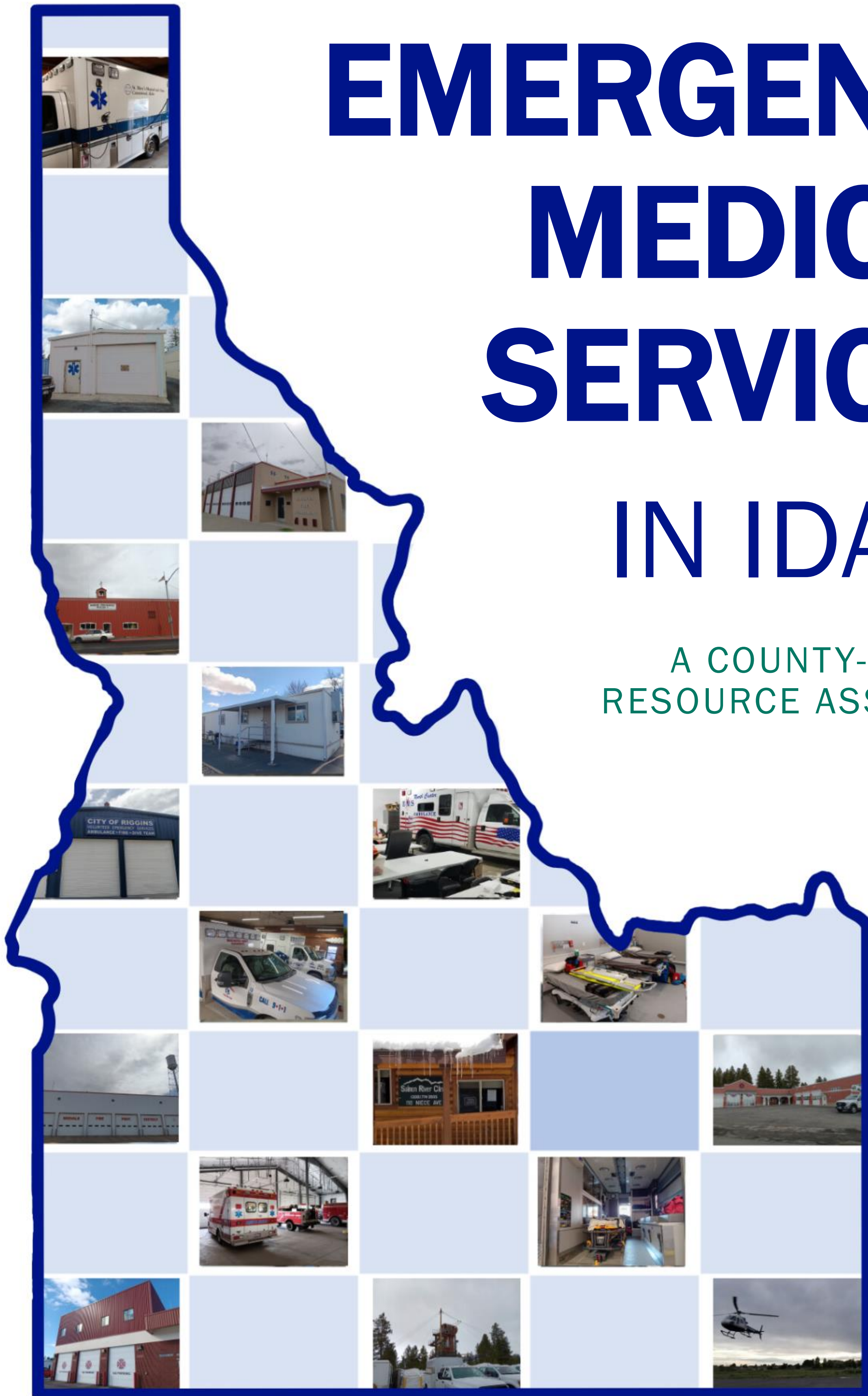


EMERGENCY MEDICAL SERVICES

IN IDAHO

A COUNTY-FOCUSED RESOURCE ASSESMENT

2023

Copyright © Idaho Department of Health and Welfare

PREFACE 3

NORTH AREA OF RESPONSIBILITY 11

BENEWAH COUNTY 12
BONNER COUNTY 33
BOUNDARY COUNTY 60
CLEARWATER COUNTY 79
KOOTENAI COUNTY 99
LATAH COUNTY 123
SHOSHONE COUNTY 151

NORTH CENTRAL AREA OF RESPONSIBILITY 173

ADAMS COUNTY 174
IDAHO COUNTY 189
LEWIS COUNTY 212
NEZ PERCE COUNTY 230
PAYETTE COUNTY 245
VALLEY COUNTY 261
WASHINGTON COUNTY 282

SOUTHWEST AREA OF RESPONSIBILITY 299

ADA COUNTY 300
BOISE COUNTY 318
CAMAS COUNTY 334
CANYON COUNTY 348
ELMORE COUNTY 364
GEM COUNTY 381
OWYHEE COUNTY 396

SOUTH CENTRAL AREA OF RESPONSIBILITY 416

BLAINE COUNTY 417
CASSIA COUNTY 432
GOODING COUNTY 449
JEROME COUNTY 464
LINCOLN COUNTY 477
MINIDOKA COUNTY 490
TWIN FALLS COUNTY 504

SOUTHEAST AREA OF RESPONSIBILITY.......................................519
BANNOCK COUNTY.......................................520
BEAR LAKE COUNTY.......................................546
BINGHAM COUNTY.......................................563
BONNEVILLE COUNTY.......................................587
CARIBOU COUNTY.......................................607
FRANKLIN COUNTY.......................................624
ONEIDA COUNTY.......................................641
POWER COUNTY.......................................658
EAST AREA OF RESPONSIBILITY.......................................674
BUTTE COUNTY.......................................675
CLARK COUNTY.......................................695
CUSTER COUNTY.......................................711
FREMONT COUNTY.......................................731
JEFFERSON COUNTY.......................................752
LEMHI COUNTY.......................................771
MADISON COUNTY.......................................791
TETON COUNTY.......................................811
APPENDIX A. EMS AGENCY RESOURCE ASSESSMENT.......................................834
APPENDIX B. EMS PLANNER PROFESSIONAL BIOS.......................................840

PREFACE

ACKNOWLEDGMENTS

This report was developed by a diverse EMS Sustainability Planning Team (Planning Team) contracted by the Idaho Bureau of Emergency Medical Services and Preparedness (the Bureau). The Team expresses gratitude to the Bureau staff, EMS Sustainability Task Force (EMSSTF) members, EMS agency administrators and EMS providers, medical directors, elected officials, and other stakeholders who generously provided time, support, and research data for this project.

BACKGROUND

EMS in Idaho is provided within a framework of organizations (EMS agencies) that vary in clinical capabilities, funding, and operational resources. Some EMS agencies use paid, career-response personnel, while others rely on volunteers or personnel receiving only a nominal stipend. While there is considerable variation in the staffing patterns, one consistent attribute is that rural communities tend to rely on volunteers to staff their EMS agencies.

The total number of licensed EMS personnel has remained relatively stable over the past 15 years but has yet to keep pace with the population growth in Idaho. The number of licensed EMS providers operating in rural communities continues to shrink. If this trend continues, many rural communities will be at risk of experiencing longer EMS response times as they wait for neighboring community's ambulances to respond to emergencies in their communities, assuming that a neighboring county is able or willing to respond.

There have been several efforts to better understand the challenges facing the organizations and personnel who provide EMS in Idaho. These efforts are further delineated below, including reports from the Idaho Office of Performance Evaluation (OPE) and the Bureau; these published reports detail the concerns and recommend possible solutions generalized to volunteer EMS personnel while providing several actionable recommendations.

The Joint Legislative Oversight Committee, the Board of Health & Welfare, and the Health Quality Planning Commission reviewed the findings of the latest OPE report. The Health Quality Planning Commission asked the Bureau to convene a Task Force to find policy solutions (including draft legislative language) that will help ensure that a reliable EMS response is available throughout the state. Additionally, contract planners were deemed necessary to assist the Bureau with gathering more granular, county-specific information to inform statewide EMS sustainability. The Planning Team was created by the Bureau to provide research data that supports the realization of the mission and vision of the EMSSTF.

PURPOSE

The Bureau commissioned this project in January 2023, engaging a contracted planning team to conduct a comprehensive county-based resource assessment of EMS providers across Idaho. The Planning Team reviewed existing state-level reports to inform targeted engagement of EMS providers and stakeholders in each of Idaho's 44 counties. The planners gathered data from governmental databases, publicly available resources, stakeholder interviews, and conducted a county-based resource adequacy assessment to assemble the reports contained in this document.

The intent of the planning team was to build upon the foundation laid by previous statewide studies. These works included two reports from the OPE; one completed in 2010, specifically on the governance of EMS agencies in Idaho, and another report in 2021 with actionable recommendations regarding EMS volunteers in Idaho. Additionally, in 2012 and 2018, the Bureau itself published reports regarding concerns and solutions surrounding the volunteer EMS systems in Idaho. With this foundation in mind, the planning team was commissioned to "tell the story" about each county's EMS system and the individual EMS agencies providing care to the citizens and visitors of Idaho within this increasingly complex and resource-constrained environment. This report includes quantitative data that describes an evolving statewide community profile in which rising demand for EMS resources collides with soaring cost of living and similar metrics, impacting the ability of volunteer and career EMS agencies to make ends meet. Qualitative measures of individual and agency perceptions of sustainability depict an ominous future for EMS delivery in many areas, especially those rugged, rural, and remote communities that define the culture and lifestyle of Idaho.

This report is intended to describe specific communities, agencies, and individual stories to the aggregated reports completed in years past, while highlighting the work of EMS professionals caring for their neighbors and visitors, often in a political environment that does not provide them adequate resources to do so. The information in this report provides local perspectives to inform opportunities for local and state funding for this vital system to prevent the loss of this essential service in many of the underserved communities where it is needed most. Further, this report highlights outcome examples, innovative solutions, and actions taken by many EMS agencies and county structures to meet the healthcare and public safety needs of Idaho's unique communities.

METHODOLOGY

Throughout the research process, the Planning Team met regularly with the Bureau, attended monthly EMSSTF meetings, engaged in weekly team working sessions to review research methodology and data, and reported the progress of project deliverables, report format, and continued regular interaction with counties and EMS agencies. The Planning Team used a four-step approach to develop the reports in this document. Each step is described below.

Research and Data Collection

The Planning Team reviewed the existing documents detailed previously to understand the work previously completed and develop a mixed methods model for evaluating EMS in Idaho. Independent research was also conducted to examine similar efforts in other states throughout the nation. Reports and initiatives in several other states provided insight into data sources, collection methods, and potential solutions. However, it quickly became apparent that no other state had found a simple solution and that Idaho's unique demographics and topography further complicate the legislative and regulatory landscape making direct correlation difficult at best.

Initial research and discussion among the planning team, the Bureau leadership, and members of the EMSSTF helped focus data collection on the specific areas noted in each county report. The Planning Team began to gather data from public data sources to highlight the demographic, economic, housing, and related challenges faced by communities within Idaho.

Resource Assessment

Based on input provided during the initial research phase, the Planning Team designed a county-based resource assessment to ensure the collection of similar data points across the state. The survey was designed to optimize the collection of quantitative and qualitative data from EMS agencies which could then be compared, aggregated, and used to tell the story of Idaho's 44 counties and nearly 200 licensed EMS agencies.

The county-based resource assessment was conducted by a hosted survey tool or through in-person facilitated discussion with EMS agency directors and response personnel. The results were used to inform the reports within this document.

Stakeholder Engagement

Stakeholder engagement was a priority before, during, and after the county-based resource assessment survey. The Planning Team conducted hundreds of virtual and in-person interviews, listening sessions, and follow-up meetings with EMS agencies, elected officials, hospital representatives, fire departments, quick response units, and other key partners in the EMS delivery system. This stakeholder engagement informed much of the qualitative data collection and the anecdotal references within the county-based resource assessments. These engagements were vital to gathering the information necessary to allow the Planning Team to "tell the story" of EMS agencies and counties within Idaho, as these stories define the current status of the EMS system throughout the state.

Review Process

Finally, the Planning Team intentionally reviewed the resulting documents, facilitated review by EMS agencies to validate the data collected during the process and share recent changes within their respective systems. During this step, agencies could provide feedback on the Planning Team's work, ensure their stories were accurately expressed, and avoid sensitivities that might negatively impact their members or communities. This critical step

also included feedback from Bureau's staff and a peer review process to ensure some degree of standardization among the 44 county reports.

LIMITATIONS

The Planning Team conducted exhaustive stakeholder engagement and gathered extensive information to compile this report; however, it is important to note there are some limitations of the data contained within this report.

Evolution of EMS Systems

EMS administrators, elected officials, and community leaders are aware of the fragile condition of EMS across the state and the nation. The changing EMS delivery landscape, workforce challenges, and funding constraints have forced communities to make adjustments to their respective systems, evidenced by changes that occurred even during the short period of data collection by the planning team. As with any industry operating within an unstable and dynamic environment, agencies and systems must continue to modify their methods of service delivery. This means that the quantitative and qualitative data collected during this project may quickly become dated as agencies continue to respond to the realities within their community.

Authority and Independence

Although many providers and county officials reported overwhelming support for this initiative, aimed at potentially improving access to funding for EMS agencies across the state, the Planning Team could not compel the participation of agencies or individuals in the survey, interview, or data collection process. Many agencies graciously provided information to support the reports that follow. Still, some were hesitant to provide detailed information for fear of exposing the challenges within the system, especially as it pertained to sensitive financial information. Other agencies chose to provide estimated or round figures, either because they did not wish to provide exact financial information or because the recordkeeping within their organizations lacked the detail necessary to provide such figures. Public entities, such as taxing districts and municipal providers, offered financial records, as required by open records and freedom of information requirements. However, some governmental agencies hesitated to provide details, citing a lack of understanding of the project's intent. The Planning Team worked closely with each participating agency and governmental body to provide the highest quality data possible; however, some gaps remain simply because members of the planning team lacked the authority to compel participation.

Before publication and public dissemination, the county-focused reports were reviewed for content and accuracy by the Bureau staff, EMS agency administrators, and the Planning Team. While substantial efforts were made to give the final product a uniform appearance, the individual AOR reports are the work of seven authors. These reports are expected to have some variations in writing style and presentation.

Data Collection

As cited in previous EMS system reports, the Planning Team found discrepancies between call volume and response data provided by agencies when compared to data within the state EMS database. These discrepancies may be explained by a myriad of reasons, such as incomplete agency run reports, failure to complete run reports for canceled or missed incidents, upload errors to the Idaho Gateway for EMS (IGEMS) database, missing fields within agency run reports, data loss in patient care reporting systems, or missing runs within the IGEMS. State-reported data utilized in this report was validated and cleaned by Bureau staff to ensure inclusion of the most appropriate data available. While it was outside of this project's scope to investigate the reasons for the difference in data between these sources, it is vital to recognize its impact on overall sustainability and the ability of the Bureau to address sustainability in the future. Where feasible, the Planning Team provided state-reported data and cited additional agency-reported data separately. The apparent discrepancy between the data sources must be addressed so agencies can receive appropriate funding and resource support based on actual response data instead of incorrect or misleading information.

GENERAL OBSERVATIONS

The Planning Team recognized several common threads during stakeholder engagement and data collection efforts. These observations bring quantitative and qualitative data to support known challenges within the EMS delivery system across Idaho and the nation. These observations are organized based on the design of the county-focused reports.

Organizational and Operational Observations

The relationship between specific demographic data for the communities in which EMS agencies operate has a significant impact on organizational and operational capabilities. Population and median home value have a direct impact on revenue generated from dedicated ambulance taxing districts in counties where such districts are established. Additionally, population and other data points provide for call volume, which correlates to revenue from billing collections. In communities where population is lower, agencies often have more difficulty in raising funds for EMS operations. The contribution of ambulance taxing districts also has a significant impact on the ability of counties to operate a robust and sustainable EMS system.

Workforce Observations

Workforce challenges tend to arise from one of three sources: availability of volunteer personnel, funding for competitive wages in career agencies, and availability of trained personnel. Demographic factors described in the individual county-focused reports can provide some basic information on the overall size of the available workforce. The increase in the average age of residents, educational demographics, and other factors can impact the potential EMS workforce. Some rural and disadvantaged communities, financial constraints have been reported that have a negative impact on volunteerism. High housing costs and costs of living has led to a decrease in local residents willing and able to volunteer, due to

competing financial priorities. Many agencies have expressed a concerning drop in the number of volunteers within their organizations due to many of these factors, and a general decrease in the commitment many volunteers are able to give to such agencies.

Similarly, the rising cost of living has impacted the ability of many agencies to offer competitive wages due to constrained financial resources and lack of availability of trained personnel able to work for lower wages within the EMS field. Diminishing access to trained and experienced EMS personnel across the state has led to a competitive recruitment and retention environment in which many larger metropolitan areas with more financial resources and opportunities for career growth are able to attract more personnel, leaving rural and suburban agencies with less financial resources struggling to fill vacant positions within paid, career departments.

Finally, the availability of high-quality education programs outside of larger metropolitan areas has led to a patchwork of in-house educational programs within many agencies that does not necessarily meet the initial training needs of many potential EMS personnel. Agencies report a high attrition rate among course participants in rural communities, with some students who fail to complete the course of instruction, and others that are unable to successfully pass the certification examination required for licensure within the state. Additionally, the time and financial resources necessary for many volunteer providers to travel to metropolitan areas to seek initial EMS education is complicated by employment schedules, personal commitments, and financial resources. The sustainability of rural EMS agencies is contingent upon the recruitment, training, and retention of personnel; however, opportunities for convenient, high-quality training are difficult to find in many parts of Idaho.

Training of EMS administrators is also paramount to the success of many struggling EMS agencies, especially within the unique, complex EMS delivery systems within rural areas of the state. Availability of administrative training to support new EMS directors with information on billing, workforce management, financial management, and human resource operations are necessary to ensure the maintenance of reliable and sustainable EMS agencies. Newly adopted administrative training programs hosted by the Bureau have been established to address this challenge, but additional support is necessary, including opportunities for on-going support and mentoring for newly assigned EMS directors across the state.

Resource and Infrastructure Observations

EMS agencies rely on operational resources, such as vehicles, capital equipment, and facilities to support reliable and appropriate response within their coverage area. Financial constraints often force agencies to forgo replacement of vehicles, purchase of updated medical equipment, or repairs to facilities. Sustainable EMS response requires that agencies maintain an inventory of reliable, equipped ambulances and ancillary vehicles, and have access to adequate facilities to house personnel and vehicles. As agencies consider transition to part-time or full-time career staffing, the requirement for adequate equipment and facilities become increasingly important as such factors can impact recruitment and employment decisions of potential members of the workforce.

Many agencies are dependent on grant funding or other financial support to facilitate the acquisition of capital equipment, especially from state funding from the Emergency Medical Services Agency Vehicle & Equipment Grant (EMSAVE) grant program. For many counties and EMS systems, the purchase of capital equipment or facilities would be extremely limited without additional aid. While funding avenues currently exist for support of resource and infrastructure purchases, agencies continue to report challenges in funding for critical equipment and supplies necessary to provide reliable and appropriate care to the communities they serve.

Financial Observations

As previously described, EMS agencies raise revenue primarily through billing and established county or municipal taxing districts. These sources of income are often relative to the population and service area characteristics that drive call volume and therefore billing for ambulance transport. Still agencies struggle with a substantial loss due to nonpayment, reduced federal, state, and commercial reimbursement rates, and costs associated with third party billing.

Dedicated ambulance taxing districts provide a key source of revenue for EMS response in many counties. Tax revenue collected can provide a substantial portion of operating costs within county EMS agencies. The lack of a dedicated EMS tax levy can severely impact the ability of an agency to provide services to the residents and visitors within that county, with many such counties unable to afford full-time, paid EMS personnel to meet the demand. Additionally, tax levy caps set by the Idaho Legislature have been reported as insufficient to meet the exploding growth in many Idaho counties. The rising cost of EMS delivery cannot be adequately covered by capped tax revenue in the presence of unprecedented growth and rising inflation.

Most agencies are breaking even or reporting significant annual deficits. Counties without dedicated tax support are challenged even further, and financial stability is tenuous.

NEXT STEPS

This assessment is intended to provide agencies, the Bureau, counties, and elected officials with an overview of how EMS operates in Idaho, with a focus on local systems. A detailed exploration of county demographics, economics, social determinants of health, system demand, operating structures, workforce, training, facilities, equipment, and financials, as available, was conducted. This information serves as a foundation for future strategic implementation efforts, as determined by agencies, counties, and the Bureau. As the EMS environment in Idaho continues to evolve, the Planning Team recommends agencies, the Bureau, and county leadership revisit the content of this assessment periodically to ensure it is current and relevant as decisions are evaluated. While this assessment itself is not a strategy document, the following work is recommended to guide efforts toward ensuring an appropriate and reliable EMS system while simultaneously building capacity for EMS delivery within Idaho:

1. Conduct strategic planning based on this assessment while identifying local, regional, and statewide EMS realities that determine opportunities and formulas for EMS sustainability.
2. Conduct a feasibility analysis of the goals, strategies, and tactics identified within that strategic planning process.
3. Continue collaborative work between the Bureau and the EMSSTF and its workgroups, developing solutions for identified challenges facing EMS providers in Idaho.
4. Design and implement system models and performance metrics that create a sustainable EMS system that is both reliable and adequate within individual Idaho counties and collectively as a State.
5. Obtain support from communities, agencies, and elected officials to establish, involve, and engage county-specific stakeholders to build county and regional working groups, using this assessment of current services and situations to devise sustainable EMS models throughout Idaho.
6. Prioritize resource support, including financial resources, to support EMS operations in communities where call volume, billing income, and tax revenues are insufficient for sustainable EMS delivery.
7. Build out a critical path and project management structure that supports implementation while monitoring system-wide changes to ensure the ongoing viability of the Idaho EMS system.

NORTH
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the North AOR:

- Benewah
- Bonner
- Boundary
- Clearwater
- Kootenai
- Latah
- Shoshone

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area - The counties that comprise the North AOR are unique within Idaho, with rugged terrain and vast public lands defining much of the landscape. The counties are separated from much of the rest of the state by both mountain ranges, large bodies of water, and a different time zone. The natural beauty, abundant recreational opportunities, and proximity to urban centers has prompted explosive growth within many rural communities in the area, driving significant increases in housing prices, cost of living, and overall development. The influx of residents, visitors, and tourists have caused an increased demand on emergency medical services (EMS), while simultaneously spurring an exodus of the potential EMS workforce seeking a more affordable cost of living and better wages. Much of the AOR remains extremely rural, with low call volume resulting in lackluster billing revenue and ambulance taxing district support to address the evolving needs of the EMS systems in the counties of North Idaho.

BENEWAH COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway to EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency medical services in Benewah County are provided by two licensed EMS agencies utilizing primarily volunteer personnel to ensure full-time coverage for frontline ambulances on the east and west sides of the county. Recent challenges with volunteer staffing during business hours on weekdays prompted both agencies to hire part-time personnel to ensure reliable, appropriate response of EMS assets to calls for service throughout the county. Although the relatively low call volume of just over 800 calls annually and the absence of ambulance taxing district revenue constrain these agencies financially, they continue to persevere and provide this vital service to the community.

Benewah County is a primarily rural county, with significant distance between populated areas, situated just south of the metropolitan area of Coeur d'Alene. Many of the citizens residing in the county commute out of the county each day for work, severely impacting their ability to contribute to the volunteer EMS workforce during the peak of EMS activity. The EMS agencies within the county illustrate the plight of EMS agencies throughout the State of Idaho and the nation, reporting a significant decrease in volunteerism and challenges recruiting and retaining a qualified EMS workforce. Financial constraints mean that EMS agencies must not only attract and maintain a skilled and dedicated workforce, but they must do so with few financial incentives, relying on the goodwill of volunteers who perform this life-saving work with minimal financial compensation.

Funding for EMS operations within the county is primarily provided through patient billing, however, low call volume, poor collection rates, and the underprivileged nature of the county's economic profile impede EMS agencies' ability to gather revenue necessary to provide this service to the citizens and visitors of Benewah County. Billing revenue, coupled with the absence of government investment, is insufficient to fund career positions at either of the EMS agencies, therefore staffing continues to rely primarily on volunteers and

minimal funded personnel for emergency response and transport of patients within Benewah County.

The combination of funding constraints and the operational reality that individual ambulance providers respond to a relatively low call volume and struggle with subsequent meager billing revenue result in a scenario where EMS agencies are unable to cover costs of facility upgrades, vehicle replacement, and essential equipment. While organizations demand more commitment from their volunteer personnel, they are simultaneously obligated to defer maintenance of crew facilities and dedicate time to seeking grants to sustain the service the community that lacks the ability to adequately fund these agencies.

Strengths	Opportunities
• Funding allocated for part-time personnel to cover critical staffing gaps during hours of peak EMS demand in the county. • Availability of grant funding for procurement of vehicles and necessary equipment. • Close working relationships between EMS agencies, hospital emergency department, and partner agencies including fire and law enforcement.	• Streamlined billing processes and potential cost savings from collective contracting of a single vendor for all EMS agencies. • Continued revenue from interfacility transports out of Benewah Community Hospital using Ambulance-based Clinicians to provide Advanced Life Support (ALS) care during transport.
Challenges	**Threats**
• Lack of ambulance taxing district revenue to support cost of readiness for EMS providers. • Meager billing revenue due to relatively low call volume, challenging collection rate and rate of poverty within the community. • Deferred maintenance of some facilities caused by increased need for funding for personnel and operational requirements.	• Decreasing volunteer workforce, and significant number of county residents that work outside of the area where they live. • Cost of living and housing prices trending higher makes it more difficult for families to pay bills and have time to seek training and volunteer for EMS agencies. • Lack of access to paramedic-level or ALS care for patients within the County.

Table A: Benewah County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Benewah County is a predominantly rural county located in the center of the Idaho Panhandle, consisting of 777 square miles and is home to a population of 10,370 citizens. [1] The county seat and largest city in Benewah County is St. Maries with a population of 2,423. [2] A significant portion of Benewah County lies inside of the Coeur d'Alene reservation, with approximately 8% of the county population identifying as Native American in 2022, and 86.7% of the county population identifying as white. [3] The cities of Plummer, St. Maries, and Tensed are the only incorporated cities within the county, but several unincorporated cities and census designated places host small, consolidated pockets of population within the county. Benewah County is the northern portion of the Palouse, a rich agricultural ecosystem that produces a large number of agricultural products. [4] US Highway 95 runs north to south along the western side of the county, providing access to the City of Coeur d'Alene to the north and the City of Moscow to the south. State and Federal land make up approximately 167 square miles of the county's 777 square mile land mass, including Heyburn State Park, McCroskey State Park, and a portion of the Idaho Panhandle National Forest. [4]

The median age of the population is 45.6, with only modest growth in the segment of the population over the age of 65, which grew from 14.2% in 2000 to 23.3% in 2021. [3] The poverty rate within the county was 13.7% in 2021, ranked 9th highest in Idaho, coupled with the 10th lowest median household income of $57,962, compared to the state average of $71,625. [3] Educational attainment within the county lags behind statewide averages with 14.2% of the population 25 years and older not having completed high school (compared to 8.8% statewide), and 18.2% of that same population earning a bachelor's degree or higher (compared to 29.1% across Idaho). [3] The population has seen a modest growth since 2000 with the most significant increase in the last two years, in contrast to the dramatic growth seen in neighboring counties of Kootenai and Latah.

Demographic	2000	2010	2020	2022
Population	9,171	9,285	9,530	10,370
Land Area	777 sq mi	777 sq mi	777 sq mi	777 sq mi
Per Capita	11.8 PPSM	11.9 PPSM	12.3 PPSM	13.3 PPSM
	PPSM: *People per square mile*			

Table B: Benewah County Population & Geography [1]

2.2. Economics

Economic, educational, and demographic disparity among the county's population put Benewah County at a disadvantage when compared to its neighbors to the north and south. The predominant industry in Benewah County is manufacturing (11.6%) and government employment (26.5%), with farming making up less than 6% of the employment. [3] Teens unemployed and not in school is almost double the statewide average, 12.0% compared to an average of 6.9% statewide. [3] The overall labor force participation rate from 2017-2021 among individuals over the age of 16 was 54%, coupled with the high unemployment rate, poverty rate, and lower educational attainment, Benewah County lacks a skilled and educated workforce to pursue EMS careers within the community. [3]

The median household income has remained largely unchanged since 2000, and similar modest gains in number of jobs and wages per job, punctuated by slow population growth relative to its neighbors highlight the stagnant economy in this county. The impact of these economic factors is evident in difficulty in recruitment and retention of an EMS workforce, poor billing collection, lack of support for a tax levy to support EMS, and increased calls for service to access healthcare.

One of the most significant barriers to workforce recruitment in Benewah County is rising housing costs, and the lack of housing inventory. Some limitations on housing exist because of the restrictions in place in the tribal environment, which impacts availability of housing for potential residents.

While the median home value is below state and national averages at $196,800, real estate market data resources report the average sale price in Benewah County to be between $261,000 - $400,000 depending on seasonal fluctuations in home sales. [3, 5] Additionally, these resources report that an overage of 3-19 housing units are sold each month, with an average time on the market of only 49 days, Time on the market has trended higher recently with rising interest rates. [5] The dramatic difference in the assessed home value and the average sale price means that home buyers must either offer a substantial down payment, or locate unsecure loans to finance a purchase, while competing for a small number of homes sold.

Metric	2010	2020	2022
Total Population	9,285	9,530	10,370
Median Age	44.8 years old	46.3 years old	45.6 years old
Poverty Rate	16.8%	12.5%	13.7%
Number of Jobs	4,839	4,986	5,167
Avg Annual Wage	$ 43,329	$ 49,531	$ 50,025
Household Income	$ 49,532	$ 59,946	$ 57,972
Unemployment Rate	13.6%	7.5%	4.4%

Table C: Benewah County Economic Factors

Metric	Benewah Co.	Idaho	United States
Housing Units	4,663	751,859	N/A
% Owner Occupied	57.3%	71.7%	64.6%
Change 2010 - 2020	0.0%	12.6%	6.7%
Median Rental Cost	$ 893	$ 1,310	N/A
Median Home Value	$ 196,800	$ 266,600	$ 244,900
Household Income	$ 57,972	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	73.6% / 6.5% / 20.0%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Benewah County Housing Factors [3]

2.3. Social Determinants of Health

Social determinants of health have a significant impact on the population, as well as the delivery of EMS to Benewah County. The county ranks last statewide in County Health Rankings, placing 43rd of 43 ranked counties. [6] Poor rankings in all eight categories highlights the economic, housing, and healthcare disparities present within the community. County Health Rankings highlight higher rates of premature death, poor physical health, and more reported poor physical health days when compared to the rest of Idaho. Those outcomes are heavily influenced by higher rates of smoking, obesity, physical inactivity, and teen births when compared to state averages. Even though Benewah County has a critical access hospital within its boundaries, the higher rate of uninsured residents, the lack of access to primary care medicine, and higher preventable hospital stays impacts the clinical care component of the county rankings.

Uninsured adults in Benewah County represent 17% of the population, compared to 13% across Idaho and 12% nationwide. [3] Uninsured children are similarly problematical with 9% of children lacking health insurance, compared to 6% in Idaho and 5% across the United States. [3] There are only four primary care physicians in Benewah County, translating to 4.2 physicians per 10,000 residents. That number has fallen dramatically in recent years and is far below the state average of 6.3:10,000 residents and the national average of 7.6:10,000 residents. [3] The lack of insurance coverage, punctuated by a high poverty rate and unemployment rate presents a significant challenge to EMS delivery in the county, which

may be the primary means to access healthcare for disadvantaged and underserved communities.

County Health Rankings	
43 of 43 ranked counties in Idaho	
Health Outcomes	43 of 43
Health Factors	40 of 43
Length of Life	43 of 43
Quality of Life	38 of 43
Health Behaviors	41 of 43
Clinical Care	37 of 43
Social & Economic Factors	37 of 43
Physical Environment	37 of 43

Table E: Benewah County Health Ranking [6]

2.4. Indicator Impacts to EMS

The indicators described above have a significant impact on both the delivery of EMS within Benewah County and the population which is served by the EMS providers within the County. Housing affordability and inventory coupled with economic depression within the county makes recruitment and retention of volunteers difficult, as stagnant wages and economic disparities detract from individuals' ability to seek training and set aside time for volunteer activities.

Additionally, the underserved populations on both the reservation and within the community have poor access to care because of financial and resource constraints, meaning that EMS is often the source of entry into the healthcare system for many residents. Punctuated by the social determinants of health, residents are not routinely seeking care for chronic conditions, and access to healthcare providers is limited resulting in deferred or neglected healthcare. The overall health of the community is additionally impacted by higher relative instances of smoking, obesity, physical inactivity, and poor healthcare decision-making which leads to lower length of life, quality of life, and health outcomes.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS System Demand

The seasonal influx of visitors who recreate in North Idaho and seasonal residents result in a noticeable increase in calls for service within the county. The two transport agencies respond to just over 1,000 calls for service annually, and data suggests the number of calls continues to rise two to four percent year over year. Recent increases in calls for service and decrease in volunteerism countywide has led to the need for both transport agencies to hire staff to cover times when traditional volunteers are unavailable because of work or school commitments. Scheduled and dedicated staff is necessary to ensure that agencies don't miss calls for service during peak demand hours.

3.1. Call Volume Overview

Many of the calls for service within Benewah County originate from the populated cities, including St. Maries, Plummer, Tensed, Fernwood, Parkline, and Emida. The two licensed EMS agencies each cover a defined service area within the county, and call volumes tend to be commensurate with population within their coverage area.

In addition to responses within Benewah County, Benewah County EMS District (BCEMS) also responds into Shoshone County to support calls for service in the backcountry up the St. Joe River. Calls can be up to 40 miles up the National Forest Road and require significant personnel to access the patient and bring them out of the wilderness area to a waiting ambulance. According to Idaho EMS registry information, BCEMS responded to 25 calls for service in Shoshone County in 2021 and 18 in 2022. BCEMS leadership reports that calls in the St. Joe backcountry are typically more serious, involving ATVs and other recreational activities. Several of these responses result in air medical transport of the patient to the Level II Trauma Center in Coeur d'Alene or the pediatric trauma center in Spokane, Washington.

BCEMS provides interfacility transports from Benewah Community Hospital (BCH), when appropriate, accounting for approximately 200 calls annually. Gateway Fire Protection District (GFPD) does not have a hospital within its service area; however, the Marimn Health Clinic is located in Plummer, providing primary care, holistic healing, and general wellness to the members of the Coeur d'Alene tribe who live in western Benewah County. GFPD reports approximately 50 emergency responses to the clinic to transport patients to Kootenai Health for emergent incidents.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Benewah County EMS	541	118	659	580	121	701
Gateway Fire Protection District	250	130	380	228	133	361
Ambulance Total	791	248	1,039	808	254	1,062

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Benewah County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Benewah County EMS	10 min	10 min	20 min	26 min	100 min
Gateway Fire Protection District	8 min	8 min	16 min	40 min	103 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Benewah County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls for service within Benewah County are received by the Benewah County Sheriff's Office (BCSO), who dispatches the appropriate EMS agency or fire department on a dedicated fire and EMS frequency. Both licensed EMS agencies and all the county fire districts utilize the same radio network, allowing for operational coordination among emergency response agencies. Through dispatch and using the county radio system, fire and EMS responders can also communicate directly to sheriff's deputies, or relay information through dispatchers. Emergency Medical Dispatch (EMD) is not available within Benewah County, but basic pre-arrival instructions are given by dispatchers to provide guidance to callers prior to arrival of EMS. Agencies report that the radio system coverage is effective for most operations, and that it provides interoperability with agencies within the county, as well as mutual aid partners. BCEMS also reports using the Shoshone County fire & EMS channel for responses "up the Joe" within Shoshone County, although they report spotty coverage in the rugged, mountainous terrain of the St. Joe Wilderness.

Benewah County EMS also utilizes a mobile alerting and communication application to relay dispatch information to volunteers a cell phone application and allows an alternate method of communication between providers to coordinate response.

4.1.2. EMS Agency Overview

Benewah County is served by two licensed EMS providers staffing three stations with a total of seven ambulances available for response. Recent changes in the agency structure within the county have taken place due to call volume and funding challenges. GFPD assumed the coverage area in the southwestern portion of the county following the closure of Tensed Ambulance. St. Maries Ambulance also closed, and BCEMS took responsibility for St. Maries and the surrounding area. Both agencies are assisted by fire district response for motor

vehicle accidents or other incidents requiring rescue support, and EMS agencies report routinely requesting assistance with manpower for complex incidents or calls with multiple patients.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Benewah County EMS	Public District Third Service	Intermediate Life Support (ILS)	Scheduled	Combination
Gateway Fire Protection District	Private 501(c)(3) Fire-based	Basic Life Support (BLS)	Scheduled	Combination

Table H: List of EMS Agencies Located in Benewah County

4.1.2.1. Agency Overview: Benewah County EMS District

Benewah County EMS District (BCEMS) is a public ambulance district providing EMS coverage to the eastern portion of Benewah County using a third service model. BCEMS was recently established and began answering calls in Benewah County in June of 2022, following the closure of St. Maries Ambulance, which was operated by the City of St. Maries. The agency is staffed primarily by volunteers but utilizes two salaried employees to provide coverage during business hours during the week when many volunteers are unavailable because of work or school commitments. These two employees are responsible for most of the responses for the organization. These salaried employees are also responsible for many of the administrative duties of the organization, including ordering supplies, managing the finances of the agency, and in-house billing. BCEMS uses scheduled personnel who are assigned to specific shifts to ensure coverage around the clock. Requests for a second ambulance are coordinated through radio communications or through the cellphone-based mobile application, and most second ambulance calls are handled by volunteers who are available and respond to the nearest ambulance station from home or work.

BCEMS maintains four ambulances at two stations, one in St. Maries housing two ambulances, and one in Fernwood that also houses two ambulances. Most of the volunteers and the calls for service are handled out of the St. Maries station. BCEMS reports 27 personnel on the roster, including five Ambulance-based Clinicians (ABC), three Advanced EMTs (AEMT), and fourteen EMTs (EMT) utilizing the Idaho Additional skills modules. BCEMS reports recently completing an EMT course with five students passing their National Registry examinations who will be joining the organization.

Funding for BCEMS comes primarily from patient billing, which is done in-house by the Director. Additional revenue is generated from interfacility transfers utilizing ABCs to meet ALS standards. The agency reports doing approximately 200 IFTs annually out of Benewah Community Hospital, typically to Kootenai Health, or specialty care facilities in Spokane,

Washington. IFTs typically take an ambulance out of service for 3 hours, requiring backfill from off-duty personnel.

4.1.2.2. Agency Overview: Gateway Fire Protection District

Gateway Fire Protection District (GFPD) is a public entity providing fire-based EMS coverage for the western portion of Benewah County from Kootenai County to Latah County along US Highway 95, including the cities of Plummer and Tensed. The agency is licensed at the BLS level and utilizes three ambulances responding from a single station located along US Highway 95 in Plummer. The organization is overseen by a board of Fire Commissioners. The entirety of the GFPD's coverage area is part of the Coeur d'Alene tribe, and the agency frequently provides emergent transfers from the Marimn Health Clinic in Plummer to Kootenai Health on an emergent basis, as the health clinic is not considered a hospital. The agency serves as an important component of the emergency healthcare system, providing access to care for many within the tribal community.

GFPD has experienced a decrease in volunteerism that has impacted its ability to respond to calls, especially during business hours, due to work commitments of its members who are employed outside of the county. As a result, the agency has hired two part-time EMTs to respond to calls during the week, supplemented by a driver from the fire department, who is also typically scheduled during the week. Often, the on-duty EMT will respond directly in the ambulance and meet the driver on-scene to complete the crew. The part-time personnel are also responsible for administrative duties, such as supply ordering, financial oversight, and billing.

GFPD's EMS operation is staffed by nine EMTs, six of whom are reported as active. The remainder of personnel responding on EMS calls are firefighters who drive the ambulance to complete the crew. EMS crews are compensated with a small stipend for each shift ($5 for each three-hour shift) and compensated per call at a rate of $10 for drivers and $25 for EMTs. The agency also provides their members with Life Flight memberships, life insurance, and the agency waives the cost of ambulance transport should they need to be taken to the hospital. "We believe we should do what we can to take care of our people", reports one of the Fire Commissioners. "Without our volunteers, we can't do what we do for the community."

GFPD is funded primarily through billing revenue, but the revenue from the fire district tax levy of 0.001137560% (totaling $439,763 in 2022), supports much of the shared infrastructure, including the station, utilities, insurance, and other overhead expenses. The operating cost for the EMS operation is approximately $230,000 annually, of which $125,000 is related to personnel expenses for the two part-time personnel, and compensation for members. The agency also receives several donations each year that support the fire protection district, but that aren't directly attributed to EMS.

4.1.3. Hospital Access Overview

The primary transport destination for most agencies within the county is Benewah Community Hospital, located in St. Maries, serving as the only definitive care facility within

Benewah County. The nearest tertiary center is located in Coeur d'Alene, north of Benewah County via US Highway 95, serving as the nearest resource for specialty care.

- **Benewah Community Hospital** (229 South 7th St, St. Maries, ID) is a county-owned, 19-bed, critical access hospital and specialty clinic, providing a 24-hour emergency department, inpatient services, women's health services, general surgery, and outpatient services. [10] Benewah Community Hospital is not currently TSE-designated for trauma, stroke, or STEMI. [11]

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-certified Level II Trauma Center, as well as an interventional cardiac center. [11] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [12] Many patients from Latah County are transferred to Kootenai Health from Gritman for specialty care if those services are not available locally.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Benewah County is supported by two distinct agencies providing EMS service within defined coverage areas within the county. Each agency is managed separately and has a unique oversight process. The volunteer agencies have access to three to four ambulances each to handle multiple patient incidents or simultaneous calls for service. Defined coverage areas are separated by sparsely populated areas of the county, however, the leadership from both agencies communicate regularly, and coordinate EMS delivery for larger incidents.

The county has no dedicated tax revenue for the provision of EMS, and agencies report that they are left to manage EMS system design with little input from elected officials. Each district is overseen by a Board of Directors, and managed by agency leadership, employed in a part-time or full-time capacity to handle the business of each organization. With only one scheduled crew on-duty at either agency, there is no routine supervisory personnel on-duty each day, and agency leadership is notified to respond if the need arises for management of complex calls or nuanced patient interaction.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Subjective assessments regarding sustainability of each provider during the resource assessment process yielded scores from 70 – 90 out of 100 with the mean of 80. Follow-up discussion focused on the decrease in overall volunteerism nationwide, and the impact of fewer volunteers on the ability of the agencies to staff ambulances. Both agencies anticipate a need to secure career staffing at some point in the future, but report that agency rosters of volunteers are sufficient to handle the current call volume.

- **EMS Agency Financial situation**: EMS agencies in Benewah County report modest revenue from billing, capable of covering operational and personnel expenses. Agencies describe the ability to retain a modest amount of revenue each year in savings "for a rainy day" or to fund capital and facility improvements, but otherwise agencies report breaking even each year.

- **EMS Agency Communications Strategy and Outreach**: While agencies participate in several community outreach activities, such parades, local events, and community health fairs, there is no formal agency communications or public relations strategy that guides these activities.

- **Community View of EMS Agencies**: Both licensed EMS agencies reported positive public perception of EMS providers within the community. All agencies report receiving donations from citizens and business within their individual communities, and participation in events, such as parades and holiday celebrations. Several agency representatives reported that members of the public are often surprised when they find out that the agency providers are volunteer.

- **Elected Official Support of EMS**: EMS Agencies within the county report positive interactions with elected officials, including local elected officials in the cities they serve, tribal leaders, and county officials. While interactions are overall positive, financial support for EMS operations is not provided. One agency reports modest financial support of $15,000 - $20,000 annually was offered by one set of elected officials in a particular community but has yet to be provided after more than a year.

- **Agency & System Outlook:** Benewah County agencies describe a positive outlook based on their core group of dedicated volunteers that continue to support their neighbors through EMS response. The financial outlook reported by agency leadership from both licensed providers is more bleak. They describe consistently diminishing volunteerism across the county but lack the financial resources to hire additional part-time or full-time personnel to meet the EMS demand, especially during the daytime hours and holidays. The agencies continue to rely heavily on a small, dedicated pool of volunteers that express worsening burnout, and strain on home life and personal relationships. Agencies are hopeful that programs such as GEMT and the EMS Sustainability Task Force will yield improved funding for agencies like theirs that struggle to recruit, retain, and support volunteers providing this critical service to the county.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: EMS is Benewah County is provided by two licensed EMS agencies providing service to defined areas within the county. While each agency answers to a Board of Directors and has agreements with the county to provide EMS to their specific coverage area, the Board of County Commissioners remains "hands-off" in the management and provision of EMS.

- **Service Delivery Partners**: During interviews with agency leadership, service delivery partners including the local fire departments, the sheriff's office, Life Flight Network, and Benewah Community Hospital were highlighted as critical to the success of county EMS providers. For responses into Shoshone County on the St. Joe River, BCEMS cited the expertise and contribution of the St. Joe Quick Response Unit (QRU) in accessing, evacuating, and providing ongoing care for patients in the backcountry.

- **Medical Direction**: Medical Direction for EMS agencies are provided by physicians from the local community, both based out of Benewah Community Hospital. BCEMS contracts with an emergency physician, and GFPD contracts with a family medicine physician for clinical oversight and medical direction. Both agencies report good working relationships with their medical director. BCEMS describes frequent interaction for patient follow-up, performance improvement, and training.

- **Communications & Interoperability**: Overall radio communications are adequate, although gaps in coverage exist in more remote areas of the county. Agencies report that the radio system allows for interoperability with other responding units. BCEMS utilizes the same radio on a different channel to communicate with Shoshone County Sheriff's Office and St. Joe QRU for responses in the St. Joe backcountry.

- **Mutual Aid Systems & Agreements:** Mutual Aid is facilitated through the Sheriff's Department Communications Center, when necessary. Agencies report the ability to respond with multiple ambulances if staffing is available, however, if additional staff is unavailable, resources are requested from the nearest appropriate agency, either within the county, or from Latah or Kootenai County depending on the location of the incident. Agencies report responding into surrounding counties to provide mutual aid support on occasion, including response into Harrison to assist Kootenai County.

- **Community Health EMS (CHEMS)**: While both licensed agencies are aware of the Community Health EMS programs, neither provider expressed interest in investing in a CHEMS program due to the volunteer nature of their staffing model.

- **Patient Care Documentation System**: Both licensed EMS providers in Benewah County utilize the Image Trend Elite patient care reporting system provided by the Bureau of EMS and Preparedness for patient care charting. One agency expressed some frustration with the ability to get sufficient reports from the state-provided system, and wished there was more support to improve QA/QI for smaller agencies.

- **Inter-facility Transports**: BCEMS performs 200 interfacility transfers a year in and out of Benewah Community Hospital, including some transfers from long-term care centers to the emergency department and back. While there is no hospital in GFPD's district, they frequently respond to the Marimn Health Clinic for emergent transfers to Kootenai Health from the primary care clinic.

4.2.1.3. Response Overview

Benewah County EMS agencies utilize dedicated volunteer personnel to provide compassionate care to the residents and visitors to the county despite personal and

professional hardships brought on by the shortage of trained and active members. Leadership from both licensed agencies have hired part-time administrative personnel to oversee administrative duties within each organization, as well as provide daytime shift coverage during weekdays, when many volunteers are unavailable.

- **Level(s) of Service:** BCEMS provides BLS care with most responders additionally trained to utilize the state's optional BLS modules to augment their scope of practice. GFPD reports similar capability with the addition of AEMT providers to allow for ILS care for patients within their service area.

- **Agency Response Concern:** Both agencies reported an ongoing decline in volunteerism within their agencies. Both agencies have recently added part-time administrative roles within each organization to help ensure shift coverage during typical work hours when many volunteers are at work. Both expressed a need for improved support for their volunteer workforce since neither organization has the funds to hire full-time staff for EMS response within the county. The recent closure of Tensed Ambulance in the southwest portion of the county punctuated the threat of decreased volunteerism to the ability of agencies to continue to provide this service with volunteer personnel and minimal investment from taxpayers within the county.

- **Helicopter Response & Utilization:** With limited access to paramedic providers in most of the county, agencies reported calling for air medical resources for high acuity patients with time sensitive emergencies and advanced interventions, especially those located outside of populated areas. Agencies described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Alternatives to air medical response during periods of inclement weather and lack of available aircraft was described as rapid transport to Benewah Community Hospital.

- **Factors impacting Response Times:** Agencies noted that simultaneous calls (requiring a second ambulance crew), time of day, and personnel shortages to be the most persistent factors impacting response times. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** BCEMS reports approximately responses into the St. Joe backcountry each year, supporting St. Joe QRU and Shoshone County with treatment and transport of patients from the recreational areas on the south side of Shoshone County. Agency leadership describe these calls as being manpower-intensive, and requiring significant time, especially if the patient is located toward the top of the forest road. Rugged terrain and gravel roads result in prolonged response and transport times. These responses often include ATV accidents and other incidents requiring prolonged patient extraction and air medical evacuation. Back-up crews are often necessary to cover their primary response area during responses to public lands.

4.2.2. Workforce & Resource Assessment

Staffing in Benewah County is provided primarily by volunteers, many of those volunteers are provided a small amount of compensation for on call and per call response. Each licensed agency utilizes two full-time or part-time administrative personnel to cover shifts during typical business hours when volunteers are not available. Agencies report increased difficulty with recruitment and retention of volunteers.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Staffing for EMS agencies within Benewah County is provided by volunteers who are scheduled for coverage within each agency. Shifts can vary from three-hour blocks to 24-hour blocks depending on the agency and are staffed by at least an EMT and a driver. Personnel in both agencies are provided a small amount of compensation for either time spent on call, or per response.

- **Responder Average Age:** Agencies within Benewah County describe an aging workforce, but BCEMS reports an average age between 25-35, while GFPD reports an average age of 35-45.

- **Staffing Numbers:** BCEMS has a roster of 27 personnel, including one full-time and one part-time employee. GFPD has nine personnel on the roster including two part-time personnel who staff the ambulance as EMTs on alternating 12-hour shifts during the week.

- **Staffing Concerns:** Agencies report that decreasing volunteerism, the number of aging volunteers on their rosters, and the training required to function as an EMT on the ambulance as significant concerns for their ability to staff ambulances within the county. One agency representative also noted that younger volunteers have a more "transactional" relationship with the agency, and are willing to volunteer for specific times, but are generally less available because of personal commitments or competing priorities. He feels like agencies need to change the way we recruit these new types of volunteers, and how we incentivize their participation in leadership roles to grow the next generation of EMS leaders.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, county agencies continue to respond to calls for service, maintain rosters of active personnel, and train new EMTs to continue to provide this vital service. At GFPD, the fire-based EMS system allows access to volunteer drivers to complete ambulance crews, though the drivers are typically retired and therefore available during the day. Both agencies cite recent decisions to add part-time personnel to cover during difficult times of the week as a key to success.

- **Recruitment & Retention:** Agencies cite opportunities to provide EMT courses in local high schools, provide scholarships for EMT and paramedic academies with reciprocal work agreements, and the availability of benefits, such as PERSI retirement and health insurance as incentives to improve recruitment and retention within the

community. Agency leadership also recommended state income tax or property tax incentives for volunteers for fire department and EMS personnel.

4.2.2.2. Training & Education Overview

- BCEMS has two instructors that provide EMT courses for the department. Most recently, the agency gained five new EMTs from the course who successfully passed their National Registry examinations and have been licensed. The agency also uses internal subject matter experts, as well as their medical director, to provide regularly scheduled training for providers.

- GFPD provides funding for new members to attend EMT school at BCEMS or in Kootenai County, but reports that pass rates, especially for students utilizing hybrid or online courses is not optimal.

- Both agencies provide access to online training platforms to manage continuing education requirements and provide some funding for personnel who wish to attend conference or educational offerings, such as Spring Fling in Grangeville.

4.2.2.3. Facilities Overview

- **Station Locations:** EMS in Benewah County is provided out of three stations. GFPD operates out of a single station located along US Highway 95 in Plummer, and BCEMS operates out of its main station in St. Maries, as well as a satellite station in Fernwood. Stations are located in the more populated areas of the county where most of the calls for service originate.

- **Station Conditions:** All three stations are described as adequate to meet the current needs of the agency. Stations do not have the infrastructure to house crews for long periods of time, although GFPD described their intention to transition some of the station to be able to accommodate personnel because of a recent incident that required people to be at the station for several days. The Fernwood station maintained by BCEMS is located across the street from the Fernwood fire station and contains the ambulance and minimal supplies and equipment. It has space for crews, however, would need extensive renovation if it were to be staffed on a regular basis. BCEMS recently funded a generator for their main station through a State Homeland Security Grant Program, in coordination with the City of St. Maries to ensure operation during power outage or natural disaster.

- **Facility Needs:** Deferred maintenance at the Fernwood station needs to be addressed, and some updates, including Storage, dedicated training area, sleeping quarters, kitchen, and restroom facilities (including shower facilities) would be necessary upgrades to accommodate on-duty crews.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: EMS agencies rate their current equipment and supplies as “good” and indicate that their equipment and supplies meet their daily needs They report that

some more expensive, seldom used items often expire, causing a financial burden to the agency. Both agencies have part-time personnel responsible for managing inventory, ordering supplies, and rotating materials at risk of expiring.

- **Condition**: Equipment and supplies are reported in “good” or “excellent” condition.
- **Funding**: Agencies try to utilize state and federal grant programs to replace more expensive equipment, including EMSAVE grants, SHSP, and the state funding for ambulance replacement. BCEMS received state funds in 2020 for ambulance replacement (which was delivered in 2022), and recently purchased automatic self-loading stretchers using grant funds. GFPD received grants for portable radios, automated external defibrillators, stretchers, and traction splints. They also utilized ARPA funds to replace a cardiac monitor.
- **Needs/Shortages**: Agencies reported no current unmet needs or shortages.

4.2.3. Financial Overview

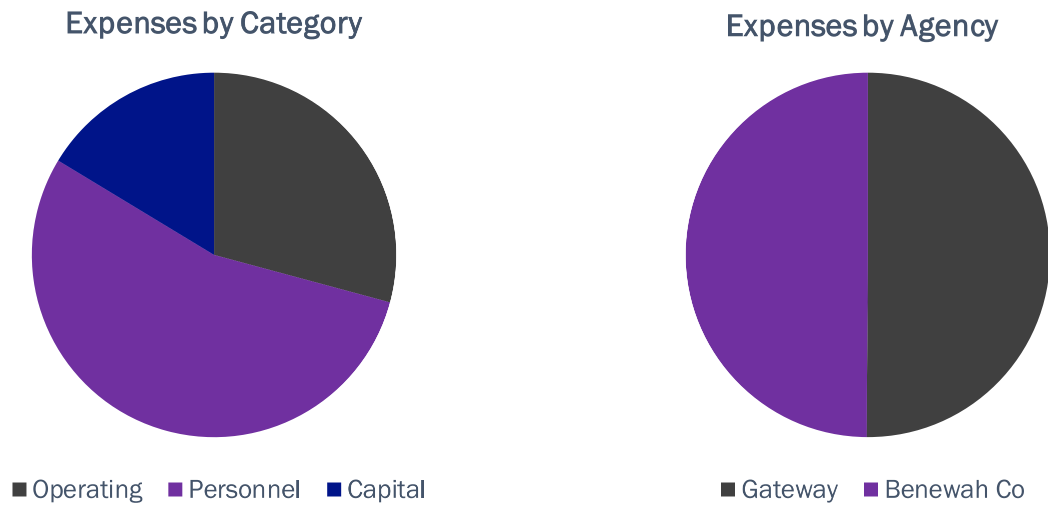
In the current countywide EMS delivery model, most of the revenue is earned through patient billing, which at the current volume and operation tempo is insufficient to support the necessary growth of the system, to include potential funding for staffing of EMS units. The dedication and support of volunteers within both agencies have mitigated the need to hire and compensate additional personnel to handle the current call volume beyond the current daytime structure. Minimal government funds, including contractual funds from one city who recently lost their ambulance service, and minimal funds from state license plate revenue constitute the entirety of the government contribution toward EMS in Benewah County.

EMS agencies within the county staff two to three scheduled ambulance crews, providing capability countywide using primarily billing revenue from just over 800 calls annually. Collection rates, lack of insurance, and general economic challenges within the community threatens the economic viability of the two licensed ambulance providers within the county. Agencies describe a break-even financial situation, and financial challenges with funding for capital expenses, large repairs, or certain equipment purchases. The lack of substantial budgetary reserves put the agencies at risk should equipment fail, vehicles require repair or replacement, or facilities require upgrade. These agencies are typically dependent on grants to cover these larger expenses.

4.2.3.1. Expense Overview

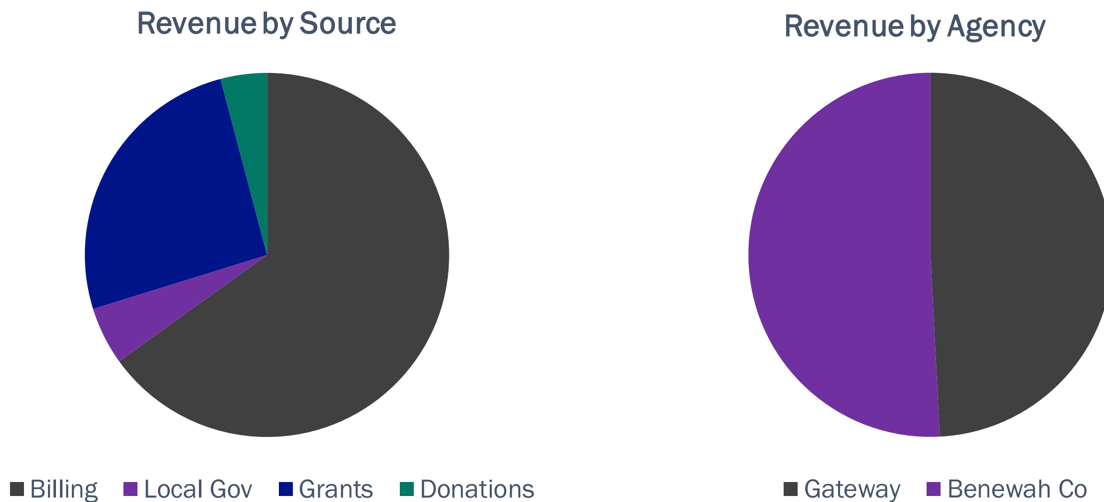
The cumulative operating costs among both county providers totals $459,000 annually, excluding passthrough costs associated with procurement of grant-funded equipment. In 2022, those costs consisted of approximately $250,000 for personnel (both career and member compensation), $75,000 for capital expenses (including radios, automatic self-loading stretchers, and other grant-funded equipment), and the remaining $134,000 for station infrastructure, utilities, insurance, training, fuel, supplies, and overhead costs. Agencies collectively described approximately $20,000 - $30,000 in carryover revenue that is earmarked for future capital and facility needs. The co-location of EMS resources

alongside fire department resources in GFPD allows for sharing of infrastructure expenses but makes calculation of exact operating costs difficult.



4.2.3.2. Revenue Overview

Benewah County does not have a tax levy that supports the provision of EMS in the county. There are five fire districts within the county that get tax revenue from levy rates between 0.000233421% and 0.001137560% depending on the respective district. Much of the total revenue of approximately $553,000 for EMS Operations in Benewah County comes from four sources: billing, grants, local government contracts, and donations from the community. Combined billing revenue across both agencies total $553,000 including approximately $134,000 of revenue from various grants that were targeted for specific equipment purchases. Billing revenue accounts for approximately $430,000 annually countywide, including billing revenue from interfacility transfers. Approximately $12,000 of revenue comes from donations to support by EMS personnel, and $15,000 comes from local government commitment to support ambulance coverage for the City of Tensed.



4.2.4. Resource Assessment Additional Factors

EMS agencies within Benewah County continue to provide high-quality EMS service to the residents and visitors of Benewah County but face an uncertain future. With decreasing volunteer recruitment, lack of funding support for services provided to county residents, and the rising cost of vehicles, equipment, supplies, and personnel, agencies continue to be asked to do more with less. Should workforce and staffing issues require the addition of full-time career personnel, the current funding model is woefully inadequate to support even one full-time ambulance, let alone the two or three necessary to maintain current operational deployment. Agencies continue to make do by deferring maintenance on facilities and equipment in order to make critical purchases and compensate staff for personal expenses incurred in the provision of EMS within the county. Agencies rely heavily on local, state, and federal grants to procure vehicles and equipment necessary to ensure provision of reliable, appropriate, and sustainable EMS delivery within Benewah County. Agency leadership express concern over continued financial solvency in the face of modest call volumes, dwindling reimbursement, and rising cost of personnel, fuel, and supplies.

The absence of an ambulance tax levy means that EMS Providers within the county must raise funds exclusively through billing revenue and fundraising, which at the current call volume would not support the augmentation of EMS staffing should the volunteer ranks continue to dwindle. In targeted discussions with providers, this financial gap is the most significant risk to the sustainability of the County EMS System.

At a minimum, support requirements include incentives for volunteer recruitment and retention to maintain the current delivery model within the county, but additional funding is required to plan for and provide financial backing for the contingency should volunteerism continue to meet the needs of the community. Future funding to include tax revenue and state support is necessary to facilitate the eventual need for career staffing to support communities throughout the county.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). US Census Bureau Quick Facts – Benewah County, Idaho. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/benewahcountyidaho

[2] Idaho Legislature. (2021). Population by city county, 2020. Retrieved from https://legislature.idaho.gov/wp-content/uploads/redistricting/2021/Cities.pdf

[3] University of Idaho Extension. (2023). Indicators Idaho: Benewah County. Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16009

[4] Benewah County. (2023). Benewah County, ID Official. Retrieved from https://benewahcountyid.gov

[5] Redfin. (2023, January). Benewah County, ID Housing Market. Retrieved from https://www.redfin.com/county/672/ID/Benewah-County/housing-market

[6] University of Wisconsin Population Health Institute. (2023). County Health Rankings: Benewah County, Idaho. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/benewah?year=2023

[7] IGEMS Data. (2023). EMS Planner Call Volume: 2021 / 2022.

[8] IGEMS Data. (2023). EMS Planner Response Time: 2021 / 2022.

[9] iGEMS Data. (2023). Agency career-vs-volunteer personnel: 2022.

[10] Benewah Community Hospital. (2023). Our Services. https://www.bchmed.org/our-services/

[11] Idaho Department of Health and Welfare. (2023). Idaho time-sensitive emergencies: Idaho TSE facility designations. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[12] Kootenai Health. (2023). Facts and community reports. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

BONNER COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway to EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Delivery of EMS in Bonner County is accomplished by a coordinated system that includes career and volunteer providers from four licensed EMS agencies and seven fire districts, providing first responder and manpower support to respond to over 5,000 calls for service annually in the county. Substantial fluctuations in EMS demand resulting from seasonal residents, outdoor recreation in the mountains, at the lakes, or on the ski slopes of Bonner County significantly impact the workforce and resources that provide care to residents and visitors of the county.

Until recently, Bonner County has struggled with consistent and reliable EMS system delivery with several agencies responsible for EMS delivery closing their doors in response to meager public support, lack of billing revenue, and political pressure. In recent years, agency and government leadership have built an integrated and coordinated EMS system that provides Advanced Life Support (ALS) service across the county while maintaining the struggling volunteer systems that have served their communities for many years. With declining volunteerism across the State and the Nation, EMS agencies have witnessed a steady decline in qualified and inspired personnel to continue to care for their neighbors and have had to rely more heavily on a small group of dedicated volunteers to carry a more significant burden each year, leading to burnout, frustration, and continued loss of the willing volunteer workforce. Though agencies have sought to overcome issues other industries have struggled with, including workforce housing, non-monetary compensation, and various other incentives, the volunteer EMS workforce is at a critical juncture. Career agencies within Bonner County are vulnerable to the same threats, with lack of affordable housing, high cost of living, competitive wages, and drastically increased costs of fuel, services, and infrastructure. The recruitment and retention of a qualified and motivated workforce is a challenge for career and volunteer agencies alike, a challenge that is made more difficult for volunteer agencies due to lack of access to funding and resources.

Funding for EMS operations at all four licensed EMS agencies is primarily provided by ambulance taxing district revenue and patient billing. Total funding of over $5 million remains insufficient for the maintenance and continued operation of a dozen ambulances, ten ambulance stations, and the experienced workforce necessary to serve the citizens and visitors of Bonner County. With various courses of action to address the sustainability of the EMS system within the county, agencies differ on the most appropriate course of action and the allocation of tax funding that lies at the heart of any potential solution. The county, its elected officials, and EMS agencies have significant work ahead to coordinate resource distribution, operational requirements, and plans to address the unique demands imposed by the growing population, and impact of recreational visitors that place demands on the EMS system throughout the year. Rural EMS transport agencies are advocating for equitable financial resource allocation; reporting that the operational and financial situation is no different today than it was 15 years ago in rural, volunteer EMS agencies, despite the growth within the county.

Strengths	Opportunities
• Coordinated EMS delivery system with four licensed agencies responding to over 5,000 calls for service annually. • Innovative solutions to unique staffing challenges caused by seasonal EMS demand in multiple communities within the county. • Continued growth of the community and subsequent increases in revenue through ambulance taxing district and billing sources.	• Seasonal operational requirements in different communities provides an opportunity to share workforce and EMS resources. • Leverage reinforcement of the county EMS delivery system to improve training and education pipeline and career and volunteer workforce professionalism. • Collaborative resource distribution to better support rural providers, allowing for growth and improved service delivery in smaller communities using tax revenue.
Challenges	**Threats**
• Funding challenges from insufficient billing revenue and lack of EMS district funding to support staffing and other “make ready” costs for EMS agencies. • Low call volume and resource demand during “off-season” negatively impact retention. • Lack of integrated plan for growth and transition to combination or career staffing in rural agencies within the county.	• Lack of transparency and stakeholder input on financial resource allocation. • Rising housing prices and cost of living, coupled with meager housing inventory significantly impact recruitment. • Lack of trained and qualified workforce means that even with funding, agencies may be unable to recruit personnel to staff ambulances.

Table A: Bonner County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Bonner County is located in the northern Idaho panhandle, consisting of 1,735 square miles, surrounded by mountains, forests, and lakes which provide recreational opportunities for its 51,414 residents and tens of thousands of visitors annually. [1] Sandpoint is the county seat and the largest city in the county, boasting a population of 9,777. [2] The county is best known for its recreational opportunities, including Lake Pend Oreille, Schweitzer Mountain Ski Resort, Priest Lake, and the Coeur d'Alene, Kaniksu, and Kootenai National Forests. Seasonal tourism plays an important role in the county, with a diverse offering of year-round recreation, with some areas of the county experiencing dramatic shifts in population due to seasonal residents, occupation of second homes, and tourism.

Almost half of the county's land mass is public land, with 958 square miles of the county's 1,735 square miles being either federal or state land. [3] Most of the public land is located in the eastern and western portions of the county, which include the Selkirk and Cabinet Mountain ranges. In addition, the county boasts an additional 185 square miles of water, including Lake Pend Oreille and Priest Lake. [4] The relatively small amount of private land within the county, coupled with the substantial population growth, has resulted in a higher population density, and movement into urban clusters, such as Sandpoint.

The median age within Bonner County is 48.3, with the fastest-growing segment of the population being persons above the age of 65. [5] In 2000, persons over the age of 65 represented 13.1% of the population, however that number nearly doubled to 25.9% in 2021. [5] The number of children under the age of 18 has fallen from 25.5% of the population to 19.5% in the same period of time, and the number of working age adults, age 18-64, has fallen from 61.4% to 54.5%. [5] The increased median age of the population has had an impact on labor participation rates. From 2017-2021, only 55% of those age 16 or older participated in the labor force, meaning many of the county's residents are retired. These demographic realities pose challenges to the delivery of EMS within the county. [5]

Demographic	2000	2010	2020	2022
Population	36,835	40,877	47,110	51,414
Land Area	1,733 sq mi	1,733 sq mi	1,733 sq mi	1,733 sq mi
Per Capita	21.3 PPSM	23.6 PPSM	27.2 PPSM	29.6 PPSM
	PPSM: *People per square mile*			

Table B: Bonner County Population & Geography [1]

2.2. Economics

The economy of Bonner County is diversified, with retail trade (12.4%), government (10.4%), and construction (10.0%) representing a majority of the employment. [5] As described, the workforce participation rate of 55% and significant growth in the population of persons over the age of 65 impact the availability of a skilled and qualified workforce. [5] With 25,062 jobs within the county in 2021 and an unemployment rate of 3.9%, Bonner County provides opportunities for employment in manufacturing, retail, tourism, and government. [5, 6] County economic development data reports that over 10,400 people live and work in the county, and an additional 4,200 commute from other counties, while approximately 6,500 commute out of the county for work (primarily into Kootenai County). [6]

The county report describes consistent tourism, growth in technology industries, and high quality of life as strengths within the county's economy. However, connectivity (primarily internet connectivity), distance to markets, and real estate affordability in relation to stagnant wages are some of the primary economic challenges that Bonner County continues to face. [6] While unemployment remains higher than the average across Idaho and wages per job remain lower than the statewide average, Bonner County officials recognize that priorities such as affordable workforce housing, broadband internet connectivity, and access to education and healthcare for families are key to the sustainability of the local economy, which includes the sustainability of EMS and other services to meet the evolving needs of an aging population.

In 2023, Bonner County reported that 43% of the properties with residential improvements are either vacant, occupied less than 180 days per year, or are considered rental properties. [7] With a significant number of seasonal properties on Schweitzer Mountain occupied primarily in the winter months, and waterfront properties along Lake Pend Oreille, Priest Lake, and other recreational areas occupied primarily in the summer, the available residential property inventory is limited.

The median household income in Bonner County is $66,897, which is lower than the state or national average, however the median home value in the county is $308,900, significantly higher than the state and national average. [5] While median home value reflects the assessed home value, the sales price for homes in the county has a direct impact on affordability. Real estate market data for 2022 shows that the average home price in Bonner County was $539,000 and $638,000 depending on seasonal fluctuation. [8]

The number of homes sold per month varied from 48 to 103, with the highest number of sales and the highest sale prices occurring in the summer and autumn months. The average length of time a property was on the market in 2022 was 11-24 days before a steep rise to 68 days following a spike in interest rates in the Fall of 2022. [8] The highly competitive housing market, and disparity between home value and selling price makes affordability difficult for potential buyers without significant cash reserves, and almost entirely out of reach for those earning below the median household income.

Metric	2010	2020	2022
Total Population	40,877	47,110	51,414
Median Age	45.8 years old	48.9 years old	48.3 years old
Poverty Rate	17.4%	12.6%	11.8%
Number of Jobs	20,752	23,064	25,062
Avg Annual Wage	$ 40,737	$ 45,819	$ 46,256
Household Income	$ 53,844	$ 62,465	$ 66,897
Unemployment Rate	12.9%	7.5%	3.7%

Table C: Bonner County Economic Factors [1, 5, 9, 12]

Metric	Bonner Co.	Idaho	United States
Housing Units	26,116	751,859	N/A
% Owner Occupied	56.2%	71.7%	64.6%
Change 2010 - 2020	6.7%	12.6%	6.7%
Median Rental Cost	$ 869	$ 1,310	N/A
Median Home Value	$ 306,900	$ 266,600	$ 244,900
Median Income	$ 66,897	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	77.9% / 10.4% / 11.7%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Bonner County Housing Factors [5]

2.3. Social Determinants of Health

Overall, Bonner County places 12th in county health rankings when compared to the 43 ranked counties in Idaho. [9] This rating is primarily due to access to clinical care, quality of life, and healthy behaviors of county residents when compared to the state as a whole.

While the county reports only 21 primary care physicians, equating to roughly 4.4 physicians per 10,000 residents, access to hospital care within the county and its proximity to metropolitan Coeur d'Alene improves access to clinical care and health outcomes. [5]

Bonner County ranks last in the state for physical environment, primarily because of particulate matter of 10.4 places air pollution at twice the state average of 5.2. [9] Additionally, county drinking water is noted to exceed standards in some parts of the county, leading to the county's poor score in physical environment category. Higher than average injury deaths, unemployment, income inequality constitute other factors that bring down the overall county health rankings.

According to the Bonner General Health Community Health Needs Assessment (2022), the county enjoys a lower population with diabetes, sexually transmitted diseases, obesity, depression, and health insurance coverage. However, Bonner County does have a higher rate of infant mortality, cancer mortality, heart disease and stroke mortality, and high blood pressure when compared to the state average. [10]

County Health Rankings	
12 of 43 ranked counties in Idaho	
Health Outcomes	13 of 43
Health Factors	26 of 43
Length of Life	24 of 43
Quality of Life	11 of 43
Health Behaviors	15 of 43
Clinical Care	15 of 43
Social & Economic Factors	31 of 43
Physical Environment	43 of 43

Table E: Banner County Health Ranking

2.4. Indicator Impacts to EMS

The county has seen a significant increase in population year over year, with the county describing an influx of an older population that exceeds the current inventory of housing

available in the community. The dramatic growth within the county and the increase in average age drive a higher demand for emergency services, with more residents accessing healthcare for chronic and acute medical issues. Further complicating the provision of EMS is a competitive housing market, high cost of living, and stagnant wages. Recruitment and retention of a qualified workforce requires access to affordable housing. High housing price coupled with competition caused by a lack of housing inventory has led to innovative solutions in workforce housing, both within the emergency services as well as several employers throughout the county. While Bonner County will continue to attract potential residents and seasonal visitors with a high quality of life and countless recreational opportunities, the recruitment and retention of an EMS workforce requires intentional solutions to address housing, cost of living, and similar demographic factors.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

A steady influx of residents and seasonal visitors to Bonner County drives steady demand for EMS service in both the more heavily populated areas of the county, and the recreational areas in more rural portions of the county. While most calls for service occur in the cities and along major highways, the need for coordinated EMS delivery systems is required across the entire county, as communities throughout the county experience population growth, and continue to serve as a vacation destination for recreationalists, hunters, skiers, and outdoor enthusiasts year-round. The permanent population of many communities, coupled with the seasonal nature of recreational activities; whether it be on the lake in the summertime, skiing on Schweitzer in the winter months, or hunting in the fall; pose a unique challenge in the planning and deployment of EMS resources to support organic demand, and season surges.

3.1. Call Volume Overview

The significant impact of tourism on the county provides for seasonal fluctuations in call volume for all licensed providers in the county. Recreational attractions within each agency's service area dictate when seasonal variation yields the highest call volume. Priest Lake and Clark Fork experience higher call volumes in the summer when visitors flock to the lakes and forested campgrounds within the county. Schweitzer Fire District experiences most of its call volume during the winter months when the ski resort is at peak operation. Bonner County EMS provides primary 911 response for much of the county and aids the rural providers with ALS support. The agency also experiences an increase in call volume during both winter and summer months, with slight reductions in calls for service during the shoulder seasons.

Call volume within the county is reported to exceed 5,000 calls annually with most calls for service in the portion covered by Bonner County EMS; this agency provides coverage for most of the populated areas of the county, including Blanchard, Cocolalla, Dover, Oldtown, Ponderay, Priest River, Sagle, and Sandpoint. [11] Additional call volume within Sandpoint is attributed to interfacility transport requests that are handled by Bonner County EMS, providing nonemergency transfers from long-term care centers within the county, as well as emergency transfers from Bonner General Hospital to tertiary care hospitals in Coeur d'Alene, and Spokane.

Rural EMS providers report increasing call volumes due to the community growth, which includes the increased number of vacation homes, rental properties, and recreational facilities within their coverage areas. Schweitzer Fire District and PLEMTs describe not only a

growing resident population, but also increased day use activity within recreational areas that can swell the daytime population significantly on the ski slopes and on the lake in their respective busy seasons. With a smaller, stable population year-round, most communities still have consistent EMS demand from an aging population with chronic illnesses and reported poor access to or compliance with primary care.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Bonner County EMS	*2,269*	*1,545*	**3,814**	*2,231*	*1,840*	**4,071**
Clark Fork Valley Ambulance Service	*176*	*90*	**266**	*173*	*102*	**275**
Priest Lake Emergency Medical Technicians	*77*	*68*	**145**	*92*	*72*	**164**
Schweitzer Fire District	*57*	*311*	**368**	*69*	*26*	**95**
Ambulance Total	*2,579*	*2,014*	**4,593**	*2,565*	*2,040*	**4,605**

Transp: *Indicates the total transports for the agency.*

Non-Transp: *Indicates the total non-transport calls for the agency.*

NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Bonner County (2021-2022) [11, 12]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Bonner County EMS	*2 min*	*8 min*	10 min	18 min	52 min
Clark Fork Valley Ambulance Service	*7 min*	*7 min*	14 min	34 min	114 min
Priest Lake Emergency Medical Technicians	*11 min*	*9 min*	20 min	46 min	136 min
Schweitzer Fire District	*3 min*	*5 min*	8 min	35 min	78 min

***NOTE:** All times are based on annual averages of 911 calls, only.*

***Chute Time:** Total time (minutes) from unit/agency dispatch notification to initiating a response.*

***Driving Time:** Total time (minutes) from unit/agency initiating a response to arriving at the scene.*

***Total Response Time:** Total of the Chute Time and Driving Time (minutes).*

***Transport Time:** Total time (minutes) from departing the scene to arriving at the transport destination.*

***Total Call Time:** Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*

***NOTE:** Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Bonner County (2022) [11, 12]

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls for service within Bonner County are routed to the Bonner County Sheriff's Office (BCSO), and EMS providers are all dispatched using a dedicated fire & EMS channel. Assigned fire & EMS dispatchers are trained in Emergency Medical Dispatch procedures, and the system uses priority dispatching procedures to provide first responder support to EMS agencies for more complex medical calls.

The radio system consists of a VHF repeater network that utilizes eight towers strategically located throughout the county, providing adequate communications in most areas. Agencies report that the current radio system provides excellent coverage, but still has gaps in areas due to terrain and natural obstructions. While this issue can often be overcome by switching to different towers, some agencies report "dead spots" in more remote areas of the county.

4.1.2. EMS Agency Overview

Bonner County is served by four licensed EMS agencies staffing 9 stations, with an additional station being added in the near future to better serve the western portion of the county. Transport EMS providers are supported by five staffed fire stations who assist with 911 response as first responders, and provide manpower and extrication, as required. Some of those stations are staffed with only one or two career personnel and augmented with volunteers. Apart from Schweitzer Fire District, none of the fire districts provide EMS transport, but EMS agencies report a functional on-scene working relationships with neighboring departments.

Bonner County has historically experienced challenges in delivering EMS within the county. Clark Fork Valley Ambulance reports being the first ambulance licensed in Bonner County in 1963 and has been providing uninterrupted service to the citizens and visitors of Hope,

Clark Fork, and eastern Bonner County since that time. Starting in 1965, EMS in Bonner County was provided by an organization that also provided towing service for the county. In the 1990s, that organization closed its doors when the owner retired and could not find another company willing to take on the responsibility for the funding provided by the county. At that point, an ambulance service from Montana called Big Sky Ambulance contracted with the county to provide EMS. Still, tension between the EMS agency and other first responder organizations, as well as financial issues, caused the company to close in the early 2000s. Bonner County EMS was established with funding provided by an ambulance taxing district to address the need for funded prehospital care capability within the county. In 2015, continued financial challenges led fire districts to consider assuming responsibility for EMS delivery; however, with leadership changes in the county, the ambulance district, and Bonner County EMS, service delivery improved. Elected officials and emergency response agencies express support for the reliability and sustainability of the current model.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Bonner County EMS	Taxing District Third Service	Advanced Life Support (ALS)	Scheduled	Compensated
Clark Fork Valley Ambulance Service	Private 501(c)(3) Third Service	Intermediate Life Support (ILS)	Scheduled	Volunteer
Priest Lake Emergency Medical Technicians	Private 501(c)(3) Third Service	Basic Life Support (BLS)	Scheduled	Volunteer
Schweitzer Fire District	Private 501(c)(3) Fire-Based	Basic Life Support (BLS)	Scheduled	Volunteer

Table H: List of EMS Agencies Located in Bonner County [13]

4.1.2.1. Bonner County Emergency Medical Services Overview

Bonner County Emergency Medical Services (BCEMS) is a third-service, public ambulance district providing ALS coverage throughout the county, supporting rural BLS and ILS agencies with paramedic intercepts for critical patients. The agency has 47 employees (24 paramedics, 14 Advanced Emergency Medical Technicians (AEMT), and 9 Emergency

Medical Technicians (EMT) working rotating 48/96 shifts, staffing four ambulances and two paramedic chase cars per shift, and additional response capabilities from a Chief and Deputy Chief, both paramedics, working business hours each day. The agency reports responding to 5,000 calls for service in 2022 and providing interfacility transfers within the county, including hospital transfers to Coeur d'Alene and Spokane.

BCEMS manages the county's ambulance taxing district funds (with oversight from the ambulance district board) and distributes contracted funding to the other three licensed providers covering the rural areas within the county, including Clark Fork Valley Ambulance, Priest Lake EMTs, and Schweitzer Fire District. The district receives approximately $3.1 million annually from tax revenue and distributes $125,000 annually to the rural agencies. In addition to tax revenue, BCEMS receives approximately $1.3 million per year in billing revenue, which includes over three hundred interfacility transfers. The approximate annual budget for the organization is $4.4 million, which includes approximately $3.0 million for personnel and $1.4 million for training, supplies, facilities, fuel, overhead, and operational expenses. The agency reports no anticipated carryover or reserve from this year's budget.

The agency has received grant funding from federal, state, and local sources to fund equipment purchases, when available, including the use of ARPA funds for vehicle replacement, EMSAVE grants for equipment needs, and private grants that fund community programs, such as fielding of AEDs in county buildings.

Additional tax revenue currently supports facility upgrades to replace an aging main station inherited from a prior EMS agency, and that had recurring mold and air quality issues. The new station has been funded and is currently in the process of design and planning. Station Four, located in Ponderay, was recently constructed, and houses a single ambulance and crew. An additional station is being planned in the western portion of the county in Blanchard for projected growth and EMS demand in that area.

BCEMS is responsible to the Board of County Commissioners (serving as the Ambulance Taxing Board), and receives input from an appointed EMS Advisory Council, made up of BCEMS leadership, the Bonner County EMS Medical Director, a representative for county fire districts, a hospital representative, rural agency EMS representation, and a public at-large representative. The intent of the Advisory Board is to provide guidance and advice to BCEMS and the Board of County Commissioners regarding the provision of EMS in the county, ensuring representation from BCEMS partners and stakeholders. As the agency responsible to the Board of County Commissioners to ensure reliable, appropriate, and sustainable EMS delivery across the county, BCEMS continues to develop and revise plans for EMS service delivery in the event any EMS agency within the county fails to meet their contractual requirements in providing EMS response within their assigned coverage area.

4.1.2.2. Clark Fork Valley Ambulance Association Overview

Clark Fork Valley Ambulance (CFVA) was the first EMS agency in Bonner County to be licensed by the State of Idaho in 1963; since that time, the agency has been providing EMS to the eastern portion of Bonner County, east of Trestle Creek, including Hope and Clark Fork to the Montana border. CVFA is a private, 501(c)(3) non-profit, third-service EMS provider licensed at the ILS level, responding to approximately 300 calls for service each

year. The agency is overseen by a Board of Directors and is contracted to provide EMS coverage to their community through BCEMS and the Board of County Commissioners. Unlike the two other rural agencies in the county, CFVA sees only modest seasonal fluctuation in call volume, as a good portion of the population of their coverage area lives in the community year-round. CFVA operates two ambulances out of two stations, one located in Clark Fork and the second out of the Sam Owen fire station in Hope. CFVA is staffed by 12 personnel (8 EMT and 4 AEMT) but reports that approximately half cover the majority of the schedule and answer most of the calls for service. The agency provides modest stipends to providers who cover shifts on behalf of the agency and fund a part-time administrative position to manage reporting, supplies, and other organizational duties. BCEMS provides ALS support for CFVA, as the agency reports approximately 1/3 of their calls require ALS interventions, owing much of that volume to the aging population with chronic medical conditions and the serious trauma patients on roadways.

CFVA receives $45,000 annually from tax revenue through the county contract and receives an additional $90,000 annually through billing revenue. Billing is contracted through a small billing agency in Spokane used by the other two rural providers within the county. The agency reports a small amount of income from donations from the community and leverages grants to purchase equipment when able to conserve financial resources. CFVA leadership describes itself as an organization at a crossroads; with a rising call volume and decreasing model of volunteerism, additional funds are needed to provide daytime staffing to cover calls for service when most volunteers are working and are unavailable. While current funding is insufficient to meet that need, the agency cites $200,000 of tax revenue collected within their coverage area for the ambulance taxing district. Still only $45,000 is provided to the agency primarily responsible for currently providing EMS coverage. CFVA is advocating to the ambulance taxing district and elected officials to increase funding to accommodate this evolving need. BCEMS has offered to put a part-time BLS unit in the community, yet both agencies disagree on the potential course of action. While billing revenue from BLS call volume may cover the cost of dedicated staffing, CFVA and BCEMS differ on which agency should best manage staffing.

CFVA intends to expand its operational model to include a combination career and volunteer staffing to accommodate increased EMS demand and maintain a positive reputation within its supportive community. CFVA describes an effort to have “more of a voice” for EMS delivery and their community. Financial and organizational modification is necessary to settle on a course of action that best serves the community, the agencies, and the EMS system within the county.

4.1.2.3. Priest Lake Emergency Medical Technicians Overview

Priest Lake Emergency Medical Technicians (PLEMT) is a private, non-profit 501(c)(3) organization providing BLS ambulance service to the community of Priest Lake with two ambulances out of two stations. The primary facility is located in Priest Lake, with a second station located in a shared garage owned by the county Road & Bridge department in Coolin Bay. Priest Lake is a rural community that sees significant increases in population in the summer months, with seasonal residents, tourists, recreationalists, and second-home owners returning to the community. Due to the lack of access to the west side of Boundary County, with rugged terrain, PLEMT provides mutual aid extending to the Canadian border.

The agency responds to 150-180 calls annually, with a majority of calls between May and October as seasonal surges bring more residents and visitors to the area. A Board of Directors oversees the agency.

PLEMT reports twenty EMS personnel currently on the roster, including seven EMTs, and four ambulance-based clinicians (ABC), as well as nine Emergency Medical Responder (EMR)/drivers. The agency schedules personnel when able, but communication often requires utilizing dedicated text messaging groups to coordinate response, especially in the slower months. A part-time administrative staff member provides support to the Board and operational leadership while also completing billing, supply ordering, and other organizational duties.

The department is contracted through the Bonner County Ambulance District to provide EMS service in their coverage area and receives $44,400 annually from tax revenue. According to agency leadership, approximately $200,000 in tax revenue is generated for the taxing district from their coverage area, but much of those funds are consolidated and used elsewhere in the county. In addition to tax revenue, the department receives approximately $45,000 annually from billing revenue for 80-100 transports. Billing is contracted to a third-party billing agency in Spokane, that is also used by Clark Fork Ambulance and Schweitzer Fire District. PLEMT relies heavily on support from the community through fundraisers, donations, and participation in social media fundraising campaigns. They describe the substantial negative impacts that the pandemic had on community engagement and traditional fundraisers. Agency leadership describes a grim financial situation, currently deferring maintenance on EMS station facilities and vehicles due to modest gross revenue. PLEMT is a non-profit EMS provider and does not have an opportunity to share infrastructure expenses with other emergency service agencies. Infrastructure expenses, insurance, utilities, maintenance, and facility repairs must be considered alongside the cost of equipment, supplies, and fuel to provide EMS to the community. Leadership describes sorely needed fleet upgrades, facility improvement, and repairs.

The dedicated volunteers of PLEMT continue to provide EMS for the permanent residents of the small community stretching from mile marker 14 on Highway 57 to the Canadian border, as well as residents who call the area home for only a part of the year and visitors that come to recreate in North Idaho. Decreasing volunteerism, an aging population, and the transient nature of much of the population of the community make the operational realities difficult for volunteers, and the lack of access to adequate funding for capital expenses, facility improvements, and the eventual need for personnel to cover the ambulance when volunteers are unavailable are concerns that have potentially severe consequences to the agency and the community.

4.1.2.4. Schweitzer Fire Department Overview

Schweitzer Fire District (SFD) is a public taxing district, fire-based EMS agency that provides BLS coverage to the area of Schweitzer Mountain Resort with two ambulances out of a single station. The agency responds to approximately 130 calls per year, with greater than 90% of those responses occurring between December and March when the ski resort is operating at peak capacity, and most calls during business hours when the resort is operational. The remainder of the year sees minimal call volume, with the agency reporting

several weeks between calls for EMS service during the off-season, as most resort properties remain unoccupied. A Board of Fire Commissioners provides oversight to the district.

The department is contracted through the Bonner County Ambulance District to provide EMS service in their coverage area and receives $36,000 annually from tax revenue, which is reportedly based on agency call volume. Citing approximately $160,000 in ambulance tax district revenue generated by properties within the coverage area, agency leadership asserts that the department deserves a more equitable share of tax revenue for EMS operations, more in line with revenue collected from the community served by SFD.

In addition to tax revenue, the department receives approximately $27,000 annually from billing revenue for 60-70 transports. Billing is contracted to a small, family-owned billing agency in Spokane, also used by Clark Fork Ambulance and Priest Lake EMTs. Additional tax revenue is generated for the department through fire district funds totaling approximately $348,000 for capital improvements, fire apparatus maintenance and replacement, personnel expenses, and department overhead. While fire district funds are not intended to support EMS transport operations, the ambulance operation at SFD benefits from shared infrastructure, facilities, and overhead costs.

The department constructed private living quarters over the apparatus bays and offers year-round housing for volunteers and their families in return for shift coverage on fire apparatus and the ambulance. The department manages seven sets of private living quarters but reports that in the last two years, not all these accommodations were full, as in years past. The department also provides free lift tickets for members, in addition to housing, utilities, and other typical expenses. Volunteer staffing at the department waxes and wanes with the influx of seasonal personnel, and the department struggles with fire and EMS coverage during the off-season. A shift schedule is maintained to ensure coverage among the department's nine licensed EMS personnel, but much of the burden falls to resident firefighter/EMTs. The department reports that many past members have chosen to live at the station while working full-time employment at fire or EMS departments within the area due to the difficulty in locating affordable housing in North Idaho.

The department is most concerned with the recruitment and retention of volunteers and the quality of training and experience within the fire and EMS workforce. Working with other fire districts within the county, the department seeks to improve access to funded, academy-style training, especially for personnel who will operate in rural environments, with delays associated with mutual aid, unlike many urban areas.

4.1.3. Hospital Access Overview

The primary transport destination within the county is Bonner General Hospital, located in downtown Sandpoint, serving as the only definitive care facility within Bonner County. However, some agencies located near the Washington border routinely transport to Newport Hospital due to the proximity and the location of their primary care provider. The nearest tertiary center is located in Coeur d'Alene, approximately 45 miles to the south via US Highway 95, serving as the closest resource for specialty care.

- **Bonner General Health** (520 North 3rd Street, Sandpoint, ID) is a 25-bed critical access hospital providing 24-hour emergency care, intensive care capability, general and orthopedic surgery, and obstetrics. [14] Bonner General is a TSE-designated Level IV Trauma Center, Level III Stroke Center, and Level II STEMI Center. [15] Bonner General accepts patients in transfer from surrounding hospitals.

- **Newport Community Hospital** (714 West Pine Street, Newport, WA) is a 24-bed critical access hospital located just over the Washington border in Newport. Patients from the western portion of the county, including Blanchard, Oldtown, Priest Lake, and Priest River often request transport to Newport for their care. Newport Hospital has 24-hour emergency services, general and orthopedic surgery, obstetrics, and primary care coverage. [16]

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-certified Level II Trauma Center, as well as an interventional cardiac center. [15] Key services provided at Kootenai Health include a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [17] Many patients from Bonner County are transferred to Kootenai Health from Bonner General Health for specialty care for services not available locally.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Bonner County is served by four licensed EMS agencies, supported by several fire departments providing first responder support and extrication on specific calls for service. The countywide EMS operation is organized by Bonner County EMS, responsible for the management of tax revenue and accountable to the Board of County Commissioners for the reliable and appropriate provision of EMS within the county. BCEMS contracts with the three rural EMS agencies for coverage within their assigned area, with modest financial compensation for the cost of readiness for the agencies. All agencies within the county share the same medical director, streamlining clinical processes for EMS delivery and optimizing communication about medical protocols and educational opportunities across all licensed agencies.

In addition to providing oversight of the tax revenue for the county, BCEMS provides ALS coverage across the entire county, coordinating the complex care of critical patients. All county agencies utilize the same medical director, providing opportunities for collaborative case review and performance improvement periodically.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Subjective assessments regarding the sustainability of each provider during the resource assessment process yielded scores of 50, 60, 70, and 90 out of 100 with a mean of 67.5. The lower scores were attributed to rural

agencies struggling with financial constraints, recruitment and retention challenges, and lack of funding for funded personnel.

- **EMS Agency Financial Situation**: Consistent growth of call volume related to steady growth within Bonner County provides a boost to tax revenue that is limited by the state-mandated levy cap; however, the rate of population growth within the county regularly outpaces the levy cap, leaving BCEMS to find ways to overcome the funding mismatch. Exacerbating this situation in the rural communities is the disproportionate allocation of tax revenue to the career ALS service, placing the rural, primarily volunteer agencies at a disadvantage in sustainability. The countywide call volume is approaching 6,000 calls per year and likely requires a new approach to meet the EMS demand within the county within the current financial constraints.

- **EMS Agency Communications Strategy and Outreach**: BCEMS has a formal outreach and public communications strategy in the wake of the pandemic. Rural agencies report an informal approach to public outreach and information that focuses on social media. Such practices can benefit from coordination and unified messaging to optimize the impact of public information efforts.

- **Community View of EMS Agencies**: All agencies within the county report a positive perception of their role and performance with the public in their community. The rural agencies report close ties to the community, enhanced by the local perception of county and state government in the rural communities. BCEMS reports positive perception within the populated communities in which they serve, improving the public opinion following administrative and leadership challenges of past years.

- **Elected Official Support of EMS Agencies**: BCEMS leadership works closely with the Bonner County Board of Commissioners and has improved the perception of EMS within local and county elected officials in recent years. Providing regular reports to the Board of County Commissioners, BCEMS reports regular communication and collaboration with elected officials. Rural agencies report routine attendance at Commissioners Court but describe much less frequent interaction with elected officials. Many of the rural providers express concern that their input about EMS delivery in Bonner County isn't understood by elected officials due to their relative lack of representation in government forums.

- **Agency & System Response Outlook:** All agencies within the county express a positive operational relationship among responders. However, rural providers express concern over an uncertain future related to operational funding and workforce challenges exacerbated by an inability to support appropriate workforce funding. BCEMS and SFD express optimism over the potential for GEMT funds to supplement "make ready" costs within their agencies. However, private, non-profit ambulance organizations cannot access those funds under the current legislation. All agencies are optimistic about the work of the EMS Sustainability Task Force and the potential for future funding to support the provision of EMS in rural communities across Idaho. Rural agencies are hopeful that funds targeted toward rural EMS delivery will be

invested in shoring up current volunteer systems and improving access to workforce funding to ensure reliable EMS delivery within their communities.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: EMS in Bonner County is provided by four licensed EMS providers covering distinct areas of the county. BCEMS provides paramedic coverage countywide, supporting the three rural providers caring for complex patients with critical medical needs. The Board of County Commissioners oversees EMS operations through BCEMS and the county ambulance district.

- **Service delivery partners**: All agencies within the county emphasized the importance of fire department support for ILS and ALS patients and motor vehicle accidents, as well as the sheriff's department for on-scene support managing family, bystanders, and unruly individuals. Rural agencies highlighted the support of BCEMS and Life Flight Network for support with critical patients and the hospital for the positive relationship and coordination for continuity of care. SFD described their close working relationship with Ski Patrol on Schweitzer Mountain, who have a significant role in patient packing and care on the slopes for many of their patients during the winter ski season.

- **Medical Direction**: Medical direction for all agencies within the county is provided by a local cardiologist who practices through Bonner General Health. The coordinated approach to multiagency coordination and clinical cooperation in the countywide EMS delivery system is highlighted by the integrated approach to training, case review, and performance improvement.

- **Communications and Interoperability**: Overall radio communications are adequate, although gaps in coverage exist due to topography in more remote areas of the county. Agencies are generally satisfied with radio coverage and report ease of communication between agencies and interoperability with all responding units from within the county and from mutual aid partners.

- **Mutual Aid Systems & Agreements:** Mutual Aid is organized by BCEMS through individual EMS contracts with licensed EMS providers within the county. BCSO's fire and EMS dispatch handles automatic aid for specific calls and coordinates the response of resources within the county and to/from neighboring counties, as appropriate and as requested by responding units based on incident location, patient requirements, and number of patients. BCEMS also maintains mutual aid agreements with Boundary and Kootenai County to their north and south. CFVA responds into the State of Montana to assist mutual aid partners, including Noxon Ambulance, as requested.

- **Community Health EMS (CHEMS)**: BCEMS has a CHEMS program utilizing available paramedic personnel to conduct follow-up with specific patients considered "high utilizers" within the county. Rural agencies have a general understanding of CHEMS programs but lack the personnel or funding to invest in program development.

- **Patient Care Documentation System**: BCEMS utilizes ESO for patient documentation, citing the reporting and comparative data capabilities of ESO as a reason for the selection of that product. Rural providers all report using the patient care reporting system provided by the Bureau of EMS and Preparedness for patient care charting.

- **Inter-facility Transports**: BCEMS conducts interfacility transfers between long-term care facilities within Bonner County and hospital and primary care destinations. Additionally, BCEMS provides emergency transfers from Bonner General Hospital to hospitals in Coeur d'Alene and Spokane, as limited private ambulance options exist in North Idaho. When necessary, BCEMS will also accept emergency transfers from Boundary Community Hospital or Newport Community Hospital into Bonner General Hospital for direct admissions and emergent surgical patients. The agency reports approximately 325 IFTs annually.

4.2.1.3. Response Overview

With a combination of career and volunteer departments providing EMS coverage across the county, response to calls for service are answered quickly by EMS units, and often multiple units respond to incidents where time is of the essence. Dispatch protocols dictate that both BLS/ILS and ALS assets are alerted to calls for service involving life-threatening illness or injury. Coordination among responding units is conducted over the radio prior to the arrival of all units to relay important response information. All agencies use scheduled personnel to ensure that personnel respond in a timely fashion, and two agencies allow response from home or locations other than the station, which may delay response of the ambulance.

- **Level(s) of Service:** ALS service is provided by BCEMS across Bonner County. Clark Fork Ambulance routinely provides ILS care to patients in the rural areas of eastern Bonner County, and the two other rural providers offer BLS care for patients within their coverage area and are supported by paramedics from one of the four BCEMS stations nearby.

- **Agency Response Concern:** The mutual aid system within the county ensures that no call for service goes unanswered; however, several agencies have reported difficulty responding to calls within the last year, and additional agencies have described situations where agencies needed to respond to another agency's territory because one of the county agencies was unable to respond. These gaps in availability primarily occur during the day while volunteers are out of the coverage area for work but have also been reported on weekends and during the late night or early morning hours. Challenges with recruitment and retention continue to burden a small number of volunteers, and some agencies are describing an increasingly frequent need to cover calls in neighboring jurisdictions. These gaps in availability cause delays in patient care and can potentially impact patient outcomes.

- **Helicopter Response & Utilization:** With Life Flight Network resources located in Sandpoint, agencies report only calling for air medical resources for high acuity patients, with time sensitive emergencies and patients with unique specialty care needs, such as pediatric trauma. Agencies described challenges with aircraft

availability due to weather during a significant portion of the year, particularly during winter weather which may ground aircraft for prolonged periods of time.

- **Factors impacting Response Times:** Agencies noted that simultaneous calls (requiring a second ambulance crew) are the most impactful factor since they require the response of resources from an adjacent district. BCSO dispatch attempts to overcome potential delays by dispatching the closest available unit. Time of day is a secondary factor impacting response times due to occasional traffic delays. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** All four agencies respond to incidents on public lands because of significant National Forest and federal land in Bonner County, and the plentiful recreational activities available within the county. Agencies report that such responses require significant investments of manpower and response units from EMS, fire departments, law enforcement, and sometimes search and rescue resources. Backcountry or wilderness responses can take four to six hours, tying up substantial emergency resources.

4.2.2. Workforce & Resource Assessment

Career personnel, compensated volunteers, and traditional volunteer personnel make up the EMS workforce in Bonner County, each facing distinct challenges related to recruitment, training, and retention of personnel. Decreased nationwide volunteerism and qualified EMS provider shortages create an increasingly competitive environment for volunteer agencies seeking to secure their workforce. Issues with recruitment, initial training, and personnel retention were consistently reported across all agencies within the county and remain a challenge for the sustainability of the EMS delivery system in Bonner County.

4.2.2.1. Staffing Overview

- **Staffing Structure:** BCEMS utilizes a rotating 48/96 schedule for staffing the four EMS units and two supervisory positions covered by career personnel within the county. All three rural EMS providers utilize coverage schedules to ensure the availability of personnel for EMS response within their respective districts.

- **Responder Average Age:** The average age of EMS personnel within the community is 25-35 in both the career ranks, as well as the fire district that serves Schweitzer Ski Resort. CFVA and PLEMT report a higher average age of 45-55.

- **Staffing Numbers:** BCEMS reports optimum staffing, with open positions typically filled in a timely fashion through an intentional hiring process. With the potential expansion to a fifth full-time staffed station in the western portion of the county, BCEMS may need to hire a large number of staff. Still typically, the hiring process only fills a small number of vacancies resulting from retirement, promotion, or lateral transfer to larger agencies. Rural EMS providers within the county struggle with a different problem; decreasing volunteerism and a lack of funding results in minimum numbers of personnel, punctuated by agencies reporting that the resignation or

retirement of one or two personnel could have catastrophic consequences on the ability of the agency to respond to calls for service in the community. A small number of volunteers are answering most of the calls, which is a risk for agency sustainability.

- **Staffing Concerns:** Rural volunteer agencies report decreasing volunteerism, resulting in an unfair burden on active members to cover more calls or scheduled shifts. Even in the case of SFD who is offering private housing for personnel, the number of applicants is dwindling to concerning levels, and threatening the ability of agencies to ensure reliable EMS coverage. Incentives for volunteer recruitment, training opportunities for entry-level training, and benefits for volunteers is necessary to shore up the current system or risk a staffing crisis and potential closure of EMS agencies in the future.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, county agencies continue to respond to calls for service and manage call volume with no missed calls. The ability of agencies to provide modest compensation or other benefits to personnel has allowed the current system to continue functioning in its current structure. BCEMS has developed contingency plans and alternative staffing models to respond to temporary or permanent interruption in service from any of the rural providers, in order to ensure a reliable and appropriate response to calls for service in the county.

- **Recruitment & Retention:** As described, BCEMS has been successful in the recruitment and retention of qualified personnel within the county including a significant number of ALS providers. Rural agencies have leveraged several unique methods, including private family housing, recreational incentives, and modest stipends for shift coverage to attract and maintain volunteer activity within their agencies. Programs such as state-provided health insurance, retirement programs, property tax incentives, and state income tax credits for fire and EMS volunteer participation were described by agency leadership as ideas that could help improve the engagement of volunteers to provide EMS in rural communities.

4.2.2.2. Training & Education Overview

- BCEMS conducts annual competency training, inviting all three county EMS agencies to participate. Annual training includes interactive discussions with the medical director and presentations on new equipment, supplies, and treatment protocols.

- All four agencies provide online continuing education for members to remain current and to facilitate renewal processes for EMS licensure.

- All agencies report challenges with the availability of initial training, especially for volunteers from rural providers who have long travel times to EMT classes. Initial training is typically accomplished through online or hybrid training centers.

- Agencies also report monthly or quarterly chart reviews with their medical director, especially following high-profile or exceptional calls.

4.2.2.3. Facilities Overview

- **Station Locations:** EMS stations across Bonner County are strategically located in populated areas or areas with anticipated calls for service. BCEMS currently maintains four stations: (1) Sandpoint, (2) Priest River, (3) Sagle, and (4) Ponderay. An additional station is planned in (5) Blanchard to compensate for increased call volume in the western portion of the county. CFVA utilizes two stations: a main station in Clark Fork and an ambulance located at the Sam Owen fire station in Hope. PLEMT operates out of its main station in Priest Lake and stations an ambulance at a county-owned garage facility in Coolin Bay. Finally, SFD operates out of the fire station on Schweitzer Mountain.

- **Station Conditions:** With nine stations, the conditions of each facility vary greatly. BCEMS Headquarters / Station One is in the process of being replaced due to the age and condition of the current building. The other stations are relatively new and meet the needs of the agency. Clark Fork and Priest Lake have deferred maintenance that needs to be addressed in the near future which will directly impact the longevity of those facilities. Issues include roof leaks and general infrastructure repair. The SFD facility is reported to be well-maintained using fire district funds.

- **Facility Needs:** Besides general repair and maintenance, CFVA and PLEMT facilities will require renovation to accommodate on-duty crews should career staffing be necessary in those communities. Improvements include sleeping quarters, kitchen facilities, storage, and shower/restroom facilities.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: EMS agencies throughout the county indicate that their equipment and supplies meet their daily needs. However, several rural agencies report that expensive supplies seldom used frequently expire, incurring additional costs to the agency.

- **Condition**: All four agencies in the county report that equipment and supplies in “good” or “excellent” condition. Agencies report seeking grant funds for the initial purchase or replacement of some equipment. if grant funds are unavailable, BCEMS will provide financial assistance to rural agencies to purchase equipment using ambulance tax district revenue.

- **Funding**: More expensive equipment is replaced through grant programs, especially capital equipment, and vehicles. Disposable supplies are often purchased using agency operational funds, and BCEMS provides financial support for agencies that encounter problems purchasing equipment or supplies using ambulance tax district revenue.

- **Needs and Shortages**: All four licensed agencies within the county reported no current unmet needs.

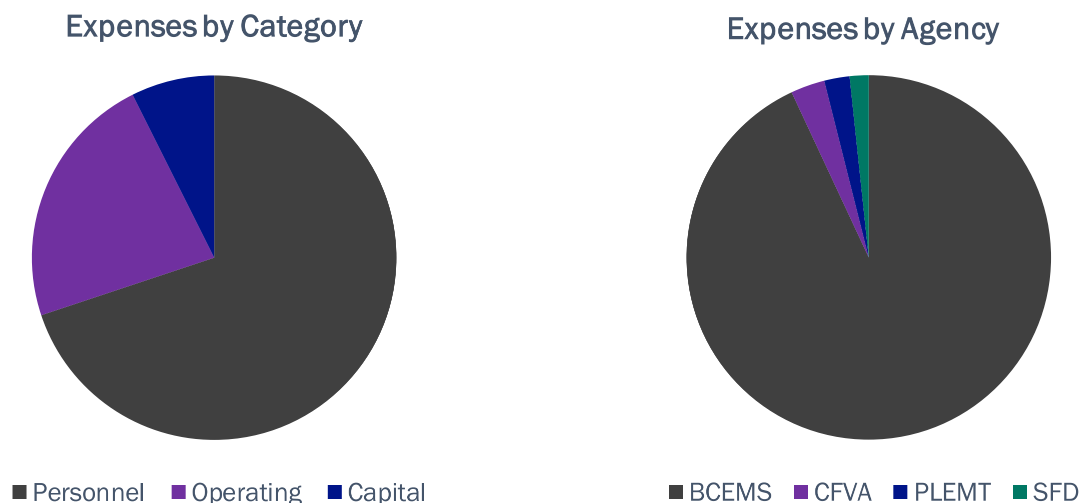
4.2.3. Financial Overview

Primary sources of income for EMS delivery in Bonner County are from the ambulance district tax revenue, at a rate of 0.000187172% in 2022, and billing revenue from patient transports performed by each agency. Total tax revenue in 2022 was approximately $3.1 million and was managed by BCEMS under the oversight of the Board of County Commissioners, who also serve as the Board for the ambulance taxing district.

Collectively staffing seven frontline ambulances, two on-duty paramedic chase cars, and two paramedic supervisors, EMS agencies in Bonner County respond to over 5,000 calls annually. One career department handles a majority of the calls for service; however, staffing for rural EMS units, including two ambulances that serve season recreational areas are important not only as countywide resources for access to emergency medical care, but support economic development through the tourist industry.

4.2.3.1. Expense Overview

The cumulative operating costs among the four county providers totals approximately $4,460,000 annually. Personnel expenses account for $3.0 million for BCEMS and roughly $75,000 for the part-time administrative personnel at the rural agencies, as well as stipends for volunteer response. In 2022, capital expenses included the purchase of chase cars, supervisor vehicles, and various pieces of equipment paid for primarily by grant income, including state equipment grants and ARPA funds. The balance of the expenses covered training, uniforms, supplies, insurance, utilities, maintenance, fuel, and overhead costs. Some expenses are estimated because of the tax payments to agencies and shared expenses utilizing alternate revenue sources, including fire district funds.



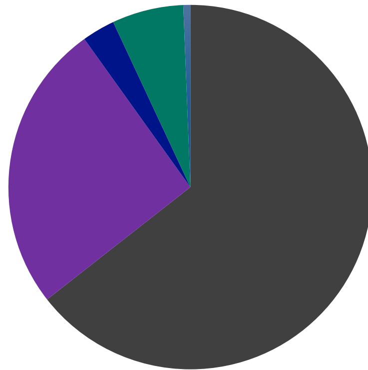
4.2.3.2. Revenue Overview

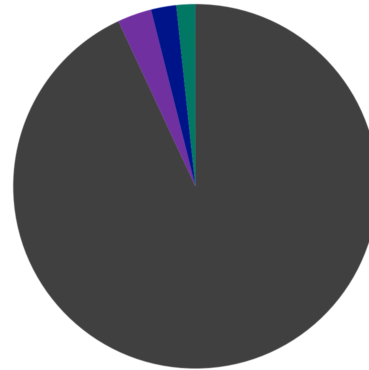
Countywide, primary revenue sources include ambulance taxing district revenue of approximately $3.3 million, billing revenue totaling approximately $1,455,000 (including interfacility transfers), grant funding of approximately $325,000 (targeted for specific capital and equipment purchases), and donations estimated at $32,000. The combined estimated revenue for the county totals $5,122,000. In 2023, that revenue was increased by $2.3 million for bond revenue for the design and construction of a new BCEMS headquarters building in Sandpoint (which is not included in the graphs above).

While tax revenue growth is legislatively capped at 3% annually, and some fluctuation in billing revenue is expected year to year, those two funding sources remain somewhat fixed. Grant revenue and donations can fluctuate greatly, and since they are typically targeted funds, they do not necessarily contribute to the fiscal sustainability of an organization but may address a particular operational or equipment need.

Agencies within the county reported little to no carryover or reserve funds from revenue collected in 2022 or projected for 2023 due to ongoing cost increases, deferred maintenance, capital and facility improvements, and increased personnel costs. In particular, rural agencies continue to neglect needed repair and facility maintenance due to a lack of funds, and current infrastructure remains insufficient to accommodate hiring career staff in rural areas should the need arise.

Continued rise in EMS demand and concurrent increase in workforce costs, facility improvement and repair expenses, equipment and supply costs, fuel costs, and overall cost of living increases threaten to outpace revenue growth, which is limited by external forces, such as Idaho statute and reimbursement rates allowed under Medicare, Medicaid, and private insurance. This economic reality threatens the solvency and financial sustainability of the EMS system within Bonner County and requires intentional focus from local and state leaders to address the growing gap between revenue and expense in providing this vital service to the residents and visitors of the county and the state.





4.2.4. Resource Assessment Additional Factors

Emergency Medical Services across Bonner County can expect a continued rise in demand with a growing population and an increasing segment of that population over the age of 65. The current EMS system relies on volunteer EMS delivery for sparsely populated and seasonal areas within the county. Access to capital for the improvement of facilities and equipment, as well as potential peak-time staffing, is necessary to sustain the services provided by the rural agencies within the county. The county EMS delivery system is approaching a decision point requiring either improved funding for rural EMS agencies or a transition to an integrated system within the county. EMS demand, call volume, and reimbursement within the rural portions of the county would likely not provide adequate funding for a career or combination system within supplemental funding.

The current EMS delivery system provides reliable and redundant coverage countywide with reasonable response times based on station locations. A more thorough assessment of response times and system demand during off-peak season, especially considering varied seasonal activity with winter and summer surges in call volume, might yield innovative solutions for staffing rural agencies with career staff should volunteerism continue to decline.

EMS agency leadership across the county remains steadfast in their support of workforce development, professionalism, and innovative solutions to address the EMS needs of the community. Additional funding should support these innovative solutions, incentivizing efficiency, but not at the cost of readiness and timely response to calls for service from the residents and visitors of the county.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). QuickFacts: Bonner County, Idaho. Retrieved from https://www.census.gov/quickfacts/fact/faq/bonnercountyidaho/PST045222

[2] U.S. Census Bureau. (2022). QuickFacts: Sandpoint city, Idaho. Retrieved from https://www.census.gov/quickfacts/fact/table/sandpointcityidaho/PST045222

[3] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). Idaho forest factbook: county atlas of forest land and the forest product industry. Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[4] Bonner County Planning Department. (May 24, 2023). Bonner County Comprehensive Plan: Land Use. Retrieved from https://www.bonnercountyid.gov/media/Planning/Comp%20Plan%20Update/Land%20Use%20-%20Current%20Adopted%20(12.20.2005).pdf

[5] University of Idaho Extension. (2023). Indicators Idaho: Bonner County. Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16017

[6] Bonner County Planning Department. (May 24, 2023). Bonner County Comprehensive Plan: Economic Development. Retrieved from https://www.bonnercountyid.gov/media/Planning/Comp%20Plan%20Update/Economic%20Development%20(v.9%20-%2005.24.23)%20-%20Adopted%20Update.pdf

[7] Bonner County Planning Department. (May 24, 2023). Bonner County Comprehensive Plan: Housing. Retrieved from https://www.bonnercountyid.gov/media/Planning/Comp%20Plan%20Update/Housing%20(v.9%20-%2007.26.23)%20-%20Adopted%20Update.pdf

[8] Redfin. (2023, January). Bonner County, ID Housing Market. Retrieved from https://www.redfin.com/county/676/ID/Bonner-County/housing-market

[9] University of Wisconsin Population Health Institute. (2023). County Health Rankings: Bonner County, Idaho. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/bonner?year=2023

[10] Bonner General Health. (2022). Community Health Needs Assessment. Retrieved from https://bonnergeneral.org/wp-content/uploads/2023/02/CHNA-2022-1.pdf

[11] Biospatial. (2023).

[12] IGEMS Data. (2023). EMS Planner Call Volume – Response Time: 2021 / 2022.

[13] IGEMS Data. (2023). Agency career-vs-volunteer personnel: 2022.

[14] Bonner General Health. (2023). Services & Clinics. https://bonnergeneral.org/services/

[15] Idaho Department of Health and Welfare. (2023). Idaho time-sensitive emergencies: Idaho TSE facility designations. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[16] Newport Hospital and Health System. (2023). Services. https://newporthospitalandhealth.org/service/

[17] Kootenai Health. (2023). Facts and community reports. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

BOUNDARY COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county, based on available data.

1. EXECUTIVE SUMMARY

Emergency medical services (EMS) in Boundary County provided by a single licensed EMS agency that has served the community since 1965. Boundary Ambulance Service (BAS) is the longest-running, active EMS agency in the State of Idaho, and has adapted to the changing needs of the community, transitioning from a volunteer to a career organization approximately six years ago. Covering 1,278 square miles of rugged wilderness is currently accomplished by one full-time ambulance crew operating out of a single station in Bonners Ferry, with the ability to staff a second ambulance with scheduled on-call personnel to meet the demands of emergency and non-emergency calls for service.

EMS Leadership, county elected officials, and the voters of Boundary County are supportive of continued growth of the county's EMS system through a referendum to increase the tax rate for the county ambulance district, which has been successfully added to the ballot for 2023, however, current legislation prohibit the increase of tax rates beyond the prescribed levy cap, even by the vote of the citizens of Boundary County. These legislative barriers limit the ability of BAS to continue to grow and better serve the needs of the citizens of this small, isolated county.

Unlike other counties in Idaho, Boundary County shares its northern border with Canada, meaning that mutual aid typically used across Idaho to cover calls within larger counties is unavailable. The Cabinet, Purcell, and Selkirk mountains two the east and west of the populated areas limit road access into Boundary County, further complicating the organization of mutual aid resources. The glacial river valley that is home to most of the population of the county is where most calls for service originate from, and BAS has improved the time from dispatch to response to overcome the impact of distance morbidity and mortality by reducing the time it takes to get EMS units responding, therefore getting to the patient's side faster, and improving patient outcomes.

BAS has embraced interfacility transfers, mobile integrated health programs, and other innovative solutions to maximize revenue, and improve service delivery to the residents and visitors of this rural county. With a growing population and increasing calls for service, expansion to include a second full-time ambulance is critical to continuing the level of quality service that is currently provided to Boundary County. Such growth requires creative approaches to funding, and engagement with policymakers that can help address regulatory limitations on community-supported funding mechanisms.

Strengths	Opportunities
• Entire county is covered by a single provider which streamlines internal and external communication. • Current model provides access to ALS care for the entire county with plans for expansion to two full-time on-duty crews. • Excellent community support for EMS through intent to increase funding through tax levy.	• Entire county is covered by a single provider which streamlines internal and external communication. • Current model provides access to ALS care for the entire county with plans for expansion to two full-time on-duty crews. • Excellent community support for EMS through intent to increase funding through tax levy.
Challenges	**Threats**
• Statutory barriers to voter-supported increase of current EMS district tax rate from 0.04% to 0.06% in 2024. • Geographic isolation of the county which borders national forest to the east and west, and international border to the north.	• Statutory and regulatory limits on ability of the county to raise additional funds for EMS. • Cost of living and housing prices trending higher makes it more difficult for agency to recruit and retain qualified personnel. • Lack of trained and qualified workforce means even with funding; agencies may not be able to recruit personnel to staff additional ambulances.

Table A: Boundary County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Boundary County is the northernmost county in Idaho, consisting of 1,269 square miles and is home to a population of 13,345 citizens. [1] The county seat and largest city in Boundary County is Bonners Ferry, which is home to 2,520 residents and is one of two cities in Boundary County, the other being Moyie Springs which boasts a population of 822. [2, 3] Boundary County is also home to the Kootenai Tribe of Idaho, consisting of over 150 members, and operating the Twin Rivers Resort and the Kootenai Inn Resort & Casino on tribal lands within Boundary County. In addition to Bonners Ferry and Moyie Springs, county is home to the incorporated cities of Copeland, Curley Creek, Eastport, Good Grief, Naples, and Porthill. US Highway 95 runs north to south through the county, providing access from Canada to the rest of Idaho the south. US Highway 2 leads east out of Boundary County to Montana.

Boundary County consists largely of public land, comprising approximately 75% of the county's land mass. Federal forest and recreation land, including Kaniksu and Kootenai National Forests, and the Kootenai National Wildlife Refuge total 748.5 square miles. State Forest on the southwest portion of Boundary County accounts for another 187.5 square miles. [4] The Kootenai River runs from Canada into Montana, providing for recreational opportunities within the County. The Cabinet Mountains to the west and the Selkirk Mountains to the east serve as a barrier to significant residential and commercial growth within the County.

The population of Boundary County has seen significant growth within the Kootenai River valley, with a 10.7% increase in the last two years. [5] The median age of the population is 44.3, which is slightly higher than the state average, and 23.3% of the population of Boundary County is over 65 years of age, compared to a 16.6% average for the State of Idaho. [5] An isolated and aging population continues to be a challenge for EMS delivery across Boundary County, especially with lack of tax revenue for the 75% of the county that is non-taxable public land.

Demographic	2000	2010	2020	2022
Population	9,871	10,972	12,056	13,345
Land Area	1,269 sq mi	1,269 sq mi	1,269 sq mi	1,269 sq mi
Per Capita	7.8 PPSM	8.6 PPSM	9.5 PPSM	10.5 PPSM
PPSM: *People per square mile*				

Table B: Boundary County Population & Geography [1]

2.2. Economics

Boundary County's isolated location and distance to the nearest metropolitan center impacts the economics of the county and its residents. According to census data in 2020, two-thirds of working residents of Boundary County have less than a 15-minute commute to work, meaning they work within the county, however greater than 10% report a commute of over an hour. [6] Primary industries in Boundary County include manufacturing (10%), construction (11.1%) and retail trade (12.1%). [5] Government employment accounts for 17% of the working population, and 36.1 percent reported being self-employed, significantly higher than the state average of 26.1%. Boundary County is served by two rail lines that support local manufacturing and increased opportunity related to the international border and trade with Canada.

Even with a rising number of jobs, average wage per job of $46,228 is significantly below the state average of $ 54,188 and the national average of $ 69,985. [5] Lower than average median household income coupled with low wages causes a financial strain on residents and families within Boundary County. The overall poverty rate in Boundary County is 12.1%, compared to 10.8% across the state of Idaho. [5] Cost of living in Boundary County, while climbing with many other communities across the nation has experienced some relief with lower housing costs compared to other areas of the state, and lower utility bills because of local hydroelectric power generation.

The rising cost of housing has a significant impact on recruitment and retention, especially for workers with families. While the median home value in Boundary County is lower than the state and national average, the median sale price for a home sold in 2022 was $492,888, meaning the assessed value and the sale price were dramatically different. Housing inventory within the county is minimal based on the number of houses sold in 2022, which varied seasonally from nine to twenty per month, averaging 13.6 per month. [7] The average time on the market was less than 54 days. [7] The cost of purchasing a home and the competitive nature of the housing market are factors that influence migration into the County and movement of families within Boundary County. Without access to affordable housing, families are forced to relocate elsewhere or pay higher prices for homes, meaning families must work additional hours or jobs to make monthly mortgage or rent payments. This factor has a direct impact on workforce recruitment and retention within the county.

The housing inventory in Boundary County consists of proportionally higher amounts of single-family homes when compared to the state and national average, meaning that apartments and condominiums are less available, and more expensive single-family homes are available at higher rates within the county. [5] The lack of multi-family dwellings can be a

disadvantage for recruiting and retaining personnel because of limited available of affordable housing options.

Metric	2010	2020	2022
Total Population	10,972	12,056	13,345
Median Age	42.8 years old	44.8 years old	44.3 years old
Poverty Rate	17.1%	14.0%	12.1%
Number of Jobs	5,296	5,989	6,506
Avg Annual Wage	$ 39,853	$ 45,550	$ 46,228
Household Income	$ 49,708	$ 59,018	$ 59,709
Unemployment Rate	13.4%	6.2%	3.8%

Table C: Boundary County Economic Factors [1, 5]

Metric	Boundary Co.	Idaho	United States
Housing Units	5,383	751,859	N/A
% Owner Occupied	64.5%	71.7%	64.6%
Change 2010 - 2020	4.3%	12.6%	6.7%
Median Rental Cost	$ 781	$ 1,310	N/A
Median Home Value	$ 262,300	$ 266,600	$ 244,900
Household Income	$ 59,709	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	84.2% / 7.2% / 8.6%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Boundary County Housing Factors [2]

2.3. Social Determinants of Health

Access to care in rural north Idaho impacts the collective health of the community. Although Boundary County is home to a critical access hospital offering emergency care and basic inpatient treatment, as well as primary care physicians for health maintenance and care for chronic conditions, specialty care resources and definitive treatment for time sensitive emergencies is located quite a distance away in Coeur d’Alene. There are 5.8 primary care physicians per 10,000 residents, which is lower than the average in Idaho of 6.3 per 10,000, and the national average of 7.6 per 10,000. [5] The older population relative to the rest of the State of Idaho, coupled with the isolated nature of the community, health behaviors, and environmental factors places Boundary County at number 18 of the 44 ranked counties in Idaho according to County Health Rankings. [8] Health behavior factors, such as physical inactivity, alcohol impaired driving death, and adult smokers contributed to worsening health factors. Mortality rates from cancer, heart disease, stroke, drug overdose, and motor vehicle accidents contributed to length of life factors. Finally, poor air and water quality resulted in a lower physical environment score.

Boundary County has additional challenges relating to health insurance coverage. The percentage of residents under the age of 65 who are uninsured (16.5%) is considerably

higher than the average in Idaho of 12.7% (10.8% national average), and the percentage of children under the age of 19 without health insurance (6.7%) is higher compared to the average in Idaho of 5.1 % (5.6 % national average). [5] The lack of health insurance coverage not only impacts the ability of residents to access healthcare, affecting the overall health of the community, but also has a negative financial impact on the healthcare system and EMS providers who deliver healthcare to the Boundary County community.

County Health Rankings	
18 of 43 ranked counties in Idaho	
Health Outcomes	19 of 43
Health Factors	33 of 43
Length of Life	36 of 43
Quality of Life	9 of 43
Health Behaviors	23 of 43
Clinical Care	22 of 43
Social & Economic Factors	33 of 43
Physical Environment	39 of 43

Table E: Boundary County Health Ranking [8]

2.4. Indicator Impacts to EMS

Workforce recruitment and retention are significantly impacted by the rising cost of living and housing market factors. Low wages, rising housing costs, and scarce housing inventory impedes healthcare and EMS agencies from attracting potential employees to the isolated border county.

The modest healthcare infrastructure, prolonged transport times to specialty care for time-sensitive emergencies, coupled with environmental factors, poor overall community health, and health behaviors among residents translate to continued high utilization of EMS resources to access appropriate healthcare for many members of the community. The low population density and large land area served by the county's only EMS provider provides challenges to timely response and transport times with large distances served by a small number of EMS resources. The utilization of quick response units, first responders, and the addition of qualified EMS responders is necessary to meet the needs of the growing, aging, and geographically dispersed population.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

Boundary County has a growing population with a significant portion of the residents remaining within the county for work during daylight hours. As such, the EMS system demand remains consistent throughout the year with modest increases during the summer months. Call volume data shows a majority of calls for service occurring during typical daylight hours, with lower but consistent call volume in the evening and nighttime hours. [9] The remote nature of some communities within the county, as well as difficult access in the winter season causes some challenge for responders and leads to a small increase in call time during the winter months. Long transports to Sandpoint or Coeur d'Alene can take units out of service for prolonged periods of time, requiring agency leadership to bring in on-call resources to backfill staffing until units return to the county.

3.1. Call Volume Overview

Most of the calls for service originate from the cities of Bonners Ferry and Moyie Springs, and the towns throughout the county. With a single EMS provider in the county staffing one ambulance along with an EMS supervisor, Boundary County has limited ability to manage simultaneous incidents within recalling off-duty resources or summoning mutual aid. Calls for service involving multiple patients, such as motor vehicles accidents can offer a challenge to the resource constrained county EMS provider. The county sees minimal seasonal fluctuations in calls for service, however, weather can impact response times, transport times, and availability of air medical resources to manage complex or critical patients requiring transport to specialty care centers in Coeur d'Alene, located approximately 90 minutes away.

Total calls for service within the County was 1,375 in 2022, down slightly from 1,422 in 2021. That figure includes emergency calls for service, interfacility transfers, and standbys for fires. The figures listed below are state reported call volume from the state EMS registry.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Boundary Ambulance Service	260	302	562	262	394	656
Ambulance Total	260	302	562	262	394	656

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Boundary County (2021-2022) [10, 11]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Boundary Ambulance Service	2 min	9 min	11 min	12 min	47 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Boundary County (2022) [10, 11, 12]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Boundary Ambulance, as well as fire department first responders, are dispatched through the Boundary County Sheriff's office. Boundary County Sheriff's Office receives calls for service for all public safety resources, dispatches EMS and Fire units, and provides pre-arrival instructions to residents and visitors who request EMS response. EMS and Fire dispatchers share responsibilities with law enforcement call takers and dispatchers improving communication between all public safety entities responding within Boundary County.

EMS and Fire agencies are dispatched on a single VHF channel that also serves as the primary operations channel, unless on-scene commander elect to move incident traffic to a tactical channel. Law enforcement, including county sheriff's, game wardens, and city police utilize a separate VHF channel for law enforcement operations, but within the same radio system.

4.1.2. EMS Agency Overview

Boundary County is served by one licensed EMS provider staffing one full-time ALS ambulance and a paramedic supervisor out of one station located in Bonners Ferry. Volunteer fire departments throughout the county provide first responder support and respond to motor vehicle collisions and rescue incidents. The same ambulance also provides non-emergency interfacility transfer when able, typically utilizing the paramedic supervisor and an on-call EMT to staff a second ambulance to maintain emergency incident coverage during prolonged transfers out of the county. The Kootenai National Forest and the Cabinet mountains constitute a geographic barrier separating the populated portions of Boundary County from the recreational areas on the far northwest side of the county. Calls

for service in these areas north of Priest Lake are handled by mutual aid with Priest Lake EMTs in Bonner County, though such calls are infrequent.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Boundary Ambulance Service	Private 501(c)(3) Third Service	Advanced Life Support (ALS)	Scheduled	Career

Table H: List of EMS Agencies Located in Boundary County [12]

4.1.2.1. Boundary Ambulance Service

BAS is a private 501(c)(3) non-profit organization providing EMS for the entire county at the ALS level, operating one full-time ambulance out of Bonners Ferry, and capable of responding with a second ambulance utilizing an on-duty paramedic supervisor and additional on-call personnel. BAS is the longest running ambulance service in Idaho, beginning operation in 1965. BAS is a third service EMS provider, meaning the organization is not affiliated with a fire department or hospital. Funding is provided through billing revenue, tax revenue provided by the county through an ambulance taxing district, and donations from community members. As the healthcare market has changed, and the county continued to grow, the organization has adapted to meeting the needs of the community, transitioning to a compensated career model within the last six years, and offering interfacility transfers from the critical access hospital in Bonners Ferry to specialty care centers in Coeur d'Alene and Spokane. BAS is an important component in the continuum of care within the rural communities within Boundary County.

BAS staffs its frontline ambulance with a paramedic and an EMT, and typical daily staffing includes a paramedic supervisor that can help field a second ambulance, if necessary. Personnel work a rotating 48/96 shift structure, on-duty for two days and off for four days. On-call EMTs are scheduled for potential second ambulance calls and respond to the station when needed. The on-call EMTs are part-time status and are scheduled for 12-hour shifts to accommodate primary employment with other providers in the region.

In addition to 911 and interfacility transports, BAS operates a community paramedicine (CP) or mobile integrated healthcare (MIH) program, staffed by a paramedic who provides follow-up, in-home care to members of the community that have unique healthcare needs that don't necessarily require hospitalization, but do not fit the traditional role of EMS. The MIH program in Boundary County is an important link to healthcare for vulnerable populations with unique healthcare needs within this rural and isolated community.

4.1.3. Hospital Access Overview

The primary destination within Boundary County is Boundary Community Hospital, which provides emergency care, inpatient acute care services and general surgery. More complex surgical patients may be transported to Bonner General Hospital in neighboring Bonner

County, which has intensive care and more advanced surgical capability. Critical patients with time-sensitive emergencies, such as trauma, stroke, STEMI, and other complex issues are transported to Kootenai Health in Coeur d'Alene by either ambulance or helicopter.

- **Boundary Community Hospital** (6640 Kaniksu Street, Bonners Ferry, ID) is a critical access hospital with 20 beds, including a 24-hour emergency department, acute care unit, and 10 swing beds (providing rehabilitation and long-term skilled nursing care). [13] Boundary Community Hospital is a TSE-designated Level IV Trauma Center, Level III Stroke Center, and Level II STEMI Center. [14]

- **Bonner General Health** (520 North 3rd Street, Sandpoint, ID) is a 25-bed critical access hospital providing 24-hour emergency care, intensive care capability, general and orthopedic surgery, and obstetrics. [15] Bonner General Health is a TSE-designated Level IV Trauma Center, Level III Stroke Center, and Level II STEMI Center. [14] Some patients requiring emergent surgical intervention are transferred to Bonner General since surgical coverage is not available after hours in Boundary County.

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-designated Level II Trauma Center, as well as an interventional cardiac center. [14, 16] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [16] Many patients from Boundary County are transferred to Kootenai Health for specialty care if those services are not available locally.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Boundary County is covered by a single licensed ambulance agency providing ALS-level service to the entire county through one full-time staffed ambulance and one on-call ambulance. BAS manages the day-to-day operations of EMS delivery in the county and is overseen by the Board of County Commissioners through a contractual relationship for EMS delivery and funding from the county ambulance taxing district. Mutual aid resources are available from Bonner County to the south, including Priest Lake EMTs that provide response support for the remote recreational areas in the far northwest portion of the county.

BAS describes an operational environment that has evolved since its inception in 1965. The agency has progressed from a volunteer BLS provider to its current career-staffed ALS capability through targeted investment and planned growth. BAS enjoys an excellent working relationship with Bonner County EMS through shared operational and administrative leadership, encouraging future operational and administrative collaboration to address challenges associated with the evolving field of EMS.

Life Flight Network provides air medical support to the County, as requested from their base at Sandpoint Airport. Life Flight Network is typically requested for patients who meet TSE

requirements for trauma, stroke, or STEMI, and for complex patients that exceed the capability of the critical access hospital.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Subjective assessments regarding sustainability of each provider during the resource assessment process yielded a score from 90 out of 100. Agency leadership highlighted current ALS capability, interfacility transport volume, and mobile integrated healthcare programs as innovative and supportive of future growth. They also highlighted the support of elected officials and the community for increased funding to expand the EMS system to meet the growing demands of the county.

- **EMS Agency Financial Situation**: In its current configuration, the financial situation is adequate to support operational, personnel, and capital expenses with existing revenue. The necessary expansion of the EMS delivery system will require additional funding, laid out in the recent funding referendum, but regulatory limitations on voter-supported tax increases currently hampers the financial support for this necessary growth.

- **EMS Agency Communications Strategy and Outreach**: BAS maintains an active communications strategy which includes social media, and an online presence which includes a website with publicly available information containing operation and financial data.

- **Community View of EMS Agencies**: BAS describes excellent support from the community. The organization routinely receives donations from the general public and participates in many public events where they interact with the general population. Recently, the community supported an increase in the tax rate for the ambulance district, recognizing the importance of EMS delivery in the community.

- **Elected Official Support of EMS Agencies**: BAS leadership describes excellent communication and support from the Board of County Commissioners and other elected officials within the county. The Board of County Commissioners serves as the oversight entity for the ambulance district, and the EMS Director routinely briefs Commissioners Court with important information, including budget approval.

- **Agency & System Response Outlook:** BAS describes an optimistic outlook on the future of EMS delivery in the county. The organization has intentionally integrated EMS delivery in the countywide healthcare landscape through the mobile integrated health program, the provision of interfacility transfers for patients requiring higher levels of service than is available within the county, and through community education programs. The return on investment for this collaborative, community-based approach is the ongoing support of elected officials, hospital administration, and the community toward the well-being and evolution of the organization. BAS leadership is hopeful for positive impacts of the GEMT program statewide, and the work being done within the Idaho EMS Sustainability Task Force, as these efforts are

focused on the unique needs of rural EMS providers in Idaho like themselves. BAS leadership is encouraged by opportunities to continue to collaborate with other providers within the region to advance EMS in North Idaho.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: BAS is a private, 501(c)(3) non-profit organization that is contracted by the county taxing district to provide exclusive EMS delivery to Boundary County. BAS is responsible for the operational, administrative, and fiscal components of EMS delivery across the county.

- **Service Delivery Partners**: BAS is supported by other public safety entities in the delivery of EMS in Boundary County, including the Boundary County Sheriff's Office, and the county volunteer fire departments that provide first responder support, as well as extrication support on scene. BAS also highlighted the contributions of the Board of County Commissioners and the public in supporting the necessary expansion of the EMS delivery system within the county through increased tax revenue.

- **Medical Direction**: Medical Direction for BAS is provided by a local family medicine physician who has been with the organization for a number of years. Agency leadership describe an excellent relationship with their medical direction and his active participation in case review and protocol review and development.

- **Communications & Interoperability**: Overall radio communications are adequate, although gaps in coverage exist due to topography in more remote areas of the county. Communications with Bonner County and other mutual aid resources is accomplished through the current radio system, as all providers utilize similar VHF radio infrastructure.

- **Mutual Aid Systems & Agreements:** As the only ambulance provider in the county, and with the Cabinet, Selkirk, and Purcell mountains limiting easy access to surrounding communities, mutual aid resources do not exist within Boundary County. The primary source of mutual aid support comes from Bonner County to the south. Bonner County EMS routinely responds into Boundary County for calls requiring additional ambulances, and Priest Lake EMTs can be requested for calls for service in the recreational areas in far northwest Boundary County.

- **Community Health EMS (CHEMS)**: BAS operates a Mobile Integrated Healthcare / Community Paramedicine program, which provides in-home care for complex conditions not requiring hospitalization, providing critical access to care for vulnerable populations within the rural and isolated community.

- **Patient Care Documentation System**: BAS currently utilizes a commercially available electronic patient care reporting system for clinical documentation. The agency reports ease of use for patient documentation, data access, and quality improvement and as the primary reason for their choice.

- **Inter-facility Transports (IFT)**: BAS provides emergency IFTs from Boundary Community Hospital to other healthcare facilities for patients requiring a higher level of care, when available and clinically appropriate. The agency also performs non-emergency transfers between facilities on a scheduled basis, often using on-call personnel to maintain optimal readiness for emergency calls for service. BAS reports conducting approximately 250 IFTs in 2022. IFTs provide additional revenue to support staffing, and other operational costs, and provides a vital link to specialty care from their rural county.

4.2.1.3. Response Overview

Boundary County utilizes career EMS personnel to provide advanced life support care to the residents and visitors of the county through a contracted relationship between the county ambulance taxing district and the private, non-profit organization that operates the EMS delivery system. One full-time ambulance is staffed using scheduled personnel to respond to calls for service throughout the county, and an additional ambulance staffed with scheduled on-call personnel can augment that response with a second ALS ambulance as necessary.

- **Level(s) of Service:** BAS employs paramedics, Advanced Emergency Medical Technicians (AEMT), and Emergency Medical Technicians (EMT), allowing the organization to staff Advanced Life Support (ALS), Intermediate Life Support (ILS), and Basic Life Support (BLS) units. The primary on-duty ambulance staffed daily operates at the ALS level with a paramedic and EMT. Additional paramedic level care is available with a paramedic supervisor on-duty each day that can staff a second ALS ambulance with callback personnel, as required.

- **Agency Response Concerns:** As the only ambulance provider in the county, and with the Cabinet, Selkirk, and Purcell mountains limiting easy access to surrounding communities, mutual aid resources do not exist within Boundary County. The primary source of mutual aid support comes from Bonner County to the south. Bonner County EMS routinely responds into Boundary County for calls requiring additional ambulances, and Priest Lake EMTs can be requested for calls for service in the recreational areas in far northwest Boundary County.

- **Helicopter Response & Utilization:** The isolated nature of the county means that BAS primarily calls for air medical resources for high acuity patients, with time sensitive emergencies. Agencies described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Agencies also described challenges with aircraft availability due to weather during a significant portion of the year. Although Life Flight Network has a base in Sandpoint, weather may ground aircraft for prolonged periods of time.

- **Factors Impacting Response Times:** Agencies noted that simultaneous calls (requiring a second ambulance crew), time of day, and distance across the county to be the most persistent factors impacting response times. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** Most calls for service within the county are made from the populated areas within the Kootenai River valley, however, there are occasions when EMS is called for patients requiring assistance in remote recreational areas, such as the National Forest. Such requests necessitate backfilling responding on-duty units with on-call personnel. Response to public lands on the northwest portion of the county is more easily accessible from the Priest Lake area, therefore mutual aid resources from Bonner County are utilized. BAS leadership reports that response to public lands can take four to eight hours from dispatch to back in service depending on the location.

4.2.2. Workforce & Resource Assessment

Staffing of EMS resources in Boundary County is provided by career personnel scheduled by the BAS. The remote environment and cost of living in North Idaho combine to provide a challenging environment for the recruitment and retention of paramedics and EMTs in Boundary County. The lack of robust retail and commercial infrastructure places BAS in a competitive environment with other more populated counties when seeking to attract personnel, especially those with families and children. The small agency with limited personnel requirements is currently well staffed and is able to recruit potential employees with lower cost of living than many surrounding communities, and access to outdoor recreational activities. With the potential expansion to a second full-time ambulance, workforce requirements may become a critical challenge to BAS leadership in the near future.

4.2.2.1. Staffing Overview

- **Staffing Structure:** BAS operates one full-time ambulance staffed with a paramedic and an EMT using a rotating 48/96 schedule. A paramedic supervisor position is also staffed using the rotating 48/96 model and augmented by part-time EMTs that are on-call for 12-hour shifts, capable of responding to the station to staff a second ambulance for simultaneous calls for service or interfacility transfers, as required. The 12-hour shifts allow for maximum flexibility for part-time personnel who may have professional commitments at other EMS providers that preclude 48/96 shift scheduling.

- **Responder Average Age:** BAS reports an average age for employees of 25-35, down significantly from the average age of volunteer prior to the transition to career staffing.

- **Staffing Numbers:** BAS is currently fully staffed for rotating 48/96 shifts and has an adequate roster of part-time EMTs to fill the on-call roster for the second ambulance and interfacility transfers.

- **Staffing Concerns:** As BAS considers expanding to a second staffed ambulance, the primary concern is the availability of qualified personnel, especially paramedics, to fill the ranks. Higher salaries paid by metropolitan departments in cities elsewhere in Idaho force BAS to compete with higher salaries or more competitive benefits to attract new personnel to the area.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, BAS maintains a roster of dedicated staff that are committed to the organization and the community.

- **Recruitment & Retention:** BAS posts open positions on their website, and publishes them through EMS magazines, and other typical sources. The location of the county makes it difficult for potential new employees to maintain employment elsewhere within Idaho, except Bonner or Kootenai counties. Recruitment and retention efforts across the county (including the business development council) are focused on access to recreation, the rural lifestyle, and the tight-knit community.

4.2.2.2. Training & Education Overview

- BAS hires licensed EMTs and provides training to help EMTs obtain licensure as Advanced EMTs. The organization conducts training as part annual competency assessment, as well as regularly scheduled clinical and operational training in-house.

4.2.2.3. Facilities Overview

- **Station Locations:** BAS operates out of a single station on Comanche Street in Bonners Ferry. The station houses two ambulances, the paramedic supervisor, and BAS administrative offices.

- **Station Conditions:** The current station meets the needs of the organization for housing crews and maintaining daily operations. BAS had been renting the property since 2015, and recently purchased the property, allowing for improvements and renovation as necessary.

- **Facility Needs:** As the organization continues to grow, BAS leadership is planning for expansion to a second station in the northern portion of the county, closer to Moyie Springs. With the anticipated increase in property tax revenue from the ambulance district, the organization expects to add a second full-time ambulance and will need to add a second station to accommodate the growth.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: BAS leadership indicates that their equipment and supplies meet their daily needs, but that some more expensive, seldom used items often expire, causing a financial burden to the agency. Current revenue sources and grant funding are sufficient to maintain adequate replacement of vehicles, equipment, and disposable supplies.

- **Condition**: Equipment and supplies are reported in great condition overall.

- **Funding**: Grants are utilized to replace more expensive equipment, including ambulances. APRA funds were used to fund a replacement for one of the frontline ambulances and should be delivered in 2024. Operating revenue is used to replace lower cost equipment and supplies.

- **Needs & Shortages**: The agency reports no unmet needs or shortages.

4.2.3. Financial Overview

Boundary County ambulance district revenue and funds earned through billing for emergency and non-emergency transport support a stable financial environment for the operation and projected growth of the BAS. With an annual budget of approximately $1.2 million, BAS remains financially stable in the current operational construct, however, future growth requires additional funding investment. Community support of an increase in the tax rate for the ambulance district was critical to the ability of the organization to expand service delivery to a second full-time ambulance stationed in the northern portion of the county. Regulatory and legislative restrictions currently in place restrict the ability of the community to make important decisions about the future funding for BAS. Legislative changes enacted recently allow for greater flexibility for newly created ambulance districts, but the ambulance taxing district in Boundary County was created before those changes went into effect, and such regulatory changes specifically excluded taxing districts already in existence. BAS leadership highlighted the need to clean up discrepancies in the regulatory landscape that poses limits on some, but not all EMS providers equally. Such changes would allow for the community to act on their intent to improve funding for EMS delivery in Boundary County and secure necessary funding for reliable and sustainable EMS delivery with the county.

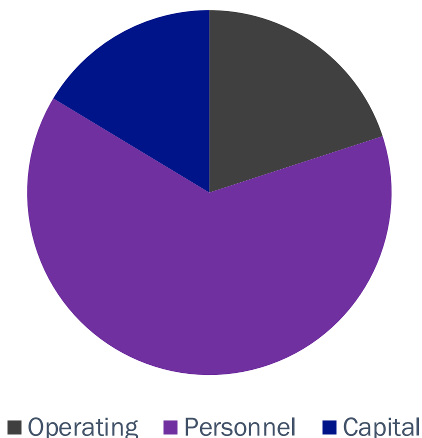
4.2.3.1. Expense Overview

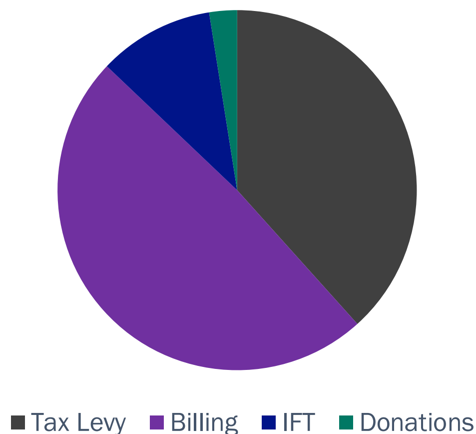
The cumulative operating costs for BAS totals $1.2 million annually. In 2022, those costs consisted of approximately $700,000 for personnel, $100,000 for capital expenses (including an automatic loading stretcher and mechanical chest compression devices), and the remainder for general operating expenses, such as infrastructure, insurance, clinical training, medical director fees, fuel, supplies, and administrative overhead costs. The purchase of a new ambulance totaled approximately $180,000. BAS described approximately $250,000 in carryover revenue that is earmarked for capital and facility expenses.

4.2.3.2. Revenue Overview

Boundary County receives a majority of its EMS funding through a 0.004% ambulance taxing district levy, patient billing for services provided, and some donations from the community. In 2022, tax revenue constituted approximately $460,000 of the total budget, and billing made up much of the balance with a total of approximately $700,000. BAS reported approximately $30,000 in annual donations in 2022 as well.

With the anticipated increase in tax revenue, BAS would expect an increase in operating revenue of $230,000 annually to fund the remainder of the expenses associated with staffing a second full-time ambulance. Additional revenue comes from grants, including an ARPA grant for a new ambulance, State EMS dedicated grant funds for an automatic lifting stretcher and mechanical chest compression devices, and a training grant from the county using ARPA funds.





4.2.4. Resource Assessment Additional Factors

Current billing revenue and taxing district funding, along with grant opportunities, have provided a stable foundation for BAS to transition from a volunteer organization to a career agency, providing reliable ALS service to the citizens and visitors of Boundary County. As the county continues to grow, and operational requirements necessitate the need for additional staffing resources, supplemental funding will be necessary to ensure appropriate response across the county, and ensure continued delivery of emergency care, as well as interfacility transfers to ensure access to higher levels of care. The community, county officials, and agency leadership are committed to proper funding to support EMS operations across the entire county, but regulatory restrictions need to be addressed to allow for this important growth opportunity.

The integration of EMS operations into the overall system of care, which includes emergency response and transportation, interfacility transfers to appropriate levels of care, and mobile integrated healthcare to ensure proper care for vulnerable populations within the community serves as an example to other communities of similar size and geography. Such integration builds public trust, and garners support for necessary funding and public support. BAS leadership is hopeful for the potential positive impact of GEMT funding, and rural funding as part of the EMS Sustainability Task Force to help bridge the gap for small, rural communities, like Boundary County.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). QuickFacts: Boundary County, Idaho. Retrieved from https://www.census.gov/quickfacts/fact/faq/boundarycountyidaho/PST045222

[2] Boundary County. (2023). Census Data. Retrieved from https://boundarycountyid.org

[3] Idaho Legislature. (2021). Population by city county, 2020. Retrieved from https://legislature.idaho.gov/wp-content/uploads/redistricting/2021/Cities.pdf

[4] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). Idaho forest factbook: county atlas of forest land and the forest product industry. Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forestfactbooks/county_factbook_august_2019.pdf

[5] University of Idaho Extension. (2023). Indicators Idaho: Boundary County. Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16021

[6] Idaho Department of Labor. (2023). Boundary County Labor Force and Economic Profile. Retrieved from https://lmi.idaho.gov/wpcontent/uploads/publications/2022/WorkforceTrends/BoundaryProfile.pdf?v=012023

[7] Redfin. (2023, January). Boundary County, ID Housing Market. Retrieved from https://www.redfin.com/county/676/ID/Boundary-County/housing-market

[8] University of Wisconsin Population Health Institute. (2023). County Health Rankings: Boundary County, Idaho. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/boundary?year=2023

[9] Biospatial. (2023). https://biospatial.io

[10] IGEMS Data. (2023). EMS Planner Agency Call Volume: 2021 / 2022.

[11] IGEMS Data. (2023). EMS Planner Agency Response Time: 2021 / 2022.

[12] IGEMS Data. (2023). Agency career-vs-volunteer personnel: 2022.

[13] Boundary Community Hospital. (2023). Inpatient services. https://boundarycommunityhospital.org/inpatient

[15] Idaho Department of Health and Welfare. (2023). Idaho time-sensitive emergencies: Idaho TSE facility designations. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[15] Bonner General Health. (2023). Services & Clinics. https://bonnergeneral.org/services/

[16] Kootenai Health. (2023). Facts and community reports. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

CLEARWATER COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency medical services in Clearwater County are provided by a single licensed provider managing both career and volunteer personnel out of three stations to respond to calls for service across the county with Basic Life Support (BLS) and Advanced Life Support (ALS) resources to meet the needs of the residents and visitors of the county in a timely and appropriate manner despite the rural and remote nature of much of the county. Career paramedic providers respond out of the agency's main station in Orofino to support compensated volunteer Emergency Medical Technicians (EMT) responding from rural stations in Elk River and Weippe. The agency is currently providing ALS service for interfacility transfers and is in the process of completing requirements for full ALS licensure. The topography and sheer size of the county provide unique challenges to responders, but maintenance of three duty crews helps to get trained personnel to patients as soon as possible anywhere in the county.

The rural environment, lack of available and affordable housing, low call volume, and inability of the agency to provide wages competitive with larger metropolitan departments presents barriers to recruitment and retention within the organization. Tax revenue is limited by the relatively small population and the abundance of public land within the county, impacting the ability of Clearwater County EMS (CCEMS) to offer competitive wages to potential employees. The rural population also provides a limited pool of potential volunteers, punctuated by the fact that most of the working age individuals within the county commute outside of the county for work due to the availability of jobs within the county.

New leadership within the organization is focusing on efficiencies and optimizing current resources to continue to provide reliable and appropriate EMS response within the county. Challenges with recruitment of paramedic providers and career EMTs is balanced with a core of dedicated volunteer personnel from across the county providing immeasurable

impact in their community. However, decreasing volunteerism and changing demographics within the county offer significant concerns about the sustainability of the volunteer system in the long-term. The agency recently had to temporarily close its station in Pierce, in the rural northeastern portion of the county due to lack of volunteer staffing in that area of the county. The station has since reopened with only intermittent gaps in coverage, which are covered by the crew in Weippe, but such issues are seen as an indication of future challenges with EMS delivery within the rural communities within Clearwater County.

Strengths	Opportunities
• Consolidated EMS system within the county brings efficiency in administrative functions and operational coordination. • Dedicated housing resources for personnel improving recruitment and retention of career and volunteer personnel. • New agency leadership bringing needed changes to staffing and training.	• Consolidated EMS system within the county brings efficiency in administrative functions and operational coordination. • Dedicated housing resources for personnel improving recruitment and retention of career and volunteer personnel. • New agency leadership bringing needed changes to staffing and training.
Challenges	**Threats**
• Lack of available and affordable housing within the county are barriers to recruitment. • Large amount of public and recreational land leads to prolonged response times to certain areas of the county. • Funding challenges from insufficient billing revenue and modest EMS district funding to support staffing and other “make ready” costs for EMS.	• Small population and lack of interest in pursuit of EMS careers impacting the availability of locally sourced career and volunteer staff. • Lack of trained and qualified workforce means that even with funding, agencies may not be able to recruit personnel to staff ambulances.

Table A: Clearwater County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Clearwater County is a rural county located in northern Idaho, consisting of 2,457 square miles and is home to a population of 9,015 citizens. [1] Unlike many counties in Idaho, Clearwater County has seen a negligible population increase in recent years, with an overall growth rate of less than 1% between 2000 and 2022. The county seat and largest city in Clearwater County is Orofino, the largest city on the Clearwater-Nez Perce Native American reservation. Clearwater County is a tourist destination with recreational opportunities year-round, including hiking, snowmobiling, hunting, fishing, and camping. Clearwater County is home to four incorporated cities, including Orofino, Elk River, Pierce, and Weippe. US Highway 12 runs across a small portion of county along the southern border from Lewiston through Orofino and into Idaho County. The remaining highway infrastructure consists of small state and county roads, and national forest roads. Access to some communities is difficult in the winter months due to lack of formal maintenance.

A majority of the population is white with approximately 2-3% Native American. [2] The average age within the county has remained stable over the last five years at 51 years old, ranking fifth in the state for highest median age. [2] The portion of the population over 65 has been the most dramatically increasing segment of the population since 2000, growing from 15.6% in 2000 to 27.9% in 2021. [2] The segment of the population from 18-64 has dropped from 61.4% in 2000 to 56.9% in 2021, while the most remarkable shift has been in children under the age of 18, going from 23.0% to 15.2% in the same time frame. This factor has been reflected in workforce participation, which is 47% in individuals above the age of 16, and the unemployment rate of 6%. [2]

Approximately 64% of the county's land mass is public land, either federal or state forest land. Most of the federal land lies within the Clearwater National Forest on the eastern side of the county. [3] Employment in the county is dominated by government positions, comprising 22.4% of employment by industry, followed by 6.4% in manufacturing. [2]

Demographic	2000	2010	2020	2022
Population	8,930	8,761	8,734	9,015
Land Area	2,457 sq mi	2,457 sq mi	2,457 sq mi	2,457 sq mi
Per Capita	3.6 PPSM	3.5 PPSM	3.5 PPSM	3.7 PPSM
PPSM: People per square mile				

Table B: Clearwater County Population & Geography [1]

2.2. Economics

Like population statistics, the economic indicators in Clearwater County have remained largely unchanged over the last twenty years. [2] The number of jobs has declined significantly since 2000, as have the number of jobs within the county, and the median household income. The median household income has remained steady for twenty years as well. The only economic variables that have increased in that same timeline is the median home value that has increased from $126,673 to $177,700 from 2000 to 2021. [2] These indicators denote a stagnant economy within the county, with rising cost of living expenses which is difficult environment to recruit a qualified workforce. In addition, volunteer providers within the county are faced with an increased financial burden in the absence of rising wages, which can have a negative impact on volunteerism within the community.

The overall poverty rate in Clearwater County is 14.8%, compared to 10.8 % in Idaho and 12.8 % nationwide. [2] Median household income is well below state and national averages at $57,613, compared to $71,625 statewide and $75,296 nationally. One of the most significant barriers to workforce recruitment in Clearwater County is rising housing costs, and the lack of housing inventory. While the median home value is below state and national averages at $177,700, real estate market data resources report the average sale price in Clearwater County fluctuated between $208,000 - $429,000, with variation being caused by seasonal factors as well as the small number of homes being sold each month. [4] These resources report that an average of 7.75 housing units are sold each month, with an average time on the market of 51 days. [4] The lack of housing inventory, coupled with varied pricing and rising interest rates make home ownership in Clearwater County difficult for potential members of the EMS workforce.

Without access to affordable housing, families are forced to relocate elsewhere or pay higher prices for homes, meaning families must work additional hours or jobs to make monthly mortgage or rent payments. This factor has a direct impact on workforce recruitment and retention within the county.

Metric	2010	2020	2022
Total Population	8,761	8,734	9,015
Median Age	49.0 years old	51.4 years old	41.2 years old
Poverty Rate	15.3%	14.0%	14.8%
Number of Jobs	4,255	3,973	4,127
Avg Annual Wage	$ 41,444	$ 45,992	$ 45,467
Household Income	$ 51,167	$ 51,311	$ 57,613
Unemployment Rate	14.6%	8.2%	5.3%

Table C: Clearwater County Economic Factors [2, 4]

Metric	Clearwater Co.	Idaho	United States
Housing Units	4,552	751,859	N/A
% Owner Occupied	77.4%	71.7%	64.6%
Change 2010 - 2020	2.2%	12.6%	6.7%
Median Rental Cost	$ 837	$ 1,310	N/A
Median Home Value	$ 177,700	$ 266,600	$ 244,900
Household Income	$ 57,613	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	73.2% / 4.5% / 22.3%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Clearwater County Housing Factors [2]

2.3. Social Determinants of Health

Clearwater County ranks 20th of 43 counties in health rankings statewide. [5] Residents of this rural county have reasonable access to care with nine primary care providers in the county, resulting in 10.3 primary care physicians per 10,000 residents compared to an average of 6.3 across Idaho, and emergency care is available at the critical access hospital located within the county. [2] Where the county begins to lag other counties in Idaho is health factors, such as smoking, obesity, physical inactivity, and excessive drinking in which Clearwater County rates higher than the statewide average. [5] CCEMS plays an important role in the county, providing access to emergency care for many remote residents and visitors in this rural county. Other metrics such as lack of insurance, higher rates of teen pregnancy, and air pollution, contributed to mediocre scores in several areas, according to County Health Rankings. [5]

The Clearwater Valley Hospital produced a Community Health Needs Assessment in 2020 that prioritized mental health education and support, access to care, and healthy active families as keys to improved health within the county. [6] Citing an increase in suicide across Idaho, the report cites a need for improved access to behavioral and mental health therapy to improve quality and length of life. Citing risk factors for chronic conditions, the report stresses the need for children to engage in physical activity and advocated for access to healthy food to improve overall health and avoidance of chronic disease. Finally, the report

cited lack of access to reliable transportation as a barrier to medical care, healthy habits. [6] With an aging population and a high poverty rate, transportation and access to healthcare continues to be a priority within the community.

County Health Rankings	
26 of 43 ranked counties in Idaho	
Health Outcomes	24 of 43
Health Factors	39 of 43
Length of Life	31 of 43
Quality of Life	15 of 43
Health Behaviors	37 of 43
Clinical Care	32 of 43
Social & Economic Factors	40 of 43
Physical Environment	34 of 43

Table E: Clearwater County Health Ranking [5]

2.4. Indicator Impacts to EMS

Workforce and volunteer recruitment are significantly impacted by the high cost of living and housing market factors. Unlike many other counties in Idaho, Clearwater County has not seen the explosive population growth, for several reasons. However, the impact on the local economy has a significant impact on the ability of EMS to field a skilled workforce. The lack of housing inventory, the high cost of living, long commutes, and the stagnant economy inhibit the recruitment of potential providers to the community and make it difficult for residents to find time to seek training and volunteer within their community.

With a small tax base and a modest capacity for growth, the potential for increased revenue associated with the ambulance taxing district levy is limited. Furthermore, lack of insurance, poverty, and a bleak employment picture means that patients may not necessarily have the means to pay for ambulance transport, impacting the operational budget of the organization. As described later in this report, the agency has a 56% collection rate for ambulance billing within the county, primarily due to the older population who are over 65 and have Medicare.

The overall health of the community suggests that EMS will continue to be an urgent need within the community, however, economic indicators describe a difficult environment for recruitment and retention of a career or volunteer EMS workforce. In the current financial environment, the agency is unable to offer higher salaries to attract career personnel, and funding constraints described above mean that the situation will likely get worse as volunteerism continues to decline.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

Most calls for service within Clearwater County originate in the populated areas surrounding Orofino, Pierce, and Weippe. Placement of EMS units throughout the county corresponds with areas of higher demand and the remote nature of recreational communities. Call volume and subsequent billing revenue supports paid staff within Orofino, however, agency leadership reports that call volume is insufficient to recruit and retain a career workforce, due in part to wages, high cost of living, and difficulty obtaining local housing. Ambulances staffed with compensated volunteers in the outlying stations respond to a lower call volume with less than 50 calls for service for the station in Elk River, and less than 200 combined calls for Pierce and Weippe crews.

3.1. Call Volume Overview

State EMS data from Clearwater County describes consistent EMS demand during daytime hours from 8am to 6pm, tapering off in the evening, and less frequent calls in the overnight hours. The seasonal tourism industry brings slightly increased call volume during the summer months; however, the increase represents less than 10% of overall call volume. [7]

The absence of private EMS resources in the county, and the remote nature of the community means that Clearwater County EMS is a critical component of the system of care in the county, ensuring timely movement of patients from the critical access hospital to specialty care facilities in either Lewiston or Coeur d'Alene, depending on the patients' needs. Interfacility transfers represent a significant contribution to billing revenue for the agency, with approximately 300 transfers reported in 2022. The on-duty ambulance from the Orofino station is often utilized for such transfers, requiring additional resources for 911 coverage for several hours. Such transfers often occur during daytime hours when volunteer crews are unavailable, and when staffing is already challenging. The agency administrative staff is often utilized to either facilitate hospital transfers or cover emergency calls while the primary unit is engaged.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Clearwater County Ambulance	668	333	1,001	754	433	1,187
Ambulance Total	668	333	1,001	754	433	1,187

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Clearwater County [8]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Clearwater County Ambulance	10 min	8 min	18 min	28 min	96 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Clearwater County (2022) [9]

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls for service are routed through the Clearwater County Sheriff's Office (CCSO) and handled by call-takers and dispatchers who are trained to provide pre-arrival instructions to callers prior to the arrival of EMS. Calls are dispatched on a dedicated EMS channel, and ambulance personnel communicate with assigned dispatchers using that channel. Coordination with other responding units is accomplished either through the dispatch center or by switching to fire or police channels. All emergency response agencies in the county utilize a VHF radio system with agencies utilizing various frequencies. Within the county, all volunteer fire departments, utilize a shared county fire channel, except the Orofino Fire Department which utilizes a different channel, making communication with responding units slightly more complex depending on the location of the call.

During interviews with agency leadership, it was noted that terrain often makes radio communications difficult, as some areas of the county have poor reception on the radio system. This is especially problematic in remote areas of the county, such as Elk River and Pierce. Much of the eastern portion of the county lies within the Nez Perce-Clearwater National Forest, which has little radio infrastructure. Responses into public land in these areas often have communication issues.

4.1.2. EMS Agency Overview

Clearwater County is served by one licensed EMS agency staffing seven ambulances out of four stations located in populated areas throughout the county. An additional licensed provider, Back Country Medics, a flight program affiliated with the county sheriff's office, is listed in the state licensure database, but records show no documented calls for service in the last several years.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Clearwater County Ambulance	Tax District Third Service	ALS	Scheduled	Combination

Table H: List of EMS Agencies Located in Clearwater County [10]

4.1.2.1. Agency Overview: Clearwater County Ambulance

Clearwater County Ambulance (CCA) is operated as a third service, taxing district licensed at the ALS level, providing service to the county through three stations, located in Orofino, Elk River, and Weippe. The main station, located at 1195 Riverside Drive in Orofino houses four ambulances, and utilizes a career ALS crew to respond to calls for service in the populated areas along the southern portion of the county, and performs ALS intercept for BLS and ILS crews out of the other two stations. The agency manages staffing fluctuations requiring intermittent closure of its most rural station in Pierce, serving the eastern portion of the county, but has been able to meet operational requirements by integrating operations with the Weippe station. The Weippe station houses two ambulances and is staffed primarily by volunteer EMTs responding to calls on the eastern side of the county. The Elk River station is located in the northwest portion of the county, housing two ambulances for response within the remote community of Elk River, which includes a substantial number of seasonal homes and recreational property. EMS response out of the Elk River station is accomplished by volunteer EMTs, responding to less than 50 calls annually.

The agency is staffed by 33 personnel, including four career personnel, 28 compensated volunteers, and one uncompensated volunteer. The agency employs three paramedics who work out of the Orofino station. Agency leadership cites decreasing volunteerism, housing affordability/shortages, and low call volume as barriers to recruitment and retention of volunteers and career personnel.

CCA is funded primarily through patient billing and tax revenue. The ambulance district has a 0.0003% tax levy that provides approximately $150,000 of revenue for EMS operations. The county supports EMS operations through fiscal oversight and accounting, and the agency reports close working relationships with county elected officials and other county departments. In addition to tax revenue, CCA receives approximately $420,428 annually from billing revenue. The agency utilizes a private billing company to manage patient billing, capturing approximately 58% of gross billing charges in 2022.

4.1.3. Hospital Access Overview

The primary transport destination for CCA is Clearwater Valley Hospital (CVH), located in Orofino, serving as the only definitive care facility within Clearwater County. Based on the limited capability of CVH, some patients are routinely transported to larger facilities in Lewiston, approximately 45 miles or 52 minutes from Orofino. CCA routinely provides interfacility transfers for patients in CVH that require specialized care in either Lewiston, Coeur d'Alene, or other tertiary care centers.

- **Clearwater Valley Hospital** (301 Cedar Street, Orofino, ID) is a critical access hospital with 23 beds, including a 24-hour emergency department, critical care unit, medical-surgical unit, birthing center, among other services. [11] Clearwater Valley hospital is a TSE-designated Level IV Trauma Center. [12]

- **St. Joseph's Regional Medical Center** (415 6th Street, Lewiston, ID) is a 145-bed hospital that is TSE-designated Level III Trauma Center, Level II Stroke Center, and American College of Cardiology (ACC)-accredited Chest Pain center. [12] Key services provided includes a 24-hour emergency department, inpatient behavioral health, gastroenterology, vascular services, and neurology. [13]

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-designated Level II Trauma Center, as well as an interventional cardiac center. [12] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [14]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

EMS operations within Clearwater County are managed by a single licensed EMS agency, utilizing both career and volunteer personnel to provide timely and appropriate EMS response to residents and visitors of the county from three stations. The consolidated management and oversight allow for flexibility and redundancy in response to staffing challenges within the county and improves access to ALS response for critical patients throughout the county. A full-time EMS Director and part-time administrative staff member work out of the main station in Orofino, providing administrative support for the organization, as well as shift coverage during scheduling gaps, simultaneous calls for service, and interfacility transfers.

The current organizational structure offers efficiency for administrative tasks, such as scheduling, billing, reporting, grant-writing, and coordination with elected officials and local hospital leadership. Additional efficiency is realized through centralized equipment and supply ordering, resource sharing, and vehicle maintenance and replacement.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Subjective assessments regarding sustainability of each provider during the resource assessment process yielded a score of 80 out of 100. Agency leadership described the addition of housing at the Orofino station, new EMT students, and additional trained providers moving to the area as contributing to an optimistic future for the organization.

- **EMS Agency Financial situation**: CCA leadership describes a sporadic financial situation, with deficits one year and surpluses the next. The EMS Director is relatively new to Clearwater County and EMS in Idaho. He describes new challenges with

recruitment and retention of volunteers and paid staff as a significant barrier to stable and reliable budgeting. His reports describe budgeted positions that remain unfilled, resulting in a budgetary surplus, but negatively impacting operational readiness. The recent pandemic has also caused financial uncertainty with dramatic shifts in prices for equipment and supplies amidst nationwide shortages.

- **EMS Agency Communications Strategy and Outreach**: While CCA participates in several community outreach activities, such parades and sporting events, there is no formal agency communications or public relations strategy that guides these activities.

- **Community View of EMS Agencies**: Agency leadership describes an excellent relationship with the community. Both the career and volunteer providers report positive overall interactions with the public, according to agency leadership. Other county departments, businesses, and residents provide financial support and kind gestures to uniformed members of CCA. Community members are appreciative of health promotion activities, such as blood pressure screenings and educational opportunities with the local schools, including standbys at sporting events and public gatherings.

- **Elected Official Support of EMS**: CCA leadership describes frequent communication with elected officials at the county and local level. The county provides administrative and budget support to the agency, and the county commissioners conduct regular meetings with CCA to discuss operational status and organizational needs within the CCA. The county commissioners are aware of the current taxing district and billing revenue that funds the agency and are involved in financial oversight for the ambulance district as the ambulance district board.

- **Agency & System Outlook:** Agency leadership describes an overall positive outlook for EMS within the community, providing examples of new providers moving into the area and improved recruitment in recent months. Additionally, a new EMT course will likely produce additional volunteers for the agency, improving capability to respond to incidents within the county. The staffing constraints affecting the EMS station in Pierce are seen as a setback and while currently being mitigated by agency leadership, has been described as an impetus to drive changes to improve response through consolidation and management of limited resources. The agency describes a need to focus on education and recruitment of new personnel and making EMS a viable profession with improved pay and professional standards. The EMS system in Idaho needs advocates who will promote the needs of rural providers and support the delivery of high-quality patient care at the ALS level across Idaho, not just in metropolitan areas. Funding is a significant issue for agency leadership who see an increased need for paid career staff in the future. Agencies are hopeful for positive impacts of the GEMT program statewide and are optimistic about the work being done within the Idaho EMS Sustainability Task Force and are encouraged by the current focus on the unique needs of rural EMS providers in Idaho.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: EMS in Clearwater County is provided by one licensed EMS provider, managing tax revenue and billing operations to fund a countywide system that utilizes both career and compensated volunteers to deliver EMS from three stations with ALS capability.

- **Service Delivery Partners**: During interviews with agency leadership, county commissioners, the ambulance board, and fire commissioners within the county were highlighted as service delivery partners due to their support for the organization. Additionally, the sheriff's department, the Clearwater Valley Hospital, local fire departments, and Life Flight Network were described as integral to the success of the organization through coordination for improved patient care. Finally, agency leadership acknowledged ambulance providers from surrounding counties, to include Latah and Nez Perce, for assistance with mutual aid for calls with multiple patients or simultaneous calls with insufficient staff within the county.

- **Medical Direction**: Medical direction for the single countywide agency is provided by two physicians from Clearwater Valley Hospital. Agency leadership describes an excellent working relationship with medical directors, citing their willingness to assist with training, and engagement with quality improvement initiatives and chart reviews when necessary.

- **Communications & Interoperability**: Overall radio communications are adequate, although gaps in coverage exist due to topography in more remote areas of the county.

- **Mutual Aid Systems & Agreements:** Mutual aid agreements exist with agencies in Latah County and Nez Perce County for bilateral support with multiple patient incidents and simultaneous calls for service. Most frequently, Deary Ambulance from Latah County may be requested to provide mutual aid to Elk River, especially if incidents involve multiple patients. Motor vehicle accidents on Highway 12 often require assistance from Lewiston Fire Department if multiple patients are involved, or if the paramedic unit is already out on a call in the county. Clearwater County EMS also provides mutual aid to Latah, Nez Perce, Lewis, and Idaho Counties when requested.

- **Community Health EMS (CHEMS)**: With a small number of paramedics employed at Clearwater County EMS, staffing is currently insufficient to support a CHEMS program. The rural and remote nature of the community would lend itself to a CHEMS program, but agency leadership cites program costs and personnel shortages as significant barriers to implementation.

- **Patient Care Documentation System**: CCEMS utilizes the Image Trend Elite patient care reporting system provided by the Bureau of EMS and Preparedness for patient care charting. Agency leadership reported difficulty in the ability to easily acquire and utilize data for organizational improvement and planning. While they would consider

transitioning to a more robust documentation and reporting system, the cost is prohibitive, therefore they intend to stay with the state-funded platform.

- Inter-facility Transports: As described, the agency performs interfacility transfers out of CVH routinely to tertiary care facilities in Lewiston and Coeur d'Alene. In addition, they perform a small number of transfers from long-term care facilities within Orofino to CVH, when able. Agency leadership reports completing approximately 300 IFTs in 2022 with associated billing revenue of approximately $50,000.

4.2.1.3. Response Overview

Clearwater County EMS utilizes a combination of career staff and volunteers to provide prehospital care to the residents and visitors of the county despite of personal and professional hardships brought on by the shortage of trained personnel and active volunteer members. Agency leadership describes increasing difficulty in recruiting and retaining sufficient volunteers to schedule crews around the clock, especially at volunteer stations in Elk River and Weippe. Such shortages resulted in the consolidation of the Pierce and Weippe stations in the spring of 2023. While many of the volunteer providers receive modest compensation for being on-call or responding to calls, the lack of reliable revenue for the organization to support full-time staffing, coupled with a lack of qualified applicants for open career positions presents a significant barrier to the future of EMS delivery in the presence of waning volunteerism within the county and nationwide.

- Level(s) of Service: Paramedic-level service is provided out of the main station in Orofino, covering the entire county. The two rural stations are staffed with EMTs, providing BLS care to the rural communities of Elk River and Weippe. Due to its remote location, ALS rendezvous for Elk River is often provided by Moscow Volunteer Fire Department paramedics out of Latah County.

- Agency Response Concerns: During interviews with agency leadership, two issues were mentioned multiple times: recruitment of career personnel and decreasing volunteerism impacting the rural, volunteer stations within the county. The rural environment, inability to offer pay competitive with larger metropolitan departments, and the lack of affordable and available housing in Clearwater County were barriers to recruitment and retention of qualified career paramedics and EMTs. Agency leadership described a long-standing and dedicated cadre of volunteers within the rural communities that provide staffing for the BLS ambulances within the region but scheduling of crews at two stations around the clock can be difficult, especially in the absence of new personnel to fill gaps from retirement of older volunteers or personnel who relocate out of the county. These two themes are the most concerning issues related to the agency's continued ability to provide an appropriate, reliable response within the county.

- Helicopter Response & Utilization: With most calls being transported to CVH, agencies only call for air medical resources for high acuity patients, with time sensitive emergencies. CCEMS described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Agencies also described challenges with aircraft availability due to weather during a significant portion of the year.

Although Life Flight Network has a base in Lewiston, weather may ground aircraft for prolonged periods of time.

- **Factors Impacting Response Times:** Agencies noted that location, simultaneous calls (requiring a second ambulance crew), and personnel shortages to be the most persistent factors impacting response times. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** CCEMS reports a significant number of responses to public land, especially out of the Elk River station. A smaller number of calls for service originate from the National Forest area on the eastern side of the county. These responses typically include prolonged response time and are resource intensive.

4.2.2. Workforce & Resource Assessment

Staffing in Clearwater County is accomplished through careful coordination between career and volunteer personnel to ensure adequate coverage for all three stations, including an ALS unit out of Orofino, and two BLS units out of Elk River and Weippe.

4.2.2.1. Staffing Overview

- **Staffing Structure:** One ALS ambulance is staffed out of the main station in Orofino, utilizing career personnel and compensated volunteers, Career personnel are scheduled on a 48/96 rotating schedule while compensated volunteer EMTs complete the crew on a dedicated schedule. Ambulances in rural stations are staffed by compensated volunteer EMTs utilizing a duty schedule, managed, and overseen by the Agency Director and administrative personnel out of the Orofino station. Assigned personnel may respond from home provided coordination among the duty crew has ensured one crew member will be available to respond with the ambulance from the station. The rural stations sometimes utilize an informal system of communication, including text message groups, or mobile phone applications to communicate changes in availability, and ensure that there is a crew available to respond should a call occur.

- **Responder Average Age:** CCEMS reports an overage age of 35-44 among both career and volunteer personnel. The rural stations have some older volunteers, however, the agency in general reports a consistent age throughout a majority of personnel.

- **Staffing Numbers:** CCEMS reports four career personnel, three full time and one part time, as well as 28 volunteers. Eighteen of the agency's volunteers are EMTs, one is an Advanced Emergency Medical Technician (AEMT), and two are Emergency Medical Responders (EMR). The remainder function as unlicensed drivers, primarily at the rural stations.

- **Staffing Concerns:** The lack of ability to recruit and retain career or volunteer personnel, due to low call volume, pay disparity, housing affordability, and the remote

environment of Clearwater County are the primary concerns related to staffing. Most career personnel live outside of the county, including the Director who lives in neighboring Latah County. This makes callback coverage for simultaneous calls or interfacility transport coverage difficult, especially during inclement weather.

- Staffing Strengths: CCEMS has recently changed their staffing plan to better accommodate career personnel, transitioning to a 48/96 rotating schedule. The prior system has extremely long shifts lasting up to a week. Complicated shift schedules based on personal preference of prior employees made recruitment difficult, but recent changes to the staffing plan have generated optimism about new hiring opportunities for the organization. Despite a difficult recruitment and retention environment, CCEMS has been able to bring in a third paramedic, who utilizes the on-site living quarters during her assigned shifts. Additionally, CCEMS has several personnel in a hybrid EMT course and is supporting them through the didactic portion, hopeful they will complete the course, obtain licensure, and volunteer within the county.

- Recruitment & Retention: There are few recruitment and retention opportunities that EMS agencies within the county are finding effective. The agency offers free housing for on-duty personnel behind the Orofino station, which allows personnel to travel from further away for their shifts. Agency leadership offers free EMS training for potential volunteers, and continuing education for current personnel. They cite opportunities to provide EMT courses in local high schools, provide scholarships for EMT and paramedic training with required work agreements, and the availability of benefits, such as PERSI retirement and health insurance as incentives to improve recruitment and retention within the community.

4.2.2.2. Training & Education Overview

- Clearwater County EMS is currently offering an EMT course, which consists of some online learning, classroom didactic, and clinical rotations. Agency leadership is hopeful that the course will generate several new volunteers for the organization.

- CCEMS reports challenges with availability of initial training, especially for paramedics, but also for EMTs who seek training outside of the agency-sponsored courses. This is due to long travel times to EMT classes in larger cities, such as Lewiston or Moscow. Further, With the profound shortage of Paramedic courses, the agency relies on applicants that are already licensed paramedics, rather than sending personnel to training and requiring a specific amount of employment to pay back those expenses. This limitation remains a significant barrier to staffing, even when personnel are interested and motivated to seek higher levels of licensure.

4.2.2.3. Facilities Overview

- Station Locations: The main station, housing four ambulances, is located in Orofino, and provides ALS service to the entire county. Three BLS stations are located in Elk River, Pierce, and Weippe, serving the more rural portions of the county.

- **Station Conditions:** Agency leadership states that all three stations currently meet the needs of the organization. The station in Orofino has dedicated housing for crews, which was purchased in 2020, and remains in excellent condition. CCEMS has a facility fund to pay for repairs and improvements to stations, as necessary, and states that the county often helps with renovations or repairs as needed.

- **Facility Needs:** Storage, sleeping quarters, kitchen, and restroom facilities (including shower facilities) would be necessary upgrades to accommodate on-duty crews in the two rural stations.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: CCEMS indicates that their equipment and supplies meet their daily needs. The agency has no unmet needs for equipment and supplies.

- **Condition**: Equipment and supplies are reported in good or excellent condition overall, however, some equipment in the rural areas is approaching end of life and may need to be replaced using grant funds.

- **Funding**: More expensive equipment is replaced through grant programs, especially capital equipment, and vehicles. CCEMS recently obtained a grant from the State of Idaho for ambulance replacement totaling $165,000. That ambulance was ordered early in 2023 and is expected to be delivered in 2024.

- **Needs/Shortages**: CCEMS reported no unmet needs for equipment and supplies at this time.

4.2.3. Financial Overview

With an annual budget in 2022 of $716,725, CCEMS is currently able to support EMS operations within the county with a combination of career and volunteer personnel, operating on a tight but functional budget. The agency, however, does report a sporadic financial year to year due to recent changes in leadership, rising operational costs, and changes in staffing within the organization. Future growth of the organization and transition to a more stable staffing structure may include the hiring of additional career personnel, which threatens the modest agency budget. Recent consolidation from four to three ambulances resulted from necessary efficiencies brought about because of decreasing volunteer availability and insufficient funding. Future consolidation threatens the timely provision of EMS as the system is already stretched thin covering a large geographical area with only three on-duty units.

4.2.3.1. Expense Overview

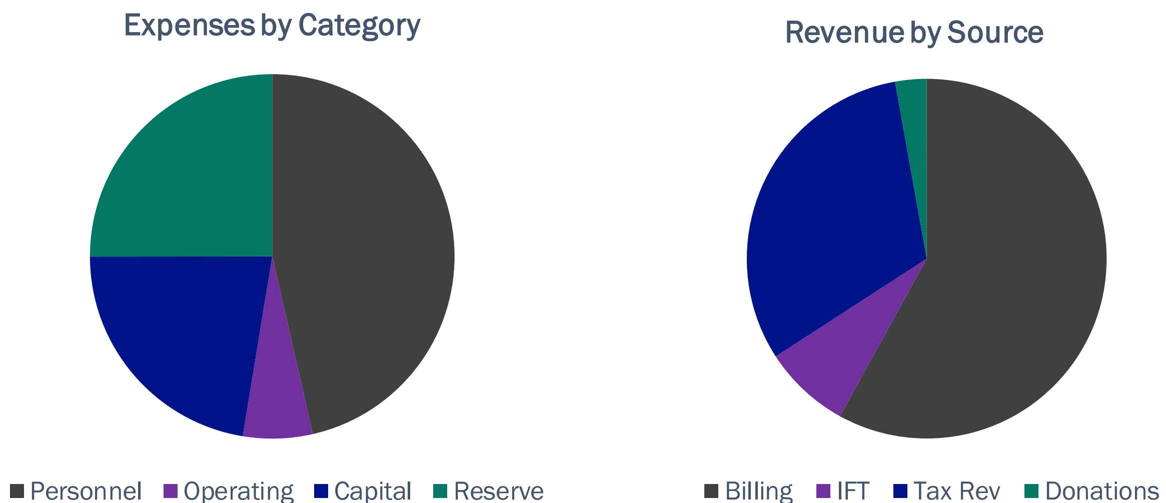
The annual budget for the organization was reported to be $716,725 in 2023. The budget includes approximately $425,000 for personnel, $40,000 for capital expenses (the organization's share of a new ambulance), and the remainder for operating costs including fuel, supplies, and overhead. CCEMS described approximately $229,000 in carryover revenue that is earmarked for capital expenses and facility improvements. The organization

received a grant in the amount of $192,307 from the State of Idaho to purchase a new ambulance which is scheduled for delivery in 2024. During conversations with agency leadership, there is an expectation that annual operating costs will consume a small portion of the projected carryover.

4.2.3.2. Revenue Overview

Clearwater County receives most of its revenue from patient billing and an ambulance taxing district levy within the county. With approximately 754 transports in 2022, the organization received $420,428 in billing revenue. This amount is approximately 58% of gross billing charges, with $232,162 disallowed, $41,093 uncollected, and $43,092 pending and likely to be written off along with uncollected amounts. The agency utilizes an outside billing agency to optimize revenue and is pleased with the amount collected relative to gross billing. The payor mix within the county, according to billing records, is 63% Medicare, 14% Medicaid, 17% commercial insurance, and 6% out of pocket. Billing revenue and payor information include the 300 interfacility transports completed by the agency each year.

Tax revenue from the ambulance taxing district totals approximately $200,000 annually with a tax rate of 0.0003%. Additional revenue in 2022 included $192,307 in grant funding for a replacement ambulance from the State of Idaho that was combined with $40,000 of agency funds to purchase a new ambulance that will be delivered in 2024. Agency leadership describes small donations from the community that are received sporadically throughout the year, averaging approximately $1,000 per month.



4.2.4. Resource Assessment Additional Factors

While workforce expenses continue to rise, and availability of volunteers drives an increased need for career personnel, the low population and large expanse of the county provide a unique challenge for EMS delivery. Tax revenue is limited by the modest population, the

limitations of expansion on the Clearwater -Nez Perce reservation, and the large amount of state and federal land. Simultaneously, limited population growth translates to limited growth in call volume which drives billing revenue. Sources of potential revenue limit the ability of the organization to manage operational and fiscal requirements brought on by the changing EMS landscape in the county.

Programs targeting workforce development, housing affordability and incentives for EMS personnel will be critical to attempts by CCEMS to keep pace with the evolving financial and operational climate in Idaho. Current efforts to optimize emergency response operations have stabilized the organization in the current setting, but on-going sustainability will require an intentional approach to recruitment, retention, and resilience for the future workforce, and improving affordability for emergency personnel.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). US Census Bureau Quick Facts – Clearwater County, Idaho. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/clearwatercountyidaho

[2] University of Idaho Extension. (2023). Indicators Idaho: Clearwater County. Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16035

[3] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). Idaho forest factbook: county atlas of forest land and the forest product industry. Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[4] Redfin. (2023, January). Clearwater County, ID Housing Market. Retrieved from https://www.redfin.com/county/685/ID/Clearwater-County/housing-market

[5] University of Wisconsin Population Health Institute. (2023). County Health Rankings: Clearwater County, Idaho. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/clearwater?year=2023

[6] Clearwater Valley Health. (2023). Clearwater Valley Health Community Health Needs Assessment. https://smh-cvh.org/wp-content/uploads/2023/07/CHNA-Report_2023.pdf

[7] Biospatial. (2023). https://app.biospatial.io

[8] IGEMS Data. (2023). EMS Planner Call Volume: 2021 / 2022.

[9] IGEMS Data. (2023). EMS Planner Response Time: 2021 / 2022.

[10] IGEMS Data. (2023). Agency career-vs-volunteer personnel: 2022.

[11] Clearwater Valley Health. (2023). St. Mary's Health and Clearwater Valley Health. https://smh-cvh.org/

[12] Idaho Department of Health and Welfare. (2023). Idaho time-sensitive emergencies: Idaho TSE facility designations. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[13] St. Joseph's Regional Medical Center. (2023). Services & Medical Clinics. https://www.pullmanregional.org/patient-care/services

[14] Kootenai Health. (2023). Facts and community reports. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

KOOTENAI COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION
1
CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway to EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Kootenai County is home to the largest city in North Idaho and a mature, well-supported Emergency Medical Services (EMS) delivery system. Kootenai County utilizes a unique system of EMS contracts through designated fire districts to provide a timely and reliable response to calls for service within the community. Revenue generated through the ambulance taxing district coupled with substantial billing revenue from a large number of patient transports annually supports career personnel and a modern fleet of EMS units carrying advanced equipment to provide EMS to the residents and visitors of Kootenai County. However, a dichotomy exists between the high-volume, career departments providing service in the metropolitan area and the remote and rural communities on the south side of Lake Coeur d'Alene. The volunteer service delivery model in this rural area of the county struggles with many of the same issues as other small communities, including decreasing volunteerism, low call volume, modest billing revenue, and long transport times to definitive care.

Several attempts at career staffing in this rural portion of the county were unsustainable due to low call volume, high cost, and lack of infrastructure. Following each attempt to upgrade the service delivery model, the volunteer providers in the community had to re-establish an ambulance provider within the community. The uneasy relationship between volunteer provider and the County EMS district has led to difficult and strained coordination, which linger within the county. While tax revenue, call volume and subsequent billing income does not necessarily support full-time career EMS delivery, there are increasing concerns about the ability of dwindling volunteers in this remote and aging community to continue to provide reliable and sustainable EMS service delivery in the southeast portion of the county. Physically separated by the Lake Coeur d'Alene and accessible only by winding mountain roads, this rural community represents the primary challenge for reliable and sustainable EMS delivery countywide.

EMS leaders within the county continue to implement contingency plans to ensure appropriate coverage for all areas of the county, both metropolitan and rural. The high call volume in metropolitan areas suggests the need for additional EMS resources to handle the increased call volume from a rapidly growing community, while engagement of new EMS partners and shared coverage models seek to address gaps in volunteer coverage in rural communities. With the unprecedented population growth in Kootenai County far exceed the tax levy cap that funds a substantial portion of EMS system delivery, while demand for EMS services steadily increases with an aging population and growing number of tourists and visitors annually. In order to remain sustainable, the EMS system in Kootenai County continues to address external limitations on resources that increase the gap caused by unconstrained growth.

Strengths	Opportunities
• Innovative contracting arrangement with fire districts for EMS coverage that provides Advanced Life Support (ALS) and Basic Life Support (BLS) coverage to most county residents. • Rapidly growing community yields significant tax revenue each year. • High call volume and dedicated billing support at the system level optimizes billing revenue.	• Ground Emergency Medical Transport (GEMT) Funding will provide additional funding to meet operational demands of the Kootenai County EMS System (KCEMSS). • Integration of Eastside Fire District for inclusion in the KCEMSS and providing redundant coverage for rural communities on the South side of Lake Coeur d'Alene.
Challenges	**Threats**
• Growth within the county far exceeds the tax levy cap, resulting in insufficient revenue to meet the growing needs of the community. • Strained relationship between two current EMS providers resulting from past struggles with EMS coverage in remote southern portion of the county. • Rural and remote community of Harrison has low call volume and subsequent modest billing revenue to fund EMS operation.	• Increased cost of living, housing prices, and lack of housing inventory in Kootenai County make recruitment and retention difficult. • Seasonal wildland fire activity diverts personnel from fire-based EMS agencies to staff fire apparatus requiring backfill staffing. • Geographic isolation of small community on the south side of Lake Coeur d'Alene leads to long response and transport times.

Table A: Kootenai County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY OVERVIEW

2.1. Demographics

Kootenai County is a predominantly metropolitan county located in northern Idaho, consisting of 1,244 square miles and is home to a population of 183,578 citizens, which has grown substantially over the past 20 years, approximately 2-3% annual growth within the county. [1] The county seat and largest city in Kootenai County is Coeur d'Alene. US Highway 95 runs north to south through the center of the county, and Interstate 90 running east and west through the southern portion of the county, connecting the county with metropolitan Spokane to the west.

Kootenai County is comprised of approximately 32% public land, predominantly located on the eastern side of the county. [2] The rugged nature of the eastern half of the county results in significantly lower population density when compared to the metropolitan portions of the county. A substantial portion of the population live in the metropolitan centers, including Coeur d'Alene, Hayden, Post Falls, Rathdrum, and Dalton Gardens. Smaller communities outside of the metropolitan area, including Athol, Spirit Lake, Cataldo, Harrison, and Worley have a much lower population density, but continue to see significant growth with immigration into the County. The county consists of both metropolitan areas and remote areas dispersed among rugged terrain. While the City of Coeur d'Alene boasts a population density of 3,392 people per square mile, the vast land area east of Lake Coeur d'Alene that comprises the Harrison Census County Division has only 6.6 people per square mile. [1, 3] In addition, much of the growth includes an older population. In 2000, persons over 65 comprised 12.3% of the population, and in 2021, that figure rose to 19.5% over the same period that the population grew from 108,685 to 180,146. [1]

state and federal forest and recreation land make up another 265,000 acres, or 414 square miles, including Farragut State Park, Old Mission State Park, Mowry State Park, and the Coeur d'Alene and Kaniksu National Forests. Abundant infrastructure, including hiking trails, national forest access, and county or city parks provide opportunities for recreation, most of which occurs near population centers. [2] Recreation in remote areas and the 70 square miles of water, including Lake Coeur d'Alene, Lake Pend Oreille, and various other recreational bodies of water causes challenges for EMS and emergency response.

Demographic	2000	2010	2020	2022
Population	108,685	138,494	171,362	183,578
Land Area	1,238 sq mi	1,238 sq mi	1,244 sq mi	1,244 sq mi
Per Capita	87.8 PPSM	111.9 PPSM	137.8 PPSM	147.6 PPSM
PPSM: *People per square mile*				

Table B: Kootenai County Population & Geography [1]

2.2. Economics

The largest sectors of the workforce are government (12.4%), retail (12.1%), construction (9.6%), healthcare (9.4%), and accommodation and food service (8.8%). [4] Tourism and travel industries have a significant impact on the local economy according to the North Idaho Business Journal, tourism spending totaled $896.3 million, and represented a substantial part of the county's economy. [5] Explosive growth in population, coupled with significant seasonal population surges related to tourism drives a significant part of the economy of Kootenai County. Additionally, Coeur d'Alene and adjacent metropolitan jurisdictions serve as a retail destination for many rural communities within Kootenai County and surrounding counties from all over North Idaho, western Montana, and up to the Canadian border. Access to shopping, building supplies, and other resources brings significant commercial traffic to Kootenai County daily. Coeur d'Alene, and particularly Kootenai Health, serve as a referral center for citizens all over North Idaho and the surrounding states who seek primary and specialty care.

Regardless of continued growth and this growing job market, the poverty rate remains at 9.5%, exacerbated by the dramatic increase in the cost of living in Kootenai County and North Idaho. Rapid growth and cost of living continue to feed disparity between affluent residents and persons living in poverty. [4]

One of the most significant barriers to workforce recruitment in Kootenai County and surrounding communities is rising housing costs, and the lack of housing inventory. Median value of homes within Kootenai County is significantly higher than the state average at $328,700, however real estate market data resources reports the average sale price in Kootenai County $555,226 in 2022. [6] The dramatic difference in the assessed home value and the average sale price means that home buyers must either offer a substantial down payment or locate unsecure loans to finance a purchase. Additionally, these resources report that an average of 179-372 housing units are sold each month with season fluctuations being highest in the summer months, with an average time on the market of only 24 days. [6] Significant increases in interest rates have caused increased time on the market, but also led to challenges for homebuyers to obtain financing and additional cost from loan interest.

Without access to affordable housing, families are forced to relocate elsewhere or pay higher prices for homes, meaning families must work additional hours or jobs to make monthly mortgage or rent payments. This factor has a direct impact on workforce recruitment and retention within the county.

Metric	2010	2020	2022
Total Population	138,494	171,362	183,578
Median Age	38.9 years old	40.8 years old	40.6 years old
Poverty Rate	14.6%	8.6%	9.5%
Number of Jobs	75,121	92,230	99,794
Avg Annual Wage	$ 42,985	$ 50,180	$ 51,115
Household Income	$ 58,819	$ 75,715	$ 73,488
Unemployment Rate	10.9%	6.9%	3.3%

Table C: Kootenai County Economic Factors [4]

Metric	Kootenai Co.	Idaho	United States
Housing Units	73,446	751,859	N/A
% Owner Occupied	64.3%	71.7%	64.6%
Change 2010 - 2020	18.3%	12.6%	6.7%
Median Rental Cost	$ 863	$ 1,310	N/A
Median Home Value	$ 328,700	$ 266,600	$ 244,900
Household Income	$ 73,288	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	76.3% / 15.2% / 8.5%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Kootenai County Housing Factors [4]

2.3. Social Determinants of Health

Access to care is a growing concern in Kootenai County. The number of primary care physicians has fallen from 35 in 2016 to 30 in 2020. There are 8.2 primary care physicians per 10,000 residents, which is higher than the average in Idaho of 6.3 per 10,000, and the national average of 7.6 per 10,000. [4] Access to clinical care, length, and quality of life ranks Kootenai County at number 7 of the 44 ranked counties in Idaho according to County Health Rankings. [7] Air pollution and access to clean drinking contribute significantly to the low physical environment score.

Kootenai County has unique challenges relating to health insurance coverage. The percentage of residents under the age of 65 who are uninsured (12.4%) is slightly lower than the average in Idaho of 12.7 % but higher than the national average of 10.8%. The percentage of children under the age of 19 without health insurance (4.6 %) is lower compared to the average in Idaho of 5.1 % (5.6 % national average). [4]

Kootenai County is served by Kootenai Health, with access to hospital care, community health centers, clinics, and outpatient clinics to provide healthcare services to the community. Additional specialty care resources are available nearby in Spokane, Washington with several large academic medical centers providing acute and specialty care.

County Health Rankings	
3 of 43 ranked counties in Idaho	
Health Outcomes	3 of 43
Health Factors	2 of 43
Length of Life	6 of 43
Quality of Life	1 of 43
Health Behaviors	5 of 43
Clinical Care	7 of 43
Social & Economic Factors	3 of 43
Physical Environment	36 of 43

Table E: Kootenai County Health Ranking [7]

2.4. Indicator Impacts to EMS

Continued explosive growth in Kootenai county is expected to strain healthcare resources, including hospitals and emergency service delivery within the county. High demand for housing has driven up home prices and cost of living continues to rise as people continue to move into the community and compete for the scarce housing resources. In some cases, the increased cost of living is causing EMS providers to work additional shifts at other departments to make ends meet, leading to increased strain on providers and burnout. Increased cost of living in Kootenai County is causing an even more pronounced impact on volunteer agencies, as personnel must balance volunteer commitments with the needs of themselves and their families.

KCEMSS and partner fire departments must continue to provide competitive wages and benefits to attract and retain personnel to provide the critical fire and EMS services within Kootenai County. As demand for service increases with a growing and aging population within the county, KCEMSS and partner fire departments must grow to meet the needs of the community.

The healthcare infrastructure in Kootenai County ranks among the highest in Idaho counties, with reliable access to primary care, emergency care, and specialty services within the county or neighboring counties. The increasing median age of the population underpins many of the population statistics within the county, although demographics, including median age are changing as affordable housing and cost of living drive in-migration of older professionals and retirees, and departure of many working-age residents.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Call volume within the county remains constant through most of the year, with an increase in calls for service to treat non-residents during the peak tourism season in the summer months. Calls for service are consistently distributed based on population density within the county, with metropolitan areas having higher call volumes than the more rural portions of the county. KCEMSS and partner fire departments station response resources in response to system demand with ALS units located in the more populated urban areas, and BLS units stationed in less populated areas. [8]

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Harrison Community Ambulance Association	44	56	100	61	61	122
Kootenai County EMS System	9,921	6,169	16,090	10,634	5,689	16,343
Ambulance Total	9,965	6,225	16,190	10,695	5,750	16,465

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Kootenai County (2021-2022) [9]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Harrison Community Ambulance Association	*18 min*	*18 min*	36 min	50 min	174 min
Kootenai County EMS System	*2 min*	*6 min*	7 min	15 min	56 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Kootenai County (2022) [10]

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or ere shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. PSAP Overview

Kootenai County is served by a single public safety answering point located within the Kootenai County Sheriff's Office. The countywide call-taking and dispatch center provides coverage for all fire and EMS operations within the county and utilizes a single, secure radio system to communicate with responding units. Kootenai County employs dedicated call-takers and dispatchers for fire and EMS operations and utilizes medical priority dispatch and provides pre-arrival instructions to citizens while units are responding. The radio system allows communication between different agencies responding to the same incident and is reported to meet the needs of the agencies within Kootenai County.

Infrastructure within the metropolitan areas of the county provide adequate radio reception, however, providers covering more rural areas of the county describe some geographic gaps in radio coverage due to terrain and limited radio infrastructure. However, all agencies describe few operational issues, and are content with the current radio system.

4.1.2. EMS Agency Overview

Kootenai County is served by two licensed EMS providers staffing 12 ambulances throughout the county. The Kootenai County EMS System operates through a network of contracted fire departments and non-profit ambulance providers to deliver reliable and timely EMS response to the entire county. KCEMSS also provides critical care transport services for interfacility transfers between hospitals in Kootenai County and specialty centers in Spokane, Washington and elsewhere. KCEMSS employs a unique system where responders are employees of the contracted fire departments or non-profit ambulance organizations. KCEMSS provides these agencies with ambulances, medical equipment, supplies, and medical direction as well as funding for staffing of the ambulances. KCEMSS handles EMS provider licensure, medical billing, management of tax revenue, and

coordination between the 12 system partners. Covering the most rural portion of the county is Harrison Ambulance which cooperates with the rest of the EMS System, but does not receive direct support for billing, purchasing, and administrative support.

Transport agencies functioning under the KCEMSS provider license include:

- Coeur d'Alene Fire Department (operating two ALS ambulances)
- Kootenai County Fire & Rescue (operating two ALS ambulances)
- Northern Lakes Fire Protection District (operating two ALS ambulances)
- Spirit Lake Fire Protection District (operating one BLS ambulance)
- Timberlake Fire Protection District (operating one BLS ambulance)
- Worley Fire Protection District (operating one BLS ambulance)
- Eastside Fire Protection District (operating one BLS ambulance)

Additional transport agencies provide contracted EMS coverage under their own provider license:

- Bonner County Emergency Medical Services (providing automatic aid with one ALS ambulance)
- Harrison Community Ambulance Association (operating two BLS ambulances)
- Shoshone County Fire District #2 (providing automatic aid with one Intermediate Life Support (ILS) ambulance)

Three Quick Response Units also operate under KCEMSS' provider license:

- Hauser Lake Fire Protection District
- Mica Kidd Island Fire Protection District

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Harrison Community Ambulance Association	Private 501(c)(3) Non-Profit	BLS	Scheduled	Volunteer Compensated
Kootenai County EMS System	Taxing District Fire-Based	ALS	Scheduled	Career

Table H: List of EMS Agencies Located in Kootenai County [11]

4.1.2.1. Harrison Community Ambulance Association

Harrison Community Ambulance Association is a private 501(c)(3) non-profit organization providing EMS for 250 square miles from the eastern side of Lake Coeur d'Alene through the town of Harrison to the Benewah County line. Harrison Community Ambulance operates two ambulances out of two stations, located in Harrison and Carlin Bay. The ambulances are staffed by scheduled volunteers who receive a small stipend for shift coverage. The most significant staffing concerns are the aging volunteer workforce, and challenges covering night and weekend calls. The agency responded to 146 calls for service in 2022 and reports transporting approximately 60-70% of their patients. Agency leadership describes difficulty recruiting new EMS providers and providing convenient opportunities for initial EMS training to potential volunteers. Although the agency has 10 volunteer Emergency Medical Technicians (EMT) on the roster, they report only four active volunteers and two EMT candidates, and often rely on fire department personnel to drive the ambulance if transport is necessary. As a lakeside community, Harrison experiences a significant amount of transient population movement during the summer, with low call volume in the winter months. The remote nature of the community and the terrain of their coverage area results in long response times, and significant transport times to the nearest hospital.

Harrison Community Ambulance utilizes two primary sources of income, billing revenue and contract funding from KCEMSS. In 2022, Harrison Community Ambulance received approximately $80,000 in billing revenue, most of which was attributed to the mileage reimbursement rate because of the remote nature of the community. When paramedic assistance is required for patient care, KCEMSS does not bill the patient, ensuring that Harrison Community Ambulance can seek reimbursement. Billing is accomplished by a dedicated billing specialist at Harrison Community Ambulance. Billing timelines have improved to approximately three days on average but continue to struggle with possible lost revenue from time-sensitive billing sources, such as motor vehicle insurance because of the small-scale, manual process. Additionally, some details including billing add-ons have not been sought because of lack of experience in complex billing processes. The agency's low call volume has caused challenges in finding a billing company willing to contract for services, requiring Harrison Community Ambulance leadership to make the decision to conduct billing in house.

Harrison Community Ambulance receives $5,600 monthly from tax revenue to support EMS operations. The agency utilizes grants for capital purchases and was most recently able to purchase a several pieces of medical equipment to replace aging and outdated equipment on the ambulance. The only other source of revenue reported by the agency is private donations from members of the community which is reported as decreasing year over year.

Harrison Community Ambulance and KCEMSS describe a strained relationship between the two agencies based on issues that occurred in the past related to ambulance contracting for the town of Harrison. With the increasing challenges associated with volunteer coverage in the remote community and impending capital equipment and facility costs, Harrison Community Ambulance faces significant financial and operational challenges in ensuring reliable and appropriate EMS response to the remote areas of southeastern Kootenai County. Both Harrison Community Ambulance and KCEMSS recognize the need for future planning and targeted funding to ensure sustainable EMS delivery in the future.

4.1.2.2. Kootenai County EMS System (KCEMSS)

KCEMSS is responsible for EMS delivery within Kootenai County, as the lead agency for management of tax revenue, overseen by the Kootenai County Joint Powers Board. KCEMSS is managed by a small staff of agency leadership and administrative staff that oversee training, billing, financial, logistical, and operational functions of EMS within the county. Funds are distributed to contracted fire departments within the region that function under the EMS provider license held by KCEMSS. Funding is distributed from tax revenue to reimburse career fire departments within the county for a portion of the personnel costs associated with ALS and BLS level service delivery provided in each fire district by the contracted fire departments. KCEMSS also provides ambulances, equipment, supplies, a clinical documentation system, and medical direction to all the agencies functioning under the KCEMSS license.

ALS service is provided by paramedics out of six stations operated by Coeur d'Alene Fire Department, Kootenai County Fire & Rescue, and Northern Lakes Fire Protection District. Additional ALS service is available through surge staffing that utilizes KCEMSS personnel out of the administrative headquarters in Post Falls. Spirit Lake Fire Protection District, Timberlake Fire Protection District, and Worley Fire Protection District are reimbursed for personnel costs associated with one EMT to staff BLS ambulances out of three stations in less populated areas of the county. Paramedic level service is available in these communities utilizing ALS intercept from one of the paramedic units described above or through paramedic personnel assigned to fire apparatus in each of the three metropolitan departments. For example, Kootenai County Fire & Rescue has paramedic personnel assigned to three engine companies, one ladder company, and one battalion chief unit in addition to staffed ALS ambulances. ALS coverage can also be obtained from paramedic-level personnel from the KCEMSS administrative building. A small area of northern Kootenai County is covered through an automatic aid agreement with Bonner County EMS (BCEMS), which is supported by a small contract fee paid to BCEMS from Kootenai County EMS tax revenue. Similarly, Shoshone County Fire Protection District #2 covers a small area of eastern Kootenai County along the Interstate 90 corridor due to the proximity to Shoshone County EMS resources. A small, contracted fee is paid to Shoshone County EMS District to reimburse the cost of providing this service to the residents of Kootenai County.

The EMS operation is funded primarily through billing revenue and tax revenue collected through the ambulance taxing district. In addition to these two revenue sources, the county spends $300,000 annually for training and maintenance of a critical care transport capability that for interfacility transfers out of local hospitals. KCEMSS utilizes on-duty EMS resources within the EMS system to handle interfacility transfer requests from hospitals and long-term care facilities, providing a significant influx of funding for the operation of the EMS system. KCEMSS leadership reports that interfacility transfer volume constitutes a small percentage of the call volume for each ambulance within the system, but the revenue pays for two fully staffed ambulances. “If we were to stop doing interfacility transfers tomorrow, I'd have to take two [ambulances] out of service.” The interfacility transfer volume provides significant financial support to the KCEMSS system, and the critical care transfer capability is important when helicopters can't fly because of weather.

Kootenai County fire and EMS leadership recognize that EMS delivery is a significant portion of the emergency services delivered by the fire departments within the county, recognizing that "90% of our calls are EMS." The integrated fire service and EMS delivery model leverages tax revenue from both fire districts and EMS districts to optimize overall emergency services delivery in Kootenai County.

4.1.3. Hospital Access Overview

The primary transport destination for most agencies within the county is Kootenai Health, located in Coeur d'Alene, serving as the only definitive care facility within Kootenai County. However, due to topography and proximity of other cities outside of the county, some calls for service in the rural portions of the county result in transports to Benewah Community Hospital in St. Maries or Shoshone Medical Center in Kellogg. The nearest tertiary center is located in Coeur d'Alene, approximately 84 miles to the north via US Highway 95, serving as the nearest resource for specialty care.

- Kootenai Health (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-designated Level II Trauma Center, as well as an interventional cardiac center. [12] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [13] Many patients from Latah County are transferred to Kootenai Health from Gritman for specialty care if those services are not available locally.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Kootenai County is supported by two licensed EMS agencies, and two other agencies that provide EMS coverage from bordering communities through contracted automatic aid agreements. KCEMSS provides administrative support and clinical oversight to EMS delivery that is operationally managed by the individual fire department leadership within each fire district or contract coverage area. Except for Harrison Community Ambulance and automatic aid resources from surrounding communities, billing, medical direction, and logistics support for EMS operations is managed by KCEMSS in support of contracted fire departments that staff and operate the nine to twelve ambulances operating throughout the county on a daily basis.

KCEMSS describes some operational challenges with joint funding model for EMS personnel since large incidents, including structure fires and wildland fires, divert shared EMS personnel to focus on management of the firefighting incident. In such cases, KCEMSS and each of the fire departments institute a callback system to backfill fire and EMS resources to ensure coverage during large events. According to KCEMSS and fire department leadership, the EMS units are the first units covered by backfill personnel.

Life Flight Network provides air medical support to the County, as requested from their base in Coeur d'Alene. Life Flight Network is typically requested for patients who meet TSE

requirements for trauma, stroke, or STEMI in the more rural or remote areas of the county. Air medical transport is sometimes requested for critical pediatric patients to minimize the time to transport to pediatric specialty centers in Spokane. Burn patients are sometimes flown to the burn center in Seattle instead of transporting to Kootenai Health, based on patient acuity and clinical judgment of EMS personnel.

4.2.1.1. EMS Agency Perceptions

- EMS Agency Stability: Subjective assessments regarding sustainability of each provider during the resource assessment process yielded scores of 60, 90, and 100. KCEMSS and fire department leadership in the metropolitan areas within Kootenai County are confident that the current EMS system is sustainable, and that continued tax revenue and billing revenue is sufficient to sustain reliable and appropriate service delivery within the county. KCEMSS leadership did express concern about the sustainability of EMS delivery in the more rural and remote region of the county, specifically in Harrison where continued reliance on volunteer staffing, coupled low call volume and modest billing revenue makes it unclear if the operational model in that portion of the county will continue to be viable. Similarly, leadership from Harrison Community Ambulance scored stability at 60, citing decreasing volunteerism, challenges raising funds for capital purchases such as a new ambulance, and necessary station upgrades as a barrier to stability in the more remote areas of Kootenai County.

- EMS Agency Financial Situation: There is a distinct dichotomy in Kootenai County between the career fire departments covering the more populous metropolitan areas and the volunteer agency covering the remote area around Harrison. The substantial difference in call volume, billing revenue, and dedicated resources to optimize billing are the primary factors for the distinct difference in financial stability of these organizations. KCEMSS described challenges with the tax levy cap which is insufficient to meet the increased operational growth due to substantial growth in the community. High call volume and operational requirements of EMS units in the county call for the addition of another EMS unit, however current revenue is insufficient to meet the $1.2 million costs associated with fielding another staffed ALS ambulance. KCEMSS leadership is hopeful for the economic impact of the additional billing revenue from GEMT that will be received in 2024. KCEMSS is also planning for redundant capability to meet any unanticipated interruption in EMS service delivery in Harrison. Harrison Community Ambulance leadership described their current financial situation as adequate for continued delivery of EMS in the community but was insufficient to replace an aging fleet of ambulances and make necessary changes to their station to accommodate overnight staffing at the EMS station. Harrison Community Ambulance is currently utilizing 2004 and 2011 ambulances as their frontline EMS units with no funding currently available for replacement. Harrison Community Ambulance leadership also cites past attempts at career staffing in Harrison's coverage area that failed within less than a year. Harrison Community Ambulance has recruited a volunteer grant writer to help with revenue development to improve overall funding for operations.

- **EMS Agency Communications Strategy and Outreach**: KCEMSS and its member fire departments have a communications and outreach strategy that includes a web-presence, social media, and contact with the community at public and county-sponsored events.

- **Community View of EMS Agencies**: KCEMSS and Harrison Community Ambulance both positive public perception of EMS providers within the community. Both agencies report receiving donations from citizens and businesses within their communities, and participation in events, such as parades and holiday celebrations. The community support for the contracted fire departments within the county provides additional positive perception, as the departments report that citizens of the county are generally vocal about their support of county fire departments, especially during the summer wildfire season.

- **Elected Official Support of EMS Agencies**: KCEMSS is governed by the Joint Powers Board which is comprised of five elected officials from the Kootenai County Board of County Commissioners, the City of Coeur d'Alene, Kootenai County Fire & Rescue, Northern Lakes Fire Protection District, and Timberlake Fire Protection District (representing all the BLS agencies in the system). KCEMSS leadership describe a positive working relationship with the Board of County Commissioners, the Joint Powers Board, the Fire District Commissioners in each of their contracted fire departments, and each of the cities within Kootenai County. KCEMSS leadership describes frequent contact with elected members of the State legislature relating to EMS delivery and property tax levies. They describe a supportive and collaborative environment where elected officials seek to ensure that EMS agencies have what they need to care for the residents and visitors of the county, but are not necessarily supportive of increases to the tax structure or the levy cap.

- **Agency & System Response Outlook**: KCEMSS and the fire departments within the metropolitan area can offer competitive salaries for firefighter/paramedic applicants, as well as initial training for new recruits, providing access to a larger potential workforce than volunteer agencies and smaller departments with more stringent budget constraints. The availability of ALS providers on fire apparatus stationed throughout the county allows for a more agile and flexible response, especially in periods of high operational activity with limited ambulance resource availability. The shared staffing model with fire districts has allowed for improved readiness and response to both fire and EMS incidents through this unique, collaborative fiscal approach. Finally, the recent adoption of GEMT funding by the State Legislature offers the potential for improved funding to overcome future operational constraints within the metropolitan areas of the county. Agencies are hopeful for positive impacts of the GEMT program, as well as the work being done within the Idaho EMS Sustainability Task Force. All agencies expect continued growth in Kootenai County and have concerns about the growing challenges of funding the necessary growth with current legislative and regulatory constraints. KCEMSS, partner fire departments, and private, non-profit ambulance organizations are working together to address sustainability and reliability concerns related to volunteer staffing in rural and remote areas of the county.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** EMS in Kootenai County is provided by nine distinct agencies functioning under the KCEMSS licensure, as well as one private, non-profit ambulance organization, as well as two agencies outside the county that provide automatic aid to small areas along the county border. KCEMSS is responsible for the overall management and organization of EMS delivery with Kootenai County and provides financial support to the contracted agencies that staff ambulances responding to calls for service within the county.

- **Service Delivery Partners**: During interviews with agency leadership, service delivery partners highlighted most frequently were the fire departments within the county. All the fire departments within the county are part of the KCEMSS, and without their participation, the system would be fragmented and inefficient. Fire departments in surrounding counties also provided support through mutual aid and QRU support to certain areas on the edge of the county, and they were also recognized by EMS agency leadership, including fire districts within Benewah County that respond routinely to Harrison to provide support for Harrison Community Ambulance. Agency leadership also cited the Kootenai County Sheriff's Department and municipal law enforcement agencies as key partners in emergency response.

- **Medical Direction**: Medical Direction for KCEMSS is provided by two part-time medical directors, providing oversight of the BLS, ALS, and critical care programs within the system. KCEMSS leadership describes frequent communication with the medical directors and active participation in training and protocol development. Harrison Community Ambulance utilizes a different medical director because of perceived limitations on BLS protocols within a primarily ALS system in the rest of the county. They report adequate availability of their medical director to provide feedback, and discuss patient care issues, but their medical director covers many other agencies across the state and is not often available for on-site participation in training or interaction.

- **Communications & Interoperability**: Overall radio communications are adequate, although gaps in coverage exist due to topography in more remote areas of the county. Communication among all the EMS and fire agencies within the county is facilitated through the county radio system. Agencies also report radio interoperability with neighboring counties through the Kootenai County radio system, which makes automatic and mutual aid response more efficient.

- **Mutual Aid System & Agreements:** KCEMSS maintains a mutual aid agreement among all the agencies within the county, including Harrison Community Ambulance as part of the ambulance contract with each of the fire departments and private, non-profit ambulance organizations. The mutual aid agreement provides resource support for large incidents, requiring additional ambulances, and ALS coverage for BLS providers within the county. No issues were reported by EMS agencies within Kootenai County or neighboring jurisdictions.

- **Community Health EMS (CHEMS)**: While several EMS agencies provide health promotion services, and perform screenings for citizens at various events, Community Health EMS programs are not currently in place within the county. KCEMSS and fire department leadership cite poor funding mechanisms and busy operational environment as barriers to the development of CHEMS within Kootenai County. Until CHEMS programs can financially support themselves, the funding and resources are not available to develop these programs within the county.

- **Patient Care Documentation Systems**: KCEMSS and Harrison Community Ambulance both utilize a separate commercial electronic records platform for patient care reporting which provides integration with fire department reporting and the ability to generate reports with response data. Although the platform includes additional cost to the system, KCEMSS leadership expressed value in data analytics, billing system integration, and integration with NFIRS fire reporting systems.

- **Inter-facility Transports**: As described above, KCEMSS utilizes on-duty EMS resources to handle requests for routine and emergency interfacility transfers, including designated critical care transfer capable units for specialty and critical care transfers. The revenue from interfacility transports provides revenue that funds the operational costs associated with two full-time ALS units and has minimal impact on the availability of ambulances based on scheduled nature of routine inter-facility transports.

4.2.1.3. Response Overview

- **Level(s) of Service:** KCEMSS provides ALS service across the county through the strategic positioning of paramedic units throughout the metropolitan area, and a network of ALS coverage for BLS units within the lesser populated areas of the county. This system is augmented with firefighter/paramedics assigned to fire apparatus throughout the county, and additional support provided by KCEMSS staff.

- **Agency Response Concern:** The most notable concern is reliable EMS coverage for the remote area currently covered by Harrison Community Ambulance. With diminishing volunteer recruitment, the seasonal nature of surges in population, and the heavy reliance on a small number of volunteers for EMS coverage, both Harrison Community Ambulance and KCEMSS expressed concern over the ability to provide timely and reliable coverage to that portion of the county. KCEMSS is working with nearby East Side Fire District to integrate an additional BLS ambulance to help with coverage for that area of the county and serving as a contingency for volunteer coverage gaps.

- **Helicopter Response & Utilization:** Proximity to Coeur d'Alene means that the metropolitan agencies only call for air medical resources for high acuity patients with time sensitive emergencies, and patients requiring specialty care, such as burn and pediatric patients. Agencies described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Agencies also described challenges with aircraft availability due to weather during a significant portion of the year. Although

Life Flight Network has a base in Coeur d'Alene, weather may ground aircraft for prolonged periods of time. Fixed wing aircraft are sometimes used for interfacility transfers out of Kootenai Health.

- **Factors Impacting Response Times:** Agencies noted that simultaneous calls requiring a second ambulance crew from a mutual aid station, time of day, and personnel constraints in the volunteer agency to be the most persistent factors impacting response times. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** KCEMSS resources respond to public lands, including Coeur d'Alene National Forest, Farragut State Park, and several remote areas surrounding Lake Coeur d'Alene. Responses to public lands typically impact the BLS providers outside of the metropolitan area, often requiring simultaneous response of ALS units from with the metropolitan area if the patient acuity or complaint require advanced interventions. Agencies report long response times with poor access down badly maintained roads that increase the time necessary for response. Occasionally, wilderness rescue and complex access issues require additional resources, such as boats, ATVs, and even helicopter resources. These responses, while occurring infrequently, require substantial resources.

4.2.2. Workforce & Resource Assessment

KCEMSS utilizes a network of fire-based and non-profit ambulance organizations to provide a well-planned and sustainable system of prehospital care to the residents and visitors of Kootenai County. Staffing, recruitment, retention, and workforce issues constitute the most significant barriers described by agency leadership. Career and volunteer agencies encounter challenges attracting and retaining qualified personnel, as access to training courses continues to be a barrier to workforce development. With continued growth in communities throughout Kootenai County, the demand for EMS services continues to rise, and revenue necessary to support the rising cost of EMS system delivery is not able to keep pace with the rising demand. Agencies within Kootenai County continue to remain flexible and adapt to the changing needs of the community, constraints on funding, and the changing environment within the EMS workforce.

4.2.2.1. Staffing Overview

Staffing throughout the county is provided by career staff at fire departments throughout the county, apart from Harrison Community Ambulance which relies exclusively on volunteer staffing.

- **Staffing Structure:** Fire Departments throughout the county staff ambulances with dual-purpose personnel on a rotating 48/96 staffing structure, meaning personnel work two-days on and four-days off. Each individual department assigns personnel between fire apparatus and ambulances based on agency protocols and procedures. KCEMSS administrative staff is also available for EMS response during traditional business hours out of the administrative headquarters in Post Falls, which augments

staffing during peak daytime hours. Additionally, departments utilize callback staffing to backfill EMS resources when large incidents, such as wildland fire, structure fires, or wilderness incidents have units unavailable for long periods of time. Harrison Community Ambulance staffs ambulances with scheduled volunteer personnel who are provided with a stipend for shift converge. Personnel are allowed to respond to the station from their homes and not required to staff ambulances from the station.

- **Responder Average Age:** Career fire departments and KCEMSS report an average age of 25-34 for response personnel. Entry level personnel can apply for positions at 19 years of age, and KCEMSS and fire department leadership report a significant number of personnel who remain with departments for their entire career and retiring from their respective department. Harrison Community Ambulance reports a much older volunteer population, which is reflective of an older population in the community, reported to be over 50 by the US Census Bureau. [3] The average age reported by the department is 55, and the agency describes recent retirements due to age and worsening health conditions among specific volunteers.

- **Staffing Numbers:** Career department report shrinking numbers of applicants during recruiting efforts but are able to find adequate staffing due to competitive wages and the draw of the community. Volunteer staffing in the remote area near Harrison is much more dire, with the agency reporting only five to six active volunteers covering all the shifts on the schedule.

- **Staffing Concerns:** The aging population of volunteers, potential volunteers moving out of the community, and the significant investment in training required for people to volunteer on the ambulance are concerns for Harrison Community Ambulance. Similar concerns about the dwindling number of applicants for career positions, especially in the smaller BLS departments within Kootenai County is causing an increase in staffing costs and more movement of staff to other departments in the area. The busy operational environment and constraints affecting tax revenue limit the ability of KCEMSS and partner fire departments to hire sufficient staff to meet growing demand.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, KCEMSS and county fire departments continue to meet the staffing needs of EMS and fire apparatus. The ability of agencies to utilize callback processes to backfill during periods of peak demand is critical to the success of the system which is operating at peak capacity. The expansion of contracted transport agency resources to potentially include East Side Fire Protection District provides the redundancy and capability necessary to ensure reliable response to rural and remote areas of the county.

- **Recruitment & Retention:** The career fire departments within the county, especially those in the metropolitan departments, have sophisticated recruitment and retention programs to attract applicants from across Idaho and across the nation. With competitive compensation and the draw of the Pacific Northwest, metropolitan departments have described successful hiring processes which meet the needs of

the system. Harrison Community Ambulance describes an environment in which active volunteers are experiencing worsening burnout due to the staffing constraints that have resulted from the remote nature of the community, the low volume of calls for service, and the decrease in volunteerism. Leadership is hopeful that the addition of EMS transport resources in the area may allow for shared shift coverage, allowing volunteers to schedule adequate downtime to ensure health and resilience of dedicated volunteer personnel.

4.2.2.2. Training & Education Overview

- KCEMSS and partner fire departments offer entry-level training at the EMT level for all career personnel and utilize various resident and hybrid solutions for training of paramedics within Kootenai County. Paramedic educational opportunities are difficult to locate within Idaho, according to KCEMSS and partner agency leadership. The number of paramedics trained in Idaho is insufficient to meet replace paramedics retiring or leaving the state for other employment opportunities.

- Similarly, Harrison Community Ambulance and smaller departments within the county report difficulty with finding EMT courses that are convenient for personnel residing in North Idaho. Expanding access to educational opportunities is critical to the assurance of reliable and sustainable EMS delivery in North Idaho.

4.2.2.3. Facilities Overview

- Station Locations: Ambulances are located at fire stations in each fire district within population centers across the county, including Coeur d'Alene, Post Falls, Hayden, Rathdrum, Athol, Spirit Lake, and Worley. Harrison Community Ambulance houses two ambulances at dedicated ambulance stations in Harrison and Carlin Bay.

- Station Conditions: Fire departments currently utilizing dual-licensed firefighters to staff EMS units within the county are employed at career stations with the infrastructure necessary to support career staffing. Harrison Community Ambulance leadership discussed ongoing efforts to upgrade station facilities to be able to house volunteers overnight, which would allow for the use of seasonal or contracted personnel to cover EMS shifts within the community. East Side Fire District would likely have to upgrade facilities to accommodate career staff on the ambulance should KCEMSS choose to contract with that district for BLS transport in the rural fire district in southeast Kootenai County.

- Facility Needs: Agency representatives described necessary upgrades for accommodating full-time staffing in East Side Fire District and Harrison, as well as additional facility needs, such as back-up generator power, security upgrades, and added storage.

4.2.2.4. Equipment/Supplies Overview

- Adequacy: EMS agencies throughout the county indicate that their equipment and supplies meet their daily needs, and KCEMSS manages the equipment and supply

needs of all the fire-based EMS units within the county. Harrison Community Ambulance also reports that their equipment and supplies meet their daily needs, but that some more expensive, seldom used items often expire, causing a financial burden to the agency.

- **Condition**: Equipment and supplies are reported in good condition overall. KCEMSS provides equipment and supply replacement for all EMS resources within partner fire departments. Harrison Community Ambulance utilizes operational funds to replace equipment that exceeds its useful life.

- **Funding**: KCEMSS provides funding and logistics support to county fire departments, including funding and replacement of EMS equipment and supplies. Harrison Community Ambulance utilizes operational funds to replace equipment and supplies that are expended or expired.

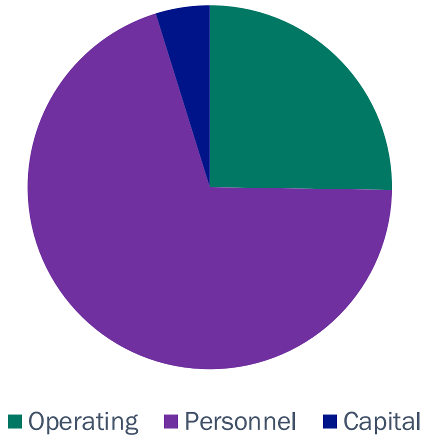
- **Needs/ Shortages**: No unmet needs or shortages noted during resource adequacy assessment.

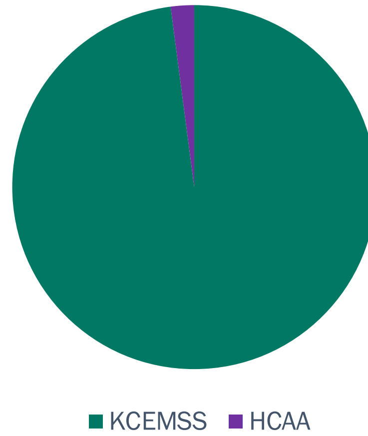
4.2.3. Financial Overview

KCEMSS employs personnel to manage financial and business responsibilities within the organization and conducts an annual financial audit. To maintain optimal public transparency, audit reports, billing rates, and other pertinent financial information is posted on the organization's website. KCEMSS maintains accounting and business records pertaining to the delivery of EMS within the county, and partner fire departments maintain personnel and employment records for response personnel per the county EMS contract, excepting KCEMSS administrative personnel. Operational, financial, and administrative oversight of KCEMSS is provided by the Joint Powers Board, as described. Harrison Community Ambulance maintains independent financial records for their organization, including separate in-house billing. Financial management of the organization is overseen by the treasurer and the Harrison Community Ambulance Board.

4.2.3.1. Expense Overview

The cumulative operating costs for all EMS operations within the county are $8,410,922. In 2022, those costs consisted of approximately $6.4M for personnel, $450,000 for capital expenses, and the remaining $2.3M for fuel, supplies, and overhead costs. Agencies collectively described approximately $775,000 in carryover revenue that is identified for future capital and facility expenses. KCEMSS financial reporting provides additional detail on increases in budgeted expenses due to increase personnel costs distributed to fire departments, increases in cost of medical supplies due to inflation and call volume, and significant increases in fuel costs due to inflation and rising fuel costs nationwide. Decreases in bad debt expenses, lower than expected expenses related to training, equipment, and payroll administration coupled with improved bad debt write-offs to remain under budget for expenses during 2022.





4.2.3.2. Revenue Overview

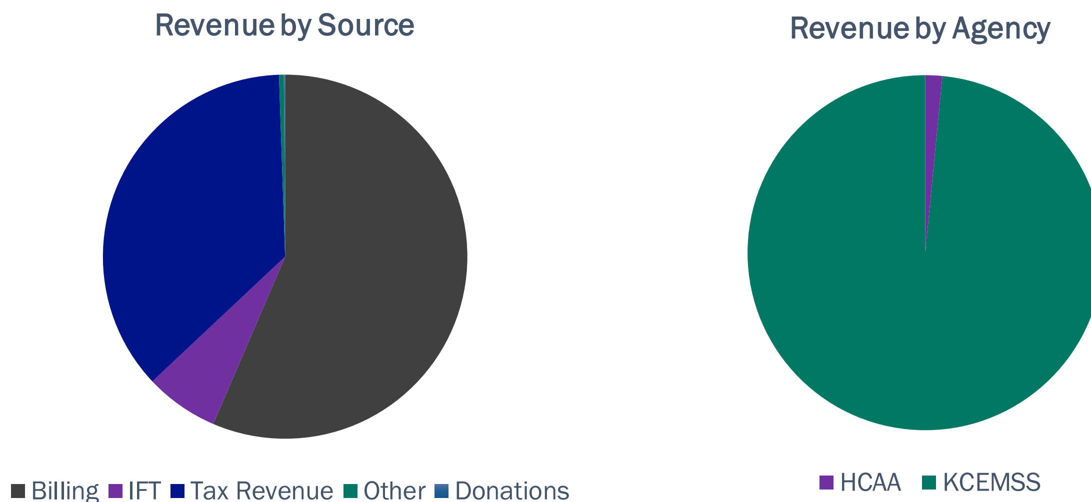
KCEMSS receives property taxes from the ambulance district levy, which was 0.0000698409 in 2022, totaling approximately $3M. KCEMSS also bills for services provided using rates that are publicly available on the KCEMSS website. Billing rates include specific rates for BLS, ALS, and CCT rates for both emergency and non-emergency transfer, as well as flat rates for treatment that doesn't require transfer, ALS intercept, and billable mileage. Billing rates also include rates for resident and non-resident patients. Billing revenue for 2022 was approximately $6.1M, an increase over previous years due to higher call volume and improved reimbursement rates for Medicare and other payers following inflation adjustments.

KCEMSS received a total of nine federal, state, and local grants totaling $230,514 to offset equipment purchases and $91,117 from federal and state sources to offset lost revenue and COVID-19 expenses.

KCEMSS anticipates improved revenue with the adoption of GEMT in the State of Idaho and expects to receive improved revenue once payments are provided to agencies in 2024.

Harrison Community Ambulance has a significantly lower call volume and utilizes a dedicated administrative support position for billing and financial operations. Revenue described includes $67,200 annually from the contract distribution from KCEMSS for coverage of the 250 square mile area east of Lake Coeur d'Alene. Additionally, Harrison Community Ambulance receives approximately $80,000 annually in billing revenue, which is bolstered by the allowable mileage rate for their long transport times. Agency leadership described improvements in billing practices during 2023 that should improve revenue, including inclusion of the 4% add-on that has not been billed for the last three years and more timely billing submission to capitalize on payment caps associated with motor vehicle accidents. As a 501(c)(3) non-profit organization, Harrison Community Ambulance may not be eligible for GEMT, as they are not owned or operated by a political subdivision. Further

clarification is necessary to validate this limitation since the organization is contracted to a political subdivision of the state, namely KCEMSS.



4.2.4. Resource Assessment

Additional Factors

The EMS delivery system in Kootenai County in its current state remains sustainable and reliable, providing ALS care to the citizens of the county. KCEMSS and Harrison Community Ambulance leadership recognize the inefficiencies and operational constraints related to the rural and remote portions of the county served by volunteer responders. Dwindling volunteer resources and increasing training and operational requirements have exposed the fragility of the EMS delivery in the portion of the county that is not funded through KCEMSS. Long-standing tension caused by competing entities that have since closed linger in the operational relationship between these two licensed providers. Improved cooperation and collaboration are required to overcome current staffing and financial challenges faced by Harrison Community Ambulance, since a failure of that organization would place KCEMSS in a position to provide coverage to the remote communities surrounding Harrison with other county resources. On-going planning and operational changes seek to improve the reliability of EMS delivery to that portion of the county and better integrate Harrison Community Ambulance into the KCEMSS, improving EMS coverage for the community.

All providers within the county are optimistic that improved funding through GEMT and potential funding related to the Idaho EMS Sustainability Task Force efforts has the potential to bridge gaps in funding related to tax levy caps for metropolitan fire districts, as well as the funding shortfalls for operational and capital needs for Harrison Community Ambulance. Continued growth within Kootenai County is not expected to slow, therefore intentional steps need to be considered to expand EMS delivery and ensure appropriate funding for this rapidly growing community.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Kootenai County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/kootenaicountyidaho

[2] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[3] U.S. Census Bureau (2021). *American Community Survey 5-year estimates. Retrieved from Census Reporter Profile page for Harrison CCD, Kootenai County, ID.* Retrieved from http://censusreporter.org/profiles/06000US1605591426-harrison-ccd-kootenai-county-id/

[4] University of Idaho Extension. (2023). *Indicators Idaho: Kootenai County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16055

[5] Weeks, D. (2023, January 30). Gem state tourism looking up. *North Idaho Business Journal.* Retrieved from https://businessjournalnorthidaho.com/news/2023/jan/31/feb-nibj-tourism-and/

[6] Redfin. (2023, January). *Kootenai County, ID Housing Market.* Retrieved from https://www.redfin.com/county/696/ID/Kootenai-County/housing-market

[7] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Kootenai County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/=kootenai?year=2023

[8] Biospatial. (2023). https://app.biospatial.io

[9] IGEMS Data. (2023). *EMS Planner Call Volume: 2021 / 2022.*

[10] IGEMS Data. (2023). *EMS Planner Response Time: 2021 / 2022.*

[11] IGEMS Data. (2023). *Agency career-vs-volunteer personnel: 2022.*

[12] Idaho Department of Health and Welfare. (2023). *Idaho time-sensitive emergencies: Idaho TSE facility designations.* https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[13] Kootenai Health. (2023). *Facts and community reports*. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

LATAH COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION
1
CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency medical services (EMS) in Latah County are provided by six agencies affiliated with or sharing infrastructure with volunteer fire departments within the community. Each agency is responsible for a distinct geographic area, separated from neighboring agencies by topography or sparsely populated areas that provide a unique challenge to the efficient delivery of EMS, especially in the rural portions of the county. The county is reliant exclusively on volunteer EMS providers at each of the six licensed agencies to respond to all requests for assistance, and all six agencies report increasing difficulty recruiting, training, and retaining volunteer personnel from the community.

Funding for EMS operations at all six agencies is primarily provided by patient billing, as Latah County does not have an ambulance taxing district and does not levy a tax for provision of emergency medical services. Billing revenue is insufficient to fund career positions at any of the six agencies, therefore staffing continues to rely solely on volunteers for emergency response and transport of patients within Latah County. A failed attempt to establish an EMS District and levy an EMS tax was voted down in 2017, and subsequent discussions of seeking another tax levy vote were received unfavorably by voters in the County. EMS agency leadership describe a political environment that is resistant to future attempts at establishing a taxing district as a result of the political fallout from the 2017 referendum.

The combination of funding constraints, the challenging county topography, and operational reality that several ambulance providers respond to a relatively low call volume and struggle with subsequent meager billing revenue result in a scenario where organizations are unable to cover costs of facility upgrades, vehicle replacement, and procurement of essential equipment. While organizations demand more commitment from their volunteer personnel, they are simultaneously obligated to dedicate time to seeking grants and engaging in

fundraising to sustain the ability to provide service to the community that lacks the capacity to adequately fund these agencies.

The dedicated volunteer personnel from each of the six agencies within the county provide immeasurable impact to their community, however, all report concerns about the sustainability of the volunteer system in the long-term. Continued research and analysis have been initiated by county EMS agencies to ensure that resources are optimally used to meet the needs of the citizens and visitors of Latah County. In the meantime, these six agencies operate 12 ambulances daily to respond in a timely and reliable fashion to any call for service in Latah County.

Strengths	Opportunities
• Close working relationship between agencies and the EMS Council provides a forum for collaboration and communication. • County-wide mutual aid agreement and ALS coverage plan helps to mitigate potential gaps in coverage within the County. • The University of Idaho provides a unique source of volunteers for some providers.	• County agencies considering some level of consolidation for administrative duties. • Streamlined billing processes and potential cost savings from collective contracting of a single vendor for all EMS agencies. • Coordination of staffing and transport resources to improve revenue through interfacility transfers from Gritman.
Challenges	**Threats**
• Some agencies report missed calls that require coverage from other agencies within the county when volunteers are unavailable. • Geography and Topology cause increased travel times between populated areas. • Funding challenges from insufficient billing revenue and lack of EMS district funding to support staffing and other “make ready” costs for EMS agencies.	• Decreasing volunteer workforce, and significant number of county residents that work outside of the area where they live. • Cost of living and housing prices trending higher makes it more difficult for families to pay bills and have time to seek training and volunteer for EMS agencies. • Lack of trained and qualified workforce means that even with funding, agencies may not be able to recruit personnel to staff ambulances.

Table A: Latah County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Latah County is a predominantly rural county located in northern Idaho, consisting of 1,076 square miles and is home to a population of 40,978 citizens. [1] The county seat and largest city in Latah County is Moscow, home of the University of Idaho with student enrollment of 9,364. [2] Latah County is considered part of the Palouse, a rich agricultural ecosystem that produces a large amount of wheat, lentils, peas, oats, and barley. Within the county are the incorporated cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Onaway, Potlatch, and Troy. Unincorporated communities include Avon, Cedar Creek, Farmington, Harvard, Helmer, Howell, Joel, Princeton, and Viola. US Highway 95 runs north to south along the western side of the county, providing access to the City of Lewiston to the south.

The farming and lumber industry are a substantial part of the county's economy. Farms occupy 349,532 acres, or 546.1 square miles of Latah County, just over 50% of the total land mass. [3] State and federal forest and recreation land make up another 138,000 acres, or 162.5 square miles, including McCroskey State Park, and the St. Joe National Forest. [4] Abundant infrastructure, including hiking trails, national forest access, and county or city parks provide opportunities for recreation, most of which occurs near population centers. The exception is the backcountry wilderness of the St. Joe National Forest, in the northeastern portion of the county which generates remote and austere patient access and evacuation challenges for EMS providers.

Demographic	2000	2010	2020	2022
Population	34,935	37,244	39,517	40,978
Land Area	1,076 sq mi	1,076 sq mi	1,076 sq mi	1,076 sq mi
Per Capita	32.5 PPSM	34.6 PPSM	36.7 PPSM	38.1 PPSM
PPSM: *People per square mile*				

Table B: Latah County Population & Geography [1]

2.2. Economics

Latah County is unique compared to many communities within Idaho with a student population that makes up a substantial portion of the population within the urban cluster of

Moscow. The influence of the student population serves to skew many of the social and economic indicators within the community profile, including significant deviations in workforce participation, median age, and a number of housing figures, and employment data. Regardless of the impact of a younger student population, the data indicates a steady increase in population and median age within the county, along with a portion of the population living below the poverty line.

The overall poverty rate in Latah County is 13.6 %, compared to 10.8 % in Idaho and 12.8 % nationwide. [5] The poverty rate for children under the age of 5 was 13.2 % (17.6 % Idaho / 19.1 % US), compared to 10.3 % for children under the age of 18 (12.5 % Idaho / 16.9 % U.S.) and was 7.2 % for residents over the age of 65 (7.9 % Idaho / 9.3 % U.S.). [5] Considering the overall poverty rate is higher than the Idaho and national average, yet lower in residents of non-working age (below 18 or older than 65), it is reasonable to conclude that a higher proportion of residents of working age are living below the poverty line. This economic factor may have a direct impact on volunteerism, recruitment, and training outside of the urban cluster of Moscow.

Finally, the predominant industries within the county, namely farming and lumber, experience fluctuations based on market prices for raw materials and inputs, such as fuel and labor. The financial risk of the industries does not leave a comfortable margin for many businesses and families. Responders within the county report a decrease in volunteerism following the COVID-19 pandemic because of the perceived risk to individual's livelihoods should they get sick or injured, and require prolonged periods of medical treatment, hospitalization, or recovery. The impact of these economic factors on family businesses that provide the farming, ranching, and transport for these volatile markets has disincentivized volunteerism to preserve financial livelihoods.

One of the most significant barriers to workforce recruitment in Latah County is rising housing costs, and the lack of housing inventory. As with other factors within the County, the large student population has led to a variation in typical housing inventory and cost. The proportion of traditional single-family homes is significant lower in Latah County, compared to the State of Idaho and the nation, in general. Additionally, the percentage of owner-occupied housing is 14% lower than the Idaho average, meaning that more housing units are rental properties, including those identified as student housing.

While the median home value is in line with state and national averages at $261,000, real estate market data resources report the average sale price in Latah County to be between $422,000 - $475,000 depending on seasonal fluctuations in home sales. [5, 6] Additionally, these resources report that an overage of 8-32 housing units are sold each month, with an average time on the market of only 14 days.[8] The dramatic difference in the assessed home value and the average sale price means that home buyers must either offer a substantial down payment or locate unsecure loans to finance a purchase.

Without access to affordable housing, families are forced to relocate elsewhere or pay higher prices for homes, meaning families must work additional hours or jobs to make monthly mortgage or rent payments. This factor has a direct impact on workforce recruitment and retention within the county.

Metric	2010	2020	2022
Total Population	37,244	39,517	40,978
Median Age	28.3 years old	30.6 years old	31,1 years old
Poverty Rate	17.6%	15.3%	13.6%
Number of Jobs	21,021	21,093	22,365
Avg Annual Wage	$ 41,090	$ 46,261	$ 45,213
Household Income	$ 54,949	$ 67,658	$ 64,193
Unemployment Rate	6.6%	4.7%	4.7%

Table C: Latah County Economic Factors [1, 5]

Metric	Latah Co.	Idaho	United States
Housing Units	17,259	751,859	N/A
% Owner Occupied	57.7%%	71.7%	64.6%
Change 2010 - 2020	7.9%	12.6%	6.7%
Median Rental Cost	$ 863	$ 1,310	N/A
Median Home Value	$ 261,500	$ 266,600	$ 244,900
Household Income	$ 54,193	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	58.9% / 31.2% / 9.9%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Latah County Housing Factors [2], [5]

2.3. Social Determinants of Health

Access to care is a growing concern in Latah County. The number of primary care physicians has fallen from 35 in 2016 to 30 in 2020. There are 7.6 primary care physicians per 10,000 residents, which is higher than the average in Idaho of 6.3 per 10,000, however is in line with the national average of 7.6 per 10,000. [7] The younger population relative to the rest of the State of Idaho, coupled with favorable health factors, places Latah County at number 3 of the 44 ranked counties in Idaho according to County Health Rankings. [7] Air pollution and severe housing problems, such as overcrowding, and lack of kitchen and plumbing infrastructure contribute significantly to the low physical environment score.

Latah County has unique challenges relating to health insurance coverage. The percentage of residents under the age of 65 who are uninsured (10.8 %) is lower than the average in Idaho of 12.7 % (10.8 % national average), and the percentage of children under the age of 19 without health insurance (4.6 %) is lower compared to the average in Idaho of 5.1 % (5.6 % national average). [7] Gritman Medical Center's Community Health Needs Assessment reports that 67% of residents have commercial health insurance, 8% have Medicare, 5% have Medicaid, and 13% use an alternative form of health insurance. [8] Students enrolled at University of Idaho are required to have health insurance.

Although the number of primary care physicians per capita in Latah County has dropped over the last five years based on the county health rankings, the ratio of physicians in Latah

County to the general population of 7.6 per 10,000 remains above the average in Idaho of 6.3 per 10,000, and in line with the national average of 7.6 per 10,000. [7] Latah County is served by Gritman Medical Center, a critical access hospital providing emergency department services, general surgery, obstetrics, and other basic healthcare services. Latah County borders Whitman County, Washington to the west, with additional services available at Pullman Regional Medical Center, and tertiary care available in Lewiston, to the south of the county line.

County Health Rankings	
3 of 43 ranked counties in Idaho	
Health Outcomes	3 of 43
Health Factors	2 of 43
Length of Life	6 of 43
Quality of Life	1 of 43
Health Behaviors	5 of 43
Clinical Care	7 of 43
Social & Economic Factors	3 of 43
Physical Environment	36 of 43

Table E: Latah County Health Ranking [7]

2.4. Indicator Impacts to EMS

Workforce and volunteer recruitment are significantly impacted by the high cost of living and housing market factors. While student volunteers and other community residents in the urban cluster of Moscow are currently able to meet the fire and emergency medical services demand at Moscow Fire Department, the rural, geographically remote, and primarily working-class nature of the outlying communities present a significant challenge to recruitment, technical training, retention, and resilience of the volunteer workforce necessary to provide reliable EMS service to Latah County. Lack of affordable housing, long commutes, and the nature of family farms and business provide obstacles to migration of potential volunteers into the community and required any new residents to take on additional employment to meet the needs of themselves and their families.

The healthcare infrastructure in Latah County ranks high among Idaho counties, with reliable access to primary care, emergency care, and specialty services within the county or neighboring counties. The low median age of the population underpins many of the population statistics within the county, although demographics, including median age are changing as affordable housing and cost of living drive in-migration of older professionals and retirees, and departure of many working-age residents.

The unique nature of the county demographics is evident in most of the statistical references in this document, but tell only part of the story, as the younger population is often transient in nature, living in the county during their collegiate education, with a majority of that segment of the population turning over every four to five years. The transient nature of

the population provides a unique challenge to EMS leadership in building investment and ownership in the community within this population and subsequently relying on continued interest of new members to fill the ranks left by volunteers that may have graduated and moved out of the community.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

With the influx of population and activity in the urban cluster of Moscow, there is higher call volumes during daylight hours. The same is true for most of the rural providers based on increased activity at local farms, businesses, mills, and places of work outside of the city limits of Moscow. However, there is still consistent demand during nighttime hours as well, meaning that agencies must maintain optimal availability of personnel both day and night. [9] In conversations with county providers, there has been a recent increase in missed calls during daylight hours because volunteers are unavailable.

3.1. Call Volume Overview

Call volume remains constant throughout the year for all agencies with minimal seasonal variation. However, there is seasonal variation in workforce availability. Moscow Fire Department has less student volunteers available during the summer months, and typically experiences a lag in full availability of volunteers in the fall at the beginning of each school year. Conversely, two departments report an increase in volunteer availability as seasonal residents arrive and begin covering shifts during the summer months.

The most notable system demand factor is the higher call volume in the City of Moscow. Further impacting the disproportionate share of calls is the Advanced Life Support (ALS) response to support other agencies within the County for calls for service requiring ALS intervention. For this reason, the county continues to focus on the need for reliable staffing for Paramedic coverage. With larger numbers of volunteers available, and the capability to provide ALS care to the County, the Moscow Fire Department and the City of Moscow are exploring methodologies to recruit and retain Paramedic staffing beyond the current on-call compensation for Paramedic volunteers. The call volumes as shown in Table F illustrate that the call volume easily supports the need for ALS staffing, however, the lack of EMS levy revenue or adequate billing revenue continue to constrain the development and implementation of new staffing model.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Deary Ambulance	95	39	134	103	44	147
Genesee Ambulance	24	8	32	33	8	41
J-K Ambulance	29	3	32	51	3	54
Moscow Fire Department	1,467	919	2,387	1,473	858	2,331
Potlatch Ambulance	174	81	255	183	66	249
Troy Volunteer Ambulance	65	37	102	61	25	86
Ambulance Total	1,854	1,087	2,941	1,904	1,004	2,908

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Latah County (2021-2022) [10]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Deary Ambulance	11 min	6 min	17 min	43 min	124 min
Genesee Ambulance	9 min	5 min	14 min	37 min	66 min
J-K Ambulance	13 min	6 min	19 min	43 min	80 min
Moscow Fire Department	6 min	6 min	12 min	27 min	54 min
Potlatch Ambulance	10 min	6 min	16 min	41 min	80 min
Troy Volunteer Ambulance	11 min	4 min	15 min	32 min	61 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Latah County (2022) [11]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Latah County is covered by two separate public safety answering points; one that serves the City of Moscow and the other that covers the rest of the County. The City of Moscow is contracted with Whitman County, Washington to provide 911 service for the police, fire, and EMS through Whitman County's Communications Center (WHITCOM). Dispatch and radio communications are conducted using a VHF radio system with medical priority dispatch and EMD-qualified call takers and dispatchers. Latah County Sheriff's Office Communications provides 911 service for the sheriff's department, fire, and EMS in the rest of the county. Latah County Sheriff utilizes a VHF-band, unencrypted radio system with EMD-qualified call takers and dispatchers but does not utilize medical priority dispatch systems.

EMS Providers have described challenges with the current communications system, requiring EMS units and Paramedic response vehicles from the Moscow Fire Department to utilize two separate radio frequencies to communicate when responding to provide ALS intercept within the county. Currently, each EMS unit, paramedic response vehicle, and most fire apparatus are equipped with two radios to minimize the chance of missing critical communication from either communications center during an emergency response.

During interviews with agency leadership, it was noted that terrain often makes radio communications difficult, as some areas of the county have poor reception on the radio system. Agencies report that some responders cannot communicate on the radio when they are responding to the station, and when they arrive at their station, the ambulance is often already gone with other crew members on board. This unnecessary time commitment has been frustrating for some members, and detracted from morale within several of the rural EMS agencies.

4.1.2. EMS Agency Overview

Latah County is served by six licensed EMS providers staffing 8 stations. An additional licensed provider, Fireline Medics LLC, is located in Latah County, but does not provide 911 or inter-facility service to county residents. Fireline Medics, LLC provides emergency medical services support to wild land fire operations as a contracted entity. Moscow Fire Department provides ALS service to the majority of the county, except for Juliaetta-Kendrick which is serviced by Lewiston Fire Department (Nez Perce County) for ALS coverage. All other EMS providers within Latah County are licensed at the Basic Life Support (BLS) level, except for Deary Ambulance licensed at the ILS level.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Deary Ambulance	Private 501(c)(3) Fire-Based	Intermediate Life Support (ILS)	Unscheduled	Volunteer Uncompensated
Genesee VFA	Private 501(c)(4) Fire-Based	Basic Life Support (BLS)	Unscheduled	Volunteer Uncompensated
Juliaetta-Kendrick Ambulance	Private 501(c)(3) Non-Profit	Basic Life Support (BLS)	Unscheduled	Volunteer Uncompensated
Moscow Fire Department	Private 501(c)(3) Fire-Based	Advanced Life Support (ALS)	Scheduled	Volunteer Combination
Potlatch Ambulance	Tax District Fire-Based	Basic Life Support (BLS)	Unscheduled	Volunteer Uncompensated
Troy Ambulance	Private 501(c)(3) Non-Profit	Basic Life Support (BLS)	Unscheduled	Volunteer Uncompensated

Table H: List of EMS Agencies Located in Latah County [12]

4.1.2.1. Deary Ambulance Overview

Deary Ambulance is a private 501(c)(3) non-profit organization providing EMS for 144 square miles in the eastern portion of Latah County and the City of Deary, operating two ambulances out of the Deary Fire and Ambulance Station, located at 403 Main Street in Deary, and is housed in a new station that was opened in 2020. The ambulances are staffed by eight active, uncompensated volunteers. The most significant staffing concerns are the aging volunteer workforce, and challenges covering night and weekend calls. The agency responds to approximately 200 calls for service annually and transports approximately 60-70% of their patients. The agency relies on automatic aid from Moscow Volunteer Fire

Department for ALS response within their service area, and routinely provides mutual aid coverage to Troy Ambulance, J-K Ambulance and Elk River community in Clearwater County.

Deary Ambulance is primarily funded through billing revenue through a third-party service, used by many of the other agencies in the county. Billing revenue typically meets operational expenses, and the department reports a modest reserve for capital purchases and major repairs. The agency relies primarily on grants for capital purchases and was most recently able to purchase a new ambulance using American Rescue Plan Act (ARPA) funds, with delivery expected in 2024. Other sources of revenue include fundraising revenue from an annual Deary Days event, and private donations from members of the community. The EMS operation is sustainable in its current form; however, the agency reports a break-even budget each year which is unable to support staff augmentation or planned capital purchases.

Deary Fire Protection District, which provides housing and infrastructure support to the ambulance operation receives funds from a 0.0322741 tax levy. Fire district funds help to offset some of the facility and infrastructure costs for the organization and achieve synergy with limited funding. The financial and operational strengths of the department are a close working relationship with the community, the fire district, and the other EMS agencies within the region.

4.1.2.2. Genesee Volunteer Fireman's Association Overview

Genesee Volunteer Fireman's Association is a private, 501c4 non-profit organization providing fire-based EMS from one station located at 555 N Main Street, Genesee, serving the southwestern portion of Latah County with one ambulance functioning at the BLS/Emergency Medical Technician (EMT) level. The ambulance is staffed by uncompensated volunteers from the predominantly farming community. Operating out of a fire station built in 2019, the department relies heavily on seven active volunteers (including three seasonal volunteers in the summer) to provide 24/7 response. EMS volunteers are augmented by 15 firefighters that serve as drivers for the ambulance as needed. The agency responds to an average of 60-80 calls for service each year with approximately 90% of those calls resulting in transport to definitive care. Genesee receives paramedic support from Moscow Fire Department for ALS calls and provides mutual aid to surrounding communities upon request.

The EMS operation is funded primarily through billing revenue, profits from an Annual Crab Feed fundraiser conducted each February, and donations from private residents within the community. The department also receives revenue for lease of space on the property by a local bank to support an ATM machine in the community. While funding is currently sufficient to maintain operations, capital purchases pose a significant challenge to the department. Recently, the department sold their historic fire station property to fund the purchase of their frontline ambulance. Additional future capital purchases and large expenditures are not accounted for in the department's budget, nor is funding for full-time staffing to meet readiness or response requirements. The EMS operation is sustainable in its current state but may not be able to absorb increased costs should regulatory or operational requirements impact direct operating costs in the future.

The fire operation is supported by the Genesee Fire District tax levy which is 0.1853483. Fire district funds help to offset some of the operation costs of the EMS operation because of shared station expenses, and infrastructure. The financial and operational strengths of the department lie in their dedicated volunteers, the symbiotic relationship with the fire district, and the excellent working relationship with other EMS agencies within Latah County.

4.1.2.3. Juliaetta-Kendrick (J-K) Ambulance Overview

J-K Ambulance is a private, 501(c)(3) nonprofit organization providing EMS as a third service, physically co-located with the Kendrick Fire Department, but operating separately. The agency covers the southeastern portion of Latah County physically separated from other county agencies by topography. J-K Ambulance operates one ambulance out of their station in Kendrick, supported by four active EMTs. During interviews with the crew members, it was noted that typically only one EMT is available during business hours because the other three volunteer EMTs are at work out of the area. Typically fire department drivers provide support to EMS and complete the crew in order to allow the ambulance to respond fully staffed. The fire department has 15 personnel who are included on the ambulance roster to serve in the role of driver. Crews describe a system where they maintain daily communication to ensure that one of these crew members is available to respond on any given day.

J-K Ambulance is funded almost exclusively through billing revenue which is collected through in-house billing done by one of the four active EMTs. Due to the annual call volume of 120-140, and the approximately 80-90 calls per year that result in transport, the agency supplements billing revenue with fundraising, including an annual sausage dinner organized by the same volunteers covering the ambulance each day. The agency is heavily reliant on the same four individuals, who range in age from 40-75 years old, with an average age of 50. Further complicating the financial picture in Juliaetta-Kendrick, policy and procedure laid out by Lewiston Fire Department, who provides paramedic coverage to J-K Ambulance's area, requires that ALS patients be manually transferred to Lewiston Fire Department's ambulance following rendezvous, and therefore J-K Ambulance cannot bill for the complete transport, further impacting billing revenue and operational funds.

J-K Ambulance shares facilities with the Kendrick Fire Department but maintains separate financial and business records. While the facility cost savings help to offset the challenges of rising operating costs, there remains a significant challenge in replacing vehicles and medical equipment. The agency relies on grants to acquire updated equipment resources and are working to develop a plan to replace the 2007 ambulance that is currently their frontline EMS unit.

4.1.2.4. Moscow Volunteer Fire Department Overview

The Moscow Volunteer Fire Department (MVFD) is a private, 501(c)(3) nonprofit organization contracted with the City of Moscow to provide fire protection within the city limits and fire-based EMS service within both the incorporated city limits and the Moscow rural fire district. MVFD operates out of three stations with volunteer staffing, supported by seven full-time employees and one part-time employee provided by the City of Moscow. The primary service area for MVFD is the City of Moscow and more rural areas east of the urban cluster. Additionally, the department serves as the primary mutual aid resource within the county,

backing up agencies that have trouble responding to calls, as well as providing primary paramedic response to Potlatch, Deary, Troy, Genesee, and Moscow. The agency operates four ambulances out of three stations within the city, staffed by 80-100 volunteers trained as both firefighters and EMTs. MVFD has a unique staffing model that provides housing to students who apply to a resident volunteer program in exchange for scheduled shifts staffing both fire and EMS apparatus at all three stations. The department runs a fire and EMS academy every fall to provide initial training to new resident members and provides continuing education to current members. Additionally, students and residents may join the department and participate in a more traditional volunteer program, signing up for shifts on fire and EMS apparatus as they are able. There is some fluctuation in volunteer staffing during university holidays, summer break, and other similar events during the year. Paramedic coverage is more constant, as paramedic volunteers are typically not students. Instead, the department is supported by two full-time staff members serving in leadership roles that are licensed at the paramedic level and are assigned to specific shifts. Several volunteer paramedics augment this staffing model as they are able, but each of those volunteers holds alternate full-time employment, impacting their overall ability to staff emergency apparatus. Volunteer paramedics are offered a paid-on call stipend which costs the department approximately $54,000 annually.

MVFD is primarily funded through billing revenue which was based on 1,473 transports last year (which included 52 interfacility transfers) and raised $524,000 in billing revenue. Billing is accomplished through a contracted third-party billing company that charges a percentage of revenue for service delivery. The department also receives some donations from the community and solicits donations through an annual brochure mailed to residents within the service each year. Billing revenue is insufficient to meet both the operational costs of the department, as well as full-time staffing costs for paramedic coverage at this time. The department maintains a rainy-day fund for emergency expenses, as well as dedicated savings for ambulance replacement at defined intervals.

The Moscow Rural Fire Protection District, which lies outside the city limits of Moscow, but within the service area for EMS delivery, receives some tax funding for rural fire protection at a rate of 0.0473937%, which funds rural fire operations, but does not provide funds for EMS delivery. As a fire-based EMS agency with providers trained for both fire suppression and EMS, the department recognizes a cost savings for facilities and other infrastructure expenses. MVFD applied for an EMSAVE grant and utilized American Rescue Plan Act (ARPA) funds to purchase equipment during the past year. The Moscow Fire Department attributes its current strong operational and financial position to their pool of dedicated volunteers, billing revenue from their high call volume, and the relationship with surrounding agencies providing service within Latah County.

4.1.2.5. Potlatch Ambulance Overview

Potlatch Ambulance functions as a private, 501(c)(3) organization that provides fire-based EMS under the Potlatch Fire District. The EMS leadership within the community is considering filing and application to become a separate 501(c)(3) non-profit to streamline the management of revenue and expenses for the operation of the Ambulance. Potlatch Ambulance covers approximately 400 square miles of northwest Latah County, including approximately 200 square miles of the St. Joe National Forest, with 5-10 calls into the

backcountry that can last up to 6-8 hours in total. The agency operates two BLS ambulances, staffed by 15 uncompensated volunteers from the community. The agency reports staffing difficulty during business hours on weekdays since a large portion of the residents either commute to urban areas for work or are employed in the nearby lumber mills, highlighting that of the 15 volunteers on the roster, only six (6) are covering most of the agency's calls for service.

Potlatch Ambulance is primarily funded through billing revenue, which is bolstered by being the agency with the second highest call volume in the county. Billing is accomplished using a contracted billing agency to optimize collection. The Ambulance also receives $500 - $1,000 monthly in donations from the general public, as well as larger donations from the local lumber mill that help with purchase of necessary equipment and supplies. Potlatch Ambulance also utilizes grants to purchase capital equipment. Most recently, the agency has purchased a new ambulance, using Federal ARPA funds, which is due to be delivered in 2024.

Potlatch Ambulance is currently functioning under the fire district organizational framework, which is funded by a 0.0452106 tax levy. The EMS operation benefits from the sharing of expenses for facilities, infrastructure, and other expenses under the current arrangement, which may change if the Ambulance is successful in obtaining an independent 501(c)(3) designation. The financial and operational strengths within the organization include a higher call volume and subsequent billing revenue, cost sharing with the tax-funded fire district, and a close operational relationship with other EMS agencies in Latah County.

4.1.2.6. Troy Volunteer Ambulance Overview

Troy Volunteer Ambulance (TVA) is a private, 501(c)(3) nonprofit organization that provides EMS as a third service, serving central Latah County. The agency staffs one BLS ambulance, operating out of one station within the city of Troy, responding to 150-170 calls for service annually. Troy Ambulance transports approximately 90-100 patients per year, providing for their primary source of revenue for ambulance operation. Billing is accomplished using a third-party billing agency, although agency leadership described challenges with billing companies dropping the service because of the low call volume and poor revenue for the billing company. Troy also hosts several fundraisers each year that net approximately $3,000 per event.

Troy Ambulance described financial struggles in replacing equipment, such as cardiac monitors, and other expensive equipment, as well as some challenges with disposable supplies. Staffing challenges were also reported due to several features, most notably the lack of volunteers available during the day due to employment outside of the community, or in industries that don't allow volunteers to leave work to respond to emergency calls.

Compounding the issue is poor radio coverage within Troy's area, staffing of ambulance is not scheduled, and all members receive notification of a call and communicate their response to dispatch over the radio. Some volunteers report that they receive notification of a call, but cannot reach the repeater using handheld radios, so they cannot communicate their response to dispatch or other responders. Crews report that when they respond from home, they often arrive to find the ambulance has already left, and they become frustrated

that they made the trip from home to the station for no reason. Leadership described such situations impacting morale, and a significant need to address crew scheduling and communication.

Troy reports 15-16 EMTs assigned on the roster, however, 4-6 active members are responsible for responding to most of the calls for service. Troy Ambulance is housed with the Troy Fire Department and shares facility and infrastructure expenses as a result. The Troy Rural Fire District receives a small tax levy of 0.0064687%. Troy Ambulance reports its strengths to be its dedicated volunteers and the support of other providers within the County but continues to struggle with volunteer staffing.

4.1.3. Hospital Access Overview

The primary transport destination for most agencies within the county is Gritman Medical Center, located in downtown Moscow, serving as the only definitive care facility within Latah County. However, due to topography and proximity of other cities outside of the county, some agencies routinely transport to facilities in Lewiston, Idaho, and Pullman, Washington. The nearest tertiary center is located in Coeur d'Alene, approximately 84 miles to the north via US Highway 95, serving as the nearest resource for specialty care.

- **Gritman Medical Center** (700 South Main Street, Moscow, ID) is a critical access hospital with 25 beds, including a 24-hour emergency department, critical care unit, medical-surgical unit, birthing center. [13] Gritman Medical Center is a TSE-designated Level IV Trauma Center. [14]

- **St. Joseph's Regional Medical Center** (415 6th Street, Lewiston, ID) is a 145-bed hospital that is TSE-designated Level III Trauma Center, Level II Stroke Center, and American College of Cardiology (ACC)-accredited Chest Pain center. [14] Key services provided includes a 24-hour emergency department, inpatient behavioral health, gastroenterology, vascular services, and neurology. [15]

- **Pullman Regional Hospital** (835 SE Bishop Blvd, Pullman, WA) is a critical access hospital with 25 beds, including a 24-hour emergency department. [16] Pullman Regional Hospital is a Level IV Trauma Center, Level III Stroke Center, and Level II Cardiac Center. [14]

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-designated Level II Trauma Center, as well as an interventional cardiac center. [14] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. Many patients from Latah County are transferred to Kootenai Health from Gritman for specialty care if those services are not available locally. [17]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Latah County is supported by six separate agencies providing EMS service within defined coverage areas within the county. Although each agency communicates well with their neighbor, provides mutual aid support as requested, and collaborates regularly through the Latah County EMS Council, there are six separate organization structures managing the administrative and operational employment of resources to provide EMS within the county.

Informal leadership is provided by the EMS Division Chief from the Moscow Volunteer Fire Department, primarily because of their full-time employment status in that role. MVFD not only provides regular mutual aid support to other agencies within the county, but also provides paramedic level response to most of the communities within the County. The primary operational challenge within the county is communications, as described above. The City of Moscow uses a different radio system than the county, which requires MVFD units to utilize two radios during response.

Life Flight Network provides air medical support to the County, as requested from their base in Lewiston and Moscow-Pullman Airport. Life Flight Network is typically requested for patients who meet TSE requirements for trauma, stroke, or STEMI, and for complex patients that exceed the capability of the critical access hospital, and pediatric patients. Management of the system is primarily accomplished by Latah County Sheriff's department dispatch when resources are requested. Most rural agencies do not utilize a call schedule, and EMS units are staffed by the first available/arriving members to the station.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Subjective assessments regarding sustainability of each provider during the resource assessment process yielded scores from 50 – 90 out of 100 with a mean of 68. Surprisingly, the higher scores were attributed to providers that reported more challenges with personnel and responding to calls. The lower scores were from providers that reported less challenges with personnel, funding, and timely/reliable response.

- **EMS Agency Financial Situation**: There is a distinct dichotomy in Latah County between the provider covering the populated city of Moscow and the five rural providers. Though all agencies are staffed with volunteers, and all lack access to tax levy to support EMS operations, Moscow Fire Department typically realizes a budget surplus each year. This is primarily due to the larger call volume, billing revenue, and ambulance support to Life Flight Network transfers out of Gritman Medical Center. The five rural county providers describe a leaner financial situation with some organizations reporting a small annual surplus, but insufficient funds to support future growth and capital expenditures. Even the MVFD foresees challenges implementing career staffing for EMS based on the current financial structure.

- **EMS Agency Communications Strategy and Outreach**: While most agencies participate in several community outreach activities, such as parades, local events,

and fundraisers, there is no formal agency communications or public relations strategy that guides these activities.

- **Community View of EMS Agencies**: All six agencies reported positive public perception of EMS providers within the community. All agencies report receiving small donations from citizens and business within their individual communities, and participation in events, such as parades and holiday celebrations. Several agency representatives reported that members of the public are often surprised when they find out that the agency providers are volunteers, hinting that the public perception is that EMS providers are career staff and considered employees. While each agency has a loosely defined public engagement strategy, which includes participation in community activities, health promotion activities, and other public engagements, only one agency has a written communication and public engagement strategy.

- **Elected Official Support of EMS Agencies**: Latah County does not have a formal ambulance district, and there is no county tax levy that supports the provision of EMS. The Board of County Commissioners allocates $20,000.00 annually to supporting all six EMS agencies and convenes the Latah County EMS Council to make decisions regarding the use of those allocated funds. The EMS Council consists of representatives from each of the six EMS provider agencies and meets monthly/bi-monthly to discuss coordination activities, training and education needs, and other important topics that affect the County EMS providers. The county allocation is typically spent on continuing education activities for members of all six agencies, as well as special projects that improve EMS delivery, such as replacing AEDs in patrol cars for the Latah County Sheriff's Department. Funds are maintained by the County, and are not distributed to the individual agencies, and therefore do not appear in the financial statements of the individual agencies.

- **Agency & System Response Outlook:** All six agencies within the county describe the cooperative partnership among EMS providers in Latah County as a bright spot, and most highlighted the Moscow Fire Department's ability to provide ALS service to a majority of the county as key to the delivery of excellent care within the county. Each agency described a small, but dedicated group of core volunteers that provide excellent care to their neighbors as the foundation of the EMS system in the county. Agencies are hopeful for positive impacts of the Ground Emergency Medical Transport (GEMT) program statewide; however, the funding only applies to municipal agencies, which does not include any of the six 911 providers within Latah County. Several agency representatives are optimistic about the work being done within the Idaho EMS Sustainability Task Force and are encouraged by the current focus on the unique needs of rural EMS providers in Idaho. All agencies expect continued growth in Latah County and have concerns about the growing challenges of recruitment and retention of volunteers. All six agencies are working together to develop plans to mitigate future response challenges in a collaborative manner and recognize the need for cooperation within the county.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: EMS in Latah County is provided by six distinct licensed EMS providers. While the Latah County EMS Council meets regularly to provide a forum for coordination between all county providers, there is no central decision-making body. The Board of County Commissioners are supportive of the six providers, and interact regularly with agency leadership, however there is no governmental board that oversees the operation of EMS in Latah County.

- **Service Delivery Partners**: During interviews with agency leadership, service delivery partners including the sheriff's office, search and rescue, Life Flight Network, and Gritman Medical Center were highlighted as critical to the success of county EMS providers. More importantly, agency leaders cited the close working relationship among the county EMS providers, and in particular the support of Moscow Fire Department by providing ALS service to four of the five rural providers as important to the sustainability of EMS delivery in Latah County. J-K Ambulance cited the assistance of Lewiston Fire Department for ALS intercept as beneficial to patients, however, current standard operating procedures at Lewiston Fire Department require the transfer of the patient from J-K Ambulance to a Lewiston Fire Department Ambulance for transfer, resulting in loss of patient revenue and an interruption in continuity of care for patients requiring ALS intervention.

- **Medical Direction**: Medical Direction for five of the six county EMS agencies is provided by the Emergency Department Medical Director at Gritman Medical Center. Agencies report frequent interaction with their medical director for both training and quality improvement. Case reviews are discussed, when necessary, as part of the Latah County EMS Council, County Continuing Education Conference, or individually, as required. Because of their geographic isolation on the south side of a significant topographical barrier, J-K Ambulance utilizes an emergency medicine physician who formerly worked at St. Joseph's Medical Center in Lewiston, and now practices at Pullman Regional Hospital. Low call volume and the distance to Pullman Regional Hospital limits the interaction between J-K Ambulance providers and their medical director, and discussions are underway to transition medical authority/direction to Dr. Garrett at Gritman Medical Center.

- **Communications & Interoperability**: Overall radio communications are adequate, although gaps in coverage exist due to topography in more remote areas of the county. Additionally, as described, two different systems are in use and mutual aid coordination requires some departments to manage two radios during typical EMS response.

- **Mutual Aid System & Agreements:** Mutual Aid is organized through the Sheriff's Department Communications Center, when necessary. Calls for service requiring more than one ambulance in the rural portions of the county will often result in mutual aid requests. Agency representatives report good working relationships with mutual aid partners, and report mutual aid given to Clearwater, Nez Perce, and portions of Benewah County based on the geography that makes Latah County units

closer to citizens requesting assistance. Coordination of mutual aid within the county is often discussed at Latah County EMS Council meetings. Agencies within the county routinely provide mutual aid for calls involving multiple patients, and automatic aid for paramedic-level support for ALS calls. All six agencies are signatories to a mutual aid agreement within Latah County, and several agreements are in place for support to and from surrounding counties.

- Community Health EMS (CHEMS): While several EMS agencies provide health promotion services, and perform screenings for citizens at various events, Community Health EMS programs are not currently in place within the county. Volunteer agencies currently providing EMS within the county lack the personnel resources to initiate a CHEMS program, but as the county considers transition to career personnel, CHEMS provides an opportunity for alternative funding mechanisms and partnerships with Gritman Medical Center and other hospitals within North Idaho.

- Patient Care Documentation System: All six providers within Latah County utilize the Image Trend Elite patient care reporting system provided by the Bureau of EMS and Preparedness for patient care charting. While all agencies reported ease of use for patient documentation, they noted difficulty in retrieving data from the system for quality improvement and benchmarking.

- Inter-facility Transports: Due to paramedic shortages and extended transport times to tertiary centers in Coeur d'Alene and Spokane, MVFD does not routinely provide inter-facility transport out of Gritman Medical Center. MVFD does have a Life Flight Network ground contract to move crews that utilize fixed wing aircraft for patient movement between Moscow airport and Gritman Medical Center and will provide a BLS ambulance for ground critical care transport for Life Flight Network ground transfers during inclement weather. Inter-facility transfer is often performed by Pact EMS, a private provider based in Nez Perce County, or by Kootenai County EMS System's Critical Care Transport unit out of Coeur d'Alene, if air transport is unavailable or contraindicated.

4.2.1.3. Response Overview

Latah County EMS agencies utilize dedicated volunteer personnel to provide compassionate care to the residents and visitors to the county despite personal and professional hardships brought on by the shortage of trained and active members. Leadership from all six agencies describe situations where each agency experiences difficulties in responding to calls, especially at times when a majority of their personnel are working or early in the morning prior to scheduled shifts or other competing priorities. A majority of the volunteer providers are not compensated for their efforts, and the lack of tax support of EMS in Latah County presents a significant barrier to the future of EMS delivery in the presence of waning volunteerism nationwide, and the rising cost of living within Idaho and Latah County.

- **Level(s) of Service:** ALS service is provided by MVFD for most of Latah County. Lewiston Fire Department covers some of J-K Ambulance's district for ALS service due to the proximity to the City of Lewiston and the topography of the county making

response from Moscow difficult and untimely. Deary Ambulance provides service at the ILS level in the northeastern portion of the county, and the four remaining ambulance services operate at the BLS level with optional modules.

- **Agency Response Concern:** The mutual aid system within the county ensures that no call for service goes unanswered, however, several agencies have reported difficulty responding to calls within the last year, and additional agencies have described situations where agencies needed to respond into another agency's territory because one of the county agencies was unable to respond. These gaps in availability primarily occur during the day while volunteers are out of the coverage area for work but have also been reported on weekends and during the late night or early morning hours, as well. Challenges with recruitment and retention continue to burden a small number of volunteers, and some agencies are describing an increasingly frequent need to cover calls in neighboring jurisdictions. These gaps in availability cause delays in patient care and can have potential impacts on patient outcomes.

- **Helicopter Response & Utilization:** Proximity to Moscow, Lewiston, and Pullman means that agencies only call for air medical resources for high acuity patients, with time sensitive emergencies. Agencies described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Agencies also described challenges with aircraft availability due to weather during a significant portion of the year. Although Life Flight Network has a base in Lewiston and Moscow/Pullman airport, weather may ground aircraft for prolonged periods of time. Fixed wing aircraft are sometimes used for interfacility transfers out of Gritman Medical Center.

- **Factors Impacting Response Times:** Agencies noted that simultaneous calls (requiring a second ambulance crew), time of day, and personnel shortages to be the most persistent factors impacting response times. Seasonal delays had a transient effect during periods of inclement weather, and vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** Potlatch and Deary Ambulance provide EMS response to the St. Joe Wilderness in north Latah County. Each agency describes a small number of calls to public lands, typically less than 6 calls a year. However, each of those calls requires substantial manpower and last an average of 6-8 hours, with some remote calls requiring 14-16 hours of time to get the patient to definitive care, especially if air medical resources are unavailable.

4.2.2. Workforce & Resource Assessment

Staffing in Latah County is provided almost exclusively by volunteers. Moscow Fire Department has several Chief officers who are funded through the city budget, but these personnel have significant administrative responsibilities to the department and the city, including the management of volunteer training and the resident firefighter program.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The MVFD staffs assigned shifts for resident firefighters and emergency medical technicians using an online EMS scheduling software application. Personnel can schedule shifts to meet personal and educational needs and the software system provides visibility for personnel and leadership regarding potential gaps that require coverage. Additional non-resident volunteers sign up for shifts and are assigned to apparatus or can respond from home to the station to meet the needs of the community. Paramedic coverage is also scheduled in advance to ensure that ALS coverage is maintained throughout the county. Assigned crews staff apparatus at the station for rapid response. Assigned paramedics may respond from home with a dedicated ALS response unit, as necessary. None of the five rural agencies use a scheduling system for staffing of EMS resources. Instead, personnel respond directly to the station from their home or place of work when the agency is notified of a call for service. All five agencies described an informal system of communication, including text message groups, or mobile phone applications to communicate availability, and ensure that there is a crew available to respond should a call occur.

- **Responder Average Age:** With the significant number of college students who volunteer at the MVFD, the average age of responders is 18-25. However, all five of the rural EMS agencies in the county report an overage age of 35-44. Some departments report that several core active members are between 65-80 and are responsible for covering many of the calls for service during the day, as they are retired and remain in the community during the day.

- **Staffing Numbers:** All six agencies report modest numbers of volunteers, with a subset of those volunteers responsible for most of the response to calls for service within the community. Several departments describe a situation where their department is minimum staffing, and the loss of 1-2 active members would severely impact their ability to maintain readiness to respond.

- **Staffing Concerns:** The aging population of volunteers, potential volunteers moving out the community, and the significant investment in training required for people to volunteer on the ambulance are concerns for most of the agencies within the county. All agencies report a decrease in volunteers, including MVFD who is having increasing difficulty filling all the resident positions within the fire stations.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, county agencies continue to respond to calls for service, and cover neighboring agencies who might not have personnel available to respond within their own community. Relationships with fire department personnel provide needed access to volunteer drivers to complete ambulance crews, and provide timely, appropriate care to the community.

- **Recruitment & Retention:** There are few recruitment and retention opportunities that EMS agencies within the county are considering. Free EMS and fire training is

available within the county, as is training in vehicle operation to recruit drivers. Agencies cite opportunities to provide EMT courses in local high schools, provide scholarships for EMT and paramedic academies with reciprocal work agreements, and the availability of benefits, such as PERSI retirement and health insurance as incentives to improve recruitment and retention within the community.

4.2.2.2. Training & Education Overview

- The MVFD sponsors two EMT Course annually, which are opened to other county providers. Additionally, rural providers have held in-house EMT classes when they had sufficient students to conduct a course. Additionally, the Council sponsors an annual continuing education event to assist personnel from each agency in meeting continuing education requirements. Most departments also offer online continuing education for members and conduct regular training at their stations to supplement county-level training.

- All agencies report challenges with availability of initial training, especially for volunteers from rural providers who have long travel times to EMT classes. Further, MVFD leadership have difficulty finding opportunities to send personnel to Paramedic courses, due to the scarcity of courses within Idaho, with courses only being taught in major cities. This limitation remains a significant barrier to staffing, even when personnel are interested and motivated to seek higher levels of licensure.

4.2.2.3. Facilities Overview

- Station Locations: Latah County EMS Agencies staff a total of eight stations across the county. Moscow Fire Department staffs three stations within the City of Moscow, and the five rural provider each staff one station in their respective response area. All providers report that facilities currently meet their needs, however, five of the agencies will need to make significant changes to facilities should providers hire career personnel requiring quarters that comply with NFPA standards. Additionally, MVFD describes a lack of physical space to accommodate additional vehicles, and limited training space, requiring the use of off-site and borrowed classrooms for larger educational offerings and classes.

- Station Conditions: All three MVFD fire Stations currently house live-in volunteers and are capable of adapting to career staffing. Genesee Volunteer Firefighters Association recently built a new fire station which includes space to accommodate career staff, with minor construction renovations. All other stations would require significant renovation to accommodate career staffing and overnight duty crews working longer shifts.

- Facility Needs: EMS agencies reported stations at capacity for vehicles, so future expansion of EMS or fire service may require additional space for apparatus. Storage, dedicated training space, sleeping quarters and appropriate kitchen and restroom facilities (including shower facilities) would be necessary upgrades to accommodate on-duty crews.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: EMS agencies throughout the county indicate that their equipment and supplies meet their daily needs, but that some more expensive, seldom used items often expire, causing a financial burden to the agency. In addition, several agencies have difficulty purchasing more advanced equipment used to improve access to critical care. Because some of these items are not on the standard equipment list, grant funds cannot be used for these purchases, and agencies must rely on donations from other providers.

- **Condition**: Equipment and supplies are reported to be in good condition overall; however, agencies highlight the financial challenge of replacing obsolete equipment that is no longer supported by the manufacturer, including AEDs and cardiac monitors. In addition, agencies do not typically have a substantial reserve of equipment and supplies.

- **Funding**: More expensive equipment is replaced through grant programs, especially capital equipment, and vehicles. Most agencies describe a lack of financial resources necessary to replace durable equipment on a scheduled basis.

- **Needs/Shortages**: Several agencies described shortages of cardiac monitors that cannot be purchased with grant funding, and a lack of stock of expensive items.

4.2.3. Financial Overview

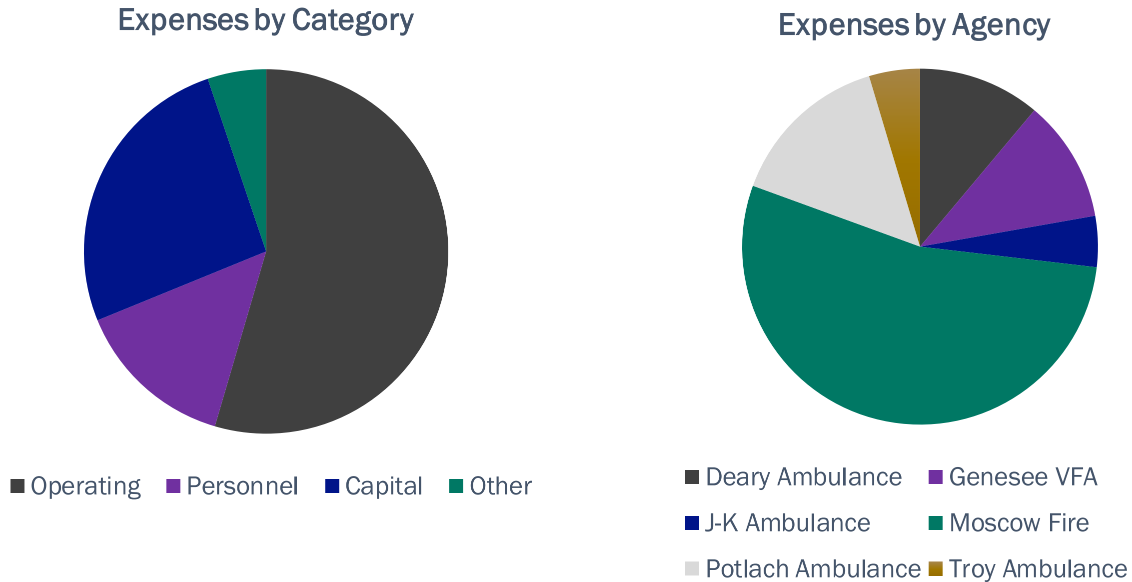
In its current state, all revenue for delivery of EMS in Latah County is earned through patient billing, fundraising, and donations. The dedication and support of volunteers within all six agencies have mitigated the need to hire and compensate personnel to handle the current call volume. MVFD provides some on-call compensation for Paramedic practitioners that provide ALS service to a majority of the county. The county agencies are in the preliminary stages of a delivery system analysis to explore the need for additional funding countywide for paramedics to continue to provide advanced level care due to the lack of volunteer paramedic personnel.

The MVFD, which staffs 3-4 ambulances daily and provides ALS response capability countywide, has more significant income than the five rural agencies simply due to collection of billing revenue for a larger number of patients. Rural agencies describe a break-even financial situation, and financial challenges with funding for capital expenses, large repairs, or certain equipment purchases. The lack of substantial budgetary reserves put the five rural agencies at risk should equipment fail, vehicles require repair or replacement, or facilities require upgrade. These agencies are typically dependent on grants to cover these larger expenses.

4.2.3.1. Expense Overview

The cumulative operating costs among the six county providers totals $725,000 annually. In 2022, those costs consisted of $55,000 for personnel, $100,000 for capital expenses (including an automatic self-loading stretcher and portions of a replacement ambulance),

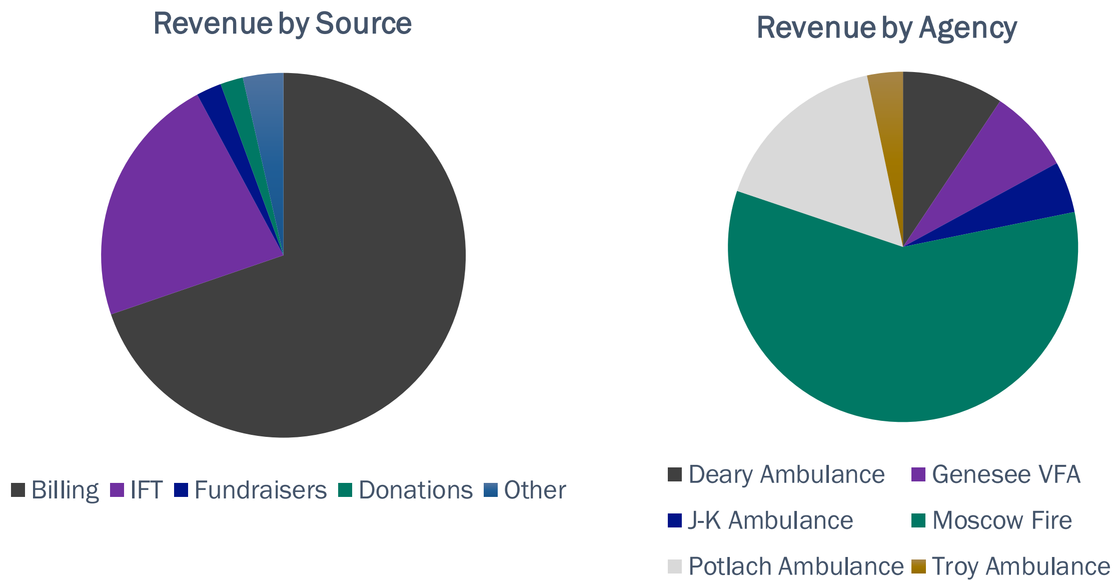
and the remainder for fuel, supplies, and overhead costs. Agencies collectively described approximately $225,000 in carryover revenue that is earmarked for capital and facility expenses. These operating costs do not include the salaries of MVFD EMS leadership subsidized by the City of Moscow. Additionally, the co-location of EMS resources alongside fire departments across most of the county allows for sharing of infrastructure expenses but makes calculation of exact operating costs difficult.



4.2.3.2. Revenue Overview

Latah County does not have a tax levy that supports the provision of EMS in the county. There are seven fire districts within the county that get tax revenue from levy rates between 0.0064687% and 0.1853483% depending on the respective district. Total tax burden within the county ranges from 0.7667458% to 1.6190753%. Most of the total revenue of $860,850 for EMS Operations in Latah County comes from five sources: billing, interfacility transports, fundraisers, and donations from the community. Combined billing revenue across all six agencies total $822,482, including approximately $200,000 of revenue from interfacility transports and contract income for transport of Life Flight Network crews. Approximately $20,000 of revenue comes from fundraising activities supported by EMS personnel, such as the Genesee Volunteer Fireman’s Association Crab Feed which occurs each February. The remainder of the revenue results from donations from citizens. Not

included in this revenue summary is the $20,000 that County Commissioners allocate to EMS that is managed by the Latah County EMS Council, as described above.



4.2.4. Resource Assessment Additional Factors

All six agencies individually recognize the constraints of their own financial situation and have been planning and spending appropriately. All six agencies maintain a financial reserve for emergencies, but most are insufficient for significant costs associated with full-time staffing, vehicle replacement, or other large expenses that might become necessary in the near future. Additionally, smaller rural departments forgo purchases of updated equipment, improvements to facilities, and programs that might improve retention in order to allocate funds to the financial reserve. This fiscally conservative activity results in prolonged use of outdated or legacy equipment, vehicles, and facilities that pose a risk for greater expense should they require replacement due to obsolesce, wear and tear, or new clinical requirements.

Further exacerbating the financial challenges within the county is the dramatic differences in financial situation between the more populous city of Moscow and the remainder of the county. The collective analysis of financial data from the entire county provides a more sustainable picture because of the unique volunteer staffing situation in Moscow and the subsequent revenue from billing in the agency with substantially higher call volume. The collective financial picture often precludes Latah County from consideration for grants because of this unique financial feature.

The absence of an ambulance tax levy means that EMS Providers within the county must raise funds exclusively through billing revenue and fundraising, which at the current call volume would not support the augmentation of EMS staffing should the volunteer ranks continue to dwindle. In targeted discussions with providers, this financial gap is the most

significant risk to the sustainability of the County EMS System. Even the largest provider who is operating at the ALS level would not be able to fund full-time employment of paramedics with current revenue figures. The current structure does not include revenue from interfacility transports or CHEMS, which could help to augment funding, but will likely be insufficient because of the additional personnel necessary to staff prolonged interfacility transfers while maintaining ALS coverage within the county for emergency response.

Future funding to include tax revenue and state support is necessary to facilitate the eventual need for career staffing to support communities throughout the county.

In its current state, all revenue for delivery of EMS in Latah County is earned through patient billing, fundraising, and donations. The dedication and support of volunteers within all six agencies have mitigated the need to hire and compensate personnel to handle the current call volume. MVFD provides some on-call compensation for Paramedic practitioners that provide ALS service to a majority of the county. The county agencies are in the preliminary stages of a delivery system analysis to explore the need for additional funding countywide for paramedics to continue to provide advanced level care due to the lack of volunteer paramedic personnel.

The combination of financial limitations, rugged county terrain, and the reality that multiple ambulance providers content with increased dependence on a shrinking volunteer pool, low call volume, and modest billing revenue culminates in an environment where the sustainability of reliable EMS delivery is at significant risk within Latah County. The dedicated volunteers from EMS agencies throughout Latah County make an invaluable impact, however concerns persist about the long-term viability of the volunteer system. Sustaining a reliable and appropriate EMS response within Latah County for the well-being of its residents and visitors in the years ahead hinges on financial commitment, workforce accessibility, and administrative support across all EMS agencies within the county. Efforts currently underway to evaluate the value of administrative consolidation and cost-savings from collaborative processes within all six EMS agencies are an important first step, but an intentional evaluation of resource utilization, operational efficiency, and financial requirements is necessary to ensure the viability of this important community lifeline.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). US Census Bureau Quick Facts – Latah County, Idaho. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/latahcountyidaho

[2] University of Idaho. (2023). *University of Idaho Fast Facts.* State of Idaho. Retrieved from https://www.uidaho.edu/about/fast-facts

[3] National Agricultural Statistics Service. (2017). *County Profile – Latah County, Idaho*. U.S. Department of Agriculture. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Idaho/cp16057.pdf

[4] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[5] University of Idaho Extension. (2023). *Indicators Idaho: Latah County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16057

[6] Redfin. (2023, January). *Latah County, ID Housing Market.* Retrieved from https://www.redfin.com/county/696/ID/Latah-County/housing-market

[7] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Latah County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/latah?year=2023

[8] Gritman Medical Center. (2022). *Community Health Needs Assessment 2023-2025. Retrieved from* https://www.gritman.org/wp-content/uploads/2022-Community-Health-Needs-Assessment.pdf

[9] Biospatial. (2023). https://app.biospatial.io

[10] IGEMS Data. (2023). *EMS Planner Call Volume: 2021 / 2022.*

[11] IGEMS Data. (2023). *EMS Planner Response Time: 2021 / 2022.*

[12] GEMS Data. (2023). *Agency career-vs-volunteer personnel: 2022.*

[13] Gritman Medical Center. (2023). *Services & Care Areas.* https://gritman.org/services-care-areas/

[14] Idaho Department of Health and Welfare. (2023). *Idaho time-sensitive emergencies: Idaho TSE facility designations.* https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[15] Pullman Regional Hospital. (2023). *Services.* https://www.sjrmc.org/services

[16] St. Joseph's Regional Medical Center. (2023). *Services & Medical Clinics.* https://www.pullmanregional.org/patient-care/services

[17] Kootenai Health. (2023). *Facts and community reports*. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

SHOSHONE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) in Shoshone County is provided through a network of fire-based EMS agencies coordinated by the Shoshone County Ambulance Service District (SCASD). The district manages tax revenue collected across the county, and contracts with three fire districts/departments to fund personnel to respond to calls for service within the county. Most of the population, and hence the majority of the call volume, is along the Interstate 90 corridor climbing from Kootenai County east to the Montana border, over two mountain passes through the Silver Valley. Volunteer fire departments in the more remote portions of the county outside the Interstate 90 corridor provide access to EMS for a much smaller population, but must contend with severe weather, rugged terrain, and difficult road conditions, especially in the winter months.

The two fire districts providing EMS response from the communities along the Interstate 90 corridor utilize career, on-duty personnel who are dual-trained as firefighters and Emergency Medical Technicians (EMT) or Advanced Emergency Medical Technicians (AEMT) out of two full-time stations in Kellogg and Osburn. SCASD has added Advanced Life Support (ALS) capability through the hiring of four paramedics, and recent licensure from the Bureau of EMS and Preparedness. This ALS capability is available for response throughout the county. To the north of the Interstate 90 corridor, in the remote communities of Prichard and Murray along the Coeur d'Alene River, the volunteer fire department staffs one to two Basic Life Support (BLS) ambulances, responding to 40-60 calls annually, resulting in approximately 20 transport each year. The low call volume and distance from staffed fire stations makes this response capability vital to the community and the recreational visitors that frequent the area but are reliant on the availability of volunteers and supplementary funding to maintain facilities, vehicles, equipment, and supplies, not to mention the training of volunteer responders.

The terrain and topology of the county limits potential residential, commercial, or industrial growth, due in large part to the large amount of state and federal land and the mountainous terrain of the county. With limited opportunity for financial growth through relocation of new residents, businesses, and industry, the SCASD must optimize the available financial and operational resources to ensure reliable, appropriate, and sustainable EMS delivery within the county. Through innovative funding opportunities, and shared operational expenses through collaborative and cooperative relationships with the county fire districts, the SCASD continues to improve the efficiency and readiness of the EMS delivery system within the county, but additional financial resources are necessary to meet the growing cost of personnel, vehicles, equipment, and supplies due to inflation and the impact of poor billing revenue related to the economic reality and poverty present in the community.

Strengths	Opportunities
• Coordination of financial and operational resources shared between EMS and fire districts to provide coverage for the county. • Recent licensure at the ALS level, improving level of care provided to the community. • Dedicated volunteer personnel providing coverage for remote areas of the county with extremely low call volume.	• Supporting rural volunteer agencies with billing and administrative support. • Continued growth of the interfacility transfer program to improve revenue and improve patient outcomes through access to tertiary and specialty care. • Continued growth of innovative programs, including funding through public health grants.
Challenges	**Threats**
• Terrain and topography of Shoshone County limits potential residential and commercial growth and possibility of increased tax revenue and impact fees. • Geography and Topology cause increased travel times between populated areas. • Recruitment and retention of career personnel is complicated by residency requirement to support callback staffing. • Funding required to be competitive with larger departments in neighboring counties.	• Decreasing volunteer workforce in remote and rural communities with insufficient call volume to support full-time staffing model for EMS. • Cost of living and housing prices trending higher makes it more difficult for potential employees to live in the community. • Economic factors within the county with high poverty level, lack of insurance, and high rate of substance abuse impacts collection rate.

Table A: Shoshone County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Shoshone County is a rural county located on the eastern side of the Idaho panhandle, consisting of 2,637 square miles and is home to a population of 14,012 citizens. [1] The county seat is Wallace, and the largest city in Shoshone County is Kellogg. The county's seven incorporated cities (Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace, and Wardner) are located along the Interstate 90 corridor that runs west to east through the center of the county from Coeur d'Alene to the Montana border, with remote mountain and wilderness terrain surrounding the valley. This corridor is known as the Silver Valley, referring to the county's rich mining history and considerable mineral deposits. To the north of the valley is the Coeur d'Alene National Forest, and the St. Joe National Forest and Wilderness Area lies to the south of the Valley. These remote wilderness areas have limited road access and minimal population, but are known for abundant hunting, fishing, and outdoor recreation. The county is home to two ski areas, including Silver Mountain and Lookout Pass.

The median age of the population of Shoshone County is 45.3, with the fastest growing segment of the population being persons above the age of 65, with 58% of the population over 18 participating in the labor force. [2] Of note, the educational attainment within Shoshone County is lower than the State of Idaho, with 11.6% of residents having not completed high school (compared to 8.8% in Idaho), and 11.3% of the population over 25 having a bachelor's degree (compared to 29.1% across Idaho). [2] These statistics coupled with lower median household income ($51,516 – ranked lowest in Idaho), and an unemployment rate of 9.1% in 2020 (ranked 2nd highest in Idaho) highlights the financial challenges across the county, punctuated by a poverty rate of 17.9% (compared to 10.9% in Idaho), ranking the highest of all 44 counties in Idaho. [2]

Demographic	2010	2020	2022
Population	12,765	13,169	14,012
Land Area	2,630 sq mi	2,637 sq mi	2,637 sq mi
Per Capita	4.9 PPSM	5.0 PPSM	5.3 PPSM
PPSM: *People per square mile*			

Table B: Shoshone County Population & Geography [1]

2.2. Economics

The mining and lumber industry are a substantial part of the county's economy. According to the Bureau of Land Management, there has been a total of 26,963 mining claims on public land in Shoshone County, with 3,753 mining claims still active. [3] The primary minerals produced within Shoshone County are silver, lead, zinc, copper, and gold. Much of the county's infrastructure was built to support mining operations, and it remains a significant part of the county's history and economy. Lumber and forest industry is another key component of the county's economy. Federal forest lands make up 1,903 square miles and state land adds 106 square miles of public land, totaling over 76% of the total land mass of the county that is state or federal land. [4] An additional 445 square miles of forest land is private, bringing the total of forested land in the county to 93% of the county's total land mass. Despite accounting for so much of the county's area, the forestry and lumber industries make up less than 1% of the employment in the county. [2] Mining on the other hand constitutes 12.0% of the employment within the county, exceeded only by government at 14.3% and retail trade at 16.4%. [2] Despite the recent growth in population, the number of jobs in Shoshone County has remained relatively flat, totaling 6,588 in 2021, roughly the same number of jobs as in the past twenty years, fluctuating between 5,751 and 6,799 between 2004 and 2023. The unemployment rate is traditionally higher in Shoshone County compared to the State of Idaho and the nation as a whole. In 2020, the unemployment rate was 9.1% compared to 5.5% across Idaho. [2] The median household income in Shoshone County is the lowest average in Idaho at $51,516 (compared to $71,625 statewide), and the county's poverty rate of 17.9% is the highest in Idaho, which averages 10.9%. [2]

The impact of these economic factors on EMS delivery is evident in poor billing collection, lack of support for increased levy rates or supplemental funding, and increased calls for EMS service to access healthcare.

One of the most significant barriers to workforce recruitment in Shoshone County is rising housing costs, and the lack of housing inventory. As described, the terrain and topography of the county limits the ability of developers to build additional housing inventory, and lack of available housing units drives up prices for potential employees seeking residence within the county to meet the residency requirement for employment. While the median home value is well below the state and national averages at $141,800, real estate market data resources report the average sale price in Shoshone County to be between $227,500 - $315,000 depending on seasonal fluctuations in home sales. [5] Additionally, these resources report that an average of 19 housing units are sold each month, with an average time on the market of only 4-31 days. [5]

SCASD requires career personnel to live no more than 20 minutes from a staffed fire station to be able to backfill staffing for large-scale incidents. The lack of available or affordable housing has a significant impact on recruitment and retention of the EMS workforce.

Metric	2010	2020	2022
Total Population	12,765	12,169	14,012
Median Age	46.2 years old	46.7 years old	45.3 years old
Poverty Rate	20.8%	14.4%	17.9%
Number of Jobs	6,142	6,226	6,588
Avg Annual Wage	$ 45,852	$ 46,916	$ 50,760
Household Income	$ 48,489	$ 50,134	$ 51,516
Unemployment Rate	15.9%	9.1%	5.1%

Table C: Shoshone County Economic Factors [2]

Metric	Shoshone Co.	Idaho	United States
Housing Units	7,003	751,859	N/A
% Owner Occupied	56.5%	71.7%	64.6%
Change 2010 - 2020	- 1.0%	12.6%	6.7%
Median Rental Cost	$ 796	$ 1,310	N/A
Median Home Value	$ 141,800	$ 266,600	$ 244,900
Household Income	$ 51,516	$ 71,625	$ 75,296
Housing Types (single family, Multi-family, Mobile Home)	71.1% / 11.4% / 11.5%	77.0% / 15.1% / 7.9%	67.6% / 26.4% / 6.0%

Table D: Shoshone County Housing Factors [2], [5]

2.3. Social Determinants of Health

Access to care in Shoshone County ranks below state and national averages, with only 3.0 primary care physicians per 10,000 residents. [2] The county reported only four primary care physicians practicing within the county in 2020, down from 5 four years prior. Poverty, economic factors, and environmental factors contribute to Shoshone County being ranked 42 out of 43 counties in Idaho for Health (one Idaho county was excluded from the ranking due to its small size and population, resulting in 43 counties being ranked). [6] 14.2% of individuals below the age of 65 are uninsured, compared to 12.7% across Idaho, making Shoshone County 25th in the state for uninsured residents. [2] Enrollment in Medicaid for individuals and families with low income or poverty-level wages likely accounts for this disparity in the presence of the economic profile described above. [2]

According to statistics provided by the Panhandle Health District in their Community Health Needs Assessment, Shoshone County has one of the highest levels of obesity, high blood pressure, and lack of physical activities. Rates of breast, colon, and lung cancer are higher in Shoshone County than the average across Idaho, and Shoshone County has higher per capita rates of infant mortality, cancer, heart disease mortality and stroke mortality when compared to the average across Idaho. Deaths from suicide are twice the state average, and death from motor vehicle crashes, unintentional injury, and firearms is more than twice the state average. [7] These health factors, health behaviors, and outcomes are clearly reflected in the poor rankings that Shoshone County received in the County Health rankings, placing the county 42nd out of the 43 ranked counties within the State. The two redeeming scores

within the county health rankings were clinical care and physical environment, the former reflecting the access to care provided by Shoshone Medical Center, county EMS agencies.

County Health Rankings	
42 of 43 ranked counties in Idaho	
Health Outcomes	42 of 43
Health Factors	43 of 43
Length of Life	40 of 43
Quality of Life	43 of 43
Health Behaviors	43 of 43
Clinical Care	28 of 43
Social & Economic Factors	43 of 43
Physical Environment	30 of 43

Table E: Shoshone County Health Ranking [6]

2.4. Indicator Impacts to EMS

The poor economic profile of Shoshone County, coupled with the rural nature of many of the communities puts residents at a disadvantage when it comes to access to healthcare and quality of life. Lifestyle factors, health behaviors, chronic conditions, and overwhelming economic factors highlight the need for a robust and responsive EMS system to help address the disparity within the community and mitigate the impact of these factors in the length and quality of life for residents of Shoshone County.

The healthcare infrastructure in Shoshone County ranks 28th out of 43 ranked counties in Idaho but serves as a vital link for underserved and vulnerable populations within the county, including those with chronic conditions, and those living in poverty. [6] The EMS delivery system in Shoshone County plays an important role in providing access to care and serves as a link to specialty care through performance of interfacility transfers. Additionally, SCASD has developed an innovative program to address social and health issues related to substance abuse within the county and providing a unique opportunity for funding for EMS delivery and integration of EMS into the healthcare delivery system within the county.

The workforce, housing, and economic factors paint an unenticing picture for potential employees seeking opportunity within the SCASD. To remain competitive with larger metropolitan departments, pay and benefits must be enhanced, and provide opportunities to afford a living/thriving wage within the community they serve. Operational stability necessitates that SCASD, and its partner fire districts be able to recruit and retain qualified employees, and not routinely lose employees to other job opportunities. Such attrition raises the cost of training, onboarding, and recruitment for the department, and impacts the financial well-being of the organization and the county.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

Data shows consistent call volume during all hours of the day with slightly higher system demand during daylight hours, and slightly lower demand during the early morning hours. Demand is also consistent across all days of the week and shows only a slight increase in volume during the summer months.

Most of the calls occur in the populated areas along the Interstate 90 corridor, as well as residential areas within the Silver Valley. A small number of SCASD responses appear to occur in the remote wilderness areas within the county. The State EMS Registry does not contain any incident documentation from the St. Joe Quick Response Unit (QRU), therefore detailed incident information is not readily available.

3.1. Call Volume Overview

Call volume remains constant throughout the year for SCASD and partner fire departments with minimal seasonal variation. [8] The county reports a significant number of calls for service related to substance abuse, intoxication, overdose, and mental health issues. [8] The county economic profile, social determinants of health, and the incidence of these types of calls has led to the development of a program to address substance abuse issues within the county, partially funded by a grant program from the Panhandle Health District through federal opioid settlement funds distributed to state and local health departments.

SCASD represents an important link in the system of care within Shoshone County, not only providing 911 response and transport, but the agency also provides interfacility transport services to Shoshone Medical Center, for patients requiring specialty care that is not available at the critical access hospital within the community. Interfacility transport volume is reported to be approximately 300 calls annually, providing a critical service to the community and to the local hospital district. During longer transports, SCASD may use callback systems to recall off-duty personnel to cover emergency calls while those units are unavailable.

The integration of EMS response under a single EMS license held by SCASD, comparisons with previous data from the State EMS Registry is difficult, however, available data and agency discussion describes an increase in calls for service within the county, especially with the increase in interfacility transfers due to the availability of paramedic providers to transport critical patients to tertiary care centers in Coeur d'Alene, Spokane, and Missoula.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Prichard/Murray Volunteer Fire Department	20	14	34	20	10	30
Shoshone County Ambulance Service District	1,170	756	1,926	1,255	937	2,192
Ambulance Total	1,190	770	1,960	1,275	947	2,222
St. Joe QRU	-----	-----	-----	-----	-----	-----
QRU Total	-----	-----	-----	-----	-----	-----

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table F: State Reported 911 EMS Call Volumes for Shoshone County (2021-2022) [9]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Prichard/Murray Volunteer Fire Department	8 min	12 min	20 min	38 min	103 min
Shoshone County Ambulance Service District	2 min	7 min	9 min	18 min	61 min
St. Joe QRU	-----	-----	-----	-----	-----

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table G: State Reported 911 Call Times for Shoshone County (2022) [10]

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Shoshone County fire and EMS resources are dispatched through the Shoshone County Sheriff's Office. Calls for service are routed to the sheriff's office dispatch center, and then appropriate units are dispatched on a dedicated fire and EMS channel. Pre-arrival instructions are provided to callers to assist the patient prior to the arrival of EMS, but the sheriff's office does not utilize formal emergency medical dispatch protocols. SCASD does not pay for call-taking and dispatch services. The use of a centralized communications system allows for improved communication with incoming units, including law enforcement, fire department, and EMS resources.

4.1.2. EMS Agency Overview

Shoshone County is covered by one licensed EMS agency that contracts with fire districts to provide the personnel and infrastructure required for reliable and appropriate EMS response within the county. SCASD provides funding for transport capability in the communities along the Interstate 90 corridor, as well as funding support to the St. Joe Quick Response Unit, operated out of Calder, supporting EMS response in the St. Joe Wilderness Area.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Pritchard/Murray Volunteer Fire Department	Private 501(c)(3) Fire-Based	Basic Life Support (BLS)	Unscheduled	Volunteer
Shoshone County Ambulance Service District	Tax District Fire-Based	Advanced Life Support (ALS)	Scheduled	Career
St. Joe QRU	Private 501(c)(3) Fire-Based	Basic Life Support (BLS)	Unscheduled	Volunteer

Table H: List of EMS Agencies Located in Shoshone County [11]

4.1.2.1. Prichard/Murray Volunteer Fire Department

Prichard / Murray Volunteer Fire Department (PMVFD) provides BLS ambulance coverage to the rural “upriver” communities of Prichard and Murray, in the northern portion of Shoshone County. The unincorporated cities of Prichard and Murray are 22-30 miles from the nearest staffed ambulance station along the Interstate 90 corridor. The agency operates two ambulances out of two stations, staffed by eight volunteer EMTs, two non-clinical drivers, and 14 firefighters. PMVFD is primarily funded through several fundraising events annually, which brings revenue into the fire department, which supports EMS operations. Annual call volume for the department varies from 46-72, approximately 75% of the total call volume being EMS calls.

PMVFD receives funding from SCASD annually to support their EMS operation, and the department works closely with the ambulance district and other fire districts within the county, providing resource support as able, and receiving ALS support for calls within the community as needed. PMFVD does not have a fire taxing district, or other source of revenue. The department uses SCASD for billing services, providing modest revenue based on 20 transports annually.

PMVFD serves a rugged, mountainous area, leading to challenges accessing patients during severe winter weather. Calls for service in the winter months can have significantly longer response and transport times due to road conditions, visibility, and seasonal road closures.

4.1.2.2. Shoshone County Ambulance Service District

SCASD is a public taxing district leveraging a contractual mechanism with county fire districts to provide EMS and interfacility transfer capability to the citizens and visitors of Shoshone County. The district utilizes contracts with Shoshone County Fire District #1 and Shoshone County Fire District #2 to provide personnel staff two full-time ambulances based out of Kellogg and Osburn. Funding is provided to each of the fire districts to reimburse the cost of personnel to staff the EMS units, and SCASD provides ambulances, equipment, supplies, medical direction, clinical documentation systems, training, continuing education, and other costs to provide EMS within the county. SCASD also collaborates with Shoshone

County Fire District #2 to share personnel costs for the SCASD EMS Director and an administrative assistant.

SCASD is an EMS organization in transition with the hiring of a new director in October 2022. SCASD is looking for efficiency in staffing and response capability by integration of fire district resources, similar to the model used in Kootenai County. With four paramedics on the agency roster, SCASD and its partner fire departments intend to transition to a full-time ALS service with the implementation of a paramedic "chase car" to augment AEMT staffing in the two staffed ambulances within the county. The addition of a dedicated ALS response unit requires supplementary funding that is not currently in the budget, however GEMT, and grant programs offer opportunities to implement this capability for the county. The agency has recently been granted an ALS license and is able to provide paramedic-level service for emergency calls in addition to IFT responses.

SCASD utilizes a third-party billing company to seek reimbursement for services rendered to patients from emergency response and interfacility transfers. Billing income and tax revenue from the county's 0.0003% ambulance district levy currently provide much of the funding for the delivery of EMS in Shoshone County. Additional funding through grant programs have paid for equipment, vehicle replacement, and education programs.

4.1.2.3. St. Joe Quick Response Unit

St. Joe QRU provides support to EMS response in the southern portion of the county along the St. Joe River and in the St. Joe Wilderness Area. Many of the calls for service in this area result from recreational incidents in the backcountry. With the lack of roadway infrastructure through the mountainous terrain of Shoshone County, St. Joe QRU is most often supporting Benewah County EMS units responding out of St. Maries. Responding to approximately 30 calls for service per year, the agency is staffed by one Emergency Medical Responder (EMR) and two EMTs who respond to calls for service, dispatched by either Shoshone County Sheriff's Office, or through personal notification by cell phone. The agency responds out of a small facility located across the street from the Saint Joe Valley Fire District station on First Street in Calder.

4.1.3. Hospital Access Overview

The primary transport destination along the Interstate 90 corridor in Shoshone County is Shoshone Medical Center, which serves as the only definitive care facility within Shoshone County. The nearest tertiary center is located in Coeur d'Alene, approximately 38 miles to the west via Interstate 90, serving as the nearest resource for specialty care.

- Shoshone Medical Center (25 Jacobs Gulch Rd, Kellogg) is a critical access hospital with 25 beds, including a 24-hour emergency department, and inpatient medical-surgical unit, among other services. [12] Shoshone Medical Center is not currently designated for trauma, stroke, or STEMI by Idaho TSE. [13] SCASD provides interfacility transfers from Shoshone Medical Center, when clinically appropriate and when staffing is sufficient to maintain emergency coverage during the approximately 2-hour transfer.

- **Kootenai Health** (2003 Kootenai Health Way, Coeur d'Alene, ID) is a 330-bed hospital that is an American College of Surgeons' verified Level III and TSE-designated Level II Trauma Center, as well as an interventional cardiac center. [13] Key services provided at Kootenai Health includes a 24-hour emergency department, inpatient behavioral health, pediatrics behavioral health, critical care, cancer services, neurosurgery, vascular care, and urology. [14] Many patients from Shoshone County are transferred to Kootenai Health from Shoshone Medical Center for specialty care if those services are not available locally.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Shoshone County is supported by two licensed EMS transport agencies providing EMS service through an integrated network of contracted fire protection districts within the county. SCASD is managed by an EMS Director is also the Fire Chief for Shoshone County Fire Protection District #2. The cost-sharing arrangement with the SCASD and the fire protection district has allowed for shared administrative cost and improved coordination among the partner fire districts that manage day-to-day operations of personnel responding to calls for service within the county.

SCASD is overseen by an advisory board, under the direction of the Board of County Commissioners. The advisory board oversees EMS contracts, fiscal accountability, and efficiency of EMS service delivery. SCASD provides administrative functions such as financial management, coordination of billing, equipment and supply ordering, and coordination of training for the county. The partner fire districts are responsible for the hiring, management, and oversight of EMS providers, as well as the operational control of personnel while responding to calls on behalf of SCASD. The ambulance district provides each fire agency with a budgeted allocation to cover personnel expenses, and provides ambulances, equipment, supplies, medical direction, training, clinical documentation systems, and other necessary resources to the fire districts to carry out EMS response.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Subjective assessments regarding sustainability of each provider during the resource assessment process yielded scores from 80-90 out of 100 with the mean of 85. The integration of EMS response under the SCASD and the hiring of an EMS Director have had a positive impact on the efficiency of the EMS delivery system within the county, and there is optimism about the continued growth of the system, implementation of an ALS service delivery model, and innovative funding solutions, such as the partnership with the Panhandle Health District that has funded training and response programs to address substance use disorder in Shoshone County. The two volunteer agencies providing service to the remote communities outside of the Interstate 90 corridor have unique challenges recruiting and retaining volunteers, as the small, aging population eventually retires or is unable to provide coverage for the community. The call volume in these areas is not sufficient to support full-time career coverage, therefore innovative approaches to

maintaining volunteer coverage is necessary to ensure reliable system delivery in these rural communities.

- **EMS Agency Financial Situation**: Agency leadership describes a stable financial situation, and report that each year the SCASD has been able to "break even". Recent grant funding opportunities have helped to fund capital purchases, such as ambulances, and funding directed to the ambulance district from the county from an outdated hospital district account has allowed the agency to update fleet and facilities without impacting the annual operating budget. Continued growth, diverse funding opportunities, and the impact of GEMT funds will help to support the needs of the agency and the community and improve the stability of the agency into the future. The rural agencies of PMVFD and St. Joe QRU have a modest budget, and rely heavily on fundraising, grants, and county tax revenue to maintain service in their communities. Donations of vehicles and equipment from larger agencies is often the only means to replace ambulances and other agency response assets.

- **EMS Agency Communications Strategy and Outreach**: The providers within Shoshone County are well-connected to the community, each participating with community events, parades, and gatherings. SCASD reports having a community engagement and outreach strategy that includes supporting sporting events, county fairs, and large community gatherings.

- **Community View of EMS Agencies**: All agencies reported position public perception of EMS providers within the community. All agencies report receiving small donations from citizens and business within their individual communities, and participation in events, such as parades and holiday celebrations.

- **Elected Official Support of EMS Agencies**: SCASD, leadership from partner fire districts, PMVFD, and the St. Joe QRU attend monthly meetings with elected officials, the SCASD board, and members of the Board of County Commissioners. The agency reports an excellent and supportive working relationship with elected officials. Elected officials, while supportive of EMS within the community, emphasize that the community is not necessarily willing to raise taxes or fund additional emergency infrastructure, so although supportive in general, access to additional funding from the county or local governments would be a contentious issue.

- **Agency & System Response Outlook:** Recent changes to the SCASD administrative and personnel structure, and the integration of EMS delivery under a single EMS license is seen as a positive step within the county. Agency leadership describes optimism around the evolution of the system to an ALS service, and potential future funding to include full-time paramedic coverage. The recent availability of unique funding sources to support capital purchases and operational improvements has had a positive impact within the agency, and the future of impact of the GEMT program, and other potential funding sources are encouraging for the organization and its ability to improve care delivery in Shoshone County.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s)**: EMS in Shoshone County is provided by two fires districts functioning under a single licensed EMS providers at the ALS level, and one volunteer fire department licensed as a BLS provider. Coordination of administrative and strategic activities within the system is managed by a dual-role EMS Director, and daily management of personnel and operations is overseen by the individual fire districts that respond to EMS calls on behalf of the SCASD. The SCASD Advisory Board and the Board of County Commissioners provide oversight for the countywide EMS operation and interact regularly with agency leadership.

- **Service Delivery Partners**: Agency leadership identified all the county's fire districts that provide ambulance staffing and first responder support to the SCASD as the most impactful service delivery partners. The Shoshone County Sheriff's Office and local law enforcement were also described as important partners, along with the sheriff's office dispatch center. Finally, the Shoshone Medical Center was listed as an important partner, without whom transport times to definitive care in Coeur d'Alene would cause significant gaps in availability of EMS resources with longer EMS transport times.

- **Medical Direction**: Medical Direction for all agencies in Shoshone County is provided by a family medicine physician based out of Shoshone Medical Center. Agencies report frequent interaction with their medical director for both training and quality improvement and he typically attends SCASD Advisory Board meetings. Case reviews are performed when clinically indicated, and the medical director is reported to be available for consultation, as needed.

- **Communications & Interoperability**: Overall radio communications are adequate, especially along the Interstate 90 corridor and the populated areas of the Silver Valley. Due to the mountainous terrain of the region, gaps in coverage exist, especially in more remote areas of the county. The radio system allows for communication between fire and EMS units, law enforcement, and communication to neighboring agencies, such as Kootenai County, for responses requiring mutual aid.

- **Mutual Aid System & Agreements:** As a single transport agency, SCASD does not require a mutual aid agreement within the county for EMS services, however, agreements are in place with county fire departments for first responder support for specific call types, or responses where the first due ambulance is already out on a call. SCASD has written mutual aid agreements with all its surrounding counties. SCASD has an automatic aid agreement and routinely responds to incidents within Kootenai County along the Interstate 90 corridor near Cataldo, due to the proximity of that rural Kootenai County community to Shoshone County EMS resources.

- **Community Health EMS (CHEMS)**: SCASD has a relatively new CHEMS program that focuses on substance abuse disorders and is funded through a partnership with the Panhandle Health District. This partnership provides funding for training and personnel to combat the substance abuse, overdose, and mental health issues

within Shoshone County. As the organization brings on more paramedic providers, agency leadership is hopeful that the CHEMS program will continue to grow and allow SCASD to provide more impactful programs to the community.

- **Patient Care Documentation System**: SCASD and its partner fire departments utilize ESO for clinical documentation, having recently migrated from the state-provided platform. Agency leadership cite ease of use, and the improved data collection and reporting capabilities of the platform, which includes deidentified data for comparison with similar agencies nationwide as an important reason for the movement to ESO.

- **Inter-facility Transports**: SCASD utilizes on-duty ambulance resources for interfacility transfer of appropriate patients out of Shoshone Medical Center. For long distance transfers to Spokane or Missoula, off-duty personnel are recalled to staff ambulances for emergency response for the duration of the transport, to minimize the impact on operational capability.

4.2.1.3. Response Overview

Shoshone County EMS agencies are dispatched through the county sheriff's office communications center and utilize EMS resources within each community to respond to calls for service through a combination of career and volunteer resources. Fire-based ambulances along the more populated Interstate 90 corridor respond with career personnel trained to the EMT or AEMT level, with ALS support from an on-duty ALS ambulance or dedicated paramedic chase vehicle, depending on staffing. Volunteers staffing a BLS ambulance in the rural, remote communities of Prichard and Murray in the northern portion of the county. Operational and administrative coordination among all licensed EMS transport agencies and quick response units are accomplished through the SCASD, which provides financial and administrative support to all partner agencies within the county.

- **Level(s) of Service:** Ambulance response in Shoshone County is typically accomplished using EMT and AEMT personnel depending on the assigned or available staffing of particular fire departments. ALS service is provided SCASD by four paramedics currently employed by the Shoshone County Fire Protection District #2 in Kellogg.

- **Agency Response Concern:** While coordination among fire districts and licensed providers within the county ensure that no call for service goes unanswered, agency leadership expressed concerns about staffing during peak activity, requiring additional ambulance resources. With two ambulances staffed daily along the Interstate 90 corridor, concurrent calls for service or multiple patients can tie up both ambulances, leaving the county uncovered until they become available. Fire district leadership has attempted to mitigate this issue by staffing a third ambulance using personnel assigned to fire apparatus, or administrative personnel, as available. Additionally, the two career fire districts require employees to live within the county, able to respond to a staffed fire station within 20 minutes if callbacks are activated to backfill EMS or fire apparatus. PMVFD has two ambulances capable of responding to calls for service within their coverage area, one located in Prichard and one in

Murray. The department lacks personnel in Murray to staff the second ambulance, so only the unit based in Prichard is currently utilized for response.

- **Helicopter Response & Utilization:** Proximity to Coeur d'Alene means that agencies only call for air medical resources for high acuity patients, with time sensitive emergencies. Agencies described utilization of helicopters for pediatric patients, multisystem trauma, stroke, and STEMI. Agencies also described challenges with aircraft availability due to weather during a significant portion of the year because of the county's elevation and terrain. Although Life Flight Network has a base in Coeur d'Alene, weather may ground aircraft for prolonged periods of time. Fixed wing aircraft can be utilized for interfacility transfers, however, encounter the same weather limitations into the airport in Kellogg.

- **Factors Impacting Response Times:** Agencies noted that simultaneous calls (requiring a second ambulance crew), time of day, and weather to be the most persistent factors impacting response times. Seasonal delays related to severe weather and snow in the higher elevation had an impact during periods of inclement weather. Vehicle and equipment issues seldom impacted response times or capability.

- **Response to Public Lands:** With a significant amount of state and federal recreation land, Shoshone County EMS agencies respond occasionally to calls for service in remote public lands. Several of these calls for service originate from the St. Joe Wilderness and generate a response from the St. Joe QRU, in coordination with Benewah County EMS, due to the access from St. Maries and the prolonged response time through National Forest roads from the Interstate 90 corridor. Agencies report call times more than six hours for many of these responses, and a strain on personnel who must access the patient, move them to the ambulance, and navigate rough roads to transport the patient to the hospital. These backcountry responses often require the backfill of on-duty ambulance resources at additional cost to the agency.

4.2.2. Workforce & Resource Assessment

Staffing in Shoshone County is provided primarily by career fire districts contracted with SCASD for coverage out of fire stations in Kellogg and Osburn. Volunteer staffing is provided out of Prichard and Calder for a small number of calls in the remote areas to the north and south of the Interstate 90 corridor.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The Shoshone County Fire Protection Districts #1 and #2 that provide ambulance coverage along the Interstate 90 corridor staff dual-licensed firefighter/EMT personnel on a rotating 48/96 schedule, meaning they work 48 hours and are off for four days. The SCASD provides funding for the districts to offset a portion of the staffing of the ambulance. This staffing structure ensures that two on-duty crews are available to respond to calls for service in the most populated area within the Silver Valley. Volunteer responders in Prichard and Calder are not

scheduled and respond to the station when a call goes out over the county radio system. The small number of calls for service makes dedicated ambulance staffing unnecessary. Volunteers use informal text groups and other communications methods to coordinate availability to cover potential ambulance calls, as needed.

- **Responder Average Age:** The career departments within the county describe an average age of responders of approximately 25-35. The volunteer agencies in the rural areas of the county are reported to have an average age of 45-55.

- **Staffing Numbers:** Career departments utilized scheduled personnel, ensuring adequate staffing to respond to calls for service from the populated communities within the Silver Valley. Volunteer agencies have reported a roster that currently meets the needs of the department.

- **Staffing Concerns:** Career departments describe challenges with recruitment and retention of qualified personnel. The residency requirement and 20-minute callback to a staffed fire station means that career personnel must live in the county. Housing prices and cost of living within the county make relocation into Shoshone County difficult for potential employees. SCASD must compete with larger departments in Kootenai County and eastern Washington that can pay much higher salaries without the onerous residency requirements. SCASD leadership reports that fire districts in Shoshone County are often seen as “feeder departments” for larger metropolitan departments that hire their employees into larger departments, lured by higher pay and higher call volume. The aging population of volunteers, potential volunteers moving out the community, and the significant investment in training required for people to volunteer on the ambulance are concerns for most of the agencies within the county.

- **Staffing Strengths:** Despite a difficult recruitment and retention environment, county departments continue to staff ambulances to respond to calls for service within the community. The coordination between all licensed providers and partner agencies helps all organizations overcome financial and administrative challenges. The volunteer agencies within the county report a low call volume which helps to minimize burnout of responders and describe high levels of engagement of many of their volunteers, attending training, and seeking additional education to better serve their community.

- **Recruitment & Retention:** There are few recruitment and retention opportunities that EMS agencies within the county can capitalize on. Agencies cite opportunities to provide EMT courses in local high schools, provide scholarships for EMT and paramedic academies with reciprocal work agreements, and the availability of benefits, such as PERSI retirement and health insurance as incentives to improve recruitment and retention within the community.

4.2.2.2. Training & Education Overview

- Career agencies typically hire personnel who are already licensed; however, some agencies provide online EMT training to firefighters and other potential personnel to improve staffing for EMS calls in the county. Departments provide regular training for both career and volunteer personnel, using experts within the department and the medical director. In addition, departments offer online continuing education programs to help individual providers with licensure renewal.

- Volunteer agencies report challenges with availability of initial training, especially for volunteers from rural providers who have long travel times to EMT classes. Online courses are often the only viable option due to the long travel times for courses in Coeur d'Alene and elsewhere in the region. The completion rate for these courses is heavily dependent on the engagement of students, and in many cases, grant funding for initial education is contingent upon successful completion of the course and passing the National Registry examination. This limitation remains a significant barrier to staffing, even when personnel are interested and motivated to seek higher levels of licensure.

- SCASD reports challenges in paramedic training opportunities for career personnel. Courses are not available in North Idaho, requiring students to travel for course work, and the competitive salaries mean that if personnel complete the training, it is often more advantageous for them to pay the department back for the training and take a position with another department with higher salary. These factors impact the ability of SCASD to fund and train additional ALS providers.

4.2.2.3. Facilities Overview

- **Station Locations:** EMS response in Shoshone County is accomplished by ambulances staffed from Kellogg and Osburn, and volunteer ambulances out of Prichard and Murray.

- **Station Conditions:** Fire stations in Kellogg and Osburn are currently supporting career personnel. Both stations have recently been built or renovated to accommodate shift work staffing, including sleeping quarters, kitchen facilities, and showers. The three volunteer stations that house EMS response assets are not currently able to accommodate on-duty personnel. In addition, all three volunteer stations are older and reporting various issues in need of repair, such as roof leaks, plumbing issues, and increased storage.

- **Facility Needs:** Career stations are maintained by fire protection district funds, and currently meet the needs of the departments and their personnel. Volunteer stations require significant investment to make critical repairs, and upgrades to infrastructure should on-duty staffing be necessary in the community.

4.2.2.4. Equipment/Supplies Overview

- Adequacy: EMS agencies throughout the county indicate that their equipment and supplies meet their daily needs. Grant funds are often used to replace more expensive equipment; however, agencies rate current equipment "good" or "excellent." Expansion of service to the ALS level has required the purchase of additional supplies and equipment, including medications, to meet the ALS standard. The current vehicle fleet within the county is adequate to support a reliable response and includes seven ambulances ranging from 2011 to 2023 models. SCASD reports one 2023 ambulance was just delivered by the manufacturer and two more or on order with delivery expected in 2024.

- Condition: Equipment and supplies are reported in good to excellent condition overall, according to agency leadership. Equipment and supplies are ordered centrally by SCASD and distributed to the partner fire departments as needed to maintain par levels of stock in each ambulance.

- Funding: More expensive equipment is often replaced through grant programs, especially capital equipment, and vehicles. SCASD utilized ARPA funds, state ambulance replacement funds, and hospital district funding allocated by the Board of County Commissioners from a defunct hospital district account to purchase new ambulances.

- Needs/Shortages: The department describes struggles with national shortages but have no immediate or unmet needs related to equipment or supplies.

4.2.3. Financial Overview

Consideration of the financial situation of the individual fire districts who provide EMS coverage within their community is complicated by the complex nature of fire district tax revenue, shared personnel costs, and administrative services provided by SCASD to support EMS operations by each of their partner fire districts and departments. Overall, the collaborative approach to shared funding of personnel and infrastructure allows Shoshone County to provide more efficient delivery of fire protection and emergency medical services to their community that might not be possible if this model was not in place. The revenue and expenses described within this report refer primarily to the SCASD budget, as consideration of individual fire district revenue would be redundant. Financial contributions made by SCASD provides funding for EMS resources and personnel within the county and should not be confused with fire protection expenses.

The cooperative funding model utilizing contractual agreements with the two larger fire districts serving the more populated area of the Silver Valley optimizes service delivery to much of the population. The rural fire departments providing EMS coverage for the remote areas of the county outside of the Interstate 90 corridor have a more difficult financial reality, requiring fundraising to support the limited funding received through billing or tax revenue sources. The low call volume and minimal tax revenue in these rural communities requires volunteer agency leadership to make difficult decisions about how to spend their limited funds, often resulting in deferred maintenance and lack of funds necessary for

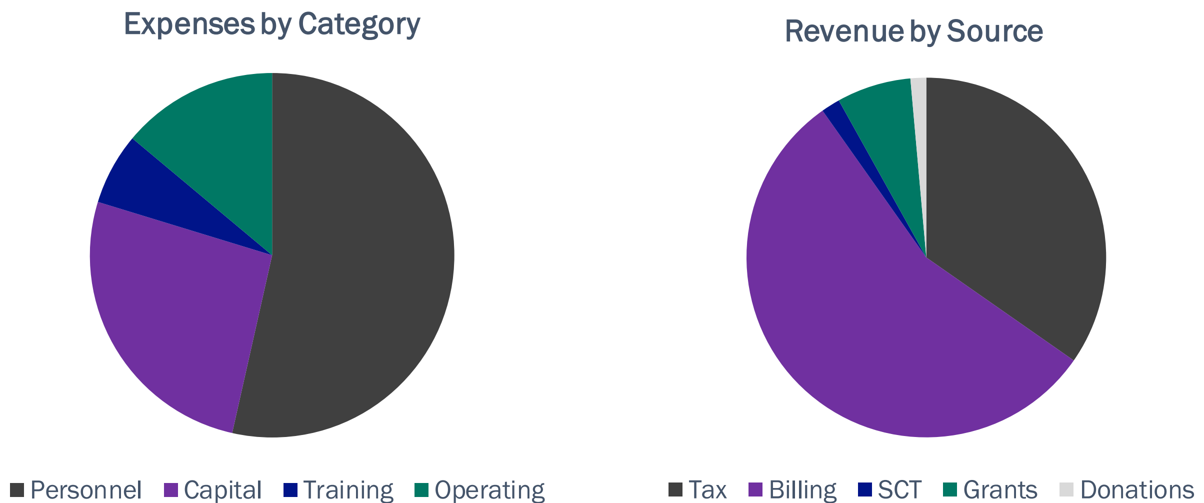
capital purchases, necessary repairs, and strategic planning for future growth and sustainability.

4.2.3.1. Expense Overview

The cumulative operating budget for the provision of EMS in Shoshone County totals $1,371,036. That budget includes $674,415 for personnel, $330,250 for capital expenses (including a new ambulance), $80,080 for education, and the remainder of $175,358 for operating expenses including, fuel ($55,963), supplies ($32,967), maintenance ($25,344), and overhead costs. SCASD wrote off approximately $110,933 in bad debt related to uncollected billing revenue.

4.2.3.2. Revenue Overview

Revenue is generated from several sources to support EMS delivery in Shoshone County. SCASD received funding through the ambulance district tax levy ($489,746), net billing revenue ($672,243), specialty care team transfer revenue ($23,977), and grant funding ($74,237). In addition, the volunteer departments within the county report receiving donations that support EMS operations (estimated to be $20,000) and grant funding for radios, and uniforms (approximately $25,000). As described earlier, additional donations and fundraising revenue is earned by each fire district or department and may contribute to EMS operations.



4.2.4. Resource Assessment Additional Factors

SCASD leadership is making incremental improvements to the delivery of EMS within Shoshone County. The addition of paramedic capability to emergency response within the county is an important step in providing reliable, appropriate, and sustainable prehospital care to the residents and visitors of Shoshone County. The recognition of community health issues, such as substance abuse disorder, and the development of innovative programs and funding to address those issues makes the EMS delivery model within the county stronger,

and more integrated with the healthcare delivery system, which includes public health, hospitals, primary care physicians, and government.

Shoshone County's terrain and topography limit the amount of commercial and residential growth that can be accomplished within the county, so future economic growth means that a sustainable EMS system requires reinforcement of current capability, instead of a focus on growth. The current revenue from the ambulance taxing district, coupled with billing revenue, grant income, interfacility transfers, and clinical programs provide the foundation for a sustainable EMS system, utilizing career staff from fire districts to meet the EMS needs of the community. The anticipated increase in personnel costs for recruitment and retention of qualified EMS personnel, especially paramedics, will require increased funding to meet rising inflation and cost of living and housing cost increases. SCASD leadership is optimistic about the potential impact of additional funds through the GEMT program, but supplemental funding will be necessary to shore up the county's EMS system in the presence of limited economic growth potential, rising cost of living, and the community payor mix, exacerbated by the poverty level and economic factors within the community.

The future availability of volunteers to replace personnel responding to calls in the remote areas outside of the Interstate 90 corridor will provide unique challenges due to the extremely low call volume and the fixed cost of readiness, including personnel, equipment, and infrastructure necessary to provide EMS coverage.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Shoshone County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/shoshonecountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho: Shoshone County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16079

[3] Bureau of Land Management. (2023). *The Diggings: Mining in Shoshone County, Idaho.* *https://thediggings.com/usa/idaho/shoshone-id079*

[4] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho/Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[5] Redfin. (2023, January). *Shoshone County, ID Housing Market*. Retrieved from https://www.redfin.com/county/707/ID/Kootenai-County/housing-market

[6] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Shoshone County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/shoshone?year=2023

[7] Panhandle Health District. (2018). *Community Health Assessment.* Retrieved from https://panhandlehealthdistrict.org/wp-content/uploads/2019/06/CHA-2018-final.pdf

[8] Biospatial. (2023). https://app.biospatial.io

[9] IGEMS Data. (2023). *EMS Planner Call Volume: 2021 / 2022.*

[10] IGEMS Data. (2023). *EMS Planner Response Time: 2021 / 2022*.

[11] IGEMS Data. (2023). *Agency career-vs-volunteer personnel: 2022.*

[12] Shoshone Medical Center. (2023). *Services – Shoshone Medical Center*. https://www.shoshonehealth.com/services/

[13] Idaho Department of Health and Welfare. (2023). *Idaho time-sensitive emergencies: Idaho TSE facility designations.* https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[14] Kootenai Health. (2023). *Facts and community reports*. https://www.kh.org/mission-vision-and-values/facts-and-community-reports/

NORTH CENTRAL
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the North Central AOR:

- Adams
- Idaho
- Lewis
- Nez Perce
- Payette
- Valley
- Washington

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area – The counties of the North Central AOR represent a predominantly rural, remote part of Idaho, straddling an approximate 260-mile corridor stretching from Interstate 84 in the south to the north of Port Lewiston. This region abuts Oregon's and Washington's eastern borders, with very low population density. Idaho's major north to south transportation corridors (Highways 95 and 55) bisect this part of the state, covering both the Mountain and Pacific time zones. Rugged and mountainous terrain (much of which is designated wilderness) and a diverse economy impact EMS in the North Central AOR, creating both opportunities and challenges. Despite local resilience, agency scalability is encumbered by low call volumes, expansive coverage territories, recruitment and retention challenges, and funding limitations. Changing demographic and economic profiles also impact the sustainability of EMS in this AOR, as reflected in taxing district and billing collection metrics. Even a dedicated mix of community-minded volunteers and full-time staff keeps the system going for the benefit of the residents, businesses, and visitors to North Central Idaho.

ADAMS COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION
1
CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by rural, low-population density and an aging citizenry, Adams County's EMS system is facing sustainability challenges with baseline funding, capital planning/long range expenditures, shift coverage, recruitment/training, equipment/supplies, and succession planning. The EMS system operates with two taxing districts in play, however rapid growth and levy rate limitations create a 'barely break-even' or slight deficit reality year over year. The agencies in Adams County are not scaling with population growth due to thin margins. Expansive geography and low population density create noteworthy scale challenges. Adams County's EMS agencies have done an excellent job utilizing partnerships (both within the county and across county lines) and generally achieve a productive level of service with limited resources.

Strengths	Opportunities
• Centrally located facilities adjacent to population centers (4.2.2.3) • Committed staff and volunteers (4.2.2.1) • Dedicated funding structure through taxing districts (4.2.3)	• Further collaboration: cost/resource sharing and integration (4.2.3.1) • Potential levy rate enhancement based on real-world costs (limited by Idaho Code—additional evaluation recommended) (4.2.3.1) • Recruit strategically against higher local unemployment rate (2.2)
Challenges	**Threats**
• Shift coverage resulting from difficulties with candidates passing the initial National Registry of Emergency Technicians (NREMT) certification testing and resulting recruitment woes (4.2.2.1) • Below average health indicators and outcomes add demand to EMS system (2.3) • Levy rates not keeping up with costs (4.2.1)	• Aging population reflects higher EMS system demand and recruitment challenges (2.1) • Scale presents long-term concerns (4.2.3) • Succession planning/retirements (4.2.1.3)

Table A: Adams County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Located in the West Central Mountains of Idaho, Adams County has 4,817 residents, an increase of 21.2% from 2010. While population has increased, the county remains rural as a whole with 3.5 people per square mile. As of 2021, the median age was holding steady at 55; 18 years older than the average age in Idaho and 16 years greater than the US average. Adams County is predominantly white (93.4%) with a relatively small portion of the population being Asian/Pacific Islander, Native American, Black, or multiple races (6.6%). [8]

Demographic	2010	2020	2022
Population	3,976	4,425	4,817
Land Area	1,370 sq mi	1,370 sq mi	1,370 sq mi
Per Capita	2.9 PPSM	3.2 PPSM	3.5 PPSM
PPSM: *People per square mile*			

Table B: Adams County Population & Geography [8]

2.2. Economics

Adams County's economic profile reflects a strong presence of the public sector/government (13.5%), farming/agriculture (10.4%), and arts/entertainment/recreation (15.8%). There are 2,642 housing units for Adams County's 4,817 residents. [8] A livable wage in Adams County ranges from $15.52 per hour for a single person without children up to $50.70 per hour for a single person with three children – presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [6] The average home value in the county was $484,352 as of August 2023. [9] Unemployment remains above average in Adams County, sitting at 5.6%--well above Idaho's 3.1% state average. The labor participation rate (the proportion of people 16 years old and older who are employed or available for work) in Adams County is extremely low, at just 51%--potentially presenting an opportunity for EMS agencies to recruit from certain segments of the population. [8]

Metric	Data
Total Population (2022)	4,817
Median Age (2021)	54.5 years old
Poverty Rate (2021)	13%
Number of Jobs (2021)	2,480
Average Annual Wage per Job (2021)	$51,270
Unemployment Rate (2023)	5.6%

Table C: Adams County Economic Factors [8]

2.3. Social Determinants of Health

Adams County has a significant lack of primary care physician coverage, at just 2.3 physicians per 10,000 residents. There are fewer primary care physicians in Adams County currently than there were in 2016, prior to significant population growth associated with the COVID-19 pandemic. An estimated 16.4% of residents under the age of 65 are without health insurance. These indicators, paired with a higher than average median age, suggest there may be higher demands on EMS capabilities than other similar sized counties. Adams County is 32nd in Idaho out of 44 counties for health outcomes (length/quality of life, etc.) and 34th in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). [8]

The poverty rate in Adams County was 12.8% in 2021, which is lower than 1999's 15.1% but higher than 1989's 10.9%. While the current poverty rate appears to be trending downward, it remains higher than the average for the state of Idaho. [8]

2.4. Indicator Impacts to EMS

A higher than average poverty rate and poor health metrics, combined with low primary care physician coverage and the above average median age noted above suggests the EMS providers in Adams County may face added coverage burdens and service pressures over and above the norm in Idaho. Centralized EMS facilities in Council and New Meadows create benefits for coverage realities near population centers, however staff recruitment and long-term succession planning may continue to be an issue given age/demographic realities. [8]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Adams County reflects a low call volume, rural area, with just over 400 calls per year between the two taxing districts. No interfacility transfers are conducted by Adams County agencies due to the lack of a hospital in the county.[2]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
City of Riggins Ambulance (Idaho County)	*4*	*0*	4	*N/A*	*N/A*	N/A
Council Valley Ambulance	*150*	*113*	263	*141*	*134*	275
McCall Fire and EMS (Valley County)	*N/A*	*N/A*	N/A	*16*	*3*	19
Meadows Valley Rural Fire District	*87*	*75*	162	*94*	*77*	171
Ambulance Total	*241*	*188*	429	*251*	*214*	465

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Adams County [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Council Valley Ambulance	*6 min*	*7 min*	13 min	51 min	153 min
McCall Fire and EMS (Valley County)	*2 min*	*16 min*	18 min	18 min	69 min
Meadows Valley Rural Fire District	*5 min*	*6 min*	11 min	21 min	66 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Adams County (2022) [2]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or were shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

When a 911 call comes in, Council Valley Ambulance and Meadows Valley Rural Fire District are dispatched by the Adams County Sheriff, a single dispatcher for all fire, EMS, and police. Agencies receive a radio tone to dispatch EMS. Text alerts are also utilized to dispatch Council Valley Ambulance. [1]

4.1.2. EMS Agency Overview

Adams County is serviced primarily by Council Valley Ambulance and Meadows Valley Rural Fire District, both with distinct taxing districts. Meadows Valley is a fire-based ambulance district while Council Valley is a stand-alone EMS agency. They both work closely with Adams County Sheriff's office and work with neighboring counties, as needed. McCall Fire and EMS (Valley County) and Riggins Ambulance (Idaho County) occasionally respond to incidents in north Adams County as well. [1]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Council Valley Ambulance	911 Response Transport	Basic Life Support (BLS)	Scheduled and unscheduled /on-call	PT Career w/ Compensated Volunteers
Meadows Valley Rural Fire District	911 Response Transport	BLS	Scheduled and unscheduled /on-call	FT Career w/ Uncompensated Volunteers

Table F: List of EMS Agencies Located in Adams County [1, 3]

4.1.2.1. Council Valley Ambulance

Council Valley Ambulance, located near Adams County's administrative headquarters, is the EMS hub for southern Adams County—located at 106 Industrial Street in Council. They cover 1,376 square miles of Adams County including Council, Indian Valley, West Mountain, Mesa, Fruitvale, Bear, and Cuprum (Hells Canyon). Regarding call make-up, they utilize Life Flight Network and occasionally Two Bear Air Rescue (Whitefish, MT) for more serious incidents, however most of their calls are medical rather than traumas. They operate with a dedicated EMS/Ambulance taxing district that is overseen by their ambulance advisory board. Their staff are licensed as Emergency Medical Technicians (EMTs) and are staffed by a combination of paid employees and volunteers, 10 of which are EMTs and one non-EMS licensed personnel. They primarily transport to Weiser Memorial Hospital and St. Luke's McCall. If there were additional funds available, they would prioritize the following first: additional personnel, pay increases for current personnel, and training/continuing education. The agency noted challenges with new recruits being able to pass the NREMT initial certification testing standard, and aspirations to eventually be licensed at the Advanced Life Support (ALS) level. [1, 3, 5]

Payor mix: [1]

- Medicare: 50%
- Medicaid: 10%
- Out of pocket: 15%
- Commercial: 25%

4.1.2.2. Meadows Valley Ambulance

Meadows Valley Rural Fire District is a public fire-based ambulance district, covering central Idaho's rural mountainous areas near the towns of New Meadows, Old Meadows, Packer John State Park, the Tamarack Mill, and towards the Idaho County line. Their service is licensed at the BLS level and is primarily staffed with two full-time staff and volunteers who

are made up of 100% EMTs, and four driver/non-certified personnel responding out of one station, located at 200 Highway 95 in New Meadows. Meadows Valley Rural Fire District identified an accumulated $90,000 deficit from years of insufficient operational funding as their biggest budget concern. Based on their location and types of calls (motor vehicle accidents/traumas, stroke, cardiac, suicide), they primarily transport to St. Luke's McCall and utilize Life Flight Network and Air St. Luke's for air transport. If additional funding was available, they would like to see more money going to increase pay for current employees, training new recruits, and equipment upgrades. The agency noted challenges with new recruits being able to pass the initial certification testing standard for the NREMT. Payor mix was not available for this agency. The fire district commissioners were noted as particularly strong partners in their sustainability and operations. [1, 3, 5]

Figure G: Image of Meadows Valley Emergency Services

4.1.3. Hospital Access Overview

Adams County agencies primarily transport to St. Luke's McCall, a 15 bed Critical Access Hospital with a Level IV Trauma Center Time Sensitive Emergency (TSE) designation and obstetrics department, and Weiser Memorial Hospital, a 15 bed Critical Access Hospital. [4, 7] Many remote incidents require utilization of Air St. Luke's given the county's rural nature and distance from major population centers. [1]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Adams County's two agencies are functioning well, although resource limitations and statutory limits on levy funds have outpaced their ability to respond to population growth and increased system demand. While well supported by their respective communities, both agencies lean heavily on partners for their daily operations--including out-of-county hospital facilities and agencies in other counties (i.e. McCall and Weiser). [1, 5]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), EMS agencies in Adams County perceive themselves to be moderately (53/100) stable/sustainable as a combined average.

- **EMS Agency Financial Situation:** Agencies in Adams County are breaking even consistently or significantly underfunded.

- **EMS Agency Communications Strategy and Outreach:** Both agencies indicated some form of a formal/effective communications and outreach strategy for their communities.

- **Community View of EMS Agencies:** Both agencies feel they are viewed in a favorable light by the community.

- **Elected Official Support of EMS Agencies:** Agencies in Adams County are split on whether they feel supported by their oversight entities and the Bureau.

- **Agency & System Response Outlook:** The EMS needs of Adams County are noted to be increasing. Based on internally determined metrics and call volumes, Meadows Valley noted that in the next 5-10 years they will likely need a fully staffed station 24/7. Meadows Valley reports optimism surrounding their extremely dedicated staff and opportunities for continuing education and training. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structures:** Both agencies in Adams County are public agencies. Meadows Valley is a fire-based ambulance district while Council Valley is a stand-alone EMS/Ambulance agency.

- **Service Delivery Partners:** Agencies cite the Medical Director as a supportive partner, along with county commissioners/ambulance board/fire commissioners.

- **Medical Direction:** Agencies are split on how involved the Medical Director is with EMS training, quality assurance and chart review, with one agency noting a stronger level of involvement than the other.

- **Communications & Interoperability:** Dispatch for both agencies are reported to be Emergency Medical Dispatch (EMD) personnel and/or Medical Priority Dispatch System (MPDS) with no cost for dispatch. The radio communications are noted to offer quality interoperability and good reception in town, as well as more rural parts of the county, and when communicating with other counties or agencies.

- **Mutual Aid System & Agreements:** Both agencies have mutual aid agreements with nearby partner agencies. Council reports that if another neighboring agency closed, they would experience higher costs and longer transport times, while Meadows Valley reports ALS services would be impossible to achieve downstream.

- **Community Health EMS (CHEMS):** Neither agency has a CHEMS program. Council is interested in partnering with other agencies to develop one, but Meadows Valley is not looking to develop one at this time.

- **Patient Care Documentation System:** Both agencies utilize IGEMS Patient Care Reporting (IGEMS-PCR) provided by the Bureau for reporting. [1]

4.2.1.3. Response Overview

Overall, Adams County's agencies are running up against location/geography, weather, personnel shortages/coverage, and time of day/coverage impacts on their response performance. These impacts, while inherent to many rural mountainous communities in Idaho, reflect the high level of seasonality apparent in the West Central Mountains region – with long cold winters, heavy snowfall (especially in Northern Adams County), recreation-tourism economy expansion, and an aging population. These performance inhibitors will likely continue to create limitations for Adams County EMS and elevate the importance of working with neighboring agencies through formal regional collaboration. [1, 5]

- **Level(s) of Service:** Both agencies operate at the EMT level of service.

- **Agency Response Concerns:** It was reported that in the last year, each agency experienced difficulty responding to calls 0-10 times.

- **Helicopter Response & Utilization:** Agencies report using helicopters when a patient requires a higher level of care/advanced medical needs including stroke, traumatic injury, and STEMI, as well as when the patient is in a remote location. It was noted that transport times can be upwards of three hours depending on incident locations.

- **Factors Impacting Response Times:** The most significant factors in Adams County that affect response times are:

  - County-wide: location, weather, geography, simultaneous calls, and time of day.

  - Council Valley Ambulance: location, simultaneous calls, weather/personnel shortages, geography, and time of day.

  - Meadows Valley Rural Fire District: location, geography, weather, and time of day.

- **Response to Public Lands:** County-wide, responses to public lands are between 5-10% of calls. One agency reports they are equipped for responses on public lands, while the other reported having little to no equipment to aid in these incidents. [1]

4.2.2. Workforce & Resource Assessment

As with many areas in Idaho, staffing and coverage are critical issues for Adams County's agencies. They experienced poaching of qualified staff from other agencies, especially during COVID. Additional funding is needed for staffing and challenges exist with their ability to compensate volunteers. Recruitment poses some risk given challenges with getting

qualified recruits who can pass the NREMT initial certification testing. Agencies noted that a candidate who fails the test is much less likely to try again and may become discouraged about their future in EMS. [1, 5]

4.2.2.1. Staffing Overview

- **Staffing structure:** Both agencies in Adams County are combination paid/volunteer with full-time, part-time, and on-call staff. One agency is staffed from 8am until 4pm daily with volunteers filling in on nights and weekends. Both agencies allow on-call staff to respond from home.

- **Responder Average Age:** Average age for agency staff in Adams County is 45-54 in Council and 35-44 in Meadows Valley.

- **Staffing numbers:** There are 15 total EMT's and one EMR in Adams County, with the majority of calls being handled by full-time or part-time staff. There are five total non-EMS licensed personnel (typically drivers) also available/on-call.

- **Staffing concerns:** The biggest concerns reported by agencies regarding staffing are burnout, hiring from adjacent cities (competition), the EMS standards for initial certification testing under NREMT and CEUs.

- **Staffing strengths:** Agencies reported staff strengths include being able to meet their needs and high morale among staff.

- **Recruitment & Retention:** To retain staff, agencies note that having more monetary resources and the ability to compensate volunteers would help. It was also reported that agencies are having trouble recruiting and retaining staff with the NREMT initial certification testing standard requirements for the reasons noted above. [1]

4.2.2.2. Training & Education Overview

Both Adams County agencies provide in-house training for their staff and volunteers. Council reports their methods of training include online training, EMS conferences, and in-house training. Meadows Valley utilizes a three-month training schedule with outside and in-house training options. [1, 5]

4.2.2.3. Facilities Overview

- **Station Locations:** There is one station in Council and one station in the Meadows Valley.

- **Station Condition:** In the county, one station is considered to be in good condition with no issues, and the other is reported to be in below average condition.

- **Facility Needs:** Agencies report that they address maintenance issues as they come up and neither agency has a rainy-day fund in place for repairs. Meadows Valley specifically noted their station needs upgrades in the staff living quarters. [1]

4.2.2.4. Equipment/Supplies Overview

While some equipment is aging, generally the agencies in Adams County have functional supplies–noted in 'good' to 'excellent' condition. From a funding perspective, agencies noted some challenges with covering matching funds for grants. [1, 5]

- **Adequacy:** There are some needs/deficiencies with supply/equipment age/condition and functionality. It is noted that in terms of use appropriateness, the supplies and equipment are generally meeting agency needs.

- **Condition:** All BLS equipment and supplies were noted to be in good-to-excellent condition at the agencies in Adams County.

- **Funding:** In the last two years, Council has received EMSAVE grant monies for a power gurney and tablet but noted difficulty in securing matching funds. They have additionally requested funding for vacuum splints, an IV warmer, thermometers, and radios. Meadows Valley requested grant money to fund a new ambulance.

- **Needs/shortages:** Council reports they have no backup funding for equipment. Meadows Valley reports they need a new ambulance and EMS funding. [1]

4.2.3. Financial Overview

The total estimated operating costs for EMS service in Adams County is $412,876, with approximately $235,413 coming from the two taxing districts and $169,799 coming from billing. Billing and tax district funds represent $405,212 in total cost accounting, or 98% of the cost of service for the entire county. [1, 5]

4.2.3.1. Expense & Revenue Overview

Meadows Valley Rural Fire District:

- Operating: -$206,000

- Tax district funds: $119,435

- Billing: $66,402

Council Valley Ambulance: [1]

- Operating: -$206,876

- Personnel: -$155,000

- Carryover: $7,595

- EMS revenue: $123,816

- Tax district funds: $115,978
- Billing: $103,397
- Difference between billings and collected: -$60,255

Meadows Valley is currently running at a slight deficit year over year, which has added up. A special 2023 tax levy helped close this gap, however as population grows, more funding will likely be needed to remedy this difference. Council Valley Ambulance is currently running a modest surplus year over year, allowing it to carry over some funds in the form of a capital reserve, however this surplus reflects an extremely small percentage of overall operating costs. The reserve is likely not sufficient to cover any major costs or 'surprise' expenses downstream, and likely does not allow for implementing any strategic initiatives or value-added items over and above existing operations. [1, 5]

4.2.4. Resource Assessment Additional Factors

The key gaps for Adams County's EMS agencies are with staffing, recruitment, and wages, which all reflect noted challenges with personnel coverage. The lack of funding does not allow for capital planning to shore up deficiencies with current facility repairs, expansion needs associated with population growth, and aging infrastructure. The agencies in Adams County appear to be highly resourceful in their operational approach and collaborative with regional partners. Long term sustainability will continue to be strained given growth, demographic demands, rurality, and resource limitations associated with tax levy rate caps and external funding availability. [1, 5]

REFERENCE LIST

[1] EMS Planning Team. (2023). *Adams County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[5] Interviews with agencies conducted January – August 2023 online and in-person.

[6] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Adams County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16003

[7] St. Luke's Online. (2023). *Obstetrics and Gynecology Facilities Location.* Obstetrics and Gynecology. https://stlukesonline.org/health-services/specialties/obstetrics-and-gynecology

[8] University of Idaho Extension. (2023). *Adams County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16003

[9] Zillow. (2023). *Adams County Home Values*. Zillow. https://www.zillow.com/home-values/355/adams-county-id/

IDAHO COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by its extremely large size (the largest geographic county in Idaho), ultra-rural/remote features, low-population, disparate agency operating structures, and an aging citizenry, Idaho County's EMS system appears to be high functioning thanks to a dedicated volunteer base—despite limited resources. Even so, they are facing challenges with organizational solvency, volunteer availability, shift coverage (especially in very remote areas), recruitment, and critical personnel retiring out (succession planning). Multiple organizational structures exist in Idaho County from ambulance taxing districts with career staff to Quick Response Units (QRUs) with virtually no funding outside of annual fundraisers. Some areas of the county are so remote that they rely significantly on air ambulance response, even for Basic Life Support (BLS) incidents. There is limited coordination, and therefore minimal uniformity between the EMS structures in Idaho County, and while elected leaders are proud of the good work being done by many volunteers, very few resources are prioritized for the EMS system. Despite the lack of uniformity, agencies communicate regularly with one another and service delivery partners, such as law enforcement, to ensure the best patient outcomes and response capabilities possible.

Many agencies noted frustration with the requirements for EMS personnel to become certified and view the initial National Registry of Emergency Technicians (NREMT) certification testing standard as a barrier to staffing needed positions. Additionally, some volunteer agencies noted challenges with communication with the state, which has impacted administrative burden and local operational outcomes. There may be opportunities to incentivize recruitment, initial training, and retention for personnel, and it is likely that some regional collaborative structures and/or consolidation could go a long way in shoring up coverage issues. This is reflected by the fact that QRUs in the area are largely unfunded, with several idling operations depending on call volumes and volunteer availability in recent years. Generally, agencies advocated for less regulation, and enhanced

state funding opportunities in this assessment, as well as EMS being designated as an essential service by the State of Idaho.

Strengths	Opportunities
• Dedicated volunteers cover an enormous amount of territory with limited resources (4.2.1.1 & 4.2.2.1) • Relatively good community health outcomes despite relatively unhealthy indicators (2.3)	• Resource collaboration and/or consolidation of agency structures (4.2.4) • Central county-wide taxing district model (4.2.4) • Leverage high primary care provider (PCP) presence to enhance community health metrics (2.3)
Challenges	**Threats**
• Disparate organizational structures create coverage challenges (4.2.2.1) • High resource requirements for low population/call volumes (4.2.3.2) • Enormous geographic size/per capita realities (2.1)	• Aging population impacts EMS demand, coverage and recruitment (2.1) • Tax averse political landscape (4.2.4)

Table A: Idaho County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Idaho County encompasses 8,503 square miles and had a population of 17,593 in 2022, reflecting some of the lowest population density in the United States. The population grew at 8.2% between 2010-2022, compared to steeper growth trends seen statewide (23.7%). In 2021, 93.1% of the population identified themselves as white, and 3.9% of the population identified themselves as Hispanic. The median age in 2021 was 49.9 in Idaho County, considerably older than the median age in all of Idaho at 37.4. A total of 28.9% of the population is 65 and older, compared to 16.6% in Idaho, indicating an aging population. [11]

Demographic	2010	2020	2022
Population	16,267	16,588	17,593
Land Area	8,503 sq mi	8,503 sq mi	8,503 sq mi
Per Capita	1.9 PPSM	2.0 PPSM	2.1 PPSM
PPSM: *People per square mile*			

Table B: Idaho County Population & Geography [11]

2.2. Economics

In Idaho County, government jobs make up 15.5% of employment followed by retail trade at 10.0%, and farming at 9.4%. There are 8,273 jobs in Idaho County, with a 53% labor force participation rate (the proportion of people 16 years old and older who are employed or available for work). The unemployment rate is 3.9%, compared to 3.5% in Idaho. Wages decreased by 2.2% between 2020-2021, and wages ranked 31st of Idaho's 44 counties. [11] A livable wage in Idaho County ranges from $15.74 per hour for a single person without children up to $51.07 per hour for a single person with three children –presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [6] The average home value in the county was $342,223 as of August 2023. [12] As of 2020 there were 8,872 housing units in Idaho County, representing a significant increase in housing stock from 1990's 6,346 units, with the most growth between 1990-2000 at 18.8%. From 2017-2021, 55.7% of all units were owner occupied, 16.4% were occupied by renters, and 27.9% were vacant. [11]

Metric	Data
Total Population (2022)	17,593
Median Age (2021)	49.9 years old
Poverty Rate (2021)	14%
Number of Jobs (2021)	8,273
Average Annual Wage per Job (2021)	$43,545
Unemployment Rate (2023)	3.9%

Table C: Idaho County Economic Factors [11]

2.3. Social Determinants of Health

Idaho County is ranked 10th in Idaho for health outcomes (length/quality of life, etc.) and 36th in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). The food insecurity rate in Idaho County is 12% for the total population and 15% for those under the age of 18, numbers that are trending downward since 2010. Rates of participation for free or reduced-price school lunches are between 23.9% - 50.4%. The number of PCPs in Idaho County per 10,000 residents is 9.0, compared to 6.3 in Idaho and 7.6 in the US. This number is up notably from 5.5 in 2016. Uninsured individuals under the age of 65 make up 16.2% of the population and 7.1% under the age of 19 are also uninsured. The poverty rate was 13.5% in 2021 and has been generally declining since 1999. The poverty rate for those under the age of 18 was 18.7% and ranked 12th (highest to lowest) of Idaho's 44 counties. For those under the age of five, that rate increases to 26.2% compared to 24.1% in all of Idaho. Between 2016-2020, the poverty rate for those over the age of 65, the rate was 9.9%, two percentage points higher than average in Idaho. [11]

Payor mix: [1]

City of Riggins Ambulance:

- Medicare (Fee Schedule): 85%
- Medicaid (Fee Schedule): 5%
- Commercial: 5%
- Private/Self pay: 5%

Syringa General Hospital Ambulance:

- Medicare (Fee Schedule): 62%
- Medicaid (Fee Schedule): 9%
- Commercial: N/A

- Private/Self pay: N/A

Elk City Ambulance Service, Inc.:

- Medicare (Fee Schedule): 85%
- Medicaid (Fee Schedule): 10%
- Commercial: N/A
- Private/Self pay: N/A

2.4. Indicator Impacts to EMS

Idaho County has extremely high childhood poverty rates and poor health factors, however they buck this trend by ranking 10th in the state for health outcomes. This could be partially attributable to the fact that access to care is greater in Idaho county than in many other parts of the state–at nine providers per 10,000 residents. Even so, 16% of those under 65 are uninsured which likely adds demand pressure and financial pressure (billing challenges) to EMS agencies. A 53% labor participation rate reflects the high amount of retirees in the area, and aging population metrics–adding to the pressures EMS agencies face. Extremely low call volumes and isolated geography present unique challenges for scaling EMS in Idaho County. The system will likely continue to rely heavily on volunteers long into the future in many parts of the county. There appears to be a surplus of housing in Idaho County, however further analysis of vacant units would be needed to determine whether these homes could be made available for EMS personnel. Decreasing wages across the county in recent years could also present an opportunity for career EMS agencies to compete with local industry wages more easily. [11]

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Idaho County agencies responded to a total of 1,233 calls in 2022. The majority of these calls originated from population centers in Riggins, Grangeville, St. Mary's, and Kooskia, while a noteworthy number of incidents still occur in more rural/remote areas. The most remote areas of the county face longer call times due to distance from definitive care and rugged/road, weather, and access realities. [2]

City of Riggins Ambulance reported a total of 205 (2021) and 269 (2022) requests for service. This is a difference from the 159 (2021) and 211 (2022) state-reported 911 EMS calls. The discrepancies in call volume may be due to the fact that the Bureau data is aggregated and filtered, as noted below, from agency reporting. These volumes may reflect 911 calls in and out of their service territory, inter-facility transports (IFTs), or other calls not accounted for in the Bureau's filtered data. [1, 5]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
City of Riggins Ambulance	108	51	159	122	89	211
Elk City Ambulance Service Inc.	35	19	54	36	29	65
Kooskia Ambulance	203	47	250	223	62	285
St. Mary's Health Ambulance	123	43	166	114	33	147
Syringa General Hospital Ambulance	353	100	453	386	88	474
Kamiah Fire-Rescue (Lewis County)	135	30	165	52	0	52
Ambulance Total	957	290	1,247	933	301	1,234
Clearwater QRU	-----	-----	-----	-----	-----	-----
Glenwood Caribel Volunteer Fire District	-----	-----	-----	-----	-----	-----
Lowell QRU	-----	27	27	-----	30	30
Tahoe QRU	-----	14	14	-----	21	21
USFS-Northern Idaho National Forests	-----	-----	-----	-----	-----	-----
White Bird QRU	-----	11	11	-----	-----	-----
Woodland QRU	-----	-----	-----	-----	-----	-----
QRU Total	-----	52	52	-----	51	51

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Idaho County (2021-2022) [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
City of Riggins Ambulance	*9 min*	*6 min*	15 min	47 min	138 min
Clearwater QRU	-----	-----	-----	-----	-----
Elk City Ambulance Service Inc.	*9 min*	*10 min*	19 min	89 min	251 min
Glenwood Caribel Volunteer Fire District	-----	-----	-----	-----	-----
Kamiah Fire-Rescue (Lewis County)	*2 min*	*15 min*	17 min	46 min	129 min
Kooskia Ambulance	*5 min*	*15 min*	20 min	45 min	187 min
Lowell QRU	*9 min*	*23 min*	32 min	-----	119 min
St. Mary's Health Ambulance	*8 min*	*6 min*	14 min	21 min	90 min
Syringa General Hospital Ambulance	*7 min*	*7 min*	14 min	9 min	60 min
Tahoe QRU	*6 min*	*10 min*	16 min	-----	121 min
USFS-Northern Idaho National Forests	-----	-----	-----	-----	-----
White Bird Quick Response Unit	-----	-----	-----	-----	-----
Woodland Quick Response Unit	-----	-----	-----	-----	-----

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Idaho County (2022) [2]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Most 911 calls in Idaho County are routed to the Idaho Sherriff's Office who in turn dispatches the appropriate EMS agency. For the USFS Northern Idaho national forests, their interagency dispatch center is notified and then their EMS providers are notified by radio or text to respond to their internal incidents. [1]

4.1.2. EMS Agency Overview

Idaho County is served by 12 total agencies. The City of Riggins Ambulance and Kooskia Ambulance are both public municipal EMS/ambulance services. Riggins just passed a taxing district, to take effect in 2024. Syringa General Hospital Ambulance is a public hospital-based ambulance service. St. Mary's Health Ambulance is a non-profit hospital ambulance. Elk City Ambulance Service, Inc. is a non-profit EMS/Ambulance. Lowell QRU, Clearwater QRU, Glenwood Caribel Volunteer Fire District, Tahoe QRU, White Bird QRU, and Woodland QRU are all nonprofit EMS/first response agencies. The USFS National Forest Service EMS is a Federal Land Management Agency that serves their employees internally. [1, 2]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
City of Riggins Ambulance	911 Response Transport	Intermediate Life Support (ILS) / Advanced Life Support (ALS)	Scheduled and unscheduled /on-call	Combination FT career with volunteers
Clearwater QRU	911 Response Non-transport	BLS	Unscheduled / on-call	Uncompensated volunteer
Elk City Ambulance Service Inc.	911 Response Transport	ILS/ALS	Unscheduled	Compensated & Uncompensated volunteer
Glenwood Caribel Volunteer Fire District	911 Response Non-transport	BLS	Unscheduled / on-call	Uncompensated volunteer
Kooskia Ambulance	911 Response Transport	ILS	Scheduled and unscheduled / on-call	Compensated volunteer
Lowell QRU	911 Response Non-transport	BLS	Unscheduled / on-call	Uncompensated volunteer
St. Mary's Health Ambulance	911 Response Transport	ALS	Scheduled and unscheduled / on-call	Compensated volunteer
Syringa General Hospital Ambulance	911 Response Transport	ILS	Scheduled and unscheduled / on-call	Compensated volunteers
Tahoe QRU	911 Response Non-transport	ILS	Unscheduled / on-call	Uncompensated volunteer
USFS-Northern Idaho National Forests	Non-public	BLS	Career	FT Compensated; seasonal compensated
White Bird QRU	911 Response Non-transport	BLS	Unscheduled / on-call	Uncompensated volunteer
Woodland QRU	911 Response Non-transport	BLS	Unscheduled / on-call	Uncompensated volunteer

Table F: List of EMS Agencies Located in Idaho County [1, 3]

4.1.2.1. City of Riggins Ambulance Overview

The City of Riggins Ambulance is a public, municipal EMS agency. Their territory is along Highway 95 from milepost 179 to milepost 215, east to Vinegar Creek on the Salmon River

and west to the Seven Devils. They are overseen by the City of Riggins, and their service is licensed at the ILS level, primarily staffed with a combination of volunteer and full-time career staff. Their staffing structure is made up of one full-time employee, 10 Emergency Medical Technicians (EMTs), five Advanced Emergency Medical Technicians (AEMTs), three Paramedics, and seven non-licensed response personnel. They respond out of one station in Riggins and hold mutual aid agreements with other area agencies. Their operating structure is expanding due to the passage of a new taxing district, which will take effect in 2024. If additional funding was available, they identified increased pay for current employees, training existing employees, and providing fringe benefits (i.e. health insurance and retirement plans) as their top three priorities. They typically transport patients to St. Luke's McCall and Syringa Hospital in Grangeville and occasionally by air with Air St. Luke's and Life Flight Network. [1, 3, 5]

4.1.2.2. Clearwater QRU Overview

Clearwater QRU is a non-transport 911 service. They are a private, nonprofit organization licensed at the BLS level of service. They respond out of Clearwater Station at 688 Sally Ann Rd. in Clearwater with volunteers. [3]

4.1.2.3. Elk City Ambulance Service, Inc. Overview

Elk City Ambulance Service, Inc. is a private, non-profit, transport EMS agency overseen by a board that covers a mostly roadless 2,500 square miles from the Salmon River to milepost 23 on Highway 14. They are licensed up to the ILS level. Elk City Ambulance Service Inc.'s staff are all volunteers made up of two EMTs, one AEMT, and three non-licensed response personnel. They respond out of one station located at 65 American River Road in Elk City and transport to Syringa General Hospital and St. Mary's Hospital. For the occasional search and rescue operation that needs air transport, they use Life Flight Network and Two Bear Air Rescue (Whitefish, MT). With additional funding resources, they would prioritize training employees/continuing education, train new recruits, and add more personnel. [1, 3, 5]

4.1.2.4. Glenwood Caribel Volunteer Fire District Overview

Glenwood Caribel Volunteer Fire District is a nonprofit, non-transport 911 service. Their staff is made up of EMT volunteers. They respond out of Station #1 at 402 Caribel Rd. in Kamiah, ID. [3, 5]

4.1.2.5. Kooskia Ambulance Overview

Kooskia Ambulance is a public municipal EMS agency overseen by the City of Kooskia and within Idaho County they cover the cities of Kooskia, Stites, Harpster, Clearwater, Lowell, Syringa, and Powell, as well as parts of the Nez Perce/Clearwater National Forest, campgrounds, hot springs, and wilderness along Highways 12 and 13, covering 115 miles. Their service is licensed at the ILS level. They are staffed by compensated volunteers who are on-call and respond out of the Kooskia Station located at 401 Front Street in Kooskia. They have mutual aid agreements with neighboring agencies. [1, 3, 5]

4.1.2.6. Lowell QRU Overview

Lowell QRU is a private, non-profit EMS/first response service overseen by a board. Their territory covers Highway 12 from milepost 80 to the Montana Border–approximately 80 miles up the Selway Road, and all remote territory in between. Their service is licensed at the BLS level, and they are a volunteer agency with one Emergency Medical Responder, three EMTs, one AEMT, and one non-EMS licensed response personnel. They respond out of one station, a private residence, and are licensed as a non-transport agency. When air transport is needed, they utilize Life Flight Network and Two Bear Air Rescue. Adding more personnel, providing fringe benefits (i.e. health insurance, retirement plans), and equipment upgrades would be their top three priorities if additional funding was made available. [1, 3, 5]

4.1.2.7. St. Mary's Health Ambulance Overview

St. Mary's Health Ambulance is a private, non-profit hospital ambulance serving a rural area around the city of Cottonwood in Idaho County. They are overseen by the hospital board. Their service is licensed at the ALS level with a handful of hospital clinicians who attend to incidents and the majority of their staff are volunteers. They respond out of one station in Cottonwood at St. Mary's Hospital located at 701 Lewiston Street. They have mutual aid agreements with neighboring agencies. [1, 3, 5]

Figure G: Image of St. Mary's Health Ambulance

4.1.2.8. Syringa Hospital Ambulance Overview

Syringa Hospital Ambulance is a public hospital-based service overseen by Syringa Hospital. They are licensed at the ILS level for 911 calls and have an additional license for IFTs, where they often utilize nursing staff. Their staff is paid-on-call/per-call and made up of one Emergency Medical Responder (EMR), two EMTs, 18 AEMTs, and three non-licensed response personnel. Their personnel are compensated volunteers with a part-time manager. They respond out of the Soltman Center, located at 600 W. Main in Grangeville, and primarily transport to Syringa Hospital or St. Joseph's Regional Medical Center for interfacility transfers. They utilize Life Flight Network and Air St. Luke's for air transport. If additional funding was made available, their top three priorities would be providing fringe benefits, adding staff, and increasing pay for current employees. [1, 3, 5]

4.1.2.9. Tahoe QRU Overview

Tahoe QRU is a non-transport 911 service. They operate up to the ILS level of service with volunteer personnel who respond out of one station located at 786 Leitch Creek Road in Kooskia. Tahoe QRU is a private, nonprofit entity overseen by a board. [3]

4.1.2.10. USFS Northern Idaho National Forests Overview

The USFS Northern Idaho National Forest is a Land Management Agency overseen by the Federal Government. They are not dispatched by 911. Their EMS entity covers lands managed by the US Forest Service, including the Nez Perce-Clearwater National Forests and the Idaho Panhandle National Forest from the Salmon River north to the Canadian border and from the Oregon/Washington border to the Montana border. Their service is licensed at the BLS level. They are a career agency staffed with two EMRs, 45 EMTs, and five AEMTs. They identified training and education for existing employees, training new recruits, and equipment upgrades as their priorities if there was additional funding available. They are a non-transport agency but utilize Life Flight Network exclusively for transport, Two Bear Air Rescue out of Montana, the National Guard for search and rescue, and USFS helicopters for agency-specific missions, such as accessing patient, transporting equipment, etc. Additionally, they interface with and send patients with EMS ground transport agencies as they are available. [1, 3, 5]

4.1.2.11. White Bird QRU Overview

White Bird QRU is a 911 response, non-transport service, operating at the EMR level of service with volunteer personnel who respond out of one station located at 212 River Street in White Bird. Their territory is about 25 miles of Highway 95, up Slate Creek and encompassing surrounding backcountry areas. White Bird QRU is a private, non-profit entity overseen by a board. Their personnel are made up of one EMT and one EMR. This agency works occasionally with neighboring agencies but due to being rural, their resources are noted as a challenge. *This agency just recently started responding to incidents again in the summer of 2023 after nearly two years of “idle” status. [3, 5]

4.1.2.12. Woodland QRU Overview

Woodland QRU is a 911 response, non-transport service, operating at the BLS level of service with volunteer personnel who respond out of one station located at 2067 Woodland Road in Kamiah, ID. They are a private, non-profit agency overseen by a board. [3]

4.1.3. Hospital Access Overview

Idaho County agencies utilize the following hospitals: [1, 4]

- St. Luke’s McCall: 15 beds, Time Sensitive Emergency (TSE) designated Level IV Trauma Center, and a Critical Access Hospital with obstetrics care;
- Syringa Hospital in Grangeville: 16 beds, TSE designated Level IV Trauma Center, Critical Access Hospital, and has obstetrics care;

- St. Joseph's Regional Medical Center in Lewiston: 145 beds, TSE designated Level III Trauma and Level II Stroke Center, has obstetrics care; and

- St. Mary's Hospital in Cottonwood: 15 beds, TSE designated Level IV Trauma Center, a Critical Access Hospital with obstetrics care. [7, 8, 9, 10]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Idaho County EMS agencies are either breaking even, getting by with deficits, or reporting they have surpluses. Typically, agencies with distinct community financial support and/or a taxing district report being more solvent/sustainable than those without. Of the survey respondents, all of them have mutual aid agreements with neighboring agencies, a positive for such a rural county, however, communications are an issue as radios are not providing sufficient coverage – likely due to the terrain and vast geographic area. In terms of response times, because of how large the county is with residents spread out among the county, they are quite long due to incident locations. One agency is testing aerial delivery of EMS supplies and Unmanned Aerial System (UAS) program for rural/remote incidents. In Idaho County, EMS personnel take pride in the services they provide patients, and a staff that is well-trained. Location is the top concern for agency response, given geography. [1, 5]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability/Sustainability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), agencies in Idaho County perceive themselves to be moderately to highly (average of 86/100) stable/sustainable, with a range of between 44-90/100. The city-based ambulance agencies and one private agency reported sustainability ratings of 74/100, 80/100, 80/100, and 90/100. Private/non-profit agencies reported lower sustainability ratings of 44/100 and 50/100.

- **EMS Agency Financial Situation:** Half of agencies in Idaho County report breaking even each year. Among the rest, half report having deficits at the end of the year while the other half report being well-funded with a surplus each year. Those with well-defined financial support from their communities tended to report better overall solvency, however staffing and coverage were largely universal challenges.

- **EMS Agency Communications Strategy and Outreach:** Half of the agencies that responded noted having an effective communications and outreach strategy and half of the respondents didn't indicate whether they had one.

- **Community View of EMS Agencies:** All agencies report being viewed in a favorable light by their community.

- **Elected Official Support of EMS Agencies:** Agencies in Idaho County are split on whether or not they feel supported by their oversight entities and the Bureau.

- **Agency & System Response Outlook:** Agencies reported a number of encouraging items, including a pilot program with St. Luke's Health System to utilize video medical control remotely. One agency was able to send personnel to upgrade their current certifications this year with additional follow-on opportunities for upcoming years. In terms of equipment, the well-funded agencies are testing new equipment including aerial delivery of supplies to EMTs and the backcountry via drones through an unmanned aircraft system program. Some challenges that these agencies see as they look into the future are the sustainability of their programs due to aging populations, being under-funded, a lack of incentives for volunteers, and a perceived unwillingness on the part of residents to give their time to volunteer (however one agency noted optimism in volunteer recruitment efforts). Additional concerns include an increased level of care required on the scene of extremely remote incidents as recreationists move further and further into backcountry areas. Areas of agency optimism include the great care patients receive, a staff that is well-trained and dedicated, and using best practices efficiently. In terms of training, one agency noted they were able to increase their scope of practice, another agency reports being well-positioned near the "action" so they can respond to incidents appropriately, and another agency is proud of their ability to provide remote EMS. One agency also noted optimism in their ability to find grant funding. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** The large number of providers are operated independently and have different organizational structures. Riggins Ambulance and Kooskia Ambulance are public municipal EMS providers. Syringa Hospital Ambulance is a public hospital-based ambulance. USFS Northern Idaho National Forests is a Federal Land Management Agency. St. Mary's Health Ambulance is a private non-profit hospital ambulance. Elk City Ambulance Service, Inc. is a private non-profit EMS/ambulance. QRUs are typically private non-profit EMS/first response entities.

- **Service Delivery Partners:** Agencies report good service delivery partners in their Medical Director, neighboring hospitals, and the community.

- **Medical Direction:** The Medical Directors in Idaho County are reported to be moderately involved in training, with good involvement in chart review and quality assurance.

- **Communications & Interoperability:** There are noted deficiencies in the interoperability features and functions to meet Idaho County agency needs, with half of the agencies surveyed reporting that they are not being met. Over half of reporting agencies noted that they do not have quality reception most of the time. When asked whether or not they had reliable communications with neighboring agencies and counties, half of the agencies replied yes, and half replied no.

- **Mutual Aid System & Agreements:** All the reporting agencies except the USFS have mutual aid programs with neighboring agencies. If any agencies closed, it would have a negative effect by increasing response times and depleting resources.

- **Community Health EMS (CHEMS):** One agency has no knowledge of CHEMS programs, two agencies know about CHEMS but do not want to develop a program, two agencies are within one year of developing a program, and two agencies are within 5 years of developing one.

- **Patient Care Documentation System:** All agencies in Idaho County use IGEMS Patient Care Reporting (IGEMS-PCR) for reporting. [1]

4.2.1.3. Response Overview

- **Level(s) of Service:** Agencies in Idaho County operate up to the ILS level of service with all reporting agencies having at least one responder licensed at the AEMT level. One agency reported providing interfacility transport services, however no information was provided regarding how this effects their financial bottom line.

- **Agency Response Concern(s):** All agencies report trouble responding to incidents 0-10 times each in the past year.

- **Helicopter Response & Utilization:** Agencies report helicopter response is required by protocol issued by the medical director for time sensitive emergencies, such as stroke, trauma, and heart attack. For the one federal agency in Idaho County, air transport via helicopter is utilized when an employee is injured and cannot self-extract.

- **Factors Impacting Response Times:** When asked to rank factors impacting response time, agencies noted the following in Idaho County:

  - City of Riggins Ambulance: personnel shortages, location, simultaneous calls, and weather.

  - USFS Northern Idaho National Forests: location, geography, weather, and time of day.

  - Syringa General Hospital Ambulance: location, weather, simultaneous calls, and geography.

  - Elk City Ambulance Service, Inc.: location, personnel shortages, simultaneous calls, and time of day.

  - Lowell QRU: location, geography, weather, and personnel shortages.

- **Response to Public Lands:** In a county as large and rural as Idaho County, agencies are well-versed and well-equipped to respond to incidents on public lands. Types of incidents include calls to trails, hot springs, hunting accidents, river rescues, vehicle and motorcycle accidents, and camping accidents. Equipment that is utilized includes jet boats and ATVs, some operated by EMS providers and others provided by dedicated search and rescue organizations. Response times are typically at least 30 minutes due to distance, terrain, and extrication. [1]

4.2.2. Workforce & Resource Assessment

Though the population of the county is aging and EMS agencies are seeing personnel retire and get older, there are a couple of agencies that reported a younger average age of responders (25-34 years old). Even so, there are many EMS workforce concerns in Idaho County. Some agencies who rely on volunteers are not seeing interest from community members and there is a perception that no one wants to help out. Other agencies have gone to great lengths to create a welcoming, supportive and encouraging recruitment environment, and have enjoyed a positive shift in onboarding, retention, and scheduling outcomes. Many agencies also noted their disagreement with the adoption of training and licensing requirements aligned with the initial NREMT certification testing standard and perceive these to be increasing barriers to new personnel entering the field. To aid with retention of volunteers, agencies noted that compensation and benefits structures could help. Internally, some agencies noted serious challenges with shift coverage despite having plenty of volunteers on their roster. A handful of people were found to be covering most shifts at some agencies, suggesting incentives were vital to overcoming coverage challenges. [1, 5]

4.2.2.1. Staffing Overview

- **Staffing Structure:** In Idaho County, there is one career agency, several volunteer agencies, one combination, and one paid per call agency.

- **Responder Average Age:** Of those that responded, two agencies in Idaho County have average ages of 25-34, two have average ages of 45-54, and one with an average age of 65 or older. Average age data is unavailable for the remaining seven agencies.

- **Staffing Numbers:** Idaho County has at least nine EMRs, 98 EMTs, 51 AEMTs, three Paramedics, 32 non-EMS licensed personnel, and eight ambulance-based clinicians (based on survey responses—data may be incomplete).

- **Staffing Concerns:** Two agencies report being moderately to well-staffed, while the others do not feel adequately staffed. Concerns for staffing include shift coverage and inability to provide mutual aid due to being understaffed.

- **Staffing Strengths:** Idaho County agencies report the following as staffing strengths: the ability to have unlicensed and law enforcement personnel assist during responses; firefighters who are motivated to be EMS licensed; despite being stressed, agencies are high functioning and work cohesively; and dedicated volunteers.

- **Recruitment & Retention:** Agencies note that retention could improve with incentives like health insurance, retirement benefits, monetary resources (sign-on bonuses/shift pay), and promoting the community benefits of a strong EMS system. [1]

4.2.2.2. Training & Education Overview

All Idaho County agencies provide training, including monthly in-house training with CEU's, contracted agencies, an annual conference, online EMS program, and Grangeville EMT Association's annual "Spring Fling" training. [1, 5]

4.2.2.3. Facilities Overview

- **Station Location(s):** Each reporting in Idaho County operates out of one station. Stations are located in Riggins, Clearwater, Cottonwood, Elk City, Grangeville, Kamiah, Kooskia, and White Bird.
- **Station Condition(s):** Reporting agencies noted station condition throughout Idaho County to be between moderate and good (an average of 75/100).
- **Facility Needs:** Facility needs for Idaho County agencies include options for or enhancement of living quarters (under the same roof as EMS), upgraded heating, and insulation. Two agencies reported not having rainy day funds for repairs or unscheduled needs. [1]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** All agencies report having adequate equipment and supplies in the categories of age/condition, functionality, and use appropriateness, except for one agency who reported specific issues with supplies related to application/appropriateness.
- **Condition:** All agencies noted BLS supplies as being in good to excellent condition.
- **Funding:** Agencies in Idaho County have applied for grants for the following items: hydraulic stretchers, automated cardiopulmonary resuscitation (CPR) devices, tablet, satellite internet dish, handheld radio upgrades, and a local repeater for improved communications.
- **Needs/shortages:** Agencies report the following needs for equipment/supplies: patient monitor, new ambulances, and an automated CPR device. One organization says they have a budget line item to cover their needs, another organization reported they rely on donations to fill the gaps. [1]

4.2.3. Financial Overview

Due to a lack of survey responses, it is difficult to assess the overall financial realities of agencies across Idaho County. Available budgetary information is listed below.[1]

4.2.3.1. Expense & Revenue Overview

City of Riggins Ambulance:

- Salaries: $268,872
- Personnel Benefits (Health Insurance): $11,000
- Contract Services: $13,110
- EMS Billing Collection Fees: $4,000
- Fuel/Oil Expense: $8,000
- Department Insurance: $4,952
- Operations & Maintenance: $5,000
- Repair Maintenance Services: $2,000
- Supplies: $11,000
- Telephone/Fax: $400
- Travel and Training: $8,500
- Utilities: $3,000
- Vehicle Repair: $4,000
- Capital Expense: $8,688
- Planned State Grants: $40,000
- Planned Other Grants: $77,337
- Salmon River Ambulance District $124,500
- Ambulance Subscriptions/Memberships: $2,000
- Ambulance Fees from Patients: $181,000
- Misc Income: $45,962 (Donations and fundraisers)
- Grants Planned to be Received: $117,337
- LEVY RATE: 0.04%

US Forest Service:

- Operating expenses: -$12,000

Syringa Hospital Ambulance:

- Operating expenses: -$175,000
- EMS personnel expense: -$140,000
- Total EMS revenue: $420,000
- No carryover from previous year
- Surplus: $105,000

Elk City Ambulance Service, Inc.

- Operating expenses: -$17,000
- Capital expenses: -$250,000
- Personnel expenses: -$500-600
- Tax support: $250
- Billing revenue: $35,000
- 45% negative billing revenue vs gross revenue
- Grants: $5,000
- Donations: $200
- Deficit: -$162,150

Lowell QRU

- Operating expenses: -$6,000
- Carryover/reserves: $10,000
- Other revenue (grants, donations, etc.): $12,000
- Surplus: $16,000

Woodland QRU - IRS 990 search, the year reported is 2018 (most recent 990)

- Expenses: -$12,730
- Total revenue: $19,367
- Carryover: $2,000
- Surplus: $8,637

Financial data was not available for Glenwood Caribel Volunteer Fire District, Kooskia Ambulance, St. Mary's Ambulance, Tahoe QRU, and White Bird QRU. [1]

4.2.4. Resource Assessment Additional Factors

Idaho County agencies bear the financial burden of a high Medicare/Medicaid population, low call volumes, massive geographic challenges, and an aging citizenry. Even so, the agencies and their staffs are resilient and solution oriented, often working across county lines and with local law enforcement. Agencies noted that they would welcome additional support for numerous challenges they face related to staffing, equipment, supplies, facilities, and training, however they did not feel a taxing district could be successful in many parts of the county. Riggins Ambulance was successful in passing a taxing district recently and may provide a blueprint for how this could get done in other parts of Idaho County. Agencies note some challenges and frustrations with training standards (NREMT initial certification testing standard) and engagement from the Bureau. More direct outreach and engagement from the Bureau could be helpful. Agencies noted a desire to recruit more from the large retiree pool in Idaho County. There are other foundational challenges in Idaho County, including relatively stagnant sector growth and higher than average poverty metrics, especially for young children.

Some agencies noted the EMS candidate pool being a challenge with younger generations, many of whom must work multiple jobs to make ends meet or are disinterested in the profession. Others cited a cultural shift towards supporting more diverse candidates and providing more training assistance as yielding better recruitment and retention outcomes. Some agencies noted the need for mentorship or support structures for volunteers to ensure they are successful during their training, and afterwards. Others already have these systems in place. Additional barriers exist from a financial perspective with the fact that QRUs cannot bill or transport. This puts additional stresses on already limited resources, especially in remote/outlying areas. Additional technical assistance with grant writing and administration was noted as a potential service the state should consider offering. Idaho County will likely always rely heavily on volunteers for its EMS system due to its low population and large geography. Making the culture of volunteerism welcoming and creating incentives for people to join EMS agencies can present challenges, but as noted above, there are agencies locally that are meeting this challenge. Some additional strategic collaboration around staffing, incentives, funding, and coverage between agencies, potentially including Lewis, Nez Perce, and Adams Counties, could help shore up many of the noted sustainability challenges, especially for the agencies that are running deficits year over year. Scaling against

population density and geographic metrics will likely remain a challenge but innovative partnerships and/or consolidation opportunities are worth evaluating. [1, 5]

REFERENCE LIST

[1] EMS Planning Team. (2023). *Idaho County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[5] Interviews with agencies conducted January – August 2023 online and in-person.

[6] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Idaho County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16049

[7] St. Joseph Regional Medical Center. (2023). *Maternity Care – Family Beginnings*. St. Joseph Regional Medical Center. https://sjrmc.org/maternity

[8] St. Luke's Online. (2023). *Obstetrics and Gynecology Facilities Location.* Obstetrics and Gynecology. https://stlukesonline.org/health-services/specialties/obstetrics-and-gynecology

[9] St. Mary's Health. (2023). *Family Birth Center*. St. Mary's Health. https://smh-cvh.org/family-birth-center/

[10] Syringa Hospitals and Clinics. (2023). *Syringa Hospital & Clinics OB Services, Providers and Support Staff*. Syringa Hospitals and Clinics. https://www.syringahospital.org/getpage.php?name=OB_Services

[11] University of Idaho Extension. (2023). *Idaho County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16049

[12] Zillow. (2023). *Idaho County Home Values*. Zillow. https://www.zillow.com/home-values/566/id/

LEWIS COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by rural, low-population features, poor community health metrics, and an aging population, Lewis County's EMS system is facing challenges with base funding, coverage, recruitment, equipment/supplies, and critical personnel retiring out. The majority of the county includes the Nez Perce Indian Reservation and four municipalities with EMS agencies: Craigmont, Kamiah, Nezperce (county seat), and Winchester. The community has seen a significant slowdown of economic activity in recent years, which creates unique challenges for volunteer EMS. Having thriving base industries in rural communities expands the pool from which talent can be recruited. This pool in Lewis County is not very deep or wide. The 'solutions' in Lewis County are likely dynamic, challenging, and multi-faceted; potentially including strategies not directly related to EMS, like economic expansion and bringing in a higher percentage of young families and good paying jobs. Concurrently, the county could explore collaborative EMS operating structures across a more regional approach (consolidation) to help with scaling of disparate resources. These are not simple tasks, but the committed and passionate existing EMS practitioners in the area provide a great foundation going forward.

Strengths	Opportunities
• Committed volunteer staff (4.2.2.1) • Close proximity to hospitals in Lewiston, Grangeville and Cottonwood (4.1.3)	• Expanded coordination/consolidation with Idaho and Nez Perce Counties for coverage/staff sharing (3.1) • Available housing stock, despite loss of units, could present opportunities (2.2)
Challenges	**Threats**
• Recruitment of new staff/incentivizing shift coverage (4.2.2.1) • Seasonality of peak recreational activities (2.2) • Some equipment and supplies are aging and having functionality issues (4.2.2.4) • Relatively poor community health indicators and outcomes exacerbates demands on EMS (2.3)	• Reliance on limited volunteer pool, especially in western part of the county (4.1.2) • Retirement/retainment of limited key personnel (4.2.2.1) • Aging population presents challenges for recruitment and higher EMS service demand (2.1) • Loss of housing units (2.2)

Table A: Lewis County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Located on the Camas Prairie in central Idaho, Lewis County has a population of 3,763, with 7.8 people per square mile. Between 2010-2022 it had one of the lowest population changes for counties in Idaho. The median age in Lewis County was 47 years old in 2021 (eight and 10 years older than the US and Idaho median ages, respectively). In 2021, 22.7% of the population was under the age of 18, compared to 24.7% in Idaho, and 27.7% of the population was aged 65 and older, compared to 16.6% in the state as a whole. [10]

In 2022, 12.9% of the population reported identifying as being a race other than white, compared to 7.4% in all of Idaho. Of the non-white population, people reported themselves as the following: 49.8% American Indian and Alaska Natives, 31.2% two or more races, 13.4% Asian/Pacific Islander, and 5.6% black. Hispanic (white and non-white) residents made up 5.5% of the population in Lewis County in 2022 compared to 13.5% in Idaho. The Hispanic population grew by 190.1% in Lewis County between 2000-2022. [10]

Demographic	2010	2020	2022
Population	3,827	3,528	3,763
Land Area	480 sq mi	480 sq mi	480 sq mi
Per Capita	8.0 PPSM	7.4 PPSM	7.8 PPSM
***PPSM:** People per square mile*			

Table B: Lewis County Population & Geography [10]

2.2 Economics

The number of jobs available in Lewis County increased by 3% from 2010-2020, a slowdown from the growth seen between 2000-2010 (23% during that time). In 2021, the number of jobs ranked 42nd of Idaho's 44 counties. The top employment by industries in Lewis County are government (18.8%), farm and retail trade (each employing 10.3% of workers), and healthcare and social assistance (8.3%). The labor participation rate (the proportion of people 16 years old and older who are employed or available for work) in Lewis County is extremely low, at just 50%. Lewis County in 2021 had 1,814 housing units, a decrease of 3.7% from 2010 to 2020. Between 2017-2021, 64.1% of all units were occupied by owners,

21.7% occupied by renters, and 14.2% were vacant. [10] A livable wage in Lewis County ranges from $15.29 per hour for a single person without children up to $54.83 per hour for a single person with three children – presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [6] The average home value in the county was $259,943 as of August 2023. [11] Lewis County's average unemployment rate in 2021 was 5.7%, compared to 3.5% in Idaho and ranked fourth highest of Idaho's 44 counties. [10] Winchester State Park is a popular seasonal recreational venue within the county, supporting additional economic activity regionally. [5]

Metric	Data
Total Population (2022)	3,763
Median Age (2021)	47.2 years old
Poverty Rate (2021)	13%
Number of Jobs (2021)	2,466
Average Annual Wage per Job (2021)	$39,358
Unemployment Rate (2023)	3.8%

Table C: Lewis County Economic Factors [10]

2.3. Social Determinants of Health

Lewis County is 39th among the 44 counties in Idaho for health outcomes (length/quality of life, etc.) and 38th in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). In 2020, 15% of the population faced food insecurity (including 20% of children under the age of 18). This is significant considering food insecurity has consequences for workforce and volunteer participation, income, educational outcomes, and health metrics—all factors that impact the county's rural EMS system and outcomes. [10]

The poverty rate in Lewis County was 13.2% in 2021, up from 12.0% in 1999, but below 15.6% in 1989. For those under the age of 18, that number jumps to 20.9% compared to 12.9% in 1999 and is 6th highest among counties in Idaho. For those 65 and older, the poverty rate from 2016 to 2020 was 10.3%. [10]

Access to primary care physicians (PCPs) in Lewis County was highest in the recent past in 2017 when there were 5.2 PCPs per 10,000 residents. This number was cut almost in half by 2020, down to 2.8, well below the average for Idaho. In 2019, 15.2% of people under the age of 65 did not have health insurance, compared to 12.7% in all of Idaho, and ranked 18th out of the 44 counties in the state. The under-18 population without health insurance was 6%, ranking 21st among the Idaho counties. [10]

Payor mix: [1]

Nezperce Ambulance:

- Medicare (Fee Schedule): 50%
- Medicaid (Fee Schedule): 20%
- Commercial: 12%
- Private/Self pay: 18%

Kamiah Fire-Rescue - not reported

Winchester Quick Response Unit (QRU) - not reported

Craigmont QRU - not reported

2.4. Indicator Impact to EMS

Considering health indicators, high unemployment, and poverty rates, Lewis County's EMS agencies will likely see continued pressure on its sustainability. With an aging population that is 39th of the 44 counties in Idaho for health outcomes and has only 2.8 primary care physicians per 10,000 residents, Lewis County will see increasing demands on the EMS agencies to provide more than just baseline Basic Life Support (BLS) response. Additionally, with a fifth of its children food insecure, as they grow up, the county may see effects on volunteerism rates, with parents trying to make ends meet before being willing to assist an EMS agency. Job growth in the county has slowed, as well. EMS agencies may have an opportunity to strategically recruit against the above average unemployment rate, depending on incentives, however further analysis is required regarding unemployment and local economic features. [10]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In 2022, Lewis County saw 513 calls–with two outside agencies, Lewiston Fire Department (Nez Perce County) and St. Mary's Health Ambulance (Idaho County), assisting with eight of those. Kamiah Fire Rescue handles the majority of the incident response, followed by Nezperce Ambulance, Inc. These two agencies also saw the longest call times in 2022 due to geography and location. [2]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Kamiah Fire Rescue (Lewis County	*217*	*60*	277	*222*	*77*	299
Lewiston Fire Department (Nez Perce County)	*6*	-----	6	*4*	-----	4
Nezperce Ambulance, Inc.	*152*	*46*	198	*141*	*36*	177
St. Mary's Health Ambulance (Idaho County)	*5*	-----	5	*4*	-----	4
Ambulance Total	*380*	*106*	486	*371*	*113*	484
Craigmont QRU	-----	*54*	54	-----	*27*	27
Winchester QRU	-----	*112*	112	-----	*104*	104
QRU Total	-----	*166*	166	-----	*131*	131

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Lewis County [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Craigmont QRU	*6 min*	*4 min*	10 min	----	44 min
Kamiah Fire Rescue	*2 min*	*5 min*	7 min	35 min	99 min
Lewiston Fire Department (Nez Perce County)	*3 min*	*31 min*	34 min	54 min	164 min
Nezperce Ambulance, Inc.	*7 min*	*18 min*	25 min	29 min	93 min
St. Mary's Health Ambulance (Idaho County)	*7 min*	*26 min*	33 min	34 min	113 min
Winchester QRU	*5 min*	*3 min*	8 min	----	75 min
Countywide Average	*4 min*	*12 min*	16 min	50 min	87 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Lewis County (2022) [2]

SECTION

4

CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Winchester QRU, Craigmont QRU, and Nezperce Ambulance respond to calls that are taken by the Lewis County Sheriff's Office who then dispatch the agency. Kamiah Fire Rescue responds to 911 calls from Lewis and Idaho Counties. Idaho County will transfer calls to Lewis County when deemed necessary (determined by geography). [1]

4.1.2. EMS Agency Overview

Lewis County agencies are largely volunteer-dependent organizations, with one exception. Kamiah Fire Rescue is a municipal fire-based ambulance agency with career staff. Winchester QRU is a municipal EMS First Response agency. Craigmont QRU is a private, non-profit EMS/first response agency. Nezperce Ambulance is a private non-profit EMS/ambulance agency. [1]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Craigmont QRU	911 Response Non-Transport	BLS	Unscheduled	Uncompensated Volunteer
Kamiah Fire Rescue	911 Response Transport	Advanced Life Support (ALS)	Scheduled & Unscheduled	Full Time, Part Time on Call
Nezperce Ambulance	911 Response Transport	Intermediate Life Support (ILS)	Unscheduled	Compensated per Call Volunteer
Winchester QRU	911 Response Non-Transport	BLS	Unscheduled	Uncompensated Volunteer

Table F: List of EMS Agencies Located in Lewis County [1 , 3]

4.1.2.1. Craigmont QRU Overview

Craigmont QRU is a private non-profit EMS non-transport agency that operates out of one station located at 116 N. Division St. in Craigmont. They cover from Mohler Road to Reubens Road along Highway 95. Their northern boundary is Gifford-Reubens Rd. and Talmaks Rd. to the Lewis County boundary, then east and north along the county boundary. They operate outside of this boundary on occasion, if requested by the Lewis County Sheriff's Office. Their service is licensed at the BLS level and staffed by uncompensated volunteers who are part-time on-call. They are staffed with one Emergency Medical Responder (EMR), five Emergency Medical Technicians (EMTs, two of whom cover most shifts), one Advanced Emergency Medical Technician (AEMT) who is in town 20-25% of the time, and one non-EMS licensed response personnel. If they had additional funding, they would allocate resources to the following: add more personnel, equipment upgrades, and train new recruits. [1, 3, 5]

4.1.2.2. Kamiah Fire Rescue Overview

Kamiah Fire Rescue is a public, municipal fire-based ambulance agency overseen by the City of Kamiah responding out of one station at 511 Main St. They cover 343 square miles in the eastern part of Lewis County between mile markers 54 to 72 on Highway 12. They also cover areas in Idaho County (see section 3.1 in Idaho County's report for additional call volume data). They are licensed at the ALS level and have seven full-time staff plus volunteers. Their roster includes six EMTs, two AEMTs, and four Paramedics. If additional funding were available, they would prioritize adding more employees/personnel, increasing pay for existing employees, and training for existing employees, to include continuing education. Based on location and call types, they primarily transport to Clearwater Valley Hospital, St. Mary's Hospital, and Syringa Hospital. Kamiah Fire Rescue is one of few career agencies in the region. [1, 3, 5]

Figure G: Image of Kamiah Fire-Rescue

4.1.2.3. Nezperce Ambulance Overview

Nezperce Ambulance is a private, non-profit EMS agency licensed at the ILS level. They are located at 509 5th Ave in Nezperce. In Lewis County, they cover roughly 625 square miles, including sections of the Highway 95 corridor to the Idaho County and Nez Perce County borders; plus the towns of Nezperce, Craigmont, Reubens, Winchester, Winchester Lake, and unincorporated areas. They also cover sections of Highway 64, Highway 7, and Highway 162 as needed. Their staff is made up of volunteer personnel and includes eight EMTs, one AEMT, and five non-EMS personnel. They transport to St. Mary's Hospital in Cottonwood, St. Joseph's Regional Medical Center in Lewiston, and Syringa Hospital in Grangeville. When a helicopter is necessary, they typically work with Life Flight Network. If additional funding were available, they would prioritize adding more personnel, training new recruits, and equipment upgrades. [1, 3, 5]

4.1.2.4. Winchester QRU Overview

Winchester QRU is a public, municipal EMS non-transport agency overseen by the City of Winchester, responding out of one station located at 501 Nez Perce Avenue in Winchester. They cover 190 square miles of Lewis County including Winchester and its surrounding communities. Their service is licensed at the BLS level, staffed by one EMR, five EMTs, and two AEMTs. If additional funding were made available, they would prioritize the following: training existing employees/continuing education, training new recruits, and equipment upgrades. They occasionally assist with incidents where patients are transported by Life Flight Network, and approximately 25% of their calls are at the nearby psychiatric hospital. [1, 3, 5]

Figure H: Image of Winchester QRU

4.1.3. Hospital Access Overview

Lewis County agencies utilize the following hospitals: St. Mary's Hospital in Cottonwood, Syringa Hospital in Grangeville, and St. Joseph's Regional Medical Center in Lewiston. [1] St. Mary's Hospital and Syringa Hospital are Time Sensitive Emergency (TSE) designated Level IV Trauma and Critical Access hospitals with 15 and 16 beds, respectively. St. Joseph's is a 145-bed hospital and TSE designated Level III Trauma and Level II Stroke Center and has obstetrics care. [4, 7, 8, 9]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Overall, the agencies in Lewis County are facing sustainability challenges related to funding and staffing year over year. They reported low confidence in their stability with all the agencies breaking even or being significantly underfunded. EMS agencies have little optimism about their future, but they do feel they are able to rely upon a few highly qualified individuals for shift coverage. Burnout is a concern. However, without a flow of capital and volunteer participation, agencies are not sure how they will get by in the future, with one noting that they may be out of business within two to three years if something does not change. A bright spot is that mutual aid agreements are in place, and the rural fire districts were identified as strong partners. Some agencies reported not having sufficient support from their oversight entities and the Bureau. [1, 5]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), agencies in Lewis County noted to have low to moderate sustainability (averaging 41/100) based on feedback from all the agencies.

- **EMS Agency Financial Situation:** Agencies report they are breaking even consistently or are significantly underfunded.

- **EMS Agency Communications Strategy and Outreach:** Agencies in Lewis County report not having a formal communications and outreach strategy.

- **Community View of EMS Agencies:** Most agencies in Lewis County report a positive perception by their community, with only one agency reported neither agreeing nor disagreeing with that statement.

- **Elected Official Support of EMS Agencies:** Agencies in Lewis County are neutral or do not feel well supported by local oversight entities. Half of the agencies feel supported by the Bureau, the others are split between a neutral feeling and not feeling well-supported.

- **Agency & System Response Outlook:** While agencies report cautious enthusiasm, there is not a lot of optimism surrounding the future of EMS in Lewis County. Agencies report that without the necessary funding and volunteer participation they

do not see themselves surviving. Any new funding will go toward new technology, new equipment, and operational advancements so they can continue to provide the best care with the best technology and equipment. Lewis County reports optimism around sufficiently providing services, being resilient, knowledgeable, and experienced personnel, cooperation with other agencies and within agencies, and a community that holds them in high regard. Additionally, it was noted that there are a few highly qualified individuals dedicated to responding to incidents/key shift coverage. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Kamiah Fire Rescue is a public, municipal fire and EMS based ambulance. Winchester QRU is a public, municipal EMS first response agency. Craigmont QRU is a private, nonprofit EMS/first response agency. Nezperce Ambulance is a private, nonprofit ambulance/first response agency.

- **Service Delivery Partners:** The Medical Director, the community, hospitals, and city/municipal government are all listed as strong partners. Craigmont Volunteer Fire, Nezperce Rural Fire, and the two area QRUs were also reported as strong partners.

- **Medical Direction:** The Medical Director is reported to have limited involvement in EMS training, quality assurance, and chart review.

- **Communications & Interoperability:** With the exception of one agency, it is reported that radios offer interoperability features and functions that meet the needs of the agency; radios offer quality reception most of the time and allow agencies to reliably communicate with each other.

- **Mutual Aid System & Agreements:** All agencies have formal written mutual aid agreements. If another nearby agency closed, it would result in increased call volume, increased wait time for patients, and increased stress on personnel.

- **Community Health EMS (CHEMS):** All agencies reported having familiarity with the CHEMS program, however three of the four are not interested in developing a program and one would be interested in partnering with other agencies to develop one.

- **Patient Care Documentation System:** Lewis County agencies utilize the IGEMS Patient Care Reporting (PCR) system provided by the Bureau for their documentation/reporting system. [1]

4.2.1.3. Response Overview

- **Levels of Service:** Two of the four agencies in Lewis County operate at the BLS level of care, another operates at the ILS level, and one operates at the ALS level.

- **Agency Response Concerns:** Across the county, it was reported that agencies had difficulty responding to calls more than 30 times in 2022.

- **Helicopter Response & Utilization:** Agencies in Lewis County utilize helicopter transport for more serious incidents, including extended vehicle extrication, trauma, stroke, and heart attack. Additionally, when an incident occurs in a remote location and ground transport is not an option, helicopters will be called in. Helicopter responses are limited between late spring and early fall due to weather concerns.

- **Factors Affecting Response Times:** The most significant factors impacting response time for agencies in Lewis County are:

  - Craigmont QRU: personnel shortages, location, time of day, and weather.

  - Kamiah Fire Rescue: location, personnel shortages, time of day, and geography.

  - Nezperce Ambulance: location, geography, weather, and simultaneous calls.

  - Winchester QRU: location, geography, weather, and personnel shortages.

- **Response to Public Lands:** Most agencies reported not having the correct equipment to respond to calls on public lands, relying on outside entities for more serious or remote incidents. Vehicles capable of public land/remote access were noted as being older and in mediocre condition, and not typically capable of transport. For those that do respond to public lands, a significant increase in call times was noted (10-20% increase in total call time allocation for the year). [1]

4.2.2. Workforce & Resource Assessment

Lewis County's EMS agencies report being severely understaffed and unable to cover shifts. Like many other parts of rural Idaho, many volunteers are nearing retirement age. The reliance on volunteers limits reliable response and coverage metrics for the agencies and puts extra stress on local people who typically have other personal and professional responsibilities. Agencies reported a desire to see additional incentive funding options to help with compensation, as well as a pipeline to help folks cover the cost of initial training. Volunteer agencies also noted some concerns with the initial National Registry of Emergency Technicians (NREMT) certification testing standard being too onerous and a high barrier to entry for new recruits. Agencies noted that a candidate who fails the test is much less likely to try again and may become discouraged about their future in EMS. Multiple respondents noted the cultural challenges with volunteerism being more difficult today than in years past. [1, 5]

4.2.2.1. Staffing Overview

- **Staffing structure:** One agency operates with a combination of scheduled/unscheduled shifts, two others are uncompensated volunteer agencies, and one is paid-on-call/per-call.

- **Responder Average Age:** Half the agencies in Lewis County have an average age of 35-44, while the other half are 45-54.

- **Staffing numbers:** Agencies reported two EMRs, 24 EMTs, six AEMTs, four Paramedics, and 10 non-EMS certified responses personnel in Lewis County. All Paramedics work for Kamiah Fire Rescue.

- **Staffing concerns:** Lewis County agencies feel they are severely understaffed and noted concerns with an aging workforce. When staff are out sick or injured and cannot work, there are not enough personnel to cover shifts. In general, there are not enough staff to cover all the shifts and days. Because of low staff numbers, volunteer-reliant agencies rely on community members to be on-call 24/7. Another agency reports they do not have required shifts, they hope volunteers are in town and can respond when an incident requires them. One agency reports having staff who commute five hours because they are unable to afford housing.

- **Staffing strengths:** Despite the staffing concerns, Lewis County EMS agencies report having dedicated staff and volunteers.

- **Recruitment & Retention:** To retain staff, agencies would like to see increased pay and benefits, free initial training, and continuing education opportunities. In addition, state tax breaks or paying volunteers per-call would help retain staff. [1]

4.2.2.2. Training & Education Overview

All agencies in Lewis County provide their own in-house training online and in-person with programming through the Bureau, Idaho Fire Service Training, and other institutions. Agencies report their personnel typically get their initial training through the Lewis Clark State College Workforce Training EMT Program, St. Mary's Hospital, or another regional EMS agency training. Some agencies also utilize Life Flight Network's trainings. For refresher courses, agencies provide in-house training with a certified Idaho EMS Instructor, regional EMS conferences, or other regional EMS agency training. [1]

4.2.2.3. Facilities Overview

- **Station Location(s):** The agencies in Lewis County operate out of one station each in Craigmont, Kamiah, Nezperce, and Winchester.

- **Station Condition(s):** Station conditions vary in the county from moderate to excellent. Two of the agency facilities are reported to be fairly new.

- **Facility Needs:** For half of the agencies in Lewis County, municipalities cover the cost of repairs. The other half of agencies do not have rainy day funds–staff and volunteers will coordinate any repairs needed. It was noted that eventually some facilities will need to grow to accommodate response vehicle size and storage needs, as well as housing if paid staff is necessary or becomes necessary. [1]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Equipment was reported to generally meet needs in terms of use appropriateness, however some agencies noted challenges with age, condition, and functionality.
- **Condition:** Equipment condition was generally noted to be good to excellent for most agencies, with some noting challenges (mediocre to poor condition) with portable handheld radios, mobile radios, defibrillators, patient monitors, and portable suction devices.
- **Funding:** One agency has applied for funding with three separate grant applications for a new ambulance in the last two years, but they have not yet been awarded funds. Another agency was awarded $75k for a new vehicle. Funding for extrication equipment and radios was also noted.
- **Needs/shortages:** Lewis County agencies reported needing additional funding to cover the cost of a new vehicle and a new defibrillator. It was noted that supplies/equipment needs can be difficult to plan for and stay ahead of. [1]

4.2.3. Financial Overview

Agencies in Lewis County report no levy rate/taxing district, with limited reimbursement from Medicaid, Medicare, or Indian Health Services. As a fee-for-service only agency, Kamiah Fire Rescue faces regular budgetary challenges. Twenty-five percent of the patient population of Nezperce Ambulance is self-pay with no opportunity to collect on fees. Community health, demographic, and economic metrics for the county support these trends. The total estimated EMS operating cost in Lewis County is approximately $753,546, not accounting for capital expenses. [1, 5]

4.2.3.1. Expense & Revenue Overview

Craigmont QRU:

- Operating expenses: -$2,000-2,500
- Personnel expenses: -$400
- Donations/grants: $2,077
- Deficit: approx. $900

Kamiah Fire Rescue:

- Operating expenses: -$700,000
- Capital Expenses: -$55,000

- Personnel Costs: -$600,000
- Interfacility Transfer revenue: -$65,000
- Billing revenue: $357,000
- Donations/Grants: $155,000
- Billed $757,000 and only received $357,000
- Deficit: $551,000

Nezperce Ambulance:

- Operating expenses: -$46,546
- Personnel expenses: -$8,710
- Carryover/reserves: $20,800
- Billing revenue: $62,124
- Donations: $3,500
- Grants: $10,000
- Surplus: $41,168

Winchester QRU:

- Operating expenses: -$4,500
- Capital expenses: -$85,000
- Personnel expenses: $0
- Carryover/reserve: $1,500
- Tax support: $1,322
- Donations/grants: $975
- Deficit: $17,297
- County deficit: $528,029 [1]

4.2.4. Resource Assessment Additional Factors

Lewis County has imminent needs with staffing, funding, coverage, training, equipment, and supplies to achieve short- and long-term sustainability. Opportunities may exist for enhanced coordination or potential consolidation with bordering counties (specifically Idaho and Nez Perce) for coverage and staff/resource sharing. Scale will likely be a persistent challenge for Lewis County EMS, given low population density and cost metrics. Additionally, capital to help with recruitment and retention incentives and coverage structures may enhance sustainability metrics for the EMS landscape in Lewis County into the future—however these factors need to be prioritized. Additional significant gaps in local economic factors like sector growth and population growth (which support volunteerism metrics) will likely continue to impact Lewis County going forward. Agencies also noted the importance of EMS being designated an essential service locally and state-wide as being areas of opportunity, and the need for public education about the important role EMS agencies play in rural communities. [1, 5]

REFERENCE LIST

[1] EMS Planning Team. (2023). *Lewis County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[5] Interviews with agencies conducted January – August 2023 online and in-person.

[6] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Lewis County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16061

[7] St. Joseph Regional Medical Center. (2023). *Maternity Care – Family Beginnings*. St. Joseph Regional Medical Center. https://sjrmc.org/maternity

[8] St. Mary's Health. (2023). *Family Birth Center*. St. Mary's Health. https://smh-cvh.org/family-birth-center/

[9] Syringa Hospitals and Clinics. (2023). *Syringa Hospital & Clinics OB Services, Providers and Support Staff*. Syringa Hospitals and Clinics. https://www.syringahospital.org/getpage.php?name=OB_Services

[10] University of Idaho Extension. (2023). *Lewis County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16061

[11] Zillow. (2023). *Lewis County Home Values*. Zillow. https://www.zillow.com/home-values/596/lewis-county-id/

NEZ PERCE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by a centralized base population in the river port city of Lewiston, Nez Perce County's EMS system is highly organized and well-funded, compliments of a consolidated funding structure and professional/career organizational structure. The county location adjacent to Asotin County (WA) and the City of Clarkston creates added benefits for scale, service contracts, coverage, and interstate service redundancy. Despite their positive outlook and well-run structure, challenges do exist. Staffing issues are anecdotally reflected in personnel not spending their whole career in fire an EMS. Personnel costs and a highly competitive labor market have added stressors to operations. However, solid leadership and strategic planning has limited impacts for EMS in Nez Perce County. There is potential to utilize Idaho Ground Emergency Medical Transport (GEMT, subject to eligibility) and community EMS programming in this region to better serve the community's needs. Supply shortages and operating cost increases have become 'the norm' however leadership has built structures and processes to adapt. [1, 6]

Strengths	Opportunities
• Consolidated agency structure under Lewiston Fire Department (4.1.2.1) • Above average health indicators and outcomes (2.3) • Contracts with neighboring cities add revenue (2.4.1)	• Potential expansion of Lewiston Fire Department's consolidated model for outlying communities– integration of rural/remote Quick Response Units (QRUs) for resource allocation (4.2.1) • Community Health EMS (CHEMS) and GEMT (subject to eligibility) program expansion (4.2.1.2)
Challenges	**Threats**
• City of Lewiston residents are 'taxed' twice (4.2.3.1) • Extremely low unemployment has created some recruitment challenges (2.2) • Facilities are aging (4.2.2.3) • Scope creep challenges with call types– i.e. Hazmat not funded (4.1.2.3)	• Coverage in remote areas (4.2.1) • Cost of operations and new facilities (1) • Poverty rate, especially for children (2.3) • Increasing call volumes (3.1)

Table A: Nez Perce County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Nez Perce County is located just south of the Panhandle in west-central Idaho and had a population of 43,004 in 2022, with 9.5% growth between 2010 and 2022 as compared to a 23.7% increase in Idaho as a whole. Most of the county's population is in Lewiston with the remainder of the county living in rural areas, including the Nez Perce Indian Reservation and the small town of Spaulding. Ten and one-half percent of the population identifies as a race other than white, and 4.7% identifies as Hispanic—a 182.7% increase since 2000. The median age in Nez Perce County is 41.2 years old, higher than the median age in the US (39) and Idaho (37). The population over 65 in 2021 was 20.7%, compared to 16.6% of Idaho. [9]

Demographic	2010	2020	2022
Population	39,265	42,141	43,004
Land Area	856 sq mi	856 sq mi	856 sq mi
Per Capita	45.9 PPSM	49.2 PPSM	50.2 PPSM
PPSM: *People per square mile*			

Table B: Nez Perce County Population & Geography [9]

2.2. Economics

Nez Perce County residents are primarily employed in the following sectors: government (15.4%), manufacturing (15.0%), and healthcare and social assistance (13.0%). There are 26,814 people employed in the county. The unemployment rate in 2021 was 3.3%, below the statewide rate of 3.5%. The labor participation rate (the proportion of people 16 years old and older who are employed or available for work) is 66%. The total number of housing units in Nez Perce County is 18,267, with 67.2% owner-occupied, 25.1% renter-occupied, and 7.8% vacant. [9] A livable wage in Nez Perce County ranges from $15.48 per hour for a single person without children up to $54.08 per hour for a single person with three children, presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [7] The average home value in the county was $363,590 as of August 2023. [11] Additional factors exist related to vehicle trip volumes for major transportation corridors in Nez Perce

County. Highway 95 near the junction with Highway 12 saw 12,278 average daily vehicle trips in August of 2023, reflecting significant intra- and inter-state and north-south traffic, being on a major through route in the state of Idaho. [5]

Metric	Data
Total Population (2022)	43,004
Median Age (2021)	41.2 years old
Poverty Rate (2021)	14%
Number of Jobs (2021)	26,814
Average Annual Wage per Job (2021)	$51,323
Unemployment Rate (2023)	3.1%

Table C: Nez Perce County Economic Factors [9]

2.3. Social Determinants of Health

Nez Perce County is 17th in Idaho for health outcomes (length/quality of life, etc.) and 12th in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.) In 2020, 11% of the population of Nez Perce County was food insecure. [9]

In Nez Perce County in 2020, there were 6.9 primary care physicians per 10,000 people, higher than the state rate of 6.3, but lower than the national rate of 7.6. In 2019, 5.5% of those under 18 and 12.2% of those under 65 had no health insurance. Nez Perce County ranks 34th of 44 counties in Idaho for those under 65 without health insurance. [9]

The poverty rate in Nez Perce County in 2021 was 15.4% compared to 10.8% in all of Idaho. For those under the age of 18, the poverty rate was 16.0%, compared to 12.5% in Idaho. For children under the age of 5, the rate increases to 23.3%, 2.4 percentage points higher than all of Idaho. [9]

Payor mix for Lewiston Fire Department: [1]

- Medicare (Fee Schedule): 60%
- Medicaid (Fee Schedule): 15%
- Commercial: 20%
- Private/Self pay: 4.8%

2.4. Indicator Impacts to EMS

Nez Perce County has seen a 9% population growth rate since 2010, which will continue to put demand pressure on the EMS system. Regarding health outcomes and health factors, including the number of primary care physicians per 10,000 persons, the county is well-

positioned. However, the higher poverty rate (especially among children) and food insecurity rate (one in ten residents) are both indicators that can negatively affect the EMS system – both from a care perspective and a recruitment/workforce perspective. The county also sees a higher number of people over the age of 65, adding demand pressures. Very low unemployment may also present long-term challenges with workforce recruitment and retention. Above average population health metrics (noted above) are positive for Nez Perce County. [9]

2.4.1. Asotin County, Washington

We can only tell the complete picture of Nez Perce County by also considering its interface with Asotin County in Washington. Clarkston, Washington is located across the Snake River from Lewiston, with just over 7,000 residents. Lewiston Fire Department responds to two counties across the state line and has a service contract that has created some scale opportunities. GEMT funding/programming opportunities may create further opportunities for scale both in Idaho and across the state line (subject to eligibility). [6]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Nez Perce County saw 5,484 EMS calls in 2022 (5,338 were with Lewiston Fire Department). Data for transports by PACT (Palouse Area Care and Transport) EMS were not available. Nez Perce County had limited coverage assistance from outlying agencies: Clearwater County Ambulance (Clearwater County) and Winchester QRU (Lewis County). Total call times were longer for these out-of-county agencies. [2]

Lewiston Fire Department reported a total of 8,400 (5,700 transport and 2,700 non-transport) requests for EMS service in 2022. This is a difference from the 5,338 (2,914 transport and 2,424) state-reported 911 EMS calls. The discrepancies in call volume may be due to the fact that the Bureau data is aggregated and filtered, as noted below, from agency reporting. These volumes may reflect 911 calls in and out of their service territory, Inter-Facility Transports (IFT), or other calls not accounted for in the Bureau's filtered data. [1]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Clearwater County Ambulance (Clearwater County)	*37*	*11*	48	*41*	*10*	51
Clearwater Paper Fire Department	*20*	*9*	29	*34*	*20*	54
Lewiston Fire Department	*2,777*	*2,249*	5,026	*2,914*	*2,424*	5,338
PACT EMS	-----	-----	-----	-----	-----	-----
Ambulance Total	*2,834*	*2,269*	5,103	*2,989*	*2,454*	5,443
Culdesac QRU	-----	*40*	40	-----	*38*	38
Winchester QRU (Lewis County)	-----	-----	-----	-----	*3*	3
QRU Total	-----	*40*	40	-----	*41*	41

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Nez Perce County [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Clearwater County Ambulance (Clearwater County)	*10 min*	*17 min*	27 min	19 min	89 min
Clearwater Paper Fire Department	*2 min*	*2 min*	4 min	8 min	33 min
Culdesac QRU	*13 min*	*9 min*	22 min	-----	54 min
Lewiston Fire Department	*2 min*	*7 min*	9 min	11 min	47 min
PACT EMS	-----	-----	-----	-----	-----
Winchester QRU (Lewis County)	*5 min*	*7 min*	12 min	-----	122 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Nez Perce County (2022) [2]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Nez Perce County 911 calls go into either the City of Lewiston or Nez Perce County dispatch, depending upon the location of the call. In both PSAPs, an Emergency Medical Dispatcher will then dispatch an ambulance and/or fire engine in the city or an ambulance in the county. [1]

4.1.2. EMS Agency Overview

Lewiston Fire Department is a 911 EMS response transport agency licensed at the Advanced Life Support (ALS) level. They are a career agency with full-time employees. Culdesac QRU is a 911 response non-transport agency. Clearwater Paper is a 911 response transport agency. PACT EMS is an IFT Critical Care-ground transport agency (private, for-profit). [1]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Clearwater Paper Fire Department	911 Response Transport	Basic Life Support (BLS)	Scheduled	FT & PT Career Compensated
Culdesac QRU	911 Response Non-Transport	BLS	Unscheduled	-----
Lewiston Fire Department	911 Response Transport	ALS	Scheduled	FT & PT Career Compensated; Uncompensated Volunteer
PACT EMS	IFT Critical Care-Ground	-----	-----	FT & PT Career

Table F: List of EMS Agencies Located in Nez Perce County [1, 2]

4.1.2.1. Clearwater Paper Fire Department Overview

Clearwater Paper Fire Department is a 911 response transport agency out of Clearwater Paper Corporation located at 805 Mill Road in Lewiston, ID. Their staff is made up of full- and part-time career staff licensed the Emergency Medical Technician (EMT) level, and they work with Lewiston Fire Department for extrication. They also have the same medical direction as Lewiston Fire Department and have automatic aid agreements in place for fire and ALS-level service, as needed. [3, 6]

4.1.2.2. Culdesac QRU Overview

Culdesac QRU is a 911 response non-transport agency with personnel licensed at the EMT level. They operate near Culdesac, ID located at 9 North Main. [3, 6]

4.1.2.3. Lewiston Fire Department Overview

Lewiston Fire Department is a public, municipal, fire-based ambulance that covers EMS for the City of Lewiston and Nez Perce County and also responds to two counties in Washington per contract. This agency responds north to Latah County to assist with EMS callouts when Latah County volunteers are unable to respond. The service is licensed at the ALS level of care and is the only licensed transport service in the county. They are a career agency with 55 full-time staff, including 15 Emergency Medical Technicians (EMTs), three Advanced Emergency Medical Technicians (AEMTs), 32 Paramedics, and two non-EMS certified response personnel. Facilities are located at 1245 Idaho St, 300 13th St., 1533 Grelle Ave., and 424 Burrell Ave. Lewiston Fire Department also provides extrication to the county via a contract, as well as Hazmat response, which can occasionally strain resources. They identified the following as priorities if additional funding was available: add more employees, train existing employees/continuing education, and train new recruits. Based on location and call types, they transport to St. Joseph's Regional Medical Center in Lewiston and Tri-State Health across the bridge in Clarkston, WA. [1, 3, 6]

Figure G: Image of Lewiston Fire Department

4.1.2.4. PACT EMS Overview

PACT EMS is a small, private agency only performing IFTs (in Idaho and neighboring states). The company operates on a regional basis, within a service area including Lewiston and Nez Perce County, and are based in Genesee, Idaho. [3, 6]

4.1.3. Hospital Access Overview

Agencies in Nez Perce County frequent St. Joseph's Regional Medical Center in Lewiston, ID and Tri-State Health in Clarkston, WA. [1] St. Joseph's Regional Medical Center in Lewiston has 145 beds and is Time Sensitive Emergency (TSE) designated Level III Trauma and Level II Stroke Center with an obstetrics department. [4, 8] Tri-State Health is a 25 bed hospital with a Level IV trauma designation. [10]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Agencies in Nez Perce County report good stability/sustainability, and are breaking even consistently. The mutual aid agreements in place within Nez Perce County and beyond to two neighboring counties in Washington State creates scalability advantages. Rural incidents are covered by rural agencies while stations in the metropolitan area can focus on urban response. Personnel in Lewiston are well-practiced, but it was noted that having community EMS would help support the incidents that are determined to not be time sensitive emergencies. There are strong service delivery partners and positive perceptions surrounding medical direction. [1, 6]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), stability/sustainability for the agencies in Nez Perce County is reported to be good (80/100).

- **EMS Agency Financial Situation:** The primary agency is breaking even consistently.

- **EMS Agency Communications Strategy and Outreach:** There is no communications or outreach strategy in place for EMS in Nez Perce County.

- **Community View of EMS Agencies:** The primary agency reports being viewed in a favorable light by the community.

- **Elected Official Support of EMS Agencies:** Agencies feel well-supported by their local oversight entity and the Bureau.

- **Agency & System Response Outlook:** Lewiston Fire Department noted a need to create an EMS only division to focus on BLS calls across their service territory, leaving ALS personnel for ALS calls, and keeping crews in service to meet fire response needs. They would also like to look at funding for community health EMS program to reduce non-emergency calls for 911. Due to the high call volume in the City of Lewiston, EMS personnel have good practice using their skills. The agency uses cutting edge protocols and employs staff who enjoy their jobs. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** There is one transport agency in Nez Perce County, a municipal fire-based agency.

- **Service Delivery Partners:** The strongest partners in service delivery are the Medical Director, the community, hospitals, and city/municipal governments.

- **Medical Direction:** Lewiston Fire Department reports good (80) involvement by the Medical Director in EMS training and excellent (100) participation in quality assurance and chart review.

- **Communications & Interoperability:** Radio communications are reported to have good interoperability features and functionality, quality reception most of the time, and allow reliable communication with other agencies and counties.

- **Mutual Aid System & Agreements:** The largest agency in the county has formal mutual aid agreements with neighboring agencies. If an adjacent agency closed, it would put an increased burden on the only transport service. However, it was noted that not having QRUs would impact patient outcomes and care before Lewiston Fire Department's arrival.

- **Community Health EMS (CHEMS):** Lewiston Fire Department does not have a CHEMS program but is interested in developing one in one to five years.

- **Patient Care Documentation System:** Image Trend Elite through the state of Idaho is utilized. [1]

4.2.1.3. Response Overview

- **Level(s) of Service:** Most EMS responses in Nez Perce County involve the ALS level of service, with some smaller agencies licensed at the BLS level.

- **Agency Response Concerns:** Lewiston Fire Department reported between 51-100 times that they had difficulty responding to calls in 2022.

- **Helicopter Response & Utilization:** Air transport is used when there are calls in more rural parts of the county that have critical patients such as trauma and cardiac.

- **Factors Impacting Response Times:** The following are the biggest factors in response times in Nez Perce County: location, simultaneous calls, weather, and personnel shortages.

- **Response to Public Lands:** Lewiston Fire Department relies on their mutual aid partners for equipment to access remote locations. Having a UTV for these types of responses would give them an advantage. These calls do cause stress on staffing due to location, time out of the station, and the extra personnel needed. [1]

4.2.2. Workforce & Resource Assessment

Staffing and shift coverage challenges exist in Nez Perce County. Overtime expenses are increasing, and long-term retention (early retirement) challenges were noted. Agencies are seeing personnel spending their working years in multiple fields, a change from the one-career trajectory in fire and EMS seen in past decades and are anticipating challenges with an increased demand to train new personnel when an existing employee wants to move on to a new occupation. [1, 6]

4.2.2.1. Staffing Overview

- **Staffing structure:** Three of the four Nez Perce County agencies have part- and full-time career personnel, with the fourth agency utilizing volunteers.

- **Responder Average Age:** The average age of staff is 35-44 years.

- **Staffing numbers:** According to agency survey responses, there are at least 51 EMTs, three AEMTs, 37 Paramedics, and two non-EMS certified personnel in Nez Perce County. The majority of the active EMS practitioners work for Lewiston Fire Department.

- **Staffing concerns:** Staffing challenges were noted. Paramedic recruitment and retention was noted as likely to be a challenge in the future as no classes are held locally at this time.

- **Staffing strengths:** Staffing requirements are being maintained, but mandatory overtime has become a requirement to meet staffing needs to cover when staff take

vacation, comp-time, or sick-leave. This impacts the personnel budget and employees who are working overtime shifts.

- **Recruitment & Retention:** Early retirements present long-term staffing retention challenges. [1]

4.2.2.2. Training & Education Overview

In-house initial EMT and Continuing Education Units (CEU) training is provided. Lewiston Fire Department has an internal onboarding training and a task book that each new employee must complete during their initial training and during their first probationary year. [1]

4.2.2.3. Facilities Overview

- **Station Location(s):** There are four stations in Nez Perce County, one on the Clearwater Paper Corporation campus, one in Culdesac, and one in Genesee.

- **Station Condition(s):** The station conditions for Lewiston Fire Department are reported to be moderate (66/100), and the agency noted a desire to build a new fire station.

- **Facility Needs:** The condition and size of Lewiston Fire Department facilities are reported to be inadequate due largely to age. The city parks and rec and facilities departments provide maintenance and there are no rainy-day funds. No data was reported for other facilities in Nez Perce County. [1]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The agency's equipment and supplies are meeting needs in the following categories: age/condition, functionality, and use appropriateness.

- **Condition:** Equipment is noted as being generally in good to excellent condition.

- **Funding:** Lewiston Fire Department has requested funds for new gurneys and is working to replace ambulances on a regular rotational basis.

- **Needs/shortages:** Lewiston Fire Department reports they are doing well with equipment needs. They have a sufficient budget and inventory system to get supplies, but they have seen a challenge with acquisition of defibrillator batteries. There are also noted challenges with supply chains for new ambulances. [1]

4.2.3. Financial Overview

Financial data for Nez Perce County EMS was only available for Lewiston Fire Department who provides the primary transport service in the county. They currently have no EMS taxing funds and are funded by the City of Lewiston general fund, EMS transport fees, and EMS contractual agreements with Nez Perce County and three agencies in Washington State.

They do not maintain carryover/reserve funding. They also receive GEMT funds from Washington. [1, 6]

4.2.3.1. Expense & Revenue Overview

Lewiston Fire Department:

- Operating costs: -$364,000
- Capital expenditures: -$450,000
- Funded by the city general fund and no carryover/reserves
- EMS personnel expense: -$2,436,000
- Revenue: $2,645,361
- Interfacility transfer revenue: less than $50,000
- Billing revenue: $1,603,098
- Grants: $15,000
- Adjustments and write offs: $741,722
- EMS Contracts, WA: $417,777
- EMS Contract, Nez Perce County: $188,453
- Surplus: $31,411 [1]

Revenue and expense data were not available for Clearwater Paper Fire Department, Culdesac QRU, and PACT EMS.

4.2.4. Resource Assessment Additional Factors

Lewiston Fire Department is concerned about the increased property taxes in the City of Lewiston and Nez Perce County affecting their budget. They would like to see an Idaho GEMT program (subject to eligibility) and community EMS to cover non-emergent incident responses. Staffing concerns may linger given growth rates and very low unemployment in the Lewiston area. [1, 6]

REFERENCE LIST

[1] EMS Planning Team. (2023). *Nez Perce County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[5] Idaho Transportation Department. (2023). *Monthly Trip Volume Comparison Report, August 2023*. Idaho Transportation Department. https://itd.idaho.gov/road-data/

[6] Interviews with agencies conducted January – August 2023 online and in-person.

[7] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Nez Perce County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16069

[8] St. Joseph Regional Medical Center. (2023). *Maternity Care – Family Beginnings*. St. Joseph Regional Medical Center. https://sjrmc.org/maternity

[9] University of Idaho Extension. (2023). *Nez Perce County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16069

[10] Washington State Department of Health. (2023). *WA Department of Health Trauma Designated Services.* Washington State Department of Health. https://doh.wa.gov/sites/default/files/2022-02/530101.pdf

[11] Zillow. (2023). *Nez Perce County Home Values*. Zillow. https://www.zillow.com/home-values/2816/nez-perce-county-id/

PAYETTE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by changing (densifying) rural population metrics and being the smallest geographic county in Idaho, Payette County's EMS system faces unique challenges and opportunities. Served by three EMS agencies (City of Fruitland/Payette County Paramedics, Payette City Fire, and New Plymouth Quick Response Unit (QRU)), Payette County faces significant staffing, recruitment, and funding challenges, all of which create headwinds for its sustainability. Funding limitations largely resulting from levy rate and billing shortfalls, as well as Medicare/Medicaid recovery issues have stagnated the county's primary EMS agency - City of Fruitland/Payette County Paramedics. As the only transporting agency in the county, these challenges have resulted in a lack of long-term capital planning and capacity building needed for facilities, staffing and shift coverage issues (as the region has experienced significant population growth), and operational cost increases year over year. They have outgrown their modular facilities and do not have funding to grow in a scalable manner.

Conversely, City of Fruitland/Payette County Paramedics is well positioned to make progress, as they already operate under a de facto consolidated operating structure, however poorly funded. Administratively, Payette City Fire to the north is limited by local taxation realities (they are funded for fire only and are located within the ambulance district for the City of Fruitland/Payette County Paramedics), forcing them to act as a secondary EMS responder that is not funded/equipped to transport. Payette County's sustainability woes appear to be primarily funding driven, with secondary challenges manifesting through staffing, coverage, and facility concerns that threaten their ability to offer EMS service in the long term. These challenges are evidenced by 338 missed calls in 2022 alone. If funding issues can be shored up in the short term and a long-term strategic framework can be built around scalable service, a sustainable system in Payette County appears to be tenable.

Strengths	Opportunities
• Committed and experienced staff (4.2.2.1) • Strong county/community support (4.2.1.1) • Existing consolidated agency structure (4.1)	• Levy rate enhancements (limited by Idaho Code—additional evaluation recommended) (4.2.3) • Wage increases for retention (4.2.1.1) • Capital planning for long term facility needs (4.1.2.1) • Decreased reliance on volunteers (4.2.2.1) • Scalability/consolidation opportunities with neighboring communities (4.1.2.1) • Ground Emergency Medical Transport (GEMT) integration if scalable (subject to eligibility) (4.2.4)
Challenges	**Threats**
• Anemic capital reserves/access to funding (4.2.1) • Low wages/sector competition (2.4) • Recruitment/retention/coverage issues (4.2.2.1) • Average health factors, below average health outcomes (2.3) • Staff operating out of inadequate facilities (4.1.2.1) • Major transportation corridor volumes present scale issues above base population (2.2)	• Staff burnout (4.2.1.2) • Coverage (4.2.2.1) • Population growth (2.2) • Wage growth in competing sectors (2.2)

Table A: Payette County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Payette County has steadily grown in population size since 2010, adding 4,693 residents, reflecting the growth of Idaho as a whole. Payette County is 93.6% white, with Asian/Pacific Islander, Black and American Indian/Alaskan Natives making up 6.4% of the population. The Hispanic origin population is 18.3% (white and non-white)–one of the fastest growing segments in the area. Per capita population density has increased steadily as Payette County grows and densifies, with nearly 66 people per square mile (2022). The median age is 39.3, above the national and Idaho averages. [11]

Demographic	2010	2020	2022
Population	22,263	25,583	26,956
Land Area	410 sq mi	410 sq mi	410 sq mi
Per Capita	54.3 PPSM	62.4 PPSM	65.7 PPSM
PPSM: *People per square mile*			

Table B: Payette County Population & Geography [11]

2.2. Economics

Payette County is home to rolling hills and the confluence of the Payette and Snake Rivers. The county seat is the City of Payette with the largest population, followed by Fruitland and New Plymouth. Payette County's largest industries are manufacturing (12.4% of the workforce), government (10%), healthcare (9.8%), and farming (9.5%). Noteworthy is the fact that healthcare is the only major industry in Payette County that is steadily growing its employment numbers, presumably due to an aging population and overall growth metrics. All other major employment sectors are relatively stagnant or receding in their net employment growth since 2014. The labor force participation rate, the number of individuals 16 and older who are employed or available for work, in Payette County is 64%. Housing stock is at 9,684 total residential units, with 71.5% of those units being owner-occupied. [11] A livable wage in Payette County ranges from $15.74 per hour for a single person without children up to $53.16 per hour for a single person with three children–presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [7] The average

home value in the county was $386,566 as of August 2023. [12] Additional factors exist related to vehicle trip numbers for major transportation corridors in Payette County. Interstate 84 saw 34,293 average daily trips through Payette County and Highway 95 saw 20,275 average daily trips between Payette and Fruitland—north and south of Killebrew Dr.—in August of 2023. [5] These trip volumes help to explain the demand pressures and volume realities Payette County's EMS system must account for going forward, and the difficulty of scaling against more than just base population.

Metric	Data
Total Population (2022)	26,956
Median Age (2021)	39.3 years old
Poverty Rate (2021)	12%
Number of Jobs (2021)	10,955
Average Annual Wage per Job (2021)	$45,612
Unemployment Rate (2023)	3.7%

Table C: Payette County Economic Factors [11]

2.3. Social Determinants of Health

With significant population growth and many retirees settling in Payette County, it remains a relatively 'young' county compared to the rest of Idaho with a median age of under 40. Community health indicators paint an interesting story. Access to a primary care physician has reduced since 2016, dropping from 5.2 physicians per 10,000 people in 2016 to 3.5 in 2021, well below the average for the state of Idaho. [11] The insurance/payor mix for Payette County Paramedics, the primary 911 agency, is as follows (reimbursement from Medicare and particularly Medicaid is not good, accounting for 75% of patients):

- Medicare (Fee Schedule) 59%
- Medicaid (Fee Schedule) 16%
- Commercial 16.5%
- Private/Self pay 8.5% [1]

Payette County is 35th in Idaho for health outcomes (length/quality of life, etc.) and 23rd in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). The poverty rate in Payette County has steadily declined since 1989 from nearly 18% to 12% in 2021. While this number is still above the Idaho average poverty rate of 10.8%, it is noteworthy that 15.6% of children under the age of 18 and 8.6% of people over the age of 65 are living in poverty. A significant portion of the population may qualify for Medicare and Medicaid which limits reimbursement potential for EMS (seen above and supported by financials in section 4). In 2019, 16% of those individuals under the age of 65 had no health

insurance coverage, higher than the 12.7% rate of coverage in all of Idaho for that age group. For children under the age of 19, 6% had no health insurance, a bit more on par with the 5.1% of all children in Idaho who don't have coverage. [11]

2.4. Indicator Impacts to EMS

Considering community health, poverty, population, housing, and base economic data for Payette County, we see a county that will continue to face long term EMS system demand pressure, while being interestingly situated as a changing semi-rural county that occasionally gets lumped in with its urban neighbors to the west, the Boise-Nampa metropolitan area. Payette County is facing growth, reduced poverty, limited housing stock, and inflationary pressures that will continue to exacerbate challenges for long term capital expenditures, recruitment, retention, and level of service. Most impactful of these indicators is likely wage growth, especially given the stability of the competing healthcare sector. Being able to offer competitive wages to new recruits will be a long-term challenge for Payette County's EMS agencies. [11]

2.4.1. Malheur County, Oregon

We cannot tell the complete picture of Payette County without also considering its interface with Malheur County in Oregon, across the Snake River. Because Payette County abuts a larger, denser city in a different state, we account for the impact of Ontario, Oregon and rural Malheur communities, and neighboring agencies. City of Fruitland/Payette County Paramedics performs interfacility transfers for St. Alphonsus in Ontario and has Memorandum of Understanding's (MOU) in place for service delivery. Staffing competition with the neighboring agencies presents a significant challenge, given that Oregon has attractive hiring incentives, up to $25,000 for EMS. Even so, they remain a quality partner in coverage and service delivery across state lines. [6]

Section 3 Context

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS System Demand

3.1. Call Volume Overview

Payette County responded to 3,070 911 calls in 2022, running patients to St Luke's: Fruitland, Nampa, Meridian, and Boise; St. Alphonsus: Ontario, Nampa, and Boise; West Valley Medical Center; and Weiser Memorial. Neighboring Parma Ambulance Service (Canyon County) and Weiser Ambulance Service (Washington County) responded to Payette County with a total of 27 calls in 2022. [2]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
City of Fruitland/Payette Co. Paramedics	*1,703*	*704*	2,407	*1,503*	*612*	2,115
City of Payette	-----	*719*	719	-----	*737*	737
Parma Ambulance (Canyon County)	*8*	-----	8	*18*	*4*	22
Weiser Ambulance Service (Washington County)	-----	-----	-----	*5*	-----	5
Ambulance Total	*1,711*	*1,423*	3,134	*1,526*	*1,353*	2,879
New Plymouth QRU	-----	*150*	150	-----	*180*	180
QRU Total	-----	*150*	150	-----	*180*	180

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Payette County (2021-2022) [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
City of Fruitland/Payette Co. Paramedics	*2 min*	*7 min*	9 min	14 min	69 min
Parma Ambulance Service (Canyon County)	*2 min*	*10 min*	12 min	12 min	79 min
Weiser Ambulance Service (Washington County)	*5 min*	*16 min*	21 min	21 min	116 min
New Plymouth QRU	*6 min*	*5 min*	11 min	----	56 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Payette County (2022) [2]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

The Payette County Sheriff's Office serves as the county dispatch center, receiving 911 calls and dispatching all EMS agencies. Each of the agencies in the county are dispatched by the sheriff's office via radio following a 911 call. City of Fruitland/Payette County Paramedics pay per call for dispatch; however, they have an exchange for service agreement with Payette County's correctional facilities to offset costs. The City of Payette does not pay per call for dispatch. [1]

4.1.2. EMS Agency Overview

City of Fruitland/Payette County Paramedics is a county-based EMS/ambulance. City of Payette is a municipal fire-based first response entity. New Plymouth is a municipal-based non-transport agency. [1]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
City of Fruitland/Payette Co. Paramedics	911 Response Transport	Advanced Life Support (ALS)	Scheduled & Unscheduled	FT & PT Career Compensated; Uncompensated Volunteer
City of Payette	Response Non-Transport	Basic Life Support (BLS)	Scheduled	FT Career; Compensated Volunteer
New Plymouth QRU	911 Non-Transport	BLS	Unscheduled	Compensated Volunteer

Table F: List of EMS Agencies Located in Camas County [1, 3]

4.1.2.1. City of Fruitland/Payette County Paramedics

City of Fruitland/Payette County Paramedics is a mixed/career 911 response transport agency that utilizes a handful of volunteers to backfill coverage as needed. They operate within an ambulance taxing district, covering 100% of Payette County. They operate out of one station located behind Fruitland City Hall located at 200 South Whitley Dr. Two and a half crews are situated in modular homes past their service life that were meant to be temporary facilities but have become permanent due to facility and funding constraints. They have call volumes that would support three full-time ambulances, however space and staffing limit their ability to expand capacity to serve the community. City of Fruitland/Payette County Paramedics provides all medical treatment and transport for the Sheriff's department, including inmates, at no cost. In 2022 alone they missed 338 calls due to staffing shortages. Their service is at the paramedic level and they are primarily staffed with 43% Emergency Medical Technicians (EMTs) and 57% Paramedics. Their members are compensated for time on-call. Based on their location and call types, they primarily transport to Treasure Valley area hospitals, with Fruitland St. Luke's being their most utilized facility. [1, 3, 6]

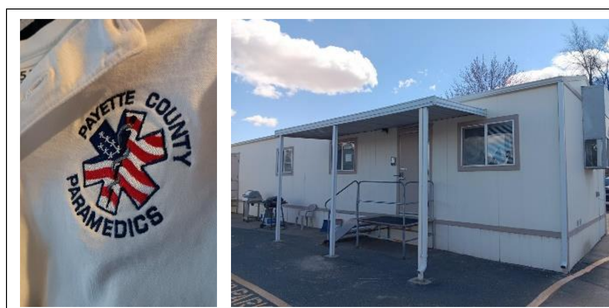


Figure G: Images of Payette County Paramedics

4.1.2.2. Payette City Fire and EMS

Payette City Fire is a career fire based EMT non-transport agency. Covering the City of Payette's impact area, they are overseen by the fire chief. They are staffed with 100% compensated EMTs and respond out of one station located at 600 N. 16th St. with a heli-pad on site. Due to taxing district structures and existing MOUs, Payette City Fire does not transport; all ground transport is performed by City of Fruitland/Payette County Paramedics. [1, 3, 6]

4.1.2.3. New Plymouth QRU

This agency was not included in the original scope of work; therefore, data is limited. New Plymouth QRU is a 911 non-transport fire department-based agency responding out of one station in New Plymouth located at 328 Southeast Ave. They are overseen by the City of New Plymouth. Their personnel operate at the EMT level of service, and their agency licensure level is BLS. They have a total of 6 compensated staff. [3]

4.1.3. Hospital Access Overview

Because of Payette County's geographic location, a number of hospitals are accessible for patient transports via ambulance. Within the St. Luke's Medical System, the following locations are frequented by Payette County agencies: St. Luke's Fruitland, a Time Sensitive Emergency (TSE) designated Level II STEMI center and stand-alone Emergency Department and specialty care clinic; St. Luke's Nampa, a TSE designated Level II STEMI center with 87 beds and obstetrics care; St. Luke's Meridian, a TSE designated Level IV Trauma, Level II Stroke Center, Level I STEMI Center, and obstetrics care; and St. Luke's Boise, a TSE designated Level I Trauma and Level I STEMI Center with 437 beds, and obstetrics care. The St. Alphonsus Medical System is also utilized: St. Alphonsus Ontario, OR, a 49-bed acute care hospital with obstetrics care and Level IV Trauma Center; St. Alphonsus Nampa, a TSE designated Level IV Trauma, Level III Stroke, and Level I STEMI Center with 106 beds and obstetrics care; and St. Alphonsus Boise, a TSE designated Level II Trauma, Level I Stroke, and Level I STEMI Center with 362 beds and obstetrics care. Additionally, West Valley Medical Center in Caldwell (TSE designated Level II Stroke, Level II STEMI with 150 beds) and Weiser Memorial Hospital in Weiser (a Critical Access 25 bed hospital) are also where patients are transported to for care. [1, 4, 8, 9, 10]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Overall, the agencies in Payette County are functional, but with significant sustainability and scale challenges. They operate with limited resources, in the face of difficult population growth metrics and wage competition metrics. Given that City of Fruitland/Payette County Paramedics is the only transport agency in the county, a lot of 911 transport volume is serviced from one small facility. Being a semi-rural county adjacent to larger, more urban areas presents unique operational challenges, as base population/per capita funding is insufficient to meet the demands associated with being located on major transportation corridors. [1, 6]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), the stability/sustainability of the EMS System in Payette County is noted to be moderately stable (averaging 50/100) based on feedback from City of Fruitland/Payette County Paramedics and Payette Fire.

- **EMS Agency Financial Situation:** Agencies report getting by with deficits most years.

- **EMS Agency Communications Strategy and Outreach:** There is not a written, adopted, and effective communications plan in place for EMS agencies in Payette County.

- **Community View of EMS Agencies:** There is a favorable view of EMS by members of the community.

- **Elected Official Support of EMS Agencies:** Both agencies reported being well supported by their local oversight entity, with mixed perceptions about the Bureau's level of support, ranging from moderate (needs some improvement) to good (well supported).

- **Agency & System Response Outlook:** Agencies reported a need for the future of EMS in Payette County to account for staff receiving a thriving wage that reflects a true professional endeavor. New technologies were noted as areas of interest among Payette County agencies. City of Fruitland/Payette County Paramedics noted an urgent demand to upgrade facilities, with three crews living in two single-wide trailers. Agencies noted that they spend a lot of time and effort to ensure equipment, supplies, and ambulances are in good working condition. They pride themselves as having quick turnaround times, excellent training, and committed and hard-working staff that hold themselves to a high standard. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** The City of Fruitland/Payette County Paramedics is a public, county-based EMS/Ambulance agency. Payette Fire is a public municipal fire-based first response agency. New Plymouth QRU is a municipal based non-transport agency.

- **Service Delivery Partners:** The Medical Director is noted as a strong service delivery partner, along with local law enforcement and county/district level elected officials.

- **Medical Direction:** Agencies report that the Medical Director is 100% involved in quality assurance, chart review, and EMS training for the transporting agency.

- **Communications & Interoperability:** Radio communications are reported to offer quality interoperability and good reception in town, but are lacking in more rural parts of the county and when communicating with other counties or agencies.

- **Mutual Aid System & Agreements:** Agencies noted mutual/automatic aid agreements with neighboring jurisdictions. If a neighboring agency in the area closed, it would greatly impact service delivery through delayed response to calls, missed calls, employee fatigue, and burnout. Agencies would not be able to provide adequate support to the residents of Payette County.

- **Community Health EMS (CHEMS):** There is no current CHEMS program in place, however Fruitland/Payette County Paramedics is interested in exploring setting up a program.

- **Patient Care Documentation System:** Documentation is performed using the free patient care reporting (PCR) platform from the Bureau. [1]

4.2.1.3. Response Overview

- **Levels of Service:** In Payette County, two agencies operate at the BLS level of service, and one operates at the ALS level.

- **Agency Response Concerns:** In the last year, there have been over 100 (338) reported occasions in which there was difficulty responding to 911 callouts.

- **Helicopter Response & Utilization:** City of Fruitland/Payette County Paramedics predominantly dispatches a helicopter to situations with especially critical patients, time-sensitive emergencies, difficult locations, or mass casualty incidents.

- **Factors Impacting Response Times:** In Payette County, simultaneous calls, personnel shortages, time of day, and location were noted as the most impactful to incident response times.

- **Response to Public Lands:** When a 911 call comes through on public land, the crew on this call, as well as the equipment and ambulance, are out of service for extended periods of time, however this makes up less than 5% of total call volume. [1]

4.2.2. Workforce & Resource Assessment

Despite a younger than average staffing profile, Payette County has noteworthy challenges with staffing and coverage. Staff or volunteers calling in sick are typically covered by career staffers resulting in added overhead (personnel expense). Volunteers are noted as vital but have few incentives to perform reliable shift coverage given broader economic metrics in the community and across the region. Challenges exist with recruitment, given higher wages in neighboring communities/sectors, however agencies in the county have demonstrated strong retention of career staff thanks to steady leadership and a supportive work culture. Agencies noted a desire to provide additional incentives to volunteers to shore up coverage constraints, and one paid position went unfilled for over a year due to wage concerns. [1, 6]

4.2.2.1. Staffing Overview

- **Staffing Structure:** The City of Fruitland/Payette County Paramedics is a career public agency supported by a taxing district and Payette Fire is a hybrid/combination agency. New Plymouth QRU is an unscheduled volunteer agency.

- **Responder Average Age:** The average age range of responders is between 25-34 years of age.

- **Staffing numbers:** There are 19 EMTs, eight Advanced Emergency Medical Technicians (AEMTs), 13 Paramedics, and three Emergency Medical Responders (EMRs) in Payette County. All Paramedics work for City of Fruitland/Payette County Paramedics.

- **Staffing Concerns:** There are noted staffing challenges across the board for agencies in Payette County. If a key person were to leave or retire, it would place a significant strain on service delivery and coverage metrics for the county. Sick calls are typically covered by career personnel, which creates budgetary challenges (paying out overtime).

- **Staffing strengths:** Despite staffing challenges, the City of Fruitland/Payette County Paramedics noted strong retention and leadership metrics for their agency.

- **Recruitment & Retention:** Agencies noted that providing a modest stipend for volunteers to cover some of their costs would be helpful in recruitment and retention. [1]

4.2.2.2. Training & Education Overview

City of Fruitland/Payette County Paramedics uses online EMS training, and has in-house simulation trainings. They provide Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), BLS, Advanced Medical Life Support (AMLS), Neonatal Resuscitation Program (NRP), and Prehospital Trauma Life Support (PHTLS). They have a 5-minute training review every morning to keep staff sharp and up to speed, along with a chart review with hands-on training every other month. On the off months their Medical Director provides chart review and training. Payette Fire does all training in-house, but occasionally uses online training options. [1, 6]

4.2.2.3. Facilities Overview

- **Station Location(s):** There are three EMS station locations: Fruitland, New Plymouth, and Payette.

- **Station Condition(s):** City of Fruitland/Payette County Paramedics noted that they have outgrown their current facility and it is past its service life. Significant upgrades are needed in the near term. Payette Fire reported no facilities issues.

- **Facility Needs:** City of Fruitland/Payette County Paramedics currently operate out of two single wide trailers, unused fire bays, and some office space at Fruitland City Hall. They have no facilities of their own. The single wide trailers are noted as being cramped and create staffing/growth limitations for the agency. [1]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Agencies noted current equipment and supplies meet their needs regarding age, functionality, and use appropriateness; along with some difficulty in obtaining supplies and adequately stocking the ambulance.

- **Condition:** Most mandated equipment on ambulances were noted to be in good condition, with some portable handheld radios being in mediocre condition.

- **Funding:** Grants have been heavily utilized and relied upon for stretchers, new suction units, ventilators, CO-oximeters, and ambulances.

- **Needs/shortages:** The agencies noted a strong reliance on grants for equipment and supplies and were generally neutral regarding access to new supplies. [1]

4.2.3. Financial Overview

Given a significant reliance on Medicaid/Medicare by the patient population, and limited funding sources, City of Fruitland/Payette County Paramedics typically runs a lean budget year over year. Payette City Fire has limited funding dedicated to EMS ($2,000 annually) given the above noted taxing district and the fact that transport responsibilities reside with City of Fruitland/Payette County Paramedics. No financial data is available for New Plymouth QRU. [1, 6]

The total estimated operating cost of EMS in Payette County is approximately $3,103,615. [1]

4.2.3.1. Expense & Revenue Overview

City of Fruitland/Payette County Paramedics:

- Operating: -$3,101,615

- Capital Expenses: -$2,213,485.10

- Personnel: -$1,056,485.10

- Carryover: $150,000

- Inter-facility transports and 911 Revenue: $1,524,912.16

- Tax Revenue: $715,962.85

- Billing discrepancies:
  - Total Gross Charges: $3,430,352.11
  - Collected: $1,524,912.16 for a difference of $1,905,440.00
  - Total Disallowed by Medicaid/Medicare: $1,629,475.16
- Grants: $139,559.47
- Donations: $72,265.39
- Interest on investments: $2,919.65
- DUI Blood Draw: $4,853.00
- LEVY RATE: 0.000206555%
- EMS Operating Expense: -$2000
- EMSAVE GRANT: $13,650 [1]

4.2.4. Resource Assessment Additional Factors

Approximately 23% of EMS operating expenses are covered by taxing district funding, while a significant portion of the population relies on Medicare and Medicaid-resulting in disallowance of payment back to the agency in many cases. This funding gap reflects the staffing, coverage, and facilities sacrifices agencies have had to make over the years that are apparent in Payette County's EMS landscape. These funding gaps need to be resolved to create a sustainable system in the long term. There may also be potential for creating a more scalable EMS platform by integrating/consolidating operations with neighboring counties facing similar growth/population densification challenges. Potential future integration of the GEMT program (subject to eligibility) should also be weighed going forward, especially if multi-county consolidation or creative partnerships are deemed appropriate. Wage constraints and growth metrics should also be integrated into any long-term strategic planning the county or agencies undertake. [1, 6]

REFERENCE LIST

[1] EMS Planning Team. (2023). *Payette County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[5] Idaho Transportation Department. (2023). *Monthly Trip Volume Comparison Report, August 2023*. Idaho Transportation Department. https://itd.idaho.gov/road-data/

[6] Interviews with agencies conducted January – August 2023 online and in-person.

[7] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Payette County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16075

[8] Saint Alphonsus. (2023) *Obstetrics Locations*. Saint Alphonsus. https://saintalphonsus.org/specialty/obstetrics/locations

[9] Saint Alphonsus. (2023). *Saint Alphonsus Medical Center – Ontario*. Saint Alphonsus. https://saintalphonsus.org/location/saint-alphonsus-medical-center-ontario-1

[10] St. Luke's Online. (2023). *Obstetrics and Gynecology Facilities Location.* Obstetrics and Gynecology. https://stlukesonline.org/health-services/specialties/obstetrics-and-gynecology

[11] University of Idaho Extension. (2023). *Payette County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16075

[12] Zillow. (2023). *Payette County Home Values*. Zillow. https://www.zillow.com/home-values/1966/payette-county-id/

VALLEY COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by rural, low-population features, a bustling recreation tourism economy, and an aging population, Valley County's EMS system is facing challenges related to funding, wages, staff retention, shift coverage, operational costs/cost of living/housing, and organizational scale. Many of these factors seem to be a result of the ratio of visitors to base population. The agencies in Valley County are professionally organized and well-established; however, critical issues with funding structures and coverage result from the prolific tourism sector in the area and far-reaching rural geography. The primary population centers of Valley County are located in Long Valley in the southern part of the county around Lake Cascade (the town of Cascade is the county hub), Payette Lake in the north, where the town of McCall is located, and the fast-growing community of Donnelly in between. Highway 55 is a main arterial route canvassing Valley County from south to north, and one of the only north/south transportation routes in the entire state. Like elsewhere in Idaho, Valley County has seen significant growth in recent years, especially since COVID, given its abundant skiing, biking, hiking, boating, golfing, hunting, and snowmobiling offerings. Valley County's residents tend to be older, on average, than residents in other parts of Idaho and the United States. Valley County commissioned a full assessment of their EMS system in 2019 by Emergency Services Consulting International (ESCI). That report speaks to specific enhancements and consolidation measures the county could take to support some of their EMS challenges (see 4.2.4). [2]

**In November of 2023, Valley County residents voted to approve the establishment of an EMS Commission, however an effort to pass a new (enhanced) tax levy rate failed. [10]

Strengths	Opportunities
• Professional/career staff and quality leadership (4.2.2.1) • Agencies work together/collaborate (4.1.2) • By most measures, the healthiest county in Idaho resulting in lower per capita demand pressures (2.3)	• Consolidation (single district) (4.2.4) • Training coordination (4.2.4) • Supply chain coordination (4.2.4) • Creative funding structures unique to high tourism/second homes–impact fees (4.2.4) • Creative housing partnerships (2.2) • ESCI recommendations (4.2.4)
Challenges	**Threats**
• Tourism/second homes creates burden on taxing abilities (2.1) • Cost of living/operations/housing (2.2) • Sector wage competition (2.2)	• Population and second home proliferation (2.1) • Aging population (2.1) • Anemic housing starts present recruitment and retention challenges for new staff (2.2)

Table A: Valley County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Valley County has a population of 12,464 (2022) and grew by 26.4% (2,602 residents) between 2010-2022, a population rate change that ranked 6th out of the 44 Idaho Counties between the same years. In 2022, 95.3% of the population was white, with the rest made up of black, Asian/Pacific Islander, two or more races, and American Indian/Alaska Native. Hispanic (white and non-white) residents make up 5.5% of the population and grew by 359.3% between 2000-2022. [13] Approximately 15.1 million visitors come to southwest and north central Idaho each year, many of whom visit Valley County as a top tourism destination outside of the Treasure Valley. [1] This puts enormous pressure on local infrastructure, including EMS. The median age in Valley County is 49.4 (2022), 10 years older than the median age in the US, and 12 years older than that of all of Idaho. 26.7% of the population is over the age of 65, compared to 16.6% in Idaho. Those under the age of 18 make up 17.4% of the population, compared to 24.7% of the population of all of Idaho. [13]

Demographic	2010	2020	2022
Population	9,862	11,842	12,464
Land Area	3,733 sq mi	3,733 sq mi	3,733 sq mi
Per Capita	2.6 PPSM	3.2 PPSM	3.3 PPSM
PPSM: *People per square mile*			

Table B: Valley County Population & Geography [13]

2.2. Economics

In 2021, there were 12,162 housing units in Valley County. The number of housing units increased by 30% between 1980-1990, by 21.7% between 1990-2000, by 45.8% between 2000-2010, and 3.4% between 2010-2020. Between 2017-2021, housing units were 24.6% owner occupied, 5.7% renter occupied, and 69.7% vacant. The median value of owner occupied housing increased by 102.1% between 1980 and 2017-2021 and ranked 3rd of 44 counties in Idaho. [13] A high level of second homes and vacation rentals likely accounts for these numbers, and has put a strain on the local housing market in Valley County. [11] Strategic partnerships with housing nonprofits and developers could offer some relief on the recruitment/employee housing front.

In 2021, there were 7,727 jobs, and the top three industries were accommodation and food service (14.5%), government (12.9%), and retail trade (11.9%). Healthcare and social assistance accounted for 7.1% of the workforce. The labor participation rate (the proportion of people 16 years old and older who are employed or available for work) is relatively low in Valley County at 54%. Wage per job ranked 20th (highest to lowest) of the 44 Idaho counties at $46,388 in 2021 and increased by only 0.8% between 2020-2021. [13] A livable wage in Valley County ranges from $15.75 per hour for a single person without children up to $55.41 per hour for a single person with three children –presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [9] The average home value in the county was $660,973 as of August 2023. [14] Additional factors exist related to vehicle trip volumes for major transportation corridors in Valley County. Highway 55 near the junction with Paddy Flat Road (mid-valley—not accounting for municipal travel in McCall, Donnelly, or Cascade) saw 8,599 average daily vehicle trips in August of 2023, demonstrating significant interstate and north-south traffic, being on a major through route in the state of Idaho. [7] Vehicle trip counts adjacent to more densely populated areas is projected to be significantly higher.

Metric	Data
Total Population (2022)	12,464
Median Age (2021)	49.4 years old
Poverty Rate (2021)	8%
Number of Jobs (2021)	7,727
Average Annual Wage per Job (2021)	$46,388
Unemployment Rate (2023)	3.9%

Table C: Valley County Economic Factors [12]

2.3. Social Determinants of Health

Valley County is first in Idaho for health outcomes (length/quality of life, etc.) and sixth in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). In Valley County, there were 14.4 primary care physicians per 10,000 in 2020, compared to 6.3 and 7.6 for Idaho and the US, respectively. That number is down from 17 in 2016. The percentage of uninsured residents is as follows: 7.8% of children under the age of 19, and 13.8% of those over the age of 65. [13]

The poverty rate in Valley County was 8.3% in 2021, ranking 40th of the 44 counties in Idaho, and has been steadily declining since 1989 as wages have increased and more wealth has moved into the area. 11.2% of those under the age of 18 experience poverty, compared to 12.5% in Idaho. For the youngest, those under five, the poverty rate is 0.6% compared to 17.6% in Idaho. The poverty rate was 6.3% for residents aged 65 and older in 2016-2020. Food insecure residents made up 9% of the population in 2020, down from 21% in 2010. [13]

Payor Mix:

Donnelly Rural Fire Protection District:

- Medicare (Fee Schedule): 18%
- Medicaid (Fee Schedule): 16%
- Commercial: 54%
- Private/Self pay: 12-15%

McCall Fire Protection District:

- Medicare (Fee Schedule): 61%
- Medicaid (Fee Schedule): 7%
- Commercial: 22%
- Private/Self pay: 10-12% [3]

2.4. Indicator Impacts to EMS

Valley County's EMS system is uniquely positioned in Idaho, with positive and negative attributes. Positive features include extremely beneficial community health indicators –being one of the healthiest counties in the country. Additionally, low poverty rates and significant economic growth trends/opportunities for residents helps with system demands. Valley County is also one of very few counties in Idaho with a surplus of primary care physicians. Factors that create challenges for the area include exorbitant housing costs, rural geography, and a massive transient visitor population that is highly seasonal. [13]

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In Valley County in 2022 there were a total of 1,165 EMS calls. Cascade, Donnelly, and McCall saw about the same number of calls, just over 300 each for the year. Meadows Valley Rural Fire District (Adams County) answered six calls within Valley County. Cascade and Donnelly have the longest call times in the county largely due to the size of their service territories and abundance of back country recreation access areas. [4] Data for Brundage Mountain Ski Patrol and USDA Forest Service office were not available from the Bureau.

McCall Fire Protection District reported a total of 519 (328 transport and 191 non-transport) requests for service in 2021 and 466 calls in 2022 (301 transport and 165 non-transport). This is a difference from the 337 (2021) and 309 (2022) state-reported 911 EMS calls. Additionally, Brundage Mountain Ski Patrol reported a total of 212 (2021) and 245 (2022) calls. The discrepancies in call volume may be due to the fact that the Bureau data is aggregated and filtered, as noted below, from agency reporting. These volumes may reflect 911 calls in and out of their service territory, inter-facility transports (IFT), or other calls not accounted for in the Bureau's filtered data. [3, 8]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Cascade Rural Fire District	192	113	305	188	117	305
Donnelly Rural Fire District	184	124	308	194	118	312
McCall Fire Protection District	255	82	337	238	71	309
Meadows Valley Rural Fire District (Adams County)	-----	-----	-----	6	-----	6
Ambulance Total	631	319	950	626	306	932
Brundage Mtn Patrol	-----	-----	-----	-----	-----	-----
Tamarack Ski Patrol	-----	216	216	-----	233	233
USDA Forest Service	-----	-----	-----	-----	-----	-----
QRU Total	-----	216	216	-----	233	233

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Valley County (2021-2022) [4]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Brundage Mtn Patrol	-----	-----	-----	-----	-----
Cascade Rural Fire District	3 min	12 min	15 min	15 min	76 min
Donnelly Rural Fire District	2 min	8 min	10 min	23 min	69 min
McCall Fire Protection District	2 min	6 min	8 min	9 min	52 min
Meadows Valley Rural Fire District (Adams County)	3 min	14 min	17 min	8 min	80 min
Tamarack Ski Patrol	2 min	5 min	7 min	-----	67 min
USDA Forest Service	-----	-----	-----	-----	-----
Countywide Average	2 min	10 min	12 min	36 min	68 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Valley County (2022) [4]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

For the public agencies in Valley County, 911 calls go to the Valley County Sheriff Dispatch office who then pages the appropriate Valley County EMS agency. The USDA Forest Service has an in-house dispatch center for their own employees. Likewise, Brundage Mountain Ski Patrol (in Adams County) manages a dispatch phone during business hours so their employees or guests can call them directly and then patrollers are dispatched. However, on occasion, callers will dial 911 instead of the patrol dispatch. If 911 receives a call then the protocols below are followed. If someone on the mountain will need ambulance transport from the base area, Brundage Dispatch calls 911 (Valley County) who will dispatch the ambulance. If Brundage is in operating hours and Valley or Adams County dispatch receive a call originating from the mountain, they will transfer the call to Brundage Dispatch. However, if it is a life threatening injury called in to Valley County Dispatch, they will dispatch McCall Fire and EMS. To mitigate Brundage being unaware of a call to 911 and EMS showing up, they have an agreement that McCall Fire and EMS will let them know they have been dispatched. Tamarack Ski Patrol also has their own dispatch, but they are occasionally dispatched by the Valley County Sheriff. [3]

4.1.2. EMS Agency Overview

Donnelly Rural Fire District, Cascade Rural Fire District, and McCall Fire Protection District are all fire-based ambulance tax districts. USDA Forest Service is a federal agency that provides service to their employees. Brundage Mountain Ski Patrol is a private agency under Brundage Mountain Resort and Tamarack Ski Patrol is privately funded. [3]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Brundage Mtn Patrol	Non-Public	Basic Life Support (BLS)	Scheduled & Unscheduled	Compensated/ per-call
Cascade Rural Fire District	911 Response Transport	Advanced Life Support (ALS)	Scheduled & Unscheduled	FT Career; on call; compensated volunteer
Donnelly Rural Fire District	911 Response Transport	ALS	Scheduled & Unscheduled	FT Career, part time on call
McCall Fire Protection District	911 Response Transport	ALS	Scheduled & Unscheduled	FT & PT Career; on call; compensated & uncompensated volunteer
Tamarack Ski Patrol	911 Response Non-transport	ALS	Scheduled	FT & PT Career
USDA Forest Service	Non-public	BLS	Scheduled	FT Career; seasonal

Table F: List of EMS Agencies Located in Valley County [3, 5]

4.1.2.1. Brundage Mountain Ski Patrol (Adams County)

Brundage Mountain, despite being located in Adams County, is being included in the Valley County report due to strategic arrangements with Valley County agencies and the fact that Brundage is headquartered in McCall, Idaho. Brundage Mountain Ski Patrol is a private, non-profit EMS/first response agency operating at the Advanced Emergency Medical Technician (AEMT) license level. They are located at Brundage Mountain Resort, which includes their permitted areas on the mountain. They are staffed with full-time, seasonal, and part-time on-call employees. They have 33 Emergency Medical Technicians (EMTs), three AEMTs (scope at BLS level), two Paramedics (scope at BLS level), and five non-EMS certified response personnel (National Ski Patrol Outdoor Emergency Care). They respond out of two locations on the mountain: patrol HQ at the top of the mountain, and a new building at the base where they bring patients. They primarily transport to St. Luke's McCall based on their location and types of incidents. When a helicopter is required, Air St. Luke's or Life Flight Network is used. If extra funding were available, they would put it toward increased pay for current employees, training/continuing education for existing employees, and equipment upgrades. [3, 5, 8]

4.1.2.2. Cascade Rural Fire Protection District

Cascade Rural Fire Protection District is a public, tax-funded fire-based ambulance that operates at the paramedic level of service. They cover 1,350 square miles in the southern part of Valley County which encompasses 40 miles of Highway 55, three smaller outlying communities (with long transport times upwards of 6+ hours), and 20 miles of the North Fork of the Payette River. They note that they help cover peak recreation and tourism seasons of summer and winter. Their combination full-time, part-time, on-call staff respond

out of one station located at 109 E. Pine Street in Cascade and their staff is made up of 11 EMTs, seven Paramedics, and six non-EMS certified personnel. They primarily transport patients to Cascade Medical Center and utilize Life Flight Network and Air St. Luke's if air transport is needed. If there was additional funding available, they would put it toward increased pay for existing employees, hiring new employees, providing fringe benefits (i.e. health insurance, retirement plans, etc.), and training/continuing education for existing employees. [3, 5, 8]

4.1.2.3. Donnelly Rural Fire District

Donnelly Rural Fire Protection District is a public, fire-based ambulance tax district operating up to the AEMT level of service. They cover approximately 156 square miles of Valley County including backcountry, waterways, and Tamarack Ski Resort. They respond out of one station located at 244 Roseberry Road in Donnelly and their staff is combination paid and volunteer with full-time and part-time on-call employees. Their staff is made up of two Emergency Medical Responders (EMRs), eight EMTs, six AEMTs, 10 Paramedics, and seven non-EMS certified response personnel. Based on their call types and location, they primarily transport to St. Luke's McCall and Cascade Medical Center. When a helicopter is needed, they work with Air St. Luke's, Life Flight Network, and Two Bear Air Rescue (Whitefish, MT). If additional funding were available, they would put it toward increasing pay for existing employees, adding more personnel, and training/continuing education for existing employees. [3, 5, 8]

4.1.2.4. McCall Fire Protection District

McCall Fire Protection District is a public fire-based ambulance funded by a tax district with personnel operating up to the paramedic level of service. They cover about 100 square miles of the northern third of Valley County and provide ALS intercept with Idaho and Adams County EMS services. They staff full-time, part-time, and on-call employees with the following credentials: six EMTs, one AEMT, 12 Paramedics, and four non-EMS certified personnel. They respond out of one station, primarily transport to St. Luke's McCall, and when a helicopter is needed, they use Air St. Luke's and Life Flight Network. If additional funding were available they would add more personnel, increase pay for existing employees and fund facility upgrades. [3, 5, 8]

Figure G: Image of McCall Fire Protection District

4.1.2.5. Tamarack Ski Patrol

Tamarack Ski Patrol is a privately funded ski patrol located at 311 Village Drive in Donnelly (Tamarack) that operates at the EMT level and covers Tamarack Resort. They are a career agency with full-time employees, and staff 14 EMTs, and two Paramedics. Cascade Medical Center and St. Luke's McCall are their primary transport facilities, based on their location and call type. They utilize Air St. Luke's and Life Flight Network when air transport is needed. If additional funding were available, they would prioritize increased pay for existing employees, equipment upgrades, and adding more employees. [3, 5, 8]

4.1.2.6. USDA Forest Service

The USDA Forest Service is a federal agency that provides service to their employees and does not provide transport for the public. They are a career agency with full-time and seasonal employees who operate up to the AEMT level of service. They cover Payette National Forest Lands. They employ 50 full-time staff: 49 EMTs and one AEMT. Based on their location and types of calls, they primarily transport to St. Luke's McCall and utilize Air St. Luke's and Life Flight Network when helicopter services are required. [3, 5, 8]

Figure H: Image of USDA Forest Service

4.1.3. Hospital Access Overview

St. Luke's McCall is primarily utilized by Donnelly Rural Fire Protection District, USDA Forest Service, Brundage Mountain Ski Patrol, Tamarack Ski Patrol, and McCall Fire Protection District. Cascade Medical Center is primarily utilized by Donnelly Rural Fire Protection District and Cascade Rural Fire Protection District. [3] St. Luke's McCall is a Time Sensitive Emergency (TSE) designated Level IV Trauma Center, a Critical Access Hospital with 15 beds, and has obstetrics care. [12] Cascade Medical Center is a Critical Access Hospital with 8 beds and no TSE designation. [6]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Generally, the federal and ski patrol-based agencies in Valley County noted a higher level of sustainability than the fire-based agencies due to adequate dedicated funding structures. All agencies noted being viewed in a positive light by their communities, with some noting challenges with oversight entities and the Bureau. Funding is the key to sustainability for the municipal fire-based agencies, with all noting sustainability challenges associated with keeping up with costs and paying personnel a livable wage. Valley County's agencies universally noted a high level of pride in the service they provide to their community/visitors, and quality medical direction. The above noted operational features are perhaps more dramatically apparent in Valley County due to extreme weather realities and enormous visitor population surges throughout the year. [3, 8]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability/Sustainability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), the stability/sustainability of the EMS System in Valley County is reported to be highly stable for privately and federally funded agencies (between 80-100/100) and moderately stable for the municipal agencies (a range of 50-58 out of 100).

- **EMS Agency Financial Situation:** The municipal agencies all report being underfunded. Brundage is non-revenue and does not charge for services. Tamarack ski resort EMS is privately funded. USDA Forest Service reports a surplus each year.

- **EMS Agency Communications Strategy and Outreach:** Half of the agencies have a communications strategy and outreach plan that is effective, and half do not.

- **Community View of EMS Agencies:** All agencies believe they are viewed positively by the communities they serve.

- **Elected Official Support of EMS Agencies:** Agencies in Valley County are split on whether they feel supported by their oversight entities and the Bureau.

- **Agency & System Response Outlook:** Municipal and ski patrol agencies report needing more funding to be sustainable into the future (hiring additional staff to cover shift rotations) and without that they will continue to face solvency and sustainability challenges. For agencies with volunteers, they note that the current cost of living requires two incomes per household for many residents, preventing volunteer EMTs from covering shifts in many cases. They note that without a change to their system, the future of EMS in the county looks very challenging. Noted areas of optimism among Valley County agencies include the training they're able to provide staff, level of patient care and safety has increased due to standards and training, swift response times, hazard response, ability to provide for ALS needs, and committed staff who regularly go above and beyond expectations. [3]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Brundage Mountain Ski Patrol (nonprofit) and Tamarack Ski Patrol are private; all other agencies are public. McCall, Donnelly, and Cascade all have taxing districts, while the USDA Forest Service is a federal agency.

- **Service Delivery Partners:** The Medical Director was named most frequently as a strong supporter of agencies. Other service delivery partners that agencies identified were other county agencies, county commissioners/ambulance board/fire commissioners, the community, hospitals, and city/municipal governments.

- **Medical Direction:** Agencies report a range of involvement in training from their Medical Directors, averaging 70 on a scale of 100. They have a similar view of how involved Medical Directors are with quality assurance and chart review, averaging 63/100.

- **Communications & Interoperability:** Except for two, all agencies report that their radios offer quality interoperability. Except for one, all agencies report that their radios offer good reception and reliable communication with other agencies and counties.

- **Mutual Aid System & Agreements:** Except for one, all agencies report mutual aid agreements in place. If a neighboring agency closed, all agencies except USDA Forest Service report that their operations would be significantly impacted.

- **Community Health EMS (CHEMS):** Three agencies are aware of and interested in developing a CHEMS program. One agency is aware of CHEMS but not interested in developing a program, and another agency was not aware of CHEMS.

- **Patient Care Documentation System:** Reporting in Valley County is done through web-based documentation software, electronic, paper and then put into IGEMS Patient Care Reporting (IGEMS-PCR) online provided by the Bureau. [3]

4.2.1.3. Response Overview

- **Level(s) of Service:** Agencies in Valley County operate at the EMT, paramedic, and AEMT level.

- **Agency Response Concern(s):** Four agencies reported between 0-10 and two agencies reported between 11-20 times where they experienced difficulty responding to 911 calls within the last year.

- **Helicopter Response & Utilization:** Agencies report utilizing helicopter transport when the severity of injury or time requires it (TSE), such as with Priority/Level 1 Trauma, STEMI, Code Stroke, provider discretion, fracture or dislocation with vascular injury or compromise, multi-system trauma, penetrating trauma, spinal cord or column injuries, any injury producing paralysis, suspected major pelvic fracture, internal injuries, burns more than 20% of body or face, feet, hands, genitals, Glasgow Coma

Scale (GCS) less than 10, declining mental status, obvious skull fracture, trauma in pregnant patients, unstable vital signs, multiple long bone fractures, and/or amputation. Additionally, if there is not a road close by, air response is appropriate. Agencies noted that weather is always a major factor for helicopter utilization as well.

- **Factors Impacting Response Times:** The most significant factors impacting response time for agencies in Valley County are:
    - Brundage Mountain Ski Patrol: geography, location, weather, and simultaneous calls.
    - Cascade Rural Fire District: location, geography, personnel shortages, and simultaneous call
    - Donnelly Rural Fire District: location, simultaneous calls, personnel shortages, and weather.
    - McCall Fire Protection District: personnel shortages, simultaneous calls, weather, and location.
    - Tamarack Ski Patrol: simultaneous calls, location, geography, and weather.
    - USDA Forest Service: location, time of day, weather, and geography.
- **Response to Public Lands:** When responding to incidents on public land, agencies become taxed, as it can take an entire crew out of service for an extended period of time due to the resource intensive nature of the incidents. One agency has specific equipment for public land response: rescue truck, UTV, snowmobiles, whitewater raft, and cold water/ice rescue equipment. Another agency notes that they don't get reimbursed for the resources expended on such incidents, and even though federal funds within the county are provided to offset costs, they do not see the funds. [3]

4.2.2. Workforce & Resource Assessment

The sustainability of Valley County's EMS workforce is determined largely by cost of living, housing, and wages. There is a heavy reliance on volunteers in some agencies. Shift coverage is noted as a challenge, especially for the municipal agencies. Many agencies are losing staff to Treasure Valley agencies due to wage issues. A bright spot is a relatively young EMS workforce (typically 25-44). Long term retention will require incentives and housing solutions. [3, 8]

4.2.2.1. Staffing Overview

- **Staffing structure:** The USDA Forest Service and Tamarack Ski Patrol are career agencies, while all other agencies are combination agencies.
- **Response Average Age:** The average age of agency staff in Valley County is 35-44 except at Tamarack Ski Patrol where the average age is 25-34.

- **Staffing numbers:** In Valley County, there are two EMRs, 121 EMTs, 11 Advanced EMTs, 33 paramedics, 17 non-EMS certified response personnel, and five National Ski Patrol Outdoor Emergency Care personnel.

- **Staffing concerns:** There are noted staffing concerns across agencies in Valley County, with the exception of the US Forest Service. Agencies are concerned about living wages, housing for employees, not enough staff, lack of shift coverage when someone is out sick, and overlap between fire and ambulance personnel.

- **Staffing strengths:** Half of the agencies reported optimism that they can count on volunteers who cover when paid staff is away, flexibility of staff, and committed career personnel step up when coverage is needed.

- **Recruitment & Retention:** Agencies noted retention strategies include increase pay and benefits to be competitive with Treasure Valley agencies, pay all personnel, provide healthcare, provide housing, and provide a pension. A seasonal employer noted that it would help to hire year-round. [3]

4.2.2.2. Training & Education Overview

All agencies provide in-house training for their employees which include BLS Cardiopulmonary Resuscitation (CPR), Advanced Cardiovascular Life Support (ACLS) classes, and for ski resorts, a two-day refresher prior to the ski resort opening. Outside training is offered in and among agencies as well as by St. Luke's McCall, Air St. Luke's, Life Flight Network, and the Valley County Sheriff. [3]

4.2.2.3. Facilities Overview

- **Station Location(s):** Cascade, Donnelly, and McCall each have one station, Brundage has two locations they respond from.

- **Station Condition(s):** Stations are reported to be in moderate condition overall, with some needed updates/minor repairs (63/100).

- **Facility Needs:** Facility needs within Valley County include a kitchen remodel, adding staff sleeping quarters, repairs and maintenance on a current station, larger station needs due to having outgrown current space, a more accessible facility, and reconfiguring space to accommodate career staff. At one agency, current staff manage maintenance and repairs, but some work is hired out. A couple of agencies note having rainy day funds available, and one agency said they have reserves for their fire district, but not the EMS district. [3]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** All agencies except one noted equipment/supplies are meeting needs in terms of age/condition, functionality, and use appropriateness.

- **Condition:** Most mandated equipment on ambulances were noted to be in good condition, with some of the following noted as being in mediocre condition: automated external defibrillator, patient monitor, extremity splits, traction splints, and portable handheld radios. A portable suction device and a scoop stretcher were noted to be in poor condition for one agency.
- **Funding:** Agencies have submitted grants for radios and a mechanical chest compression device. One agency noted the grant money would not cover the cost of what they need. The agencies associated with ski resorts and the federal government are ineligible for grant support based on their organizational structure, but the ski patrols noted it would be beneficial for them if they were able to apply for grant funding.
- **Needs/shortages:** Needs in Valley County include gurneys, mechanical chest compression devices, cardiac monitors, cots, and loaders. One agency will keep using what they have and will budget once the piece of equipment appears to be toward the end of its service life. It was noted that at times supply shortages cause agencies to wait longer for replacement supplies and medications. Additionally, agencies note difficulty in finding matching funds for high-cost equipment. [3]

4.2.3. Financial Overview

The overall operating cost of EMS service in Valley County is estimated to be $3,303,030.00 annually, not accounting for capital expenses. [3]

4.2.3.1. Expense & Revenue Overview

Brundage Mountain Ski Patrol:

- Operating expenses: -$661,000
- Capital expenses: -$105,000
- Personnel expenses: -$490,000

Cascade Rural Fire Protection District:

- Operating expenses: -$652,000
- Capital expenses: -$45,000
- Personnel expenses: -$503,336
- 911 EMS revenue: $531,862
- Tax support (county contract): $420,000
- Billing revenue: $111,862

- State grant (for ambulance): $135,000
- LEVY RATE: 0.000120014%

Donnelly Rural Fire Protection District:

- Operating expenses: -$659,199
- Personnel expenses: -$358,411
- 911 EMS revenue: $527,512
- Billing revenue: $123,613
- Write off amount (billing revenue vs. gross revenue): $21,913
- LEVY RATE: 0.012%

McCall Fire Protection District:

- Operating expenses: -$1,091,030
- Capital expenses: -$99,000
- Personnel expenses: -$911,422
- Carryover/reserve: $507,000
- 911 EMS revenue: $583,000
- Tax support: $418,000
- Billing revenue: $165,000

Tamarack Ski Patrol:

- Operating expenses: -$240,000
- Capital expenses: -$20,000
- Personnel expenses: -$200,000 [3]

4.2.4. Resource Assessment Additional Factors

Municipal fire agencies noted feeling hamstrung by current and changing funding structures (noted HB389 and levy yields being compromised) in Valley County and across Idaho. A fundamental lack of stability stems from cost increases, staffing, and issues related to housing in the popular mountain region. County leadership has allocated one-time Payment

in Lieu of Taxes (PILT) funds to shore up some short term challenges, but long term fixes are not intact. EMS not being essential in the eyes of the Idaho State Legislature has created friction for forward progress in EMS. Volunteer retention is a major issue as well. A central theme noted by some agencies in Valley County was the challenges of EMS are community issues rather than being EMS-only/specific. [3, 8]

ESCI Report Findings:

The following is a synopsis of the findings from the 2019 ESCI report commissioned by Valley County. This information is for reference only, and is not the work product of the contracted EMS planner writing this report:

Short Term:

- Single Medical Director for the entire county to centralize efforts/care standards
- Put in place a strategic planning and EMS quality improvement committee to evaluate operational and clinical performance
- 3 municipal based agencies utilize the same billing and collection servicer
- Evaluate transport fee structures
- Establish a regional training program with a committee to oversee schedules –fire districts share training staff and resources for goals, standardize equipment and supplies across the county.

Medium Term:

- Improve records/data collection system
- Public education to for injury and illness prevention
- Support Ground Emergency Medical Transport (GEMT) (subject to eligibility) when it goes to legislature and agencies participate in program
- Implement impact fees as a source of funding
- ET3 program participation
- ICS training should be the same across fire districts

Long Term:

- More equitable and fair funding structure across the district via the county (ie most volume to receive the proportionately appropriate funding)

- Consolidate into a single fire district to improve quality, effectiveness, and efficiency of EMS delivery [2]

REFERENCE LIST

[1] Compass – Longwoods International. (2021). *Travel USA Visitor Profile*. Idaho Commerce. Compass – Longwoods International. https://commerce.idaho.gov/content/uploads/2022/09/ITC-Longwoods-Reports-Regions-2022-FINAL.pdf

[2] Emergency Services Consulting International (ESCI). (2019). *Valley County EMS District, Cascade, ID: EMS System Evaluation for Improvement Study*. ESCI.

[3] EMS Planning Team. (2023). *Valley County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[4] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[5] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[6] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

[7] Idaho Transportation Department. (2023). *Monthly Trip Volume Comparison Report, August 2023*. Idaho Transportation Department. https://itd.idaho.gov/road-data/

[8] Interviews with agencies conducted January – August 2023 online and in-person.

[9] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Valley County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16085

[10] Robertson, Autumn. (6 December 2023). *New Commissioners Take Over Valley County EMS District*. Boise Dev. Day365. https://boisedev.com/news/2023/12/06/valley-county-ems-district/

[11] Robertson, Autumn. (18 April 2023). '*There's Nothing Available': Valley Co. grapples with housing supply shortage*. Boise Dev. Day365. https://boisedev.com/news/2023/04/18/valley-county-housing-shortage/

[12] St. Luke's Online. (2023). *Obstetrics and Gynecology Facilities Location.* Obstetrics and Gynecology. https://stlukesonline.org/health-services/specialties/obstetrics-and-gynecology

[13] University of Idaho Extension. (2023). *Valley County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16085

[14] Zillow. (2023). *Valley County Home Values*. Zillow. https://www.zillow.com/home-values/1454/valley-county-id/

WASHINGTON COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, the Bureau's data tracking systems – Biospatial and Idaho Gateway for EMS (IGEMS), and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Punctuated by rural, low-population features to the north and the more densely populated southern part of the county (Weiser), Washington County's EMS landscape faces challenges with wages/funding for staffing/coverage, geographic features that result in longer incident response times, aging facilities in some parts of the county, and succession planning stresses for key personnel. The Highway 95 corridor passes through the county as a major north-south arterial in Idaho–bringing transit traffic and recreation tourism to the local communities. Cambridge on the northern end of the county is the gateway to the Hells Canyon Recreation Area. Adams County's EMS agencies (to the north) rely partially on Weiser Memorial Hospital and agencies in Washington County for service delivery and transport, resulting in excess coverage stresses over and above those indicated by just the base population. Community health metrics are about average, and poverty rates are improving in the county, partially driven by sector expansion and population growth in Southwest Idaho--however these features also present recruitment and succession planning challenges related to wage growth/sector/labor competition and funding availability. Overall, the agencies in Washington County perform at a high level with limited resources, however significant sustainability challenges continue to grow year over year.

Strengths	Opportunities
• Committed leadership (4.1) • Weiser Memorial Hospital anchors EMS viability on a regional basis (4.1.3)	• Low wages, housing vacancy rates, and above average unemployment present targeted recruitment opportunities (2.2) • Enhanced resource sharing/scaling (staffing, equipment, supplies) through Memorandum of Understanding/Agreement's (MOU/MOA) with neighboring agencies and counties (4.2.2.4) • Strategic assessment of coverage and consolidation opportunities for rural West Central Idaho (4.2.4)
Challenges	**Threats**
• Staffing/recruitment/retention (4.2.2.1) • Remote geography and large service territory (2.1) • Anemic funding (4.2.3)	• Aging population increase demand on EMS system (2.1) • Succession planning for key personnel positions (4.2.2.1) • Talent retention against competing industry sectors (4.2.2.1) • Competitive wages in other nearby areas (2.5)

Table A: Washington County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Washington County is located in southwestern Idaho on the Oregon border. Weiser is the county seat and has the largest population, followed by Cambridge and Midvale. Between 2010 and 2022, Washington County grew by 8.7% as compared to 23.7% in Idaho as a whole. The county is 94.3% white, with 5.7% making up Black, Asian/Pacific Islander, and American Indians/Alaska Natives. 16.7% of the population is of Hispanic origin (white and nonwhite). Per capita population density has increased by about one person per square mile since 2010, with slightly more than 7 people per square mile today. The median age in 2021 was 45.7 years old, higher than both the national and Idaho averages. Interestingly, Washington County's population grew by over 500 residents between 2010 and 2020, however the county lost 15 total housing units, suggesting an increase in population per household and increased strain on housing demand. [8]

Demographic	2010	2020	2022
Population	10,098	10,559	11,087
Land Area	1,474 sq mi	1,474 sq mi	1,474 sq mi
Per Capita	6.8 PPSM	7.2 PPSM	7.5 PPSM
PPSM: *People per square mile*			

Table B: Washington County Population & Geography [8]

2.2. Economics

Washington County's largest industries, as of 2021, are government (12% of the workforce), healthcare and social assistance (11.4%), retail trade (9.5%), and professional and technical services (7.4%). In 2021, the county's unemployment rate was 4.4%, compared to 3.1% in Idaho as a whole and the number of jobs increased to 4,689, adding 215 jobs from the year before. The labor participation rate (the proportion of people 16 years old and older who are employed or available for work) in Washington County is 55%. Wage per jobs in Washington County ranked 37th of Idaho's 44 counties in 2021 at $40,092 per year. Housing stock is 4,529 total units with 65.8% being owner occupied, 25.0% occupied by renters, and 9.2% were vacant. [8] A livable wage in Washington County ranges from $14.91 per hour for a single person without children up to $50.53 per hour for a single person with three

children–presumably due to the cost/scarcity of childcare in the region. Poverty wages are $6.53 per hour for a single person without children and $13.34 for a single person with three children. [6] The average home value in the county was $335,979 as of August 2023. [9]

Metric	Data
Total Population (2022)	11,087
Median Age (2021)	45.7 years old
Poverty Rate (2021)	14%
Number of Jobs (2021)	4,689
Average Annual Wage per Job (2021)	$40,092
Unemployment Rate (2023)	3.8%

Table C: Washington County Economic Factors [8]

2.3. Social Determinants of Health

Washington County is 16th in Idaho for health outcomes (length/quality of life, etc.) and 29th in Idaho for health factors (behavioral, clinical, social, economic, environmental, etc.). The percentage of uninsured people in Washington County has been steadily declining since 2014. 17.1% of the population under the age of 65 were uninsured in 2019, down from 21% in 2014. Access to primary care physicians (PCPs) has decreased in Washington County since 2016 when there were 7.0 primary care physicians per 10,000 people. There were 4.7 PCPs per 10,000 people in 2021, compared to 6.3 per 10,000 in Idaho. The insurance/payor mix was not provided by the agencies surveyed. The poverty rate in Washington County has declined since 1989 from 19.6% to 13.7% in 2021, which is above the 10.8% poverty rate in Idaho. For those under the age of 18 in 2021, the poverty rate was 20%, and 15.9% for those under the age of 5. The poverty rate in 2021 for those 65 and older was 9.6%. [8]

2.4. Indicator Impact to EMS

Lower wages, available housing stock, and above average unemployment in Washington County present some potential strategic opportunities for targeted recruitment and retention, if funding for wages/coverage were made available. The poverty rate for people under age 18 in the county being at 20% presents long term challenges for lower wage positions and volunteer agencies in Washington County and may continue to drive up the average age metrics as young people leave the area to find better opportunities elsewhere. With high uninsured rates in the county (17%) demand pressures and financial headwinds for EMS in Washington County will continue to contribute to sustainability pressures, alongside reductions in access to care metrics. [8]

2.4.1. Malheur County

We cannot tell the complete picture of Washington County without also considering its interface with Malheur County in Oregon, just across the border. Rural Malheur County EMS is facing similar sustainability challenges with staffing, as Oregon requires an associate's degree to practice EMS in the state, resulting in talent pipeline stresses. Additionally, it was noted that the adjacent Malheur agency was losing its licensure in the near term, potentially creating additional cross-border challenges for Weiser Ambulance District. Staffing competition with the neighboring agencies also presents a significant challenge, given that some parts of Oregon have attractive hiring incentives, up to $25,000 for EMS. Even so, Malheur County's remaining EMS agencies remain a quality partner in coverage and service delivery across state lines. [5]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Bureau's data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Washington County reflects a low-to-medium call volume rural area with approximately 800 incidents per year—most of which originate in the service territory of the Weiser Ambulance District. Weiser also conducted all interfacility transports for the county, 340 total for 2022. No incident data was available for Midvale Fire Protection District. [2]

All cited call volumes below were reported to the Bureau by agencies. They have been filtered to exclude canceled calls, standby, and certain outlier responses (i.e. 24+ hour responses, 180+ minute chute times, and 360+ minute total response times).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Cambridge Ambulance	15	14	29	30	18	48
Midvale Fire Protection District	-----	-----	-----	-----	-----	-----
Weiser Ambulance District	537	214	751	508	241	749
Ambulance Total	552	228	780	538	259	797

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Washington County (2021-2022) [2]

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Cambridge Ambulance	*7 min*	*4 min*	11 min	31 min	112 min
Midvale Fire Protection District	-----	-----	-----	-----	-----
Weiser Ambulance District	*3 min*	*4 min*	7 min	7 min	55 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Washington County (2022) [2]

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some of it is quantitative/objective. In cases where agencies did not provide detailed information, or chose not to share information, high level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected to not participate in the EMS assessment; therefore, data is deemed reliable, but in some cases incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or were shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point Overview

The Washington County Sheriff's office provides the county's 911 dispatch. Each of the agencies in the county are dispatched by the sheriff's office via radio following a 911 call. [1]

4.1.2. EMS Agency Overview

Cambridge Volunteer Ambulance is a non-profit EMS/ambulance. Midvale Fire Protection District is a fire-based tax district with an ambulance for EMS service. Weiser Ambulance District is an EMS taxing district. [1]

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Cambridge Volunteer Ambulance	911 Response Transport	Basic Life Support (BLS)	Unscheduled	On-call w/ Uncompensated Volunteer
Midvale Fire Protection District	911 Response Transport	BLS	Unscheduled	On-call w/ Uncompensated Volunteer
Weiser Ambulance District	911 Response Transport	Advanced Life Support (ALS)	Scheduled & Unscheduled	FT & PT Compensated/ Career w/Volunteers

Table F: List of EMS Agencies Located in Washington County [1, 3]

4.1.2.1. Cambridge Volunteer Ambulance

Cambridge Volunteer Ambulance is a private nonprofit EMS/Ambulance which operates up to the Emergency Medical Technician (EMT) level and is overseen by a board of directors. Their staff includes 10 EMTs and eight non-EMS certified personnel. They respond out of one recently built station located at 190 N. Commercial St. They cover a significant amount of territory going north to the Adams County line, south along the Weiser River, and west to Hells Canyon. Cambridge Volunteer Ambulance transports to Weiser Memorial Hospital and they utilize Air St. Luke's and Life Flight Network for air transport. Revenues from EMS helps to cover their use of the fire facility in Cambridge. If additional funding were available, they would like to see it go to adding more personnel, training and education for existing employees, and training new recruits. In 2023, they noted two key retirements and more aging out in the next few years. The initial National Registry of Emergency Medical Technician (NREMT) certification testing standard presents recruitment and passage challenges for their rural volunteer-based EMS service, and they are seeing burnout with new recruits who do pass the initial test. [1, 3, 5]

Figure G: Image of Cambridge Volunteer Ambulance

4.1.2.2. Midvale Fire Protection District

Midvale Fire Protection District is a public tax district fire-based agency. They cover 240 square miles in Washington County and are overseen by the Midvale tax district. Their personnel are certified up to the EMT level of service. They are staffed by volunteers, nine of which are EMTs and 15 are non-EMS certified response personnel. They respond out of one station in Midvale located at 105 River Street. They primarily transport to Weiser Memorial Hospital and when air transport is necessary, they work with Air St. Luke's and Life Flight Network. If additional funding were available, they would prioritize the following: add more employees, train new recruits, and increase compensation opportunities. They also noted concerns with the initial NREMT certification testing standard (see 4.2.1.1) as a barrier to recruitment due to low passage rates for new recruits. The agency noted the importance of community generosity as it relates to their bottom line (lots of donations) and working with the fire district for expenses related to fuel, training, and administrative costs. [1, 3, 5]

4.1.2.3. Weiser Ambulance District

Weiser Ambulance District is a public tax district EMS agency, licensed to the Advanced Emergency Medical Technician (AEMT) level and overseen by the taxing district in the City of Weiser. Their staff includes 15 EMTs, two AEMTs, seven Paramedics, and five non-EMS certified personnel. They respond out of four stations. Weiser Ambulance transports to Weiser Memorial Hospital, St. Alphonsus in neighboring Ontario, OR, and St. Luke's Fruitland. They utilize Air St. Luke's and Life Flight Network for air transport. If they had additional funding resources, they would put it towards increasing pay for current employees, adding more employees, and facility upgrades. Their main station was built in 1978 and is showing its age. They purchased a home next door that has shored up their staffing/housing needs in the near term but is not a 'forever fix'. [1, 3, 5]

Figure H: Image of Weiser Ambulance District

4.1.3. Hospital Access Overview

Washington County agencies utilize Weiser Memorial Hospital, St. Alphonsus in Ontario, OR, and St. Luke's Fruitland. [1] Weiser Memorial is a 15 bed Critical Access Hospital with no Time Sensitive Emergency (TSE) designation. St. Alphonsus in Ontario is a 49-bed acute care hospital with a Level IV trauma designation and obstetrics care. [4, 7] St. Luke's Fruitland is a TSE designated Level II STEMI center with a stand-alone Emergency Department. [4]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Overall, agencies in Washington County are facing two major operational challenges, no matter their size and structure: staffing and funding. The smaller volunteer agencies are at the whims of the volunteer pool for coverage, and facing burnout issues, while the more densely populated areas of the county are seeing demand increases associated with population growth and retention. Despite the challenges, all agencies noted a favorable relationship with their communities and oversight bodies. [1, 5]

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** On a subjective scale of 0 (least sustainable) to 100 (most sustainable), the average for agencies across the county is 52 out of 100.

- **EMS Agency Financial Situation:** Agencies report either breaking even consistently, getting by but having deficits most years, or relying on grants and donations for capital expenses.

- **EMS Agency Communications Strategy and Outreach:** Some agencies noted having an effective and functional communications strategy in Washington County, while others do not.

- **Community View of EMS Agencies:** All agencies report that they are viewed favorably by the communities they serve.

- **Elected Official Support of EMS Agencies:** All agencies feel well supported by their oversight body. They are split evenly between feeling supported, neutral, and not feeling supported by the Bureau.

- **Agency & System Response Outlook:** Agencies report concerns into the future surrounding staff recruitment and retention due to the NREMT initial certification testing requirements and they note difficulty in recruiting and retaining staff since the state went to this structure. Some note feedback they have been given from recruits indicating people are worried about failure in testing environments. It was also reported that with lack of funding, it is difficult to incorporate standardized technology and equipment to stay relevant in the field. Despite these challenges, agencies report optimism in the dedicated EMTs who care for the community they work in. [1]

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Within Washington County there are two public agencies and one private agency.

- **Service Delivery Partners:** The Medical Director, other agencies, hospitals, and fire departments are listed as strong delivery partners. Also listed as delivery partners in Washington County are the community and city/municipal government.

- **Medical Direction:** The Medical Director is reported as being adequately involved in EMS training, quality assurance, and chart review in Washington County.

- **Communications & Interoperability:** Communications are reported to offer quality interoperability and features that meet agency needs. Most radios offer quality reception and reliable communication with other agencies and counties most of the time.

- **Mutual Aid System & Agreements:** All agencies have mutual aid agreements with neighboring agencies. If a neighboring agency closed, service areas would be dramatically affected, relying on law enforcement or agencies further away. Call response times would increase as well as overhead and payroll expenses. Another anticipated setback is that there would be no back-up assistance to the service areas within an agency's territory when that agency was covering for the closed agency.

- **Community Health EMS (CHEMS):** All agencies know about CHEMS programs. Midvale and Weiser are interested in partnering with other agencies to develop one, but Cambridge is not.

- **Patient Care Documentation System:** All agencies use Patient Care Reporting (PCR) documentation provided by the Bureau. [1]

4.2.1.3. Response Overview

- **Level(s) of Service:** In Washington County, two agencies operate to the EMT level of service, and one operates up to the AEMT level of service.

- **Agency Response Concerns:** In the past year, there have been between 11-40 occasions on which there was difficulty responding to a 911 incident.

- **Helicopter Response & Utilization:** All agencies utilize helicopter transport depending on the location or type of emergency: stroke, heart attack, trauma, or drug overdose patients or any other injury/illness that would worsen during ground transport. Agencies typically use Air St. Luke's in these situations.

- **Factors Impacting Response Times:** All agencies within Washington County listed personnel shortages and location as the top factors affecting their response times. The most significant factors impacting response time by agency are:

  - Cambridge Volunteer Ambulance: personnel shortages, simultaneous calls, time of day, and location.

  - Midvale Fire Protection District: location, personnel shortages, time of day, and weather.

  - Weiser Ambulance District: location, weather, geography, and personnel shortages.

- **Response to Public Lands:** Long transport times across the county on public lands takes needed resources away from the rest of the service area. One agency reported owning specialty equipment for these incidents: a UTV to help with transport to their staged ambulance. No data was provided about the ratio of responses to public lands versus response on private or residential/commercial lands. [1]

4.2.2. Workforce & Resource Assessment

The EMS workforce in Washington County, while trending younger (35-54) than in some Idaho counties, faces some challenges with competency of new staff who need to gain experience. New recruits face low call volumes in the northern part of the county, while the career agency for the county has funding limitations for shift coverage. Even so, staff communication is noted as excellent and Weiser's 48-hour shift structure is noted as a bright spot for recruitment and retention. Weiser also pairs shift EMTs with Paramedics, enhancing quality of care and capabilities within their service territory. [1, 5]

4.2.2.1. Staffing Overview

- **Staffing structure:** Midvale and Cambridge are volunteer agencies. Weiser is a combination agency with full time, part time, and volunteer coverage.
- **Responder Average Age:** Midvale and Cambridge have an average employee age of 45-54 while Weiser's is 35-44.
- **Staffing numbers:** There are 34 total EMTs, two AEMTs, and seven Paramedics in Washington County, with the majority of this personnel based in Weiser. There are an additional 28 non-EMS certified response personnel in Washington County, with the majority based in Midvale.
- **Staffing concerns:** There are noted staffing concerns across the three agencies in Washington County. Agencies are concerned with being able to pay their employees, relying on staff that are new or inexperienced, teaching new recruits to pass the national registry, and due to the nature of the job and being rural, it can take a new recruit a year to onboard. The agencies also noted that if they lost staff due to illness or retirement that they are not well-equipped to cover those staffing gaps.
- **Staffing strengths:** Communication between staff, 48-hour shifts, and recruitment strategies to bring on new EMTs every few years are noted as staffing strengths.
- **Recruitment & Retention:** For Washington County agencies, a number of improvements were noted to help recruitment and retention. Volunteer agencies would like to see Idaho standardized testing that is separate from the national registry, the capacity to have two duty crews who are able to share living quarters in the station while they are on duty and being able to compensate personnel per incident/call-out. [1]

4.2.2.2. Training & Education Overview

All agencies in Washington County report providing in-house training. Midvale meets twice monthly for training. In Weiser, new recruits are trained on a volunteer basis via the primary crew on duty and orientation packets and training are used. Cambridge is trained by medical control who provides training several times per year. They also go to local EMS conferences, attend online classes, and attend training put on by neighboring agencies. [1, 5]

4.2.2.3. Facilities Overview

- **Station Location(s):** Midvale and Cambridge have one station each. Weiser has four stations.

- **Station Condition(s):** Midvale and Cambridge stations are owned and maintained by the fire protection district and their conditions are reported as average and above average with minimal upgrades needed. Weiser reports significant facility upgrade needs as their facilities were built in the 1970s.

- **Facility Needs:** Weiser needs significant upgrades for sleeping quarters; currently they rent a house nearby for ease of proximity to staff on shift when calls come in. Midvale noted needing a larger training room. [1]

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Equipment and supplies were all rated as meeting the needs of functionality and use appropriateness, and age/condition, with the exception of one agency.

- **Condition:** All equipment and supplies pertinent to EMS service delivery in Washington County was noted to be in at least mediocre condition, with most equipment in good or excellent condition.

- **Funding:** Grant funding has been utilized by all agencies. Types of equipment that have been sought using grants include: bags, cot features, patient moving equipment, a new ambulance, and cardiac monitors. Additional American Rescue Plan Act (ARPA) funding was utilized to purchase a power cot and other equipment.

- **Needs/shortages:** One Washington County agency reports an immediate need of a new defibrillator/patient monitor, while the other agencies have back up equipment and rely on grant money for long term equipment needs. It was noted that some disposable equipment has been hard to come by or more expensive following the COVID-19 pandemic, but neighboring agencies and hospitals have helped shore up those needs if they have an excess. [1]

4.2.3. Financial Overview

The total estimated operating cost for EMS in Washington County is $1,420,000 annually (personnel and operations) with an additional $334,670 in projected near term capital expenditures. Carryovers/reserves, if any, are typically modest. [1]

4.2.3.1. Expense & Revenue Overview

Cambridge Volunteer Ambulance:

- Operating expenses: -$35,000

- Capital expenses: -$325,000

- Personnel expense: -$1,000
- Carryover/reserves: $40,000
- Grants: $234,656
- Donations: $8,290
- Fundraiser for new ambulance: $68,245

Midvale Fire Protection District:

- Operating expenses: -$5,000
- EMS Capital expenses: -$1,500
- Personnel expenses: -$2,000
- Total 911 revenue: $1,000 “if we are lucky”

Weiser Ambulance District:

- Operating expenses: -$560,000
- Capital expenses: -$8,170 (for IV pumps)
- Personnel expenses: -$817,000
- Tax support: $301,312
- Billing revenue: $630,251
- Billing: 10/01/2021-09/30/2022: 926 billable calls: Charges are $1,309,341.80. Disallowed: ($487,143.88). Uncollected: ($20,336.91) Payments: $464,901.83. Pending: $336,959.18 [1]

4.2.4. Resource Assessment Additional Factors

The vast majority of funding for EMS in Washington County comes from one-off grants for equipment, donations, billing, and the Weiser Ambulance District taxing funds (approx. 21% of total operations). Anecdotally, agencies noted challenges with recruitment, retention, burnout, and lack of investment into stabilizing features of EMS in Washington County. They noted few incentives for people to enter the EMS workforce when they can find better paying and more stable opportunities in other sectors. Scale, paired with a handful of community poverty and insurance metrics that affect billing recovery rates seem to inflame these revenue challenges. Some volunteer agencies are particularly frustrated with the initial NREMT certification testing standard, as they feel it sets a difficult entry point for volunteers. The lack of funding for staffing has, as in many parts of Idaho, created a situation where facilities and equipment needs fall by the wayside. Opportunities may exist for agencies to

consolidate/coordinate efforts and create scale across a broader territory, however administratively, this can be difficult to achieve due to low population density features, especially further north. [1, 5]

<u>REFERENCE LIST</u>

[1] EMS Planning Team. (2023). *Washington County EMS Resource Assessment Survey.* Idaho EMS Resource Assessment Survey.

[2] Idaho EMS Bureau. (2023). *Biospatial Call Volume and Response Time Data.* Biospatial. https://biospatial.io

[3] Idaho EMS Bureau. (2023). EMS Bureau Provided Information: Agency Licensure Type/Level, Location, & Staffing.

[4] Idaho Health and Welfare. (2023). *Idaho Time Sensitive Emergency (TSE) Facility Designations.* Idaho Time Sensitive Emergency. https://healthandwelfare.idaho.gov/providers/idaho-time-sensitive-emergency/idaho-tse-facility-designations

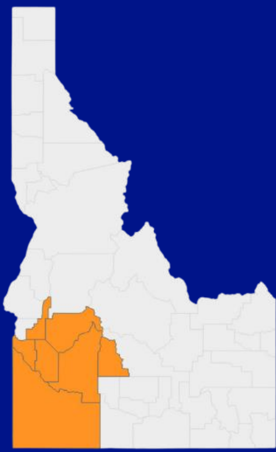
[5] Interviews with agencies conducted January – August 2023 online and in-person.

[6] Massachusetts Institute of Technology. (2023). *Living Wage Calculator – living wage calculation for Washington County, Idaho.* Living Wage Calculator. https://livingwage.mit.edu/counties/16087

[7] Saint Alphonsus. (2023) *Obstetrics Locations*. Saint Alphonsus. https://saintalphonsus.org/specialty/obstetrics/locations

[8] University of Idaho Extension. (2023). *Washington County.* Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16087

[9] Zillow. (2023). *Washington County Home Values*. Zillow. https://www.zillow.com/home-values/3053/washington-county-id/



SOUTHWEST
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the Southwest AOR:

- Ada
- Boise
- Camas
- Canyon
- Elmore
- Gem
- Owyhee

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area – The Southwest AOR includes a far-stretching landscape that transitions from desert land in its south, to rolling hills and mountains in its north. This geographic difference lays the framework for its infrastructure and population landscape, as its seven counties hold nearly half of the state's population. This statistic, however, cannot be overshadowed by the fact that the region includes two of the most populated counties in the state and one of the least. This leads to stark differences in residential, commercial, and industrial environments simply by crossing its counties' borders, or by traveling along its interstate thoroughfares.

As a result, the emergency medical service (EMS) systems included within this region range from purely volunteer and unscheduled structures to fully-career and nationally recognized examples of model efficiency and operational progress. As neighbors to one another, their differences are noticeable. As potential partners in developing a regionally supportive system of care, their opportunities lead the pathway for sustainability are gainful.

ADA COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

The emergency medical service (EMS) system in Ada County is a unique example of how a multi-partnered, quasi-consolidated system can be designed. Its unique approach, similar to neighboring Canyon County's system, exemplifies how multiple community and agency stakeholders spanning across fire and EMS disciplines can administratively and operationally collaborate, all while maintaining their own individual and corporate identities. Its county-focused approach and developed economy-of-scale delivery model positions it well to navigate the rapid growth experienced within the county, however, to achieve this also requires adequate system funding, which the system is pivotally facing in the moment.

Uniquely and arguably, the EMS system within Ada County is one of the most effective and efficient existing models in the state, while also showing great potential for future growth. This also leads to one of its greatest challenges: keeping up with its demand and coverage need. Its demand is largely due to the county's rapid population growth, while its coverage need is largely due to its communities' suburban expansion into what has historically been rural landscapes. The dilemma created in this reality is that call volumes continue to remain high in populated urban areas, while the need for adequate coverage continues to grow in rapidly transitioning rural-to-suburban developments.

In a sense, the system is designed to effectively function within an urban/suburban landscape because that's where its primary source of funding comes from, reflecting its patient billing revenues. Its need for coverage growth, moreover, is in its surrounding areas where the cost to provide services doesn't quite match the financial return for billing for those services. Providing equitable coverage to these areas, thus, requires more than what the system is able to generate under its current restraints. This systemwide need for more also translates to the need for more EMTs (emergency medical technicians) and Paramedics that are available to respond and transport in ambulances throughout the county.

In contrast to other neighboring rural counties, Ada County's EMS system doesn't need more volunteers, it doesn't need dedicated on-call pay, and it doesn't need to worry about the significance behind the loss of one or two EMS providers within any given year; it needs the appropriate, less restricted funding to be able to sustain itself so that it can incorporate its best practice model scale into its rural-to-suburban growth areas. Such leverage would assure that all its residents receive greater equal access to care, rather than dispersed equitable access to care.

Strengths	Opportunities
• Collaborative, system-based model is already place. • Ambulance taxing district funding is in place.	• Existing economy-of-scale modeling may allow for greater countywide or regional rural coverage if dedicated funding becomes available. • Options may exist to incorporate additional BLS ambulances into the system to account for higher demands and paramedic recruitment realities.
Challenges	**Threats**
• Significant countywide population growth and community development has outpaced the current system's ability to maintain operational growth due to land acquisition and operational funding restrictions. • Providing countywide rural coverage is challenged by higher suburban/urban call volume demands. • Ambulance taxing district levy limits restrict financial security opportunities.	• System integrity and efficiency could be jeopardized if organizational dissolution or separation were to result in the future. • Increasing call volumes may threaten shift schedule dynamics, necessitating a transition away from traditional 24-hour shifts, thus, increasing the need for more employees.

Table A: Ada County SCOT Analysis

SECTION

2

CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Ada County has experienced rapid year-over-year population growth and land development, ranking it as the most populous county in the state with double the population of its following (and neighboring) Canyon County, who combine to create the Treasure Valley, a region consisting of nearly 800,000 residents. The cities of Boise and Meridian comprise the majority of the county's population, nearly 70% of its total, and also lead the state in city populations, respectively.

Demographic	2010	2020	2022
Population	392,365	494,964	518,907
Land Area	1,052.58 sq mi	1,052.01 sq mi	1,052.01 sq mi
Per Capita	372.8 PPSM	470.5 PPSM	493.3 PPSM
PPSM: *People per square mile*			

Table B: Ada County Population & Geography [1]

2.2 Economics

As exemplified by the population growth experienced within the county from 2010-2020 (approximately 26%), Ada County has also experienced an approximately 25% increase in single family residences between that same time period. [2] This rapid population growth and community footprint expansion has brought about a respective increase in total jobs, an increase in wages per job, and an increase in overall household incomes; while consequentially resulting in higher rental market rates, higher home value rates, and a higher overall cost of living when compared to the rest of the state. These factors greatly impact EMS agencies as they try to recruit and retain workers, whose financial also needs rise, all while taxing district rates remain limited.

Metric	Data
Total Population (2022)	518,917
Median Age	32.8 years old
Poverty Rate (2021)	9%
Number of Jobs (2021)	367,584
Average Annual Wage per Job (2021)	$63,224
Unemployment Rate (2023)	2.4%

Table C: Ada County Economic Factors [2]

2.3. Social Determinants of Health

Ada County ranks toward the top of nearly all factors related to *County Health Rankings*, including health outcomes, health behaviors, and clinical care within Idaho. This reality is a direct result of its residents' greater access to care and higher percentages of insurance coverage at all age levels, exceeding both state and national coverage percentages, largely due to its lower unemployment levels and prominence of local residents/patients. [3]

2.4. Indicator Impacts for EMS

Because the county is a predominant population center within the state, the challenges faced within its rural landscape may be overshadowed by the fortunes of its urban and suburban growth. This growth, moreover, brings its own set of challenges as the financial impact of infrastructure needs, an increased volume and variety of health care needs, and the community dynamics associated with "big cities" compared to "small towns" may exacerbate other system-of-care impacts that are expected with such designations.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Outlined by the total response times experienced within the county, it is apparent that ambulances and other responding EMS units are strategically located throughout the county to result in rapid response times, especially in more urbanized and populated areas. What is not differentiated in this report in either the total call volume or response times, however, are the instances where ambulances and responders respond to more rural areas of the county. Data relating to such instances is likely drowned out by the greater volume of incidents occurring in more urbanized locations. Respective to rural incidents that do occur, the average response and call times are likely proportionately greater because of the system's design and funding model, necessitating it to account for equitable demand, rather than equal coverage. Herein lies a potential opportunity for further evaluation and system enhancement through dedicated funding.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Ada County/City Emergency Services System	19,191	20,294	39,485	20,747	26,138	46,885
Elmore Ambulance Service (Elmore County)	5	-----	5	-----	-----	-----
Treasure Valley EMS System (Canyon County)	35	12	47	40	8	48
Ambulance Total	19,231	20,306	39,537	20,787	26,186	46,933
Gowen Field Fire Department	-----	15	15	-----	12	12
Orchard Fire Department	-----	18	18	-----	4	4
QRU Total	-----	33	33	-----	16	16

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Ada County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Ada County/City Emergency Services System	1 min	7 min	8 min	11 min	52 min
Treasure Valley EMS System (Canyon County)	2 min	14 min	16 min	21 min	70 min
Gowen Field Fire Department	1 min	2 min	3 min	-----	32 min
Orchard Fire Department	3 min	5 min	8 min	-----	48 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Ada County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center, who serves as the sole PSAP within the county for EMS dispatching. Within this center, 911 calls are routed to respective fire and EMS dispatchers who utilize emergency medical dispatching (EMD) services when indicated and notify available crews of their need for a response.

4.1.2. EMS Agency Overview

The 911 response system within Ada County is a unique system within the nation that operates under a collaborative model with a single organization serving as the EMS license holder, while multiple individual departments and agencies exist underneath it (with only a few exceptions). This system, ACCESS (Ada County/City Emergency Services System), exists as its own joint powers authority (JPA) that serves as the countywide ambulance taxing district, while incorporating multiple local fire departments as response entities and operating its ambulance service as the entity of Ada County Paramedics. This system, and its neighboring Treasure Valley EMS System, remain one of only a few of its kind utilized throughout the country.

Independent, but still clinically collaborating with the ACCESS organization and within the county's EMS system are also two military base installation resources who provide primary quick response services within their vicinity. Additionally licensed within the county, but separate from the ACCESS system, are three wildfire-based (mission-specific) non-transport agencies, one corporate non-transport entity, one search and rescue based non-transport resource, five interfacility transfer ambulance services, and one helicopter/air-based EMS transport resource.

Respective to the county's 911 system, only three licensed agencies exist under the ambulance transport and non-transport definitions, while multiple municipal and taxing district fire departments also play a role within the system's emergency operations.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Acute Rescue and Transport	IFT Critical Care – Ground	Advanced Life Support (ALS), Critical Care	Scheduled	Compensated/ career
Ada County/City Emergency Services System	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Air St. Luke's	Air Medical	Advanced Life Support (ALS), Critical Care	Scheduled	Compensated/ career
Backcountry Rescue	Non-public	Basic Life Support (BLS)	(Unknown)	(Unknown)
Boise BLM Smokejumpers	Wildfire	Basic Life Support (BLS)	Scheduled	Compensated/ on-call
Gowen Field Fire Department	911 Response Non-transport	Basic Life Support (BLS)	Scheduled	Compensated/ career
Idaho Bureau of Land Management	Wildfire	Basic Life Support (BLS)	Scheduled	Compensated/ on-call
Injury Care EMS	IFT Critical Care – Ground	Advanced Life Support (ALS), Critical Care	Scheduled	Compensated/ career
Intermountain Healthcare Specialty Care Transport	IFT Critical Care – Ground	Advanced Life Support (ALS), Critical Care	Scheduled	Compensated/ career
Lifestar Rural EMS Solutions	Interfacility Transfer- Ground	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Micron Technology	Non-public	Basic Life Support (BLS)	(Unknown)	(Unknown)

Orchard Fire Department	911 Response Non-transport	Basic Life Support (BLS)	Scheduled	Compensated/ career
USFS-Boise National Forest	Non-public	Basic Life Support (BLS)	Scheduled	Compensated/ on-call
Victory EMS	IFT Critical Care – Ground	Advanced Life Support (ALS), Critical Care	Scheduled	Compensated/ career

Table F: List of EMS Agencies Located in Ada County

4.1.2.1. Acute Rescue and Transport

Acute Rescue and Transport is a private, for-profit ambulance service providing interfacility transfer (IFT) services throughout the state. The agency is not a part of the 911 response system and only operates at the request of sending/receiving healthcare facilities.

4.1.2.2. Ada County/City Emergency Services System

The Ada County/City Emergency Services System (ACCESS) is a collaborative organization designed as a public, ambulance taxing district entity (operating its ambulance service as Ada County Paramedics) to function as the district's 911 response ambulance service, while incorporating the support of Boise Fire Department, Eagle Fire Department, Kuna Fire Department, Meridian Fire Department, Middleton & Star Fire District, and North Ada County Fire Rescue District. The organization operates under a joint powers agreement that authorizes voting rights, allows for shared resources, and creates common clinical/operating practices among the partnering agencies. While the Ada County Board of Commissioners also serves as the taxing district's board, the organization of ACCESS is not a department or entity of the Ada County government; it is its own taxing district/joint powers authority.

The entity of Ada County Paramedics serves as the source of medical care billing for the ACCESS system and as a source for systemwide collective purchasing. Individually, each municipal/public entity provides for its own staffing and organizational structure, however, there are some system/organizationally funded positions that are designed to function in more of a system-focused role than in an individual entity role.

As a system, response units (which include ambulances, supervisory units, and fire-based apparatus) respond to over 40,000 unique incidents each year throughout the county (system). The system and its ambulance service operate up to the ALS level of care, staffing nearly all of its ambulances with one EMT and one Paramedic, while piloted opportunities are being pursued to trial dual-EMT staffing to respond to lower-acuity incidents for some of its deployed ambulances. In total, 14 ambulances are typically in-service at any given time on a 24/7 basis, with an additional three (totaling 17 ambulances) being available during higher-volume (peak) timeframes. Fire apparatus are commonly staffed by cross-trained Firefighter/EMTs, however, some individual fire departments are also employing cross-

trained Firefighter/Paramedics to staff their apparatus. Units within this system deploy from a number of fire stations and EMS (only) stations located throughout the county, primarily operating on a career-based 24-hour or 48-hour shift model.

Staffing challenges do hit those within Ada County Paramedics, as the reality of occasional "brown outs" of ambulances do occur (situations where a unit is not staffed due to insufficient numbers of personnel). To combat this, the incorporation of mandatory overtime and hold-over is sometimes all the agency can do to keep adequate numbers of ambulances available for 24 hour coverage. Such instances are largely due to the staffing recruitment challenge the agency faces and its budgetary restriction on increasing its available personnel roster. In recent years, as an example, the agency has had to debate whether it should increase its providers' pay or try to add more ambulances into the system. The dilemma created here, moreover, is that agencies cannot add more ambulances (and recruit more providers) if they do not competitively pay them.

Of the over 40,000 EMS incidents that occur within the county (system), approximately 45% (less than half) result in a patient being transported to the hospital. This results in a higher cost of readiness compared to the revenue that is generated through ambulance transports and medical billing services. Of the patients transported to a hospital, the significant majority are transported to hospitals within the county and have access to a variety of specialty care capabilities to manage any and all minor through major illnesses/injuries.

Figure G: Images of ACCESS/Ada County Paramedics

4.1.2.3. Air St. Luke's

Air St. Luke's is a private, non-profit air transport service offering helicopter (rotor-wing), airplane/jet (fixed-wing) and ambulance (ground) patient transport services between hospital entities throughout the state and national region. The agency staffs two bases in the state; one in Boise and the other in Twin Falls (Twin Falls County). While they are not primarily identified as a 911 resource, they are frequently requested by various local/regional 911 EMS agencies (primarily in rural/remote locations) to either provide high-acuity and time sensitive emergency care and patient transportation to ill/injured patients, or to serve as a source of primary patient care and transport as a result of the extensive time demands that a ground response ambulance would otherwise experience. Between the agency's two bases, approximately 40% of their responses are for 911-oriented incidents

such as direct scene flights or direct patient care where they may be the first transporting unit to arrive. Approximately 25% of these responses result in a cancellation or no-transport scenario, which equates to a financial loss for the agency due to its expenses related to fuel expenditure and time allocation.

When the agency does respond with a helicopter to a 911 incident, the expense for such services – not to the helicopter service's direct fault – is often exponentially higher than what would be experienced with a ground ambulance transport, especially when the patient does not have a high-acuity or time sensitive illness/injury. In such situations, there is little justification in utilizing a helicopter to provide services that an ambulance is fully capable of providing, but otherwise chooses not to because of its factor of time. There is also a significantly higher safety risk associated with helicopter use for low-acuity illnesses/injuries, such that the risk versus benefit is disproportionately higher toward the side of increased risk. In some rural/remote locations throughout the state, Air St. Luke's essentially is the local ambulance service; despite ambulance taxing districts or service agreements being in place.

4.1.2.4. Backcountry Rescue

Backcountry Rescue is a private, for-profit non-transport EMS agency corporately located in Ada County, but primarily providing rescue-based operational support throughout the state in various remote locations and for wildfire incidents. They are not directly a part of any local 911 response system.

4.1.2.5. Boise BLM (Bureau of Land Management) Smokejumpers

Boise BLM Smokejumpers is registered as a wildfire-based EMS agency providing isolated medical support operations during wildfire incidents. They are an internal-care resource that is not directly a part of any local 911 response system.

4.1.2.6. Gowen Field Fire Department

Gowen Field Fire Department is a public/federal, fire-based non-transport response agency within the county that provides local coverage in and immediately around Gowen Field (military base) and Boise International Airport. Their staff of career firefighters and cross-trained firefighter/EMTs provides BLS patient care in collaboration with the county's ACCESS partners while awaiting further patient care and transport by the ACCESS ambulance service (Ada County Paramedics). In total, they respond to approximately 10-20 calls per year. Within their operations, they do serve as a resource to the 911 system, but in a limited and minimal overall capacity.

4.1.2.7. Idaho Bureau of Land Management

Idaho Bureau of Land Management is registered as a wildfire-based EMS agency providing isolated medical support operations during wildfire incidents. They are an internal-care resource that is not directly a part of any local 911 response system.

4.1.2.8. Injury Care EMS

Injury Care EMS is a private, for-profit ambulance service providing interfacility transfer services to/from healthcare facilities, residences, and care facilities within the region/state. While not directly a part of the 911 response system within Ada County, the agency does offer supplemental mutual aid support to neighboring county EMS agencies on a per-request basis.

4.1.2.9. Intermountain Healthcare Specialty Care Transport

Intermountain Healthcare Specialty Care Transport is a private, for-profit ambulance service providing interfacility transfer services throughout the state. The agency is not a part of the 911 response system and only operates at the request of sending/receiving healthcare facilities.

4.1.2.10. Lifestar Rural EMS Solutions

Lifestar Rural EMS Solutions is a private, for-profit ambulance service providing interfacility transfer services throughout the state. The agency is not a part of the 911 response system and only operates at the request of sending/receiving healthcare facilities.

4.1.2.11. Micron Technologies

Micron Technologies is a private, for-profit corporation utilizing internal staff to operate its own on-site medical response services. The agency is not a part of the 911 response system.

4.1.2.12. Orchard Fire Department

Gowen Field Fire Department is a public/federal, fire-based non-transport response agency within the county that provides local coverage in and immediately around the Orchard Combat Training Center. Their staff of career firefighters and cross-trained firefighter/EMTs provides BLS patient care in collaboration with the county's ACCESS partners while awaiting further patient care and transport by the ACCESS ambulance service (Ada County Paramedics). In total, they responded to less than 10 calls during the year of 2022. Within their operations, they do serve as a resource to the 911 system, but in a limited and minimal overall capacity.

4.1.2.13. USFS-Boise National Forest

USFS-Boise National Forest is registered as a wildfire-based EMS agency providing isolated medical support operations during wildfire incidents. They are an internal-care resource that is not directly a part of any local 911 response system.

4.1.2.14. Victory EMS

Victory EMS is a private, for-profit ambulance service providing interfacility transfer services throughout the state. The agency is not a part of the 911 response system and only operates at the request of sending/receiving healthcare facilities.

4.1.3. Hospital Access Overview

Multiple hospitals are located within the county and serve the population both within and surrounding Ada County, and even throughout the entire state. The St. Luke's and St. Alphonsus healthcare systems offer a variety of specialty care services that include trauma centers, cardiac care centers, and comprehensive stroke centers. Additional, specific, hospital services are also available within the county for pediatric patients and veterans, respectively.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

A unified system approach to organization and operations sets the Ada County EMS system apart from many other counties in the state. This structure promotes somewhat of a tiered-response model, where BLS response entities may arrive at the scene of an incident first, allowing for initial care to be provided while ALS response resources are only moments away. In other instances, ALS resources may arrive at a scene first while BLS resources arrive shortly thereafter and provide supportive care and operational assistance as needed. Structurally, one set of clinical protocols are followed by all 911 response agencies, which allows for patient care cohesion regardless of whichever response entity arrives at a scene first.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** EMS agencies within the county rate their sustainability levels toward the higher end of the spectrum, many in the 80s out of 100. Factors that challenge this value commonly relate to limited funding, as nearly all 911 responder agencies indicate a need to increase employee pay to both remain competitive and to offer thriving local wages, as well as a financial need to support operational growth due to community expansion.

- **EMS Agency Financial Situation:** Agencies express a common "breaking even" sentiment with regards to individual finances. Restricted tax levies have been identified as a common and significant source of this sentiment, threatening their long-term sustainability and current general operations.

- **EMS Agency Communications Strategy and Outreach:** Many of the metropolitan and public based agencies identify they have strong communications strategies within their communities and regularly promote public outreach activities.

- **Community View of EMS Agencies:** EMS agencies perceive that the general public does view them in a positive light.

- **Elected Official Support of EMS Agencies:** EMS agencies do feel supported by their communities and the general public.

- **Agency & System Response Outlook:** Many agencies express optimism toward the future, however, still recognize there are workforce and community growth challenges that need to be addressed through proper financial support in order for this optimism

to become a reality. One agency chief/administrator was quoted as saying that under the current state of affairs, the agency "can either add a resource or pay people more, but can't do both at the same time."

4.2.1.2. Organizational & Operational Overview

- **EMS Agency Structure(s):** A unique and collaborative public system model is utilized throughout the county for 911 response services, which includes one (sole) 911-based ambulance service provider.

- **Service Delivery Partners:** Various private-based interfacility transfer ambulance services are a common partner within the system, allowing 911-based ambulances to remain in service to focus their efforts on community emergency care, rather than facility-to-facility or facility-to-home patient movement.

- **Medical Direction:** Medical direction within the 911 system is consolidated and unified, resulting in high collaboration and involvement by the associated physician team.

- **Communications & Interoperability:** Communications within the system is expressed as reliable and updated. System users contribute approximately $700,000 per year for its maintenance and use.

- **Mutual Aid System & Agreements:** Formal mutual aid agreements are in place between the countywide 911 ambulance service and other local EMS agencies.

- **Community Health EMS (CHEMS):** An established CHEMS program is in place within the county, with optimism toward program expansion and seeking sustainable funding.

- **Patient Care Documentation System:** An independently contracted vendor is utilized by the 911-based system to incorporate its EMS and fire-based reporting needs. This vendor platform relays/exports its relevant information into the state's reporting database, as required.

4.2.1.3. Response Overview

- **Level(s) of Service:** Ambulance services within the county operate at the ALS level of care, with some IFT agencies offering critical care services as well. Many response-only entities operate at the BLS level of care; however, some do staff with ALS providers to increase their level of first response care.

- **Agency Response & Utilization:** A station-based response model is the most common form of unit deployment. There are currently 14 EMS stations deploying up to 17 total 911-based ambulances to incidents throughout the county. Some of these EMS stations are co-located at fire stations within various communities, which also deploy response (non-transport) fire apparatus to various incidents as requested.

- **Helicopter Response & Utilization:** Helicopter responses within the urbanized areas of the county are uncommon, however, their use does occur in more rural areas of the county, typically during situations where the patient has a time sensitive or high-acuity emergency.

- **Factors Impacting Response Times:** The station-based deployment model allows for strategic unit location during a static time where no units are assigned to calls but creates the potential for geographic gaps when one unit responds to an incident, thus, requiring an ambulance from a neighboring station to respond if a subsequent 911 call for service exists. While this is often of minimal impact within the urbanized area of the county, a greater response time gap is created toward the outskirts of this urban area and nearing the rural landscape of the county.

- **Response to Public Lands:** Quantities of responses to public lands are not high within the county, as there are not large community developments located in these areas. For incidents that do occur on public lands, direct patient access poses more of a challenge as specialty vehicles are often necessary to effectively move patients from the incident scene to an awaiting ambulance, as the incidents that commonly occur on public lands are more recreational and off-road in nature.

4.2.2. Workforce & Resource Assessment

Particularly in terms of the workforce within the county, there is a need for more EMS providers and the ability to pay them a thriving wage. This is due to the county's rapid population growth and call volume increase. This impact is also felt by responding fire departments who need to equally increase their workforce, apparatus, and station counts. Coupled with the higher cost of living experienced within Ada County, the exacerbated financial need extends beyond what the current funding inflow can keep up with.

4.2.2.1. Staffing Overview

- **Staffing Structure:** All 911 response agencies utilize a predominantly career-based staffing model with full-time employees who work a set schedule to provide 24/7 system coverage. Some employees within the system (within some fire departments) may work on a part-time or on-call basis – still allowing for 24/7 system coverage.

- **Responder Average Age:** The workforce within the county seems to fit most within the 25-44 years of age range.

- **Staffing Numbers:** There are approximately 150-175 full-time employees (EMTs and Paramedics) dedicated to 911-based ambulance service operations within the county; and an additional 350-400 predominantly full-time, cross-trained firefighters with EMS credentials working in response roles throughout the county.

- **Staffing Concerns:** Daily staffing is a recurring concern, as some units require either mandatory overtime coverage to be staffed, or face "brown out" altogether. Overall staffing related to hiring new Paramedics is also a challenge, as the local market for such providers is already scarce and highly competitive.

- **Staffing Strengths:** All ambulances are staffed with career personnel.

- **Recruitment & Retention:** Offering a thriving wage to account for the rapid increase in housing market and cost of living expenses poses a financial challenge to all EMS agencies in the county. As a result, many of the fire departments within the county compete with each other, and the ambulance service, to hire new employees, consequentially from one another, which results in a need for staffing replenishment. Ambulance services are also at risk of losing employees to higher paying fire department jobs as well.

4.2.2.2. Training & Education Overview

- Initial provider training is locally available; however, it expressed that class sizes appear lower in volume than years past, especially for initial Paramedic training programs.

- Regular continued education is readily and easily available for most EMS agencies within the county.

4.2.2.3. Facilities Overview

- **Station Location(s):** 14 stations housing up to 17 ambulances are strategically located throughout the county, including in some shared facilities such as municipal fire stations and at local hospitals. At least five additional locations have been identified as needing near-to-immediate future station/unit coverage to keep up with the county's population growth and community development.

- **Station Condition(s):** Stations are adequate and accommodating for 24-hour shift work and regular staffing.

- **Facility Needs:** There is an expressed need for more stations as communities are actively expanding their residential footprints.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** EMS agencies within the county indicate that their equipment and supplies are adequate and updated to meet their needs.

- **Condition:** EMS agencies within the county indicate that their equipment and supplies are in good condition and functional for their needs.

- **Funding:** Funding for larger equipment purchases often comes from grant funding sources.

- **Needs/Shortages:** Regarding the ambulance fleet, it is indicated that many current ambulances are nearing the end of their functional lifespan either due to age or accrued miles. Available grants and federal funding are being pursued to cover the costs of such replacements.

4.2.3. Financial Assessment

The most pressing challenges to the financial impacts faced by Ada County EMS agencies are the need for operational expansion (due to community growth) and the need to increase employee wages (due to an increased cost of living within the county). While the coverage growth challenges may not be equally felt by some of the county's non-911 (IFT) agencies, the financial impact related to providing thriving wages certainly is. Both challenges are directly impacted by existing tax levy limitations and reimbursement revenues provided by insurance payors, as such reimbursements do not actually cover the full cost of providing ambulance services.

4.2.3.1. Expense Overview

- **Personnel Expenses:** Approximately $23,000,000
- **Operational Expenses:** Approximately $4,000,000
- **Capital Expenses:** Approximately $1,000,000

4.2.3.2. Revenue Overview

- Approximately $10,500,000 is generated through 911 ambulance transport billing services within the county.
- Approximately $9,000,000 is generated through ambulance taxing district revenues in the county.
- Approximately $5,500,000 is available in carryover funds through the ambulance taxing district.

4.2.4. Resource Assessment Additional Factors

Limited tax levies and insurance billing restrictions for Medicare and Medicaid patients restrict the 911 EMS agencies' ability to grow at the same pace as their communities. Coupled by increased operational costs and payroll expenses, the challenges facing the Ada County EMS system are operationally similar, but exponentially different than those of neighboring or statewide smaller (or primarily rural) counties. While an annual increase of $1,000,000 to a less populous county would prove significantly beneficial to such counties, this same dollar value applied to the expanded Ada County system would not hold the same sustainable value. Multiplying that value is necessary to address its current and growing pivotal need.

Even in the light of such a greater dollar value need, and for different sustainability purposes than what other rural counties need additional funding for, the Ada County EMS system remains a positive example of what a true system looks like and exemplifies the potential for what other future consolidated systems could resemble.

REFERENCE LIST

[1] U.S. Census Bureau. (2023), *QuickFacts Ada County, Idaho*. https://www.census.gov/quickfacts/adacountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16001

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16001&IndicatorID=100041

BOISE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

The pocketed geography of Boise County results in an emergency medical service (EMS) system focused on a few community population centers, surrounded by remote and mountainous public lands with only sporadic residences located throughout. The mountainous terrain and remote environment, thus, limits the county's ability for community growth, while the reality of its experienced growth has become more apparent in the past few years as residential communities take shape along the county's western and southern borders nearing Ada County.

Examining the county's EMS system, the "flow" of ambulance transports and even regular daily residential commuting appears to be in a one-way funnel toward one direction: Ada County. While call volumes are not particularly high near this county borderline, nearly all ambulance transports that occur within the county are directed into the Boise metropolitan area, and the county's greatest potential for future growth seems to follow along such travel corridors. This funneled appearance is also indicative of local workforce flows, as Boise County residents seek employment in neighboring county companies, including those seeking full-time EMS employment. The competitive environment that exists, as a result, creates recruitment and retention challenges for many Boise County EMS agencies as they battle with a limited tax base and revenue recovery reality, while neighboring EMS systems offer higher pay and greater benefits to their employees. Relying mostly on the local pull to embrace the mountainous landscape of the county, there is little in terms of stable opportunities to recruit future employees into existing EMS agencies, leaving a decreased sentiment of sustainability as well.

Strengths	Opportunities
• High local pride has driven previous and current staffing and support for some EMS agencies. • Ambulance taxing districts are in place in some areas of the county, affording supplemental funding support for some EMS agencies.	• Many EMS agencies within the county cooperate or align with neighboring EMS systems, opening-up opportunities for future and expanded collaboration. • Regional collaborative efforts may provide improved system response and coverage through combined service efforts.
Challenges	**Threats**
• Remote area coverage is largely impossible to maintain reasonable response times because of the size and topography of the county. • Recruiting new EMS providers remains a significant challenge in rural counties because of decreased workforce availability. • Decreased in-person education opportunities exist due to the remote landscape of the county. • Non-staffed EMS stations result in longer chute times and overall incident response times.	• Reliance on a few key individuals within most agencies would result in the agency's inability to reliably respond to incidents, or the agency's complete collapse, if any one of these key members retired or had an extended absence. • Proximity to suburban/urban EMS systems presents an operational threat in terms of workforce competition and availability, especially in the paid/staffed EMS provider environment.

Table A: Boise County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

The limited flat landscape of Boise County restricts large-scale community growth within much of its borders. The exception to this topography exists within the county's far western edge, along the Highway-55 corridor connecting Ada County to Horseshoe Bend; and its southern edge along the Highway-21 corridor connecting Ada County to Idaho City. These periodic plots of agricultural and ranching landscape are seeing conversion into residential community growth areas, particularly near the Ada County border. Beyond this area, limited residential growth potential appears to keep the county's population fairly at bay and less than 10,000 residents. This, in turn, keeps the total EMS call volume within the county relatively low as well. Slow population growth, however, creates a challenge for existing EMS agencies, particularly ambulance services, as slow and concentrated or even sporadic population growth typically equates to limited taxbase revenue potential as well.

Demographic	2010	2020	2022
Population	7,028	7,610	8,333
Land Area	1,899.24 sq mi	1,899.56 sq mi	1,899.56 sq mi
Per Capita	3.7 PPSM	4.0 PPSM	4.4 PPSM
PPSM: *People per square mile*			

Table B: Boise County Population & Geography [1]

2.2 Economics

One of the largest economic factors impacting Boise County is its low comparable average wage per job, which ranks the county as 43rd in the entire state. Within the county, the annual average wage per job is $35,373, while the minimum necessary wage to afford a two-bedroom rental residence is $44,720. [2] This variance poses a significant challenge as new home prices continue to rise, resulting in the need for residents to potentially seek employment in higher paying markets, like in neighboring Ada County. Considering the residential growth in northern Ada County, this may also translate into western growth in Boise County to match these trends.

Metric	Data
Total Population (2022)	8,333
Median Age	53.0 years old
Poverty Rate (2021)	12%
Number of Jobs (2021)	3,197
Average Annual Wage per Job (2021)	$35,373
Unemployment Rate (2023)	4.3%

Table C: Boise County Economic Factors [2]

2.3. Social Determinants of Health

Access to care within Boise County is significantly limited. The farther that one lives from Ada County and the Boise metropolitan region, in fact, the more limited it becomes. This is exemplified by the fact that all ambulance services within the county primarily transport their patients into Ada County hospitals, as there are no hospitals within Boise County.

Further, Boise County ranks 35th in the state with respect to uninsured residents under the age of 65, which may play to an advantage with respect to ambulance transport billing revenues for such patients, but by comparison of the county's age demographics, the county boasts a higher population of residents over the age of 65 (27.7%) when compared to the statewide average (of 16.6%). Factors like these create a higher demand for elder care, complicated by traditionally lower reimbursement rates for residents supported by Medicare and Medicaid. Over the past decade, the percentage of residents over the age of 65 has increased from 15.9% (in 2010) to 27.8% (in 2020; 27.7% in 2021). [3]

2.4. Indicator Impacts to EMS

The aging population within the county will likely result in an increased need for health care services (including EMS response and ambulance transport), in light of the county's lack of overall health care resources. As the potential for population increases occur nearing the county's border with Ada County, so will the need increase to provide sufficient coverage to support this residential and commuter increase, all while maintaining the coverage need for the aging residents already located within the county.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

EMS calls for service (incidents) within the county are equally shared between two of the three ambulance services within the county, but still equate to an average of less than one call per day for each. For the third service, it equates to approximately 2-6 calls per month. Transport percentages within the county average approximately 50%, with the lowest transport percentage being near 25% for the lowest call volume service within the county. What this equates to is, essentially, is a “flip-of-the-coin” reality when it comes to revenue (reimbursement) generation for services. Even though the public’s expectation may be for 24/7 ambulance service coverage, the reality is that the ambulance services operate at an unreliable transport percentage rate, given their overall expenses and revenue potential.

With two of the three ambulance services utilizing a scheduled roster, turnout, or chute time to begin a response to an incident fall in an understanding timeframe, with a response beginning within 10 minutes from dispatch. This timeframe takes into account the scheduled crew’s need to respond from their residence to the ambulance station before beginning their formal response to the scene. Overall response times, from dispatch-to-arrival, range near the 20-30 minute mark, while the average time for one agency to complete an entire call (involving patient transport to a hospital) exceeds an average of three hours per instance. Putting this into perspective for residents living within the coverage area for this agency, this means that their entire coverage area does not have a scheduled ambulance crew available for approximately 10-15% of each day.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
East Boise County Ambulance District	179	153	332	189	109	298
Garden Valley Fire Protection District	123	108	231	110	118	228
Gem County Fire & EMS	-----	6	6	-----	6	6
Horseshoe Bend Ambulance	21	47	68	6	17	23
Ambulance Total	323	314	637	305	250	555
Wilderness Ranch Fire Protection District	-----	65	65	-----	65	65
QRU Total	-----	65	65	-----	65	65

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Boise County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
East Boise County Ambulance District	6 min	14 min	20 min	31 min	106 min
Garden Valley Fire Protection District	10 min	9 min	19 min	64 min	194 min
Horseshoe Bend Ambulance	19 min	8 min	27 min	28 min	98 min
Wilderness Ranch Fire Protection District	10 min	14 min	24 min	-----	108 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Boise County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center as the starting PSAP, who then transfers EMS (medical) calls to StateComm for further call handling and dispatching. Calls transferred to this resource are routed through an emergency medical dispatch (EMD) process, providing caller instructions for care and call categorization based on acuity.

4.1.2. EMS Agency Overview

Ambulance services within Boise County are organized through various forms of public-based models, but not necessarily receiving their own, dedicated, ambulance tax funding sources. Overall, there are three primary ambulance stations located within the county, with the two higher call volume agencies utilizing a scheduled staffing model for their agency, also including some form of compensation model for their employees. Only one agency is approved to operate up to the advanced life support (ALS) level of care, however, this level of care is not always guaranteed by the agency on a 24/7 basis.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
East Boise County Ambulance District	911 Response Transport	Basic Life Support (BLS)	Scheduled	Compensated/ on-call
Garden Valley Fire Protection District	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Horseshoe Bend Ambulance	911 Response Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated
Wilderness Ranch Fire Protection District	911 Response Non-Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated

Table F: List of EMS Agencies Located in Boise County

4.1.2.1. East Boise County Ambulance District

East Boise County Ambulance District (EBCAD) is a public, ambulance taxing district EMS agency with a primarily on-call crew staffing a station based in Idaho City and operating at the basic life support (BLS) level of care. Additional ambulance stations are located throughout the county in Wilderness Ranch, Placerville, and Lowman, but these locations typically do not have dedicated and scheduled crew available for ambulance responses. The agency is comprised of approximately 25 emergency medical technicians (EMTs) who primarily operate on an on-call basis and receive a nominal on-call wage for their time commitment. Ambulance transports are primarily directed toward Boise-area hospitals, while some patients in more remote areas of the district are transported by regional helicopter resources.

4.1.2.2. Garden Valley Fire Protection District

Garden Valley Fire Protection District is a public, fire taxing district EMS agency operating up to the advanced life support (ALS) level of care with a shared fire/EMS station located in Garden Valley. The agency supports a full-time crew to staff an ambulance from this station, while relying on additional on-call or available crews to provide supplemental staffing for subsequent calls for service. In total, the agency has a current roster of approximately 30 EMT/AEMT (advanced EMT) members and only two paramedics, which means that it is not able to provide an ALS level of care on a 24/7 basis. While the agency as a whole receives taxing district support for its fire services, there is no dedicated taxing support within this district for ambulance services. Ambulance transports provided by the agency are primarily to hospitals located in the Boise metropolitan area.

Figure G: Images of Garden Valley Fire Protection District

4.1.2.3. Horseshoe Bend Ambulance

Horseshoe Bend Ambulance is a public-based EMS agency consisting of a shared fire/EMS station within Horseshoe Bend. The agency responds to a low volume of incidents each year and maintains an uncompensated, unscheduled roster of a few EMTs operating at the basic life support (BLS) level of care.

Figure H: Image of Horseshoe Bend Ambulance

4.1.2.4. Wilderness Ranch Fire Protection District

Wilderness Ranch Fire Protection District operates as a non-transport response agency (quick response unit) within the Wilderness Ranch community. They are organized as a public, fire taxing district without additional ambulance taxing district support. Their roster of approximately 10 EMTs operates on an unscheduled basis, responding from their homes to the incident scene or station to retrieve a response vehicle. The agency does maintain one compensated/career fire chief, who (at times) may be the only responder available in the area during weekday/daytime hours. The majority of EMS calls for service that occur within their fire district have East Boise County Ambulance District responding as an ambulance transport resource.

4.1.3. Hospital Access Overview

Patient transports via ambulance from within the county are often made to nearby hospitals in northern Ada County, such as Saint Alphonsus Regional Medical Center-Boise (Boise, ID), St. Luke's Boise Medical Center (Boise, ID), and St. Luke's Meridian Emergency Department (Meridian, ID). Comprehensive and full-service cardiac, stroke, and trauma patient care services are available through these networks of hospital facilities. Patients located in more remote areas of the county are often transported via helicopter to various hospital facilities within Ada or Canyon County.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

While each EMS agency is publicly organized in one model format or another, they are not all funded equitably as only one agency receives ambulance taxing district financial support. Others, moreover, rely on fire taxing district support to supplement their financial needs and agency operations. Countywide, responses to incidents near EMS stations receive a relatively quick response. Farther locations do not share the same reality, and when ambulance transports do occur, respective jurisdictions and communities may be left without reliable or scheduled second ambulance staffing for hours at a time.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The expressed perception of EMS agencies within the county ranges from highly sustainable to minimally-sustainable, yet the expanded expressions of financial and workforce hardships indicates a relatively low sustainability outlook within the county for all agencies.

- **EMS Agency Financial Situation:** There is expressed financial hardship with a lack of countywide ambulance-designated tax support, which leads to a challenge toward addressing the competitive and thriving wages required to maintain a sustainable system by paid agencies.

- **EMS Agency Communications Strategy and Outreach:** Public communications remains a challenge expressed by EMS agencies.

- **Community View of EMS Agencies:** EMS agencies perceive that the general public does view them in a positive light.

- **Elected Official Support of EMS Agencies:** EMS agencies do feel supported by their communities and their elected officials.

- **Agency & System Response Outlook:** A lack of sustainable tax funding dedicated to EMS operations has been expressed as a common hardship experienced amongst all EMS agencies. Internally, the need to provide for more attentive mental health support for their responders is also a priority, as impending burnout may cause some responders to leave their agencies and the EMS industry as a whole.

4.2.1.2. Organizational & Operational Overview

- **EMS Agency Structure(s):** All EMS agencies are public in origin and receive some form of tax-based support for their overall agency operations, but not necessarily directed toward EMS operations as dedicated ambulance taxing district funds are only available to one agency.

- **Service Delivery Partners:** Each agency relies upon one another for mutual aid support, in addition to helicopter responses for remote patient access and transport.

- **Medical Direction:** Variable medical director activity is noted throughout the county's EMS agencies.

- **Communications & Interoperability:** Radio communications in remote areas of the county remain a challenge in terms of reliability.

- **Mutual Aid System & Agreements:** Each EMS agency relies upon one another to assist as requested for mutual aid support, but no agencies expressed formal mutual aid agreements were in place to provide such services. One agency indicated that it posed a regular challenge for them when they were called into a neighboring jurisdiction, as it depleted resources within their own district and the request for service did not always equate to revenues from a patient transport.

- **Community Health EMS (CHEMS):** EMS agencies are aware of the concept behind CHEMS programs but did not express interest in pursuing the development of such programs because of a lack of stable funding and the inability to training or recruit personnel to perform such responsibilities.

- **Patient Care Documentation System:** EMS patient care reports are completed using the Bureau's free, contracted electronic patient care reporting platform, Idaho Gateway for EMS (IGEMS).

4.2.1.3. Response Overview

- **Level(s) of Service:** The majority of calls responded to within the county receive a BLS level of care; however, some calls within one ambulance service's jurisdiction do occasionally receive ALS-level care, as not all of this agency's units have enough Paramedics available to provide 24/7 ALS staffing.

- **Agency Response & Utilization:** Responses to most calls are performed within 20-30 minutes from initial dispatch. This is often due to the on-call nature of each agency's staffing model, which does not necessarily provide for in-station crew coverage.

- **Helicopter Response & Utilization:** Helicopter responses and patient transports are common in remote areas of the county.

- **Factors Impacting Response Times:** Responses to remote locations can add an hours' worth of time to the overall incident before patient contact can be made.

- **Response to Public Lands:** While not a statistically high volume, the number of responses that do occur to incident locations to public lands often pose a significant time burden to EMS responders as they try to locate patients and effectively prepare them for ambulance transport.

4.2.2. Workforce & Resource Assessment

Agency reliance on local responders to maintain active rosters appears to be a significant challenge for nearly all EMS agencies within the county. For those paying a regular (full-time) wage, high competition with neighboring countywide systems results in a local recruitment and retention challenge. For those paying on-call wages for local responders, the burden of providing reliable staffing often becomes the personal burden of only a few individuals on an agency's roster, resulting in an unsustainable long-term staffing model.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Some agencies utilize full-time staffing for only a few employees, but the majority of agencies rely on either on-call or unscheduled and uncompensated EMS providers to maintain their agency rosters.

- **Responder Average Age:** Only one EMS agency shared that their average responder age was between 35-44 years old. This same agency also reported challenges with maintaining their workforce due to lower pay compared to nearby EMS agencies.

- **Staffing Numbers:** There are approximately 50 EMS responders constructing the workforce within the county – either through career, on-call, or uncompensated methods.

- **Staffing Concerns:** Many of the EMS agencies reported that while their agency roster comprised of a healthy-appearing number of responders, that only (approximately) 25% of the members regularly responded to calls and were a driving force behind the continued operations of the agency. One agency reported that losing just one or two of those key members, despite their large overall roster, would result in an immediate jeopardy of the agency to regularly respond to weekday and daytime calls for service.

- **Staffing Strengths:** Many of the responders that are affiliated with an EMS agency within the county also live within their affiliated EMS agency's jurisdiction.

- **Recruitment & Retention:** Decreased on-call and full-time wage compensation results in a significant challenge for many EMS agencies in the county, especially as they compete with more established and neighboring EMS systems. The local housing market – and its high prices – also creates a significant challenge toward recruiting new EMS providers.

4.2.2.2. Training & Education Overview

- Initial EMS education for new EMTs remains a local challenge within the county as the availability of courses within the rural environment remains low, resulting in many prospective students having to travel to more populated counties/cities to obtain the necessary education, which may be an over-one-hour drive, one-way, to reach.
- Continued training & education also remains a challenge for most agencies within the county as the budgeting capabilities of each agency are limited toward purchasing equipment, mannequins, learning management systems, or other subscription-based learning tools. Even at its baseline, covering the basic expenses for each agency member to maintain their minimum continued education hours through flexible or refresher course options, alone, is an expense that many agencies have a challenge with maintaining.

4.2.2.3. Facilities Overview

- **Station Location(s):** Multiple EMS stations are located throughout the county but are not necessarily or typically staffed with an on-duty or on-call EMS crew. One EMS agency shares that they have four total stations located throughout the county, but only commonly staff one ambulance at one of those stations. Overall, three total EMS stations (one for each ambulance service) located throughout the county house the most-commonly deployed ambulances within the county.
- **Station Condition(s):** Significant variances exist between EMS agencies and their overall stations, some of which are shared with fire service resources. As an example, one agency maintains full living quarters and office space for their personnel, while another simply shares a space in a large garage-type structure with its local fire department.
- **Facility Needs:** Because dedicated ambulance funding is limited, most EMS agencies are reliant upon capital funding from their fire service partners to maintain any sort of ambulance service space, living accommodations, or future improvement planning.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** EMS agencies within the county indicate that their current equipment and supplies largely meet their needs, but replacement of various items is challenging because of the costs associated with making capital-item purchases.
- **Condition:** Most durable equipment items are reported in good condition, however, some agencies report aging items where newer, improved items would be more beneficial to have available.
- **Funding:** Most equipment purchases, especially capital items, are solely funded through grant funding. Agencies report that they are not able to obtain such items solely based on their current revenue means.

- **Needs/Shortages:** Some agencies express the need for new ambulances; however, this is also in light of their current operations of maintaining multiple ambulances within a service area that may only necessitate a smaller fleet. Facility expansion, moreover, seems to be one of the greatest challenges experienced by countywide EMS agencies, particularly accommodating in-station crews that require appropriate living accommodations, compared to prior practices of allowing those personnel to respond from home.

4.2.3. Financial Assessment

Direct expense and revenue values were not directly shared by the agencies as a part of this assessment; however, publicly available information was gathered from each agency via online searches and verbal communications. As a result of such research, it is estimated that EMS expenses within the county reach $800,000 to maintain a largely on-call staffing and response structure. Regarding revenues, it is estimated that approximately $155,000 is generated by ambulance transport services and only $160,000 is raised through direct ambulance taxing district levies. The significant gap between experienced revenues and expenses is largely supported by a combination of agency carryover funds, fire taxing district revenues, and other supplemental donations or grants. [4, 5]

4.2.3.1. Expense Overview

- **Personnel Expenses:** Approximately $450,000
- **Operational Expenses:** Approximately $250,000
- **Capital Expenses:** Approximately $100,000

4.2.3.2. Revenue Overview

- Approximately $160,000 is generated in ambulance transport revenues by EMS agencies within the county.
- Approximately $155,000 in ambulance taxing district revenue is generated by one ambulance service within the county.
- Approximately $60,000 of supplemental revenue is generated by EMS agencies within the county be means of grants, donations, or other supplemental income.
- Fire taxing district money is often utilized within the respective fire-based EMS agencies as a means to support EMS staffing and operations and to supplement the financial needs of maintaining an ambulance service.
- It is estimated that approximately $200,000 in agency-specific carryover funds are used to support EMS operations within the county; a number that has been expressed as being rapidly depleted each year.

4.2.4. Resource Assessment Additional Factors

Many of the EMS agencies reported the potential for future system collaboration or even consolidation, citing local politics as a potential hurdle to accomplish this. Agencies, nevertheless, realize that their challenges cannot be remedied under their current state of affairs or operations and that building an economy-of-scale model may prove to be more efficient and effective related to EMS agency and ambulance service delivery.

Also, of note within this assessment, many agencies cited crew burnout and mental health concerns as being a significant challenge facing many responders within the county, especially those that maintain a very “local” relationship, having lived in the area their entire life and often knowing their patients personally.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *QuickFacts Boise County, Idaho*. https://www.census.gov/quickfacts/boisecountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16015

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16015&IndicatorID=100041

[4] Garden Valley Fire Protection District. (2023). *Notice of Budget Hearing*. https://www.gvfdidaho.com/media/fy-2023-released-1p0-idaho-world-notice.pdf

[5] East Boise County Ambulance District. (2023). *Public Budget Hearing*. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.boisecounty.us%2Fwp-content%2Fuploads%2F2022%2F11%2FEBCAD-2023-Budget-PP.pptx&wdOrigin=BROWSELIN

CAMAS COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

The emergency medical service (EMS) system within Camas County is best described as "limited" when in comparison to the rest of the State of Idaho. Its small population leads to a low call volume, which poses a significant challenge with respect to revenue potential through both tax-based support and ambulance transport billing revenues. Its larger geographic footprint, in comparison to its population, creates a response time and coverage challenge that simply cannot be supported with resources available solely within the county's borders. Coupled with its limited access to immediate and definitive hospital care, local EMS resources are stretched thin when factoring-in the time commitment required to complete the full response and patient transport involved with an EMS incident, when one occurs.

Geographically, the majority of the county's land area is not feasibly covered in a timely manner by one ambulance station within the county; but based on the present call volume demand and local population, residents in the county receive a fairly reliable service. The county, moreover, is fortunate to have a dedicated ambulance service to call its own. The resources needed to increase the amount of ambulance locations simply does not exist using only the county's available workforce or funding means; nor is it operationally practical. Camas County's EMS system, in many respects, is barely getting by; and that's only positively in part because of its dedicated, local EMS providers. Losing one or two of these providers due to attrition or any other distracting factor, moreover, could be detrimental to the EMS operations within the county.

Strengths	Opportunities
• Local residents take pride in being EMS responders within their community/county. • One licensed EMS agency provides consolidated system coverage throughout the entire county.	• Regional collaborative efforts may provide improved system response and coverage through combined service efforts.
Challenges	**Threats**
• Recruiting new EMS providers remains a significant challenge in rural counties because of decreased workforce availability. • Decreased in-person education opportunities exist due to the remote landscape of the county. • Non-staffed EMS stations result in longer chute times and overall incident response times.	• Unscheduled staffing practices have the risk of resulting in the absence of available resources to respond to EMS incidents. • Low call volumes pose the risk of creating agency/system instability due to a lack of financial and operational benefits, when compared to the time dedication required to maintain an operational agency or system.

Table A: Camas County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Camas County is a rural, low-population county located in southwest Idaho. It is largely mountainous and forest terrain supports a low per capita value of nearly one resident per square mile overall, with approximately one-third of the county's residents living in its county seat of Fairfield. Running through the county within its southern third is U.S. Highway-20 (east/west), which is the only major highway and is the longest stretch of paved roadway in the county. This roadway serves as the only primary connecting road between the county and other population centers within the state, including healthcare facilities and other neighboring counties. The vast majority of the roads within the county are unpaved and, especially in the county's northern two thirds, navigate mountainous terrain. Population within the county has remained relatively static over the past few decades, leading to its remote landscape and single map-noted community of Fairfield.

Demographic	2010	2020	2022
Population	1,117	1,077	1,153
Land Area	1,074.49 sq mi	1,074.23 sq mi	1,074.23 sq mi
Per Capita	1.0 PPSM	1.0 PPSM	1.0 PPSM
PPSM: *People per square mile*			

Table B: Camas County Population & Geography [1]

2.2 Economics

The county's rural landscape minimizes its opportunities for population attraction and workforce growth due to a variety of factors. Its northern terrain and national forest lands make it impossible for largescale community development, and the existence of only one thoroughfare highway limits its overall travel capabilities to more populated communities, which are still over an hours' drive away. Within the county, there are no major retail stores, no hospitals, minimal restaurants, and minimal grocery store options. Economic development within the county is largely reliant upon its recreational activity scenes and agricultural lifestyle.

Metric	Data
Total Population (2022)	1,153
Median Age	46.8 years old
Poverty Rate (2021)	10%
Number of Jobs (2021)	686
Average Annual Wage per Job (2021)	$56,726
Unemployment Rate (2023)	3.8%

Table C: Camas County Economic Factors [2]

2.3. Social Determinants of Health

One of the largest impacting social determinants of health within the county is its absence of local healthcare access, outside of its ambulance service. There are no primary care physicians operating within the county and the majority of the county's population lives greater than a 30-mile drive from the closest hospital. Greater than 10% of the population under the age of 65 is uninsured and the county ranks 29th in the state (of 43 ranked counties) related to clinical care access, and 33rd related to health behaviors. [3, 4]

2.4. Indicator Impacts to EMS

Because of its rural, including remote and mountainous landscape, low population volume, and largely unattractive dynamics for new household development, EMS operations within Camas County remain difficult, even desolate. Younger generations of workers and residents simply do not flock to the county, nor do they have an opportunity to provide supplemental or reliable work for additional family members because of the county's lack of industry and commercial workforce opportunities, besides local agricultural employment. The county's stagnant population growth is a likely trend that will be experienced in the upcoming decade, and its median resident age will likely grow with its population halt, as it has experienced such results since the 1980s. Playing into its highly limited growth opportunities, limited healthcare access, and limited population attraction, Camas County's realization of a struggling EMS system is one that sees no signs of demographic-related improvements in the foreseeable future.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Camas County as a whole, and its sole 911 ambulance service provider, operates within an extremely low-call-volume environment that is also consistent with the county's overall low population volume. Respective to the entire State of Idaho, less than one-tenth of a percent of total EMS calls occurs within Camas County. This can only be compared to the more eastern Clark County, who shares a similar finding. As a result, less than one EMS call is experienced (on average) per day within the county, and only (approximately) one call is experienced per week.

Starting with the initial dispatch for a call, the county's ambulance service average chute time of greater than ten minutes stands as a testament to response realities that exist within rural Idaho counties. This time, moreover, does not account for additional average of six minutes that it takes to arrive at an incident's location, which nears greater than fifteen minutes post the initial dispatch. For instances where an ambulance transport occurs (approximately 50% of all EMS calls), the average total call time is greater than two hours (143 minutes), which typically creates a countywide gap in coverage to any subsequent calls (upwards of three total hours) as a reflection of the current staffing and deployment system utilized within the county.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Camas County Ambulance	*33*	*35*	71	*28*	*28*	56
Ambulance Total	*33*	*35*	71	*28*	*28*	56

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Camas County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Camas County Ambulance	*11 min*	*6 min*	17 min	45 min	143 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Camas County (2022)

Section 4

4

Context

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center, who then notifies available (unscheduled) EMS crews of the incident via radio/pager system and via the EMS agency's phone-based app platform. Subsequent communications with the PSAP are made primarily via radio communications, such as announcing their arrival at an incident's location. This PSAP does not have emergency medical dispatch (EMD) or medical priority dispatching software (MPDS) in place to categorize or prioritize EMS calls for service.

4.1.2. EMS Agency Overview

There is only one licensed EMS agency in Camas County, Camas County Ambulance, which functions as the primary responder for all 911-based EMS calls. Reflective of the county's low call volume, the county is staffed by a largely unscheduled workforce of paid-per-call responders who operate at the BLS level of care, first responding from their homes or their current location, to their ambulance station, and then to the incident location.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Camas County Ambulance	911 Response Transport	Basic Life Support (BLS)	Unscheduled	Compensated/ per-call

Table F: List of EMS Agencies Located in Camas County

4.1.2.1. Camas County Ambulance Overview

Camas County Ambulance is a public/county-operated EMS agency covering the entire geographic boundary of Camas County. They are licensed at the BLS level and primarily operate on an unscheduled staffing model utilizing approximately 20-24 local emergency medical technicians (EMTs), however, they do attempt to create a staffing calendar to account for regular 24/7 coverage. They respond out of one station (located in Fairfield), which houses both agency's ambulances, neither of which are staffed with in-station resources. The EMTs employed by the agency receive a per-call payment when they respond to calls but are otherwise not compensated to be on-call or available at any scheduled moment; nor are they required (or expected) to be located at the station awaiting the next call.

Respective to covering such a largely rural and mountainous terrain, the agency has identified challenges in providing timely responses to its distant and off-the-trail incidents, as roadway access is often limited to such incidents. Surrounding its staffing and deployment model, maintaining a regularly scheduled coverage roster, despite its compliment of often 20 or more EMTs, often results in time periods (even days) where no one is identified as being scheduled to respond to an incident if it occurs. Therefore, the agency is often reliant upon a small cadre of traditionally higher-activity members who often drop what they are doing to respond to a call for service. Such sporadic coverage is often experienced during weekday/daytime hours, as the agency's crew members are either unable to leave their place of employment to respond to calls for service, or they simply work outside of the county and the agency's coverage area.

4.1.3. Hospital Access Overview

Patient transports via ambulance from within the county are often made to two of the county's closest hospitals, North Canyon Medical Center (Gooding, ID) and St. Luke's Wood River Medical Center (Ketchum, ID), which are located approximately 30-50 miles from Fairfield, respectively. Both facilities offer basic, non-interventional cardiac and stroke emergency care, along with minimal trauma care capabilities.

4.2. County EMS System Resource Assessment Overview

The EMS agency within the county was requested to participate in the project's *Resource Assessment* information gathering questionnaire, however, it did not submit any respective responses to this request. Subsequent responses within this section, therefore, were gathered solely from direct communications with the agency.

4.2.1. Organizational/Operational Assessment

Like many rural, geographically large, and low-population counties that exist within Idaho and throughout the nation, Camas County faces significant organizational and operational challenges that put both the short-term and long-term sustainability of its EMS system in jeopardy. While its transition from a purely volunteer response workforce in years' past toward a paid-per-call model has created a benefit, it still does not create a reliable solution to maintain regular on-call staffing coverage on a 24/7 basis. This reality often results in

extended overall response times, which are further complicated by long patient transport times and the reliance on helicopter resources to function within the 911 response system for difficult access or time sensitive emergency situations.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The current EMS system within the county is largely unstable and unsustainable due to its limited funding, inconsistent and largely unscheduled staffing, and large geographic coverage demands.
- **EMS Agency Financial Situation:** Limited financial resources, including ambulance transport billing revenues and county budget support, restrict the operational growth of the local EMS system.
- **EMS Agency Communications Strategy and Outreach:** A formal communications strategy or outreach plan was not communicated as existing within the county.
- **Community View of EMS Agencies:** The EMS agency within the county expresses a perception of positive community viewpoint toward their operations.
- **Elected Official Support of EMS Agencies:** The EMS agency within the county expresses a perception of positive community support toward their agency by members of the community.
- **Agency & System Response Outlook:** Like many other rural and volunteer-rooted EMS agencies, there is a high sense of local involvement and community support expressed toward the local EMS resources. The long-term future of the EMS system within the county, however, remains short-term focused as it continues to face challenges related to a declining local EMS workforce and limited financial opportunities.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** The (sole) EMS agency in the county is a public, county-operated ambulance service.
- **Service Delivery Partners:** Current supportive services are offered by local law enforcement and fire service entities for traffic incidents, search & rescue, and other complex or specialty incident situations.
- **Medical Direction:** Medical direction is provided by a contracted/volunteer physician who is affiliated with a local hospital system. Current interaction between the EMS agency and its medical director remains minimal, overall.
- **Communications & Interoperability:** 911 call-taking and dispatching is provided by a single PSAP, which does not have medical priority dispatching software (MPDS) or emergency medical dispatch (EMD) service capabilities. Radio and cellular phone

communications are otherwise reliable in the southern portion of the county, but more sporadic in the northern mountainous area of the county.

- **Mutual Aid System & Agreements:** Mutual aid is provided by neighboring EMS agencies responding from outside of the county, including helicopter responses, as requested; it is uncertain if formal mutual aid agreements exist or if such responses are based on past practices or informal agreements.

- **Community Health EMS (CHEMS):** There are currently no Community Health EMS programs established within the county, nor was there an expressed or immediate interest in creating such a program; largely due to the EMS agency's already stretched crew resources.

- **Patient Care Documentation System:** Documentation is currently completed via electronic patient care reporting through IGEMS available from the Bureau.

4.2.1.3. Response Overview

- **Level(s) of Service:** The sole EMS agency registered within the County operates at the BLS level of care.

- **Agency Response Concern:** Long response times, particularly to more rural and mountainous areas within the county, pose a significant challenge with respect to both accurate patient location and timely patient access.

- **Helicopter Response & Utilization:** Because of the more rural and remote aspects of the county's geography, the use of helicopters to provide either initial incident response or patient transport to a hospital is a common occurrence within the county.

- **Factors Impacting Response Times:** The un-staffed station deployment model utilized within the county poses the first response time challenge, averaging a total dispatch-to-arrival response time of 17 minutes per call. Second to this, and sometimes contributing to extremes within this average, is the geographic terrain and limited roadway access experience responding to incidents located in more rural or mountainous terrain locations within the county.

- **Response to Public Lands:** Specific values or percentages were not available to quantify a response to this question, but it is a fair assessment that the overall volume of incidents and responses into public land areas remains relatively low (overall) when comparing to a collective statewide value.

4.2.2. Workforce & Resource Assessment

The EMS workforce within Camas County can best be describes as "limited." There is a limited local population to pull new members from, there is a limited call volume to support a more structured and paid staffing model, and there is limited availability to utilize neighboring resources given the county's rural location. Outside of Camas County, the

county's ambulance service arguably "does not exist" because it garners no online search traffic, it has no social media presence, does not have online space on the county's website, and its small-volume nature limits its attractiveness to promote a progressive recruitment & retention environment.

4.2.2.1. Staffing Overview

- **Staffing Structure:** EMS delivery within the county is provided by a non-career workforce that is reliant upon either a sign-up on-call scheduling model, or a resulting unscheduled staffing model that is dependent upon the availability of personnel when an incident occurs. It was expressed that, fortunately, no calls for service within the county have gone un-answered by the ambulance service provider; however, it may take multiple minutes to garner enough individuals to comprise a legal response crew to staff an ambulance to respond.

- **Responder Average Age:** (No response)

- **Staffing Numbers:** There are approximately 20-24 individuals on staffing rosters within the county, however, on-call sign up and actual responses are largely handled by a smaller group of individuals on a regular basis, approximately four to five individuals.

- **Staffing Concerns:** Because of the largely unscheduled structure and decreased daytime availability of rostered crew members, due to many having full-time employment elsewhere, there is a high level of concern to meet the scheduling demands to maintain adequate 24/7 coverage within the county.

- **Staffing Strengths:** Since EMTs are only paid when they respond to an incident, there is a high level of local dedication experienced by those who tirelessly dedicate their time to remain available to respond within their community.

- **Recruitment & Retention:** As a small county (in terms of population) and within the small EMS agency, there is practically no opportunity for professional growth within the agency, the low call volume poses a clinical challenge to remain well-versed and clinically comfortable in advanced care skills, and there is largely no incentive to dedicate oneself to be on-call because there is no pay associated with this dedication. Coupled with the minimal housing market and other local economic challenges, there is difficulty toward retaining younger EMTs who may otherwise have no personal ambition or financial dedication to remain living in such a rural environment. Retention possibilities are, therefore, very low within the county's EMS system.

4.2.2.2. Training & Education Overview

- Due to the limited local resources and low enrollment volume of prospective new EMT students, initial and continued EMS courses are typically not offered or available within Camas County.

4.2.2.3. Facilities Overview

- **Station Location(s)s:** Ambulances deploy from one EMS station located within the county, in Fairfield.
- **Station Condition(s):** Newer condition with adequate space for current operations.
- **Facility Needs:** The only ambulance station in the county is a shared facility with the county's family health services department and contains basic facility needs for the current EMS operational model of the ambulance service.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The equipment and apparatus available meet the low volume needs of the EMS system within the county.
- **Condition:** Some pieces of equipment are old in age but appear in newer condition due to their decreased use.
- **Funding:** The ambulance service is often reliant upon grant funding to replace capital equipment, including ambulances.
- **Needs/Shortages:** Future capital purchasing is largely contingent upon grant funding.

4.2.3. Financial Overview

Based on available FY 2022 budget data, it is shared that the proposed total budget for operating the county's ambulance service (therefore, the entire county's EMS system) is $189,654. This amount is largely supported through grant funding, which consists of greater than 65% of the proposed revenues for the fiscal year. For this reported fiscal year, approximately $27,867 in local tax dollars were dedicated to support the local EMS system, which comprises 14% of the year's total revenues; but likely accounts for closer to 40% of a typical year's revenues (as FY 2022 included a significant dollar increase due to grant funding received). [5]

4.2.3.1. Expense Overview

- **Personnel Expenses:** Based on available FY 2022 budget data, it is shared that proposed personnel expenses for the county's ambulance service are approximately $1,854.
- **Operational Expenses:** Based on available FY 2022 budget data, it is shared that proposed operational and capital (all "other") expenses for the county's ambulance service is approximately $187,800. Excluding what is presumed to be grant funding to purchase a new ambulance ($125,000), it is presumed that the normal (actual) operating budget for ambulance service operations within the county is $62,800.

- **Capital Expenses:** (See Operational Expenses) It is presumed that approximately $125,000 of the total $187,800 in operating expenses accounts for capital expenses related to the purchase of a new ambulance for the county's ambulance service.

4.2.3.2. Revenue Overview

- Based on available FY 2022 budget data, it is shared that proposed ambulance revenues include: $15,704 in carryover cash, $20,883 in revenues other than taxes (presuming this include ambulance transport billing revenues), $125,000 in grant funding, $200 in P.I.L.T. revenues, and $27,867 in tax revenues.

4.2.4. Resource Assessment Additional Factors

Attempts to incorporate an on-call schedule have not been successful for the ambulance service in the county, thus resulting in an unscheduled daily roster that is reliant upon the in-the-moment availability of local responders. This availability, when competing with weekday/daytime employment responsibilities, makes an immediate response to an incident difficult. While the ambulance service has expressed that each call it receives is eventually answered, this eventuality is not a guarantee, and this eventuality is only due to the personal sacrifices that many of the county's responders must make in order to respond to the needs of others within the county, and for nominal compensation.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *QuickFacts Camas County, Idaho*. https://www.census.gov/quickfacts/camascountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16025

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16025&IndicatorID=100013

[4] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16025&IndicatorID=100041

[5] Camas County. (2023). *County Budget*. http://camascounty.id.gov/wp-content/uploads/2021/08/FY2022-Budget-Hearing-Notice-8-23-2021-10-AM.pdf

CANYON COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Canyon County's EMS system is unique and efficient in design and operations; however, funding constraints and rapid community growth have limited its ability to be fully optimized. Its collaborative approach, similar in design to neighboring Ada County's system, makes it a unique administrative model that is rarely exemplified throughout the rest of the state and nation. The financial limitations placed upon this collaborative system, however, have resulted in a rural disconnect where some areas of the county rely on coverage and response by an EMS agency that is not a part of the countywide taxing district. This is a direct result of the county's rapid growth and necessity to focus on demand-based coverage due to increased revenue potential, which unfortunately means that geographic-based coverage needs to be handled with a different approach. In short, the county tax-based agency is pressured to follow the source of the most funding in order to sustain operations, rather than provide the level of coverage that it would like to, or is designed to, which is encompassing the entire county.

Opportunity, therefore, exists within the county to pursue two different directions: reinvigorate its unified and true countywide model, or strengthen its existing separated missions of urban/suburban versus rural coverage models. In either case, adequate funding is necessary to keep up with the county's population growth, residential landscape expansion, and cost of living as it relates to workforce expenses. Beyond just Canyon County, multiple opportunities also exist for cross-county collaboration and large-scale system development. Such opportunities would likely strengthen local coverage and response capabilities, improve workforce recruitment and retention, and promote a more sustainable EMS system that is enhanced through greater economy-of-scale modeling.

Maintaining its current course, Canyon County's EMS system appears divergent but not completely fractured. Future focus, therefore, should be considered toward either promoting

its true unification, or its separated landscapes for the sake of long-term sustainability. Supporting its residents in the second largest county in the state, Canyon County's EMS system has the potential to expand to a greater footprint that aids in the sustainability of many more counties, and covering an even larger geography.

Strengths	Opportunities
• Collaborative, system-based model is in place, but with opportunity for enhancement. • Ambulance taxing district funding is in place.	• Existing economy-of-scale modeling may allow for greater countywide or regional rural coverage if dedicated funding becomes available. • Options may exist to incorporate additional BLS ambulances into the system to account for higher demands and paramedic recruitment realities.
Challenges	**Threats**
• Significant countywide population growth and community development has outpaced the current system's ability to maintain operational growth due to land acquisition and operational funding restrictions. • Providing for countywide rural coverage is challenged by higher suburban/urban call volume demands. • Ambulance taxing district levy limits restrict financial security opportunities.	• System integrity and efficiency could be jeopardized if organizational dissolution or separation were to result in the future. • Increasing call volumes may threaten shift schedule dynamics, necessitating a transition away from traditional 24-hour shifts, thus, increasing the need for more employees.

Table A: Canyon County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Much like Canyon's neighboring county of Ada, the county has experienced significant population growth over the past couple of decades. Its communities are expanding their footprint through the residential development of once agricultural or foothill lands, and its population is rushing into suburban communities that are surrounded by all the amenities that a growing metropolitan area can offer.

Demographic	2010	2020	2022
Population	188,923	231,105	251,065
Land Area	587.37 sq mi	587.05 sq mi	587.05 sq mi
Per Capita	321.6 PPSM	393.7 PPSM	427.7 PPSM
PPSM: *People per square mile*			

Table B: Canyon County Population & Geography [1]

2.2 Economics

The county's greater than 20% population increase from 2010-2020 has been the result of new residential community developments surrounding the greater Nampa and Caldwell areas. Expansion from these communities continues north toward its Gem County border and south toward its Owyhee County border. As a result, the economies of both neighboring counties become reliant upon Canyon County for their own workforce and population growth. Adjoining Ada County, housing market and workforce growth have resulted in an increased demand on both respective EMS systems in terms of coverage needs and workforce expenses. These challenges present two of the largest concerns for the county, as competition for EMS providers between these two counties remains a constant, and also has an impact on other rural county EMS systems who are further challenged by competing with these two countywide systems, but with even further limitation at hand.

Metric	Data
Total Population (2022)	251,065
Median Age	34.7 years old
Poverty Rate (2021)	11%
Number of Jobs (2021)	114,050
Average Annual Wage per Job (2021)	$46,050
Unemployment Rate (2023)	3.3%

Table C: Canyon County Economic Factors [2]

2.3. Social Determinants of Health

Despite its increasing urbanization, Canyon County remains middle-of-the-road with respect to overall *County Health Rankings*; ranking 15th in health outcomes, 20th in quality of life, 17th in clinical care, and 41st in terms of physical environment. This is likely due to the county's higher instances of uninsured populations at ages and its higher cost of living. Recent unemployment percentages within the county also remain above the statewide averages, but typically below the national averages. [3]

2.4. Indicator Impacts to EMS

Rapid population growth and community expansion results in a seemingly constant need to keep up with the demand for EMS agencies within the countywide system, particularly when immediate funding is not available to address this growth impact. Fortunate for the county, the resources and infrastructure exist for a successful pathway to be followed; now is time for the appropriate funding to be implemented to provide the expanding coverage that the county is in need of.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Call volumes within the county have been on the rise, particularly those instances of mutual aid use (utilizing neighboring ambulance services to respond to a call). While this only equates to a 1-2% impact on the total call volume, this emerging trend further expands to an increased workload on neighboring systems as a result, and a decrease in their own systemwide coverage consequently.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Ada City-County EMS System (Ada County)	22	38	60	15	176	191
City of Fruitland/Payette County Paramedics (Payette County)	48	23	71	36	20	56
Gem County Fire & EMS (Gem County)	6	-----	6	8	-----	8
Homedale Ambulance (Owyhee County)	-----	-----	-----	8	3	11
Marsing Ambulance Service (Owyhee County)	14	34	48	29	47	76
Parma Ambulance Service	241	100	341	258	148	406
Treasure Valley EMS System	8,866	9,625	18,491	9,776	10,924	20,700
Ambulance Total	9,197	9,820	19,017	10,130	11,318	21,448

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Canyon County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Ada City-County EMS System (Ada County)	*1 min*	*11 min*	12 min	16 min	66 min
City of Fruitland/Payette County Paramedics (Payette County)	*2 min*	*14 min*	16 min	22 min	94 min
Gem County Fire & EMS (Gem County)	*2 min*	*18 min*	20 min	23 min	108 min
Homedale Ambulance (Owyhee County)	*7 min*	*4 min*	11 min	23 min	88 min
Marsing Ambulance Service (Owyhee County)	*7 min*	*16 min*	23 min	34 min	96 min
Parma Ambulance Service	*2 min*	*5 min*	7 min	26 min	79 min
Treasure Valley EMS System	*2 min*	*7 min*	9 min	13 min	54 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Canyon County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center, who serves as the sole PSAP within the county for EMS dispatching. Within this center, 911 calls are routed to respective fire and EMS dispatchers who utilize emergency medical dispatching (EMD) services, when indicated, and notify available crews of their need for a response. One exception to consolidated approach is within the City of Nampa, who has their own PSAP to handle initial 911 calls. Within their process, 911 calls are answered by their own dispatching center, which dispatches their own fire department resources while simultaneously transferring the call to the county's dispatch center to dispatch a responding ambulance.

4.1.2. EMS Agency Overview

The 911 response system within Canyon County is a unique system that operates under a collaborative model with a single organization serving as the EMS license holder for multiple entities, while each individual entity maintains their own personnel, facilities, and apparatus. This is the Treasure Valley EMS System (TVEMSS), which provides systemwide coverage throughout the entire county with funding as an ambulance taxing district. Aside from TVEMSS is a single-agency resource that remains separate from the system and primarily dedicated to its own local community and region, which is the Parma Ambulance Service (operating under Parma Rural Fire District and under its own local fire taxing district).

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Parma Ambulance Service	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Treasure Valley EMS System	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career

Table F: List of EMS Agencies Located in Canyon County

4.1.2.1. Parma Ambulance Service (Parma Rural Fire District)

Parma Ambulance Service operates as a part of Parma Rural Fire District, which is a public, fire taxing district EMS agency located in western Canyon County. The agency provides regular staffing for up to two ambulances at the ALS level of care and responds approximately 400-450 calls per year from its Parma location into parts of Canyon and Payette Counties. While the agency does operate an ambulance service, it does not receive funding from the countywide ambulance taxing district as it chooses to function independently from the TVEMSS. The agency staffs its EMS operations with approximately 20-25 full-time cross-trained Firefighter/EMTs (emergency medical technicians) and Firefighter/Paramedics; most of which live outside of the agency's response area.

Figure G: Images of Parma Ambulance Service (Parma Rural Fire District)

4.1.2.2. Treasure Valley EMS System

TVEMSS is a collaborative organization designed as a public, ambulance taxing district EMS agency that essentially contracts with Canyon County Paramedics to function as the district's 911 response ambulance service, while incorporating the response support of Caldwell Fire Rescue, Kuna Fire District, Middleton Fire & Rescue, Melba Quick Response Unit, Nampa Fire Protection District, and Wilder Fire Department. Homedale Ambulance Service from neighboring Owyhee County is also a part of the greater clinical oversight of this system, but not a part of its ambulance taxing district authority.

The agency's ambulance service component operates out of 10 EMS stations located throughout the county, some of which are shared with fire department resources or located at hospital facilities. Its career-based ambulance staffing consists of approximately 75 personnel, most of which are licensed at the Paramedic level, while the entire system is comprised of closer to 300 EMT and Paramedic licensed providers. Within the system, approximately 20,000 calls for service are responded to each year.

TVEMSS is primarily funded through a combination of 911 ambulance transport revenues, ambulance taxing district funds, interfacility transfer (IFT) operational revenues, and additional (various) fees for contracted services.

Figure H: Images of Canyon County Paramedics (Treasure Valley EMS System)

4.1.3. Hospital Access Overview

Multiple hospitals are located in the county and serve the population both within and surrounding Canyon County, even seeing patients from throughout the entire state. The St. Luke's and St. Alphonsus healthcare systems offer a variety of specialty care services that include trauma centers, cardiac care centers, and comprehensive stroke centers. Additional specific hospital services are also available nearby for pediatric patients and veterans, respectively.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

A primarily unified system approach to organization and operations sets the Canyon County EMS system apart from many other counties in the state. This structure promotes a tiered-response model, where BLS response entities may arrive at the scene of an incident first, allowing for initial care to be provided while ALS response resources are only moments away. In other instances, ALS resources may arrive at a scene first while BLS resources arrive shortly thereafter and provide supportive care and operational assistance as needed. Structurally, one set of clinical protocols are followed by nearly all 911 response agencies – which allows for patient care cohesion regardless of whichever response entity arrives at a scene first.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Agencies and entities within the countywide system express variable stability and sustainability, with the lowest rating coming from the county's largest EMS entity.

- **EMS Agency Financial Situation:** Agencies express variances from "breaking even" each year to "experiencing deficits" each year. Adequate tax funding to supplement ambulance transport revenues remains a key item of concern by all ambulance services within the county.

- **EMS Agency Communications Strategy and Outreach:** EMS agencies expressed variability toward whether or not they had defined communications or outreach strategies for their communities.

- **Community View of EMS Agencies:** EMS agencies perceive that the general public does view them in a positive light.

- **Elected Official Support of EMS Agencies:** Agencies do feel supported by their communities and the general public.

- **Agency & System Response Outlook:** There was significant concern expressed related to the inequitable pay that EMS providers, particularly Paramedics, receive compared to nurses, for example. The growing cost of living is creating a challenge point for the local workforce to be able to afford living in the area where they work and is not enticing for them to stay within the EMS field when they can make nearly double the salary, while working less hours, as a nurse. For these reasons, future system outlook is diminished, unless adequate funding is dedicated toward providing thriving wages to employees.

4.2.1.2. Organizational & Operational Overview

- **EMS Agency Structure(s):** A unique and consolidated public system is utilized throughout much of the county for 911 response services.

- **Service Delivery Partners:** Neighboring EMS agencies are the most common external partner utilized within the system for additional response and care.

- **Medical Direction:** Medical direction within the 911 system is primarily consolidated and unified but perceptions of the two ambulance services within the county are vastly different; one with a sentiment of high support and the other with an expression of absenteeism.

- **Communications & Interoperability:** Communications within the system is expressed as reliable and updated. System users contribute approximately $250,000-300,000 per year for its maintenance and use.

- **Mutual Aid System & Agreements:** Formal mutual aid agreements are in place between the countywide 911 ambulance service and other local EMS agencies.

- **Community Health EMS (CHEMS):** EMS agencies are aware of the concept of CHEMS but are not interested in developing programs in the near future.

- **Patient Care Documentation System:** An independently contracted vendor is utilized by the 911-based system to incorporate its EMS and fire-based reporting needs. This vendor platform relays/exports its relevant information into the state's reporting database, as required.

4.2.1.3. Response Overview

- **Level(s) of Service:** Ambulance services within the county operate at the ALS level of care, while there's a mix of non-transport entities operating at either the BLS or ALS level of care.

- **Agency Response Concerns:** A station-based deployment model is the most common form of unit staging for deployment purposes. There are currently 10 EMS stations deploying 10 total 911-based ambulances to incidents throughout the county. Some of these EMS stations are co-located with fire stations within various communities – which also deploy response (non-transport) fire apparatus to various incidents as they are indicated or requested. When one ambulance is responding to an incident, this often results in the next ambulance responding from a farther station. This can create a larger response time gap when such second responses occur in rural areas of the county.

- **Helicopter Response & Utilization:** Helicopter responses within the urbanized areas of the county are uncommon, however, their use does occur in more rural areas of the county, typically during situations where the patient has a time sensitive or high-acuity emergency.

- **Factors Impacting Response Times:** The station-based deployment model allows for strategic unit location during a static time where no units are assigned to calls but creates the potential for geographic gaps when one unit responds to an incident, thus, requiring an ambulance from a neighboring station to respond if a subsequent 911 call for service exists. While this is often of minimal impact within the urbanized area of the county, a greater response time gap is created toward the outskirts of this urban area and nearing the rural landscape of the county.

- **Response to Public Lands:** There is not a high volume of incidents that occur on public lands within the county; but for incidents that do occur on public lands, direct patient access poses more of a challenge as specialty vehicles are often necessary to effectively move patients from the incident scene to an awaiting ambulance, given the typical recreational and off-road nature of these events.

4.2.2. Workforce & Resource Assessment

Workforce challenges within the county appear to be one of its greatest needs to address. The county's rapid population growth and call volume increase has resulted in the need for more EMTs and Paramedics, more ambulances, and more stations. This impact is also felt by responding fire departments who express similar shortages in their workforce, apparatus, and station counts. Coupled with the higher cost of living experienced within Canyon County, the exacerbated financial need extends beyond what the current funding inflow can keep up with. Complicating this even further, most fire departments pay a higher salary than the ambulance services, which results in many EMS/ambulance employees leaving their agency to work for the higher paying fire departments. This equates to a significant recruitment and retention challenge within the county.

4.2.2.1. Staffing Overview

- **Staffing Structure:** All 911 response agencies utilize a predominantly career-based staffing model with full-time employees who work a set schedule to provide 24/7 system coverage. Some employees within the system (within some fire departments) may work on a part-time or on-call basis, still allowing for 24/7 system coverage.

- **Responder Average Age:** The workforce within the county seems to fit most commonly within the 25-44 years of age range.

- **Staffing Numbers:** There are approximately 300 total full-time employees (EMTs and Paramedics) employed by different agencies within the 911 response system, with only approximately 100 of those full-time employees working in ambulance service roles.

- **Staffing Concerns:** Daily staffing is not of typical concern, but overall staffing related to hiring new Paramedics is a challenge, as the local market for such providers is already scarce and highly competitive.

- **Staffing Strengths:** All ambulances are staffed with career personnel.

- **Recruitment & Retention:** Offering a thriving wage to account for the rapid increase in housing market and cost of living expenses poses a financial challenge to all EMS agencies in the county. As a result, many of the fire departments within the county compete with each other to hire new employees, which results in a need for regular staffing replenishment. Ambulance services are also at risk of losing employees to higher paying fire department jobs as well.

4.2.2.2. Training & Education Overview

- Initial provider training is locally available; however, it was expressed that class sizes appear lower in volume than years past, especially for initial Paramedic training programs.

- Regular continued education is readily and easily available for most EMS agencies within the county.

4.2.2.3. Facilities Overview

- **Station Location(s):** 10 stations are strategically located throughout the county, including some shared facilities such as municipal fire stations and at local hospitals. A need for additional stations has been identified in growing suburban areas, but adequate funding limits their progress for construction.

- **Station Condition(s):** Stations are adequate and accommodating for 24-hour shift work and regular staffing.

- **Facility Needs:** There is an expressed need for more stations as communities are actively expanding their residential footprints.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** EMS agencies within the county indicate that their equipment and supplies are adequate and updated to meet their needs.

- **Condition:** EMS agencies within the county indicate that their equipment and supplies are in good condition and functional for their needs.

- **Funding:** Funding for larger equipment purchases often comes from grant funding sources.

- **Needs/Shortages:** Regarding the ambulance fleet, it is indicated that many current ambulances are nearing the end of their functional lifespan either due to age or accrued miles. Available grants and federal funding are being pursued to cover the costs of such replacements.

4.2.3. Financial Assessment

The most pressing challenges to the financial impacts faced by Canyon County EMS agencies are the need for operational expansion (due to community growth) and the need to increase employee wages (due to an increased cost of living within the county). Both challenges are directly impacted by existing tax levy limitations and reimbursement revenues provided by insurance payors, as such reimbursements do not actually cover the full cost of providing ambulance services.

4.2.3.1. Expense Overview

- **Personnel Expenses:** Approximately $11,250,000
- **Operational Expenses:** Approximately $3,000,000
- **Capital Expenses:** $750,000

4.2.3.2. Revenue Overview

- Approximately $4,500,000 is generated through 911 ambulance transport billing services within the county.
- Approximately $3,300,000 is generated through ambulance taxing district revenues in the county.
- Approximately $1,900,000 is generated through IFT ambulance billing services to supplement agency operations and staffing.
- Approximately $1,800,000 remains in available carryover funds to maintain the ambulance taxing district system within the county.
- Approximately $250,000 in additional funding was achieved through either grants, donations, or property sales by EMS agencies within the county.

4.2.4. Resource Assessment Additional Factors

Limited tax levies and insurance billing restrictions for Medicare and Medicaid patients greatly (negatively) restrict the EMS agencies within the county's 911 EMS system to grow at the same pace as their communities. Coupled by increased operational costs and payroll expenses, the challenges facing the Canyon County EMS system are similar to their neighboring counties but have unique components when compared to smaller, more rural communities. While an annual increase of $1,000,000 (as an example) to a less populous county would prove significantly beneficial to such counties, this same dollar value applied to the expanded Canyon County system would not hold the same sustainable value. While the Canyon County EMS system remains a positive example of what an efficient and collaborative system can look like, some of its challenges are beginning to accentuate its operational stress points.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *QuickFacts Canyon County, Idaho*. https://www.census.gov/quickfacts/canyoncountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16027

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16027&IndicatorID=100041

ELMORE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Like many counties located in southwest Idaho, Elmore County is seemingly split in half geographically between agricultural lands and mountainous forest lands, which correlates well to its emergency medical service (EMS) system status. The county is primarily served by a single, countywide ambulance service provider that is a public model supported through taxing district funding, but also receives supplemental response support from additional quick response units that provide initial patient care before an ambulance arrives, which may be between one-to-three hours away on any given day because of the county's geography. Fortunately, such instances only occur at a rate of approximately 1-2% of the total incidents within the county. This extended response and incident time reality may very well be identified as a "risk" of living in the more remote portions of the county and state, as providing consistent and reasonable response time coverage to such areas may be unfeasible. Opportunities to mitigate this, moreover, do exist and can be implemented if local changes in operations occur.

Local division in response operations within this 1-2% coverage area appears to hinder the potential for more adequate ambulance response and patient transport to exist within the county. Such division appears rooted in years, even decades, of tarnished relationships between the local QRUs (quick response units) and the existing ambulance service, but also appears to be on a more positive trend within the recent years. Opportunities, therefore, exist for greater system cohesion and improved overall countywide response and coverage if such barriers can be mitigated and the EMS system within the county becomes unified through merged efforts.

Strengths	Opportunities
• The county is already covered by a full-border taxing district ambulance service. • Interfacility transfer operations are already being utilized as supplemental revenue stream to support 911 operations within the county.	• Quick Response Units (QRUs) merging into the ambulance service may improve response and transport capabilities through a relay-designed system of patient transport and transfer of care. • Billing service options may be explored to determine in-house billing efficacy and return on investment, and/or uncollected revenue potential opportunities through the utilization of a 3rd party billing company.
Challenges	**Threats**
• Low statistical call volumes within mountainous areas create coverage and response challenges due to demands and the need to cover more populated areas of the county. • Low tax levy rates are not sufficient enough to maintain baseline staffed agency operations within the county. • Proximity to suburban/urban EMS systems presents an operational challenge in terms of workforce competition and availability, especially in the paid/staffed EMS provider environment.	• Past relationships between the ambulance service and local QRUs can cause further system divide. • Aging membership among rural/remote responders, met by decreased younger-aged replenishment, poses a significant threat toward future response operations in such areas.

Table A: Elmore County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Elmore County is conveniently located between the populated areas of Ada County (including Boise) and Twin Falls County (including Twin Falls) along the west-central Interstate-84 corridor. Its predominantly rural environment is constructed of agricultural lands in its southern half and mountainous woodlands in its northern half. Given this split dynamic, the majority of the county's population is located within its southern half along the interstate and within the City of Mountain Home, the county's seat. Throughout the county, sporadic outdoor recreation-oriented communities exist within the mountains, but all traditional amenities within the county are found within Mountain Home or in neighboring counties. As a result, the growing rural-to-suburban community shift experienced within Mountain Home remains a driving force behind the county's steady, but slow population growth over the past decades. Additional population growth within the area may also be due to the Air Force base located within the county's southern borders.

Demographic	2010	2020	2022
Population	27,038	28,666	29,403
Land Area	3,074.74 sq mi	3,075.08 sq mi	3,075.08 sq mi
Per Capita	8.8 PPSM	9.3 PPSM	9.6 PPSM
PPSM: *People per square mile*			

Table B: Elmore County Population & Geography [1]

2.2. Economics

Much of the county's economic drive and growing tax base is reflected in its population center and suburban marketplace of Mountain Home. Within this proximity, big-box retail stores have been constructed on lands that were largely agricultural in years prior, and predominantly westward community expansion has opened the possibility for new residential growth to add toward the county's continually growing population base.

Metric	Data
Total Population (2022)	29,403
Median Age	33.5 years old
Poverty Rate (2021)	11%
Number of Jobs (2021)	14,069
Average Annual Wage per Job (2021)	$42,688
Unemployment Rate (2023)	3.3%

Table C: Elmore County Economic Factors [2]

2.3. Social Determinants of Health

Fortunate for county residents within its populated areas, access to emergency care through a local hospital system does exist but remains limited in terms of comprehensive emergency care options. The population as a whole, prior data (2019) indicates a higher rate of uninsured residents under the age of 65, with the county rating at 15% compared to the state's 13% average. [3] In many categories respective to health outcomes, healthy factors, health behaviors, access to clinical care, and the county's physical environment, Elmore County ranks between 21 to 38 among Idaho's 43 ranked counties. [4]

2.4. Indicator Impacts to EMS

The county's midway location between the Treasure Valley and Twin Falls positions it as a prime thoroughfare for travelers between the two regions, and a potential residency spot for individuals seeking a location between both areas. Population increases remain slow-but-steady within the county and primarily concentrated within its population center of Mountain Home, which is located along Interstate-84, resulting in the need for increased suburban/urban-resembling services and access to care, particularly emergency medical services. Attracting new workers within this discipline, moreover, poses a local challenge because of its lower median household income compared to the rest of the state; including its neighboring, competitive, population-concentrated counties.

SECTION

3

CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Documented EMS call volumes in Elmore County range between 1,400-1,700 responses, according to the Bureau's patient care reporting system database, however, individual agency reports indicate the total call volume within the county is greater than 3,000 incidents per year. Discrepancies in data to this extent suggest either reporting issues at the agency level or call volume filtering that excludes an extensive amount of cancellations or other tracked events. Nevertheless, data reported to the Bureau suggests that nearly 98% of all EMS incidents within the county receive a response by only the covering ambulance service, while the remaining 1-2% receive a response by a local quick response unit (QRU) and a responding ambulance service or a responding helicopter EMS agency.

Respective to overall incident times, the full-time/staffed ambulance service within the county has expected average chute/turnout times of approximately one minute, while the local QRU agencies range in times to upwards of 20 minutes to begin their response to an incident. Within the populated areas of the county where ambulance stations are located and staffed, average ambulance response times are less than 10 minutes and average total incident times are approximately 52 minutes in duration. In the more rural areas of the county, moreover, total incident times and ambulance response times can be substantially extended, as fair-weather driving time from Pine to Atlanta, for example, is approximately one hour and 45 minutes in duration, one-way. Fortunately, incidents only occur at a rate of approximately 1-2% of the total volume within the county in such rural, mountainous northern areas.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Elmore Ambulance Service	1,306	356	1,662	1,083	355	1,438
Ambulance Total	1,306	356	1,662	1,083	355	1,438
Atlanta QRU	-----	12	12	-----	7	7
Bruneau QRU	-----	7	7	-----	9	9
Prairie QRU and Fire	-----	17	17	-----	10	10
QRU Total	-----	36	36	-----	26	26

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Elmore County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Elmore Ambulance Service	1 min	6 min	7 min	12 min	52 min
Atlanta QRU	5 min	9 min	14 min	-----	97 min
Bruneau QRU	19 min	12 min	31 min	-----	84 min
Prairie QRU and Fire	4 min	6 min	10 min	-----	106 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Elmore County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center, who then notifies available (unscheduled) EMS crews of the incident via radio/pager system. Subsequent communications with the PSAP are made primarily via radio communications, such as announcing their arrival at an incident's location. This PSAP does not have emergency medical dispatch (EMD), or medical priority dispatching software (MPDS) in place to categorize or prioritize EMS calls for service. Of note, it was reported that some remote areas within the county's northern half only recently gained 911 access within the past decade.

4.1.2. EMS Agency Overview

One 911-based ambulance service exists within Elmore County and provides primary coverage throughout the entire county. Two additional QRUs exist within the county and provide supplemental response and patient care within their respective areas, which may consist of initial patient packaging and movement from the incident location to a rendezvous point with a responding ambulance or helicopter unit. A fourth EMS agency is registered within the county; however, it is not a part of the 911 response system and only exists as a privately-contracted resource for wildfire standby operations and other interfacility transfer or supplemental coverage services throughout the state and country.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Atlanta EMS	911 Response Non-transport	Basic Life Support (BLS)	Unscheduled	Uncompensated
Elmore Ambulance Service	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Front Line EMS	Interfacility Transfer-Ground	Advanced Life Support (ALS)	Scheduled	Compensated/ career
Prairie QRU and Fire	911 Response Non-transport	Basic Life Support (BLS)	Unscheduled	Uncompensated

Table F: List of EMS Agencies Located in Elmore County

4.1.2.1. Atlanta Emergency Medical Services

Atlanta EMS is a private, non-profit, non-transport EMS response agency located in Atlanta, ID. The agency primarily covers the area around Atlanta and the northern mountainous area within Elmore County. They are overseen by a board of directors as a 501(c)(3) non-profit corporation and are licensed to the BLS level of care. Their membership is comprised of cadre of approximately eight emergency medical technicians (EMTs) and six additional support (non-clinical) members. Operationally, they are a wholly volunteer organization that operates on an unscheduled, respond-per-availability model when an incident occurs. Crew members may respond from their home, place of recreation, place of employment, or from other locations within the area directly to the incident scene, or to a co-located fire station where they have a response vehicle available. Their response vehicle is a former ambulance from Elmore Ambulance Service but remains equipped to perform patient movement from the scene to a rendezvous point with a responding ambulance or helicopter to complete the patient's transport to a local hospital. Because of its remote location and poor roadway access, many of the patients requiring transport to a hospital have it performed by a dual-dispatched helicopter, as it can take over an hour for an ambulance to respond to incidents within their coverage area. Overall, the agency responds to a very low call volume within the county; approximately 7-12 calls per year. Because of their independent relationship from the ambulance taxing district within the county, Atlanta EMS does not receive dedicated tax funding to maintain its operations. It does, however, receive some equipment replenishment from the countywide ambulance service, in addition to primary donations and grant funding support in order to cover any incurred costs.

4.1.2.2. Elmore Ambulance Service

Elmore Ambulance Service is a public, ambulance taxing district-based EMS agency providing coverage within the entire geographical boundary of Elmore County. The agency is licensed up to the ALS level and staffs its ambulances with either an EMT and Paramedic, or two EMTs to comprise its crew. Overall, the agency employs over 40 EMTs and Paramedics

at either a full-time or part-time capacity, including one full-time director. Ambulances respond out of three primary stations: one station with two staffed units located in Mountain Home, one ambulance in Pine, and one ambulance in Glenns Ferry. In addition to the agency's 911 response services, it also provides interfacility transfer operations from a local hospital to other neighboring hospitals.

Based on available data provided by the Bureau, the agency responds to approximately 1,400-1,700 calls per year, while the agency reports this number to be closer to triple that amount, including conducting over 300 interfacility transfers (IFT) per year. Discrepancies in this data may be due to differences in incident reporting and/or incident type screening. Nevertheless, the agency reports that the majority of its non-tax revenue comes from its billing/transport operations, but this amount does not adequately cover the agency's full operational needs. Even with its taxing district financial support, the agency has had to rely on additional county funding in order to supplement its financial expense needs.

Figure G: Images of Elmore Ambulance Service

4.1.2.3. Front Line EMS

Front Line EMS is a private, for-profit ambulance service based and licensed within Elmore County, but not actively involved within the county's 911 response system. The agency, moreover, exists as a contracted service option for performing interfacility transfers, providing staffing coverage, and for providing wildfire incident standby operations. Most of the agency's operations and contracts for service are conducted outside of the State of Idaho, despite the agency basing its operations within the state. The agency reports that restrictive language related to performing IFT operations hinders their progress within the state. Staff members for Front Line are primarily part-time or contracted for specified periods of time and/or coverage projects. The agency does express that they may be available to supplement the current 911 system and its call volumes, given that their ambulances are located within the county, but prior efforts to become involved in the 911 system have not led to progress with their incorporation as a back-up resource.

4.1.2.4. Prairie QRU and Fire

Prairie QRU and Fire is a private, non-profit, non-transport EMS response agency located in Prairie, ID. The agency primarily covers the area around Prairie and the northern

mountainous area within Elmore County. They are overseen by a board of directors as a 501(c)(3) non-profit corporation and are licensed to the BLS level of care. Their membership is comprised of a cadre of approximately fifteen EMTs. Operationally, they are a wholly volunteer organization that operates on an unscheduled, respond-per-availability model when an incident occurs. Crew members may respond from their home, place of recreation, place of employment, or from other locations within the area directly to the incident scene, or to the agency's director's private residence, where their response vehicle is located - outside. Their response vehicle is a former ambulance from Elmore Ambulance Service but remains equipped to perform patient movement from the scene to a rendezvous point with a responding ambulance or helicopter to complete the patient's transport to a local hospital.

Because of the community's remote location and poor roadway access, many of the patients requiring transport to a hospital have it performed by a dual-dispatched helicopter, as it can take over an hour for an ambulance to respond to incidents within their coverage area. Overall, the agency responds to a very low call volume within the county; approximately 10-17 calls per year. Because of their independent relationship from the ambulance taxing district within the county, Prairie QRU does not receive dedicated tax funding to maintain its operations. It does, however, receive some equipment replenishment from the countywide ambulance service, in addition to primary donations and grant funding support in order to cover any incurred costs.

4.1.3. Hospital Access Overview

Patient transports via ambulance from within the county are often made to three of the county's closest hospitals; Saint Alphonsus Regional Medical Center-Boise (Boise, ID), St. Luke's Elmore Medical Center (Mountain Home, ID), and St. Luke's Boise Medical Center (Boise, ID); with one facility located within the county (Mountain Home) and the other two located 40-50 miles away in Boise. Both Boise facilities offer comprehensive trauma, cardiac, and stroke emergency care, including offering pediatric trauma care, while the Mountain Home facility provides patient stabilization without comprehensive interventional care.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Elmore County joins a large group of counties that utilize its borders to form intra-county ambulance taxing district. Models like this often promote system cohesion, uniformity, and reduce the risk of exhibiting unnecessary operational duplications. Contrasting to neighboring systems in Ada or Canyon County, who also utilize their geographical borders to define their taxing district borders, Elmore County also contains two, non-affiliated additional non-transport agencies within its borders. Such a finding presents a potential operational limitation through its realization of system silos, disproportionate funding means, and even a potential lack in service offering by creating "kinks" in the system's operational chain. This can be experienced through more remote communities not having quicker access to transporting ambulance availability and an increased reliance on expensive helicopter medical transport, purely because of transport time factors, not necessarily because of patient illness/injury acuity.

Such realizations can also be noted in many other Idaho counties with similar system compositions. Perceptions within the county's EMS system, moreover, likely match its reality, that it is experiencing challenges respective to maintaining responders because of local competition, that long response times and first responder wait times lead to patient transfer-of-care delays, and that the remote "islands" within various rural counties create a coverage dilemma where the needs of the majority (population centers) outweigh the needs of a county's rural or remote residents, particularly when large coverage boundaries exist.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Responding agencies provided moderate-to-high numerical value ratings to their individual agency stability/sustainability, ranging from 77-90%. Direct interview comments provided by each non-transport agency within the county to the assigned Planner, however, provide a more bleak perception that does not match these numerical values, and likely better reflects a low stability or sustainability value mainly due to volunteer shortages, inconsistent and unreliable funding sources, and an often reliance on "one or two individuals" to keep the agency afloat (which is exemplified by parking their response unit at a member's personal residence).

- **EMS Agency Financial Situation:** Despite the primary ambulance service being organized as an ambulance taxing district and having the ability to levy its own taxes, it was communicated that the revenue generated through this means does not adequately provide, or supplement, the operational funding necessary to maintain itself as a coverage-providing and competitive-employment agency. Non-transport agencies, being more volunteer in nature within the county, do not face the same financial challenges as paid/staffed ambulance services, nor do they face the same capital needs. Their financial challenges, as a result, were typically presented in the light of needing more funding to provide initial education for new members or continued education for existing members.

- **EMS Agency Communications Strategy and Outreach:** None of the 911 response agencies indicated that they had a formalized communications strategy or outreach plan to share information within the communities they served.

- **Community View of EMS Agencies:** All 911 response agencies within the county believe that they are well-viewed by members of the public within their respective areas.

- **Elected Official Support of EMS Agencies:** All 911 response agencies within the county believe they are well-supported by members of the public within their respective areas, however, some non-transport agencies expressed that there appears to be significant confusion amongst elected officials toward the reality of the EMS system's operations, oversight, and financial sources available to such agencies.

- **Agency & System Response Outlook:** Dedicated staff members are highly engaged with the agencies, continually finding ways to keep them progressing. Technology integration and utilization remain both a challenge and opportunity within the county. The lack of reliable communication services poses a challenge, while the agency and crew member interest and willingness to integrate improved communications and reporting practices remains high.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** The primary 911 response ambulance service within the county is organized as a public, ambulance taxing district organization, while its encompassing non-transport agencies (QRUs) are organized as private, non-profit organizations.

- **Service Delivery Partners:** The system's medical director, local law enforcement and fire departments, search and rescue resources, and the county commissioners/ambulance district board have all been identified as service delivery partners by the 911 EMS response agencies in the county.

- **Medical Direction:** Medical direction is provided by a contracted/volunteer physician who is affiliated with a local hospital system. Current interaction between the EMS agencies and their medical director remains minimally active regarding training and quality assurance involvement.

- **Communications & Interoperability:** 911 call-taking and dispatching is provided by a single PSAP, which does not have MPDS or EMD service capabilities. Radio communications are indicated to be inadequate and unreliable, at times, when traveling throughout the county and trying to communicate with resources that respond from outside of the county. Interoperability is not expressed to be reliable or functional by all EMS agencies within the county.

- **Mutual Aid System & Agreements:** Mutual aid is provided by neighboring EMS agencies responding from outside of the county, including helicopter responses, as requested. Most EMS agencies express having formal mutual aid agreements established with local agencies to provide system response during times of need.

- **Community Health EMS (CHEMS):** A CHEMS program has recently been developed within the county and is in its early stages of operation and development.

- **Patient Care Documentation System:** Documentation is currently completed via free electronic patient care reporting (ePCR) resources available from the Bureau.

4.2.1.3. Response Overview

- **Level(s) of Service:** Minimum ambulance response levels within the county are at the BLS level of care, however, most incidents receive ALS-level ambulance staffing based on the population-centered location of incidents within the county. Rural/remote incidents often receive BLS/ILS (intermediate life support care but

have ALS-level care available to them via helicopter response or Paramedic chase vehicle/intercept rendezvous.

- **Agency Response Concerns:** Long response times, particularly to more rural and mountainous areas within the county, pose a significant challenge with respect to both accurate patient location and timely patient access.

- **Helicopter Response & Utilization:** Because of the more rural and remote aspects of the county's geography, the use of helicopters to provide either initial incident response or patient transport to a hospital is a common occurrence within the county.

- **Factors Impacting Response Times:** Response times within populated areas where staffed ambulances are located are relatively adequate, on average. Responses to rural/remote areas of the county, however, typically experience longer response and overall call times.

- **Response to Public Lands:** Overall incidents to public lands are minimal in total volume but have a high impact when they do occur. The use of snowmobiles, UTVs, and other off-road equipment are often essential to gain patient access, including the response of search and rescue resources to provide assistance. The need to maintain such resources, especially considering their limited use, remains a capital item that EMS agencies must address. The overall time impact necessary to respond to and manage such incidents is also very consuming for all responders involved.

4.2.2. Workforce & Resource Assessment

Aging volunteers within rural response agencies, particularly a lack of available local replenishment of such volunteers, creates a significant challenge within Elmore County's rural/remote response network. As the future nears, there is a high risk of such agencies facing depleted membership and, ultimately, facing an inability to respond to incidents as they arise due to a lack of local responder availability. Within the staffed ambulance service, provider age faces an opposite finding, where younger providers continue to populate the agency's staffing needs, but at a higher turnover rate than older responders due to the competing and pulling suburban/urban markets in nearby counties, who often offer higher wages and more competitive benefits packages to their employees.

Additional local concerns related to a lack of initial education courses for EMTs and Paramedics also leads to drawing interested county residents away from employment within the county, as the time dedication to gain such training requires either significant and regular travel, or the need to move closer to training centers in order to meet such commitment demands. Space dedication for continued training, and even for 24/7 coverage and living accommodations, also poses a challenge for countywide EMS agencies.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Primary 911 ambulance staffing within the county is provided by paid, full-time or part-time employees. Staffing by rural first response agencies is largely unpaid and volunteer in nature.

- **Responder Average Age:** Many paid EMS providers are between 20-40 years old, which leads to a perception of longevity potential within the system, but the reality of this finding often leads to higher turnover rates, as younger employees can tend to utilize agencies within rural counties as "steppingstones" to gain higher-paying jobs with more suburban/urban-oriented agencies, which is where they commonly live. The average age of non-career responders who volunteer with local first response agencies is typically higher, ranging between 40-60 years of age, which is a common finding within the state and EMS industry as a whole. This finding presents a longevity issue as younger EMTs, and Paramedics do not tend to volunteer their time and services as prominently as more middle-aged responders do. It has been expressed that approximately half of the volunteer responders within the county are anticipated to retire from providing services within the next few years.

- **Staffing Numbers:** There are approximately 20-25 full-time responders working within the 911 response system and an additional 20-25 unpaid, volunteer responders within the system.

- **Staffing Concerns:** Being close in proximity to both the Ada/Canyon County and Twin Falls County systems, recruitment to work in the more rural Elmore County, and retention to stay within Elmore County, remains a continued challenge for maintaining paid personnel.

- **Staffing Strengths:** Local residents comprise a significant volume of responder staffing for the first response agencies, leading to a high level of local engagement. Within the career workforce, the daily need to maintain regular staffing is being met.

- **Recruitment & Retention:** Retention among career/paid responders remains a challenge primarily due to local wage competition and talent loss to such urban/suburban agencies. Within the rural/remote environment, retention remains high, but the future pertaining to responder recruitment and replenishment appears bleak.

4.2.2.2. Training & Education Overview

- Initial EMS training is not often available within the county but is available in nearby populated counties.

- Continued education and training are often provided in-house with available staff for each agency and are supplemented by distributive/online education.

4.2.2.3. Facilities Overview

- **Station Location(s):** Ambulance station locations are located in the more populated areas within the county, with the Mountain Home station covering greater than 50% of the county's population base through the city's population alone. Additional ambulance stations are located in Glenns Ferry and Pine, typically responding to a lower number of incidents, but within a more rural/remote environment. As expansion continues in the area surrounding Mountain Home, consideration may be necessary toward the construction of a second ambulance station in order to meet the geographical/response needs of the community.

- **Station Condition(s):** Many staffed stations were constructed during time periods where regular, 24/7 staffing was no provided and intra-agency structure was not as prominent. As a result, living, sleeping, office, training/meeting, and storage space is often limited in existing structures; or has required extensive facility remodeling in order to minimally meet agency needs. EMS agencies describe their overall facility conditions as being lacking, in general.

- **Facility Needs:** Back-up power, facility security, and full living amenities are limited in existing EMS facilities throughout the county.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Agencies express high adequacy in their current equipment and recent replacement of aging and outdated items.

- **Condition:** Agencies express appropriate conditions related to equipment aging, appearance, and functionality.

- **Funding:** Agencies have heavily relied on statewide grant programs for capital or high-cost equipment replacement, such as power-lifting cots/stretchers and updated cardiac monitors/defibrillators.

- **Needs/Shortages:** Current frontline units are stocked appropriately, however, there exists no additional cache of equipment available to account for items that need unexpected repair, preventative maintenance, or further inspection.

4.2.3. Financial Assessment

The financial sustainability of EMS operations within the county is primarily contingent upon three revenue components: 911 ambulance transport billing, IFT billing, and ambulance taxing district support. Each one of these components is necessary to maintain the current level of service available within the county, but they are not enough to support the future needs within the county. Factoring in community growth, tax rate limitations, and a reliance on supplemental IFT services to maintain 911 system operations and sufficient staffing coverage, the role of the transporting ambulance service within the county is stretched to its capacity. Without further alterations to its tax base or mil levy rates, the ambulance service

within the county will only remain in a state of “getting by,” but will remain a weak competitor in highly competitive workforce environment.

4.2.3.1. Expense Overview

- **Personnel Expenses:** $1,990,000
- **Operational Expenses:** $475,000
- **Capital Expenses:** $265,000

4.2.3.2. Revenue Overview

- Approximately $600,000 of taxing district dollars were generated to support the staffed ambulance service’s operations within the county.
- Approximately $1,935,000 was collected through ambulance billing services for both 911 operations and IFT operations. Approximately 300-350 IFTs occur each year, resulting in likely 20-25% of the total billing revenue to be as a result of such supplemental operations. Of note, billing services are conducted in-house by the ambulance service, which may result in an opportunity for future efficiency exploration to determine the return on investment and help to identify if any uncaptured revenue potential exists through in-house or 3rd party billing options.
- EMS agencies within the county rely on state grant programs to support many high-cost or capital equipment purchases, such as ambulances, cots/stretchers, cardiac monitors, or facility upgrades. Approximately $60,000 in total grants were received by EMS agencies throughout the county.
- Additional low-volume funding received by county agencies has been identified as coming from sources such as the silver mining and wind farm/power industries. Such revenues vary in value but equate to approximately $5000 of the total revenues experienced within the county.

4.2.4. Resource Assessment Additional Factors

One key component identified toward maintaining current ambulance response operations within Elmore County is its ambulance service’s incorporation of IFT operations into its service delivery model. This incorporation allows for additional unit staffing that can be available for 911 response purposes, in addition to serving as a supplemental revenue generation source to not only offset this increased staffing need, but to also offset additional 911 service delivery needs. While further analysis is necessary to fully highlight this financial impact, its presence (IFT operations) certainly aids in justifying the additional staffing that the ambulance service within the county takes advantage of for 911 response purposes.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *QuickFacts Elmore County, Idaho*. https://www.census.gov/quickfacts/elmorecountyidaho

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16039

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspxRegionID=16039&IndicatorID=100013

[4] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspxRegionID=16039&IndicatorID=100041

GEM COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Gem County, similar to its neighboring Payette County, is located on the northwestern border of the Treasure Valley and contains a population that is primarily centered around throughfares to this neighboring region. Considering most of the population's reasonable access to the commercial amenities of the greater Ada and Canyon County areas, this presents an opportunity for southern Gem County residential growth, but it also presents a potential EMS workforce challenge because of this competing system proximity.

Expanding north into the county's mountainous and remote terrain, the picture of community growth and service availability matches more of its neighboring Washington County, which is primarily remote in nature and without any notable opportunities for population expansion. This divided landscape creates a challenge with respect to providing ambulance service coverage, as the actual service demand downplays the overall impact experienced within the county, as less than 10% of the population lives in this more remote area. The overall time and resource impact of the statistically fewer incidents that do occur within this area of the county, however, is substantially greater than those that occur in the more populous area of the county. Considering the county's projected growth patterns and potential, the need to provide for a sustainable and cohesive emergency medical service (EMS) system needs to occur now and before the current system becomes further outpaced, and before its current emergency response system becomes further competitive.

The EMS and greater emergency response system within Gem County, as a result, appears best described as "competing" or trying to maintain their own operations in an environment where workforce recruitment and retention, coupled with undedicated EMS funding, are its largest sustainability challenges. This is exacerbated by the dynamics of two fire-based response entities being located within one city block from one another, further competing for local resources, workforce talent, funding, and identity. In short, such challenges create an

environment of decreased sustainability with regards to the county's EMS system, but increased opportunity in the light of potential large-scale regional consolidation.

Strengths	Opportunities
• The county is already covered by a single ambulance service. • A remote access hospital does exist within the county, capable of initially assessing and stabilizing various patient illnesses and injuries.	• Regional collaborative efforts may provide improved system response and coverage through combined service efforts. • Close proximity (within one hour) to more suburban/urban areas may present an opportunity to pull-in a paid staffing workforce. • Low call volumes within mountainous areas create coverage and response challenges.
Challenges	**Threats**
• Remote area coverage is largely impossible to maintain reasonable response times as the population center is not located near any of the remote areas of the county. • One EMS response agency provides a minimal response and coverage impact to the overall system, which brings into question its necessity.	• Proximity to suburban/urban EMS systems presents an operational threat in terms of workforce competition and availability, especially in the paid/staffed EMS provider environment. • Competing local emergency response entities likely result in workforce recruitment challenges, in addition to potential cultural challenges that can threaten local cohesion and unity efforts.

Table A: Gem County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Gem County's population places it toward the middle-of-the-pack when comparing it to other counties throughout the state. Its proximity to the Treasure Valley, however, changes its potential for future growth and expansion, even connection, to such urban-growing landscapes (at least in the southern half of the county). A 2022 Comprehensive Plan for the county sought engagement from residents and produced a word cloud of expressed sentiments that portrayed a mixed emotion of both optimism and pessimism with respect to the county's 20-year future. When asked, "In 20 years, Gem County will be …," residents responded most prominently with terms like "small town," "rural," "small," "too big," "like Boise," and "planned." These divided sentiments speak clearly to what residents expressed related to "what they love most about Gem County" as sentiments and visualizations such as "rural," "agriculture," "quiet," "conservative," "small town," and "peaceful." [1]

An experienced 20% growth rate from 2010 to 2022, however, seemingly "threatens" what many longstanding residents have expressed as positive points to living in in the county, while also serving as a testament to the exact factors leading toward what is driving new residents and development into the county, in general. Continued growth, as a result, appears to be a reality faced within the southern portion of the county; particularly as it relates to a further "connection" between Gem, Ada, Canyon, and even Payette Counties. This growth, nevertheless, translates to increased emergency medical service demand and need as the county steadily moves into the future.

Demographic	2010	2020	2022
Population	16,719	19,123	20,418
Land Area	560.90 sq mi	559.77 sq mi	559.77 sq mi
Per Capita	29.8 PPSM	34.2 PPSM	36.5 PPSM
PPSM: *People per square mile*			

Table B: Gem County Population & Geography [2]

2.2 Economics

A 17% increase (2010-2020) in available jobs speaks to the growing population base and transitioning agriculture-to-commercial/industrial workforce opportunities within the county throughout the past decade. [3] This transition also brings about local residential growth (in the county's southern half), with a nearly 10% increase in available housing units during this same time period. [4] Despite the growth within the county, agriculture remains a prominent source of economic development and a focus of the county's future economic ecosystem. As farm and ranch lands surrounding the City of Emmett convert to residential and mixed commercial properties, however, the reality of the county's southern growth and expansion toward the ever-growing (northern expanding) Ada and Canyon Counties only hypothesizes their eventual "connection" and metropolitan expansion into Gem County. In summary, the visual and overhead "brown" that can be seen separating these two regions is gradually becoming more "green" with suburban landscapes. If not for some of the physical terrain that exists between these two regions, it is only a matter of time before they become visibly undiscernible from one another, and their economies become further merged.

Metric	Data
Total Population (2022)	20,418
Median Age	43.8 years old
Poverty Rate (2021)	12%
Number of Jobs (2021)	7,809
Average Annual Wage per Job (2021)	$41,671
Unemployment Rate (2023)	3.5%

Table C: Gem County Economic Factors [5]

2.3. Social Determinants of Health

Gem County's relative proximity to major population centers and its existing rural, critical access hospital provides its residents a higher *County Health Ranking* (12th) in the category of access to clinical care, but not with respect to other social determinants of health. When addressing other health factors such as health outcomes, health behaviors, social environment, and physical environment, Gem County ranks proportionately where it may be respective to its population ranking (which is in the 30s compared to the state's 43 ranked counties). The county's residents, at all ages, also rate with a higher percentage of uninsured individuals when compared to both the state's average and nation's average percentages. [6]

The poverty rate within the county has been on a long-term decline but remains slightly higher than the state's average. Uniquely, the county ranks 8th in the state in terms of having a self-employed workforce, which has been a continually growing trend within the county and may play a factor into the experienced higher uninsured rate, as well.

2.4. Indicator Impacts to EMS

Gem County's rural-to-growing suburban dynamic serves as an appeal for some residents, while also a potential threat to others. This mixed dynamic can pose a significant challenge for the county as it becomes further divided in two, appealing to both ends of the spectrum and on either ends of the county. Respective to its EMS system, this split has resulted in a dynamic where ambulance service coverage is reasonably available to the majority of the county's residents, but only because of the county's suburban shift. If the county continues to grow its southern population, its system demand will, too, continue to grow and so will its need to employ more EMS providers and staff more ambulances. This result to compete with other local and major systems within the state will likely pose the greatest challenge for the county in the foreseeable future, especially as it already struggles to compete with the higher wages and greater benefits experienced through the already competitive employment landscape. All this added need, exacerbated by the county's high unemployment rate, may create a further distanced cost recovery realization for its billed ambulance services, resulting in the need for supplemental tax support to be necessary to keep its growing system afloat.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

The county's rural-to-suburban landscape creates a relatively low call volume for both EMS agencies within the county; of which, only one is a transporting ambulance service. This lower-than-expected call volume may be attributed to two primary factors: the county has a high uninsured population rate, and the county does not commonly experience through-traffic, only local traffic. Of note, only one agency is staffed with scheduled, on-site crew members, while the other is not, which results in a significantly less experienced call volume for the latter. Reflecting on the overall call times for each agency and EMS incident, turnout times are higher than what should be expected from an on-site, scheduled response crew for the ambulance service, but the agency's low overall response times speaks to the relatively close locations where incidents prominently occur (near the City of Emmett). The quick response agency, as a result of its paid chief, who is the only individual in-station during business hours of the day, likely contributes to the low overall response times experienced by the agency.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Gem County Fire & EMS	*979*	*478*	1,457	*874*	*391*	1,265
Ambulance Total	*979*	*478*	1,457	*874*	*391*	1,265
Emmett Fire Department	-----	*27*	27	-----	*29*	29
QRU Total	-----	*27*	27	-----	*29*	29

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Gem County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Gem County Fire & EMS	*3 min*	*5 min*	8 min	11 min	60 min
Emmett Fire Department	*2 min*	*4 min*	6 min	-----	31 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Gem County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county sheriff's department/office dispatching center, who then notifies available (unscheduled or scheduled) EMS crews of the incident via radio/pager system. Subsequent communications with the PSAP are made primarily via radio communications, such as announcing their arrival at an incident's location. EMS agencies indicate that this PSAP does not have emergency medical dispatch (EMD) or medical priority dispatching software (MPDS) in place to categorize or prioritize EMS calls for service.

4.1.2. EMS Agency Overview

Two total EMS agencies are registered within the county: one as a non-transport response agency and the other as a transporting ambulance service. Coincidentally, both are located within the same community, the City of Emmett, and only one city block from one another. Considering the significantly low call volume experienced by the non-transport agency (responding to only 2% of the total incidents within the county), it brings into question the effectiveness of maintaining and supporting this resource, especially given the full capabilities of the ambulance service literally a block away. In its current state, what appears to exist within Gem County; and more specifically, within the City of Emmett, is an unnecessary duplication and competition of resources within an already low call volume system (likely reflecting a low fire call volume environment, as well), and an already workforce-competitive and suggestively under-funded industry to begin with.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Emmett Fire Department	911 Response Non-Transport	Basic Life Support (BLS)	Unscheduled	Compensated/ per-call
Gem County Fire & EMS	911 Response Transport	Advanced Life Support (ALS)	Scheduled	Compensated/ career

Table F: List of EMS Agencies Located in Gem County

4.1.2.1. Emmett Fire Department

Emmett Fire Department is a public/fire-based EMS agency providing 911 response and non-transport EMS services within the City of Emmett, responding out of one station as a quick response unit (QRU). They are licensed at the basic life support level and have a roster primarily comprised of paid-per-call firefighters, some of whom have EMS credentials, and one full-time fire chief.

4.1.2.2. Gem County Fire & EMS

Gem County Fire & EMS is a public/fire taxing district-based EMS agency with multiple fire stations located throughout the county, but only two stations with an ambulance, and only one of which has a staffed ambulance (in the City of Emmett). The agency is primarily staffed with a combination of full-time (scheduled) Firefighter/Paramedics and part-time Firefighter/EMTs (emergency medical technicians) who support the 24/7 scheduled staffing of one ambulance located at their Emmett station. Additional ambulances are located at this facility; however, they serve as supplemental units for additional or subsequent calls for service and are staffed on an unscheduled and call-in basis. An additional ambulance is also located at an un-staffed station in Sweet, with nearby responders staffing the unit when available when an incident occurs. Overall, Gem County Fire & EMS staffs one ALS ambulance staffed with an EMT and a Paramedic on a 24/7 basis.

In total, the agency has approximately 40-50 crew members with various fire/EMS credentials on its roster; nearly half of which work on an unscheduled basis and respond if available, as requested. Reflecting on the daily scheduled staff, the agency employs eight full-time cross-staffed crew members (fire & EMS qualified), a full-time chief, four additional full-time fire-only, and approximately 20 part-time fire/EMS cross-staffed crew members.

The agency's EMS operations are supported by ambulance transport billing revenues and by supplemental county funding, as no ambulance taxing district is in place throughout the county, only a fire taxing district. Of its ambulance transport revenues, approximately 20-25% are derived from interfacility transfer operations performed by the agency from its in-county Valor Health hospital to other nearby Treasure Valley hospitals. As a result, the agency regularly relies on the county for supplemental financial support in order to maintain its 24/7 staffed operations for one ambulance. When a patient transport is necessary, ambulance crews often transport patients to their local Valor Health hospital, in addition to

various hospitals located in the Treasure Valley, and occasionally to a local hospital in Ontario, Oregon.

Figure G: Images of Gem County Fire & EMS

4.1.3. Hospital Access Overview

One hospital, Valor Health, does exist within the county in the City of Emmett. This rural, critical access hospital has basic emergency room and minimal hospital admission capabilities, but no high-acuity interventional services for patients suffering from a stroke, heart attack, or major traumatic injury. These patients are either transferred via Gem County Fire & EMS ambulance, another interfacility transfer (IFT) ambulance service, or via helicopter to a Treasure Valley hospital for further care and admission. Aside from initial patient transports to the hospital in Emmett, patients do seek direct transport to hospitals within the Treasure Valley and to nearby Ontario, Oregon.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Overall operations within the county are supportive surrounding the City of Emmett, the population center, but scattered and sporadic throughout the rest of the county. Fortunately, the total impact (call volumes) is lower in the more remote areas within the county, however, the resource and financial impact incurred in these remote areas is indicated as being proportionately higher because of the increased time commitment for such responses/transports, including instances where helicopters are utilized to complete such operations. The consensus from responses received by countywide EMS agencies is that overall system sustainability is relatively low, and the burden to maintain sufficient operations in a competitive system is relatively high.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The perception of EMS agency and system stability is very low, rating in the 20s on a scale of 0-100.

- **EMS Agency Financial Situation:** There is expressed financial hardship with a lack of ambulance-designated tax support, which leads to a challenge toward addressing the competitive and thriving wages required to maintain a sustainable system.
- **EMS Agency Communications Strategy and Outreach:** Public communications remains a challenge expressed by EMS agencies.
- **Community View of EMS Agencies:** EMS agencies perceive that the general public does view them in a positive light.
- **Elected Official Support of EMS Agencies:** EMS agencies do feel supported by their communities and the general public.
- **Agency & System Response Outlook:** Agencies express continued challenges in terms of both financial reliability and workforce maintenance with regards to their agency & system outlook.

4.2.1.2. Organizational & Operational Overview

- **EMS Agency Structure(s):** The ambulance service within the county is a compensated model with career and scheduled staffing for its first responding ambulance. Subsequent ambulances rely on a call-in model of unscheduled, off-duty employees dedicating time to staff additional units. The QRU agency within the county primarily operates on an unscheduled basis and responds to a minimal number of calls per year.
- **Service Delivery Partners:** The countywide fire district commissioners serve as a key partner in assuring the support of ambulance services within the county.
- **Medical Direction:** Medical direction functions are performed by a contracted physician through a local hospital system and are low in engagement, overall, but are receptive when requested.
- **Communications & Interoperability:** Radio communications within the county are expressed as being sufficient, but challenges do arise when trying to communicate with neighboring counties.
- **Mutual Aid System & Agreements:** The ambulance service for the county has formal mutual agreements with multiple EMS agencies from neighboring counties.
- **Community Health EMS (CHEMS):** EMS agencies are aware of the concept behind CHEMS programs but are not currently expressing interest in developing such programs.
- **Patient Care Documentation System:** EMS patient care reports are completed using the Bureau's free, contracted electronic patient care reporting (ePCR) platform.

4.2.1.3. Response Overview

- **Level(s) of Service:** Primary (first-out) ambulance responses are staffed to the ALS level of care, while subsequent responses do not have guaranteed ALS staffing.

- **Agency Response Concerns:** Primary ambulance response is from one ambulance station located in Emmett. An unstaffed ambulance is located in Sweet but does not always have an available crew to assemble for the unit's response within the area.

- **Helicopter Response & Utilization:** Incidents occurring in more remote areas of the county (in its northern region) may utilize a helicopter response in order to provide a timelier response and patient transport, regardless of the patient's injury/illness acuity.

- **Factors Impacting Response Times:** Limited northern road access and mountainous terrain greatly impact response times and overall call times from responding and transporting ambulances.

- **Response to Public Lands:** Responses to public lands are statistically low but pose the largest time and resource impact due to the time required to often reach patients located in remote or off-road locations.

4.2.2. Workforce & Resource Assessment

EMS Resources within the county most fittingly align with the definition of a "minimum" standard, but not necessarily at the fault of the responding agencies. This "minimum" is largely due to the lack of dedicated funding for EMS operations within the county, and the reliance on both primary 911 ambulance transport revenues and supportive IFT ambulance transport revenues. As a result, the workforce reports being undercompensated and is at risk of being recruited to work in more established and appropriately funded agencies elsewhere.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The primary ambulance staffing model within the county is on a scheduled, on-duty basis, while subsequent responses are maintained through a call-in (unscheduled) roster of responders. QRU responses are primarily from an unscheduled roster of responders, or from the agency's on-duty and scheduled chief.

- **Responder Average Age:** The approximate average age of many responders within the county is between the ages of 35-44 years old.

- **Staffing Numbers:** There are approximately 8-10 full-time responders within the county and approximately 30-40 additional (non-full time) responders working in the county.

- **Staffing Concerns:** Current staffing is maintained at a minimum level, creating a daily staffing hardship when scheduled or unscheduled time-off is taken by any full-time

responder. The staffing reliability of unscheduled (call-in) responders is also decreasing, as personal commitments and external full-time employment limit their availability to function as an emergency responder.

- **Staffing Strengths:** Many staff members live within the county and maintain personal dedication to their roles and agency.
- **Recruitment & Retention:** The risk of losing staff is very high and remains a continued challenge as neighboring agencies within Ada and Canyon Counties often offer higher pay and more competitive benefits for full-time employment.

4.2.2.2. Training & Education Overview

- In-house instructors are often utilized to maintain internal continued education and relevant training needs. Additional and occasional training is also provided by local hospital staff members or obtained through free online resources.

4.2.2.3. Facilities Overview

- **Station Location(s):** The staffed ambulance station in Emmett is in an appropriate location to meet the majority of the county's EMS call volume demand.
- **Station Condition(s):** Facilities are lacking in the ability to maintain two staffed crews on a 24/7 basis and were built during a time when the needs of full-time staffing were not a primary consideration.
- **Facility Needs:** Significant improvements are necessary to maintain a 24-hour shift lifestyle, including appropriate living accommodations. This includes the potential for a second staffed or on-call/available crew.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Durable and disposable items located in ambulances or designated for primary EMS response are noted to be adequate in purpose and functionality by the ambulance service.
- **Condition:** Durable and disposable items located in ambulances or designated for primary EMS response are noted in excellent condition by the ambulance service.
- **Funding:** Reliance on supplemental funding through equipment grants is the primary means for replacing or acquiring new equipment.
- **Needs/Shortages:** Additional/updated training equipment is preferred by the ambulance service.

4.2.3. Financial Assessment

911 response operations within the county are largely supported by the existence of additional, supplemental, revenues generated through IFT operations, which comprise approximately 23% of the total ambulance transport billing revenues generated. At its greatest, 911 ambulance transport revenues cover close to the cost associated with personnel expenses within the county, but certainly not all of it. Additional IFT revenues help to offset a larger portion of the current cost of ambulance operations within the county, but still leave approximately 13% of total EMS expenses unfunded through dedicated means.

4.2.3.1. Expense Overview

- **Personnel Expenses:** Approximately $600,000
- **Operational Expenses:** Approximately $200,000
- **Capital Expenses:** Approximately $50,000

4.2.3.2. Revenue Overview

- Approximate revenue generated from 911 ambulance transport billing services within the county is $570,000.
- An additional (approximately) $170,000 is generated from IFT operations, equating to a total ambulance service revenue of approximately $740,000 (23% of which comes from IFT operations).
- Remaining income needed to maintain EMS operations is often sourced from the established (rural) fire district in place within the county.
- One positive attribute for the near future is the opportunity to garner financial support from new impact fees for community development, but this financial increase still does not lessen the overall concerns that agencies experience, thus, resulting in continued challenges for the system’s outlook.

4.2.4. Resource Assessment Additional Factors

Minimum staffing levels have largely been maintained by the combined 911 and IFT ambulance transport revenues generated within the county, but this in no way reflects the stability of the EMS system as a whole. Such minimum levels do not sufficiently account for the additional staffing needed while an ambulance crew performing IFT operations leaves the county reliant upon an unscheduled workforce for upwards of 2-3 hours per occurrence. Additionally, the minimum staffing levels and finances are only covered under the premise that lower wages are utilized to compensate the workforce, when compared to neighboring EMS agencies. If more aligned and adequate wages were supplied, there would be an immediate need to rely upon more funding to support this personnel expense reality.

REFERENCE LIST

[1] Gem County. (2023). *Comprehensive Plan*. https://webgen1files.revize.com/gemcountyid/Development_Services/Comprehensive_Plan/GemCounty_ComprehensivePlan_AdoptionDraft.pdf

[2] U.S. Census Bureau. (2023). *QuickFacts Gem County, Idaho*. https://www.census.gov/quickfacts/gemcountyidaho

[3] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16045&IndicatorID=13

[4] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16045&IndicatorID=18

[5] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16045

[6] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16045&IndicatorID=100041

OWYHEE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county, based on available data.

1. EXECUTIVE SUMMARY

The emergency medical service (EMS) system in Owyhee County is operationally divided into three landscapes that encompass nearly the combined land areas of the states of Connecticut and Delaware, but with a population just less than all of Garden City, Idaho. Reflective of the geography and community locations within Owyhee County, the majority of its population, and therefore, EMS call volume occurs along its northern border separating the county from its neighboring Canyon, Ada, and Elmore Counties via the Snake River. This natural border splits and veers southwest near the midpoint between Marsing and Grand View, dividing the county's EMS system in-two and causing each western/eastern portion to reflect as rural extensions of their neighboring Canyon and Elmore County systems, respectively. Further south, a third region can be identified as a primarily desolate and remote area within the county, which may best associate with neighboring EMS systems within northern Nevada. These associations, moreover, are not seen as a hindrance or a negative; but rather, as an opportunity for the EMS agencies and residents in the county to be supported by larger EMS systems during a time of need; which, for at least one ambulance service, is right now.

Within the county, its EMS agencies are locally supported through volunteer or paid-on-call membership, but their northern proximity to rapidly expanding suburban landscapes and fully-paid services in both Ada and Canyon Counties places Owyhee County EMS agencies at risk of a workforce loss as younger generations of countywide workers seek employment in the more populated communities surrounding Boise. The residential expanse of neighboring counties, nevertheless, creates an opportunity for Owyhee County's EMS system to transition toward either a merged partnership with their neighbors, or a locally consolidated effort between some of its agencies; but not likely all of them.

The vastly rural/remote and uninhabited landscape of the county's central and southern regions presents a significant coverage challenge for each of the county's three ambulance services; but fortunately, the actual volume of incidents that occur in such regions remains statistically low. Incidents that occur near the populated communities within the county have reasonable response times and coverage capabilities, given their on-call and volunteer staffing models. Opportunities to significantly improve this, however, do exist; but would require significant financial support and additional creative solutions to provide for most of Owyhee's residents and visitors the same level and expectation of care as experienced in their neighboring career ambulance services to the north. At any rate, Owyhee County's EMS system appears geographically divided, which complicates efforts to maintain a cohesive and unified system, as the pure expanse associated with each region's boundaries are far too large to view Owyhee County as "one" system.

Strengths	Opportunities
• High local pride has driven previous and current staffing and support for some EMS agencies.	• Many EMS agencies within the county cooperate or align with neighboring EMS systems, opening-up opportunities for future and expanded collaboration. • Regional collaborative efforts may provide improved system response and coverage through combined service efforts. • Close proximity (within one hour) to more suburban/urban areas may present an opportunity to pull-in a paid staffing workforce.
Challenges	**Threats**
• The county's significant size creates systemwide unification difficult, as EMS agencies often better align with neighboring EMS systems (and states) based on their geographic location. • Remote area coverage is largely impossible to maintain reasonable response times because of the sheer size of the county and its largely uninhabited landscape. • Recruiting new EMS providers remains a significant challenge in rural counties because of decreased workforce availability. • Decreased in-person education opportunities exist due to the remote landscape of the county. • Non-staffed EMS stations result in longer chute times and overall incident response times.	• Reliance on a few key individuals within most agencies would result in the agency's inability to reliably respond to incidents, or the agency's complete collapse, if any one of these key members retired or had an extended absence. • Unscheduled staffing practices by some ambulance services have the risk of resulting in the absence of available resources to respond to EMS incidents. • Proximity to suburban/urban EMS systems presents an operational threat in terms of workforce competition and availability, especially in the paid/staffed EMS provider environment. • Local perceptions and past practices may hinder future consolidated, merged, or regionalized efforts necessary to provide greater reliability and sustainability to the EMS system as a whole. • One ambulance service identified itself as being unsustainable for future operations given the current workforce and financial climate, and actively collapsing as a response agency.

Table A: Owyhee County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Owyhee County ranks number two in terms of land area size within the state but resides in the middle of the pack in terms of population volume, creating a unique demographic mix within the county as the majority of its population is spread along its northern border, leaving vast openness spreading south to Nevada and west to Oregon. This characteristic creates slightly misleading data abstraction points, as the majority of the county is uninhabited and remote, while its smaller third (in the north) may better be described as being rural, but on the nearing outskirts of expanding development within its neighboring counties' borders.

Demographic	2010	2020	2022
Population	11,526	11,913	12,613
Land Area	7,665.51 sq mi	7,668.21 sq mi	7,668.21 sq mi
Per Capita	1.5 PPSM	1.6 PPSM	1.6 PPSM
PPSM: *People per square mile*			

Table B: Owyhee County Population & Geography [1]

2.2. Economics

Growing light commercial and industrial economies exist within Owyhee County, which complement its largely rural and agricultural surrounding landscape, as residential growth slowly expands the county's population and workforce base in terms of internal sources of economic development. Largely impacting Owyhee County's economic potential, moreover, is the rapid neighboring growth experienced in Ada and Canyon Counties, which plays to benefit the economy of Owyhee, but also potentially hinders its internal EMS system's progress. The spreading boundaries of neighboring suburbs may cause EMS workforce attraction to those traditionally higher-paying environments, potentially outweighing the current sense of local pride experienced through minimal on-call wages, or a completely volunteer compensation structure as a whole. As such, local growth experienced within each individual community in Owyhee County may not necessarily equate to EMS agency "success," as other economic factors may pull the county's workers north into other already established and unified EMS system environments

Metric	Data
Total Population (2022)	12,613
Median Age	39.0 years old
Poverty Rate (2021)	14%
Number of Jobs (2021)	5,164
Average Annual Wage per Job (2021)	$42,540
Unemployment Rate (2023)	4.4%

Table C: Owyhee County Economic Factors [2]

2.3. Social Determinants of Health

Owyhee County largely ranks toward the bottom 10% of *Health Rankings* when compared to the rest of the state, ranking 40th in overall health outcomes, 41st in social & economic factors, and 42nd in overall health factors. [3] This is largely due to the county's high rate of uninsured residents, with over 20% of the county's population under the age of 65 traditionally being uninsured, which is nearly double the state's average and easily double the nation's average. [4] Factors like this can greatly impact the revenue potential that ambulance services can experience, likely implying a greater need for supplemental or tax-based funding, rather than fee-for-service and insurance-based reimbursement. While no hospitals exist within the county, the majority of the county's residents are within a 30-40 minute drive from a hospital, which can be expected in a primarily rural environment. Beyond the populated areas of the county, however, it is not atypical for fair weather driving to a hospital to consume upwards of two or more hours (one-way), depending on the location of one's residence or incident. Access to other forms of health care and medical resources, otherwise, remain limited within the county and likely lead to the county's low overall ranking.

2.4. Indicator Impacts to EMS

Considering the population locations within Owyhee County, its slow growth trend, and its vast geographic size, it is likely that the current trends of northern county growth and development will continue at its existing pace for the immediate future, thus placing the demand for emergency medical services in the county in a slight growth state. On one hand, the combined population of the county warrants what would otherwise equate to one full-time, staffed ambulance for coverage, but the geographic size of the county makes single unit coverage impractical. Even along the county's northern border, the distance between Homedale and Marsing, and then Marsing to Grand View (all locations where current ambulances are located) creates an impractical single-unit coverage area for any one system to commit to. As a result, these realities necessitate a geographic "split" in the county's EMS system to better reflect the needs of the western, eastern, and even southern residents and visitors of the county.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

EMS call volumes (incidents) as a whole are relatively low within Owyhee County, especially considering its total population above 10,000 residents. This finding is likely due to the population spread throughout the county and the lack of an isolated population center comprising the majority of the population within its individual community borders. An additional likely factor to this is the county's high uninsured population volume, which exceeds 20% amongst residents under the age of 65. The incidents that do occur, nevertheless, are largely handled by resources licensed within the county – such as its three ambulance services and two non-transport quick response units. Considering the location of the majority of the county's incidents are in close proximity to the county's northern border, total incident time involving ambulance transports is approximately 1.5-2 hours in duration, but this average can certainly be vastly expanded if such resources are requested to respond into the more remote areas within the county.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Elmore Ambulance Service (Elmore County)	14	0	14	6	4	10
Grand View Ambulance Service	43	70	113	41	76	117
Homedale Rural Fire Protection District	66	27	93	70	20	90
Marsing Ambulance Service	138	94	232	183	7	190
Treasure Valley EMS System (Canyon County)	0	10	10	13	1	14
Ambulance Total	261	201	462	313	108	421
Bruneau QRU	-----	37	37	-----	56	56
MRW EMS	-----	80	80	-----	152	152
QRU Total	-----	117	117	-----	208	208

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Owyhee County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Elmore Ambulance Service	*2 min*	*22 min*	24 min	38 min	99 min
Grand View Ambulance Service	*10 min*	*12 min*	22 min	39 min	130 min
Homedale Rural Fire Protection District	*7 min*	*4 min*	11 min	30 min	87 min
Marsing Ambulance Service	*7 min*	*10 min*	17 min	31 min	95 min
Treasure Valley EMS System	*1 min*	*10 min*	11 min	26 min	71 min
Bruneau QRU	*7 min*	*10 min*	17 min	----	61 min
MRW EMS	*9 min*	*10 min*	19 min	----	82 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Owyhee County (2022)

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are primarily received by the county's sheriff's department/office dispatching center, who then notifies available (unscheduled or scheduled) EMS crews of the incident via radio/pager system. Subsequent communications with the PSAP are made primarily via radio communications, such as announcing their arrival at an incident's location. EMS agencies indicate that this public safety answering point (PSAP) does have emergency medical dispatch (EMD) or medical priority dispatching software (MPDS) in place to categorize or prioritize EMS calls for service. In some eastern and more remote areas of the county, 911 calls may be received by StateComm, who then routes the call to the sheriff's office for further dispatching operations.

4.1.2. EMS Agency Overview

Similar to many comparable counties in the state, the composition of private, non-profit and public, taxing district EMS agencies within Owyhee County is fairly split. Such findings are common even throughout the nation, as many rural EMS agencies that are not affiliated with local fire departments or fire districts were originally established as non-profit entities. Local cooperation between such fire and EMS resources, despite their organizational separation, typically remains highly engaging in many western states.

Pertaining to agency and geographic coverage, three ambulance services cover nearly the entire geography of Owyhee County, with the exception of an unincorporated and largely uninhabited Bureau of Land Management area located in the county's southwest corner. This isolated area also has no designated fire protection coverage and creates an uncovered zone with respect to emergency services within the county. Of note, one of the closest residences observed near the border of this uncovered area is approximately 100 miles (or four hours and 20 minutes driving time) in one direction, or 130 miles (or three hours and

45 minutes driving time) in another direction to the closest Owyhee County ambulance in Grand View. In fact, the closest ambulance to this location resides in Owyhee, Nevada, which is only 50 miles (or two hours and 30 minutes of driving distance) away.

Considering the county's large reliance on volunteer emergency medical technician (EMT) responders, many of the EMS agencies within the county rely on a membership roster of 10-15 individuals, while also identifying that only a fraction of those individuals respond regularly to calls for service. One of the largest challenges identified in the county, as a result, is the reliance on a small pool of individuals to completely maintain EMS operations within the county and on a completely volunteer basis. For some agencies, the long-term absence (or retirement) of one of these key individuals would likely lead to the agency's inability to reliably respond to calls, and the agency's ultimate collapse.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Bruneau QRU	911 Response Non-Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated
Grand View Ambulance Service	911 Response Transport	Intermediate Life Support (ILS)	Unscheduled	Uncompensated
Homedale Rural Fire Protection District	911 Response Transport	Basic Life Support (BLS)	Scheduled	Uncompensated
Marsing Ambulance Service	911 Response Transport	Basic Life Support (BLS)	Scheduled	Compensated/ on-call
MRW EMS	911 Response Non-Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated

Table F: List of EMS Agencies Located in Owyhee County

4.1.2.1. Bruneau QRU

Bruneau QRU is a private, non-profit EMS agency providing 911 response, non-transport services to the residents and visitors around Bruneau and the eastern portion of Owyhee County. They are licensed at the BLS level and are primarily supported by a volunteer membership of approximately 10 EMTs. When an incident occurs, responders are allowed to respond to the scene in their person vehicle, however, they are encouraged to report to a local station where their quick response vehicle (a decommissioned ambulance) is located. Although a separate entity from their local fire protection district, they do regularly work in conjunction with them by receiving on-scene support, as well as regularly engaging with Grand View Ambulance Service and Elmore Ambulance Service for calls within their northern response area, and with Owyhee Ambulance Service (Nevada) within their southern

response area. Because of the remoteness of some of their incident locations, the use of helicopter transport is routinely considered or utilized to facilitate a timely patient transport to a nearby hospital. In various situations, the agency's quick response vehicle will be utilized to move a patient from the incident scene to a rendezvous point with a licensed, transport-capable ambulance.

4.1.2.2. Grand View Ambulance Service

Grand View Ambulance Service is a private, non-profit EMS agency providing 911 response and ambulance transport services throughout eastern Owyhee County. The service is licensed to the ILS level and operates with a roster of approximately 5-10 responders, identifying this as a significant challenge to the agency, as often two or three of these members respond to the majority of the agency's calls for service. They respond out of a local fire station in Grand View where they share space with the local fire district's apparatus, housing two ambulances. Considering their close proximity to Elmore County (across the Snake River), the majority of their patients are transported to a local hospital in Mountain Home, which is capable of providing initial patient stabilization and appropriate transfer for high-acuity or interventional needs. Bruneau QRU is a common response partner working with the ambulance service, but not directly affiliated with it.

Figure G: Images of Grand View Ambulance Service

4.1.2.3. Homedale Rural Fire Protection District

Homedale Rural Fire Protection District, sometimes referred to as Homedale Ambulance, is a public, fire protection district EMS agency covering the northwestern portion of the county from their ambulance station in Homedale. They operate within the borders of its parent fire protection district, splitting tax revenues with the fire disciplines of the organization. They operate at the BLS level of care and are closely oriented with their neighboring Treasure Valley EMS System (TVESS), located in Canyon County, following similar protocols, and having the same medical director oversight. They primarily operate a scheduled, on-call staffing model with uncompensated members. Because of their proximity to Canyon County, most of the agency's transports are to hospitals in the Caldwell area. Additional support provided to Homedale Ambulance is often received from the Treasure Valley EMS System and Parma Fire Protection District, both of which are located in Canyon County, and by their neighboring Marsing Ambulance Service within Owyhee County.

Figure H: Images of Homedale Rural Fire Protection District

4.1.2.4. Marsing Ambulance Service

Marsing Ambulance Service is a private, non-profit EMS agency providing up to advanced EMT (AEMT)-level coverage in the northwest portion of Owyhee County. While located within Marsing at a local fire station, they are not affiliated with the local fire district, but do primarily cover within its borders. The majority of their members are paid-on-call and staff their ambulance on a scheduled basis, but the agency does have one primarily full-time, paid director that also provides daytime response coverage. Locally, most of their response support comes from the nearby ambulance service in Homedale, in addition to a quick response unit in Givens Hot Springs (MRW EMS), who is not directly affiliated with the ambulance service. As the agency responds to its further remote areas, it relies on helicopter responses from the Treasure Valley area to provide either initial scene response, or ambulance/QRU crew rendezvous for patient transport (largely because of extensive transport times to their closest hospitals).

Figure I: Images of Marsing Ambulance Service

4.1.2.5. MRW EMS

MRW EMS (reflecting the unincorporated communities of Murphy, Reynolds, and Wilson) is a public, fire protection district EMS agency providing 911 response, non-transport services to the residents and visitors around the northcentral portion of Owyhee County. They are

licensed at the EMT level and are primarily supported by a volunteer membership of approximately 10-15 EMTs. When an incident occurs, responders are allowed to respond to the scene in their person vehicle, however, they are encouraged to report to a local fire station where their quick response vehicles are located. Locally, they often respond with Marsing Ambulance Service and serve as an initial source of patient care and packaging. In various situations, the agency's quick response vehicle will be utilized to move a patient from the incident scene to a rendezvous point with a licensed, transport-capable ambulance. MRW also has a vehicle available for off-road responses, which is a specialty capability for the agency and region.

4.1.3. Hospital Access Overview

Patient transports via ambulance from within the county are often made to nearby hospitals in southern Canyon and Elmore Counties, such as St. Luke's Nampa Medical Center (Nampa, ID), West Valley Medical Center (Caldwell, ID), and St. Luke's Elmore Medical Center (Mountain Home, ID). Primary and stabilization care services are available in Mountain Home, while more advanced and interventional care options are available in Caldwell and Nampa, and into Boise. On the county's far southern end, the closest hospitals to communities like Murphy Hot Springs are likely in the Twin Falls-area. As a result of such long transport durations, the use of helicopters to transport various patients from such remote areas is fairly common and is highly expensive to utilize.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

EMS agencies within Owyhee County have traditionally operated independently from one another while maintaining collaborative associations with neighboring county systems as a result of their closer geographic affiliation. This collaborative relationship will likely play a key role in the potential sustainability, or collapse, of each agency in the near future as these neighboring systems are both the agency's greatest asset, as well as their greatest operational threat.

Within the county, there appears to be a mixed emotion of organizational and operational support between two primary regions. In one region, the EMS agencies are perceived to be well supported by their communities, but still in need of additional financial support in order to maintain sufficient future operations. In another region, nearly the opposite sentiment is perceived, and the primary ambulance service expresses an active agency collapse as a result of both staffing and financial challenges, coupled with dwindling community support. As a result of these findings, the EMS system within Owyhee County is at risk of significant and immediate hardship without adequate funding to support regular staffing or on-call operations, and without creative solutions to either promote greater countywide system unification or enhance the supportive collaboration with neighboring system partners.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Individually, EMS agency sustainability within the county is expressed as extremely low to moderate, with one ambulance service highlighting zero agency sustainability, while another expresses a value reflecting a moderate rating. Collectively, the county's EMS system is identified as low, below a 50/100 rating, with 50/100 being the median and mode response provided by EMS agencies.

- **EMS Agency Financial Situation:** EMS agencies express that their agencies either "break even" financially, largely due to supportive funding provided by their partnering fire districts or are significantly underfunded and in need of immediate financial support.

- **EMS Agency Communications Strategy and Outreach:** None of the 911 response agencies indicated that they had a formalized communications strategy or outreach plan to share information within the communities they served.

- **Community View of EMS Agencies:** The majority of the EMS agencies believed that their agency has a positive view by the public, however, one expressed that the community they served did not have a favorable viewpoint of their service.

- **Elected Official Support of EMS Agencies:** The majority of EMS agencies believed that their agency has positive support by the communities they serve; however, one agency expressed that they did not feel as though they had adequate support by their community.

- **Agency & System Response Outlook:** EMS agencies within the county have become reliant on supplemental grant funding to largely maintain their general operations and capital purchases. This has allowed each agency to keep individual and public costs to a minimum, which is a point of praise and optimism, but also a point of significant concern as these same agencies are now at a point where grant funding cannot sustain their financial needs to incorporate paid and reliable staffing into the future.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Many of the EMS agencies within the county are organized as private, non-profit EMS agencies; however, they have close connections to their local fire districts and often operate with their support.

- **Service Delivery Partners:** Neighboring EMS agencies and collective systems, particularly the Treasure Valley EMS System in Canyon County and Elmore Ambulance Service in Elmore County, provide the most support for service delivery within the county. Additional local support comes from surrounding fire districts and associated district boards.

- **Medical Direction:** EMS agencies in the county report some involvement with their medical directors, but necessarily on a consistent or regular, in-depth basis.

- **Communications & Interoperability:** Radio reliability appears mixed within the county, with the western agencies expressing better reliability, system coverage, and interoperability when compared to the eastern agencies, who largely express the opposite.

- **Mutual Aid System & Agreements:** All ambulance services within the county outline that they do have formal mutual aid agreements in place.

- **Community Health EMS (CHEMS):** No CHEMS programs are currently established within the county, however, there is curiosity surrounding the potential benefits of such programs, but also concerns related to reliable funding sources to maintain such initiatives.

- **Patient Care Documentation System:** EMS patient care reports are completed using the Bureau's free, contracted electronic patient care reporting (ePCR) platform.

4.2.1.3. Response Overview

- **Level(s) of Service:** The majority of the EMS agencies within the county operate at the BLS level of care, however, some ambulance services have the ability to operate at either an enhanced EMT level with additional skills allowed, or at the ILS level of care. None of the ambulance services within the county provide interfacility transfer (IFT) operations.

- **Agency Response Concerns:** Responses to remote areas of the county, primarily as a result of injuries related to recreational activities, pose both a timely response and total time consumption challenge for the EMS agencies as these incidents tend to require multiple hours of operation from call dispatch to call completion. Gaining access to such patients also typically requires specialty off-road equipment and reliance on fire or quick response partners to transport such equipment to the incident location.

- **Helicopter Response & Utilization:** For high-acuity incidents, the utilization of helicopters for patient transport is a common occurrence. When incidents occur in remote areas of the county, helicopter response and transport is also fairly common as such resources can often respond to the scene, package the patient with assistance of QRU resources, and transport the patient to a hospital before a responding ambulance is able to even arrive on scene via ground response.

- **Factors Impacting Response Times:** The expansive rural and remote geography of the county poses the largest response time impact for most EMS agencies within the county. On a daily basis, moreover, the deployment model utilized by ambulance services within the county naturally correlates to longer chute/turnout times and total

response times to incidents as EMS crews must (first) respond to the station to join their ambulance, and (second) then respond to the scene.

- **Response to Public Lands:** A significant majority of the largely uninhabited portion of the county is comprised of public lands. While the instances of incidents occurring in such areas remains statistically low in volume, the total impact of responding to such locations is incredibly time and resource consuming; and not always resulting in an ambulance transport; therefore, no reimbursable revenue to the EMS agency.

4.2.2. Workforce & Resource Assessment

The overall workforce and resource assessment within the county is best described as "underfunded." Currently, EMS agencies rely on supplemental grant funding to make large capital purchases and largely rely on the generosity of their tax-supported fire districts to provide ambulance/vehicle facility space. Without these primary supportive means, all EMS agencies within the county would not be able to function as they do now; nor would they have any optimism toward operations in the future. Staffing challenges continue to exacerbate and place each agency at risk of critical breaking points as their aging workforce is not easily replenished with younger EMS providers. By and large, the workforce and resource challenges faced by countywide EMS agencies are directly associated with insufficient funding and a dwindling paid-on-call or volunteer workforce.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Ambulance services within the county typically operate with an on-call schedule whereby crew members sign up to be available for an incident response within a given timeframe. Within this structural model, no crew members are required to be physically present at their station during the allotted time; rather, they are allowed to be at home or within a reasonable response distance/timeframe from the station while awaiting a response. In at least one ambulance service, and in each non-transport quick response agency, a time-slotted schedule is not utilized, and the crew configuration is purely based upon each individual responder's availability when an incident occurs. While the instances of not enough responders being available to respond to an incident remains fortunately low at the moment, utilization of this staffing structure does not guarantee any form of accountability toward having dedicated staffing available on a 24/7 basis. Relative to pay, some crew members are paid an hourly on-call wage and/or response stipend to account for their dedicated time; others remain completely volunteer and unpaid. This varied dependent upon the EMS agency.

- **Responder Average Age:** It was reported that the average age of EMS responders within the county is increasing, which poses a challenge respective to roster replenishment and sustainability whenever a responder retires from service.

- **Staffing Numbers:** There are approximately 60-75 total EMS responders within the county affiliated with any one of the various EMS agencies; however, each agency has reported that approximately 25% of the crew members on their listed roster respond to the majority of the incidents and maintain the majority of on-call time

slots scheduled. As a result, the loss of any one of these identified "regular" members would have a larger impact on the operations and response reliability of the agency, when compared to less active members.

- **Staffing Concerns:** An aging responder workforce, difficulty recruiting younger members to volunteer (or not obtain a reliable or livable wage), and the reliance on approximately 25% of the listed roster of members lead the staffing challenges for each EMS agency within the county. These challenges are exacerbated when comparing weekday/daytime staffing operations to overnight and weekend operations, as the weekday/daytime operations are largely reliant upon a limited pool of available responders to begin with, as many working responders do not work within their coverage area.

- **Staffing Strengths:** Some of the EMS agencies identifying positive community support have indicated that they have been fortunate to maintain 24/7 response and coverage capabilities, but all have also indicated that this finding is not a guarantee, and is not a reliable indicator of future staffing strengths or successes.

- **Recruitment & Retention:** Retention of current members for each EMS agency remains relatively high resulting in low overall turnover. However, the presence of a listed member on an agency's roster does not necessarily equate to an equal workload spread amongst all agency members. Recruitment of new members, especially of younger ages (identified as being under the age of 40 by some agencies) remains extremely difficult, as many of these licensed providers (or prospective members) seek paid/full-time employment in neighboring county EMS systems.

4.2.2.2. Training & Education Overview

- There is a significant desire for improved training and education opportunities within the county, which, interne, would result in improved clinical care. Currently, each EMS agency is extremely limited in their ability to improve such efforts because of a lack of, or the absence of, adequate funding.

- Initial EMS education for new EMTs remains a local challenge within the county as the availability of courses within the rural environment remains low, resulting in many prospective students having to travel to more populated counties/cities to obtain the necessary education, which may be an over-one-hour drive, one-way, to reach.

- Continued training and education also remains a challenge for most agencies within the county as the budgeting capabilities of each agency are limited toward purchasing equipment, mannequins, learning management systems, or other subscription-based learning tools. Even at its baseline, covering the basic expenses for each agency member to maintain their minimum continued education hours through flexible or refresher course options, alone, is an expense that many agencies have a challenge with maintaining.

4.2.2.3. Facilities Overview

- **Station Location(s):** Ambulance stations are located within the more populated areas within the county (Grand View, Homedale, and Marsing); many of which are co-located their local fire departments/districts as a courtesy on the district's behalf.

- **Station Condition(s):** None of the ambulance stations within the county are designed with proper living accommodations to account for live-in 24/7 staffing. Nearly all stations, additionally, lack sufficient training or meeting space, administrative office areas, or other storage or functional areas that are otherwise standard or necessary in updated facilities. The conditions of each station range from outdated and overfilled to aesthetically sufficient on the exterior but lacking in overall amenities. Generally speaking, each of the stations in use within the county are best reflective of a culture promoting a volunteer and un-staffed workforce, not an on-premises or staffed workforce.

- **Facility Needs:** In addition to sufficient living accommodations and administrative or training space, additional facility needs such as back-up generator power, security systems, and sufficient space for storage or expansion are also needed in each ambulance station within the county.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** EMS agencies within the county indicate that their current equipment and supplies largely meet their needs, but replacement of various items is challenging because of the costs associated with making capital-item purchases.

- **Condition:** Most durable equipment items are reported in good condition; however, some agencies report aging items where newer, improved items would be more beneficial to have available.

- **Funding:** Most equipment purchases, especially capital items, are solely funded through grant funding. Agencies report that they are not able to obtain such items solely based on their current revenue means.

- **Needs/Shortages:** Updated radios and newer ambulances top the list of items requested for near-future replacement.

4.2.3. Financial Assessment

While sufficient financial data was not shared by all EMS agencies within the county, it was universally expressed that each agency remains financially challenged and grossly underfunded in order to provide any form of progressive future operations. In short, each EMS agency is limited to their current status, if not a diminished or decreased status, given their current funding limitations. Without significant and stable financial support, EMS agencies within Owyhee County simply will not progress, and many will face organizational collapse if left to solely support themselves.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is projected that approximately $75,000-$100,000 in expenses are dedicated to personnel costs throughout the county. This approximation is in light of one agency indicating that they have a paid staff member, while some agencies utilize a paid-on-call model to maintain regular staffing operations.

- **Operational Expenses:** It is projected that approximately $25,000-$35,000 in expenses are dedicated to operational costs such as disposable supplies, training, and other reoccurring facility expenses by EMS agencies within the county.

- **Capital Expenses:** It is approximated that regular, average capital expenses equate to approximately $50,000 per year accounting for all EMS agencies within the county; however, it was reported that recent grant funding has supported the purchasing of between two and three new ambulances by EMS agencies; which would place actual recent capital expenses closer to $750,000-$900,000 in recent years, alone.

4.2.3.2. Revenue Overview

- Each ambulance service within the county charges its patients for ambulance transport to the hospital, however, this is a new practice for one ambulance service within the county, who had not been billing patients in prior years. Of note, EMS agencies do not receive any direct reimbursement for non-transport situations, or when patient care is transferred to a helicopter service for subsequent patient transport.

- Ambulance services did not share direct billing revenue data as a part of this assessment; however, it is projected that approximately $70,000-$85,000 in revenues are experienced throughout the county in patient billing for ambulance transport services.

- Most EMS agencies receive a significant portion of the operating revenues from grants, while some EMS agencies receive supplemental operational support from their partnering fire district, to which they are affiliated as a division of.

4.2.4. Resource Assessment Additional Factors

A lack of countywide tax support by means of ambulance taxing districts often equates to the public's perception that their fire district tax is designed to support ambulance operations; but this perception is not a reality. Along with such financial challenges, each of the ambulance services within Owyhee County have expressed common challenges related to maintaining regular staffing, especially regular staffing that extends beyond only a few individuals within each of their respective agencies. The reliance on these few individuals poses a personal burden that each responder faces, without meaningful pay to truly account for their dedicated time, and without a long-term solution in sight to maintain the current level of system operations.

REFERENCE LIST

[1] U.S. Census Bureau. (2023). *QuickFacts Owyhee County, Idaho*.
https://www.census.gov/quickfacts/fact/table/owyheecountyidaho,ID/PST045222

[2] University of Idaho Extension. (2023). *Indicators Idaho*. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16073

[3] University of Idaho Extension. (2023). *Indicators Idaho*.
http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16073&IndicatorID=100041

[4] University of Idaho Extension. (2023). *Indicators Idaho*.
http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16073&IndicatorID=100041

SOUTH CENTRAL
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the South Central AOR:

- Blaine
- Cassia
- Gooding
- Jerome
- Lincoln
- Minidoka
- Twin Falls

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area – The South Central AOR counties share common challenges across the Emergency Medical Services (EMS) landscape. Agencies face funding constraints due to reliance on diverse revenue sources such as ambulance taxing districts, county general funds, billing, grants, and donations to sustain the EMS systems. Recruitment and retention hurdles persist, exacerbated by wage stagnation in the EMS sector. This reality leads personnel to explore alternative career paths. Collaboration and interoperability improvements are evident, as seen in contracted transport services, MOUs, and the engagement of outside consultants to enhance system efficiency. The impact of population growth emerges as a recurrent theme, necessitating stable funding and preparedness strategies to meet the escalating demands on EMS resources. Geographical features add unique complexities, influencing travel patterns and stretching EMS capabilities. Amidst these challenges, a thread of resilience prevails as counties emphasize the importance of regional collaboration, dedication to system readiness, and addressing the evolving needs of their communities to ensure effective and timely emergency medical response.

BLAINE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) services in Blaine County are overseen by the Blaine County Ambulance District (BCAD), which falls under the jurisdiction of the county commissioners. BCAD employs no staff or EMS personnel directly. Instead, they contract EMS transport service to Ketchum Fire Department and Wood River Fire and Rescue while also providing additional yearly funds, albeit at a much lower rate, to both Carey and Sun Valley. The two transport agencies are licensed at the Advanced Life Support (ALS) level and staffed with a mix of full-time career and on-call personnel. Carey Rural Fire and Rescue holds a Basic Life Support (BLS) transport service license, though nearly all calls they respond to are transferred to Wood River units which then transport these patients to the receiving facility. Sun Valley Fire and Hailey Fire are first-response non-transport departments. The North Blaine Rural County Fire District is also an entity involved in the county, which contracts service to Ketchum Fire. BCAD manages all billing for EMS services, regardless of which department responded and/or transported. Within the county is one hospital, St Luke's Wood River, a transport destination for EMS. BCAD and the area Fire Departments have improved interoperability over the last several years and continue to make positive progress. BCAD has hired outside consultants to thoroughly review the system and capabilities and provide recommendations; the agencies are currently evaluating the recommendations and developing a strategy for implementation of change. Moving forward, this process should be watched closely by other regions as a more rural example of the system collaboration that has been developed in larger counties within Idaho. To begin this process in the region, contracted EMS units no longer display the emblems/names of the respective fire departments; instead, they present as "Blaine County Ambulance District." This branding change communicates to citizens that when they see or are part of an EMS response, it is BCAD providing service.

Blaine County faces similar challenges as compared to the broader EMS service across the state - an inability to offer compensation at a rate sufficient to attract and retain personnel. However, where the county is different is the number of transport units staffed at all times and the number of credentialed responders employed in the region.

The county has the potential to be a bright spot and model of EMS service delivery in Idaho as they work toward improving interoperability and collaboration.

Strengths	Opportunities
• Full-time career ALS transport service across county • Local political support • County-wide ambulance taxing district	• Wage increases to improve recruitment • Eligible for GEMT reimbursement • Consolidation of infrastructure • PILT funds to offset response cost to federal lands
Challenges	**Threats**
• Recruitment and retention • High cost of living vs. Wages • Affordable housing	• Reliance on on-call staff, both career and volunteer • Call volume growth

Table A: Blaine County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Blaine County is centrally located within Idaho and has a robust tourism and recreation economy. The largest city and county seat is Hailey, while Ketchum and Sun Valley occupy the county's northern area known as the Wood River Valley. To the south of the valley is Bellevue, an agricultural town known for its rich farming heritage. The most southern municipality, Carey, is a scenic community at the foot of the Pioneer Mountains. The county contains four major travel routes - US26, US20, and ID75. U.S. Highway-26 connects Carey to Lincoln County to the south and exits Blaine County to the east along the northwest border of Craters of the Moon National Preserve. U.S. Highway-20 intersects with the north/south thoroughfare ID75. To the west of this intersection, US20 exits the county and connects to Fairfield and Camas County. This route is the predominant travel corridor coming from Boise to Blaine County. On the east side of this intersection, US20 continues to Picabo & Carey. Idaho State Highway 75 travels through the heart of Blaine County and is the only route connecting Bellevue, Hailey, Ketchum, and Sun Valley.

Demographic	2010	2020	2022
Population	21,376	24,272	24,866
Land Area	2,643.59 sq mi	2,637.74 sq mi	2,637.74 sq mi
Per Capita	8.1 PPSM	9.2 PPSM	9.2 PPSM
PPSM: *People per square mile*			

Table B: Blaine County Population & Geography

2.2. Economics

One single industry does not dominate Blaine County's employment. Instead, construction, real estate/rental, and accommodation/food services account for 12.8%, 12.9%, and 12.4% of industries, respectively. This is indicative of the heavy reliance on tourism and vacation homes throughout the area. The only other industry employing greater than 8% of the workforce is retail trade at 8.9%. [1]

As of 2021, 59.1% of the population was between 18 and 64 years old, tracking just 0.4% greater than the average across the state. However, 21% of the population was over 65 years old, nearly 5% above the rest of the state. [2] Labor Force participation rate was 68.5% in 2020, the second-highest participation rate in the state. [3]

According to MIT Living Wage data, a two-working adult two-child household needs a gross annual income of $101,685 to cover the cost of basic needs. [4] The median household income in the county as of 2021 was the highest in the state at $93,676. [5]

Metric	Data
Total Population (2022)	24,866
Median Age	44.6 years old
Poverty Rate	-----
Number of Jobs (2021)	22,148
Average Annual Wage per Job (2021)	$50,710
Unemployment Rate (2023)	2.5%

Table C: Blaine County Economic Factors

2.3. Social Determinants of Health

Compared to the broader state, Blaine County has more access to health care and physicians per capita. In 2020, Blaine had nine primary care physicians (PCP) per 10,000 people. The average across Idaho is 6.3 PCPs per 10,000 people and 7.6 PCPs per 10,000 across the country. Blaine is consistently at the top of County Health ratings across the state: third in health outcomes and fourth in clinical care.

The county is also home to nearly double the national average for number of people uninsured and close to one and a half times the state average. 10% of the population under 18 years old is uninsured, the second highest percentage across the state. [6] The scenario only improves slightly for those under the age of 65, with 19% being uninsured, making it the sixth-highest percentage across the state.

The poverty rate trends several percentage points below the state and national averages. In 2021, the poverty rate was 7.2%, compared to 10.8% across Idaho, the lowest across the state.

2.4. Indicator Impacts to EMS

Blaine County EMS response is spread across multiple agencies and districts. However, as the region's population has grown, call volume and utilization has climbed in response. Due to the high cost of living within the county and the departments' combined career/volunteer workforce, EMS personnel will likely continue to commute into the County. This results in difficulty staffing an on-call or volunteer unit to respond to concurrent calls with a reliance

upon a full-time, paid, department. Considering these factors, increasing personnel pay was the most significant priority across all agencies.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

With Blaine County being a seasonal recreation destination, EMS system demand follows seasonal trends. The busiest time of year is the summer months when the area sees dramatic increases in tourism and resultant population. These trends will continue to seasonally stress the availability of response as the area continues to experience growth in tourism. Overall, the county's transport agencies saw a nearly 11% increase in call volume from 2021 to 2022.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Ketchum Fire Department	*478*	*128*	606	*510*	*159*	669
Magic Valley Paramedics	*9*	*4*	13	*19*	-----	19
Wood River Fire & Rescue	*491*	*265*	756	*528*	*307*	835
Ambulance Total	*978*	*397*	1,375	*1,057*	*466*	1,523
Carey Rural Fire Protection District	-----	*58*	58	-----	*91*	91
City of Sun Valley Fire Department	-----	*114*	114	-----	*152*	152
Stanley Ambulance	-----	*4*	4	-----	-----	-----
QRU Total	-----	*176*	176	-----	*243*	243

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Blaine County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Carey Rural Fire Protection District	6 min	8 min	14 min	----	96 min
Ketchum Fire Department	2 min	7 min	9 min	31 min	56 min
Magic Valley Paramedics	1 min	103 min	104 min	140 min	278 min
Sun Valley Fire Department	1 min	5 min	6 min	----	36 min
Wood River Fire & Rescue	2 min	7 min	9 min	36 min	72 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Blaine County (2022)

Section 4

Context

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

Blaine County medical emergencies are primarily handled by two fire-based EMS transport entities within the main population centers. They are supported in response by non-transport fire based first response departments in less densely populated areas with lower call volume.

4.1.1. Public Safety Answering Point (PSAP) Overview

911 calls in Blaine County are dispatched via Blaine County Emergency Communications (BCEC), the Public Safety Answering Point (PSAP). A call for medical service routes directly to BCEC, who utilize their Computer Aided Dispatch (CAD) system to generate an appropriate response. BCEC employs Emergency Communications Officers, who maintain extensive certifications to function as dispatchers. The department operates as an Enhanced 911 service, meaning when individuals dial 911, their location and phone number appear on-screen through technology tools.

4.1.2. EMS Agency Overview

BCAD does not employ EMS personnel directly. Instead, they contract EMS service to Ketchum Fire Department and Wood River Fire and Rescue to provide ALS response and transport. All billing is handled through the district. There is a shared medical direction and personnel training.

EMS service is contracted to Ketchum Fire Department and Wood River Fire and Rescue. These departments are a mix of full-time, part-time, and volunteer personnel staffed at the ALS level. Carey Rural Fire and Rescue is licensed as a BLS transport service, but nearly all calls they respond to are transferred to Wood River, which transports these patients to a receiving facility. Sun Valley Fire and Hailey Fire are BLS first-response departments but cannot provide patient transport. The North Blaine Rural County Fire District is also an entity that contracts service to Ketchum Fire but does not provide EMS service directly.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Carey Rural Fire District	911 Response Transport	BLS	Unscheduled	Uncompensated
Ketchum Fire Department	911 Response Transport	ALS	Combination	Compensated/ On-Call Compensated/ Per-Call Compensated/ Career Compensated/ Stipend
Sun Valley Fire Department	911 Response Non-Transport	BLS	Combination	Compensated/ On-Call Compensated/ Per-Call Compensated/ Career Compensated/ Stipend
Wood River Fire & Rescue	911 Response Transport	ALS	Combination	Compensated/ On-Call Compensated/ Per-Call Compensated/ Career Compensated/ Stipend

Table F: List of EMS Agencies Located in Blaine County

4.1.2.1. Wood River Fire & Rescue (WRF&R) Overview

The Wood River Fire Protection District is a public taxing district doing business as WRF&R, providing fire-based EMS transport at the ALS level to the southern region of Blaine County. They respond out of two primary stations with at least two personnel per station. The department is approximately a 50/50 split between career and volunteer members. The staff consists of fifteen EMTs, one Advanced EMT (AEMT), and nine paramedics. Due to their location, the average turnaround time to be back in service and available in their area after transport is over one hour.

4.1.2.2. Ketchum Fire Department Overview

Ketchum Fire Department is a public municipal-based fire and EMS agency providing ALS transport service response to the northern areas of Blaine County, specifically Ketchum and Sun Valley. All response comes from a single station near Ketchum's north end. They are staffed with combination personnel, approximately a 40/60 split between career and

volunteer staff. As of survey response in 2023, they had 35 EMTs, 2 AEMTs, and 18 paramedics on the roster.

4.1.2.3. Sun Valley Fire Department Overview

Sun Valley Fire Department responds to the northern area of Blaine County and is a municipal fire-based first response department providing BLS care. They respond from one primary station within Sun Valley and are staffed with combination personnel, including three paramedics. Although the department has paramedics, they are only licensed at the BLS level, meaning the paramedics cannot function at the ALS level in the field. The staff consists of sixteen EMTs, in addition to the paramedics. Depending on volunteer, on-call availability, and number of simultaneous calls, responses will be staffed by two or three personnel.

4.1.2.4. Carey Rural Fire District Overview

Carey Rural Fire District is a volunteer, unscheduled BLS organization that responds to the western portion of Blaine County. The department has one station but primarily responds from whatever location personnel are at during a call. Due to this staffing nature, the department coordinates schedules to ensure someone is in town each weekend. They possess an EMS transport license; however, units nearly always rendezvous with EMS transport from WRF&R and hand off the patient to WRF&R who then completes patient transport. The agency is staffed with nine EMTs, most certified at the AEMT level.

4.1.3. Hospital Access Overview

Blaine County is home to St. Luke's Wood River Medical Center, a critical access hospital providing an Emergency Department and several specialty services. In addition, St Luke's manages interfacility transports internally through their hospital-based EMS crews and can provide air medical response should it be necessary. Nearly all transports in the county are made to St. Luke's Wood River. St. Luke’s Health System also has a Community Health EMS (CHEMS) program that could further enhance the county's utilization of healthcare and hospital services. To date, this CHEMS program doesn’t operate in Blaine County, although efforts have been made by the hospital for this to occur.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Agencies across Blaine County operate in a cohesive structure and support each other in service delivery. The region continues to grow in popularity as a destination travel location. The cost of living is increasing faster than the local industry can support. As such, recruiting personnel to support department growth will continue to be at the top of priority lists and hard to accomplish.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** EMS agencies within the county have an average sustainability rating of 53/100.
- **EMS Agency Financial Situation:** All agencies in Blaine County self-identify as breaking even. However, this is directly related to the agencies being fire entities. All denote that they receive little funding from the ambulance district, and EMS services are supported via their fire budget.
- **EMS Agency Communications Strategy and Outreach:** No agency in the county has a communications or outreach strategy to engage the public. They do not have ongoing projects or initiatives to share their success or struggles outside the immediate stakeholder sphere.
- **Community View of EMS Agencies:** EMS is viewed as a necessary service & is supported by citizens of Blaine County.
- **Elected Official Support of EMS Agencies:** In general, there is a positive sentiment regarding the support of EMS in the county. All receive support via their respective fire district, the ambulance district, and county commissioners.
- **Agency & System Response Outlook:** Departments report optimistic outlook for the future. Agencies believe they have the support to continue to provide 911 responses, but do see impediments to expanding service, in terms of additional staffing and certification level.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** EMS is provided by multiple public ALS transport agencies and BLS non-transport services.
- **Service Delivery Partners:** Each agency identifies their neighboring agencies, the commissioners, and city government as being their strongest partners when it comes to delivery of service.
- **Medical Direction:** Medical direction is involved at a rate of 57/100 on training and 71/100 involved in chart review. Of note, agencies who offer transport service report having more interaction and involvement with medical direction.
- **Communications & Interoperability:** It is reported that radio operations and communications are inconsistent and vary greatly depending on geographic location. They don't readily or reliably allow cross-agency communication.
- **Mutual Aid System & Agreements:** Entities in the region have written mutual and automatic aid agreements in place with neighboring agencies.

- **Community Health EMS (CHEMS):** There are no active CHEMS program in the county, however all entities are interested in establishing this service in the near future. St. Luke's has a CHEMS program, but it doesn't operate in Blaine County.

- **Patient Care Documentation System:** Charting is done through the state sponsored Idaho Gateway for EMS (IGEMS) interface for all entities in the county.

4.2.1.3. Response Overview

- **Level(s) of Service:** The county receives full-time ALS coverage from two separate Fire Departments. In addition, there is a full time BLS first response from a single agency in the northern area of the county, with unscheduled BLS first response in the central and southern areas in the county.

- **Agency Response Concern:** There is limited concern regarding response in correlation with the current call volume. Departments reported an average of five to fifteen times where they have had difficulty responding to calls within the past year.

- **Helicopter Response & Utilization:** Overall the county makes limited use of air medical response. This is generally due to proximity to a transport destination. Personnel can request air response if they believe it is appropriate.

- **Factors Impacting Response Times:** All agencies reported the same predominant factors impacting their response time - location, geography, and simultaneous calls.

- **Response to Public Lands:** Agencies self-report an average of thirty backcountry/public land responses each year. These calls place a significant strain on the system often requiring extended response and scene times, and additional personnel. Technical response/rescue is provided by these departments and there is no specialty search and rescue organization.

4.2.2. Workforce & Resource Assessment

The county is staffed with a mix of scheduled and unscheduled personnel. The ability to have scheduled personnel is reflected in these agencies' ability to have responders enroute and on scene in a reasonable time frame in most circumstances.

4.2.2.1. Staffing Overview

- **Staffing Structure:** EMS response is provided by full-time (FT), scheduled/on-shift personnel at all times. Simultaneous response or extraordinary rescue situations result in on-call personnel being paged for coverage.

- **Responder Average Age:** It was reported that the average age of responders in the county is between 35-44 years old.

- **Staffing Numbers:** Responding agencies report a total of 108 licensed EMS personnel across their rosters. Of those, 46 are scheduled compensated staff members.

- **Staffing Concerns:** The primary concern is the inability of department pay to mirror the increasing cost of living in the region. It is reported that the majority of personnel working as EMS providers don't live within the county due to this disparity. Some departments have gone as far as to build full-time housing offered through employment to personnel.

- **Staffing Strengths:** The region has a robust number of overall EMS providers and scheduled providers. This is a reality not shared in many of the surrounding areas.

- **Recruitment & Retention:** Both recruitment and retention present challenges for these departments. Personnel can receive higher pay at other agencies and simultaneously not face the same high cost of living. There is fear that this mismatch of wages and cost of living will continue to get more disparate in the future, further hampering recruitment and retention.

4.2.2.2. Training & Education Overview

All agencies offer in-house training and refresher courses. They often conduct cross-departmental training to support collaboration and interoperability.

4.2.2.3. Facilities Overview

- **Station Location (s):** The county has two primary ambulance stations which are located in the main population centers - Hailey and Ketchum.

- **Station Condition(s):** There is a wide range of facility conditions - from nearly new to aged and needing substantial maintenance in the new future.

- **Facility Needs:** It was identified that the system is nearing the need for an additional station with the growth seen in the central region of the county.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** In general, EMS agencies feel their equipment is adequate to meet the demands of day-to-day operations. Agencies are able to obtain supplies for EMS without any significant challenge or shortfall.

- **Condition:** Broadly speaking, agency equipment is in working condition. There are items nearing 'end of life' usability and will need to be replaced, for no other reason than normal use.

- **Funding:** Funding via grants has been sought for larger equipment purchases - AEDs, cardiac monitors, mechanical chest compression devices, and handheld radios.

- **Needs/Shortages:** No agency notes a significant challenge, need, or shortage when it comes to equipment or supplies necessary to respond.

4.2.3. Financial Overview

Overall, these counties can meet fixed costs to continue operations. However, personnel expenses make up the majority of all budgets, and are likely to increase with no significant change to revenue expected. As such, the prospect of long-term financial sustainability would be expected to diminish over time.

4.2.3.1. Expense Overview

- **Personnel Expenses:** The aggregate personnel cost across these departments is estimated to be $5.4 million dollars. This is with regard to multiple departments having full-time/career/scheduled personnel.

- **Operational Expenses:** Broadly, the county expects $500,000 to $750,000 in annual operating expenses.

- **Capital Expenses:** Departments plan annual capital purchases between $25,000 to $30,000. EMS-specific purchases such as ambulances and cardiac monitors are purchased through BCAD and supplied to the fire departments via the EMS contract.

4.2.3.2. Revenue Overview

All billing and EMS revenue runs through BCAD. The fire departments sign service contracts with BCAD for which they are paid an annual amount. There are very few stand-by contract events that generate revenue for agencies. None of these agencies currently provide inter-facility transfers.

Anticipated Carryover: The County has little carryover funds from year to year. Some responding departments note they overspend in order to continuously provide service.

4.2.4. Resource Assessment Additional Factors

Blaine County has multiple departments providing EMS response and transport. Compared to counties in the immediate area, they are in a favorable position. However, the county faces challenges due to its destination nature and the prevalence of affluent visitors. This draw leads to heavy use of the EMS system by individuals who do not pay property taxes to support these agencies. This burden is amplified by recruitment and retention challenges seen in current pay rates and lack of department personnel living within the county. While GEMT money will be available to BCAD, the relatively low number of transports per year will not substantially impact the financial reality of the district.

REFERENCE LIST

[1] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved November 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013&IndicatorID=17

[2] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved November 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013&IndicatorID=5

[3] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved November 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=12

[4] Living Wage Calculator - Living Wage Calculation for Blaine County, Idaho. (n.d.). Livingwage.mit.edu. Retrieved November 2, 2023, from https://livingwage.mit.edu/counties/16013

[5] Indicators Idaho. (n.d.). Indicatorsidaho.org. http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=9

[6] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved November 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=100013

CASSIA COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Cassia County, despite being one of the seventeen Idaho counties that has no ambulance taxing district, has developed a largely well-functioning Emergency Medical Services (EMS) system. [1] Transport service is largely provided by a single hospital-based Advanced Life Support (ALS) agency which receives yearly general monies from the county general fund. Agencies outside Cassia County are utilized, when necessary, as demand for the current two full-time (FT) ambulances increase, at times leaving no available resources within the County. Multiple non-transport agencies, both fire-based and private Quick Response Units (QRUs), decrease the time from dispatch to first medical contact and provide immediate Basic Life Support (BLS). Without stable or reliable funding sources, many of these QRUs struggle to maintain equipment needs, provide ongoing and initial training, and have little to no ability to compensate volunteers for the time spent away from jobs and other commitments. These factors negatively impact these units' ability to consistently and reliably provide timely response to the most rural areas of the County.

As the area continues to grow, both with residents and seasonal visitors, all agencies have found recruitment and retention of qualified personnel increasingly difficult. Wage stagnation in EMS across both the state and nation has led many already in the field to seek alternate career paths. Limited educational opportunities for EMS across the immediate region discourage those interested in either a FT career or volunteering within their community from entering EMS.

Division among non-fire QRUs and the local fire departments and/or districts has led to further fragmented response systems and inefficiencies in both funding mechanisms and capital costs. While there are bright spots in regional collaboration, many in the area feel this division increases EMS recruitment challenges as "we're pulling from the same pool of people." The previously mentioned limited availability of initial education and training further

strains the ability of the rural QRUs to add to their rosters as they are unable to offer more frequent and local options. This limits on-boarding of new providers as those residents that may have an interest in EMS find other ways to serve their community due to time delays and logistic hurdles.

With a FT ALS transport agency, backed by an involved Critical Access Hospital (CAH), Cassia County has laid the groundwork to rise to the challenges of increasing population growth and the reality of decreasing participation in non-career agencies. They must, however, have a stable funding source in order to both adequately rise to and prepare for these challenges.

Strengths	Opportunities
• Full-time career ALS transport service • Local hospital partnership and support • Community Health EMS (CHEMS) program	• Regional education collaboration • Increased response role of fire resources • PILT funds to offset response cost to federal lands
Challenges	**Threats**
• Most agencies ineligible for GEMT • No ambulance taxing district • Increasing IFT volume strains 911 response capabilities	• Aging volunteer rosters • Lack of new volunteers • Reliance on on-call staff, both career and volunteer

Table A: Cassia County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Located in the south-central region of Idaho, Cassia County is bordered largely to the north by Interstate 84 and to the south by the Idaho-Utah border. Its population of just over 25,000 is concentrated in the town of Burley, population 12,142. [2, 3] Although not as affected by the population growth seen in other parts of Idaho, Cassia County's population did increase 11.8% from 2010 to 2022. [1] No appreciable changes have been noted in the county's median age and the 2021 statistic, 32.8, places Cassia 41st from highest to lowest in the state. [2]

South of Burley is largely agricultural land, 643,346 acres, roughly 39% of the county. [2] Significant land area within Cassia County is federal land containing portions of the Sawtooth National Forest and the National Park Service's City of Rocks National Reserve. [4]

Demographic	2010	2020	2022
Population	22,952	24,760	25,655
Land Area	2,580 sq mi	2,580 sq mi	2,580 sq mi
Per Capita	8.89 PPSM	9.6 PPSM	9.94 PPSM
PPSM: People per square mile			

Table B: Cassia County Population & Geography

2.2. Economics

Cassia County's economic base is largely agricultural, employing 11.7% of workers, although that percentage has declined in recent years as in 2021 retail trade became the dominant employment area at 12.6%. Grouped closely together are government (9.8%), manufacturing (9.4%), and health care/social assistance (9.3%). These sectors are likely the reason behind the 2021 median wage of the county, $68,426. Cassia County reports a labor force participation rate of 69%, 97% of those persons employed, as well as an overall unemployment rate of 2.3%, lower than the state average. Poverty in the county (11.3%) is slightly more prevalent than the Idaho average (10.8%) and the percentage of people living on an income less than 200% of the poverty rate (37.2%) is ranked 16th in the state. [2]

To afford a two-bedroom unit in Cassia County at Fair Market Rent (FMR), $779/month in 2022, would require an annual income of $31,160 or $14.98 per hour. An income below 200% of the federal poverty rate for a family of three is $28,680, a wage over one-third of Cassia County does not earn annually. [2]

Metric	Data
Total Population (2022)	25,655
Median Age	-----
Poverty Rate (2021)	11.3%
Number of Jobs (2021)	16,636
Average Annual Wage per Job (2021)	$44,600
Unemployment Rate (2023)	2.3%

Table C: Cassia County Economic Factors

2.3. Social Determinants of Health

Residents of Cassia County enjoy a much higher primary care physician (PCP) ratio than the rest of Idaho: 8.1 per 10,000 compared to Idaho average of 6.3. [2]

This access may not benefit all residents, however, as Cassia County has the 9th highest percentage of uninsured adults over the age of 65 at 17.1%. This is likely secondary to the two dominant employers, farm, and retail, offering benefits less often than other industries. Children are also more likely to be uninsured, 7.4% in Cassia County versus the 5.1% average in Idaho. [2]

2.4. Indicator Impacts to EMS

The implied wage gap in Cassia County presents both an opportunity and a challenge to recruiting EMS providers in Cassia County. The presence of a CAH in Burley attracts health care providers, most of whom will demand higher wages than EMS providers of all levels. While the relatively large percentage of persons living below 200% of poverty wage may present an opportunity to recruit those currently working lower-paying jobs, the limited availability of local EMS education programs hinders this.

The relatively young population offers the same opportunities and challenges. A younger population is, due to the need to work full-time, less likely to have time to volunteer for an EMS agency. However, a working age adult, if provided with a viable career path in EMS, may choose to pursue full-time employment in the field.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

As reported in the table below, call volumes in Cassia County increased 2021-2022 though this table does not reflect the burden of Inter-Facility Transfers, canceled calls and standbys. Intermountain Cassia Regional Hospital Paramedics (ICRHP), according to Idaho State EMS bureau figures, responded to 2,231 total calls for service in 2022 while Raft River Fire Protection District (FPD) responded to 105 total calls. These two agencies are aided by the occasional need for mutual aid by Emergency Response Ambulance (ERA), who responds from Rupert, Idaho in Minidoka County less than nine miles Northeast of Burley.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Emergency Response Ambulance	32	-----	**32**	33	5	**38**
Intermountain Cassia Regional Hospital Paramedics	858	465	**1323**	940	450	**1390**
Raft River Fire Protection District	11	50	**61**	9	59	**68**
Ambulance Total	907	515	**1,416**	982	514	**1,496**
Albion Quick Response	-----	4	**4**	-----	11	**11**
Burley Fire Department	-----	578	**578**	-----	662	**662**
Declo QRU	-----	51	**51**	-----	58	**58**
Minidoka County Fire Protection District	-----	5	**5**	-----	6	**6**
Oakley Quick Response Unit, Inc.	-----	28	**28**	-----	27	**27**
West Cassia QRU	-----	42	**42**	-----	59	**59**
QRU Total	-----	708	**708**	-----	823	**823**

QRU: Quick Response Unit
Transp: Indicates the total transports for the agency.
Non-Transp: Indicates the total non-transport calls for the agency.
NOTE: Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.

Table D: State Reported 911 EMS Call Volumes for Cassia County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Albion Quick Response	3 min	7 min	**10 min**	-----	**52 min**
Burley Fire Department	2 min	4 min	**6 min**	-----	**34 min**
Declo QRU	2 min	7 min	**9 min**	-----	**41 min**
Emergency Response Ambulance	5 min	22 min	**27 min**	**49 min**	**159 min**
Intermountain Cassia Regional Hospital Paramedics	1 min	10 min	**11 min**	**28 min**	**66 min**
Minidoka County Fire Protection District	21 min	7 min	**28 min**	-----	**73 min**
Oakley Quick Response Unit, Inc.	4 min	4 min	**8 min**	-----	**54 min**
Raft River Fire Protection District	6 min	11 min	**17 min**	**53 min**	**114 min**
West Cassia QRU	2 min	8 min	**10 min**	-----	**60 min**

NOTE: All times are based on annual averages of 911 calls, only.
Chute Time: Total time (minutes) from unit/agency dispatch notification to initiating a response.
Driving Time: Total time (minutes) from unit/agency initiating a response to arriving at the scene.
Total Response Time: Total of the Chute Time and Driving Time (minutes).
Transport Time: Total time (minutes) from departing the scene to arriving at the transport destination.
Total Call Time: Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.
NOTE: Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.

Table E: State Reported 911 Call Times for Cassia County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

911 calls placed within Cassia County are received by the Cassia County Sheriff's Office (CCSO) dispatch center who functions as the county's Public Safety Answering Point (PSAP). Neither agency that responded to the resource survey knew if CCSO uses Emergency Medical Dispatching (EMD) or Medical Priority Dispatch Software (MPDS), however the CCSO website states all 911 dispatch personnel are certified EMD. [5] Once a call is received, appropriate units are dispatched based on the location and nature of the call using radio alerts.

Information received in the resource survey indicates agencies have radio communications that are adequate in interoperability, functionality, reception quality, and reliable inter-agency communication.

4.1.2. EMS Agency Overview

ICHRP is the only ALS EMS transport agency licensed within Cassia County, while Raft River FPD offers BLS transport in the eastern portion. Additional responders include four private QRUs as well as two fire departments.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Albion Quick Response	Non-Transport	BLS	Unknown	Uncompensated Volunteer
Burley Fire Department	Non-Transport	BLS	Scheduled and Unscheduled	FT Career and Compensated Volunteer
Declo QRU	Non-Transport	BLS	Unscheduled	Uncompensated Volunteer
Intermountain Cassia Regional Hospital Paramedics	Transport	ALS	Scheduled and Unscheduled	FT And PT Career
Oakley Quick Response Unit, Inc	Non-Transport	BLS	Unknown	Uncompensated Volunteer
Raft River Fire Protection District	Transport	BLS	Unknown	Uncompensated Volunteer
West Cassia QRU	Non-Transport	BLS	Unknown	Uncompensated Volunteer

Table F: List of EMS Agencies Located in Cassia County

4.1.2.1. Intermountain Cassia Regional Hospital Paramedics Overview

Based out of Cassia Regional Hospital in Burley, the agency increased its capabilities to two FT ALS ambulances. These ambulances are staffed by 13 FT, three part-time (PT), and eight PRN personnel - 11 paramedics, seven Advanced EMTs (AEMT), six EMTs. Located at the northernmost edge of the county, response times to the southern, more rural areas, are extended and frequently require Helicopter EMS (HEMS) response. ICRHP also responds into Power County north of the Utah border. Adding a second station, and therefore a third ambulance, further east in the county could ease some of this response time challenge. However, budgeting for the facility, equipment, personnel, and the ambulance itself is not possible within current conditions.

Although operationally hospital-based and for-profit, Cassia County taxes do provide a portion of the agency's operating cost through a yearly contract, which includes the CCSO dispatch services. These are general fund taxes, allocated yearly by county commissioners, as the county has no ambulance taxing district. Through a $1,000,000 grant from Health Resources and Services Administration (HRSA) the agency now offers a CHEMS program focused on high utilizers of 911 and the Emergency Department, as well as disease-specific referrals from the hospital. Billing is conducted through a third-party vendor and electronic Patient Care Report (e-PCR) documentation is performed using state provided software.

Not included in the 911 response table are the inter-facility transfers (IFTs) performed by the agency, both from Cassia Regional Hospital as well as, rarely, from Minidoka Memorial Hospital in Rupert. In 2022, ICRHP conducted 314 IFTs, 14% of the total responses reported by Idaho State EMS Bureau. IFTs are not the only strain on the small agency not included in call numbers- frequent requests for EMS stand-by services, a long-standing small-town

tradition, either require an ambulance go out of service, or an additional crew may be called in, an additional expense not covered by the nominal fee charged to organizations for the service.

4.1.2.2. Raft River Fire Protection District Overview

With a fire taxing district covering a large portion of eastern Cassia County, Raft River Fire Protection District (RRFPD) has a single EMS station in Malta, a small town approximately 37 miles south-east of Burley. The agency's EMS roster of 14 personnel include one paramedic, three AEMTs, and 10 EMTs, all of whom are classified as uncompensated volunteers. Of the reported 105 calls for service in 2022, RRFPD reported only 9 transports by their agency, while 32 patients were transferred to another EMS unit.

4.1.2.2. Albion Quick Response Overview

Based in Albion, a small town of 234 people 16 miles south-east of Burley, the QRU reported three EMT personnel on their roster, one as an uncompensated volunteer, the other two had no employment status listed.

4.1.2.3. Burley Fire Department Overview

Burley Fire Department (BFD), a municipal fire-based department, responds to all EMS calls within the six square miles of the city of Burley. In addition to this, BFD is responsible for providing fire suppression and extrication response for roughly 380 square miles of Cassia County within the North Cassia Rural Fire District (NCRFD). Units will also respond, through mutual aid agreements, to requests for assistance from neighboring QRUs or ICRHP. Thirteen EMS certified personnel, four AEMTs and nine EMTs staff one station. Of these thirteen, 11 are full-time employees, while two are compensated volunteers. Turnover, within both the career and volunteer pools, has been an issue but staffing is now reportedly "okay."

As a purely tax supported entity, BFD receives funds from both the city general fund and the NCRFD taxing district who contracts with the city for service. FY2023 budget of 1,522,921 included $3000 for EMS supplies and disposable items are replaced by transport agencies who then include it in the transport bill.

Total call volume, including non-EMS responses, was not reported, therefore no implied EMS response cost can be calculated. There is a possibility the department may ask the voters to approve a bond and/or levy in order to fund a second station and the required apparatus.

4.1.2.4. Declo QRU Overview

Declo, population 338, is located 9 miles east of Burley on State Highway 77. Reporting 13 personnel consisting of 12 EMTs and one AEMT, three of whom have volunteered for over thirty years and the reported "same 10 people for years" routinely respond to calls for service. Recruitment is difficult in the small community, and those interested in EMS, once they've been trained by the College of Southern Idaho's (CSI) EMT program, often don't stay,

The non-profit agency is funded by grants and community funds, often from the pockets of their non-compensated volunteers. The reported budget of $2000 per year pays for supplies, but there is an unmet need for more expensive equipment purchases. Response from the one station is done with a "QRU rig", though personnel will respond from home or work as the response time for a transport unit is normally only 5 minutes.

4.1.2.5. City of Rocks/Almo QRU Overview

Located in the southern area of Cassia County, Almo is an unincorporated community near the City of Rocks National Reserve. Reporting eight personnel with a surprising mix of two paramedics, one AEMT, and five EMTs in a BLS licensed agency, all of whom are uncompensated volunteers, there was no additional information reported. However, as a governmental, non-fire agency, it is assumed they receive tax funding, though once again the lack of a single EMS taxing district in Cassia County raises the question of where that funding comes from.

4.1.2.6. Mini-Cassia Search and Rescue Unit, Inc. Overview

Reporting a roster of five EMTs, this agency reported no call data to the state EMS Bureau.

4.1.2.7. Oakley Quick Response Unit, Inc. Overview

Oakley QRU is a private agency, based from a single station in Oakley, population 938. Located just over 20 miles south of Burley, the QRU has a single station out of which the seven uncompensated volunteers respond. Another mix of licensure levels indicates these providers work elsewhere, as the BLS agency comprises of two paramedics and five EMTs.

4.1.2.8. West Cassia QRU Overview

West Cassia QRU, based out of Burley, is a private non-hospital BLS agency. The reported 17 licensed personnel responded to 80 calls for service in 2022, 59 of these reported as non-transports. The agency roster includes one paramedic, six AEMTs, and 11 EMTs, all of whom are uncompensated volunteers.

4.1.3. Hospital Access Overview

Cassia Regional Hospital, a non-profit critical access hospital has been a part of the larger Intermountain Healthcare system since 1975. Located in Burley, ID, it is rated by the Idaho TSE Council as a STEMI Level II, Stroke Level III, and Trauma Level IV destination. The 25-bed hospital transfers its most critical and time-sensitive patients to larger facilities including the near-by St Luke's Magic Valley as well as tertiary care facilities in Pocatello, Idaho Falls, Boise, and Salt Lake City.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The sole respondent to this question in the survey rated their sustainability as 75/100, notably this agency is funded completely by fire department funds. In discussions with other agencies, the consensus was much less optimistic. Difficulties in recruitment, maintaining provider involvement, and education challenges were cited as reasons for concerns of instability.

- **EMS Agency Financial Situation:** While the sole ALS transport agency is partially supported by a tax allocation from the county general fund, non-fire department/district QRUs have no reliable or sustainable source of funding. Cassia County, like nearly 40% of Idaho counties, has no dedicated ambulance taxing district and therefore agencies are reliant on stagnant reimbursement rates and general fund taxes in addition to grants and community donations.

- **EMS Agency Communications Strategy and Outreach:** As the majority of agencies within Cassia County have no full-time staff, all communications must be accomplished by the volunteers. While the major transport agency is part of the local hospital, it has no unique online presence.

- **Community View of EMS Agencies:** The one respondent to this question stated they "strongly agree" when asked if their agency is viewed in a favorable light by the community. As many of the QRUs are supported largely by community donations, the same may well be applicable to them.

- **Elected Official Support of EMS Agencies:** Again, few agencies responded directly to this question but "somewhat agree" was reported during conversations. Many feel their elected officials are unaware of the challenges facing EMS.

- **Agency & System Response Outlook**: Overall, agencies in Cassia County are not overly optimistic of their ability to deliver reliable EMS responses in the future. Initial education has increased in complexity for all levels of EMS providers, and this has, in turn, caused pass rates to fall. Access to technology and professional instruction is limited in more rural areas, both of which can improve student success. Stagnant reimbursement rates for transport do not compensate for the continually increasing costs to provide service. Also of note is that due to either their status as a non-governmental, private service or as a non-transport response provider, only one of the eight agencies in the county will be eligible for GEMT enhanced reimbursement.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Five of the eight agencies located in Cassia County are private non-profits. Two are fire department-based, one governmental, non-fire, one hospital-based

- **Service Delivery Partners:** All Cassia County agencies who participated noted the partnership of Cassia Regional Hospital and the education provided by both their staff and the EMS providers.

- **Medical Direction:** EMS agencies in the county report regular involvement with their medical directors, but necessarily on a consistent basis.

- **Communications & Interoperability:** There were no reported problems with inter-agency communication other than geographic barriers in the more mountainous areas.

- **Mutual Aid System & Agreements:** Cassia County EMS agencies are part of a regional Fire and EMS response Memorandum of Understanding (MOU).

- **Community Health EMS (CHEMS):** ICRHP has a functioning, grant-funded CHEMS program that extends the partnership between the EMS system with the local hospital.

- **Patient Care Documentation System:** All agencies utilize the Idaho EMS Bureau's contracted electronic-Patient Care Report (e-PCR) service.

4.2.1.3. Response Overview

- **Level(s) of Service:** Seven of the eight licensed agencies within the county provide BLS level of service, one transport agency provides the ALS level.

- **Agency Response Concerns:** With decreasing volunteer participation, time to first medical contact can be delayed. With the region's mutual aid agreements and relatively short distances between response areas, however, when one agency may have a staffing shortage, another may, and often does, assist with the response.

- **Helicopter Response & Utilization:** Due to large areas of sparse population and extended access, ground EMS agencies will utilize HEMS for not only transport but ease of patient access.

- **Factors Impacting Response Times:** Large coverage area for the transport ambulance and the limited number of staffed ambulances may increase response times to outlying areas. Volunteer providers usually respond from home or work, which also increases response times, though the Cassia County average is 12 minutes for all agencies.

- **Response to Public Lands:** A sizeable portion of Cassia County is public land, including the City of Rocks National Reserve. Special events in these areas, as well as on both rivers and lakes, request EMS stand-by services which can be difficult to staff.

4.2.2. Workforce & Resource Assessment

While the career transport agency has difficulties in recruitment and retention, many of the QRUs report diminishing numbers of residents willing and able to join their ranks. While there are a variety of factors to this decline, it is well documented that overall volunteerism is declining nationwide and Idaho is no exception. Responding to very few calls per year, most of these QRUs would likely be better served by collaboration and consolidation of some sort. The resources necessary to staff and equip a response vehicle continue to increase, a task that is difficult to accomplish with an all-volunteer model.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Cassia County's EMS transport is performed mainly by one career agency, though a smaller BLS volunteer fire protection district in the eastern portion does occasionally transport. Currently five BLS non-transport agencies are licensed in Cassia County, though only one responds to over 100 calls per year.

- **Responder Average Age:** No agency responded.

- **Staffing Numbers:** Licensed within Cassia County agencies are 67 EMTs, 27 AEMTs, and 19 paramedics.

- **Staffing Concerns:** As previously mentioned, all non-career agencies report declining numbers of volunteers interested in EMS. The initial education is a significant hurdle, both the time commitment as well as reportedly low National Registry of EMT (NREMT) pass rates. As communities become populated with housing subdivisions, many of those new residents commute to work outside of the county, making daytime coverage difficult.

- **Staffing Strengths:** Staffing stability was rated 74/100 by the transport agency, largely due to the transition to a second FT paid ambulance.

- **Recruitment & Retention:** Due to the issues mentioned above, recruitment and retention are significant challenges to all agencies in the county. Although there is a paramedic education program in nearby Twin Falls, recruitment of residents interested in an EMS career path is difficult as wages in other sectors increase beyond the pace of EMS.

4.2.2.2. Training & Education Overview

All agencies report difficulties in recruiting personnel, both career and volunteer. Low success rates for initial EMT education certification decreases the available pool of willing, local volunteers. The ALS transport agency, with support of the CAH, does provide ongoing continuing education classes for outlying agencies but with no dedicated education staff, this strains an already limited resource.

4.2.2.3. Facilities Overview

- **Station Location & Condition:** ALS transport agency responds with two ambulances out of one location in Burley, rated 51/100 for overall condition. All other agencies but one report one station each, the exception being a private QRU which listed two, both in Burley.

- **Facility Needs:** Were the ALS transport agency to expand to two station locations with the intent of decreasing response times in the eastern portion of the county, it would require additional funds the agency does not currently have a reserve for.

4.2.2.4. Equipment/Supplies Overview

- In large part due to the partnership with the CAH, no agency reported difficulties in obtaining and re-stocking EMS supplies. Equipment purchases are largely obtained through grant funding, most of which comes from the state EMS Bureau but the current equipment, when rated, met agencies' needs with regards to age/condition, functionality, and appropriateness.

4.2.3. Financial Overview

A true financial assessment proved difficult in Cassia County, in part due to the two largest agencies' difficulties in delineating EMS budgets. As a department of the CAH, the ALS transport agency was unable to provide certain specific financial details. However, due to "generally operating at a loss" and as cash is "held at a central (hospital) level", there is no reported carry-over or reserve year to year. The second largest entity, as a fire department, does not separate EMS budget needs from the department as a whole. Smaller QRUs are sustained by community donations, grants, and occasional fund-raisers with yearly budget reports of less than five thousand dollars ($5000) each.

4.2.3.1. Expense Overview

- Personnel Expenses for the career transport agency consisted of the majority of reported financials, an estimated $1,200,000.

- Operational Expenses were reported as $115,000.

- Capital Expenses were not reported.

4.2.3.2. Revenue Overview

As described above, the ALS transport agency provides the only reported billable service within Cassia County. Billing is done through a contracted third-party and the agency was unable to provide payor breakdowns. Difference between gross billing and revenue received is due to contractual agreements with payors and non-payment for those funds deemed patient responsibility.

4.2.4. Resource Assessment Additional Factors

Ground Emergency Medical Transport (GEMT) funding, a federal Medicaid reimbursement program, will only benefit one entity in Cassia County as currently structured and funded. An opportunity to create an ambulance taxing district could provide a larger tax base as the population continues to grow, thus providing less reliance on reimbursement. Currently the residents of Cassia County largely depend on the corporate structure and backing of the Critical Access Hospital to bridge yearly deficiencies in both funding and revenue.

Payment in Lieu of Taxes (PILT) funds could be allocated to offset response expenses to the federal lands within Cassia County if allocated by Cassia County.

The value of the five QRUs responding to a combined 337 incidents in 2022 cannot be measured in quantifiable ways. However, the multitude of challenges faced by these departments are real and will require innovation and regional collaboration among all involved parties.

REFERENCE LIST

[1] Idaho State Tax Commission (2023) *Idaho State Tax Commission County Parcel Maps-Taxing Districts* Retrieved from https://tax.idaho.gov/taxes/property/gis/data-maps/parcel-maps/

[2] University of Idaho Extension. (2023). *Indicators Idaho: Cassia County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16031&IndicatorID=1

[3] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Burley city, Idaho.* Retrieved from https://www.census.gov/quickfacts/fact/table/burleycityidaho/PST045222

[4] Cassia County. (2023) *Cassia County, ID Official Assessors Office.* Retrieved from https://experience.arcgis.com/experience/16fa7ed83156466b97b80bd3f7420df7/

[5] Cassia County. (2023) *Cassia County, ID Official Dispatch Center.* Retrieved from Cassia County, Idaho - Dispatch Center

GOODING COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Gooding County, despite its smaller population and geographic size, has developed a largely well-functioning Emergency Medical Service (EMS) system. Transport service is provided by a single tax funded Advanced Life Support (ALS) agency which is funded from a mix of ambulance taxing district funds and billing revenue. EMS transport agencies outside Gooding County are utilized occasionally as demand for the one full-time (FT) and one on-call ambulance increases. Three fire-based non-transport agencies, or Quick Response Units (QRUs) decrease the time from dispatch to first medical contact and provide immediate Basic Life Support (BLS), though they do not respond to all EMS calls. These QRUs struggle to maintain equipment needs, ongoing and initial training, and have limited ability to compensate volunteers for the time spent away from jobs and other commitments. These factors negatively impact these units' ability to consistently and reliably provide timely response to EMS calls for service within the County.

As this area continues to grow with both residents and tourism, agencies find it difficult to recruit and retain qualified personnel. Wage stagnation in EMS has led to many already in the field to seek alternate career paths. Limited educational opportunities for EMS across the region discourage those interested in either a full-time career or volunteering within their community. This limited availability of initial education and training further strains the ability of the rural agencies to add to their rosters as they are unable to offer more frequent, local, options. This limits on-boarding and those residents that have an interest in EMS may find other ways to serve their community due to time delays and logistic hurdles.

With a full-time ALS transport agency, well supported by the local Critical Access Hospital (CAH), Gooding County has laid the groundwork to rise to the challenges of increasing population growth and the reality of decreasing participation in non-career agencies. They

must, however, have a funding source responsive to the increasing costs of maintaining response readiness in order to both adequately rise to and prepare for these challenges.

<table>
<tr><th>Strengths</th><th>Opportunities</th></tr>
<tr><td>• County-wide ambulance taxing district
• Full-time career ALS transport service</td><td>• Regional education collaborations
• Increased response role of fire departments
• CHEMS collaboration with local hospital</td></tr>
<tr><th>Challenges</th><th>Threats</th></tr>
<tr><td>• Recruitment and retention
• Small geographic area
• Stagnant population growth
• Low call volume</td><td>• Lack of new volunteers
• Reliance on on-call staff, both career and volunteer
• One full-time transport ambulance</td></tr>
</table>

Table A: Gooding County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Gooding County is a rural, largely agricultural county of 15,715 residents located in the South-Central region of Idaho. [1] The county's largest town and the county seat, Gooding, population 3,722, is located 33 miles from the region's most populous city, Twin Falls. [2] Gooding has seen little of the growth endemic elsewhere in Idaho, with a 2010-2020 population increase of only 0.7%, placing it 41st in the state from highest to lowest for growth. The county's median age, 37.9, is comparable to Idaho as a whole and has increased only slightly for the past twenty years. [1]

Agricultural land dominates Gooding County's landscape as 40% of its land area was considered farmland in 2017. That figure is, however, a decrease from just five years prior, indicating a shift in land use although the dominant employer in 2022 continues to be farming at 22.6%. [1]

Though containing no U.S. Forest Service land, the Bureau of Land Management manages 237,503 acres, over 50% of the county land area, mainly in the northern portion of the county which also contains three wilderness study areas. [3]

Demographic	2010	2020	2022
Population	15,464	15,643	15,715
Land Area	729.32 sq mi	729.32 sq mi	729.32 sq mi
Per Capita	21.2 PPSM	21.4 PPSM	21.5 PPSM
***PPSM:** People per square mile*			

Table B: Gooding County Population & Geography

2.2. Economics

As mentioned above, farming does and has employed more residents of Gooding County than any other industry. Government employs 11.2% of residents with manufacturing following closely at 11.1%. A median household income of $63,910 places Gooding County squarely in the middle of the state, however 40% of the county earns less than 200% of the poverty level, $28,680 for a family of three. Wage inequality may explain this difference as

the real wage per job is $44,063. The May 2023 unemployment rate of 2.4% is lower than the state average. [1]

Housing affordability cannot be overlooked, even in small rural counties. A housing wage of $16.04 per hour for a two-bedroom unit with a monthly Fair Market Rent of $834 translates to $33,360 per year, which is more than 40% of the county earns annually. [1] While stagnant population growth has not led to an increase in housing units within the county, pressures from neighboring areas have impacted rental rates as well as home prices.

Metric	Data
Total Population (2022)	15,715
Median Age	37.9 years old
Poverty Rate (2021)	10.9%
Number of Jobs (2021)	8,968
Average Annual Wage per Job (2021)	$44,254
Unemployment Rate (2023)	2.4%

Table C: Gooding County Economic Factors

2.3. Social Determinants of Health

With its low population size and geographic area, Gooding's 3.2 primary care physicians (PCPs) per 10,000 residents does not necessarily mean citizens have less access to care. 19.9% of those under 65 years old did not have health insurance in 2019 compared to 12.7% in all of Idaho. This places Gooding County 5th in the state for uninsured working age adults, highest to lowest. This lack of insurance is also present in children, with 7.8% of those under 19 years old having no insurance, placing the county ninth in Idaho's 44 counties. [1] While the lower ratio of PCPs to population may be overcome by travel to adjoining counties, lack of insurance can and often does translate to lack of access to affordable health care. Gooding County also lacks a Federally Qualified Health Center (FQHC) within its borders, a reliable source of primary and preventative care for the un/under insured. Although there are multiple FQHCs within 30 miles, those residents needing medical care may resort to EMS and the local hospital's emergency department for routine transportation and evaluation due to the lack of other resources.

2.4. Indicator Impacts to EMS

The implied wage gap in Gooding County presents both an opportunity and a challenge to recruiting EMS providers in Gooding County. The presence of a Critical Access Hospital in Gooding attracts health care providers, most of whom will demand higher wages than what is currently offered EMS providers of all levels, both locally and regionally. Starting wage for EMTs with Gooding County EMS is $17/hour for a 40-hour workweek, paramedics earn slightly more at $21/hour.

While the relatively large percentage of persons living below 200% of poverty wage may present an opportunity to recruit those currently working lower-paying jobs, the limited availability of local EMS education programs hinders this.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Gooding County EMS, the sole 911 transport agency within the county, also performs occasional interfacility transfers for North Canyon Medical Center (NCMC) located in the city of Gooding, though these do not represent a substantial percentage of total calls for service. As reported, call volume decreased modestly from 2021-2022, with a corresponding decrease in the need for outside agencies from Twin Falls County and Lincoln County to assist within the county.

The marked decrease in calls within Wendell reflects the dissolution of the QRU division of the Wendell Rural Fire District in 2022 which responded to the majority of EMS calls within their response area.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Gooding County EMS	*1,168*	*391*	1,559	*980*	*354*	1,334
Lincoln County EMS	*17*	*5*	22	*16*	-----	16
Magic Valley Paramedics	*10*	*10*	20	*9*	*7*	16
Ambulance Total	*1,195*	*406*	1,601	*1,025*	*361*	1,366
City of Bliss Department of QRU	-----	*17*	17	-----	*6*	6
Hagerman Fire Protection District	-----	*197*	197	-----	*95*	95
Wendell Rural Fire District EMS Division	-----	*72*	72	-----	*18*	18
QRU Total	-----	*286*	286	-----	*119*	119

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Gooding County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
City of Bliss Department of QRU	*7 min*	*4 min*	11 min	----	46 min
Gooding County EMS	*6 min*	*9 min*	15 min	49 min	114 min
Hagerman Fire Protection District	*8 min*	*4 min*	12 min	----	61 min
Wendell Rural Fire District EMS Division	*5 min*	*4 min*	9 min	----	49 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Gooding County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Dispatch of 911 calls is done through SIRCOM (Southern Idaho Regional Communications) the Public Safety Answering Point (PSAP) for the region. Calls for service are received over radios and sent/relayed to personnel cell phones. Dispatch fees are based on an agency's yearly call volume.

4.1.2. EMS Agency Overview

Gooding County is home to three non-transport EMS agencies located within the towns of Gooding, Hagerman, and Buhl. A fourth QRU in Wendell recently disbanded due to lack of personnel. ALS transport services are primarily provided by Gooding County EMS. Occasionally, neighboring Twin Falls County's Magic Valley Paramedics as well as Lincoln County EMS may respond as needed or requested. All agencies are dispatched by SIRCOM, the dispatch center located in Twin Falls which provides dispatch services to a four-county area.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
City of Bliss Department of QRU	Non-Transport	BLS	Unscheduled	Compensated Volunteer
Gooding County EMS	Transport	ALS	Scheduled and Unscheduled	FT and PT career
Hagerman Fire Protection District	Non-Transport	BLS	Scheduled and Unscheduled	Career and Compensated Volunteer
Wendell Rural Fire District EMS Division	Non-Transport	BLS	QRU No Longer Staffed	-----

Table F: List of EMS Agencies Located in Gooding County

4.1.2.1. Gooding County EMS (GCEMS) Overview

Gooding County EMS (GCEMS) is a governmental non-fire agency that responds to 911 calls within Gooding County with occasional mutual aid responses into neighboring counties-- Lincoln and Jerome. An ALS agency with a mix of FT and part-time (PT) employees, personnel respond out of one newly built station in Gooding. The employees are a mix of nine EMTs, three AEMTs, and five paramedics. Full-time is a 40-hour work week of five, eight-hour shifts, part-time hours vary according to agency need. Most personnel live in the area, however approximately one-third of their PT staff commute from outside the county for their shifts. With a self-reported sustainability score of 70, administrators cite funding concerns due to a low levy rate for the ambulance taxing district as well as increasing payroll costs due to overtime. With staffing levels rated 65/100, much of this overtime stems from lack of depth in available personnel roster. A reported “lack of interest in EMS” locally hinders recruitment opportunities though the department does report good support from residents and their governing entity.

Based on the location and call type, GCEMS primarily transports to North Canyon Medical Center and St Luke’s Magic Valley. Local QRUs assist on EMS calls to a variable degree, much of that due to their on-call staffing models and subsequent lack of available personnel at times.

4.1.2.2. Gooding Fire Department (GFD) Overview

With a roster of 10 licensed EMS personnel responding from one station, GFD reported no EMS calls to the Idaho State EMS Bureau in 2022.

4.1.2.3. Hagerman Fire Protection District (HFPD) Overview

Responding to both fire and EMS calls within Hagerman and parts of the surrounding area, HFPD licensed EMS personnel consist of nine EMTs, two AEMTs and two paramedics. With only two FT employees, the department relies on its 11 compensated volunteers to respond to calls for service. Reporting difficulties in daytime and weekend coverage, concerns about aging volunteers and few upcoming replacements lead to a reported sustainability score of 50.

No living quarters in their facilities further limits the department's ability to increase staffing and decrease response times. Due to Hagerman's proximity to Twin Falls County, HFPD responds with both MVP (Magic Valley Paramedics) and Gooding County EMS as transport agencies. All funding for operations comes from the fire protection district though they have received grant funds from the state EMS bureau in the past two (2) years and some monies from community donations. HFPD absorbed a local QRU that was struggling, which meant absorbing the EMS response costs with no increase in funding.

4.1.2.4. City of Bliss Department of QRU (BRFD) Overview

Bliss Rural Fire District's QRU reported three total EMS licensed personnel, all uncompensated volunteers at the EMR level.

4.1.2.5. Wendell Rural Fire District EMS Division (WRFD) Overview

The EMS division of WRFD staffed a non-transport QRU which dissolved in 2022 due to a lack of qualified personnel. Prior to this, the QRU was well-funded by the fire district and community fund-raising, responding to calls within a 126 square mile area with four uncompensated volunteers. After the dissolution, time to first medical contact has increased in the area as Gooding County EMS responds from their station 11 miles away as well as Hagerman QRU located 12 miles from Wendell.

4.1.3. Hospital Access Overview

North Canyon Medical Center, located in the town of Gooding, is a small critical access hospital offering a variety of services. The hospital is not designated by the Idaho Time Sensitive Emergencies council in Stroke, STEMI, or Trauma but does offer emergency care 24/7.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Gooding County, like most counties in Idaho, struggles with insufficient funding and a lack of qualified personnel, both career and volunteer. With an ambulance taxing district, the county is able to staff a full-time ALS transport ambulance, but current funding does not provide for growth nor wage increases necessary to retain staff. Shifting demographics, including an increase in retirees, decreases local availability of potential volunteers for the non-career agencies. While the area has generally not seen the population growth of other

areas of Idaho, the increase in visitors, both those recreating on the County's Federal lands and those traveling through, place demands on a system struggling to staff EMS response in a sustainable manner. Limited regional EMS educational offerings and an increase in the complexity of baseline EMS knowledge and competencies make initial licensure difficult for many that may be interested in serving their communities.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** EMS agencies within the county have an averaged sustainability rating of 60/100.
- **EMS Agency Financial Situation:** No agency within Gooding County reports a healthy financial state, though most "break even" through a variety of funding mechanisms.
- **EMS Agency Communications Strategy and Outreach:** Without written communications strategies, all agencies felt their outreach was neither effective nor productive.
- **Community View of EMS Agencies:** Despite the lack of outward communication and outreach, all agencies reported positive community support and a generally favorable community perception.
- **Elected Official Support of EMS Agencies:** Support from the variety of oversight entities was rated well, less so the perception of support from the state EMS Bureau.
- **Agency & System Response Outlook:** Overall, agencies in Gooding County are not overly optimistic of their ability to deliver reliable EMS responses in the future. Initial education has increased in complexity for all levels of EMS providers, and this has, caused pass rates to fall. Access to technology and professional instruction is limited in these rural areas, both of which can improve student success and decrease participation within smaller agencies reliant on volunteers. Stagnant reimbursement rates for transport do not compensate for the continually increasing costs to provide service. As a public agency, Gooding County EMS will be eligible for Ground Emergency Medical Transport (GEMT) funds once available, however with their relatively low call volume, the impacts of this may be minimal.

4.2.1.2. Agency Administrative Overview

Citing the common struggles of inadequate funding and reimbursement, decreasing opportunities for recruitment and retention of qualified personnel, and the perceived lack of interest in EMS careers, agencies in Gooding County join the statewide chorus of the struggles with an unsustainable system. Furthermore, no one solution could be identified to change the status quo.

- **EMS Agency Structure:** ALS transport service is provided by a single county-funded agency, with local fire departments serving as initial BLS responders, though not consistently.

- **Service Delivery Partners:** The medical director, various government oversight entities, and surrounding EMS agencies were cited as partners within Gooding County.

- **Medical Direction:** Though lauded as a strong service partner, agencies rated their medical director low in involvement with both training and case review/QA, reporting an average of 24/100.

- **Communications & Interoperability:** It is reported that radio operations and communications are in good, reliable, working order and allow for communication when the situation demands.

- **Mutual Aid System & Agreements:** Gooding County agencies are part of a multi-county written mutual and automatic aid agreement.

- **Community Health EMS (CHEMS):** No agency reported knowledge of nor interest in CHEMS.

- **Patient Care Documentation System:** Charting is done through the state sponsored IGEMS interface for all reporting agencies in the county.

4.2.1.3. Response Overview

- **Level of Service:** There is one transporting ALS service within Gooding County.

- **Agency Response Concerns:** There were less than ten occasions where the transport agency reported difficulty responding to 911 incidents over the last year, though with the dissolution of one QRU, Wendell did not consistently supply a local first response.

- **Helicopter Response & Utilization:** Requesting air ambulance services can be initiated on initial dispatch but is most often left to the discretion of responding personnel based on the call location and patient presentation.

- **Factors Impacting Response Times:** No respondent ranked the provided factors.

- **Response to Public Lands:** Agencies mentioned the lack of taxes from public lands not offsetting the costs of response due to both accessibility issues and increased time required for EMS calls in these areas. Of particular note, the Snake River has become increasingly popular as a rafting destination and EMS agencies rely on the Gooding County Sheriff's Office for swift water rescue.

4.2.2. Workforce & Resource Assessment

Recruitment and retention of qualified personnel were noted challenges mentioned by all responding agencies. The workforce scarcity of EMS personnel makes competitive hiring difficult. Initial education difficulties hinder local recruitment efforts as does the presence of equal or better paying jobs in other sectors.

4.2.2.1. Staffing Overview

- **Staffing Structure:** There is a single career agency, one combination agency, and one volunteer agency providing EMS response in the county.
- **Responder Average Age:** The average age of the non-career providers is above 40 years old, no number provided from the career agency.
- **Staffing Numbers:** There are a total of four EMRs, 25 EMTs, seven AEMTs, and nine paramedics licensed and responding in the county.
- **Staffing Concerns:** General staffing concerns exist with a lack of qualified, willing personnel seeking EMS employment within the county as well as a noted lack of interest in initial education and licensure.
- **Staffing Strengths:** The current personnel within these agencies are dedicated and committed to their job and community.
- **Recruitment & Retention:** Pay increases were reported to be the primary tool to increase recruitment and retention, however, all agencies also reported difficulties in the initial education process.

4.2.2.2. Training & Education Overview

Ongoing training and education are offered in-house as well as with partner agencies. Development of a formal Field Training Officer (FTO) program is on-going as it is believed this will aid in retention of newly hired employees who may be hired with little to no prior EMS experience.

4.2.2.3. Facilities Overview

- **Station Location(s):** EMS transport response is from a single station in Gooding, fire department personnel respond from facilities in Gooding, Hagerman, and Bliss.
- **Station Condition(s):** Facilities condition varies widely. The transport agency was recently able to build a new station with multiple apparatus bays, living quarters, and offices. Other agencies have aging stations without the capacity to house personnel for 24/7 response.
- **Facility Needs:** Other than upgrading current stations, no agency reported the need for additional stations at this time.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Overall equipment and supply needs are currently being met, allowing providers to respond appropriately and safely.
- **Condition:** Responding agencies indicated their current equipment meets their needs in age/condition, functionality, and use appropriateness.

- **Funding:** All agencies in the county note having recently received grants for EMS equipment and supplies.
- **Needs/Shortages:** No agency in the county reported equipment needs they have been unable to meet, though all have required grants to do so.

4.2.3. Financial Overview

With little to no recent population change or the resultant housing increase, the tax base which is levied for EMS funding remains stagnant as does reimbursement. Costs, both operational and personnel, continue to rise however, leaving Gooding County with little recourse to progress or improve EMS delivery.

4.2.3.1. Expenses Overview

- **Personnel Expenses:** Reported by the transport agency only, the anticipated annual EMS personnel expense is $776,000 as fire departments typically don't allocate personnel costs to EMS alone.
- **Operational Expenses:** Combined EMS operational costs as reported by two agencies are estimated to be $427,000, covering the day-to-day operations of EMS response.
- **Capital Expenses:** One department reported planning capital purchases amounting to $639,000 for the year.

4.2.3.2. Revenue Overview

The one agency that bills for service was unable to provide this number nor an estimated carryover/reserve.

4.2.4 Resource Assessment Additional Factors

With a functioning ALS transport agency, Gooding County has the structure in place to continue to thrive and progress. Further collaboration with non-transport agencies, increased accessibility to initial education with technological support, as well as funding that reflects modern operational needs for career agencies will ensure the EMS system is able to not just maintain, but progress. Allocation of Payment In Lieu of Taxes (PILT) funds as well as GEMT reimbursement will help but due to low call volumes these additions will not provide a robust, sustainable, or reliable funding mechanism.

Continued partnership with the local CAH will ensure a robust delivery of quality pre-hospital care as well as offer opportunities for the exploration of CHEMS programs as funding becomes available.

Changing shift coverage to 24-hour shifts may help with recruitment of providers living outside of the immediate Gooding area, aiding in the transition to a second full-time ambulance as call volume indicates.

REFERENCE LIST

[1] University of Idaho Extension. (2023). *Indicators Idaho: Gooding County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16047

[2] U.S. Census Bureau. (2023). *City and Town Population Totals 2020-2022* . Retrieved from https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-cities-and-towns.html

[3] Gooding County (2023) *Gooding County Official Planning and Zoning, Comprehensive Plan.* Retrieved from http://goodingcounty.org/DocumentCenter/View/186/Comprehensive-Plan-PDF?bidId=

JERRY COUNTY

Strengths	Opportunities
• Full-time career ALS transport service • Local hospital partnership and support	• Regional collaboration through contracted services.
Challenges	**Threats**
• Transport service contracted from out of county • Recruitment and retention of part-time personnel • Agencies ineligible for GEMT • Auto dispatch of non-transport departments only occurs within city limits	• Increasing IFT volume strains 911 response capabilities • Population and call volume growth outpace system growth

Table A: Jerome County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Jerome County is a geographically small county located in a rural area of the south-central region of Idaho. The largest city and county seat is Jerome, containing over half of the county's residents with a 2022 population of 13,037. Within the county are three major travel routes – Interstate 84, U.S. Highway 93, and Idaho State Highway 25. Interstate 84 travels along the county's southern border and connects Jerome to Boise, Mountain Home to the west, and Burley into Utah to the east. U.S. Highway 93 travels north and south along the county's western half, connecting Falls City with Twin Falls to the south and Shoshone to the north. Idaho State Highway 25 parallels I84 to the north and connects the cities of Jerome, Perrine, Eden, Hazelton, and McHenry before rejoining I84.

Demographic	2010	2020	2022
Population	22,374	24,268	25,311
Land Area	597.54 sq mi	597.19 sq mi	597.19 sq mi
Per Capita	37.5 PPSM	40.6 PPSM	42.4 PPSM
PPSM: *People per square mile*			

Table B: Jerome County Population & Geography

2.2. Economics

The county's most prominent employment industry is manufacturing at 15%, followed closely by farming at 13.3%. [1] These are the only two employment sectors containing over 10% of the workforce. As of 2021, 57% of the population was between the ages of eighteen and sixty-four, tracking just over 1% less than the age demographics of the broader state. The labor force participation rate was 66.9%, ranking seventh statewide. [2]

Total housing units rank fifteenth out of forty-four counties with 8,533 total units. [3] The value of housing is twenty-second at $207,100. [4] The county comes in tenth regarding housing affordability, with the fair market rent for a two-bedroom residence being $924. This equates to 1.8 full-time minimum wage jobs needed to afford fair market rent or a housing wage of $17.77/hour to meet the housing wage standard defined by Idaho Indicators. [5]

According to MIT Living Wage data, a two-working adult, two-child household needs a gross annual income of $93,242. In contrast, the median household income in the county as of 2021 ranked twenty-second across the state at $63,765. [6]

Metric	Data
Total Population (2022)	25,311
Median Age	34.2 years old
Poverty Rate (2021)	-----
Number of Jobs (2021)	12,880
Average Annual Wage per Job (2021)	$47,111
Unemployment Rate (2023)	2.8%

Table C: Jerome County Economic Factors

2.3. Social Determinants of Health

Overall, the county has limited access to healthcare. There are no hospitals and only one urgent care facility within the county. Consistently, it is in the bottom group of counties when it comes to state County Health Rankings: 32nd in Health Behaviors and 41st in Clinical Care. [7]

The county consistently measures above both the state and national average for number of uninsured with the third-highest percentage in the state for those under the age of 65 years old. 21% of that age demographic in Jerome County have no health insurance compared with 13% for Idaho overall, 11% for the US. 8% of residents under 19 years old have no health insurance, slightly higher than the 5% across Idaho, 6% for the US. [8]

The poverty rate is predominately 2%-3% higher within the county when compared to the remainder of the state. As of 2021, the poverty rate was 12.6%, ranking 27th out of 44 counties. [9]

2.4. Indicator Impacts to EMS

As part of the greater Twin Falls area Jerome County has not seen as much of the economic growth and opportunity associated with the increasing population of the area. Limited access to health care means residents frequently leave the county for service.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Jerome County EMS transport service is provided by Magic Valley Paramedics (MVP) who is contracted through the county government. The county averaged approximately 5.2 calls/day through 2021 and 2022. In 2021, there were a total of ten requests for outside agency response that decreased to zero in 2022. Overall call volume increased by 4.5% from 2021-2022, a modest increase when compared to the growth seen in neighboring counties during the same time-period.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non-Transp*	2022 TOTAL
Emergency Response Ambulance	5	-----	5	-----	-----	-----
Gooding County EMS	5	-----	5	-----	-----	-----
Magic Valley Paramedics	1,303	547	1,850	1,471	473	1,944
Ambulance Total	1,313	547	1,860	1,471	473	1,944
City of Jerome Fire Department	-----	846	846	-----	792	792
Rock Creek QRU	-----	124	124	-----	131	131
West End Fire & Rescue	-----	11	11	-----	8	8
QRU Total	-----	981	981	-----	931	931

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Jerome County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
City of Jerome Fire Department	*2 min*	*4 min*	6 min	----	21 min
Magic Valley Paramedics	*1 min*	*8 min*	9 min	36 min	63 min
NOTE: *All times are based on annual averages of 911 calls, only.* ***Chute Time:*** *Total time (minutes) from unit/agency dispatch notification to initiating a response.* ***Driving Time:*** *Total time (minutes) from unit/agency initiating a response to arriving at the scene.* ***Total Response Time:*** *Total of the Chute Time and Driving Time (minutes).* ***Transport Time:*** *Total time (minutes) from departing the scene to arriving at the transport destination.* ***Total Call Time:*** *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.* ***NOTE:*** *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*					

Table E: State Reported 911 Call Times for Jerome County (2022)

Section 4

4

Context

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

911 calls in Jerome County are dispatched via Southern Idaho Regional Communications (SIRCOMM) in Jerome, Idaho, the region's Public Safety Answering Point (PSAP). Calls go directly to SIRCOMM, where dispatchers utilize a Computer Aided Dispatch (CAD) system to assign units. SIRCOMM uses Emergency Medical Dispatch (EMD) qualified personnel as well as medical priority dispatch software to triage and dispatch medical calls as accurately as possible.

4.1.2. EMS Agency Overview

Jerome County provides EMS services by contracting with MVP who provides ALS transport ambulances staffed by full-time (FT) career personnel. As the agency is responsible for both Twin Falls County and Jerome County, ambulances may be dispatched across county lines as needed. The City of Jerome Fire Department provides non-transport BLS response though the agency is not automatically dispatched to all EMS calls. Law enforcement resources are available but not part of the typical response model.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
City of Jerome Fire Department	911 Response Non-Transport	BLS	Combination	Compensated/ Per-Call
Magic Valley Paramedics	911 Response Transport	ALS	Scheduled	Compensated/ Career

Table F: List of EMS Agencies Located in Jerome County

4.1.2.1. Magic Valley Paramedics Overview

Magic Valley Paramedics (MVP) is a hospital-based EMS agency overseen by St. Luke's Magic Valley (SLMV) hospital. The agency is classified as hospital-based, though it receives $225,912 in funds from the county's LifeLine Ambulance Service District tax levy, representing 3.3% of its total annual budget. In addition to ALS transport, MVP provides various services to the surrounding areas, partnering with allied agencies for training, education, and logistical support. Personnel are paid employees of the St Luke's hospital system who employs 39 paramedics, six Advanced EMTS (AEMT), and 27 EMTs to staff ambulances in both Twin Falls County and Jerome County. A single 24-hour transport unit is housed in Jerome, in addition to two, 12-hour crews, that supplement this response area, one in Jerome and another just north of the city of Twin Falls near the county border.

Interfacility transfers (IFT), both to and from SLMV, are a significant portion of MVP's call volume and revenue. Administrators admit these ground transfers from the hospital to more extensive tertiary care facilities in Boise strain the available 911 resources by removing units for hours at a time. However, the current alternative, air transportation, is costly and, at times, medically unnecessary.

4.1.2.2. City of Jerome Fire Department Overview

City of Jerome Fire Department is a combination department with 13 full-time career and six compensated part-time personnel all of which are licensed at the EMT level. The department operates out of three stations throughout the town and provides BLS non-transport first response to support 911 medical calls within the city limits. The department will respond if mutual aid is requested outside of city limits.

4.1.3. Hospital Access Overview

There are no hospitals or free-standing emergency departments in Jerome County. All EMS calls that result in patient transport from the area must drive to either neighboring Gooding County or Twin Falls County. Any time-sensitive emergency or critically ill patient must be transported to St. Luke's Magic Valley in Twin Falls, as the emergency department in Gooding County is part of a critical access hospital with minimal bed capacity and limited advanced medical intervention capabilities.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

EMS across Jerome County operates in a cohesive structure despite containing only one licensed agency solely based in the county. The county isn't experiencing growth with the same rapidity see elsewhere and as such, recruiting personnel will continue to be a priority and likely difficult to accomplish.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** EMS agencies within the county consider themselves sustainable. A specific numerical value wasn't provided for the non-transport agency.
- **EMS Agency Financial Situation:** Departments consider themselves financially stable with sufficient funds to sustain day-to-day operations. The budget growth necessary to add additional full-time personnel or to provide benefits that may help recruit/retain part time employees has not occurred.
- **EMS Agency Communications Strategy and Outreach:** Due to the nature of the region, county citizens are aware and involved with departments. There isn't an intentional or consistent communication and outreach plan in place.
- **Community View of EMS Agencies:** EMS is viewed as a necessary service & is supported by citizens of Jerome County.
- **Elected Official Support of EMS Agencies:** There is a generally positive sentiment regarding the support of EMS within the county government.
- **Agency & System Response Outlook:** The county's fire department reported an "unsure" outlook for the future of EMS in Jerome County. While it is believed they have community support and will to continue to provide 911 responses, it is recognized there are risks associated with the current reliance on contracted services.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** EMS transport is provided by a single career ALS agency who is contracted through a non-Jerome County entity. EMS support response is from a combination fire based first response department. This department does have around the clock career personnel in stations to respond.
- **Service Delivery Partners:** Each agency identifies the citizens, co-responding agencies, and county and city government as being their strongest partners when it comes to delivery of service.
- **Medical Direction:** Medical direction is available and accessible by all departments. Non transporting agencies interact with medical direction minimally, while agencies who offer transport service report having more interaction and involvement from medical direction.
- **Communications & Interoperability:** It is reported that radio operations and communications are consistent and reliable.
- **Mutual Aid System and Agreements:** There are no written mutual aid agreements in place. There is a verbal understanding that requests for aid will be accommodated.

- **Community Health EMS (CHEMS):** There are no active CHEMS programs in the county, though MVP operates a program, but it does not extend into Jerome County.

- **Patient Care Documentation System:** Charting and run reports for the non-transport agency is documented using the state sponsored IGEMS-PCR interface. The contracted transporting agency documents patient care reports through a separate electronic Patient Care Report (e-PCR) software, although this data is reported to the Bureau.

4.2.1.3. Response Overview

- **Level(s) of Service:** The county receives full-time ALS coverage from a transport agency contracted from an out of county while BLS first-response is provided by a single fire-based agency.

- **Agency Response Concerns:** There is limited concern regarding availability for a timely response with current call volumes.

- **Helicopter Response & Utilization:** Overall the county makes limited use of air medical response due to the proximity to a transport destination. Personnel can request air response if they believe it is appropriate.

- **Factors Impacting Response Time:** All agencies reported the same predominant factor impacting their response time - simultaneous calls.

- **Response to Public Lands:** Information on response to public lands was not offered.

4.2.2. Workforce & Resource Assessment

The county is staffed with a mix of scheduled and unscheduled personnel from two agencies. The ability to have scheduled personnel positively impacts the ability to have responders enroute and on scene in a reasonably reliable time frame in most circumstances.

4.2.2.1. Staffing Overview

- **Staffing Structure:** EMS response is provided by FT, scheduled personnel at all times. Simultaneous responses or extraordinary rescue situations result in on-call personnel being paged for coverage.

- **Responder Average Age:** Average age of responders was not provided.

- **Staffing Numbers:** The fire-based agency reported 19 licensed EMS personnel on their roster, 13 are scheduled and compensated. EMS transport is staffed within the county by a FT career ALS transport service.

- **Staffing Concerns:** The primary staffing concern is the inability of the agency to provide competitive wages relative to the increasing cost of living in the region.

- **Staffing Strengths:** Both transport and non-transport agencies have scheduled and compensated personnel available in stations for response at all times.

- **Recruitment & Retention:** Recruitment and retention present challenges for agencies in the county as qualified personnel can receive higher wages at other agencies within the region. Part-time fire department personnel receive hourly pay only while responding and receive no other benefit or compensation.

4.2.2.2. Training & Education Overview

All agencies offer in-house training and refresher courses. They often conduct cross-departmental training to support collaboration and interoperability.

4.2.2.3. Facilities

- **Station Location (s):** The county has two primary ambulance stations which are co-located near the fire department facilities.

- **Station Condition(s):** There is a wide range of facility conditions - from nearly new to aged and needing substantial maintenance in the new future.

- **Facility Needs:** The number of stations meets demand, at this time, however the agency reports the desire to remodel an older fire station to meet the needs of future staffing.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** In general, EMS agencies feel their equipment is adequate to meet the demands of day-to-day operations. Agencies are able to obtain supplies for EMS without any significant challenge or shortfall.

- **Condition:** Broadly speaking, agency equipment is in working condition.

- **Funding:** Funding primarily comes from the county for the fire-based, non-transport service and via the hospital and county contract for transport service. Grant monies have been used for communication equipment.

- **Needs/Shortages:** No agency notes a significant challenge, need, or shortage when it comes to equipment or supplies necessary to respond.

4.2.3. Financial Overview

The agencies providing EMS in Jerome County are able to budget for fixed costs and continue operating at their current staffing levels. However, personnel expenses make up the majority of all budgets, and will likely require on-going increases with no significant change to revenue or funding predicted. As such, long-term financial sustainability is in danger, which may leave Jerome County's EMS agencies unable to adapt to population growth and subsequent demands.

4.2.3.1. Expense Overview

- **Personnel Expenses:** No data shared.
- **Capital Expenses:** The department has requested a budget for the purchase of a new ladder truck, approximately a $1.8 million dollar purchase.

4.2.3.2. Revenue Overview

All EMS billing and revenue collection is performed by the transporting agency.

- **Anticipated Carryover:** The presence of a carryover fund wasn't communicated.

4.2.4. Resource Assessment Additional Factors

Overall, Jerome County has a reliable, and currently sustainable, EMS response due to the contract services of a career ALS agency based in Twin Falls County. Non transport agencies are supported by the county budget. As the contracted EMS transport service is classified as hospital-based, no agency responding within the county will have the opportunity to participate in Ground Emergency Medical Transport (GEMT) reimbursement, a federal Medicaid program.

REFERENCE LIST

[1] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16053&IndicatorID=17

[2] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16053&IndicatorID=5

[3] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=18

[4] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=19

[5] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=100039

[6] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=9

[7] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16053&IndicatorID=100041

[8] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=100013

[9] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved July 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=10

LINCOLN COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) in Lincoln County are provided by two separate entities - a tax district-based department and a private, non-profit, non-transport organization. The highest level of service in the county is Advanced EMT/Intermediate Life Support (AEMT-ILS). When Advanced Life Support (ALS) treatment or transport is required, it is provided by outside agencies responding from Jerome County to the south or Gooding County to the west. The county contains no hospital emergency service within its borders and only has one primary care physician as of 2020. [1] Timely access to emergency care is provided via 911 and transport out of the county. Coverage is provided twenty-four hours per day, seven days per week, by one ambulance crew who respond out of a single station in Shoshone. There is no second, staffed ambulance or other on-shift personnel. Simultaneous 911 calls for service results in an on-call crew being paged. This staffing model leads to an increased response time but given the county's low population and call volume it has yet to be a persistent, meaningful problem worth committing the necessary capital to fund additional resources.

Potential large-scale projects in the clean energy space would temporarily increase both the travel and population within the region. This represents the county's only likely growth, as it currently ranks fortieth out of forty-four counties in terms of population growth from 2010 – 2022. [2] This type of growth and industrial projects have the potential to drastically stretch EMS resources in the region - both local ground transport and the larger geographic demand for medical flight services.

Strengths	Opportunities
• Full-time career EMS transport service • Local hospital partnership and support • Community Health EMS (CHEMS) program	• CHEMS program as a recruitment and retention tool
Challenges	**Threats**
• Utilization of on-call personnel for additional staffing	• Interfacility transports strain 911 response • No budget for anticipated increase in scheduled/compensated positions

Table A: Lincoln County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. County Indicators

2.1. Demographics

Lincoln County is a rural, low-population, agricultural county in south central Idaho. The largest city and county seat is Shoshone. The county contains four major travel routes - US26, US93, ID75, and ID24. U.S. Highway 26 connects Shoshone to Gooding County to the west and departs the north central area for Blaine County. U.S. Highway 93 connects Shoshone to Jerome County to the south. Idaho State Highway 75 leaves Shoshone traveling north, connecting to Blaine County and the Wood River Valley. Idaho State Highway 24 connects Shoshone to the east with Dietrich. The eastern part of the county is extremely remote, with only a single thoroughfare traveling through the southeastern part of the county.

Demographic	2010	2020	2022
Population	5,208	5,127	5,329
Land Area	1,201.41 sq mi	1,201.36 sq mi	1,201.36 sq mi
Per Capita	4.3 PPSM	4.3 PPSM	4.4 PPSM
PPSM: *People per square mile*			

Table B: Lincoln County Population & Geography

2.2. Economics

The farming industry is the primary economic driver in the county, employing 24.1% of the workforce. [3] The only other industry employing a double-digit percent of the labor force is the Government at 18.8%. As of 2021, 58.7% of the population was between the ages of 18 and 64, matching the exact average across the state. The labor force participation rate was 67.3%, ranking fifth statewide. [4]

Total housing units rank twenty-third out of forty-four counties with 1,951, but the value of housing is forty-second at $156,700. Regarding housing affordability, the county comes in thirty-third, with the fair market rent for a two-bedroom residence being $825. [5, 6] This equates to 1.8 full-time minimum wage jobs needed to afford fair market rent or a housing wage of $15.87/hour to meet the housing wage standard defined by Idaho Indicators.

According to MIT Living Wage data, a household with two-working adults and two children needs a gross annual income of $91,704. [7] In contrast, the median household income in the county as of 2021 ranked thirtieth across the state at $61,681. [8]

Metric	Data
Total Population (2022)	5,329
Median Age	36.7 years old
Poverty Rate (2021)	11.3%
Number of Jobs (2021)	2,602
Average Annual Wage per Job (2021)	$44,717
Unemployment Rate (2023)	4.4%

Table C: Lincoln County Economic Factors

2.3. Social Determinants of Health

Overall, the county has limited access to healthcare. There are no hospitals or urgent care facilities within the county. Consistently, the county is in the bottom group of counties regarding state County Health Rankings: 41st in Health Outcomes and Factors and 40th in Clinical Care. [9]

The county consistently tracks around double both the state and national average for the number of people uninsured. 20% of residents under 65 years old have no health insurance (compared to 13% for Idaho and 11% nationwide), and 10% of residents under 19 years old have no health insurance (compared to 5% for Idaho, 6% nationwide). [10] Specifically for the rates of those under 18 years old without insurance, the county ranks fourth highest in this area when compared across the state.

The poverty rate broadly follows the trends of the state, running 0.5% above the state average as of 2021, ranking it 28 out of the 44 counties. [11]

2.4. Indicator Impacts to EMS

Lincoln County lacks significant draws in employment, creating challenges for EMS operations. Currently, the hourly EMS wages do not meet the Living Wage standard outlined by MIT and Idaho Indicators for Lincoln County. This wage gap and the lack of a county or private employee health insurance program will perpetuate hardships in recruiting and retaining employees. Due to lower call volume when compared to agencies across the state, the cost to add additional service capabilities may outweigh the added benefit. This financial reality contrasts with an aging population that has no immediate access to primary care or emergency hospital care within the county's borders. The projected increase in demand for EMS response will continue to strain a county that currently has only six full-time staff members and relies heavily on part-time and the availability of on-call personnel.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Lincoln County Ambulance District responded to 609 calls for service in 2022, with 290 of those calls resulting in patient transport. The agency does not engage in interfacility transfers. The biggest challenge for response in the county continues to be simultaneous calls, a direct result of only staffing one full-time crew. A simultaneous call must either be responded to by an on-call crew, or the county must request mutual aid from a neighboring county's EMS agency.

Dietrich Quick Response Unit (QRU) responded as a non-transport unit to 67 calls for service in 2022, with 44 requiring EMS transport from another agency.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Gooding County EMS	*7*	*8*	**15**	*5*	*10*	**15**
Lincoln County Ambulance District	*195*	*204*	**399**	*210*	*201*	**411**
Magic Valley Paramedics	*14*	*5*	**19**	*29*	-----	**29**
Ambulance Total	*216*	*217*	**433**	*244*	*211*	**455**
Dietrich QRU	-----	*21*	**21**	-----	*40*	**40**
Wood River Fire & Rescue	-----	-----	**-----**	-----	*3*	**3**
QRU Total	-----	*21*	**21**	-----	*43*	**43**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Lincoln County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Dietrich QRU	*4 min*	*5 min*	**9 min**	-----	**42 min**
Gooding County EMS	*2 min*	*15 min*	**17 min**	**35 min**	**88 min**
Lincoln County Ambulance District	*3 min*	*8 min*	**11 min**	**57 min**	**109 min**
Magic Valley Paramedics	*1 min*	*15 min*	**16 min**	**34 min**	**69 min**
Wood River Fire & Rescue	*1 min*	*32 min*	**33 min**	-----	**67 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Lincoln County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

Lincoln County medical emergencies are handled by two agencies, Lincoln County Ambulance District (LCAD) and Dietrich QRU. LCAD is the lone transport agency in the county. Dietrich QRU responds as a supporting EMS entity to calls within the county's eastern portion but has no transport capabilities.

4.1.1. Public Safety Answering Point (PSAP) Overview

911 calls in Lincoln County are dispatched via Southern Idaho Regional Communications (SIRCOMM) in Jerome, Idaho, the region's Public Safety Answering Point (PSAP). Calls made to 911 are routed directly to SIRCOMM, which runs the information through their Computer Aided Dispatch (CAD) system to generate a response. SIRCOMM uses Emergency Medical Dispatch (EMD) qualified personnel and Medical Priority Dispatch Software to triage and dispatch appropriate medical calls.

4.1.2. EMS Agency Overview

Lincoln County EMS response is provided by one AEMT/ILS transport agency and one non-transport quick response unit. SIRCOMM handles all dispatching. Local fire and law enforcement resources are available for aid but are not part of a typical EMS response for this area.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Dietrich QRU	Response Non-Transport	BLS	Unscheduled	Uncompensated
Lincoln County Ambulance District	911 Response Transport	ILS	Scheduled	Compensated

Table F: List of EMS Agencies Located in Lincoln County

4.1.2.1. Lincoln County Ambulance District Overview

LCAD is a public EMS agency funded partially by a county-wide ambulance taxing district. It is staffed by seven full-time career personnel supplemented by an additional 27 part-time and on-call personnel. Scheduled for 24-hour shifts, and responding out of one station in Shoshone, the agency is licensed at an AEMT/ILS level. Local fire and law enforcement services can support EMS response and service upon request. In most circumstances, this is a single dispatch system, meaning an ambulance responds without the automatic dispatch of additional resources.

4.1.2.2. Dietrich Quick Response Unit Overview

Dietrich QRU is a private, non-profit agency staffed and managed by five volunteer licensed EMS personnel. No funding is provided by the county taxing district, municipality, hospital, or county entity. Capital for operations comes entirely from donations, fundraising, and grants. Personnel are compensated per-call and will schedule on-call times. When no volunteers are available, this information is communicated to LCAD personnel who then respond to the area without the first-response capabilities of the unit.

4.1.3. Hospital Access Overview

There are no hospitals or free-standing emergency departments in Lincoln County. All EMS calls result in transport to neighboring Gooding County or Twin Falls County. Any time-sensitive emergency or critically ill patient must be transported to St. Luke's Magic Valley in Twin Falls, a 26-mile transport from Shoshone. The emergency department at North Canyon Medical Center in Gooding County, 16 miles from the ambulance station, is part of a critical access hospital with minimal bed capacity and limited advanced medical intervention capabilities.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

Agencies in Lincoln County operate with the limited resources at their disposal. Due to the county's smaller population, minimal growth, and lack of in-region providers, the county will likely continue to face challenges when offering additional or enhanced EMS services. With

limited volunteer numbers, Dietrich responds to calls in their area as available but is not able to consistently provide first response capabilities or personnel.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability/Sustainability:** One agency within the county has a self-reported sustainability rating of 80/100.
- **EMS Agency Financial Situation:** All agencies in Lincoln County self-identify as significantly underfunded. Taxing district funds are utilized by the transport agency, the non-transport QRU relies on donations, grants, and collaboration with the other agency.
- **EMS Agency Communications Strategy and Outreach:** No agency in the county has a communications or outreach strategy to engage the public. They don't have ongoing projects or initiatives to share their success or struggles outside of the immediate stakeholder sphere, having no website nor social media presence.
- **Community View of EMS Agency:** EMS is viewed as a necessary service & is viewed as strongly supported by the citizens of Lincoln County.
- **Elected Official Support of EMS Agencies:** There are mixed feelings regarding support of EMS in the county. Entities with public funding, career/paid providers, and engagement with stakeholders feel very well supported. Those entities relying on volunteer or on-call providers, operating as non-profits, feel extremely undervalued both as providers and as a resource.
- **Agency & System Response Outlook:** Departments report a tentative yet optimistic outlook for the future. Agencies believe they have the support to continue to provide 911 responses, but do see impediments to expanding service, in terms of additional staffing and certification level.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** EMS is provided by a publicly funded transport entity with an Ambulance Taxing District and a non-profit volunteer non-transport service reliant on other funding strategies.
- **Service Delivery Partners:** EMS transport agency has strong involvement and partnership from medical direction, county commissioners, and other 911 responding agencies. Non transporting entities don't share the same feelings of support, specifically from other 911 responding entities and county officials.
- **Medical Direction:** Survey response rated medical direction involvement as of 80/100 in regard to training, and 100/100 with it comes to quality assurance and chart review.

- **Communications & Interoperability:** It is reported that radio operations and communications are in good, reliable, working order and allow for communication when the situation demands.

- **Mutual Aid System & Agreements:** Entities in the region have a written mutual and automatic aid agreements in place with neighboring agencies.

- **Community Health EMS (CHEMS):** There is a functioning CHEMS program in the county. It is unknown the long-term viability of CHEMS in the region, due to the county's CHEMS program being funded by grants requiring on-going financial support through annual awarding of grant funding.

- **Patient Care Documentation System:** Charting is done through the state sponsored IGEMS-PCR interface for all entities in the county.

4.2.1.3. Response Overview

- **Level(s) of Service:** There is one AEMT/ILS EMS transport service within Lincoln County and one Basic Life Support (BLS), non-transport agency.

- **Agency Response Concern:** There have been less than ten occasions where there was difficulty responding to 911 incidents over the last year.

- **Helicopter Response & Utilization:** Requesting Helicopter EMS (HEMS) can be initiated on initial dispatch but is most often left to the discretion of responding personnel based on the call location and patient presentation.

- **Factors Impacting Response Times:** The single biggest factor affecting response times are simultaneous calls for service. This was followed by weather, location of call, and the time of day.

- **Response to Public Lands:** Overall there are few calls to public lands and recreational facility areas. When these calls do occur, the response is impacted by the lack of technical rescue apparatus should the patient be in a remote location. This impacts the local services' ability to both access these patients and appropriately transport them, leading to reliance on HEMS.

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** There is a single career agency and a single volunteer agency in the county. The career agency personnel are scheduled for 24-hour shifts with on-call personnel available as needed. The volunteer agency does have an on-call schedule, but coverage is not guaranteed.

- **Responder Average Age:** The average age of career providers is 35-44. The average age of volunteer responders is noted to be older, but a specific numerical response wasn't provided by this entity.

- **Staffing Numbers:** There are a total of two EMRs, 10 EMTs, and eight AEMTs licensed and responding in the county.

- **Staffing Concerns:** General staffing concerns exist with a lack of qualified, willing additional personnel seeking EMS employment within the county.

- **Staffing Strengths:** The personnel who are currently operating for the departments are dedicated and committed to their job and community.

- **Recruitment & Retention:** The single biggest benefit which would increase recruitment/retention of staff is paid, comprehensive health insurance. The only healthcare benefit is a stipend to offset insurance costs which are acquired by other means. There are no medical benefits offered through the agencies. Should there be a need to increase personnel or seek to offer a more competitive hiring environment, significantly more investment would be required either directly from the county or via tax increases.

4.2.2.2. Training & Education Overview

Ongoing training and education are offered through a third-party, online EMS education company. This program is paid by the county entity for the career agency. The career agency also uses the QA/QI process as an opportunity for education based on calls the department has experienced. All agencies attend conferences and outside training activities when possible.

4.2.2.3. Facilities Overview

- **Station Location(s):** EMS transport response is from an EMS station in Shoshone as well as Richfield, QRU responders lack a dedicated station, responding from their homes and/or places of work.

- **Station Condition(s):** Facilities currently do not meet the agency's need in regards to condition.

- **Facility Needs:** This entity is in the process of building new crew quarters, which are much needed.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy & Condition:** Overall equipment and supply needs are at an adequate level in age/condition, functionality, and use appropriateness, allowing providers to respond appropriately and safely.

- **Funding:** All agencies in the county note having received grants for EMS equipment and supplies.

- **Needs/Shortages:** Some agencies in the county report equipment needs, mainly ambulances, they are unable to meet due to their funding status.

4.2.3. Financial Overview

Without additional funding, agencies in Lincoln County will continue to struggle to maintain operations, much less progress or increase the level of service. Call volume and subsequent billing will not cover these additional expenses as the costs to provide an appropriate and reliable response continue to increase far beyond the funding mechanisms currently in place.

4.2.3.1. Expense Overview

- **Personnel Expenses:** One agency's anticipated annual EMS personnel expense is $400,000.

- **Operational Expenses:** The career agency expects EMS operations costs to be approximately $550,000 for the current year. The volunteer entity functions off a $4,000 annual budget that is all from donation and fundraiser.

- **Capital Expenses:** Departments report planning capital purchases amounting to $50,000 for the year.

4.2.3.2. Revenue Overview

Revenue for EMS operations is $290,000 for a year which all comes from 911 EMS transport billing. Based on the provided data, the revenue from EMS billing accounts for 52% of the funding needed for the expected total operational cost. The Ambulance Taxing District generates funding at a levy rate of four mils, insufficient to maintain operations. Lincoln county funds the remaining deficit, $80,000 -100,000 per year as currently structured.

Anticipated Carryover: Due to tight budgeting every year, no carryover or budget reserve is available.

4.2.4 Resource Assessment Additional Factors

The sentiment is EMS will continue at the current level, due to limited call volume, limited funding, and lack of transport destinations within the county. The county is unable to afford full-time ALS service due to the aforementioned factors. LCAD has received an $80,000 grant to provide CHEMS services to their residents, unfortunately without continued funding or revenue streams, this program is not sustainable.

REFERENCE LIST

[1] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=29

[2] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=1

[3] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=17

[4] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=5

[5] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=18

[6] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=100039

[7] Living Wage Calculator - Living Wage Calculation for Lincoln County, Idaho. (n.d.). Livingwage.mit.edu. Retrieved June, 2023, from https://livingwage.mit.edu/counties/16063

[8] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, fromhttp://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=9

[9] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=100041

[10] Indicators Idaho. (n.d.). Indicatorsidaho.org. June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=100013

[11] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved November 3, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16063&IndicatorID=10

MINIDOKA COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) in Minidoka County is provided by one hospital-based 911 transport agency, Emergency Response Ambulance (ERA). Three separate Basic Life Support (BLS) fire-based entities support the transport service. The highest level of service in the county is Advanced EMT/Intermediate Life Support (AEMT/ILS). If Advanced Life Support (ALS) treatment or transport is needed, mutual aid is requested from Cassia County to the south, Twin Falls County to the west, or via air ambulance. Emergency Department services are provided through Minidoka Memorial Hospital (MMH), a Critical Access Hospital (CAH) located in Rupert. Although MMH is owned and operated by the County, there is little to no direct oversight or involvement in day-to-day hospital or EMS operations by the County and there is no dedicated ambulance nor hospital taxing district. Coverage is provided twenty-four hours per day, seven days per week, by one ambulance crew based out of a single station in Rupert. A second call for service results in an on-call crew being paged or a request for transport services responding outside the county. To date, calls have been adequately handled within the current structure, but this type of model leads to increased response time as system demand increases.

Strengths	Opportunities
• Full-time career EMS transport service	• CHEMS program could be created and supported by the hospital
Challenges	**Threats**
• Agencies ineligible for GEMT reimbursement	• Increasing IFT volume strains 911 response capabilities • No budget for anticipated increase in scheduled/compensated positions

Table A: Minidoka County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Minidoka is a rural, primarily agriculture-based county located in south central Idaho. The largest city and county seat is Rupert. The county contains three major travel routes – Idaho State Highway 24, Idaho State Highway 25, and Interstate 84. The county's southern border contains Interstate 84 and should continue to be the epicenter of growth for the region. Idaho State Highway 24 enters through the county's west side and connects Dietrich in neighboring Lincoln County to the city of Minidoka on the eastern border. Idaho State Highway 25 leaves the city of Minidoka, traveling southwest, connecting to Rupert, I84, and into Burley across the southern county line. Interstate 84 travels along the county's southern border, connecting Minidoka to Boise, Mountain Home to the west, and Pocatello or Utah to the east.

Demographic	2010	2020	2022
Population	20,069	21,613	22,194
Land Area	757.59 sq mi	757 sq mi	757 sq mi
Per Capita	26.5 PPSM	28.6 PPSM	28.6 PPSM
PPSM: *People per square mile*			

Table B: Minidoka County Population & Geography

2.2. Economics

The bulk of employment in Minidoka County is spread somewhat evenly across three industries: government at 13.6%, agriculture at 12.8%, and manufacturing at 11.8%. No other industry accounts for more than 8% of employment. [1]

As of 2021, 55% of the population was between the ages of 18 and 64, tracking just over 3.7% less than the age demographics of the broader state. The labor force participation rate was 63.6%, ranking seventeenth across the state.

Total housing units rank 35th out of 44 counties with 8,189 total units. [2] The value of housing is 35th at $170,500. [3] Regarding housing affordability, the county comes in 41st, with fair market rent for a two-bedroom residence at $758. [4] This equates to 1.8 full-time

minimum wage jobs needed to afford fair market rent or a housing wage of $14.58/hour to meet the housing wage standard defined by Idaho Indicators.

According to MIT Living Wage data, a two-working adult two-child household needs a gross annual income of $90,662. [5] In contrast, the median household income in the county as of 2021 ranked fifteenth across the state at $65,892. [6]

Metric	Data
Total Population (2022)	22,194
Median Age	35.0 years old
Poverty Rate (2021)	-----
Number of Jobs (2021)	11,608
Average Annual Wage per Job (2021)	$46,015
Unemployment Rate (2023)	3.1%

Table C: Minidoka County Economic Factors

2.3. Social Determinants of Health

Minidoka County has five primary care physicians (PCP), a ratio of 2.3 PCPs per 10,000 inhabitants, well behind the 6.3 ratio in Idaho overall. The county ranks thirty-first among Idaho counties for health outcomes and factors and 26th for clinical care access. [7]

The county consistently tracks above state averages for the number of uninsured people. 18% of residents under 65 years old have no health insurance (13% for Idaho, 11% for the US), and 7% of residents under 19 years old have no health insurance (5% for Idaho, 6% for the US). [8]

The poverty rate in Minidoka County was 13.9% as of 2021. The average across Idaho was 10.8%. Minidoka has the eighth-highest poverty rate in the state of Idaho. [9]

2.4. Indicator Impacts to EMS

Minidoka County faces long-term challenges when considering Idaho Indicators data and the impact on EMS. With limited access to care and only the presence of a critical access hospital, all specialty care must occur outside of the county. This impacts 911 service delivery as the transporting EMS entity also provides interfacility transport, moving patients from MMH to other appropriate care facilities.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

EMS Call volume is relatively low, averaging 4.5 calls/day through 2021 and 2022. Considering the county has just one scheduled crew per day, future growth and demand will amplify the strain placed on the system by simultaneous calls. The other major factor affecting system demand is interfacility transfers. As a hospital-based agency, part of ERA's mission is to support the facility by transferring out those patients who need more definitive care to other facilities.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Emergency Response Ambulance	*1,013*	*590*	1,603	*962*	*623*	1,585
Intermountain Cassia Regional Hospital Paramedics	*29*	*17*	46	*34*	*10*	44
Ambulance Total	*1,042*	*607*	1,649	*996*	*633*	1,629
Burley Fire Department	-----	*36*	36	-----	*42*	42
Minidoka County Fire Protection District	-----	*329*	329	-----	*329*	329
West End Fire & Rescue	-----	*234*	234	-----	*234*	234
QRU Total	-----	*599*	599	-----	*605*	605

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Minidoka County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Burley Fire Department	*2 min*	*6 min*	8 min	----	25 min
Emergency Response Ambulance	*2 min*	*8 min*	10 min	37 min	84 min
Intermountain Cassia Regional Hospital Paramedics	*1 min*	*9 min*	10 min	25 min	60 min
Minidoka County Fire Protection District	*2 min*	*5 min*	7 min	----	63 min
West End Fire & Rescue	*3 min*	*4 min*	7 min	----	45 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Minidoka County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

Minidoka County's pre-hospital medical emergencies are responded to by a single hospital-based EMS entity, ERA, a division of the only hospital in the county. The county contracts with the hospital to provide EMS transport using county general funds. Additional response comes from one of three non-transport BLS fire-based agencies. If additional transport units or ALS services are needed, they are predominantly requested from Cassia County eight miles to the south through the region's mutual aid agreement.

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls for 911 service come through Minidoka County Sheriff's Office, the county's Public Safety Answering Point (PSAP) who will then dispatch the appropriate response via radio page. No Emergency Medical Dispatch qualified personnel or medical priority dispatch software was being used within the facility at the time of this review. The agencies incur no cost for dispatch services at this time.

4.1.2. EMS Agency Overview

EMS Response in the county is provided by four agencies - a single AEMT/ILS transport entity and three BLS non-transport fire departments. The only agency with career staffing for EMS calls is the transport entity while each of the fire departments function with a combination staffing model.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Emergency Response Ambulance	911 Transport	ILS	Scheduled	Compensated/ Career
Minidoka County Fire Protection District	911 Non-Transport	BLS	Unscheduled	Compensated/ On-Call Compensated/ Per-Call
Rupert City Fire-Rescue	911 Non-Transport	BLS	Unscheduled	Compensated/ On-Call Compensated/ Per-Call
West End Fire-Rescue	911 Non-Transport	BLS	Unscheduled	Compensated/ On-Call Compensated/ Per-Call

Table F: List of EMS Agencies Located in Minidoka County

4.1.2.1. Emergency Response Ambulance Overview

Emergency Response Ambulance (ERA) is a private, hospital-based ILS transport agency contracted by Minidoka County to provide EMS service. They are overseen by the hospital board, which works with the county to ensure the contracted service meets the community's needs. ERA has both full-time and part-time personnel. There are seven full-time staff and an additional twenty-two part-time or as-available employees. They respond out of one station located at the hospital in Rupert.

4.1.2.2. Minidoka County Fire Protection District Overview

MCFPD is an unscheduled compensated on-call/per-call department providing fire protection and EMS assistance. They have twenty-three certified EMS personnel on the roster, only one of which is full-time.

4.1.2.3. Rupert City Fire-Rescue Overview

RCFR is an unscheduled compensated on-call/per-call department providing fire protection and EMS assistance.

4.1.2.4. West End Fire-Rescue Overview

WEFR is an unscheduled compensated on-call/per-call department providing fire protection and EMS assistance.

4.1.3. Hospital Access Overview

The lone hospital in the county is Minidoka Memorial Hospital, a critical access facility. They have a staffed emergency room and can receive EMS patients. Patients requiring a higher level of care or specialty care are moved to a larger facility generally via ground transport, most often to St Luke's Magic Valley, 44 miles to the west.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

EMS response is provided by a combination of four separate departments, including three non-transport Fire agencies. Each Fire department has a defined response area and follows those borders strictly. The lone ILS transport agency is the only entity operating across the county.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** EMS agencies within the county have an average sustainability rating of 66/100, ranging from 61 to 71.
- **EMS Agency Financial Situation:** Agencies report breaking even or operating at a financial deficit depending on the year.
- **EMS Agency Communications Strategy and Outreach:** No agency reports having a written or adopted communication or community outreach strategy that is viewed as effective or productive.
- **Community View of EMS Agencies:** EMS is viewed as a necessary service & is supported by citizens of Minidoka County.
- **Elected Official Support of EMS Agencies:** There is a positive sentiment regarding EMS in the county. All report receiving support via their respective fire district, the hospital board, and county commissioners.
- **Agency & System Response Outlook:** Departments report optimistic outlook for the future. Agencies believe they have the support to continue to provide 911 responses, but do see impediments to expanding service, in terms of additional staffing and certification level.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** EMS is provided by a single ILS transport agency supported by multiple volunteer BLS fire departments.
- **Service Delivery Partners:** Corresponding agencies, the hospital, and respective oversight boards are sighted as the biggest partners in service delivery across the county.

- **Medical Direction:** Respondents to the survey rated medical direction involvement as an average 74/100 in training and 73/100 in chart review. There is a divergence in perspectives with regards to medical direction, as the transport agency rated a 98/100 in both categories.

- **Communications & Interoperability:** It is reported that radio operations and communications are consistent, reliable, and meeting the needs of agencies at this time.

- **Mutual Aid System & Agreements:** There are agreements in place across the county fire entities, but EMS specific entities report having no written documentation for mutual aid.

- **Community Health EMS (CHEMS):** There are no active CHEMS programs in the county, however all entities are interested in establishing or collaborating on this service in the near future.

- **Patient Care Documentation System:** Charting is done through the state sponsored IGEMS interface for all entities in the county.

4.2.1.3. Response Overview

- **Level(s) of Service:** The county has full time ILS coverage from a single EMS entity. There is non-transport support offered by multiple unscheduled BLS fire departments.

- **Agency Response Concerns:** Departments who rely on unscheduled personnel report a higher concern when it comes to the ability to respond, although non-transport agencies are auto dispatched, they do not automatically respond to all EMS calls. Agencies who have career personnel, who work out of a station, report having very little concern.

- **Helicopter Response & Utilization:** Personnel can request air response if they believe it is appropriate. Overall helicopter use is greater in comparison to other areas of the state. This is due to not having ALS ground transport within the county and the presence of multiple air medical services within close proximity.

- **Factors Impacting Response Times:** The two primary challenges impacting response times are simultaneous calls and personnel shortages.

- **Response to Public Lands:** Agencies report this specific response type having minimal impact in the county as they are extremely infrequent. Of note, any response that requires watercraft or entry into a water way by boat requires the response of law enforcement. No fire department or EMS agency has in-house water rescue apparatus.

4.2.2. Workforce & Resource Assessment

Non-transport agencies are primarily staffed by unscheduled personnel who respond from wherever they are in their day at the time of an incident. The full-time transport agency does staff a FT ambulance and would like to expand their facilities in order to house a second two-person crew.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Transport EMS response is provided by scheduled/on shift personnel at all times. Simultaneous response, inter-facility transfer requests, standbys, or lengthy rescue situations result in on call personnel being paged for coverage. Non-transport agencies have unscheduled personnel who respond to assist on EMS calls.

- **Responder Average Age:** Transport personnel ranges between 35 - 44 years old while the average for non-transport personnel ranges between 25 - 34 years old.

- **Staffing Numbers:** Responding agencies report a total of forty-five EMS certified personnel across their rosters. Of those, seven are full-time scheduled compensated staff members.

- **Staffing Concerns:** The primary concern is the small number of full-time scheduled personnel in the county. This leads to a high reliance on a few key individuals for coverage. This is compounded by facing difficulty when it comes to recruiting new personnel. The other major concern is with the unscheduled rosters for non-transport agencies. When these entities are paged for response, they aren't required to respond, instead it is dependent on their personnel's availability at the time of call.

- **Staffing Strengths:** Departments report strong support and dedication from the personnel who do engage with their respective agencies on a regular basis.

- **Recruitment & Retention:** Both recruitment and retention present challenges for these departments. Agencies compete for providers with many other entities outside the county, so it is always a competitive environment for staff.

4.2.2.2. Training & Education Overview

All agencies offer in-house training and refresher courses. They often conduct cross-departmental training to support collaboration and interoperability.

4.2.2.3. Facilities Overview

- **Station Location:** The county has one ambulance station, co-located at the hospital. Two of the three fire entities respond from a single station located within their district, one in Rupert, another in Paul, while the third department has three stations throughout their district, notably a second, distinct station also located in Rupert.

- **Station Condition:** Respondents report no adverse conditions of stations.

- **Facility Needs:** Broadly, agencies desired additional crew sleeping quarters to either add additional personnel and units or to support scheduled 24/7 staffing.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** EMS agencies generally feel their equipment is adequate to meet the demands of day-to-day operations. They are able to obtain supplies for EMS without any significant challenge or shortfall.

- **Condition:** Broadly speaking equipment is in working condition. There are items nearing "end of life" usability and will need to be replaced, for no other reason than normal use.

- **Funding:** Funding via grants has been sought for larger equipment purchases - medical monitoring equipment & handheld radios.

- **Needs/Shortages:** EMS responding departments having no immediate needs or shortages at this time. The transporting entity in the county attributes this to the support they receive as part of the hospital.

4.2.3. Financial Overview

Overall, these departments are able to meet their fixed costs to continue operating at this time. Personnel expenses make up the majority of all budgets, and as departments look to add scheduled/compensated personnel, these costs are likely to grow significantly without any significant change to revenue. The prospect of long-term financial sustainability would be expected to diminish over time.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is reported that personnel expense is approximately $768,000 per year. This is indicative of a small number of compensated personnel on agency rosters across the county.

- **Operational Expenses:** The responding transport agency reported annual budgeted operating costs of $75,000.

- **Capital Expenses:** Departments report having no plans for capital purchases in the near-term future.

4.2.3.2. Revenue Overview

EMS transporting agencies receive compensation via a contract with the county government to provide service, totaling $2,375,000. They conduct billing for service when transports do occur, reporting annual revenue of $831,250, approximately 31% of the total amount billed. They also bill for interfacility transfers, though that amount was not specified.

Anticipated Carryover: Departments don't anticipate carryover or reserve funds.

4.2.4 Resource Assessment Additional Factors

Minidoka county has a single department providing ILS level EMS transport as well as IFTs with no dedicated tax district, instead relying on county general funds. Three fire-based non-transport departments provide first response with unscheduled/compensated personnel.

Ground Emergency Medical Transport (GEMT) funding, a federal Medicaid reimbursement program, will not benefit any entity in Minidoka County as structured.

An opportunity to create an ambulance taxing district could provide a larger tax base as the county's population grows. Currently the residents of Minidoka County largely depend on the structure and backing of the Critical Access Hospital to provide a reliable, appropriate EMS response.

The value of the three fire-based agencies responding to a combined 605 incidents in 2022 cannot necessarily be measured in quantifiable ways. However, the common challenges faced by these departments will likely require innovation and regional collaboration among all involved parties.

REFERENCE LIST

[1] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16067&IndicatorID=17

[2] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, from http://indicatorsidaho.org/DrawRegion.aspxAction=DrawRankings&RegionID=16000&IndicatorID=18

[3] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, from http://indicatorsidaho.org/DrawRegion.aspxAction=DrawRankings&RegionID=16000&IndicatorID=19

[4] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, from http://indicatorsidaho.org/DrawRegion.aspxAction=DrawRankings&RegionID=16000&IndicatorID=100039

[5] Living Wage Calculator - Living Wage Calculation for Minidoka County, Idaho. (n.d.). Livingwage.mit.edu. Retrieved June, from https://livingwage.mit.edu/counties/16067

[6] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspxAction=DrawRankings&RegionID=16000&IndicatorID=9

[7] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16067&IndicatorID=29

[8] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June , 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16067&IndicatorID=100013

[9] Indicators Idaho. (n.d.). Indicatorsidaho.org. Retrieved June, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16067&IndicatorID=10

TWIN FALLS COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Twin Falls County is the most populous of the South Central AOR and 5th most populated county in Idaho, with the city of Twin Falls containing 58% of the county's population. [1, 2] Interstate-84 crosses just above the northern portion of the county, while Highway 93 serves as a main corridor to Northern Nevada. Emergency Medical Service (EMS) in Twin Falls County is provided by a career hospital-based Advanced Life Support (ALS) transport agency, Magic Valley Paramedics (MVP). Basic Life Support (BLS) non-transport response within Twin Falls city limits is provided by Twin Falls Fire Department (TFFD), a full-time (FT) career department. Responses to outlying areas within the County are assisted by Quick Response Units (QRUs) in Buhl, Castleford, Filer, and Rock Creek, all of which are largely volunteer agencies. MVP also responds as the sole transport agency into Jerome County where a large segment of I-84 creates call demand. They also, when requested, respond into Gooding, Lincoln, and Minidoka counties. MVP services these geographically diverse requests with five 24-hour, and two 12-hour ambulances, in addition to frequent Interfacility Transports (IFTs) from St Luke's Magic Valley (SLMV) to tertiary care centers in Boise and Idaho Falls. This demand places a strain on the service and providers. Retention and recruitment have been a challenge despite pay raises as the cost of living continues to rise as in other areas of the state. County-wide, QRUs report decreases in the number of volunteers, citing a variety of perceived reasons.

Of the 911 non-transport agencies in the county, only one, TFFD, is staffed 24/7 with paid personnel. The availability of each of the more rural QRUs varies by time of day and available personnel.

All EMS agencies within Twin Falls County are signers of a multi-county Memorandum of Understanding (MOU), a testament to the willingness of the area to work together in times of need. The Perrine Bridge, the Snake River itself, as well as many other public lands and

recreation areas within the county present a significant resource challenge to all the local communities and agencies.

There is one Helicopter EMS (HEMS) based at SLMV, one of three HEMS bases in the South-Central AOR. Air medical resources are dispatched within the county by request of field personnel by Southern Idaho Regional Communications (SIRCOM) who rotates a list of nearby resources. Air resources are frequently requested to respond in areas with delayed ALS response times based on dispatch information, resulting in expensive and, at times, medically unnecessary, air transport.

Strengths	Opportunities
• Full-time career ALS transport service • Local hospital partnership and support • Community Health EMS (CHEMS) program	• Regional education collaboration • Wage increases to improve retention
Challenges	**Threats**
• Agencies ineligible for GEMT • Increasing IFT volume strains 911 response capabilities • Relative lack of employee benefits • Recruitment and retention	• Staff burnout • Population and call volume growth outpace system growth • Competing industries and agencies with higher wages

Table A: Twin Falls County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Twin Falls County is no stranger to the growth seen throughout Idaho; however, it is not experiencing the dramatic population influx seen in other areas of the state. Age demographics have remained much the same throughout the years with those over 65 years old accounting for 16.1% of the population, closely mirroring that of Idaho as a whole. [1] The county's residents are less likely that their peers throughout the state to have graduated from high school which may negatively affect availability of those that may be interested in a career in EMS. [1]

Demographic	2010	2020	2022
Population	77,230	90,361	93,696
Land Area	1,921.71 sq mi	1,921.71 sq mi	1,921.71 sq mi
Per Capita	40.2 PPSM	46.9 PPSM	48.8 PPSM
PPSM: *People per square mile*			

Table B: Twin Falls County Population & Geography

2.2. Economics

As of July 1, 2022, there were a reported 36,721 housing units in the county, 70.7% of those owner-occupied, a number slightly lower than the Idaho average. The total number of housing units grew by 11.7% from 2010-2020 while the population grew by 21.3% 2010-2022. This strain on housing has led to an increase in Fair Market Rent to an all-time high of $897 per month in 2022. The Housing Wage for this two-bedroom unit is $17.25 per hour or $35,880 per year. [1]

Metric	Data
Total Population (2022)	93,696
Median Age	36.0 years old
Poverty Rate (2021)	13.4%
Number of Jobs (2021)	55,421
Average Annual Wage per Job (2021)	$44,374
Unemployment Rate (2023)	3.5%

Table C: Twin Falls County Economic Factors

2.3. Social Determinants of Health

Residents of Twin Falls County suffer the same poor access to primary care physicians as the rest of Idaho with 6.5 providers per 10,000. [1] In addition to the hospital in the city of Twin Falls and its allied clinics, Twin Falls County is home to a single Federally Qualified Health Center (FQHC) with multiple locations.

Uninsured rates for those under the age of 65 years old in the county are slightly higher overall than the Idaho state average, 14.1% vs the 2019 state-wide average of 12.7%. [1] EMS billing for the county reflects this statistic, reporting a self-pay percentage of 6%, Medicaid accounting for 26% and Medicare 52.5% of billable ambulance transports.

Poverty rates in Twin Falls County have remained relatively stable for the past 30 years, although the current 13.4% is higher than the Idaho average. [1]

2.4. Indicator Impacts to EMS

As Twin Falls County and the surrounding area has grown, hospital and clinic care has largely kept up with demand, but the same cannot be said for EMS. With over 75% of billing revenue dependent on stagnant Medicare/Medicaid reimbursement rates, a need to increase wages to retain personnel, and the increases in costs for supplies and equipment, EMS is not unique in experiencing the broader challenges of healthcare. Where it is unique is in the dependence on tax revenues that do not keep pace with these demands nor provide for the innovation and improvements in a quickly changing pre-hospital healthcare environment.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

2022 saw a 14% increase over 2021 911 calls in Twin Falls County with a decrease in the percentage of non-transport calls from 23% to 18%. MVP reported completing 808 IFTs in 2022, an increase partially due to increased system demands on the outlying transport agencies.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Magic Valley Paramedics	*6,341*	*1,868*	8,209	*7,605*	*1,764*	9,369
Ambulance Total	*6,341*	*1,868*	8,209	*7,605*	*1,764*	9,369

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Twin Falls County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Buhl Fire Department EMS Division	*3 min*	*5 min*	8 min	----	35 min
Castleford QRU	*10 min*	*8 min*	18 min	----	99 min
Filer QRU	*3 min*	*7 min*	10 min	----	31 min
Magic Valley Paramedics	*1 min*	*8 min*	9 min	29 min	55 min
Rock Creek QRU	*2 min*	*6 min*	8 min	----	40 min
Twin Falls Fire & Rescue	*1 min*	*5 min*	6 min	----	23 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Twin Falls County (2022)

SECTION

4

CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

All calls to 911 within Twin Falls County are answered by Southern Idaho Regional Communications (SIRCOMM), the region's Public Safety Answering Point (PSAP). Any request for EMS within Twin Falls is answered by a second agency, the City of Twin Falls Emergency Dispatch Center, also known as TWINCOMM, who dispatches TFFD. The call is then routed to SIRCOMM who dispatches the appropriate EMS resource(s).

Dispatch fees are proportional to use, MVP reports yearly fees of $129,720, Rock Creek Fire District $3500-4000, while Castleford QRU reported $0 for 2022. Twin Falls FD reports an annual dispatch fee of $1.2 million paid to TWINCOMM.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Buhl Fire Department EMS Division	911 Non-Transport	BLS	Unscheduled	FT career and Compensated volunteer
Castleford QRU	911 Non-Transport	BLS	Unscheduled	Uncompensated
Filer QRU	911 Non-Transport	BLS	Unscheduled	Compensated and uncompensated volunteer
Magic Valley Paramedics	911 Transport	ALS	Scheduled	FT and PT career
Rock Creek QRU	911 Non-Transport	BLS	Unscheduled	FT and PT career; compensated volunteer
Twin Falls Fire Department	911 Non-Transport	BLS	Scheduled	FT and PT career

Table F: List of EMS Agencies Located in Twin Falls County

4.1.2.1. Magic Valley Paramedics Overview

Magic Valley Paramedics is a hospital-based EMS service overseen by St Luke's Magic Valley (SLMV) hospital, responding to 911 calls for service across 2,528 sq miles of both Twin Falls and Jerome counties. The agency is considered hospital-based, though it does receive $225,912 in funds from a county ambulance district, representing 3.3% of the agency's annual budget. In addition to ALS transport, MVP provides an array of services to the surrounding areas, partnering with allied agencies for training, education, and logistical support. Personnel are paid employees of the St Luke's hospital system and consist of 39 paramedics, six Advanced EMTS (AEMTs), and 27 EMTs. 24-hour transport units are housed in the following areas: two in the city of Twin Falls; one in Filer; one in Kimberly; one in Jerome. There are two 12-hour crews are in Jerome and north of the city of Twin Falls. These facilities are rated 37/100 in overall condition with some having no garage for the ambulance.

Interfacility transfers, both to and from SLMV, are a small but significant portion of MVPs call volume and revenue. Administrators admit these ground transfers from the hospital to larger tertiary care facilities in Boise strain the available 911 resources but the alternative, air transportation, is costly and at times, medically unnecessary.

MVP does have a functioning Community Health EMS (CHEMS) program which focuses on post-discharge follow-up, frequent users of the 911 system, and in-home labs. There are

plans to expand into a collaborative crisis response model and the program is working towards this with the support and input of local community partners.

4.1.2.2. Twin Falls Fire Department Overview

TFFD is a BLS agency responsible for both fire and EMS response within the city limits of Twin Falls. Line personnel consists of 42 EMTs, all (FT) career employees responding from a main station, two sub-stations, as well as an airport station (ARFF). TFFD also reports recruitment and retention issues but rate their staffing as 83/100.

EMS response is funded by the department's general budget which is provided by city taxes. TFFD reports an approximate yearly EMS supply cost of $5,000 - $10,000 and does not bill for services. The cost to respond to EMS calls is considered part of the department's overall budget ($7,117,286 FY23) and not separate from fire or rescue services. [3] According to TFFD's 2021 annual report, 68% of the department's calls for service were considered EMS/Rescue. [4]

4.1.2.3. Rock Creek Fire District Quick Response Unit Overview

Rock Creek QRU is the EMS division of Rock Creek Fire District, a BLS non-transport agency responsible for 911 calls within 212 square miles of Twin Falls County as well as 100 square miles within Jerome County. The agency reported 26 personnel to the state EMS Bureau in 2023, a mix of 11 full-time and part-time employees, as well as 15 compensated volunteers. Of these 24 are EMTs, one AEMT, one paramedic.

4.1.2.4 Buhl Fire Department EMS Division Overview

Buhl FD is a BLS non-transport agency who responds to 911 calls in the City of Buhl and surrounding areas, roughly 10,000 citizens within 101 square miles. The agency reported 23 personnel to the state EMS Bureau in 2023, seven of these FT employees, as well as 16 compensated volunteers. Of these, 22 are EMTs, as well as one licensed paramedic that respond from two stations. The department is funded by the City of Buhl as well as the Buhl Rural Fire District.

4.1.2.5 Filer QRU Overview

Filer Fire and Rescue QRU is a BLS non-transport agency that responds to calls within an approximately 132 square mile area within which reside roughly 8,000 citizens. Filer QRU reported 24 personnel to the state EMS Bureau in 2023, with 21 uncompensated volunteers, as well as three compensated volunteers. Of these nine are EMRs, 14 EMTs, and one AEMT. The QRU is the EMS department of Filer Fire-Rescue and is funded by the city fire department as well as a fire district.

4.1.2.6 Castleford QRU Overview

Castleford QRU responds in and around Castleford, a rural area east of the City of Twin Falls. A BLS non-transport agency, personnel are uncompensated volunteers, responding out of one station housing two ambulances. With few calls per year, the agency does not

use a scheduling platform, relying on the availability of their five EMRs and six EMTs, along with one non-EMS licensed driver, to respond to calls for service. Funding for operational costs is obtained through community donations and grants. Recruitment and retention, as well as initial education challenges, have the dedicated volunteers concerned for the future of their ability to maintain adequate response to the area.

4.1.3. Hospital Access Overview

Within Twin Falls County is one hospital, St Luke's Magic Valley, a Level I STEMI, Level II Stroke, and Level III Trauma center as designated by Idaho's Time Sensitive Emergency council. Patients requiring care beyond these capabilities are transferred to larger hospitals in Boise, Idaho Falls, or Salt Lake City.

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

With an average sustainability rating of 62/100 consisting of answers ranging from 50 to 72, EMS in Twin Falls County is moderately stable. With a FT career ALS transport agency run by the area hospital and a FT career fire department wholly funded by taxes in the largest population center, the county also relies on a smaller volunteer fire department and three (3) private QRUs throughout the county. As with most counties in Idaho, Twin Falls agencies have been experiencing difficulties with retention and recruitment, both career and volunteer as the demand for service has increased. Wages, benefits, and challenges with initial education were all cited as contributing factors to these personnel difficulties, although all agencies lauded the dedication of their staff and medical director.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** All respondents felt the current EMS system, with the reliance on unpaid responders as well as increasing costs and stagnant funding, is not sustainable to continue providing timely appropriate pre-hospital care.
- **EMS Agency Financial Situation:** Breaking even and "getting by" were common descriptions of the overall financial situation for EMS in Twin Falls County.
- **EMS Agency Communications Strategy and Outreach:** Agencies all agreed that they have an effective and productive community outreach which leads to a favorable view of EMS in their community.
- **Community View of EMS Agency:** EMS is viewed as a necessary service & is viewed as strongly supported by the citizens of Twin Falls County.
- **Elected Official Support of EMS Agencies:** Most agencies agreed that their elected officials support EMS to varying degrees.
- **Agency & System Response Outlook**: Overall, agencies in Twin Falls County are not overly optimistic of their ability to deliver reliable EMS responses in the

future. Length of initial education as well as the scope of knowledge required has increased for all levels of EMS providers. These factors are often cited as the cause of decreasing initial certification pass rates. Access to technology and professional instruction is limited in more rural areas, both of which can improve student success and decrease participation with smaller QRUs reliant on volunteers. Stagnant reimbursement rates for transport do not compensate for the continually increasing costs to provide service. Also of note is that due to either their status as a non-governmental, private service or as a non-transport response provider, none of the agencies in the county will be eligible for Ground Emergency Medical Transport (GEMT) enhanced reimbursement.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Twin Falls County contains one ALS transport agency, two BLS fire-based non-transport agencies, and three BLS non-transport QRUs.
- **Service Delivery Partners:** All agencies cited SLMV as well as their medical director who provides oversight for all agencies in the county as partners in service delivery.
- **Medical Direction:** Both in EMS training as well as quality assurance/chart review, the single medical director was given an average rating of 83/100.
- **Communications & Interoperability:** Although there are two PSAPs utilized within the county, agencies reported no difficulties or time delays in communications or interoperability.
- **Mutual Aid System & Agreements:** Twin Falls county's agencies are part of a regional Fire and EMS MOU.
- **Community Health EMS (CHEMS):** In large part due to the support and oversight by the area hospital, there is a functioning and funded CHEMS program in Twin Falls County that focuses on post-hospitalization follow up and frequent users of the 911 system.
- **Patient Care Documentation System:** E-PCRs are documented through a variety of software providers.

4.2.1.3. Response Overview

- **Agency Response Concerns:** While the two career agencies reported personnel shortages and increased use of overtime and incentive to staff apparatus, they did not report concerns about the ability to do so. Volunteer QRUs did report some issues with responses due to shortages of qualified personnel.
- **Helicopter Response & Utilization:** HEMS is utilized in the more remote areas of the county due to access issues, with QRUs requesting an air response more frequently due to delays in ALS ground units.

- **Factors Impacting Response Times:** Location of the incident was the most cited factor impacting response times.

- **Response to Public Lands:** Resource and time intensive, responses to public lands can impact agencies both in the removal of a 911 resource for a length of time as well as the economic impact of overtime.

4.2.2. Workforce & Resource Assessment

While the career transport agency has difficulties in recruitment and retention, many of the QRUs report diminishing numbers of residents willing and able to join their agencies. While there are a variety of factors to this decline, it is well documented that overall volunteerism is declining. Responding to very few calls per year, most of these QRUs would likely be better served by collaboration and consolidation of some sort. The resources necessary to staff and equip a response vehicle continue to increase, a task that is difficult to accomplish with an all-volunteer model.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Alongside the FT career transport agency in the county, first response is staffed by two municipal fire departments and three private QRUs.

- **Responder Average Age:** Respondents to the resource survey indicated agency's average ages are under 50 years though the volunteer QRUs did report an aging volunteer group.

- **Staffing Numbers:** There are currently 278 licensed EMS providers in Twin Falls County: 13 EMRs, 163 EMT-Bs, 14 Advanced EMTs, and 88 paramedics.

- **Staffing Concerns:** Once again, recruitment and retention were the top concerns for all agencies. Loss of staff from retirements, both career and volunteer, as well as a reported increase in licensed personnel leaving the field of EMS entirely coupled with difficulties recruiting new providers is leaving many agencies anticipating on-going staffing challenges. Required daily staffing positions are often covered with overtime shifts, placing a greater demand on career personnel.

- **Staffing Strengths:** Respondents had little to say in regard to strengths, mentioning the availability of incentive pay to cover overtime shifts and the ability to staff at minimum levels. Volunteers were increasingly relying on fewer and fewer dedicated providers to respond.

- **Recruitment & Retention:** All agencies reported difficulties recruiting and retaining personnel with an average staffing sustainability rating of 66/100 with responses ranging from 43 to 83.

4.2.2.2. Training & Education Overview

- Agencies report the majority of training and education in Twin Falls County is facilitated and/or presented by MVP. MVP also reports a Field Training Officer (FTO) process by which newly hired personnel are on-boarded and signed off by the medical director before practicing independently.

4.2.2.3. Facilities Overview

- **Station Location(s)s:** All agencies reported the current locations of their stations met their response needs and goals
- **Station Condition(s):** With overall condition ratings ranging from 37/100 to 100/100 there is clearly no consensus on the condition of these facilities.
- **Facility Needs:** The two largest agencies in the county report a backlog of facility upgrades, however TFFD is in the process of building two new stations to better meet their needs. Both agencies also reported the need to anticipate growth and plan for new locations to meet demand.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** All reporting agencies felt the age/condition, functionality, and use appropriateness of their current equipment met their needs.
- **Condition:** Equipment condition was all rated from good to excellent.
- **Funding:** The transport agency has received grant funding for equipment in recent years, upgrading to the newest technology. No other agency reported using EMS grant funds.
- **Needs/Shortages:** While two reporting agencies felt they had no equipment needs or shortages, one did state both their operational and capital budgets have been operating with limited and decreasing resources.

4.2.3. Financial Overview

4.2.3.1. Expense Overview

- **Personnel Expenses:** MVP reported a personnel cost of $5,453,439 for the current budget year
- **Operational Expenses:** While MVP reports $6,750,000 in operating costs, TFFD maintains a small EMS supplies and equipment budget of $5-10,000 for the year.
- **Capital Expenses:** No agency reported a carry-over fund, partially due to legal constraints. MVP did budget $465,567 for planned purchases of capital goods.

4.2.3.2. Revenue Overview

As the sole transport agency in Twin Falls County, only MVP bills for service, reporting a 30.29% yield on billable transports, with only 15.5% paid by commercial insurance and 78.5% by either Medicare or Medicaid. Reimbursement rates are reportedly flat or even decreasing in light of sharply increasing costs of doing business.

4.2.4. Resource Assessment Additional Factors

GEMT funding, a federal Medicaid reimbursement program, will not benefit any entity in Twin Falls County as agencies are currently structured.

An opportunity to increase the ambulance taxing district levy rate could provide greater tax support as the population continues to grow. With an ambulance taxing district levy rate of 0.000148295 providing $1,594,627 for the current budget year to MVP, two rural QRUs rely on a mixture of grants and donations to fund their services.

Fire protection districts or city general budgets fund three of the five non-transport agencies, none of whom bill and therefore report no EMS revenue. Currently the residents of Twin Falls County largely depend on the corporate structure and backing of the local hospital system to bridge deficiencies in both funding and revenue.

REFERENCE LIST

[1] University of Idaho Extension. (2023). *Indicators Idaho: Twin Falls County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16083

[2] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Twin Falls city, Idaho.* Retrieved from https://www.census.gov/quickfacts/fact/table/twinfallscityidaho/PST045222

[3] City of Twin Falls. (2023) *City of Twin Falls, ID City Budget.* Retrieved from https://idtwinfalls3.civicplus.com/DocumentCenter/View/5938/City-of-Twin-Falls-FY-2022-23-Adopted-Budget

[4] City of Twin Falls. (2023). *City of Twin Falls, ID Twin Falls Fire Department Annual Reports.* Retrieved from https://www.tfid.org/DocumentCenter/View/5983/Twin-Falls-Fire-Department-2021-Annual-Report?bidId=

SOUTHEAST
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the Southeast AOR:

- Bannock
- Bear Lake
- Bingham
- Bonneville
- Caribou
- Franklin
- Oneida
- Power

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area – The Southeast AOR's geography contains mountainous terrain and remote public lands in the east, transitioning to expansive agricultural and the Snake River plains in the west. Abundant tourism and recent population growth have affected urban, rural, and remote Emergency Medical Services (EMS) with increasing call volumes and operational expenses. Four of the eight counties in this AOR have no taxing district, with EMS provided by minimally compensated or uncompensated personnel. These counties provide EMS through billing revenues, general county tax funds, and grant support to provide services, often experiencing annual deficits. Furthermore, the increasing cost of living, rising home prices, and limited compensation dramatically impact agencies and personnel. Recruitment and retention of EMS personnel continue to be among the preeminent concerns, with worries in some agencies that losing one or two individuals may result in rural agency demise and leave entire counties without EMS coverage.

BANNOCK COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

As the sixth most populated county in Idaho, Bannock County has an imbalanced population distribution with a large metropolitan area in its northwest corner and smaller rural communities dispersed throughout the south and southeast portions of the county. This unique population distribution relative to geography and city and county infrastructure contributes to one of the most significant disparities for Emergency Medical Services (EMS): providing equal countywide EMS coverage. To help address this, the system depends upon several non-transport agencies to collaborate on patient care in the northern part of the county. While this strengthens the system through collaboration, it also creates complexities with interagency communication. Moreover, financial constraints make implementing equal Advanced Life Support (ALS) response throughout the county challenging despite the centralization of county EMS services.

EMS in Bannock County is funded through an ambulance taxing district; this district has an intergovernmental agreement with the Pocatello Fire Department (PFD) to provide EMS transport throughout the county. The PFD has ALS-level transport ambulances stationed in the City of Pocatello, providing paramedic transport amidst the county's population center. The department also provides partially compensated, non-career Basic Life Support (BLS) ambulances in three rural communities south and east of the metropolitan areas of Pocatello and Chubbuck; these BLS ambulance personnel can request ALS transportation or paramedic-level care if needed.

Using a single transport agency demonstrates the centralization of an EMS system. However, it does not make further expansion of ALS transport into other county areas less challenging or costly. While the county deliberates future change and expands transport capabilities, strong continued interagency collaboration is imperative. While centralization can avoid redundancy and improve consistency in communication, it can also strengthen

interagency partnerships and unify leadership, all necessary elements to maintain a sustainable EMS system. The Bannock County system boasts dedicated, resilient, collaborative, knowledgeable, and diligent systemwide EMS personnel and leadership. Further funding is needed to expand the ALS transport area. However, continued deliberate collaboration between existing countywide resources will help refine funding allocation, improve system efficiency, and enhance EMS expedience, equality, and affordability throughout the county.

Strengths	Opportunities
• The county currently has paramedic-level service coverage available countywide. • A tax-supported ambulance district exists, supporting countywide coverage. • Leadership for Emergency Medical Services (EMS) transport is provided by a single agency overseeing all transport ambulances in the county. • There is a collaboration between multiple response agencies and several non-transport units to help decrease ambulance arrival times.	• Continue strategic planning to improve transport coverage to the south and north portions of the county. • Update mutual aid agreements and written collaboration with neighboring counties. • Improved communication between county agencies. • Solidifying and streamlining dispatch protocols to avoid potential delays. • Improved reimbursement with Ground Emergency Medicine Transportation (GEMT).
Challenges	**Threats**
• Recruiting and retaining partially compensated Emergency Medical Technicians (EMTs) in the south county. • Decreasing billing reimbursement. • Increasing call volumes in the northern part of the county (Chubbuck) relative to the physical location of ambulances in the City of Pocatello. • Hastening EMS transport response to the north county, regarding infrastructure and station location. • Initial costs are required to expand services into the south or north county. • Increasing and aging rural populations and tourism with potential call volume increase. • Continuing to provide competitive wages to paramedics in light of increasing costs of living. • Communication amongst countywide agencies. • Multiagency and multilayered dispatch system is creating communication challenges.	• Increasing operational and capital costs in an economy with an unpredictable outlook. • Further decreasing net billing revenues. • Continued population growth, most notably in rural and suburban areas with a challenging and lengthy response. • Recruitment and retention of personnel of partially compensated EMTs or volunteers. • Increasing costs of living threatening and long-term retention of career personnel. • Increasing operational and capital expenses with a relatively fixed ambulance district budget. • Collapsing neighboring EMS systems in rural southeast Idaho.

Table A: Bannock County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Bannock County is in Southeastern Idaho and is the 6th most populated county in the state, with its county seat in Pocatello. Bannock County has had an 8.1% population increase and has gained 6,678 residents between 2010 and 2022. Most of this population is in Pocatello (population 57,730) and Chubbuck (population 16,165), with more negligible population growth noted in southern cities. [1] According to populations per United States (US) Census, nearly 82% of the Bannock County population lives in the northwest portion of the county in the metropolitan area surrounding Pocatello and neighboring Chubbuck. Also, in this northern county area is a portion of federally recognized Fort Hall Indian Reservation. Additional cities within Bannock County include the smaller southern towns of Arimo (pop. 354), Downey (pop. 571), Inkom (pop. 792), Lava Hot Springs (pop. 358), and McCammon (pop. 809). [2] While the south district near Lava Hot Springs and Downey contains a smaller year-round population, it supports a higher population of retirement-aged individuals and year-round recreationists who visit the natural hot springs. Of the public land in Bannock County, 31% is federally owned, 6.7% is state land, and the city and county own 1.7%. [3]

Located on Bannock County's western slope is Pebble Creek Ski Area, which covers 1,100 acres and has three ski lifts, drawing visitors from all over Southeastern Idaho. [4] Although physically located in Power County, the Pocatello Regional Airport, which has approximately 100 flights per day, is owned by the city of Pocatello and serviced by EMS services from Bannock County. [5] Two major transportation corridors traverse through the county, including Interstate 15, which travels north to Idaho Falls and south to Salt Lake City, and Interstate 86, which travels from Pocatello to Boise.

The distribution of the county is unique, and many people in the south district commute to work with an average daily commute time of upward of 30 minutes. [2] The total population of Bannock County is 89,517, with 64% of the population living in Pocatello, 18% living in Chubbuck, and 17% living in the south county areas. [2] The number of housing units has been steadily increasing, with 1,712 new units added in the last ten years, with the most significant growth noted in Chubbuck. Throughout Bannock County, 63% of housing units are identified as owner-occupied, renters occupy 29%, and 7.7% of housing units are vacant. [6]

Demographic	2010	2020	2022
Population	82,839	87,018	89,517
Land Area	1,111.99 sq mi	1,112.49 sq mi	1,112.49 sq mi
Per Capita	74.5 PPSM	78.2 PPSM	78.2 PPSM
PPSM: *People per square mile*			

Table B: Bannock County Population & Geography

2.2. Economics

An unemployment rate of 3.6% was noted in 2021, with 49,637 jobs in the county, an increase of 2,033 jobs in one year. The average wage per job is $45,243, with a noted salary decrease of 1.2% between 2020 and 2021. [7] Furthermore, a living wage salary in Bannock County is 31,137, and a poverty wage salary is $13,582. [8] Of the most prevalent jobs, 17% are government-related, 13% are in healthcare and social assistance, 12% are in retail trades, and 8% are in accommodation and food services. [9] Agriculture continues to be a large part of the county's economy. In 2022, the county supported an average of 883 agricultural workers, with the most significant number of workers identified in October, of which migrant labor comprised 29%. [10]

The median age in Bannock County is 35; however, the median age is noticeably older in the rural areas, with an average age in Lava Hot Springs of 50. [2] The county-wide poverty rate is slightly more than that of the US, with nearly 14% of people under 18 living below the poverty level and 8% of those over 65 living below the poverty level. [11]

In 2021, the US Census identified a median home value of $184,600 in Bannock County (as compared to Idaho's $266,500). [2] However, a review of average home prices in 2023, as compared to median home values noted by the 2021 US Census, the 2023 market values more than 75% more, with an average home priced at $325,200; this requires a net household income of approximately $63,000. [12]

Metric	Data
Total Population (2022)	89,517
Median Age	35.2 years old
Poverty Rate (2021)	12.9%
Number of Jobs (2021)	49,637
Average Annual Wage per Job (2021)	$45,243
Unemployment Rate (2023)	3.6%

Table C: Bannock County Economic Factors

2.3. Social Determinants of Health

Bannock County, in terms of health outcomes and health factors, is ranked #40 out of 43 ranked counties. It is ranked among the least healthy counties regarding quality and length of life. However, it is in the higher middle range for health factors, including smoking, alcohol consumption, or activity levels, that can be modified or improved upon. [13]

There are 6.9 primary care physicians in Bannock County per 10,000 people and 60 primary care physicians in Bannock County, notably fewer than in 2016. [14] There is access to home health agencies, surgical centers, hospice agencies, end-stage renal disease providers, intermediate care facilities for the disabled, residential children's facilities, skilled nursing centers, and long-term care facilities. [15] In the south portion of the county, there is one community health clinic in Lava Hot Springs, which provides family medicine, obstetrics, and mental health, and one in Downey, which includes family medicine and behavioral health services. [16]

More than 25% of the population is under the age of 18, and 15% of the population is over the age of 65. [17] As of 2019, 12% of people under 65 had no health insurance coverage, and over 4% of people under 19 had no health insurance coverage. [18] Regarding those with insurance coverage, the single transport agency shared the following county payer mix: Medicare 26%, Medicaid 25%, out-of-pocket 6%, and commercial insurance 43%. [19]

2.4. Indicator Impacts to EMS

Bannock County is a large geographical area with an imbalanced population distribution. The predominant population density is in the northwestern portion of the county, with smaller populations in the south. Moreover, the growth and projected growth in Chubbuck are contributing to growing pains, strains on infrastructure, and an anticipated increase in EMS demand for transport services. Meanwhile, the aging population in rural areas has limited access to primary care and lives furthest from healthcare resources. As the median age of the Lava Hot Springs community is 50, this foretells an increase in calls for service, a possible increase in patient acuity or patient comorbidities, and a coinciding decrease in those in the working age range available to serve the community. Of those who are in the working age range, a typical commute is upwards of 30 minutes or more, which means that the area may have challenges providing weekday and day-time coverage, particularly given the increasing housing prices noted in these rural communities, often requiring for a dual-income to off-set the cost of living.

Twelve percent of people under 65 in Bannock County are without health insurance, similar to Idaho. However, the unemployment and poverty rates are higher than in Idaho. Despite these rates, the transport agency shared a payer mix with over 43% commercial insurance and just over 50% Medicare and Medicaid. This payer mix may appear brighter through the lens of potential future Ground Emergency Medical Transportation (GEMT) reimbursement. However, the simultaneous uncertainty about compensation related to Medicare and Medicaid, even in the setting of GEMT, makes it difficult to budget specific annual sums based on billing revenues or GEMT reimbursement, especially given the proposed GEMT payout occurring in the following fiscal year.

The net migration is 1%, which suggests a stable community and the possibility of increased employee or volunteer retention; however, it may also increase the challenges with recruiting new volunteers. [20] Also contributing to a strong community is the percentage of family households, comprising 63% of the Bannock population. [21] While this stability may attract full-time employees with families, it may make partially compensated EMS models and rural living more difficult due to increased cost of living and expense, especially in communities where a dual income is essential.

When considering long-term employee retention, the ability of someone to rent or own a home in a given county should be considered, whether career EMS or partially compensated. Given the current housing market prices, with the average home priced at $325,200 and given the median household income in Bannock County of $64,864 (Lava Hot Springs at $43,542 and Downey at $40,114) and an average wage per job of $45,243, this makes housing affordability feasible in portions of Bannock County for a multi-income household but challenging in homes with a single household income or the rural areas of Bannock County. [2, 7] Increasing housing prices are most likely to affect those areas with ambulances that operate with a paid-per-call and paid-on-call model, making non-career EMS operations challenging, particularly in the setting of a single wage-earning household.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

According to state data per The Idaho Bureau of Emergency Medical Services (hereafter referred to as the Bureau), there were 6,615 total requests for EMS services in 2021 and 8,033 total EMS incidents in 2022. This was an increase in 1,418 requests for service within one year. This data includes transport and non-transport services with some mutual response to calls, so many of these calls overlap due to simultaneous assistance by non-transport agencies, especially in the north portion of the county (Chubbuck and the North Bannock Fire District areas). The Bannock County Ambulance District (BCAD) predominately provides transport services, although each neighboring county contributed to at least one EMS response.

Agency data was somewhat different compared to state-recorded data. Comparatively, the single countywide transport agency reported 8,311 calls for 911, resulting in 4,729 patient transports with 89 interfacility transfers. The non-transport agencies reported responses to 1,891 within Chubbuck and 12 within the North Bannock Fire District.

BCAD reported 8,311 total requests for EMS service in 2022; this is a difference between state-reported and agency-reported data by over 2,000 callouts. The difference in data may be secondary to data clean-up and eliminating call standbys or cancellations. Furthermore, within the BCAD oversight in 2022, state reports indicate that there were 253 requests for service in Lava Hot Springs, with nearly 20% of patients transported, 180 requests in Inkom, with 10% resulting in patient transport, and 161 in Downey resulting in 27% patient transport. Moreover, in 2022, the City of Chubbuck Fire Department responded to 1,891 requests for service, and the North Bannock Fire Department responded to 12 callouts.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Bannock County Ambulance District	*3,484*	*1,516*	5,000	*4,046*	*2,138*	6,184
Blackfoot Fire Department	*5*	-----	5	*14*	-----	14
Fort Hall Fire & EMS	*213*	*108*	321	*333*	*160*	493
Power County EMS	-----	-----	-----	*5*	*4*	9
Ambulance Total	*10*	*5*	15	*10*	*5*	15
Bannock County Sheriff Search & Rescue	-----	*46*	46	-----	*25*	25
City of Chubbuck Fire Department	-----	*1,021*	1,021	-----	*1,085*	1,085
North Bannock Fire Department	-----	-----	-----	-----	*9*	9
QRU Total	-----	*1,067*	1,067	-----	*1,119*	1,119

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Bannock County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Bannock County Ambulance District	*2 min*	*6 min*	8 min	26 min	47 min
Bannock County Search & Rescue	*3 min*	*32 min*	35 min	-----	124 min
City of Chubbuck Fire Department	*2 min*	*3 min*	5 min	-----	34 min
North Bannock Fire Department	*5 min*	*6 min*	11 min	-----	52 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Bannock County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Bannock County's dispatch system has three Public Safety Answering Points (PSAP), including Bannock County, Pocatello, and Chubbuck.

The Pocatello Emergency Communications Center (PECC) uses a protocol-driven emergency medicine dispatch (EMD) system and dispatches for the Pocatello Fire Department (PFD) and county-wide Bannock County Ambulance District (BCAD); there is currently no cost incurred to BCAD for this service. The PECC has been designated as an Accredited Center of Excellence (ACE) in Emergency Medical Dispatch, licensed through the Internal Academies of Emergency Medical Dispatch. This is the first dispatch agency to be ACE-certified in Idaho.

Chubbuck Police Department provides dispatch services for city police and the Chubbuck Fire Department (CFD) and does not currently provide EMD; this service incurs a cost to the CFD for fire and EMS dispatching services. If a 911 call originates in Chubbuck, or if the Chubbuck Police Department receives the call, or if a police officer in Chubbuck requests EMS assistance, the CFD is dispatched to provide the first response. The 911 call is simultaneously transferred to the PECC for EMD dispatching of a BCAD transport ambulance.

Bannock County PSAP dispatches for Bannock County Sheriff (BACSO), Bannock County Search and Rescue (BACSAR), and Bannock County Fire Department (BCFD). This PSAP does not use Emergency Medical Dispatching (EMD) and, ideally, will dispatch BCFD for EMS first response and then route all EMS requests for service to the PECC for EMD and to dispatch transport ambulance by BCAD. If EMS services are needed, the dispatch of BACSAR or BCFD depends on the dispatcher's discretion.

Given the proximity of cities, the PSAP that each 911 call is routed to highly depends upon the caller's physical location and the associated cell phone tower of the caller using the 911

system. The call will most likely reach the PECC to dispatch the BCAD ambulance if the caller is located within Pocatello City or in Bannock County. Regardless of whether a request for assistance is initially handled by the Bannock County PSAP or the Chubbuck PSAP. If an ambulance is needed, the call will be transferred to the PECC to dispatch a BCAD ambulance.

4.1.2. EMS Agency Overview

One agency licensed up to the ALS level has an intergovernmental agreement with the Bannock County Ambulance District (BCAD) to provide EMS transport for the entire county. This career agency stations ALS transport in Pocatello and BLS ambulances in three rural towns in outlying south county areas. The stations housing ALS ambulances are located in the City of Pocatello, and response times are often variable and dependent upon the physical location of these ambulances in Pocatello relative to the incident location. Given this, several agencies collaborate in the north county to decrease overall EMS response time.

Because ALS transport ambulances respond from their respective Pocatello fire stations to incidents, the BCAD has a patient care integration plan with the CFD and the North Bannock Fire Department (NBFD). These two non-affiliated, independently funded fire departments provide an initial response before the arrival of the BCAD transport ambulance. The use of these two non-transport agencies decreases EMS personnel arrival times. A multi-layer and multi-agency dispatch system is in place, as each agency has its respective dispatch system that communicates with the BCAD transport ambulance dispatch. EMS response time is often dependent on the physical location of the 911 caller, the dispatch system, the time of day (relative to roadways and traffic), and the physical location of the nearest paramedic-level ambulance at the time of the service request.

Also staffed by the BCAD transport agency are three rural BLS transport ambulances providing services in the south and east portions of the county. This model includes ambulance response using paid-per-call and paid-on-call Emergency Medical Technicians (EMTs). ALS ambulances are dispatched per protocols, based on acuity to the south and east portions of the county and based on established Emergency Medical Dispatch protocols.

Although licensed in Bingham County, Fort Hall Fire and EMS is located in Fort Hall; this fire-based career Intermediate Life Support transport agency provides some coverage for the northern portion of Bannock County, particularly the areas including the Interstate highways.

BCAD helps provide local interfacility transfers; however, a private organization recently began operating in Bannock County as a critical care transport service. Offering urgent and non-urgent critical care or BLS transports throughout Idaho, the agency is licensed in Ada County. It is rapidly expanding to other Idaho counties throughout the Southeast portion of Idaho, collaborating with numerous healthcare facilities.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Bannock County Ambulance District	911 Response - Transport	Advanced Life Support & Basic Life Support (ALS/BLS)	Scheduled	Compensated, Compensated/ On-Call, Compensated/Per-Call
Bannock County Search and Rescue	911 Response – Non-Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated
Bannock County Sheriff	911 Response – Non-Transport	Advanced Life Support (ALS)	Unscheduled	Uncompensated
City of Chubbuck Fire Department	911 Response – Non-Transport	Basic Life Support (BLS)	Scheduled	Compensated, Compensated/Per-Call
North Bannock Fire Department	911 Response – Non-Transport	Basic Life Support (BLS)	Unscheduled	Uncompensated

Table F: List of EMS Agencies Located in Bannock County

4.1.2.1. Bannock County Ambulance District Overview

Tax-based BCAD has an intergovernmental agreement with the PFD, a public career all-hazards fire department, to provide EMS transport services throughout Bannock County. BCAD ambulance transport is provided throughout the county. ALS transport services are available county-wide but primarily respond near their respective stations in the north portion of the county. BLS transport services are available in the rural areas, are staffed through BCAD, and are located south of the metropolitan area of Pocatello. BCAD also works with other BLS non-transport services in the north county, including the Chubbuck Fire Department (CFD) and North Bannock Fire Department. ALS response and transportation are provided primarily in the population center of Pocatello and Chubbuck; however, if ALS rendezvous is requested in the areas covered by the BLS south county ambulances, these ALS ambulances can rendezvous with BLS ambulances on a per-requested basis. Currently, 26 medics/firefighters, two advanced EMTs/firefighters, and 55 basic EMTs/firefighters staff the career-based stations.

The three BLS transport ambulances, located in towns in the southern portion of the county, operate under the leadership guidance of the PFD and are stationed in the cities of Inkom, Lava Hot Springs, and Downey. Based on agreements in local areas, while the ambulances are physically located at the volunteer fire department stations in these respective cities, they have no formal affiliation with these fire districts. These three stations are staffed by BLS personnel on a paid-per-call basis. There are currently two advanced EMTs and twenty-nine basic EMTs affiliated with BCAD in the south county. Based on location and call types, agencies in Bannock County primarily transport patients to Portneuf Medical Center. Very

rarely, and only under specific circumstances, and in agreement with the medical director, patients in Downey and Lava Hot Springs may request to be transferred to Franklin County Medical Center or Caribou County Medical Center. Air transport ambulances typically used include Classic Air from Portneuf or Air Methods from Idaho Falls.

These three rural volunteer ambulances experience the county's most extended transport times and lowest volumes. The trends of these communities demonstrated by the US Census show an aging demographic, which means that each ambulance serves an older population and a population in less proximity to preventative healthcare. The longer transport times, an aging population, areas of high recreational use, and decreased access to preventive care increase the potential for higher patient acuities, which may necessitate regular medical training and medical knowledge. With close oversight and training provided by the PFD, the providers are well-equipped and supported to provide care for these long transports. These volunteer ambulance stations are staffed with volunteer EMTs recruited from local communities. However, just as recruitment and retention are challenging for most rural EMS agencies, there are challenges noted in these more southern communities with decreasing numbers of EMS personnel available despite rigorous attempts at recruitment.

4.1.2.2. Chubbuck Fire Department Overview

The City of Chubbuck has experienced increasing housing prices and the highest growth rate in the county at 3.8%, with several proposed retirement community developments in the northern county. [2] Transport ambulances respond to Chubbuck from Pocatello-based fire stations. To help decrease initial EMS response times as these ambulances are responding from respective Pocatello stations, two unique non-affiliated, independently funded, non-transport fire departments provide an initial first response in the northern portion of Bannock County before the arrival of the transport ambulances. Chubbuck Fire Department is one of those agencies providing the first response within the City of Chubbuck.

The City of Chubbuck Fire Department provides EMS as a non-transport BLS-licensed Quick Response Unit (QRU) inside the City of Chubbuck. Employing full-time and paid-per-call EMS/fire personnel, two Emergency Medical Responders (EMR) and twenty-one basic EMTs are affiliated with the agency. This agency is a public, tax-based, full-time, career-based fire department that covers the City of Chubbuck with an all-hazards service and EMS first response. Chubbuck City consists of approximately 5.9 square miles and serves a population of 17,000 people. [22]

Per an interview with CFD leadership, the CFD works closely with the BCAD, and ideally, when there is an EMS call in Chubbuck, the CFD is dispatched to provide BLS-level care until an ambulance arrives from the City of Pocatello; this ambulance then provides transport to definitive care. There are reported challenges with the dispatching system that may occasionally delay the department's dispatch, as referenced above. There is one centrally located station in Chubbuck, and the department is currently exploring options for adding a second station further north of the current station; this is being considered to accommodate the growth that the City of Chubbuck is experiencing. This department uses fire district funds and receives no dedicated EMS compensation. However, there is some assistance with acquiring EMS-related capital equipment, collaborative training, and an agreement to restock disposable medical supplies.

4.1.2.3. North Bannock Fire Department Overview

Per interviews with leadership at the North Bannock Fire Department, North Bannock Fire District was created in 1979 to provide fire services for the unincorporated areas in North Bannock County. North Bannock Fire District consists of 45 square miles. It includes the area from Facer Mountain on the west side of Bannock County to Buckskin and Pocatello Creek Road on the east side, Chubbuck City boundary to the south, Bingham County line on the north, and covering deeded properties on Fort Hall Indian Reservation. Fire suppression in this district was initially contracted to the Chubbuck Fire Department. However, in 2019, because of the population growth in Chubbuck, the CFD turned their response efforts internal within the parameters of the city only; this led to an urgent need for fire services in this area and the official development of the NBFD. NBFD recognized a need for a more prompt local first response and established a non-transport quick response unit to help provide expedient patient care within its district. [23]

NBFD has recently begun to provide fire suppression services and now patient care as a non-transport QRU through uncompensated, unscheduled volunteers. The station is near the current CFD station and is inside the City of Chubbuck. Because of the remoteness of the North Bannock Fire District, which encompasses the area around Chubbuck, and the length of time for a BCAD transport ambulance to respond to these distant calls, NBFD obtained a non-transport license to help provide initial patient care. The EMS division of the agency is newly established, and there are noted difficulties within the multi-layered dispatch system. Dispatching of the department as a QRU is multifactorial and is highly dependent upon where the 911 call originates and which dispatch agency receives the request for assistance.

The funds to operate this department come from fire district funds, with no funding specifically allotted for EMS-related activities, personnel, or capital expenses. Applying for grants for capital expenses is challenging simply concerning how long it takes volunteers to complete grant applications, and, as the department is licensed as a non-transport agency, this often disqualifies the agency from many grant resources.

This newly established agency maintains a volunteer model without a formal call schedule or compensation. There is currently one EMR and four EMTs affiliated with the agency. Many EMS volunteers are recruited to the department by the local interim fire chief, who provides a high school educational program for youth to certify in fire and EMS; these recruited volunteers often come from this high school program. While this may serve as an entry into the service, the challenges with retaining these volunteers are multifactorial, likely due to lack of financial compensation, anticipated career advancement, or anticipated life changes.

This model, the positioning of the current NBFD station, limited funding for operations and personnel, limited numbers of personnel, and dispatch challenges have made it difficult to implement this first response unit fully. However, the district continues to grow, as have the noted demands on the BCAD ambulances; this inspires NBFD to continue providing EMS first response. The NBFD has a future desire to participate in a sustainable model by collaborating with various surrounding agencies for an initial response on all EMS calls in the district and providing patient care until the arrival of the BCAD ambulance.

4.1.2.4. Southeast Idaho Special Tactics and Response Overview

Per written communication from leadership at the Southeast Idaho Special Tactics and Response, the Bannock County Sheriff's Office contributes to EMS as a volunteer, uncompensated tactical EMS (TEMS) team and responds as a part of the seven-county coalition on a per-call, as-requested basis throughout Idaho as the Southeast Idaho Special Tactics and Response (STAR) Team. The STAR team was initially created in 1979 and consists of seventeen officers who respond to critical incidents that require special training, including barricaded gunmen or hostage incidents, search and arrest incidents, active shooter, civil disobedience, crowd control, and dignitary protection. The team comprises volunteer experienced ALS providers who function in other medical roles; these roles may include flight nurses, flight medics, and emergency room providers. All members have completed reserve Peace Officer Standards and Training (POST) and Special Weapons and Tactics (SWAT) training.

4.1.2.5. Bannock County Search and Rescue Overview

Per an interview with leadership, Bannock County Search and Rescue (BACSAR) is an organization staffed by uncompensated, unscheduled volunteers specializing in vehicle extrication throughout the county and providing remote rescue. Licensed as a non-transport BLS agency, BACSAR volunteers train two times monthly. The agency training includes medical training and rescue training. There is funding through the Sheriff's Department for supplies related to EMS equipment. Still, larger capital purchases such as extrication equipment, vehicles, snowmobiles, or all-terrain vehicles come from grant funding or donations. Certification, continuing education, or EMS licensure costs falls on individuals. There is no annual carryover for capital purchases, which makes acquiring large capital items or specialty training difficult. BACSAR structure has leadership provided by a group of BACSAR officers who then answer directly to a Deputy Sergeant whom the Sheriff at BACSO oversees. Because of this multilayered leadership structure, there are challenges with the logistics, some operational decisions, and completion of grant applications to acquire support for the agency's only funding opportunity.

BACSAR operates out of two rescue trucks at separate locations: one station is at a shared area with NBFD, and the other rescue truck is in Downey. Often, volunteers respond in personal vehicles. As reported by the agency, approximately 90% of call responses are vehicle accident assistance calls throughout the county, and 10% are for remote rescue. Of the vehicle accident assistance calls, approximately 10% require vehicle extrication and patient care, and the remainder require traffic control or other scene management. The PSAP for BACSAR is Bannock County Sheriff's Department, and there are no formal protocols for agency dispatch. Whether the agency is dispatched is typically based on the nature of the call or per request by other responding agencies. BACSAR personnel respond to rescues or vehicle accident assistance throughout the entire county. According to a BACSAR representative, the agency has an average chute time of five to fifteen minutes and an average on-scene response time of 50 minutes with an average total call time of two hours.

4.1.2.6. SERV 1 Overview

SERV 1 is an internal service provided by J.R. Simplot. This privately operated, non-transport emergency response team works at the J.R. Simplot Company. J.R. Simplot Company specializes in manufacturing feed phosphates, industrial products, turf and nursery fertilizers, and silica sand mining. [24]

4.1.3. Hospital Access Overview

Portneuf Medical Center (PMC) is located on the east side of Pocatello. It is an acute care medical center and serves as a receiving center for most agencies in southeast Idaho. It is a Level II trauma center by TSE designation with 22 ER beds. While not officially leveled in Idaho, PMC is certified as a Primary Plus Stroke Center by the Det Norske Veritas (DNV) Health Accreditation Service; this is the second-highest certification level. Additionally, according to TSE designation, PMC is a level I STEMI center, and the American College of Cardiology accredits it as a chest pain center for primary percutaneous coronary intervention. There are also several medical clinics in Pocatello and Chubbuck, with smaller community health clinics in Lava Hot Springs and Downey. These community health clinics provide some same-day urgent care but do not provide emergency medicine or obstetrics. [25]

4.2. County EMS System Resource Assessment Overview

The following information has arisen from six transport and non-transport agencies licensed in Bannock County. Three agencies participated in a formal survey, including one transport agency and two non-transport agencies. Each of these agencies also participated in face-to-face site visits. Additionally, one non-transport agency partook in a phone interview, and one non-transport agency provided written information about their agency.

4.2.1. Organizational/Operational Assessment

EMS agencies in Bannock County operate separately; each agency operates under a unique structure and leadership. With one transport ambulance and several non-transport units contributing to the system in Bannock County, and with an overlap between Bingham County and Power County agencies, all EMS entities maintain a high level of collaboration amongst each other and neighboring counties; the cooperation between agencies is imperative to bridge gaps in response areas. The ongoing multi-agency partnership will likely sustain this system by continuing to identify and address service gaps within the county.

There is a mixed sentiment about organizational and operational support. Most EMS agencies in this area feel supported by their leadership as well as by the community; however, in contrast, one service does not feel that the community has a high view of its agency and also does not feel well supported by local or state oversight; this agency feels underfunded and has concerns for agency sustainability. Most county agencies do not have written and adopted communication strategies or community outreach plans, possibly due to the complex, multi-agency county coverage.

Each agency has its source of public tax funding. However, the one transport agency is the only agency with a budget dedicated to EMS-related expenses and receiving funds from the EMS taxing district. While the ambulance district has sufficient funds and funds dedicated wholly to EMS, a service gap remains in many areas regarding response time. All other collaborating first response agencies within the county feel that if their agency dissolved, the community would not receive nearly the prompt attention generally thought to be reliable and adequate EMS coverage.

Several non-transport agencies feel underfunded and endorse significant financial strain in their current situation, with no carryover/reserve from year to year and no dedicated EMS funding. Moreover, while the ambulance district service maintains an annual carryover and a sufficient budget each year, this agency also expresses concerns regarding long-term sustainability. Broadly, these concerns suggest that the system sustainability, as perceived by agencies, is not entirely based on financial support or annual carryover/reserve but suggests that other components, such as the agency interoperability, personnel, staffing, and compensation, may lead to uncertainties regarding the system's sustainability. Identifying, collaborating, and addressing elements through system change and restructuring will prompt improved system expedience, availability, and sustainability.

4.2.1.1. EMS Agency Perceptions

- EMS Agency Stability: Subjective assessments regarding stability, as rated by each agency, averaged 58/100 among all agencies. Most agencies endorsed moderate overall sustainability ratings, with one agency assigning itself a low perceived sustainability rating, which may have coincided with that agency's funding and staffing concerns.

- EMS Agency Financial Situation: The licensed transport agency notes a well-funded EMS program with a yearly surplus. Other agencies are breaking even or are significantly underfunded and operating on a deficit yearly.

- EMS Agency Communications Strategy and Outreach: Based on responses from the survey, most agencies agree that there is no effective, formal, or productive communications plan amongst and between agencies and no formally established community outreach plan, though these informal plans exist at and between several agencies.

- Community View of EMS Agencies: The sentiment is divided about the community viewpoint of EMS agencies; one agency believes that the community has a favorable view of their agency; however, there is a perception amongst several other agencies that the community does not favorably view their agency services, which may also coincide with agencies that have a lower sustainability rating.

- Elected Official Support of EMS Agencies: Local support is also a divided sentiment, similar to the abovementioned community viewpoint. Broadly, agencies feel well supported by local official oversight; however, other agencies contributing to the EMS landscape, yet with no formal agreements with the ambulance district, feel

unsupported mainly due to limited collaboration and communication from the local ambulance district.

- **Agency & System Response Outlook:** GEMT is a hopeful possibility for reimbursement in addition to the future incorporation of Community Health EMS (CHEMS). In anticipation of growth and future needs, the transport ambulance has been evaluating locations to place additional ALS coverage in continued collaboration with the BCAD leadership and BLS agencies. The non-transport agencies in the north county support another ambulance placement in the north portion of Bannock County to provide rapid transport to these suburban and urban populations, and one of these agencies is presently looking to build a new station to accommodate population growth. Each collaborating agency desires to help by expressing nonconventional ideas to collaborate and increase ambulance transport availability throughout the northern county reaches. While the non-career EMTs are noted to be one of the county's greatest assets, there are expressed concerns about the recruitment and retention of countywide personnel, especially in the south portion of the county.

- **Agency Optimism:** Personnel throughout the county are considered dedicated and educated, whether career or otherwise, and continue to deliver excellent patient care to the community with exceptional patient outcomes. The Mission: Lifeline ® Award was granted for this excellence in patient care, undoubtedly due to the multi-agency approach to patient care and collaboration of all county resources. Other agencies report consistency with training and licensure as a bright spot that increases overall knowledge, skill, and abilities.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure(s):** Each agency is structured uniquely; however, all agencies are public. Two agencies are municipal fire-based agencies with unique funding models. Also maintaining ALS ambulance coverage countywide, the agency also operates a BLS-level transport agency in the south county, performing EMS activities only in these areas, with no affiliation with respective local fire districts but operating under the leadership of a single municipal fire-based agency. Meanwhile, two other agencies function as first-response units under the supervision of individual fire districts.

- **Service Delivery Partners:** City and municipal governments are noted to be some of the strongest partners of transport agencies. At the same time, the community is the most vital partner of non-transport agencies.

- **Medical Direction:** EMS agencies generally report limited regular interaction with their medical director in training, quality assurance, chart review, and EMS training.

- **Communications & Interoperability:** Radio communication is noted to meet needs in functionality and features, offering quality reception most of the time and enabling reliable communication with other agencies throughout the county and in

neighboring counties. Unfortunately, the radio reception is often poor for the BACSAR in remote areas, so the agency frequently relies upon satellite devices, which are often costly, with limited funding available for replacements or multiple units.

- **Mutual Aid Systems & Agreements:** A unique structure exists between collaborating transport and non-transport agencies with variable response boundaries and response times. All agencies agree that the citizens in their area need timely response. Non-transport agencies agree that close cooperation with the transport agency is integral in providing rapid patient care. With this in mind, all agencies agree that mutual aid should be streamlined throughout the county by implementing formal, written mutual-aid agreements with neighboring counties and contributing internal county agencies. While able to cover requests for a response within the county, if a neighboring county agency could not answer EMS calls, systems in Bannock County would have a difficult time covering call volume. If BCAD could not handle call volume or could not operate, it was noted that this would be challenging to the county as there is no other agency with a current transport license or nearby to provide adequate EMS.

- **Community Health EMS (CHEMS):** There is currently no CHEMS program in Bannock County, but several agencies expressed interest in coordination, development, and implementation, primarily if there were to be reimbursement for such activities.

- **Patient Care Documentation System:** Documentation is performed by transport agencies using a private subscription, and non-transport agencies use both paid subscriptions and Idaho Gateway for EMS (IGEMS), the free platform provided by the Bureau.

4.2.1.3. Response Overview

- **Level(s) of Service**: ALS transport is available in the northwest portion of the county, including the Pocatello and Chubbuck areas. While BLS-level providers provide EMS coverage in the south and east parts of the county, ALS-level response is also available to those areas based on patient acuity and per the established Emergency Medical Dispatch protocols. Initial BLS quick response/non-transport is also present in the north county by CFD and NBFD.

- **Agency Response Concerns:** There has been some noted difficulty in responding to EMS calls in the last year by all agencies, whether the agency is transport or non-transport. Concerns are expressed about simultaneous callouts and increasing requests for response with challenges in obtaining a second-out ambulance. Concerns were also expressed about the response time for a transport ambulance to depart from Pocatello stations and respond to portions of the north county; non-transport services express a desire to continue assisting with callouts to reduce the time for personnel to arrive on the scene. Unfortunately, these agencies are often not notified of a need by dispatching agencies. There are challenges with recruiting and retaining personnel at the non-career stations; this is also noted to be challenging during daytime hours or periods that are challenging to staff.

- **Helicopter Response & Utilization:** Helicopter response is requested in the county's southern areas based on patient acuity and distance. Rarely is a helicopter used in the county's northern portion near the metropolitan areas of Pocatello and Chubbuck. Non-transport agencies do not routinely request helicopters – this is typically only requested by transport agencies. Occasionally, search and rescue will utilize air transport, primarily requested for patient care in remote areas with lengthy response times.

- **Factors Impacting Response Times:** The primary factors identified by all agencies that impact response times include personnel shortages, time of day, and call location. Weather, geography, and equipment issues are less likely to affect response. NBFD and BACSAR allow responders to go directly to the scene to assist with a call while other responders respond to the station to obtain an ambulance or a response vehicle.

- **Response to Public Lands:** Response to public lands rarely affects the transport agency and predominately involves BACSAR. Public land response impacts the system with lengthy response times, long scene times, significant numbers of personnel required, prolonged hours contributed by volunteers, specialized equipment and related expenses, and a significant unrecoverable cost to the system.

4.2.2. Workforce & Resource Assessment

The workforce and resources in the county are currently being tested with increasing call volumes, increasing operational costs, and challenges with recruitment and retention. While the recruitment of a future workforce is viewed as relatively optimistic from the perspective of the transport ambulance, there continue to be marked concerns from all agencies, particularly regarding the retention of EMS personnel. The paid-on-call, paid-per-call, volunteer, and unscheduled agencies need help retaining staff members and recruiting new team members. Tactics, including EMS promotion, activism, and touted fringe benefits, are proving less effective regarding recruitment and retention. Despite all creativity and collaborative efforts, the system now faces long-term challenges with the enigmatic model of EMS, particularly in the north and south districts. There is a noted desire to strengthen the collaboration between transport and non-transport agencies, thought to be foundational in the success of a systematic approach to countywide EMS and patient care. Non-transport agencies continue to face significant challenges in securing grant funding and securing funding for EMS-related activities; however, these agencies are integral in assisting with response times to certain parts of the county. Collaborative efforts are fundamental to prevent duplication of efforts, equipment, and personnel.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The transport ambulance services in the county operate under a full-time, career-based agency with a scheduled staffing model. While portions of the county use a paid-per-call/paid-on-call model, these EMS stations are still scheduled. Each station location in the south county has a station manager who directly reports to the PFD agency administration. The PFD has an intergovernmental agreement with the BCAD to provide EMS services throughout the county. The non-transport agencies

are structured differently, using a full-time career department in the population center of Chubbuck and an unpaid, unscheduled non-transport service in the remainder of the county by way of a fire district and search and rescue services.

- **Responder Average Age:** The partially compensated or volunteer agencies have an increasing average age, while the full-time, career-based agencies report an average age of 34. The exception is one volunteer service with a younger average age due to the recruitment of high school and college-aged individuals.

- **Staffing Numbers:** There are a reported 140 EMS responders in the county, including paramedics, Advanced EMTs, Basic EMTs, and EMRs. Of these individuals, 71 EMS responders are compensated in some form from the BCAD budget; 26 are paid as full-time employees from the BCAD, and 45 are paid-per-call/paid-on-call by the BCAD funding. In contrast, the remainder is either reimbursed from fire district budgets or as unpaid or partially compensated responders.

- **Staffing Concerns:** Staffing is thought to be moderately stable throughout the county. Agencies universally express concerns about recruiting and retaining staff, especially in ambulances in rural areas, and regarding the use of unpaid or partially compensated staff. A recent increase in out-of-service time is noted for BLS Ambulances in the south district, which is thought to be secondary to scheduling conflicts and recruitment and retention challenges. Amongst partially compensated or uncompensated departments, there is a predominant recruitment threat of training individuals into an EMS license and not retaining these EMTs despite multiple tactics to do so. In addition to providing compensation for unpaid EMS personnel at QRU agencies, funding is also needed to provide specific EMS training and licensure maintenance throughout the non-transport agencies alike. Funding for EMS licensure for non-transport agencies primarily comes from fire-related funds.

- **Staffing Strengths:** All agencies have dedicated EMS providers committed to system sustainability and excellence.

- **Recruitment & Retention:** There is hope regarding a new paramedic-level training program implemented in Eastern Idaho through the Madison County Fire Department in Rexburg, ID. This training model may decrease the need for long stretches of challenging schedules and necessary overtime coverage to adequately cover shifts while paramedic trainees are out of state attending paramedic programs. Agency leadership hopes that this will also improve retention and paramedic staff coverage. Some agencies that use unpaid or partially compensated staff members are hopeful that the future may include fully paying staff with a competitive wage and maintaining a part-time or full-time schedule; however, all agencies also know that this would require additional funding, which is not currently present. If there was a budget to support training at the non-transport agencies, these agencies agree that there would be an increased ability to retain and recruit personnel. The possibility of fringe benefits or health insurance is also considered a possible attractant, particularly in uncompensated or partially compensated agencies.

4.2.2.2. Training & Education Overview

- Previously, the National Emergency Medical Training Center in Boston was used to provide paramedic training; however, the recent development of a paramedic training program in Eastern Idaho allows paramedics to stay locally for internships, which decreases costs associated with travel and enables the department to continue scheduling the trainee around their local training schedule. Potentially, State Universities were mentioned as a possibility for training programs, but local Universities seem unable to offer similar training programs compared to the previously mentioned programs.

- All agencies use in-house continuing education and training, but many use training and conferences provided through collaboration with Idaho State University and local hospitals. Education and training budgets are limited, so there is little participation in larger conferences or educational opportunities.

4.2.2.3. Facilities Overview

- Station Location(s): There are three transport ambulance stations within Pocatello's population center. There are two non-transport EMS provider locations in the northern county, both in Chubbuck. Three rural EMS locations are also noted in smaller cities in the south, though a distance from a local hospital (Lava Hot Springs, Downey, Inkom). These latter three fire stations accommodate the physical ambulances; however, these stations also serve as these communities' current unaffiliated fire stations. All stations are noted to meet the agency's location, condition, and size needs.

- Station Condition(s): The condition of the stations is noted to be adequate, though updating for equipment and training is identified. There is a need for more space within the unpaid stations. Several agencies need more indoor storage space due to multiple vehicles/apparatus currently parked outside in the weather.

- Facility Needs: The growing population in the north portion of Bannock County creates challenges with infrastructure, response, and increasing demand for EMS response. In response, there is likely to be an expansion of emergency services and consideration of additional transport in this location. Additional ALS coverage in the southern portion of the county is being considered to supplement current services and to accommodate the areas with challenging recruitment and retention and population growth. Meanwhile, several agencies have expressed a desire to collaborate with the BCAD to accommodate space and to integrate resources to host a transport ambulance in the north portion of Bannock County. While helping to address a systems gap, increasing personnel and capital equipment expenditures would be challenging if an additional station is added in any portion of the county.

4.2.2.4. Equipment/Supplies Overview

- Adequacy: The current equipment and supplies of the agencies are noted to meet the system's needs regarding age, functionality, and use appropriateness. Each agency

can obtain supplies and adequately stock the ambulances or response units, though non-transport agencies need a formal budget line item for EMS supplies. While there is some exchange of durable EMS supplies, agencies do not have a written agreement or formal plan established with BCAD for reimbursement or assistance purchasing supplies and equipment.

- Condition: Most mandated equipment in the county is noted to be in good or excellent condition.

- Funding: Grants have been requested by BCAD for gurneys, monitors, and ambulances. Non-transport agencies have also submitted grants for larger capital equipment such as monitors and automated external defibrillators. Equipment grants are challenging to receive as a non-transport unit, so some were not awarded; however, the transport agency has previously assisted some agencies by providing a monitor and related training.

- Needs/Shortages: Several agencies feel that acquiring the necessary equipment and supplies to help provide EMS is challenging, with a heavy reliance upon grant acquisition or alternate funding sources to leverage costs. Transport ambulances can readily stock ambulances with supplies. All equipment is noted to meet the needs of the department. There is also a county reserve fund to purchase capital equipment if needed. With multiple collaborating agencies, there are challenges when the transport ambulances update equipment or change a brand. Other non-transport agencies must also update their equipment at their own expense to maintain compatibility. Purchasing equipment and supplies by the non-transport units is challenging with limited EMS budgets, also requiring leverage for costs with grant supplementation.

4.2.3. Financial Overview

Financial information was shared by transport and non-transport agencies within the county, and insufficient funding was a predominant concern countywide. Each non-transport agency faces a future of uncertainty and continued reliance upon outside funding sources, whether from respective fire districts, private donations, or acquisition of grants, to support EMS-related activities. BCAD does have a stable funding source but operates at cost per the intergovernmental agreement and also experiences limited annual budget increases with a need for continued financial support through other means, including grant funding, to make significant capital expenditures. While there is BCAD funding with annual increases present, there is little room for substantial system expansion into areas identified as greatest need by leadership without additional tax support, collaboration, or restructuring of current budgets.

4.2.3.1. Expense Overview

- Personnel Expenses: It is estimated that $3,473,291 in expenses is dedicated to EMS personnel costs within Bannock County. This information is regarding one transport ambulance district and two agency fire districts. These fire districts and

volunteer agencies have little to no dedicated funds for annual EMS-related personnel costs.

- **Operational Expenses:** It is estimated that $650,899 in countywide expenses is dedicated to operations such as disposable supplies, training, and facility expenses. Since each non-transport agency has a limited EMS fund, very little is dedicated toward this fund. Largely, all that is dedicated toward the fund goes toward education or supplies.

- **Capital Expenses:** Countywide capital expenses are estimated at $275,500 each year. This goes toward the purchase of large capital equipment such as ambulances.

4.2.3.2. Revenue Overview

- The Bannock County Ambulance District taxing levy rate is 0.000243136%.

- The transport agency bills for service using an in-house billing service. In FY 2022, billing revenue includes $2,065,348 for 911 transports and $150,588 for interfacility transfers.

- Agencies collaborating in the north do not bill for service as they are non-transport agencies.

- The county has a rainy-day fund carried over annually, totaling $3,060,829.

- EMS Agencies, the non-transport agencies receive a portion of their operating revenue from grants or fundraising activities, while others receive supplemental support from their respective fire districts.

4.2.4. Resource Assessment Additional Factors

Non-transport agencies employ EMS personnel to provide a portion of EMS-related activities. These agencies rely on supplemental funding from fire district budgets to provide these services and maintain EMS licensure and credentialing. Because two of these agencies are unpaid and unscheduled, actual working and training hours for EMS services and preparedness are not calculated and are not included in the total systemwide cost for EMS provision; this makes it difficult to give a complete representation of the total working and training hours needed to sustain the countywide EMS system. If the total number of dedicated EMS working and training hours put forward by all non-transport personnel were added to the countywide cost of the EMS system, this would have substantially altered the expense summary. Moreover, if this summary were to apply a livable wage value on a volunteer or partially compensated working hour, this resulting countywide number would further emphasize the need for additional tax support, grant funding, or continued collaborative funding sources.

The agencies identify several prominent needs in this assessment, including increasing personnel, transport capabilities, and capital to support a growing population and system, specifically in the north portion of the county and in the south part of the county.

Additionally, increasing support and compensation for existing personnel, adding new personnel to expand the current ALS response area, and decreasing ALS response times are prominent needs. One of the most urgent needs identified is the recruitment and retention of EMS personnel in agencies that use volunteer or partially compensated response models, particularly given that these agencies currently fill service gaps and provide expeditious responses to certain areas. While additional ALS support has been evaluated, expanding resources requires significant capital expenditures such as new or updated facilities and ambulances and employing more career personnel.

All elements noted above involve increased financial support or further formal collaboration. While initial capital expenses for growth could be paid from agency carryover, the budget does not currently support annual recurring expenses such as additional personnel. Without continued use of non-transport agencies, sizeable GEMT reimbursement, leverage by grant support, or alternate sources of supplemental funding, there is a tight margin for unplanned capital expenses, growth, expansion, or improvements. In short, the county's current resources don't match long-term needs or anticipated population growth.

REFERENCE LIST

[1] University of Idaho Extension. (2022, December 13). *Bannock: Population*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/drawregion.aspx?regionid=16005&indicatorid=1

[2] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/table/PST045215/1645820

[3] Bannock County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau.*

[4] Wpczar. (n.d.). *Pebble Creek Ski Area*. Pebble Creek Ski Area. https://pebblecreekskiarea.com/

[5] Pocatello Regional Airport. (2023, August 29). *Homepage – Welcome to the Pocatello Regional Airport & Business Park*. https://www.iflypocatello.com/

[6] University of Idaho Extension. (2022, December 13). *Bannock: Total housing units*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=18

[7] University of Idaho Extension. (2022a, December). *Highlights for Bannock*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005

[8] Massachusetts Institute of Technology. (2023, February 1). *Living Wage Calculator - Living wage Calculation for Bannock County, Idaho*. Living Wage Calculator. from https://livingwage.mit.edu/counties/16005

[9] University of Idaho Extensions. (2022, December 13). *Bannock: Employment by industry*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=17

[10] University of Idaho Extensions. (2023, March 29). *Bannock: Agricultural Workers*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=100050

[11] University of Idaho Extension. (2023, April 25). *Bannock: Poverty rate by age*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=11

[12] Zillow. (2023). *Bannock County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/1530/bannock-county-id/

[13] University of Wisconsin Population Health Institute. (2023). *Bannock, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/bannock?year=2023

[14] University of Idaho Extension. (2023a, April 13). *Bannock: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=29

[15] *Medicaid & Health | Idaho Department of Health and Welfare*. (n.d.). https://healthandwelfare.idaho.gov/services-programs/medicaid-health

[16] Health West Inc. (2023a, September 12). *Home - Health West Inc.* https://www.healthwestinc.org/

[17] University of Idaho Extension. (2023c, May 10). *Bannock: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=5

[18] University of Idaho Extension. (2021, September 27). *Bannock: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=100013

[19] Resource Assessment Survey.

[20] University of Idaho Extension. (2023a, April 12). *Bannock: Migration and natural change*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=2

[21] University of Idaho Extension. (2022b, December 13). *Bannock: Household types*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=20

[22] *Fire - City of Chubbuck*. (2023, May 4). City of Chubbuck. https://cityofchubbuck.us/fire-2/

[23] *NBFD*. (n.d.). https://www.northbannockfire.us/

[24] *The J.R. Simplot Company - bringing Earth's resources to life*. (n.d.). https://www.simplot.com/

[25] *Portneuf Medical Center*. (n.d.). Portneuf Medical Center. https://www.portneuf.org/

BEAR LAKE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau o EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of he EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Bear Lake County is a remote county in southeast Idaho with one licensed transport agency providing Emergency Medical Services (EMS). The county supports this agency through billing revenue and general tax support; no ambulance taxing district is present. The agency transports patients to the critical access hospital in Montpelier for stabilization, while the same agency also performs interfacility transports. There have been challenges with the recruitment and retention of EMS personnel for 911 coverage, which has translated to difficulties in providing interfacility transports (IFTs), particularly given an average IFT time of four hours. There is inadequate funding to support compensation for a full-time EMS director or to compensate personnel for 911 call coverage or incidents.

The county has a unique geographic layout and remoteness, with a small year-round population. Bear Lake boasts significant summertime tourism and recreation due to its relative proximity to metropolitan areas in Utah and other neighboring states. The complete impact of tourism on Bear Lake EMS is largely unknown; however, the seasonal population is directly correlative to increased seasonal call volumes, with minimal additional funding provided to the single agency. In addition to challenges with infrastructure and timely response to these areas of tourism, there is an increased cost of living and increasing real estate prices, which may also be correlative to tourism and the seasonal populations. The county is rural/remote, making population growth, tourism, and cost of living more impactful to the smaller year-round population and making household income of utmost importance while further challenging volunteerism.

In addition to remoteness, other challenges this agency faces are adequate funding, staff recruitment and retention, and oversight provided by a part-time leader, offset by the greatest strength of EMS in Bear Lake County: the persistence, dedication, and sacrifice of a small group of Emergency Medical Technicians (EMTs) who sustain the system. With

minimal general tax support and rare financial carryover, this system relies heavily upon ample net billing revenue and grants, with continued use of an uncompensated model for 911 coverage. Significant changes to this structure will only be possible with additional funding or financial support. The long-term sustainability of countywide EMS will be challenging in its current operational model, despite close collaboration between the agency, county entities, the local hospital, and the collective EMS personnel's diligence and sacrifice.

Strengths	Opportunities
• A single agency coverage for entire county. • A small group of dedicated Emergency Medical Services (EMS) providers. • Involvement of the agency medical director. • Collaboration between the hospital and EMS. • Limited expenses.	• Collaborative efforts with the local hospital and other internal county agencies. • Consider collaboration with other outside county EMS Agencies. • Compensation for EMS personnel. • Increasing the level of service provided. • Establishing a dedicated EMS tax levy or tourism/occupancy tax. • Consider succession planning.
Challenges	**Threats**
• Recruitment and retention of EMS personnel. • Tight budget, inhibiting compensation to EMS personnel for 911 coverage. • Challenges with daytime call coverage • Large capital improvement projects with minimal carryover/reserve funds. • Tourism inputting little financial support into the current system yet increasing service demands. • Duplication of the system with multiple EMS stations requiring scheduled staff and equipment for each of these stations.	• Concern for limited EMS services in neighboring counties which may inflict greater demands on the county agency. • Loss of certain personnel who cover more significant portions of time. • Decreasing net billing revenue. • Increasing cost of living. • Interfacility transfers place strain on the system. • Continued seasonal or year-round population growth.

Table A: Bear Lake County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Bear Lake County is named after the high-elevation lake incorporating 75 square miles of water in the county's southern portion, extending into Utah. [1] The county is known for long winters and year-round tourism, with large numbers of tourists in the summer months. Moreover, the county is remote, with challenging year-round access to surrounding metropolitan areas and over 90 minutes away from either the metro area of Pocatello or Logan, Utah. [2] With an estimated population of 6,722, it has seen a net in-migration of 2.8% more than Idaho, increasing 184 residents between 2020 and 2022. [3] Most of the population resides in or surrounding Montpelier. A smaller population lives in Paris, the county seat, and the less populated areas of Bloomington, Georgetown, St. Charles, and other unincorporated communities. Bear Lake is a significant draw for year-round recreation. [2] Federal land makes up 46% of the public land in the county, with 3.1% owned by the State of Idaho. [4]

Demographic	2010	2020	2022
Population	5,986	6,372	6,722
Land Area	974.79 sq mi	975.73 sq mi	975.73 sq mi
Per Capita	6.1 PPSM	6.5 PPSM	6.5 PPSM
PPSM: *People per square mile*			

Table B: Bear Lake County Population & Geography

2.2. Economics

The average unemployment rate in 2021 was similar to that of Idaho, with 3,459 jobs in the county. A 2.1% increase in the average wage per job was noted between 2020 and 2021. [5] Additionally, 20% of industry employment is government-related, followed by nearly 16% in farming and 11% in retail sales. Healthcare accounts for 4.3% of the county's industry. [6] In 2022, 582 agricultural workers were identified, with 15% being migrant workers. [7] As of 2021, 3,868 housing units were present in the county, which has been relatively stable over

the last decade, with 46% of these housing units as owner-occupied, 11.5% occupied by renters, and the remainder of homes reported as vacant. [8]

The median age in Bear Lake County is 39, which has been gradually increasing over the last decade; it is noted to be more than the median age in Idaho and the United States. [9] The poverty rate is nearly 10%, with more than 13% of children under 18 living below the poverty level. The poverty rate for those over the age of 65 is 5.6%. [10] A livable annual salary, based on a living wage, is $31,449, and a poverty salary is $13,582. [11]

In 2021, the United States (US) Census identified a median home value in Bear Lake County as $160,200 (as compared to Idaho's $266,500). [12] However, in the review of average home prices in 2023, as compared to median home values noted by the US Census, the current market values are 140% more, with an average home priced at $384,393; this requires an approximate net household income of $74,503. [13]

Metric	Data
Total Population (2022)	6,722
Median Age	39.0 years old
Poverty Rate (2021)	9.7%
Number of Jobs (2021)	3,459
Average Annual Wage per Job (2021)	$35,840
Unemployment Rate (2023)	3.1%

Table C: Bear Lake County Economic Factors

2.3. Social Determinants of Health

Bear Lake County is ranked #36 of 43 ranked counties in Idaho as it pertains to health outcomes and health factors. Overall, the county is ranked as one of the least healthy counties in Idaho regarding length and quality of life. It is ranked in the higher middle range regarding health factors or things that can be modified to improve length and quality of life. [14] There are 6.3 primary care physicians per 10,000 in the population, similar to Idaho. There are currently four primary care physicians located in Bear Lake County, which is a 20% decrease from one year previous. [15] Within the county are two community health centers, a home health company, an end-stage renal disease provider, one skilled nursing facility, and two long-term care facilities. [16]

The population is estimated at 6,722, with nearly 27% under 18 and over 20% over 65. [17] The percentage of those with health insurance has remained relatively stable over the last five years. As of 2019, 11% of those people under 65 had no health insurance coverage, and 5.4% of children under 19 had no health insurance coverage. [18]

2.4. Indicator Impacts to EMS

Bear Lake County has a challenging demographic relative to access to care. Overall, this county is determined to be one of the least healthy counties regarding health outcomes, and this potential decrease in preventative care with a declining number of primary care providers raises concerns for increasing comorbidities, translating to an increasing call volume and possible increase in patient acuity.

The remote nature of the county also presents challenges for an agency regarding recruitment and retention of personnel. Approximately 52% of the population is in the working age range, and 20% are in the 65 and older age range. The number of those in the 65 and older age range has gradually increased over the last decade and is more pronounced in Bear Lake County than in Idaho. [17] Approximately 61% of those over 16 are actively involved in the labor force. [19] Ultimately, a noted decrease in the population under 18 (from nearly 38% in 1980 to 26% at present) may lead to challenges with recruitment into the EMS profession at a younger age. The percentage of individuals actively participating in the paid workforce may ultimately impact recruitment potential into a non-career EMS position, particularly one with limited personnel wages. An average work commute time is 30 minutes, which may also suggest that people in the working age range are employed outside of the county, further limiting the time people are available to help provide EMS on-call coverage, especially during weekdays. [12]

When considering long-term retention of EMS personnel, especially in a rural area reliant upon an uncompensated EMS workforce, whether someone can rent or own a home near the agency should be considered. Given the current housing market prices at $384,393, the median household income in Bear Lake County ($65,088), and an average wage per job ($37,008), housing affordability is only feasible in portions of Bear Lake County in a home with a dual income or in families who are willing to accept a higher than optimal debt-to-income ratio. [5,13] Given this, housing prices will likely continue influencing recruitment into a largely unpaid agency, especially with associated increased living costs.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

The EMS system in Bear Lake County has seen a 3.8% increase in call volume over the last few years. The single county transport agency reports 383 calls for 911, resulting in 291 patient transports with 47 interfacility transfers. There is some difference in the call volume reported by the agency compared to the state data, this may be due to the reporting system used as the agency transitions from paper charting to the state-provided documentation system. A noted percent increase in patient transports of 13% was also seen, and interfacility transports constitute approximately 13% of the total volume. The total call time is about 90 minutes, with a chute time of less than ten. A complete call time averages 90 minutes for 911 calls; however, not reported is the average interfacility transport time of 240 minutes.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Bear Lake County Ambulance Service	*206*	*71*	**277**	*233*	*66*	**299**
Ambulance Total	*206*	*71*	**277**	*233*	*66*	**299**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Bear Lake County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Bear Lake County Ambulance Service	*8 min*	*9 min*	**17 min**	**39 min**	**90 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Bear Lake County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Bear Lake County has one Public Safety Answering Point (PSAP), a dispatching center through the Sheriff's Department. Bear Lake County Sheriff's Department dispatches for fire, law enforcement, search and rescue, and EMS. No Emergency Medical Dispatching (EMD) is available, and no cost is incurred to the EMS agency for dispatching services.

4.1.2. EMS Agency Overview

Bear Lake County has one licensed transport agency, the Bear Lake County Ambulance Service (BLCAS). Bear Lake County Fire Department (BLCFD), Montpelier City Fire Department, and Bear Lake County Search and Rescue are also volunteer fire departments; these agencies do not possess transport or non-transport EMS licenses and are not formally affiliated with the BLCAS. A written agreement is in place for the BLCFD to assist with vehicle accidents and extrication. However, the ambulance service is also equipped to provide this service and tends to perform patient extrication. BLCAS primarily transports patients to Bear Lake Memorial Hospital while providing interfacility transports to Idaho Falls, Pocatello, and Northern Utah hospitals. Bear Lake County Sheriff's Department has a Search and Rescue division and a Marine division; this organization also works closely with BLCAS. Because Bear Lake attracts many recreationists, the marine division of the Sheriff's Department promotes boating safety and education, conducts maritime patrols, assists with boat rescues, boating accident assistance, and investigation, rescue, and dive recovery. Portneuf Classic Air is typically used for air transport; Intermountain Life Flight from Salt Lake City may also be used, with occasional Air Idaho for patients in remote locations with longer transport times or critical patients.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Bear Lake County Ambulance Service	Transport	Intermediate Life Support (ILS)	Scheduled	Uncompensated for 911, Stipend for Interfacility Transport

Table F: List of EMS Agencies Located in Bear Lake County

4.1.2.1. Bear Lake County Ambulance Service Overview

Bear Lake County Ambulance Service (BLCAS) is licensed up to the intermediate level of service and is a public agency with budget oversight provided by the Bear Lake County Commissioners. The operation of the service is structured with elected positions consisting of a president, vice president, secretary, and volunteer medical director with an unpaid staffing model. There is no compensation for call time or 911 calls; however, with recent challenges in providing interfacility transports, there is now a stipend for each patient's transport. An average 911 incident is 90 minutes, but an average IFT is often more than four hours; this removes the primary ambulance from service for prolonged periods with challenges in backfilling a second ambulance for 911 response.

According to the agency, 10 EMRs, 19 EMTs, and one driver are affiliated with the agency. The agency is working toward an increase in the level of service response to all 911 calls to an intermediate level, with one EMT recently attending education hosted by Star Valley EMS in Wyoming and adding optional modules to the EMT licensure through in-house training. Moreover, despite attempts to increase the level of service, BLCAS currently has two Advanced Emergency Medical Technicians (AEMTs) affiliated with the agency. There is a minimum expectation for each volunteer to be on-call several shifts each month, and each is responsible for attending a percentage of the weekly in-house training hosted by the agency. Only a few EMTs are regularly active, meeting minimum expectations and providing coverage for most incidents. While there is a volunteer search and rescue agency and volunteer city and county fire departments, the ambulance also performs patient extrication from automobile accidents; the agency maintains its own extrication equipment, training, and credentialing.

4.1.3. Hospital Access Overview

Bear Lake EMS transports 911 patients to Bear Lake Memorial Hospital. Bear Lake Memorial Hospital is a county-owned non-profit organization with a level IV trauma designation. The Montpelier facility contains an emergency department with 17 licensed acute care beds. Attached to the hospital is an assisted living facility. Within Bear Lake County, there is access to a skilled nursing facility, home health, assisted living center, family and internal medicine, obstetrics and gynecologic services, general surgery, orthopedic surgery, mental health, and dialysis services. [20]

4.2. County EMS System Resource Assessment Overview

The following information has been shared from the single transport agency licensed in Bear Lake County. The agency participated in a formal survey and a face-to-face site visit.

4.2.1. Organizational/Operational Assessment

The one EMS agency in Bear Lake County operates up to an Intermediate Life Support (ILS) license level, with EMS personnel working with revenues from billing and tax support from general funds provided by the county. Personnel are paid stipends for interfacility transports; however, there is no budget to support compensation for call coverage or attending to 911 incidents. An attempt to address recruitment, retention, and skills maintenance has been addressed by increasing access to frequent training opportunities. However, there are concerns about maintaining this system long-term without providing compensation or benefits in a largely uncompensated agency. Moreover, increasing challenges have been reported with the availability of staff to respond to incidents, especially during daytime/work hours; this has been thought secondary to personnel working outside of the area or working full-time to meet family needs. However, a handful of highly active and dedicated, scheduled, and uncompensated EMTs in Bear Lake County continue to respond to requests for service and perform planned and unscheduled interfacility transfers and public/community standbys. Despite a positive support system involving county government and hospital administration, the system would be significantly impacted if several of these EMTs were unavailable, and the system may fail.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: The single transport agency in Bear Lake County reports a 60/100 subjective sustainability and stability rating regarding their EMS system.
- **EMS Agency Financial Situation:** The single tax-supported county agency reports getting by with deficits most years.
- **EMS Agency Communications Strategy and Outreach**: There is a written communications plan identified within the EMS agency, and there is a community outreach plan that is written, adopted, effective, and productive.
- **Community View of EMS Agency**: Community members have a favorable view of EMS. The public perception is also quite positive, and the agency overall feels supported.
- **Elected Official Support of EMS Agency:** The agency feels supported by local oversight with regular communication and budget oversight. The agency has a positive relationship with entities in the county, specifically with the county commissioners, a local hospital, and an actively engaged medical director.
- **Agency & System Response Outlook:** The future of this county is likely continued population growth and an increase of an aging population with an increase in recreation tourism leading to increasing call volumes. There are concerns about the decreasing number of volunteers, especially with the intent to increase to an intermediate level of service without personnel compensation. Significant shortages are noted, especially when providing interfacility transports, which prompted the

stipend provision for IFTs. The agency noted a sense of optimism in continued collaboration with the medical director and collaborative opportunities with adjoining agencies. The medical director is also reported to be a bright spot regarding oversight, collaboration, and provision of training opportunities. Although the agency is mainly unpaid, there was optimism regarding the recent addition of a stipend for providing interfacility transports. The agency is hopeful that additional compensation can be delivered to EMS personnel in the future.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** EMS in Bear Lake County is covered by a single agency that is public and county based.
- **Service Delivery Partners:** Medical directorship is a noted strength in the county with other strong service delivery partners, including county commissioners, ambulance board, and the local hospital.
- **Medical Direction:** The medical director is a volunteer position with no compensation provided in exchange for oversight or services. Per the agency, the director is involved in quality assurance, chart review, and EMS training. The medical director is also reported to be a partner in general agency operations, ongoing training, skills updates and maintenance, quality assurance, chart reviews, and functions as an intermediary between the agency and the hospital.
- **Communications & Interoperability:** Radio communications are reported to offer quality reception, interoperability, and reliable communication with outside counties.
- **Mutual Aid Systems & Agreements:** No mutual aid agreements exist with neighboring counties. However, there are informal mutual aid agreements that are often referred to. If an adjacent service in the region closed, this would significantly impact the agency, and they would not be able to absorb the call volume. BLCFD can provide extrication from vehicle collisions per the written protocol; however, this service request is rare as the EMS agency frequently provides its vehicle extrication.
- **Community Health EMS (CHEMS):** There is no structure or funding to support a CHEMS program, and there is little knowledge of it at the agency or the medical directorship level.
- **Patient Care Documentation System:** Documentation is performed using paper charting and the reporting system provided by The Idaho Bureau of Emergency Medical Services and Preparedness (hereafter referred to as the Bureau). Although there was a difficult transition to the computer-aided documentation system, members have recently increased its acceptance and use.

4.2.1.3. Response Overview

- **Level of Service**: A single EMS agency is licensed up to the ILS level and provides EMS transport for the entire county.

- **Agency Response Concern**: In the last year, there have been 11-20 reported occasions when there was difficulty responding to 911 incidents. These challenges have been increasing recently with more challenges in providing interfacility transfers and regarding 911 call coverage during weekdays. Most EMTs work full-time and cannot respond from their workplace; some work out of the county, further limiting response potential.

- **Helicopter Response & Utilization:** The agency predominantly dispatches a helicopter to rural/remote rescues due to distance, duration of the call, and the lack of resources to transport patients out of the backcountry. Helicopters are also called for prolonged extrication, rural/remote rescues, or based on patient acuity.

- **Factors Impacting Response Times:** In order of significance, difficulties in response were identified as time of day, location, weather, personnel shortages, geography, simultaneous callouts, and equipment or vehicle issues.

- **Response to Public Lands:** Given the large area of public lands, backcountry rescues are often resource-intensive and time-consuming. Many of these backcountry rescues use helicopter transportation to access the patient and decrease the time to definitive care during transport.

4.2.2. Workforce & Resource Assessment

There is cautious optimism by the single agency regarding the workforce and resources currently in the county. The staffing structure is primarily operated with a scheduled and uncompensated EMS model with increasing average age of volunteers. While there are 31 EMS providers in Bear Lake County, only a fraction of these regularly participate and perform coverage for most 911 incidents or interfacility transports. This same handful of individuals are also meeting the minimum requirements for affiliation. However, suppose minimum requirements were written in stone and punitive measures taken against individuals who do not meet minimum expectations. In that case, there is the fear that the agency would lose much of its current workforce. Significant challenges are present regarding EMS coverage during the day, given that much of the EMS personnel work full-time elsewhere, outside of EMS, and often in neighboring counties, with a heavy reliance upon those who are retired to help provide coverage. Call coverage would be impacted if one or two of these integral individuals were to leave the county. The agency also provides interfacility transfer coverage for the hospital; however, providing coverage for interfacility transports has become more challenging. It is even more difficult to procure a second ambulance for 911 coverage in the event of a simultaneous callout, given an average interfacility transport turnaround time of four hours. A stipend is now provided to everyone involved with interfacility transports with hopes of improving coverage. Education and training are a small portion of the budget, so networking with other local agencies has become imperative for ongoing education. While most equipment is noted to be functional, many pieces of equipment, and some communication devices, need to be updated and

replaced; however, with a limited budget for capital expenses, there is a continued need for grant support to purchase needed equipment.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The agency schedules EMTs at two of the three existing county stations, and no compensation is provided for 911 calls or on-call coverage. There is, however, a stipend provided for the provision of interfacility transports.

- **Responder Average Age:** The average age range of responders is between 45 and 54 years of age.

- **Staffing Numbers:** There are currently 31 EMS personnel licensed in Bear Lake County, including 10 EMRs, 19 EMTs, and two AEMTs reported by the licensed agency. The number of AEMTs is increasing.

- **Staffing Concerns:** There are noted staffing challenges as most responders work full-time in occupations that they cannot leave during the day for 911 callouts or interfacility transports; this limits daytime responders. There is heavy reliance upon select and retired individuals to provide daytime coverage. People sign on to become EMTs for a short time; however, due to the requirements to maintain agency affiliation, licensure upkeep, and the infrequency of calls, many people also lose interest.

- **Staffing Strengths:** Several EMTs in the agency are retired from paying jobs and can help provide EMS coverage during the weekdays, and there is also some flexibility in scheduling.

- **Recruitment & Retention:** The agency recently introduced an interfacility stipend to help compensate providers and hopes to provide 911 on-call and per-call compensation eventually. The agency also hopes to increase access to continuing education.

4.2.2.2. Training & Education Overview

Due to a limited training budget, all in-house training is utilized. One EMT recently participated in an advanced EMT training course hosted by Star Valley Emergency Medical Services. Local conferences are regularly attended by EMS providers, as well as any free regional continuing education opportunities. The agency medical director is highly involved in these regular monthly trainings. These trainings are available weekly to help accommodate all EMTs, regardless of their working or family schedule outside the agency. With the medical directors' support, the agency has progressively added optional modules so EMTs can increase their skills and capabilities. The expectation for minimum call time and training attendance prompts responders to attend weekly in-house training, refreshers, continuing education opportunities, and opportunities to increase scope and skill levels.

4.2.2.3. Facilities Overview

- **Station Locations**: The primary EMS station in Montpelier contains most ambulances and rescue apparatus. One station in Bloomington has an ambulance, but the station in Paris only has a rescue truck. There is no ambulance in Paris, as maintaining an ambulance in this location is costly, primarily related to the area's call volumes relative to the expiration of durable medical goods and equipment maintenance and updates. Responders report directly to the station in Montpelier or Bloomington. The primary EMS station is adequate to house equipment and apparatus, including an extrication truck and ambulances, and contains training rooms and offices.

- **Station Condition:** The facilities, including the training room, are noted to meet the agency's needs to maintain equipment and vehicles.

- **Facility Needs:** While the facilities are identified as sufficient, there are ongoing needs for facility updates and maintenance. There are no facilities to house full-time staff members at the central station.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: The current equipment and supplies in possession of BLCAS are noted to meet the agency's needs regarding age, functionality, and use appropriateness. The agency can generally obtain supplies and adequately stock the ambulance.

- **Condition**: Most mandated equipment on ambulances is noted to be in good condition by the agency, except for traction splints, portable suction devices, scoop stretchers, and mobile radios, which were reported to be mediocre.

- **Funding:** Grants were requested to leverage costs for extrication equipment, as well as for the replacement of patient care monitors, a new ambulance, and a power cot.

- **Needs/Shortages**: The agency has noted difficulty acquiring supplies and equipment, and there are several disposable goods for which there is a documented need. There have been some difficulties with acquisition due to supply shortages, and often, items are noted to be on backorder for lengthy periods.

4.2.3. Financial Overview

The following is data that the single agency within the county shared. Bear Lake County has no ambulance taxing district, and the agency's funding source is an apportionment of its billing revenue and general tax support. This current funding model is adequate to provide for lean operations, with a small salary for a part-time EMS president, without the ability to compensate personnel for 911 coverage. Grant opportunities are crucial to leverage capital equipment. Without grants or other possible funding opportunities, there would be significant challenges with updating equipment or acquiring capital. The agency hopes its future will include facility updates, expansion, or building maintenance; however, there is little room in the budget to support this without significant foresight, aside from the minimal annual carryover or general tax support from the county. Despite lean operations, prudent

spending, and low expenses, the agency reports annual deficits, relying on additional funding or leveraged grant support.

4.2.3.1. Expenses Overview

- **Personnel Expenses**: It is shared that $28,778 in expenses is dedicated to EMS personnel costs within Bear Lake County; this includes a stipend for interfacility transfers. Personnel expenses are noted to be 9% of the reported budget.

- **Operational Expenses**: It is shared that $170,865 in expenses is dedicated to operations such as disposable supplies, training, and facility fees. This is noted to be 55% of the total budget.

- **Capital Expenses**: It is shared that $35,000 goes toward capital expenses each year; this includes large capital equipment such as monitors and ambulances. This year, the budget is $109,578 due to the need to leverage the received ambulance grant. Capital expenses are 35% of the total budget.

4.2.3.2. Revenue Overview

- In FY 2022, approximately $148,447 came from billing reimbursement and general tax support.

    - Billing revenue: BLCAS bills for service through in-house billing. The county collects billing reimbursement and disperses half of this total back to the agency in the following fiscal year. For services conducted in FY 2021, the estimated billing revenue was $149,046. In FY 2022, half of this sum, $74,523, was dispersed to the agency, and the other half of net billing revenue remains with the county.

    - General tax support: No special taxing district is in place. In FY 2022, $73,924 was apportioned to EMS for operational costs from general tax support.

- There are no contracted fees for service revenue or noted revenue streams such as donations or fundraising.

- Grants are frequently sought out to leverage capital expenses. In the past few years, BLCAS has received grant support for automated external compression devices, extrication equipment, patient monitor systems, power load stretchers, and an ambulance.

4.2.4. Resource Assessment Additional Factors

The county EMS system is financially supported by billing reimbursement and general tax support from Bear Lake County. Under its current financial model, the agency cannot compensate personnel as billing and general tax support is primarily directed toward operational expenses. The agency relies upon leveraged funding with grant support to

further offset costs to acquire capital equipment, such as monitors, gurneys, and ambulances. Despite grant support and lean operations, the agency operates at a deficit, with a financial gap that must otherwise come from other forms of support. In an average year, significant capital expenses or improvements are only possible with carryover/reserve, county tax support, or additional support.

In addition to limited funding, recruitment and retention of personnel continue to be one of the leading threats to system sustainability in Bear Lake County. The challenges faced in this county are comparable to other counties in rural Southeast Idaho, with a much smaller population and call volume to support the billing revenue. While this agency offers a small stipend for interfacility transports, there is no room in the budget to introduce compensation for the provision of 911. Despite the intrinsic benefits each member may have with serving their community and their diligence in providing this service, the sustainability and longevity of EMS in Bear Lake County, under its current operational model, remain guarded.

REFERENCE LIST

[1] Wikipedia contributors. (2023). Bear Lake County, Idaho. *Wikipedia*. https://en.wikipedia.org/wiki/Bear_Lake_County%2C_Idaho

[2] *Bear Lake County Idaho Official Website*. (n.d.). Bear Lake County Idaho. https://www.bearlakecounty.info/

[3] University of Idaho Extension. (2023b, April 12). *Bear Lake: Migration and natural change*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=2

[4] Bear Lake County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[5] University of Idaho Extension. (n.d.). *Highlights for Bear Lake*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007

[6] University of Idaho Extension. (2022e, December 13). *Bear Lake: Employment by industry*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=17

[7] University of Idaho Extension. (2023a, March 29). *Bear Lake: Agricultural workers*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=100050

[8] University of Idaho Extension. (2022f, December 13). *Bear Lake: Total housing units*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=18

[9] University of Idaho Extension. (2023g, May 10). *Bear Lake: Median age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=100012

10] University of Idaho Extension. (2023f, April 25). *Bear Lake: Poverty rage, by age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=11

[11] Massachusetts Institute of Technology. (2023b, February 1). *Living Wage Calculator - Living wage Calculation for Bear Lake County, Idaho*. https://livingwage.mit.edu/counties/16007

[12] United States Census Bureau QuickFacts. (n.d.-a). *U.S. Census Bureau QuickFacts: Bear Lake County, Idaho; United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/bearlakecountyidaho,US/PST045222

[13] Zillow. (2023a). *Bear Lake County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/2627/bear-lake-county-id/

[14] University of Wisconsin Population Health Institute. (2023b). *Bear Lake, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/bear-lake?year=2023

[15] University of Idaho Extension. (2023e, April 13). *Bear Lake: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=29

[16] *Medicaid & Health | Idaho Department of Health and Welfare*. (n.d.). https://healthandwelfare.idaho.gov/services-programs/medicaid-health

[17] University of Idaho Extension. (2023i, May 10). *Bear Lake: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=5

[18] University of Idaho. (2021, September). *Bear Lake: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=100013

[19] University of Idaho Extension. (2022b, December 12). *Bear Lake: Labor force participation rate*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=12

[20] *Bear Lake Memorial Hospital - The Hospital Cooperative*. (2017, August 11). The Hospital Cooperative. https://hospitalcooperative.org/members/bear-lake-memorial-hospital/

BINGHAM COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Independently operated and funded agencies provide Emergency Medical Services (EMS) to a uniquely distributed, changing, and growing population in Bingham County. Most agencies receive supplemental funding in addition to billing reimbursement. Despite this, all county agencies identify needing more personnel and additional funding. The uniqueness and independence of the EMS agencies increase complexities with intercounty cohesion, sustainability, and continuity, especially as most agencies collaborate more with agencies and services outside of Bingham County.

Three agencies in the county are public, with tax support apportioned to each agency by Bingham County Ambulance District. Periodic adjustments in agency funding are based on county population shifts. A projected adjustment in the apportionment, in addition to the transition of one service from an initial response unit to a transport ambulance, is expected to create a financial ripple. This will impact the funding allotment to all agencies and create systemwide sustainability challenges, especially in the rural portion of this county. The anticipated impact emphasizes a need for further agency collaboration and additional funding to match the county's needs, especially in rural areas.

Moreover, directly contributing to EMS outside of its borders is a large portion of an Indian Reservation. This agency overlaps Bingham County resources and contributes to EMS in three other counties. Tribally funded, there are significant capital, funding, and staffing challenges, especially regarding increased cost of living and challenges in providing competitive wages from a relatively fixed budget system with nominal yearly increases that do not necessarily match inflation.

The unique county geography, population distribution, and infrastructure disbursement may limit agency collaboration. However, the individual agency and personnel leadership,

resilience, dedication, and perseverance are foundational to collectively address the countywide needs and develop a unified sustainability plan. The EMS response in Bingham County leaves few coverage gaps but continues to illuminate disparities regarding the equality of EMS services; this emphasizes an urgent need for further systemwide collaboration, funding, and personnel.

Strengths	Opportunities
• Formal individual agency leadership structure and dedicated Emergency Medical Services (EMS) personnel. • Collaboration between tax-based agencies and county officials. • Collaboration and mutual aid between the county agencies and neighboring counties. • An established ambulance taxing district is a primary funding source amongst county agencies.	• Streamlined resources with unified EMS coverage throughout the county. • Collaboration with other out-of-county agencies to support a regionalized model. • Continued progression from non-transport to transport EMS model in the north portion of the county. • The possibility of Ground Emergency Medicine Transportation (GEMT) reimbursement to increase net billing revenues. • Further consolidation of the EMS structure amongst the three county agencies.
Challenges	**Threats**
• The anticipated change in the tax apportionment. • Overlap of services from the tribally funded agency on county areas. • Unique geographic layout and county infrastructure contributes to limited communications between agencies. • Financial challenges with transition from non-transport to transport agency. • Continued use of a volunteer ambulance in the rural area with recruitment and retention challenges. • Provision of competitive wages to personnel. • Low Initial Association of National Registry Emergency Medicine Technicians (NREMT) test passing rate for rural EMTs impacts staffing.	• Increasing costs of building, maintenance, and equipment replacement. • Agency maintenance of a sufficient number of dual-trained firefighters and EMTs in the uncompensated agency. • Further alterations in the tax apportionment, especially in the rural areas. • A changing population distribution throughout the county. • An aging infrastructure and buildings with a need for an increased capital budget. • Decreasing billing reimbursement.

Table A: Bingham County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited, where appropriate.

2. County Indicators

2.1. Demographics

Bingham County is in Southeastern Idaho with a total population of 49,923, with a 2% population increase from 2021 to 2022. [1] Most of the population increase has been seen in the Shelley and Firth area and Blackfoot, with a 6.8% and 2.8% growth rate, respectively. This population change primarily affects the growing area near Shelley, in the northern portion of the county, near the metropolitan area of Idaho Falls. Population growth also affects the county seat of Blackfoot, which is in the east part of the county. Meanwhile, Aberdeen is in the southeast area of the county and is an agricultural and manufacturing town with a population of nearly 2,000 people. [2] While the community of Aberdeen has experienced a gradual population decline after the closure of a Simplot factory in 2014, with a loss of 300 jobs, this area continues to see a vast seasonal influx of agricultural workers, mainly migrant labor. [3] In 2022, the average number of agricultural workers was 3,455, with the county's most significant number of agriculture workers noted in October. In October, 106% of Bingham's agricultural workforce comprised migrant workers. [4]

Additionally, Fort Hall Indian Reservation is in the southwest portion of the county and is part of the Shoshone-Bannock Tribe. This reservation is approximately 20 miles northwest of Pocatello and incorporates portions of Bingham, Power, Bannock, and Caribou Counties. The Fort Hall Reservation has a census population of more than 5,970 and attracts visitors to the area to their tribal hotel and casino. [5]

Bingham County is more than 2,100 square miles and contains 26 square miles of water (Snake River, Blackfoot Reservoir, and American Falls Reservoir). Over 40% of the county land is public, either federally or state-owned; this area is quite remote and primarily impacts the county's search and rescue agency with remote and water rescues. [6]

Demographic	2010	2020	2022
Population	45,607	47,995	49,923
Land Area	2,093.97 sq mi	2093.73 sq mi	2093.73 sq mi
Per Capita	21.8 PPSM	22.9 PPSM	22.9 PPSM
***PPSM:** People per square mile*			

Table B: Bingham County Population & Geography

2.2. Economics

The average unemployment rate in 2021 was 3.2%, with 23,118 jobs in the county, an increase of 869 jobs in one year. [1,7] Of those jobs, the average wage per each is $44,476, with a 2.2% decrease between 2020 and 2021. [8] Meanwhile, the poverty rate is 11%, with 13.4% of those under 18 living below the poverty level and 6.9% of those over 65 living below the poverty level. [9] Of the leading occupations, 18% are government-related, 10% in manufacturing, and farm-related work accounts for 9.4%, with healthcare and social assistance at 8.9% and retail trade at 8.7%. [10]

With a predominance of owner-occupied homes, housing has grown significantly, both in the volume of units and cost. Though long-term growth in housing units has slowed somewhat, there are 16,845 housing units in Bingham County; this number has been steadily increasing, with an approximate 13% increase in the number of units observed between 2000 and 2010 and a 4.7% increase between 2010 and 2020. [11] Nearly 72% of those housing units are identified as owner-occupied, and renters occupy 21%, while 7% are identified as vacant. [12] As of 2021, the United States (US) Census identified a median home value in Bingham County of $190,600 (as compared to Idaho's $266,500). [2] However, a review of average home prices on the market in 2023, compared to median home values noted by the 2021 US Census, the current market values are 80% more, with an average home currently priced at $343,899; this requires a net household income of $66,651 regarding a 35% optimal debt to income ratio. [13]

Metric	Data
Total Population (2022)	49,923
Median Age (2022)	34.6 years old
Poverty Rate (2021)	11%
Number of Jobs (2021)	23,118
Average Annual Wage per Job (2021)	$44,476
Unemployment Rate (2023)	3.2%

Table C: Bingham County Economic Factors

2.3. Social Determinants of Health

Bingham County is ranked #37 of 43 ranked counties in Idaho in terms of health outcomes and health factors. It is ranked amongst the least healthy counties in terms of length and quality of life and in the higher middle range for elements that can modify or improve the length and quality of life, including factors such as tobacco use, increasing activity, or alcohol consumption. [14] There are 2.9 primary care physicians in Bingham County per 10,000 people, and there are currently 14 primary care physicians in Bingham County; this is four fewer physicians than in 2016. [15] The county has access to community health centers, home health agencies, surgical centers, an end-stage renal disease provider, skilled nursing facilities, and long-term care facilities. [16]

Just under 30% of the population is under 18, and nearly 15% of the population is over 65. [17] Of the population over 65, as of 2019, almost 15% had no health insurance coverage, and 6.3% of those under 19 had no health insurance coverage. [18] Further, a count EMS transport agency shared the following insurance payer mix, somewhat reflective of the county: Medicare 37%, Medicaid 29%, Commercial 18%, and 16% out of pocket. [19]

2.4. Indicator Impacts to EMS

Bingham County has a changing population distribution within its boundaries, with a most noted population and housing increase in the northern and eastern county areas and a population decrease in the southwest portion. This population increase in the north and east parts of the county will likely translate to increased call volumes and further the demands placed on EMS services. Conversely, the Aberdeen area has had a slight decline following the closure of a factory, which dramatically affected the population in this area, decreasing the availability of Emergency Medical Technicians (EMTs) and decreasing call volumes, reflected in decreasing revenue. This area is simultaneously experiencing an aging population with a predominance of agriculture and manufacturing industries; this aging population and these growing industries will likely contribute to increasing demands for EMS services. [20] Further contributing to the increased demand for EMS is the decreasing number of primary care providers, the low health ranking, and overall fewer health care providers, as seen throughout Idaho. Decreased preventative care and primary medicine may increase demand for EMS services.

Housing prices are increasing with a nominal increase in the number of jobs in the county and a decrease in the average wage per job. This increased cost of living with decreasing wages will most impact staffing availability in volunteer or partially compensated agencies. The rising cost of living will inhibit many from volunteering, particularly when traveling outside of the county to work, working multiple jobs to match the cost of living, or working in a career that does not allow EMS response during work hours. Increasing housing prices will likely also impact the retention of career or compensated EMS personnel, prompting the personnel to another agency that provides more competitive wages. In Bingham County, healthcare support positions have an approximate salary of $31,830, which, if this data is used as a reference point for comparable EMS wages, raises concern for a sustainable, long-term EMS workforce, given current living costs. [7]

Regarding living costs, when contemplating long-term employee retention, whether someone can rent or own a home in an area should be considered. Given the current housing price of $343,899, the median household income in Bingham County of $68,664, and an average wage per job of $44,476, housing affordability is possible with a dual-income household or with an increased debt-to-income ratio but less likely for a single-income household. [2, 13]

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

As reported by state recorded data, there were 3,872 requests for 911 service in 2022 throughout Bingham County, which was 98 fewer than in 2021. Comparatively, agencies reported a total of 4,364 requests for 911 response in 2022 (Aberdeen Fire Department: 250, Fort Hall Fire and EMS: 1,088, Black Foot Fire Department: 2,153, and Shelley Firth Quick Response Unit: 873), which resulted in 2,754 transports by the transport agencies (AFD: 200, FHFD: 1,000, BFFD: 1,554). BFFD reported 400 interfacility transports, and FHFD reported 20 interfacility transports.

Overall, nearly 74.5% of all calls within the county were provided by the Blackfoot Fire Department (BFFD), 12.6% by Shelley Firth Quick Response Unit (SFQRU), and the Aberdeen Fire Department (AFD) responded to 3.9% of calls. City of Idaho Falls Ambulance Service (COIAS) and BFFD co-respond to calls with SFQRU to provide transport. Whether BFFD or COIAS co-respond to a call is based on the given location of the service request relative to the predetermined geographic boundary; according to 2021 state data, the City of Idaho Falls Ambulance Service (COIAS) responded to northern Bingham County an average of one call per day, which was 60% of the total SFQRU EMS calls and transported 46% of patients from those calls. In 2022, Idaho Falls responded to 55% of EMS calls in the SFQRU area and transported patients from 42% of these. Aberdeen has the longest transport time and the longest total call time, with an average of 108 minutes; this indicates a longer percentage of time they would be out of service and unavailable for secondary calls. Fort Hall Fire and EMS responds to an average of fewer than one call per day but has the shortest total call time of all transport agencies.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Aberdeen Fire Department	77	45	122	81	39	120
Blackfoot Fire Department	1,451	828	2,279	1,471	808	2,279
City of Idaho Falls Ambulance Service (COIAS)	276	83	359	283	72	365
Fort Hall Fire & EMS	320	187	507	206	137	343
Ambulance Total	2,124	1,143	3,267	2,041	1,056	3,089
Shelley Firth QRU	-----	600	600	-----	661	661
QRU Total	-----	600	600	-----	661	661

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Bingham County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Aberdeen Fire Department	6 min	4 min	10 min	45 min	108 min
Blackfoot Fire Department	2 min	4 min	6 min	36 min	83 min
City of Idaho Falls Ambulance Service	4 min	14 min	18 min	34 min	76 min
Fort Hall Fire & EMS	2 min	5 min	7 min	35 min	62 min
Shelley Firth QRU	2 min	7 min	9 min	-----	48 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Bingham County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. PSAP Overview

Depending on the location of an individual making a 911 call, the call is most likely routed to the Bingham County Sheriff's Office, and the closest resource is dispatched. Fort Hall Fire and EMS do not have their own 911 system, but they do have a Public Safety Answering Point (PSAP). If a call occurs within the reservation boundary, the call may be routed to the Fort Hall PSAP to dispatch FHFD. However, there is significant variability based on a caller's location, especially as the reservation incorporates four counties, so it is also possible for the call to be routed to a respective county dispatching system (in this case, Bingham County Sheriff's Office), and subsequently transferred to FHFD. Regardless, if a call reaches the Bingham County Sheriff's Office PSAP requesting service inside the Fort Hall area, the call will be transferred to the Fort Hall PSAP to dispatch Fort Hall Fire and EMS.

4.1.2. EMS Agency Overview

EMS in Bingham County is a complex interworking primarily of three tax-funded agencies and one tribal-funded agency. The Bingham County Commissioners oversee the Bingham County Ambulance District, which provides tax funding to the AFD, BFFD, and SFQRU. The Bingham County Commissioners provide budget oversight and disperse this funding between the three agencies based on the taxable value of the school districts in their respective areas. The total base distribution amount of the Bingham County Ambulance District is divided by school district values. The three county agencies then receive a percentage of tax funds based on this value, less a portion of district funds reserved each year from the overall budget for capital expenses. Each of these tax-supported agencies is structured differently. One rural agency is an unscheduled, uncompensated, fire-based service covering the southwest portion of the county. Another agency is a career fire department providing coverage for 1,500 square miles. Thirdly, an agency in the north part

of the county covers over 800 square miles and is licensed as a non-transport Advanced Life Support (ALS) service, with transport provided by COIAS or BFFD, depending on location.

In addition to an uncompensated search and rescue unit, Fort Hall Fire and EMS District has an EMS transport license listed in Bingham County. This agency provides coverage in Bingham County and portions of neighboring counties while collaborating with the Blackfoot Fire Department, which occasionally provides ALS assistance and transport for FHFD. The agency also collaborates with the Blackfoot Fire Department as the BFFD performs ALS assistance and patient transport for FHFD. The agency provides its own leadership and tribal oversight, independent of Bingham County's financial resources and administration. These agencies do overlap but do not collaborate regularly. Agencies are more likely to overlap or cooperate with agencies outside the county.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Aberdeen Fire Department	Transport	BLS	Unscheduled	Uncompensated
Bingham County Search & Rescue	Non-Transport	BLS	Unscheduled	Uncompensated
Blackfoot Fire & EMS	Transport	ALS	Scheduled	Career
Fort Hall Fire & EMS	Transport	ILS	Scheduled	Career
Shelley Firth QRU	Non-Transport QRU	ALS	Scheduled	Paid per call/Paid on call

Table F: List of EMS Agencies Located in Bingham County

4.1.2.1. Aberdeen Fire Department Overview

Aberdeen Fire Department (AFD) is a public transport agency licensed at the Basic Life Support (BLS) level with two stations in Aberdeen and Springfield. This is a tax-funded agency, also receiving a portion of tax reimbursement from Bingham County Ambulance District. The agency is staffed with an uncompensated dual-licensed workforce of firefighters/EMTs. At one point, the agency once had people licensed as firefighters or EMTs. However, due to increasing challenges with staffing the ambulance, the agency has adopted a model where all newly recruited volunteers should simultaneously possess an EMT license. Significant challenges have inhibited many individuals from continuing in the agency as they have been unable to successfully pass the standardized exam. Many members fail the exam one time and then never retest. While many potential candidates possess the qualifications to perform firefighting, they do not meet the minimum standards for EMS, which further challenges recruitment and retention for fire services and EMS services alike.

The agency does not schedule EMS personnel; however, through communication amongst each other, the agency will ensure that someone is in town and available to respond.

Because of this communication and the willingness of the EMTs to help, there have been very few instances in which there has been difficulty staffing an ambulance to respond in an emergency. The agency has 21 EMS personnel; 12 are EMTs, and six are drivers. Approximately half of these responders are regularly participatory. The agency has a partially compensated Fire Chief who is also an EMT and closely collaborates with the District Fire Commissioners, having limited direct communication with County Commissioners.

Depending on the patient's needs, the agency primarily transports patients to Power County Hospital, Bingham Memorial Hospital, or Portneuf Medical Center. A physician at Power County Hospital also provides medical direction and assists with combined monthly fire/EMS training. The fire department purchased the current fire station in Aberdeen as the structure was not originally built as a Fire and EMS station. The facility size limits the size of vehicles and apparatus currently placed therein. Unfortunately, there is little funding to improve the current condition or size of the building. However, the agency has adequate training facilities and has begun to work on the facilities to include sleeping quarters and accommodations for overnight personnel.

Like many agencies in rural Idaho, the strength of this service lies in its leadership and a group of dedicated volunteers; however, with the loss of any of these integral members or a decrease in revenue support, this system may not be sustainable in its current model. Further complicating staffing, the low pass rates for the national registry exam will continue to affect retention. The agency's sustainability depends on funding and continued recruitment and retention of EMS personnel.

4.1.2.2. Blackfoot Fire Department Overview

Blackfoot Fire Department (BFD) is a career-based public transport agency operating up to the ALS level of care. The agency operates from two ambulance stations in Blackfoot and Rockford (17 miles west of Blackfoot), with 24/7 staffing scheduled at each station. The agency is an all-hazards department and provides fire and EMS services for approximately 1,500 square miles of Bingham County. The agency also provides ALS transport for the Shelley/Firth area and Fort Hall, in addition to delivering ALS response to the Aberdeen response area as requested. The department has a full-time fire chief, 27 full-time firefighters, and ancillary staff. Of the 27 firefighters, seven are paramedics, and 22 are EMTs. The agency primarily transports to Portneuf Medical Center, Eastern Idaho Regional Medical Center, and Bingham Memorial Hospital. The City of Blackfoot, County Commissioners, and the Fire District Commissioners provide budgetary oversight. A portion of EMS funding is provided by the Bingham County Ambulance District to maintain EMS operations. The agency also bills for EMS calls using a third-party billing service.

There have been recent challenges with EMS response regarding multiple calls simultaneously, particularly since the agency co-responds to and transports patients from the Shelley/Firth district. Challenges have also been noted with fully staffing the secondary station in Rockford based on staffing shortages. Due to challenges with staffing, the Rockford station is occasionally unstaffed with coverage to the area provided by the primary station, located approximately 10 miles away. The primary station is located inside Blackfoot and contains fire and EMS apparatus.

Concerns were raised regarding a much-needed update of this existing primary station to accommodate apparatus and equipment. Interestingly, the primary station is positioned on one side of railroad tracks, which runs the entire length of Blackfoot City. If there is an incident on the opposite side of the railroad tracks, depending on the time of day and train schedule, the railroad may block access for rapid EMS response. There is no easy or affordable solution to this challenge, and it will likely continue to pose response challenges for the agency. Agency funding is through billing for 911 incidents, supplemental tax support through the Bingham County Ambulance District, fire district, and grant support. The agency does offer EMT courses to internal employees and surrounding agencies. These courses are typically offered at no cost to attendees, and textbooks are occasionally funded by grant support.

Adequate agency EMS funding is challenging. EMS activities at BFFD are funded through tax support from the County Commissioners and billing revenue; however, some costs related to EMS response, notedly personnel related, are also augmented with funds from the fire district and the City of Blackfoot. Adjustments in funding reapportionment from the ambulance taxing district do occur, directly impacting operational costs, especially with increasing costs relative to a somewhat fixed total ambulance district budget. Additionally, as BFFD currently performs a portion of transports from within the SFQRU area, as SFQRU transitions to a transport agency, there are concerns that the loss of this patient transport revenue will affect billing revenue. Unfortunately, the current tax apportionment makes large capital purchases and building improvement challenging without an additional levy or alternate funding source such as augmentation from the fire district. As in every agency, paramedics are highly regarded, and it is recognized that there are significant challenges with the retention of personnel and a frequent loss of personnel to outside agencies regarding competitive wages.

4.1.2.3. Fort Hall Fire and EMS District Overview

Fort Hall Fire and EMS (FHFD) is a full-time, career, tribal fire and EMS transport service, licensed up to the Intermediate Life Support (ILS) level of service, based out of Fort Hall. This tribal-based agency is also an all-hazards fire department covering 544,000 acres of the reservation in Bingham County, extending across county lines. The reservation overlies Bingham, Bannock, Caribou, and Power Counties and serves a population on Fort Hall Reservation and Off-Reservation Trust Land of 5,977 individuals but also provides fire and EMS coverage outside of tribal land. FHFD has 22 full-time staff members, which consists of 19 EMTs and three AEMTs. EMS is funded through the general funds of the tribal council with a budget that has small annual incremental increases.

Budget oversight is provided by the Tribal Council, which closely collaborates with the Fire Chief. The relatively fixed budget makes significant capital expenses challenging without grants or alternate funding sources. Because the agency is fire-based, supplemental funding is also provided for fire-related costs. In 2022, FHFD received a $7 million federal grant, the Community Project Funding Appropriation, to help construct a new fire station near the current fire station location. [21] The current fire station is described as outdated and inadequate, with several outbuildings and mobile job trailers providing quarters for firefighters/EMTs and housing apparatus. The agency primarily transports to Bingham Memorial Hospital and Portneuf Medical Center. A large part of the bordering land is water,

so the agency also provides technical rescue, including swift water rescue, ice rescue, rope rescue, and search and rescue. Wellness checks, including blood pressure screenings, blood glucose screenings, well-being assessments, and accessibility assessments, are also performed by the department, which actively participates in community events and health fairs. 22 The Shoshone Bannock Casino Hotel on Interstate 15 attracts Idaho residents, tourists, and the tribal population. FHFD covers 911 response to this location on Interstate 15, to motorists also on this interstate, and meanwhile providing EMS response to the reservation population. FHFD has collaboration agreements with surrounding agencies and mutually responds to emergencies in all surrounding counties as requested and as able.

4.1.2.4. Bingham County Search and Rescue Overview

Bingham County Search and Rescue (BICSAR) is a volunteer, uncompensated, non-transport organization licensed at the BLS level, capped at 30 associate members, with other affiliated and non-associate members. The associate members have the benefits of a right to vote within the organization and to attend specialized training without cost incurred to the individual. The agency has oversight provided by the Bingham County Sheriff's Office, and donations and fund-raising activities help provide funding. The agency has ten licensed EMTs and AEMTs who practice at the BLS Level. Each EMT must maintain their licensure at their own cost, and each is required to have an affiliation with a transport agency outside of BICSAR. The agency purchases its own EMS equipment and supplies from the funding from donations and fundraising. The agency receives no dedicated support from the Bingham County Ambulance District. EMS equipment consists of one rescue toboggan equipped with EMS supplies, a pontoon boat with a side-scan sonar device, equipment trailers, and an ambulance that will eventually be converted into a command unit. The agency utilizes personal vehicles at personnel expense for response to emergencies and rescues, with uncompensated rescue costs incurred to individual responders. Some specialized rescue training and capabilities include dive team, high-angle rescue, man-tracking, all-terrain vehicles, and snowmobile capabilities. Nearly all rescues that involve patient care are operated collaboratively with a transport EMS agency that will provide medical care. The agency does not perform patient documentation or billing.

4.1.2.5. Shelley Firth QRU Overview

Shelley Firth QRU (SFQRU) is a public, tax-funded, non-transport quick response unit. The agency is licensed up to the ALS level of care and uses a paid-per-call and paid-on-call model. Since this is a non-transport agency, the agency cannot bill for patient care. However, the agency does receive funding as apportionment of the Bingham County Ambulance District funds and through extensive fundraising efforts (including hosting community breakfasts, community events, and a booth at the East Idaho State Fair). SFQRU covers 528 square miles in Northern Bingham County and has two Quick Response Unit (QRU) vehicles. These vehicles are physically located at the Shelley Fire Department; however, the agency operates independently from the Shelley Fire Department.

The agency has five paramedics, five AEMTs, 29 EMTs, and four Emergency Medical Responders (EMRs) affiliated. The agency does provide scheduled coverage; however, the agency is not a full-time agency, and 25% of the personnel cover 90% of the shifts. The agency employs no full-time EMS personnel, and no benefits or full-time employees are

associated with the agency. Given this, the agency faces challenges with retention as most personnel live outside of the area, and most work elsewhere as full-time EMTs, so there are consistent difficulties in filling the schedule. The agency does support a partially compensated EMS Chief and assistant. There is a minimum expectation for EMTs and paramedics to work two twelve-hour shifts each month and attend a portion of the eight continuing education training offered each month. Because the agency does not transport, there are transportation agreements with the Blackfoot Fire Department and the City of Idaho Falls Ambulance Service (COIAS) to provide patient transport, depending upon patient location. When SFQRU is dispatched, one of these agencies is simultaneously dispatched. If necessary, the patient is transported by COIAS to Eastern Idaho Regional Medical Center (EIRMC), Idaho Falls Community Hospital (IFCH), or BFFD to IFCH, EIRMC, or Bingham Memorial Hospital.

The agency is a quick response unit, so it cannot bill for services or apply for grants for transport vehicles. Therefore, operations are entirely reliant upon supplemental tax support by Bingham County Ambulance District, fundraising, or grant support. Because of increasing call volumes and response times, nearly double for collaborating transport units, SFQRU anticipates initiating the transport service in 2024. The transition and up-front expense in purchasing transport ambulances and gurneys has been costly, with the purchase of two ambulance units and equipment and no ability to apply for grant funding to assist with the initial agency start-up. One ambulance from the Blackfoot Fire Department was recently given to SFQRU to help offset these startup costs. This proposed transport model in the Shelley/Firth area would eliminate response by an additional transport ambulance, eliminate the contractual agreements with COIAS, enable billing for patient care, and decrease the mutual aid responses performed by BFFD and COIAS. Additionally, the agency is considering transitioning to a full-time, career-paid agency, which would significantly impact the agency with increased personnel costs.

4.1.3. Hospital Access Overview

Bingham Memorial Hospital is a TSE-verified level IV trauma facility located in Blackfoot and is a non-profit critical access hospital. The facility offers emergency services, obstetrics, in-patient, critical care, and same-day surgery. [23]

4.2. County EMS System Resource Assessment Overview

Four transport agencies and one non-transport agency are licensed in Bingham County. The information from the following is from a Comprehensive Resource Assessment Survey in which four agencies participated. These same four agencies participated in an in-person agency site visit, and one agency participated in a phone consultation.

4.2.1. Organizational/Operational Assessment

Countywide EMS operations in Bingham County are described as “separate, underfunded, and non-essential.” With a low indicated sustainability rating, EMS agencies in Bingham County operate separately and with unique leadership and structure. Although three county-based agencies receive funding based on an apportionment from the taxable value of respective school districts, and one agency receives funding from tribal-based funding, the

financial support is universally perceived as inadequate for agencies to meet personnel, equipment, and operational needs, thus needing additional supplemental funding or reliance upon grants or fire district funds. Moreover, one agency describes being barely afloat with existing resources, incapable of taking on an additional scope of work without more resources. Each district operates independently with little to no overlap or cooperation between agencies. Somewhat secondary to geography, county agencies are more likely to interact with agencies and services outside Bingham County, fragmenting intercounty communications, agreements, and collaboration. Given the limited interagency overlap between Bingham County agencies, few formal agreements are noted between agencies, which further reinforces agency independence and solidarity.

4.2.1.1. EMS Agency Perceptions

- EMS Agency Stability: The subjective assignments of EMS stability and sustainability ratings range between 47/100 and 75/100, with a moderate average sustainability rating of 60/100. Interestingly, the agency receiving the least funding also rates the highest sustainability, which may equate with the high degree of intrinsic benefit described by agency leadership in addition to the support by leadership oversight and dedication of EMS personnel. One agency with the lowest score receives supplemental funding outside public tax support, which may correlate with its low staff stability rating.

- EMS Agency Financial Situation: Most agencies in Bingham County are noted to be getting by with deficits each year. Further, one agency feels they do not have sufficient funds to purchase necessary equipment and supplies and insufficient funding to provide competitive compensation for personnel, which is thought to translate to challenges with recruitment and retention. Budget adjustments are slated with concomitant funding reapportionment to each county agency. Given this reapportionment, most agencies express concern about the potential to be grossly underfunded.

- EMS Agency Communications Strategy and Outreach: Based on survey responses, while there is communication and some written agreements between agencies in neighboring counties, there is not a strong, effective, formal, or productive communications plan between agencies within Bingham County. The agencies also agree that a more robust community outreach plan needs to be implemented.

- Community View of EMS Agencies: Each Bingham County agency unanimously agrees that there is a favorable view of their agency within their respective community.

- Elected Official Support of EMS Agencies: The relationship with county officials mainly concerns budgetary oversight, with little direction for day-to-day challenges or operations. Several agencies feel supported by local oversight, but a few have very little interaction with county oversight. FHFD does not collaborate with Bingham County but collaborates with the tribal council and does feel overall supported by their leadership.

- **Agency & System Response Outlook:** The uncertainty of funding and billing reimbursement makes projecting and preparing for countywide staff retention, equipment maintenance, equipment replacement, and facilities challenging. Whether the agency is career, partially compensated, or volunteer, staff retention is the most prominent countywide concern. The agencies can meet county call-volume demands and the perceived community needs in its current operational model. However, the model is not currently scalable for growth, which makes future expansion with the existing resources challenging, especially regarding the coinciding population growth. Future changes are anticipated in this system; in particular, SFQRU intends to become a transport agency and, in doing so, wants to improve patient care by decreasing ambulance response and transport time and to begin billing for patient care. The agency is hopeful that in doing so, funding will be augmented, along with the ability to pursue additional grants and further invest in personnel. Agencies have a resilience that has been especially noticed throughout the last few years. The one non-career transport agency in Bingham County is currently working on succession planning amongst agency members to carry on fire and EMS traditions and to continue serving their communities. The dedicated personnel is noted to be the centerpiece and foundation of the county, with positivity regarding agency culture, community support, and a high view of EMS by community members. EMS personnel respond and demonstrate compassion and empathy for their patients while taking pride in their agency. Competent and well-trained EMS personnel are emphasized by all agencies with a noted optimism in maintaining a high level of competency despite funding, staffing, and education challenges.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** Of the five licensed agencies in the county, each agency operates uniquely and separately with significant structural variability. One agency is tribal-funded and provides services within that Indian Reservation and overlaps with neighboring counties. Most other county agencies are public and county-funded; several are fire-based, one agency is completely uncompensated, and one is partially compensated with no fire affiliation. A varying licensure level is present in the county with ALS, ILS, and BLS licensure levels. Each agency licensed as ILS and BLS interfaces with a neighboring county or agency with an ALS service capability and can utilize mutual aid as needed.

- **Service Delivery Partners:** The strongest service delivery partners are other county agencies, the community, the Bingham County Memorial Hospital, county officials, and district fire commissioners (as noted by all fire-based agencies).

- **Medical Direction:** Each agency has a separate medical director. Countywide, medical directorship has a moderate average involvement in training, quality assurance, chart review, and training.

- **Communications & Interoperability:** Radio communications are noted to meet needs through functionality and features, offering quality reception most of the time and enabling reliable communication with other agencies throughout. Apart from FHFD,

who indicates that although they possess reliable radios, radio communication reception is often challenging on the reservation lands. Occasionally, the agency cannot communicate with collaborating agencies and has had occasional difficulties contacting their PSAP.

- **Mutual Aid Systems & Agreements:** Fort Hall overlaps across four counties and has written mutual aid agreements with outlying agencies, including Bannock, Power, Bingham, and Caribou Counties. Most other agencies have written mutual aid agreements with neighboring agencies. Further, SFQRU has mutual aid agreements with COIAS and BFFD for patient transport.

- **Community Health EMS (CHEMS):** Most agencies are familiar with CHEMS but do not presently operate a program. Some are willing to consider this in the future, though there is concern with billing and reimbursement of this program.

- **Patient Care Documentation System:** each agency uses the electronic patient care reporting (PCR) platform provided by The Idaho Bureau of Emergency Medical Services (hereafter referred to as the Bureau), and some agencies use paper documentation. Both full-time departments also subscribe to and pay for a separate electronic PCR system.

4.2.1.3. Response Overview

- **Level(s) of Service**: Bingham County is covered by various leveled agencies, mostly coinciding with respective population densities. The county is comprised of a volunteer BLS search and rescue unit, a BLS agency in the southwest, a career-based ILS level service in the south county, a career ALS agency in the more east-central county, and an ALS non-transport QRU agency in the north district which an out-of-county ALS transport agency also supports. A BLS-licensed search and rescue unit is also present and collaborates closely with individual agencies in respective locations.

- **Agency Response Concern**: In the last year, the agencies reported very few instances where they could not respond to incidents. Each career-level agency identifies several calls that have presented challenges with the overall response; however, this is rare. Uncompensated departments occasionally have challenges finding an EMT to respond to calls; however, through direct communication amongst team members, each agency has been able to locate an EMT who can respond to the callout, resulting in no missed incidents.

- **Helicopter Response & Utilization:** Helicopter response is often utilized in rural areas for expedient transport to definitive care, particularly in leveled trauma or stroke facilities, and in more populated areas, helicopters are often called for significant trauma.

- **Factors Impacting Response Times:** In order of significance, the primary factors affecting response times include location, simultaneous calls, and personnel. The uncompensated agency also reports challenges regarding time of day, especially

during the weekdays, which is noted to be a challenge for most unscheduled or partially compensated departments as many of the EMS providers work full-time jobs and cannot leave their work to perform EMS duties.

- **Response to Public Lands:** Apart from the search and rescue agency, most other agencies within Bingham County provide few resources to cover emergencies on public lands. Aside from BICSAR, very few agencies respond to remote areas away from population centers that require equipment and personnel to be out of service for prolonged periods. BICSAR also responds to water rescues and people stranded in vehicles, especially in the winter. Much of the public land in Bigham County constitutes water, so BICSAR and FHFD have expertise in water and dive rescue and more often perform water rescues than those of mountainous terrain. Water rescues are prolonged, requiring significant hours of volunteer time and often personal equipment from each search and rescue individual. BICSAR is a sought-after water rescue team, and often, these rescues occur throughout all Eastern Idaho, not just in Bingham County.

4.2.2. Workforce & Resource Assessment

The workforce in Bingham County is defined as dedicated and resilient, while systemwide resources are primarily defined as sufficient but outdated. Most agencies express staffing concerns, with a low staffing stability score noted throughout the county, whether related to the overall retention of career staff due to the inability to provide competitive wages or the failure to recruit and retain personnel at volunteer or partially compensated departments. Most prominently, few educational opportunities and advancement are a significant challenge in this county, with a low testing pass rate following an EMT course, dramatically affecting retention at an uncompensated rural agency requiring all personnel to be dual licensed in fire and EMS to be an active member. Of the few staff currently present and providing coverage for most EMS callouts, there is a noted resilience, ingenuity, and a potential for increased collaboration between existing county agencies.

Resources are noted to be challenging with anticipated apportionment changes to county EMS agencies. One agency is progressing to a transport agency, which requires significant upfront costs. This initial up-front cost may prevent some systemwide equipment and vehicle replacement in the future; however, going to a transport agency will allow one agency to begin billing for services for income generation and eliminate the need for contractual obligations and payments to external agencies for transport, allowing those agencies to focus resources inside their respective communities.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The county-wide staffing structure is highly variable, ranging from an uncompensated model to a compensated paid-per-call model to full-time and career-based services.

- **Responder Average Age:** The average age reported amongst EMS providers in Bingham County is 35 to 44. Further, the average responder age is younger at the full-time agencies and older in the rural and volunteer agencies.

- **Staffing Numbers:** As reported by agencies in Bingham County, there are approximately nine EMS drivers, 82 EMTs, eight AEMTs, and 12 paramedics licensed and actively practicing in Bingham County.

- **Staffing Concerns:** As reported by agencies, the staffing stability is reportedly inadequate, per agency scoring ranges from 10/100 to 52/100, averaging 36/100, throughout the county. Several uncompensated and unscheduled agencies have significant challenges in finding coverage for incidents, primarily as most EMS personnel work full-time outside of the agency and are less flexible to participate in calls during regular work hours. Concerns exist regarding the pass rate for EMTs who take an agency sponsored EMT course and need additional help to pass the national registry exam to obtain licensure. With no educational assistance or testing resources available to this rural area, the result is a low testing pass rate and an increased strain on the recruitment to the department while absorbing incurred costs related to the initial EMT courses. One non-transport agency that uses EMS personnel with a paid-per-call/paid-on-call model also needs assistance with staffing as it maintains a schedule without implementing full-time employees due to associated costs with benefits. This challenges retention and creates inconsistencies in scheduling secondary to an EMT's regularly scheduled work. In career departments, challenges are primarily due to the inability to provide competitive wages compared to neighboring counties. Given this, regardless of agency structure, county agencies often find themselves inadequately staffed; this leads to increased overtime costs, staff fatigue, burnout, and challenges with retention.

- **Staffing Strengths:** Motivators and strengths of departments are noted to be intrinsic benefits, culture, and closeness of EMS personnel who enjoy working together and dedication of personnel. There is flexibility in scheduling at uncompensated or partially compensated agencies, which is an attractant and thought to contribute to personnel retention. All agencies proudly assert excellently trained staff.

- **Recruitment & Retention:** Most agencies believe that increasing benefits such as retirement or travel compensation and providing or increasing wages will help to retain staff. Additionally, EMT exam pass rates are low in rural areas, so if potential EMS recruits had tutoring or assistance in passing the initial NREMT exam, recruitment and retention would be simultaneously addressed in rural departments.

4.2.2.2. Training & Education Overview

- Some training and education are provided through in-house continuing education, courses, and refreshers. Recently, a few agencies have begun using online training programs, and most attend local conferences, with some being compensated by department budgets. Unfortunately, budget constraints keep many agencies from participating in specialized training or advancing to a greater level of care. While some personnel pay for career advancement from their pocket, the desire is expressed to help EMTs advance to a higher level to keep personnel in the community and help people grow in their careers. Each agency has minimum

requirements for EMS personnel to maintain an affiliation with that agency, including minimum shift expectations and minimum training attendance.

4.2.2.3. Facilities Overview

- **Station Location(s):** Several transport ambulances are located throughout Bingham County to provide adequate county coverage. While each operates distinctly from the other, transport ambulance stations are in Aberdeen, Springfield, Blackfoot, Rockford, and Fort Hall, and one non-transport agency is located in Firth. Interestingly, the Blackfoot Fire Department has a railroad that courses through the middle of town; this track often inhibits an ambulance from crossing it at certain times when trains are maneuvering in the downtown area, as there are no underpasses or overpasses. The position of the current station and limitations to access the other side of the railroad tracks do lengthen 911 response times in certain areas and at certain times of the day.

- **Station Condition(s):** As reported by county agencies, the average station condition rating is 41/100. Specifically, though each station meets the needs of the respective agency, most stations need to be updated. Per the agency report, several of the current ambulance facilities are insufficient in size and condition to contain existing equipment, and several stations are insufficient regarding quarters for personnel, with limitations for future expansion.

- **Facility Needs:** A countywide challenge is noted amongst agencies regarding updating facilities for personnel, equipment, and training. The AFD reports adequacy in station location but only a partially adequate size to store all apparatus, even with height restrictions for some equipment as the station was repurposed. While the training room is sufficient, this station has no sleeping quarters and little ability to facilitate this. Moreover, SFQRU has arrangements with the Shelley Fire Department to provide a station for the two quick response unit vehicles and provide staffing quarters, which are noted to need some updates despite the adequacy of the station. FHFD has secured a federal grant to build a new fire station across the road from its current location; the existing facilities need to be updated to provide adequate space to store all EMS and Fire apparatus. Unfortunately, Bingham County Ambulance District has little carryover for large capital expenditures or facility improvement outside of additional tax support or budgets (such as affiliated fire district budgets).

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: EMS agencies report the current equipment and supplies to be adequate, but some equipment needs to be updated or replaced. While most agencies have acceptable radios for communication, BICSAR has a limited number of radios and communication devices and a limited budget to purchase additional units.

- **Condition**: Most mandatory equipment is in good shape across the county. Many agencies have recently applied for grants to replace items such as immobilization equipment, monitors, and gurneys. However, smaller items, such as suction devices or durable goods, continue to be of need to many departments. There were several

years that durable goods were difficult to acquire, though this has significantly improved within the last year.

- **Funding:** Grants have been applied for by all agencies, and many have received automated external compression devices and ambulances. The acquisition of ambulances in rural areas is needed, but the supply shortages and unpredictability regarding when the ambulances will be obtained make future planning and budgeting difficult.

- **Needs/shortages**: SFQRU is transitioning to a full-time, paid ALS transport service, needing new ambulances, monitors, and equipment. There are limited funds for capital purchases in Bingham County, and a token annual allotment for capital purchases is typically split amongst all agencies or as determined by the County Commissioners. Given that a non-transport agency must be qualified to apply for ambulance grant funding, and despite some preowned equipment obtained from outlying agencies, capital equipment has incurred a significant upfront cost to the county. The career agencies have a model that builds in purchases of large capital equipment such as monitors, ventilators, and automated external compression devices. However, non-career agencies have little additional budget for replacement, equipment maintenance plans, or capital purchases. Throughout the county, there is a limited carryover and an increasing cost of replacement and repair; this creates challenges with the need for replacement and maintenance.

4.2.3. Financial Overview

The following information for this assessment came from budgets and information provided by the Bingham County Ambulance District. The district was created in 1985 and is overseen by the Board of County Commissioners. Voters approved an ambulance override levy in November 2011, and the funds are divided amongst the three districts each year by the taxable value for their school districts, including Blackfoot/Snake River Fire District, Shelley/Firth Fire District, and Aberdeen Springfield/Fire District. Periodic adjustments are made to this tri-agency allotment. Per the FY2023 budget, Bingham County Ambulance District dispersed total property taxes of $1,115,093 (less $20,000 toward an aggregate ambulance vehicle purchase fund). This amount includes agricultural equipment replacement monies, personal property replacement, and sales tax, minus the ambulance vehicle purchase fund, unequally divided amongst three entities.

Finances throughout the county have been different this year as there is an upfront county cost to help the non-transport agency transition to a transport agency. In addition to the projected 2024 tax apportionment, when SFQRU moves to a transport model, the agency anticipates it will bill for approximately 500 patient transports with the hopes of a 70% net billing revenue of $467,600. Considering projected revenue and additional tax support minus expenses, the agency anticipates more than $46,000 in surplus.

Further contributing to resources in Bingham County is Fort Hall Fire and EMS. This agency's funding and operations are separate from the Bingham County's resources. The agency operates from tribal funds designated for EMS, serving a population of over 5,977 persons.

This agency often collaborates with all four neighboring counties, so it is difficult to calculate how this agency financially contributes to EMS in each neighboring county.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is estimated that $1,714,086 in expenses is dedicated to EMS personnel costs within Bingham County (including FHFD). This information is from three transport agencies and one non-transport agency.

- **Operational Expenses:** It is shared that $2,138,048 is dedicated to systemwide operations, including disposable supplies, training, and facility fees.

- **Capital Expenses:** It is shared that approximate capital expenses will be $788,236 in 2022. Capital expenses were higher than anticipated in FY 2022 regarding one agency leveraging an ambulance with a grant and one agency moving to a transport model.

4.2.3.2. Revenue Overview

- Bingham County Tax Levy: .000390062%

- FHFD did not contribute revenue information. However, this agency does bill for services.

- Regarding tax apportionment, in 2022, BFFD received 65.4%, SFQRU received 20.5%, and AFD received 14.1% apportionment. These percentages will change in the years 2023-2024, with significant changes that will take place in the AFD district. Proposed changes included BFFD: 59.8% ($631,871), SFQRU: 32.3% ($387,281), and AFD 7.9% ($170,264) for a proposed total distribution amount in FY2023 of $1,189,416.

- All transport agencies bill for service. SFQRU is not a transport service, so they do not bill for services. Not all agencies shared billing information, which has limited the accuracy of the total billing revenue.

- Revenue for non-transport agency SFQRU comes from the county levy apportionment and fundraisers. SFQRU revenue in FY2021 included $36,955 in fundraising activities; this sum is expected to decrease as the agency transitions to a full-time transport agency. As a non-transport agency, SFQRU can begin billing for services. This revenue will likely be reflected in FY2024; however, at this time, there are contractual agreements to pay a transport agency from Bonneville County $96,189 to provide patient transport.

- Anticipated carryover: One agency reported a carryover each year, which was shared to be $47,708. It is said that $20,000 is carried over each year by the Bingham County Ambulance District for ambulance vehicle purchase funds.

4.2.4. Resource Assessment Additional Factor

As provided by Bingham County agencies, there is an approximate total system cost of $4,640,370. Total county revenue, including FHFD, is unknown, though within Bingham County Ambulance District alone, revenue totals $2,156,594. Given the limited information provided, a financial gap likely exists, which means that an additional funding source, such as fire district funds, grants, or alternate forms of tax support, must account for this sum.

With an increased in-migration of the population into the north portion of the county, there has been an increased utilization of EMS in this area with no billing reimbursement to offset expense and a reliance upon fundraising activities in addition to an increase in tax funding; transition to a transport agency seems the next step for the agency, mainly based on call volume and an ability to bill for services.

Moreover, the Southwest portion of the county near Aberdeen is served by a rural agency using an uncompensated fire-based agency. The taxable value of this school district is decreasing, so there is an anticipated decrease in funding for this agency. The financial demands on this EMS agency remain the same, with little billing revenue generated due to small call volume. Decreasing the tax allotment portion to the southwest Aberdeen area may have devastating consequences on this rural agency's sustainability with continued challenges in recruitment and retention.

Because each county agency operates independently, limited operational and equipment collaboration is noted between agencies. With several significant capital purchases this year, including ambulance purchases and equipment upgrades, this is likely increasing challenges with funding. Indeed, collaboration amongst agencies locally, county-wide, and across county lines is imperative for the longevity of this EMS system. Ultimately, increasing billing reimbursement, tax support, and collaboration with leadership, capital, equipment, and staff may help consolidate resources, decrease expenses, and distribute services throughout the county more equally.

REFERENCE LIST

[1] University of Idaho Extension. (2022a, December). *Highlights for Bingham*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011

[2] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/binghamcountyidaho,US/PST045222

[3] Local News 8. (2018). Aberdeen getting back on track, four years after Simplot closure. *Local News 8*. https://localnews8.com/news/2018/10/10/aberdeen-getting-back-on-track-four-years-after-simplot-closure/

[4] University of Idaho Extensions. (2023, March 29). *Bigham: Agricultural Workers*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=100050

[5] *Shoshone-Bannock Tribes | Located on the Fort Hall Indian Reservation*. (n.d.). https://www.sbtribes.com/

[6] Idaho Department of Health and Welfare. (n.d.). *County Profile Data*. Bureau of Emergency Medical Services and Preparedness. https://healthandwelfare.idaho.gov/providers/emergency-medical-services-ems/emergency-medical-services-ems-providers

[7] University of Idaho Extension. (2022, December 13). *Bingham: Number of jobs*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=13

[8] University of Idaho Extension. (2022, February 23). *Bingham: Wage per job*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=16

[9] University of Idaho Extension. (2023, April 25). *Bingham: Poverty rate by age*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=11

[10] University of Idaho Extensions. (2022, December 13). *Bingham: Employment by industry*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=17

[11] University of Idaho Extension. (2022, December 13). *Bingham: Total housing units*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=18

[12] University of Idaho Extension. (2022, December 13). *Bingham: Household types*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=100014

[13] Zillow. (2023). *Bingham County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/1545/bingham-county-id/

[14] University of Wisconsin Population Health Institute. (2023). *Bingham, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/bingham?year=2023

[15] University of Idaho Extension. (2023, April 13). *Bingham: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=29

[16] Idaho Department of Health and Welfare. (n.d.-b). *Welcome to Idaho Department of Health and Welfare | Idaho Department of Health and Welfare*. Services and Programs. https://healthandwelfare.idaho.gov/

[17] University of Idaho Extension. (2023c, May 10). *Bingham: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=5

[18] University of Idaho Extension. (2021, September 27). *Bingham: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16011&IndicatorID=100013

[19] Resource Assessment Survey.

[20] Ag, J., Baccaglini, L., Haynatzki, G., Achutan, C., Loomis, D., & Rautiainen, R. (2021). Agricultural Injuries among Farmers and Ranchers in the Central United States during 2011-2015. *Journal of Agromedicine*, *26*(1), 62–72. https://doi.org/10.1080/1059924x.2020.1845268

[21] Hines, K. (2022). Fort Hall FD announces $7M grant to replace outdated station. *East Idaho News*. https://www.eastidahonews.com/2022/03/fort-hall-fd-announces-7m-grant-to-replace-outdated-station/

[22] *Fire and EMS | Shoshone-Bannock Tribes*. (n.d.). https://www.sbtribes.com/fire-and-ems/

[23] *Bingham Memorial Hospital | Family Doctors Clinic in Idaho Falls & Pocatello, ID | Orthopedic SU*. (n.d.). https://www.binghammemorial.org/

[24] *Bingham County Idaho - Interactive GIS Mapping*. (n.d.). Copyright 2023 EvoGov, Inc. https://www.binghamid.gov/interactivegismapping

BONNEVILLE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Bonneville County is the fourth most populated county in Idaho. One career tax-funded fire and Emergency Medical Service (EMS) agency contracts with the Bonneville County Ambulance District to provide EMS transport to most of the county. Several other transport agencies collaborate on a small percentage of calls within the county, although these other transport agencies are physically located outside the county. The operational overlap between agencies contributes strength and sustainability to the EMS system. Moreover, stability is noted in funding by an ambulance taxing district and the overarching execution of emergency services performed by this single Advanced Life Support (ALS) transport agency.

Idaho Falls, the county seat, is the most populated city outside of metropolitan Boise and covers a large portion of Bonneville County. While the remainder of the county is rural, the entire county receives equivalent ALS-level transport services. Over 56% of the county is designated public land with year-round recreation. [1] While recreational activity and remote EMS response result in only a few incidents, these incidents are often resource-intensive, with unrecoverable operational expenses and little billing reimbursement. Multiple agencies work collaboratively in these situations, often using the county's one volunteer agency and career law enforcement to help with rescues. Bonneville County has two Time Sensitive Emergency (TSE) verified trauma facilities; this is fundamental to the health of this system, the remainder of Idaho, and neighboring states. Another system strength is the collaboration amongst these facilities, the transport agency, the local air ambulance, other county resources, and neighboring county resources.

Like other counties in Idaho, a multi-factorial decline in net billing reimbursement is threatening the long-term survival of agencies. Sustainability may be further challenged without additional funding or support to augment the budget and offset expenses. While Bonneville County uses uncompensated EMS personnel in a fraction of calls, which does

offset the overall system cost, the long-term sustainability of uncompensated systems is largely unknown, especially with decreasing opportunities available to leverage capital expenses. In addition to increasing funding, succession planning, cooperation, and communication amongst all neighboring EMS agencies will continue to reveal opportunities, promote long-term system sustainability, and help elevate Bonneville County as an exemplar to other EMS systems in Southeast Idaho.

Strengths	Opportunities
• There is cohesion amongst several neighboring agencies who collaborate on a percentage of calls. • Dedicated staff and leadership of all agencies, contributing to cohesion. • Written mutual aid agreements/operational agreements between agencies. • Collaboration, education, training, and quality improvement between hospital and Emergency Medical Services (EMS) organizations. • Single agency transport coverage with an ambulance taxing district.	• Consider further support toward the county non-transport agencies, particularly regarding training and acquisition of patient care-related equipment. • Further collaboration with other neighboring counties. • Increasing agency reimbursement with the possibility for Ground Emergency Medicine Transportation (GEMT) reimbursement. • Providing an increase in Payment in Lieu of Taxes (PILT) funding to non-transport agencies providing EMS-related services.
Challenges	**Threats**
• Decreasing net billing reimbursement. • Change in service area with restructuring of neighboring counties and loss of some contracted transport services. • Use of non-transport services to augment the EMS system with challenges purchasing patient-care-related equipment and maintaining EMS licensure. • Provision of Equal EMS services in Swan Valley area with regard to service expense.	• An increase in operational/capital costs. • Provision of competitive wages to retain or recruit EMS personnel. • Continued population growth in rural areas.

Table A: Bonneville County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Bonneville County is in Eastern Idaho and comprises 1,901 square miles. Of this land area, 1.8% is water, 52.1% is federal land, 0.5% is city or county land, 4.5% is state land, and the remainder is private land. [1] The county seat is in Idaho Falls, located on the western side of Bonneville County, and incorporates 22 square miles of the county. It is the fourth most populated city in Idaho and the largest city outside of the Boise metropolitan area. Interstate 15 proceeds through Idaho Falls and is a key transportation corridor from Utah to Montana, making Idaho Falls a commercial hub for Western Wyoming and Southern Montana. [2] The Idaho Falls Regional Airport, the second busiest airport in Idaho, is located on the city's west side and incorporates 866 acres in Idaho Falls. [3]

The estimated population in Bonneville County in 2022 was 129,496, with an overall estimated growth rate of 4.5% and a 1% increase in population between 2021 and 2022. [4] Most of the county population lives in Idaho Falls or the surrounding metropolitan area, and the communities of Iona, Ammon, Ririe, and Ucon are located within this area. Rural Irwin and Swan Valley are located on the county's east side. These towns are separated from the Idaho Falls Metropolitan area by an expanse of remote farmland known as Antelope Flats; this area is known to have difficult winter travel and frequent road closures. [2]

The easternmost boundary of Bonneville County abuts the Wyoming state line. Beginning at the southernmost edge of Bonneville County at the Wyoming State line, the Snake River flows out of Palisades Reservoir and proceeds northwest through the county along Hwy 26. In addition to the river corridor, there are multiple protected areas, including Caribou Targhee National Forest, Greys River National Wildlife Refuge, and Targhee National Forest. These large areas of the Snake River, expanse of federal lands, and state lands attract abundant tourism and year-round recreation.

Demographic	2010	2020	2022
Population	104,234	123,964	129,496
Land Area	1,866 sq mi	1,867 sq mi	1,867 sq mi
Per Capita	55.9 PPSM	66.4 PPSM	66.4 PPSM
PPSM: *People per square mile*			

Table B: Bonneville County Population & Geography

2.2. Economics

As of 2021, there were 47,365 housing units in Bonneville County, with over 65% identified as owner-occupied and 28% occupied by renters. [5] The county population has seen a 24% increase in the last decade, similar to Idaho, with a coinciding 11% increase in housing units in that same time frame.

The county poverty rate is 9.8%, and the average unemployment rate in 2021 was 2.7%, with 80,803 jobs in the county. [6] Nearly 12% of children under 18 live below the poverty level, and 5.4% of those over the age of 65 are below the poverty level. [7] The average wage per job as of 2021 has decreased since 2020 and, as of 2022, is identified at $47,529, less than Idaho as a whole and much less than the United States. [8] A living salary in Bonneville County, based on a living wage, is $31,574, and a poverty salary is $13,582. [9]

Of those aged 16 or older, 68% were involved in the labor force. [10] Fifteen percent of employment is in healthcare, 13% is in retail trade, and nearly 9% of jobs are government-related, closely followed by food service and construction. [11] In 2022, 1433 agricultural workers were identified during the growing season, with the highest number of workers in October. Seventy-two percent of those workers were identified as migrant workers. [12]

In 2021, the United States (US) Census identified a median home value in Bonneville County of $231,000 (as compared to Idaho's $266,500). [4] However, in the review of average home prices in 2023, compared to median home values noted by the 2021 US Census, the current market values are 60% more, with an average home priced at $370,624; this requires an approximate net household income of $71,828. [13]

Metric	Data
Total Population (2022)	129,496
Median Age (2020)	33.3 years old
Poverty Rate (2021)	9.8%
Number of Jobs (2021)	80,803
Average Annual Wage per Job (2021)	$47,529
Unemployment Rate (2023)	2.7%

Table C: Bonneville County Economic Factors

2.3. Social Determinants of Health

Bonneville County, in terms of health outcome and health factors, is ranked #19 out of 43 ranked counties in Idaho. It is ranked in the higher middle range for health outcomes and amongst the healthiest counties in Idaho regarding health factors related to prolongation of life and improved quality of life. [14]

There are 3.6 primary care physicians per 10,000 population, significantly less than Idaho. Like one year previous, 45 primary care physicians are practicing in Bonneville County. [15] In

addition to community health centers, home health companies, hospice providers, end-stage renal disease providers, skilled nursing facilities, and multiple long-term care facilities/nursing homes exist in the county. [16]

The population estimate is 129,496, with 30% of the population under the age of 18 and 13% over the age of 65; this makes the percentage of those in the non-working age range account for over 56% of the population. [17] As of 2019, 11% of people under the age of 65 had no health insurance coverage, and 4.4% of children under the age of 19 had no health insurance coverage. [18] Regarding those with insurance coverage, the transport agency shared the following payer mix: 49% is Medicare, 20% is Medi-Cal/Medicaid, 14% is private insurance, 5% is out-of-pocket, and the remainder is not defined.

2.4. Indicator Impacts to EMS

The county has several factors that may contribute to call volume variability. The county has had a 24% increase in population, with a current population estimate of 129,496, and an 11% increase in housing units, which has likely increased both the tax base and the service requests. [17] However, most of the population resides in metropolitan areas with proximity to EMS, access to two hospitals, numerous healthcare resources and primary care, good health outcomes, and notedly optimal health factors, which may serve to decrease overall call volume. [14] Additionally, the county has experienced a declining population over 65, which may also equate to a decrease in EMS demand related to transport for associated co-morbidities. [17]

The percentage of the population without health insurance is less than the average in Idaho, suggesting a potential increase in reimbursement potential, depending on the variability in the payer mix. Sixty-nine percent of the transported population is reported to be on Medicare/Medi-Cal/Medicaid); this initially increases challenges with billing reimbursement, though there is optimism regarding reimbursement potential, such as with Ground Emergency Medical Transportation (GEMT).

The unemployment and poverty rates in Bonneville County are both lower than in many Idaho counties with a predominant household comprised of family units. This, coupled with a net migration lower than the remainder of the state, suggests demographic stability.

When considering long-term retention of employees, whether an employee can rent or own in a given county should be considered. Given the median household income in Bonneville County of $64,864 and an average wage per job of $47,529 with average current market prices at $370,624, this makes housing affordability feasible in portions of Bonneville County for a multi-income household but challenging in homes with a single household income. [5, 13]

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed to be accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

According to state EMS registry data, 911 calls in Bonneville County, excluding standbys and cancellations, totaled 10,161 in 2021 and 10,152 in 2022. The number of documented patient transports declined for the City of Idaho Falls Ambulance Service (COIAS) in 2022, with nearly 5% fewer patient transports in 2022. Per COIAS, the agency reports 14,248 requests for EMS service in 2022, with 11,253 of the 911 calls resulting in patient transport. In 2022, Idaho National Laboratories (INL) remained on par with previous years regarding the volume of EMS responses in Bonneville County, with a slight increase in patient transports noted in 2022. Star Valley EMS began assisting with a handful of 911 calls in the south end of Bonneville County with five patient refusals in 2022; most of these were noted to be vehicle-related incidents. Of note, COIAS provided 2,644 interfacility transports in 2022, which indicates 24.3% of total patient volume as interfacility transports.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
City of Idaho Falls Ambulance Service	5,880	2,754	8,634	5,605	2,611	8,216
Fremont County Emergency Medical Services	4	-----	4	6	-----	6
Idaho National Laboratories	38	13	51	42	9	51
Star Valley EMS - Wyoming	-----	-----	-----	-----	5	5
Ambulance Total	5,922	2,767	8,689	5,653	2,625	8,278
Central Fire District	-----	27	27	-----	53	53
Technical Careers High School District	-----	-----	-----	-----	9	9
QRU Total	-----	27	27	-----	62	62

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Bonneville County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Central Fire District	*8 min*	*8 min*	16 min	----	77 min
City of Idaho Falls Ambulance Service	*2 min*	*5 min*	7 min	23 min	51 min
Fremont County Emergency Medical Services	*11 min*	*41 min*	52 min	76 min	200 min
Idaho National Laboratories	*3 min*	*4 min*	7 min	57 min	133 min
Star Valley EMS – Wyoming	*2 min*	*15 min*	17 min	17 min	76 min
Technical Careers High School District	-----	-----	----	----	186 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Bonneville County (2022)

Section 4

4

Context

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

The Public Safety Answering Point (PSAP) in Bonneville County is a joint dispatch between the Idaho Falls Police Department and the Bonneville County Sheriff's Office (BCSO). The dispatchers provide Emergency Medical Dispatching (EMD) and are employees of the Idaho Falls Police Department with equipment and information technology provided by BCSO. The joint dispatch center dispatches for three law enforcement agencies, four fire departments, EMS, and search and rescue. Typically, a caller in Bonneville County activates 911, and the call goes to the Bonneville County Joint Dispatch Center. The COIAS or Bonneville County Search and Rescue (BOCSAR) is subsequently dispatched. The COIAS pays an annual fee for dispatch services.

4.1.2. EMS Agency Overview

Most patient transports are provided throughout Bonneville County by one licensed EMS agency that contracts with the Bonneville County Ambulance District. Idaho Falls Fire Department provides fire suppression and EMS services in Idaho Falls and, as the City of Idaho Falls Ambulance Service, it also provides EMS response and transport for the remainder of the county. COIAS provides transport services for the Central Fire District in Jefferson County and Shelley Firth QRU in north Bingham County.

Bonneville County has three other fire departments: Ammon Fire Department, Swan Valley District 2, and Ucon Volunteer Fire Department. These agencies do not possess transport or non-transport licenses but help with extrication and motor vehicle collisions, assist with search and rescue, and provide some skilled rescue. BOCSAR is associated with the BCSO and works with compensated full-time backcountry law enforcement deputies to perform rescue activities throughout public lands. Additionally, a critical care ground transport service based in Wyoming provides 911 response to the southeast portion of the county,

and an Advanced Life Support (ALS) agency interfaces in the westernmost part of the county, providing 911 response primarily to highway traffic accidents. Lastly, a separate agency is based out of the Idaho Falls Airport. It is a non-transport quick response/first response unit, working collaboratively with the transport agency should transport be necessary. Air Idaho Rescue, a subsidiary of Air Methods, provides coverage for Eastern Idaho, Northwest Wyoming, and Southwest Montana. Air Idaho has a helicopter based in Idaho Falls in addition to neighboring Salmon, Driggs, and West Yellowstone, Montana. Air Idaho provides critical care transport between hospitals and 911 response in remote or rural areas with long transport times. The agency also offers affordable clinical education to all EMS services throughout rural East Idaho.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Bonneville County Search & Rescue (BOCSAR)	Non-transport	Basic Life Support (BLS)	Unscheduled	Uncompensated
City of Idaho Falls Ambulance Service	Transport	Advanced Life Support (ALS)	Scheduled	Compensated
Idaho National Laboratories (INL)	Transport	Advanced Life Support (ALS)	Scheduled	Compensated
ProTec Fire Services (PTFS)	Non-Transport	Basic Life Support (BLS)	Scheduled	Compensated
Star Valley EMS, WY (SVEMS)	Transport	Advanced Life Support (ALS)	Scheduled	Compensated

Table F: List of EMS Agencies Located in Bonneville County

4.1.2.1. Bonneville County Search and Rescue Overview

Bonneville County Search and Rescue (BOCSAR) is a volunteer, uncompensated division of BCSO, licensed as a non-transport BLS agency. BOCSAR responds to calls, works collaboratively with agencies in Bonneville County, and may even assist with rescues in other counties. Also, under the BCSO are backcountry law enforcement officers. In addition to law enforcement duties, these officers are certified as Emergency Medical Technicians (EMTs) and help provide EMS for search and rescue in the backcountry setting, often in conjunction with the volunteer search and rescue organization and other local agencies. Together with backcountry law enforcement officers, BOCSAR assists IFFD with specialty rescues, including high-angle rope rescues. They also have a canine unit and conduct monthly training for volunteers in medical, ATV, snowmobile, and logistics. According to Idaho State EMS data, BOCSAR has five licensed EMTs actively participating with its division, with four additional EMTs affiliated with the agency. The agency has 42 active members on

the roster, and the list is almost always complete with a waiting list of potential members. Typical unit response time is 1-1.5 hours, and calls and searches may last for hours to days. The agency frequently utilizes Air Methods for rescue operations and collaborates closely with COIAS. The agency has also used the Air National Guard out of Mountain Home. Radios are operable but often have a poor signal in remote areas, so satellite communication devices were purchased through BOCSAR for communication. Bonneville County Search and Rescue has no official support or reimbursement for equipment or supplies, and the operational budget comes through private donations or the Sheriff's Office. The medical director is active and helps to provide training for the agency, with 50% of the activity incorporating some form of EMS training. This agency has little difficulty recruiting volunteers, takes pride in the diverse expertise of its members, and looks forward to helping the community.

4.1.2.2. City of Idaho Falls Ambulance Service Overview

The City of Idaho Falls Ambulance Service, a division of the Idaho Falls Fire Department (IFFD), is full-time, tax-funded, and contracted to Bonneville County Ambulance District to provide ALS transport EMS services in Idaho Falls and throughout Bonneville County. This agency serves a population of nearly 155,000 people in 3,500 square miles. The agency is also contracted to provide patient transport in portions of Bingham County and Jefferson County, providing patient transports for Shelley Firth Quick Response Unit (QRU) in north Bingham County and Central Fire District QRU in south Jefferson County. Both agencies are currently progressing to full-time transport ambulance capability. This will decrease call volumes for COIAS outside of Bonneville County, allowing COIAS to focus its attention internally within the county and rising county call volumes. Response capabilities, mutual aid, and co-response of neighboring agencies are highly esteemed by the transport agency, and the agency is highly supportive of increasing capabilities within agencies in surrounding counties.

The IFFD has six stations throughout the Idaho Falls metropolitan area, with fire apparatus and COIAS ambulances at each station. COIAS also provides EMS services from one remote station located in Swan Valley. The agency provides the same paramedic-level EMS services from the Swan Valley station and occasionally collaborates with the Swan Valley Volunteer Fire Department. COIAS is overseen by leadership at the Idaho Falls Fire Department, fire district commissioners, and the Bonneville County Commissioners, who oversee the Bonneville County Ambulance District. 65 Basic EMTs, 12 Advanced EMTs, and 58 Paramedics are affiliated with the agency. Based on location and call types, the ambulance primarily transports to Idaho Falls Community Hospital and Eastern Idaho Regional Medical Center. Interfacility transports are also performed from these facilities to hospitals throughout Eastern Idaho and Utah.

4.1.2.3. Idaho National Laboratories Overview

Idaho National Laboratories operates private fire and EMS services contracted with Battelle Energy Alliance. In addition to fire suppression, this agency provides ALS transport EMS services throughout 800 square miles of the designated Idaho National Laboratories. Because of its proximity and overlap across neighboring counties, it provides mutual aid to other surrounding agencies, including Lost River EMS, Bingham County, Bonneville County,

Jefferson County, and Fremont County. The agency employs a full-time, career-based agency with 80 staff on five ambulances. Ten firefighters are based at the central station, with two secondary stations, each with five firefighter EMTs at any time. The agency trains regularly while on shift and provides wildland and structure fire suppression, high-angle and low-angle rescue, and radiologic emergency response across the western United States. In 2016, the agency began using paramedics on the ambulances.

4.1.2.4. ProTec Fire Services Overview

ProTec Fire Services is a private and for-profit agency that provides aircraft rescue, firefighting, and EMS first response for the Idaho Falls Regional Airport (IFRA). This agency is licensed as a non-transport BLS agency, responding to incidents within the unsecured portion of IFRA, and in-flight medical emergencies are reported through the Air Traffic Control Tower. The control tower or ProTec will coordinate with the COIAS for additional patient treatment and transport. ProTec has seven full-time employees, each licensed at an EMT level. In the event of a 911 callout, the Idaho Falls dispatch center transfers the 911 incident to ProTec Fire Services. If there is a need for patient transport, the dispatch center simultaneously requests COIAS.

4.1.2.5. Star Valley EMS - Wyoming Overview

Star Valley EMS (SVEMS) Is a not-for-profit, hospital-based ambulance service licensed as a transport ALS service operated by Star Valley Health, providing care for the Star Valley in Western Wyoming, and covering portions of southeastern Bonneville County and Caribou County by written mutual aid agreement. This agency has ambulances stationed in Afton, Thayne, and Alpine, Wyoming. In addition to local 911 response, this agency also provides regional critical care ground transport services throughout eastern Idaho and western Wyoming, primarily for critical access hospitals. SVEMS predominately provides coverage in southeast Bonneville County, with most calls involving recreational activities or motor vehicle accidents on State Hwy 26, north of Alpine. The agency also provides coverage in Caribou County on State Hwy 34 and Hwy 89 to the Bear Lake County line on the Geneva Summit. This agency uses hands-on training to maintain education and subscribes to critical care courses provided by Air Methods.

4.1.3. Hospital Access Overview

- Eastern Idaho Regional Medical Center (EIRMC) is a Level II trauma, Level II stroke, Level I ST Elevation Myocardial Infarction (STEMI), Level I Intensive Care Unit, and Level III Neonatal Intensive Care Unit facility in Idaho Falls. This facility is also Idaho's only burn center, providing wound and hyperbaric therapy, stroke care, and cardiac catheterization, with 318 licensed beds.

- Idaho Falls Community Hospital is a Level III trauma center, Level III stroke center, and Level II STEMI center located in Idaho Falls with 88 licensed beds.

4.2. County EMS System Resource Assessment Overview

Eight agencies in Bonneville County participated in this report. The following information is from participation in a formal survey including one transport agency and one non-transport agency. The transport agency also participated in a face-to-face site visit, and two additional transport agencies (not discussed in this survey overview below, though discussed above) participated in face-to-face visits. One non-transport agency participated in a phone consultation. Three unlicensed departments participated in face-to-face visits. One critical care air ambulance hosted a site visit.

4.2.1. Organizational/Operational Assessment

EMS in Bonneville County is provided mainly by one transport agency that best perceives its financial situation as "well-funded with annual surpluses.". Several other transport agencies contribute from neighboring counties, even from Wyoming, on a small percentage of calls. Each transport agency operates in a full-time, career-based capacity with adequate funding. Agencies feel supported and optimistic about the future, with a broad perception of stability, as reported by transport agencies. While this may not reflect the viewpoints of all collaborating non-transport agencies in the county, most agencies feel encouraged by the regular interactions between all collaborating county agencies. With this predominant single-agency transport model with a unified leadership structure, agencies agree that there is the opportunity to establish, improve, and maintain cohesion amongst all county agencies. Collaboration between county agencies and even agencies from neighboring counties may be enhanced through the continued use of organized and formally adopted communications and community outreach plans. Regional communication and collaboration are likely to contribute to the stability and sustainability of the County EMS system.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: The subjective stability and sustainability rating of the EMS system, as reported by the primary transport agency in Bonneville County, is 84/100.

- **EMS Agency Financial Situation:** The career departments licensed in Bonneville County shared that they are well-funded with annual surpluses. Meanwhile, the only volunteer agency receives funding as a division under the Sheriff's Department, so budgeting for EMS-related expenses is often minimal outside of grants, private donations, and fundraising.

- **EMS Agency Communications Strategy & Outreach**: There is a written communications plan amongst the EMS agencies, and there is a community outreach plan that is written, adopted, effective, and productive.

- **Community View of EMS Agencies**: Agencies perceive that there is a favorable view of EMS by members of the community.

- **Elected Official Support of EMS Agencies:** Agencies feel well supported by local oversight, including fire district commissioners and Bonneville County

Commissioners, with the relationship further described by the transport agency as positive, engaging, and interacting regularly."

- **Agency & System Response Outlook:** Agencies feel optimistic about the future of EMS in Bonneville County. The agencies feel encouraged by the regular interactions between one another and with agencies in surrounding counties. The agency's strengths are noted in its personnel, standardized protocols, equipment condition, and positive relationships with its partnering agencies.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** Several agencies contribute to the prehospital healthcare setting in a career and full-time capacity, with one volunteer agency collaborating on a small percentage of calls. Two agencies perform dual-role fire-based services, and one in a neighboring state is operated as a hospital-affiliated agency.

- **Service Delivery Partners:** "Other agencies" are defined as the strongest service delivery partners in addition to hospitals, the City of Idaho Falls, and Bonneville County. Neighboring counties, including Jefferson and Bingham counties, are also noted.

- **Medical Direction:** there is some involvement in training and quality assurance, and the medical director helps on an as-requested basis with quality assurance, protocol updates, and on-shift training about recent trends in patient care.

- **Communications & Interoperability:** Radio communications are reported to offer quality reception, interoperability, and reliable communication with outside counties. There are challenges with communications in remote areas, so the search and rescue agency uses satellite communication devices for communication.

- **Mutual Aid Systems & Agreements:** There are mutual aid agreements with neighboring counties, including Bingham, Jefferson, and Lincoln County, Wyoming, and agreements with internal County resources.

- **Community Health EMS (CHEMS):** CHEMS is well known to the agencies with no interest in introducing the model into the system.

- **Patient Care Documentation Systems:** The transport agency uses the electronic patient care reporting system provided by the Bureau.

4.2.1.3. Response Overview

- **Levels of Service:** Most services in Bonneville County operate at the ALS level except Search and Rescue, a BLS non-transport division.

- **Agency Response Concerns:** Adequate staffing has been maintained, and there have been no problems transporting patients in the last year or responding to EMS calls.

- **Helicopter Response & Utilization:** While each agency interfaces with transport helicopters, these helicopters are typically used in rural areas, remote areas, areas with difficult access, or a distance from definitive care. The agencies in Bonneville County primarily use Air Methods for air transport and occasionally Life Flight or Classic Air.

- **Factors Impacting Response Times:** When response times are affected, the most common reasons include location, simultaneous calls, and personnel shortages. The least likely factors affecting response times include time of day, weather, geography, and equipment/vehicle issues.

- **Response to Public Lands:** The agency is affected minimally by the response to public lands: these calls typically impact staffing, funding, equipment, and response times. The number of these calls is negligible and does not pose an issue for the agency.

4.2.2. Workforce & Resource Assessment

Workforce and resources in Bonneville County are primarily described as "sufficient." Various agencies contribute to care in the county as career-based and funded by billing revenue, public tax support, private funding, or financed through a hospital-based system; this likely translates to an agency perception of personnel, facility, and equipment adequacy. Increasing costs concern agencies in the county, primarily rising living costs with challenges retaining personnel with competitive salaries. Occasionally, grant support is needed for capital purchases; however, if expenses continue to increase with a relatively fixed budget, many agencies may require additional funding support. In contrast, the search and rescue division relies upon volunteers and attends to incidents in the county's most remote areas with no specific EMS budget and challenges with grant acquisition for capital purchases. While it serves an area with few incidents, these are often resource-intensive, requiring specialized patient access and transport equipment. Sustainability and leverage will continue to be discussed in this division, especially for purchasing capital equipment. Unlike many volunteer agencies, however, this division appeals to the community, as evidenced by substantial public interest in volunteering with little issue with recruitment or long-term retention. The transport agency provides equal leveled care for the population center and the rural population alike, which also serves to strengthen the system and continue to provide continuity.

4.2.2.1. Staffing Overview

- **Staffing Structure:** Most agencies in the county are scheduled, compensated, career agencies. Search and Rescue is the only uncompensated and volunteer organization present. There are deputies associated with the Sheriff's Department who are career law enforcement officers, and though their role contributes to EMS, their full-time duties include law enforcement. There are compensated career backcountry deputies employed through BCSO whose position entails patrol of public lands and roads and assisting with search, rescue, marine rescue, all-terrain vehicles, and dirt bike patrols. Though their occupation occasionally requires EMS, they typically function and are primarily employed in a law enforcement capacity.

- **Responder Average Age:** The average age of reported countywide responders was 25 to 44.

- **Staffing Numbers:** Over 200 licensed EMS providers are estimated to participate in EMS in Bonneville County.

- **Staffing Concerns:** All career-based agencies express concerns regarding staffing due to increasing and more competitive wages elsewhere. There are growing expectations regarding service provision and increasing protocols placed on paramedics, with a concomitant increase in the cost of living and relatively static compensation. Amongst transport and non-transport EMS agencies in the county, the average staffing stability rating is 75/100.

- **Staffing Strengths:** Agencies are career organizations and are minimally staffed at this current time, with occasional openings that are typically filled. Search and Rescue reports that one of the organization's strengths is staff flexibility and availability to respond to calls, particularly given unscheduled and unpredictable needs. The agency has never struggled to retain volunteers and maintains excitement and pride amongst its members.

- **Recruitment & Retention:** Recent challenges have been noted at the career level regarding an increasing cost of living with increasing demands on paramedics, translating to an overall decrease in pay for the required work. These agencies frequently compete with other regional agencies for paramedic-level employees. They hope there may be a future wage increase with decreasing expectations and demands placed on paramedics to help with retention. The search and rescue division rarely has issues with recruitment and retention, with a waiting list of individuals who are ready and willing to be involved. The agency contributes this willingness to serve due to increasing interest, curiosity, and a desire to learn more about rescue activities during exercises.

4.2.2.2. Training & Education Overview

The training and education models vary throughout the county, and most agencies use online training resources, hands-on, live training for skills, and conference attendance. COIAS has a medical director who occasionally participates in quality improvement and training. Budget constraints are evident throughout all agencies with limited funding apportioned to education systemwide, which may even prevent consolidated in-person training, given the current staffing model and a limited budget for overtime. However, education is highly sought and provided by the medical director, trauma facilities, and the local air ambulance, which actively participates and provides training for EMS personnel. The involvement of these individuals and agencies increases cohesion between prehospital and in-hospital medicine, especially as the training is local, timely, current, high quality, and cost-effective.

4.2.2.3. Facilities Overview

- **Station Locations:** The transport agency has six locations, five in Idaho Falls and one in a more remote area in Swan Valley. ProTec has facilities located at the Idaho Falls airport. Other agencies contributing to EMS coverage include an EMS station in Alpine, WY, south of Swan Valley, and another at the Idaho National Laboratories, west of Bonneville County.

- **Station Condition:** The facilities are noted to meet the agency's needs countywide. Broadly, the average facility condition rating, as reported by countywide agencies, is 82/100.

- **Facility Needs:** The transport agency has regular facility inspections and maintenance on Fire and EMS stations and a $100,000 contingency set aside annually for significant capital improvements. There is the hope and expectation to build a new training facility in the county.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: The current equipment and supplies in possession of agencies meet the needs of each regarding age, functionality, and use appropriateness. The transport agency can obtain supplies and adequately stock the ambulance; non-transport agencies can easily acquire supplies. The search and rescue division rarely needs to purchase supplies; however, patient care equipment is occasionally required, and there are sometimes challenges with grant acquisition to leverage this expense for various reasons.

- **Condition**: Most mandated equipment on ambulances was noted to be in great condition by the agency; the non-transport agency also has equipment in good condition, including radios, which are reported to be in excellent condition. Some equipment for the search and rescue division, specifically equipment related to patient care, may soon need to be replaced.

- **Funding:** The transport agency has been awarded several grants, including the EMS for Children Grant, Healthcare Coalition, and Bonneville County Public Safety Grant. The search and rescue division has challenges acquiring grant funding, particularly for equipment and training supplies.

- **Needs/Shortages**: Most large capital equipment is noted to be in operable condition; however, there is a need for training equipment throughout the county. The non-transport unit also needs remote patient extrication equipment and updated communication devices, as radios are often unreliable in remote areas.

4.2.3. Financial Overview

Two agencies shared the following financial information. However, all other neighboring county agencies contributing to patient care in Bonneville County universally expressed challenges with net billing reimbursement and increasing costs related to capital and

operations. EMS is primarily delivered to the county by a single transport agency funded through tax and billing revenue. This agency is well-funded and has carryover for significant expenses but does express concerns that increasing wages would be challenging with the current personnel budget.

The non-transport agencies could not provide financial information. Yet while these agencies indirectly contributed to a small portion of calls in the county, these agencies contributed working hours, whether compensated or uncompensated, that directly impacted patient care. The search and rescue division is no exception and shared that though they have sufficient staffing, they need more access to funding for EMS training, licensing, and even updated equipment for patient care. With EMS-related funding provided to this agency, patient care in these remote areas will likely be improved.

4.2.3.1. Expense Overview

- **Personnel Expenses**: A collective $5,486,927 in expenses is estimated to be dedicated to personnel costs throughout the county. However, this number does not account for the collective volunteer working hours cost incurred for search and rescue or backcountry rescue expenses.

- **Operational Expenses**: It is estimated that $2,236,348 in expenses are directed toward operating costs, including supplies, training, and recurring maintenance or facility expenses across the county.

- **Capital Expenses**: An estimated $1,398,012 is directed toward yearly capital expenses.

4.2.3.2. Revenue Overview

- The transport ambulance in the county bills for service with a billing revenue of $4,270,304 for 911 calls and $533,144 for interfacility transfers.

- EMS does receive county support at an ambulance levy rate of 0.000228589%, with $3,324,114 received in 2022 for taxing revenue and fees for service in providing EMS transport for Jefferson County and Bingham County.

- The agency does receive a contracted sum to mentor students and has also received vaccine reimbursement fees.

- Grants are applied for and awarded regularly to help leverage capital equipment. The agency does not apply for grants to leverage ambulances but builds this purchase into a regular vehicle replacement cycle.

- Carryover is estimated at $300,000 annually set aside for the purchase of significant capital expenses, such as ambulances or equipment.

4.2.4. Resource Assessment Additional Factors

This county has multiple internal resources and neighboring county agencies that contribute to patient care, so the cost of EMS is not completely delineated. Also not delineated is the collaboration of the volunteer search and rescue division and the backcountry law enforcement, with dedicated hours directed to EMS challenging to quantify. While it is a rarity for a volunteer agency to be adequately staffed, it is also encouraging, given that it participates in a portion of EMS coverage for remote rescues and often bridges the gap between the transport agency and other collaborative agencies. It is challenging to ascertain the total number of EMS working hours, related apparatus and equipment, training, education, and licensure the agency contributes to the overall picture of EMS in the county.

One transport agency mainly serves this county, so the financial discussion is primarily based on that budget. COIAS presently receives contractual fees to provide transport services for outlying counties, which may translate to revenue loss if these surrounding agencies successfully implement transport services with a loss of billing revenue or contractual fees. While several ambulance stations are located near the population center, supporting most of the call volume, COIAS also provides services from a remote station. Remote stations are rarely profitable, given the few incidents with little billing revenue generation. However, consolidated services offer simultaneous urban and remote patient transport throughout the county, which avoids duplication of equipment, vehicles, personnel, and services and strengthens unified oversight and leadership. The agency is also worried about the potential effects of the No Surprise Act for Ground Ambulance Billing, coupled with the current challenges in billing negotiation and decreasing net billing revenues. Negotiating fees-for-service is an increasing challenge with billing Medicare/Medicaid with increased numbers of adjustments that ultimately affect the net billing reimbursement. Overall, revenue income and fees for service, less expenses, leaves a financial gap resulting in a systemwide operational deficit. This gap, or need, must be compensated for with supplemental funding or other possible funding sources such as grants, associated fire district funds, or even general tax support. There is hope that GEMT may help to bridge this gap.

REFERENCE LIST

[1] Bonneville County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[2] Wikipedia contributors. (2023b). Bonneville County, Idaho. *Wikipedia*. https://en.wikipedia.org/wiki/Bonneville_County,_Idaho

[3] *Airport | Idaho Falls, ID*. (n.d.). https://www.idahofallsidaho.gov/1743/Airport

[4] United States Census Bureau QuickFacts. (n.d.-b). *U.S. Census Bureau QuickFacts: Bonneville County, Idaho; United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/bonnevillecountyidaho,US/PST045222

[5] University of Idaho Extension. (2022h, December 13). *Bonneville: Total housing units*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?IndicatorID=18&RegionID=16019

[6] University of Idaho Extension. (n.d.-b). *Highlights for Bonneville*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019

[7] University of Idaho Extension. (2023h, April 25). *Bonneville: Poverty rate, by age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=11

[8] University of Idaho Extension. (2022a, February 23). *Bonneville: Wage per job*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=16

[9] Massachusetts Institute of Technology. (2023c, February 1). *Living Wage Calculator - Living wage Calculation for Bonneville County, Idaho*. https://livingwage.mit.edu/counties/16019

[10] University of Idaho Extension. (2021b, December 12). *Bonneville: Labor force participation*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=12

[11] University of Idaho Extension. (2022, December 13). *Bonneville: Employment by industry*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=17

[12] University of Idaho Extension. (2023, March 29). *Bonneville: Agricultural workers*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=100050

[13] Zillow. (2023). *Bonneville County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/2892/bonneville-county-id/

[14] University of Wisconsin Population Health Institute. (2023). *Bonneville, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/bonneville?year=2023

[15] University of Idaho Extension. (2023, April 13). *Bonneville: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=29

[16] *Medicaid & Health | Idaho Department of Health and Welfare*. (n.d.). https://healthandwelfare.idaho.gov/services-programs/medicaid-health

[17] University of Idaho Extension. (2023, May 10). *Bonneville: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=5

[18] University of Idaho Extension. (2021, September 27). *Bonneville: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16019&IndicatorID=100013

CARIBOU COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) in Caribou County is provided by a single transport agency funded by billing revenue and tax support from property tax, registration fees, and sales tax; there is no ambulance taxing district in Caribou County. The Eastern Idaho county is remote, with a stable aging population and minimal growth. Federal land makes up a large portion of the county, as do private corporate lands owned and operated by mining companies; these private companies each have non-transport agencies. While these non-transport agencies do not significantly contribute to the EMS system or incident volumes in Caribou County, these industries impact the county infrastructure and local economy.

The aging countywide demographic is similarly reflected in the average age of EMS personnel who staff the paid-on-call/paid-per-call transport ambulance. One of this agency's greatest strengths is the small group of dedicated Emergency Medical Technicians (EMTs) who continue to sustain this agency. In recent years, however, the agency has been challenged with attracting new EMS personnel as many people have retired or moved out of the area. As the cost of living has been increasing countywide, this cost is not offset by the meager stipend provided to EMS personnel, further contributing to challenges with personnel retention.

Once having many personnel, the agency has seen this number decline despite colossal efforts to attract and retain EMTs. Moreover, according to the agency, approximately 40% of on-call shifts go unfilled. To combat this, the agency reports increasing the personnel stipend by 25% within the last two years, subsequently increasing personnel budget expense to 40% of the total budget. While this was initially helpful in retention, it did not address recruitment. Attempting to bolster recruitment, the agency reports hosting EMS classes and even placing advertisements in the local newspaper with titles such as "What if you call 911 and no one comes?" to attract attention to the need for EMS personnel in

Caribou County. This shock-and-awe approach has prompted very few phone calls of interest and has done little to attract new personnel. Despite resilient personnel, strong leadership, county support, and support by the local hospital, the agency anticipates that unless there is additional funding, increased reimbursement, personnel incentives, and increased compensation, the EMS agency will not succeed without significant change, funding support, or collaborative efforts from county entities and neighboring counties.

Strengths	Opportunities
• Dedicated Emergency Medical Technicians (EMTs) provide coverage despite small stipends. • Operating under consistent leadership by the Public Safety Director who is actively working on recruitment and retention. • Collaboration between the hospital, medical director, and transport Emergency Medical Services (EMS) agency. • Single agency coverage for the entire county. • Collaboration and written agreements with other neighboring agencies (Wyoming). • Several EMS stations distributing EMS services across the county.	• Consider consolidation with other county services/agencies. • Collaboration with other neighboring county agencies to support a regionalized model. • Consider integration of Community Health Emergency Medical Services (CHEMS) to help support a full-time model. • Compensation of workforce to consider providing part-time wages or benefits. • Consider establishing a dedicated ambulance taxing district. • Consider an increase in transport fees. • Ground Emergency Medical Transportation (GEMT) may be a possibility to increase reimbursement.
Challenges	**Threats**
• Improving community awareness of EMS system challenges in the county. • Recruitment and retention of volunteers. • A limited budget without taxing district. • A potential increase in compensation with a limited personnel budget. • Large capital improvement projects. • Filling on-call schedules at each individual station. • Public land 40% with low Payment in Lieu of Taxes (PILT) reimbursement.	• Inadequate shift coverage during the daytime hours. • Decreasing certified EMS personnel at mining operations, requiring more EMS assistance. • The Public Safety Director and administrative assistant are often removed from other duties to provide EMS Coverage. • Concerns for decreasing billing reimbursement. • Rising cost of living noted throughout the county. • Interfacility transfers place strain on the system.

Table A: Caribou County SCOT Analysis

SECTION

2

CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY OVERVIEW

2.1. Demographics

Caribou County is in Southeast Idaho and is named after the Caribou Mountains that run the length of the county. Cache National Forest, Caribou National Forest, and Grey's Lake National Wildlife Refuge are in the county. [1] The area has a stable population, estimated at 7,190 in 2022, and a population change of 2.3% over the last two years. [2] Much of this population resides in Soda Springs, the County Seat, but Grace and Bancroft are recognized cities therein. Federal land makes up nearly 40% of the county's public land, with an additional 10% as city and Idaho state land. [3] As of 2021, there were 3,125 housing units in Caribou County. 64% percent of these housing units are owner-occupied, nearly 15% are occupied by renters, and 21% of homes are identified as vacant. This number has remained unchanged over the last several years. [4]

Demographic	2010	2020	2022
Population	6,963	7,027	7,190
Land Area	1,764.15 sq mi	1,764.19 sq mi	1,764.19 sq mi
Per Capita	3.9 PPSM	4.0 PPSM	4.0 PPSM
PPSM: *People per square mile*			

Table B: Caribou County Population & Geography [2]

2.2. Economics

The average unemployment rate in 2021 was 3.1%, with 5,005 jobs in the county and an addition of 67 jobs in one year. The average wage per job as of 2021 is $63,331, just over a 1% wage increase between 2020 and 2021. [5] Based on living wage data, the annual livable wage in Caribou County is $31,532, with a poverty salary of $13,582. [6] The most notable industries include manufacturing (16%), government-related occupations (14%), mining activities (12%), and farming (11%). [7] In 2022, 786 agricultural workers were identified in the county, with the most significant population of farm workers identified in October. In October, 32% of the total farm workers were identified as migrant workers. [8]

The median age in Caribou County is nearly 38 years of age. [5] The overall poverty rate is almost 10%, with more than 12% of children under 18 living below the poverty level, while the poverty rate for those over 65 is nearly 7%. [9]

In 2021, the United States (US) Census identified a median home value in Caribou County of $160,800 (as compared to Idaho's $266,500). [2] However, in the review of average home prices in 2023, compared to median home values noted by the 2021 US Census, the current market values are 73% more, with an average home currently priced at $278,560; this requires a net household income of $54,000. [10]

Metric	Data
Total Population (2022)	7,190
Median Age (2020)	37.9 years old
Poverty Rate (2021)	10%
Number of Jobs (2021)	5,005
Average Annual Wage per Job (2021)	$63,331
Unemployment Rate (2023)	3.2%

Table C: Caribou County Economic Factors

2.3. Social Determinants of Health

Caribou County is ranked #11 out of 43 counties in Idaho regarding health outcomes and health factors (factors that can be modified, such as tobacco use, alcohol consumption, or physical exercise). It is identified among the healthiest counties in Idaho. [11] There are 5.7 primary care physicians (PCP) per 10,000 population, fewer than Idaho. Four primary care physicians are identified in Caribou County, a 25% increase from years previous. [12] There is one community health center and three long-term nursing facilities/skilled nursing facilities. Caribou County has no independent home health agencies, surgical facilities, or dialysis centers. [13]

More than 28% of the population is under 18, and 18% is over 65. [14] As of 2019, 10.5% of people under 65 had no health insurance coverage, and over 5% of children under 19 had no health insurance. [15] The transport agency shared the following payer mix: Medicare 35%, Medicaid 35%, Out of Pocket 10%, and Commercial 20%.

2.4. Indicator Impacts to EMS

The countywide population remains stable; however, Caribou County is experiencing an aging population with fewer children. In the 1980s, 7.6% of the population was noted to be over the age of 65 and almost 39% under 18, whereas in 2021, over 18% of the population is over 65, and 28% is under 18. [14] This aging demographic may lead to increased challenges with the recruitment of local EMS personnel, and it may lead to a noted increase in the demand for emergency response.

When considering long-term employee retention, the ability of someone to rent or own a home in a county should be considered, especially in the case of a partially compensated agency. Given the current housing market prices, with the average home priced at $325,200, a median household income in Caribou County of $72,035, and an average wage per job of $63,331, housing affordability is feasible in homes with an average single household income. [2,10] Housing prices have increased by over 6% last year. If prices continue to increase, this will ultimately contribute to a lower likelihood of people being able to participate as personnel for an EMS system with no full-time wages or benefits. [10]

The primary industries in this county are noted to be those with higher rates of injury: farming, manufacturing, and mining. Known for its recreation, with over 50% of land identified as recreational areas, either federal or state lands, this county is decidedly remote, with little access to metropolitan areas and a significant distance from healthcare facilities. This impacts the EMS agency with increased transport times and multi-agency patient extrication from remote areas. This aging population, prevalent tourism, and recreation will ultimately contribute to higher call volumes, increasing operational and capital expenses, need for personnel expenses, and continued lengthy EMS response times to remote areas. Ultimately, this will continue placing a burden on the EMS system and upon the EMS workforce.

Section 3 Context

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed to be accurate.

3. EMS System Demand

3.1. Call Volume Overview

In Caribou County, the single agency reported 381 requests for 911 services in 2022, resulting in 281 patient transports, which equates to 1.05 calls per day. The call volume has increased slightly in the last two years with a noted increase in transports. While several non-transport agencies are licensed in the county, these agencies do not report data. The agency reported 38 interfacility transports in 2022, accounting for 10% of its total call volume.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Caribou County EMS	*275*	*82*	**357**	*252*	*103*	**355**
Ambulance Total	*275*	*82*	**357**	*252*	*103*	**355**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Caribou County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Caribou County EMS	*9 min*	*15 min*	**24 min**	**40 min**	**102 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Caribou County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Caribou County has one Public Safety Answering Point (PSAP), dispatching through the Caribou County Sheriff's Department. Caribou County Sheriff's Department dispatches for fire, law enforcement, EMS, and Search and Rescue. No Emergency Medical Dispatching services are available, and no cost is incurred to the EMS agency for dispatch services.

Most of the private mining operations in the area use an internal system for emergency response, similar to the use of "mayday" for an emergency. All employees have access to a radio to report the need for EMS response. The 911 system is then used if necessary; Caribou County PSAP dispatches Caribou County EMS, and EMS response occurs.

4.1.2. EMS Agency Overview

Caribou County contains one licensed transport agency – Caribou County Emergency Medical Services (CCEMS). ITAFOS CPO Emergency Response team, Kiewit Mining Group, and Monsanto Fire and Rescue are each licensed private non-transport agencies within Caribou County. ITAFOS phosphate mine is located over seven miles north of Soda Springs near the small community of Conda, Kiewit phosphate mine is located 24 miles north and east of Soda Springs, and Monsanto Chemical Company manufacturing elemental phosphorus is situated three miles north of Soda Springs. Caribou County has a volunteer fire department, and the city of Soda Springs also has a 16-member fire department; neither department has an EMS license, but they do collaborate on a small percentage of calls with CCEMS. Caribou County Search and Rescue (CCSAR) is an all-volunteer search and rescue unit that operates under the Sheriff's Office; this agency does not provide EMS services or have an EMS license, although they do have many of the same EMTs volunteering with the agency that also operate under the license of CCEMS. Finding volunteers for CCSAR has been challenging.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Caribou County EMS	Transport	Basic Life Support (BLS)	Scheduled	Compensated
ITAFOS CPO	Non-transport	Basic Life Support (BLS)	Scheduled	Full-time
Kiewit Mining Group	Non-transport	Basic Life Support (BLS)	Scheduled	Full-time
Monsanto Fire & Rescue	Non-transport	Basic Life Support (BLS)	Scheduled	Full-time

Table F: List of EMS Agencies Located in Caribou County

4.1.2.1. Caribou County Emergency Medical Services Overview

Caribou County Emergency Medical Services (CCEMS) is a compensated, public, tax-based transport agency that covers the entirety of Caribou County without a special ambulance levy for financial support. The EMS agency model employs a scheduled paid-on-call and paid-per-call model, which provides significant flexibility, specifically for personnel who also perform shift work in local manufacturing or mining companies. Budgetary oversight is provided by county Commissioners who function as the Ambulance Board. The agency is licensed at the Basic Life Support level and has 26 volunteer EMTs and one affiliated Emergency Medical Responder (EMR). While the agency has an internally elected leadership structure, the Director of Public Safety fulfills the EMS directorship and oversight role. This Director of Public Safety also performs other duties outside of oversight for EMS; however, this individual also provides a significant amount of EMS coverage, particularly during daytime hours, due to constant staff shortages. The agency has a part-time administrative assistant who performs internal billing services and is simultaneously affiliated as an EMT.

The agency responds from three stations in Bancroft, Grace, and Soda Springs, and patients are typically transported to Caribou County Medical Center. Each station maintains a schedule of on-call EMTs. EMTs can sign up for the 12-hour shifts at each of these stations. If no one is available to cover the schedule on a given day, subsequent pages occur with hopes of finding call coverage. While this may not attract one individual to cover the entirety of the call shift, it is thought to prompt awareness and team collaboration. Shift scheduling is flexible, and personnel may contribute as they are able. While this offers flexibility to personnel outside their paid occupations, it similarly presents challenges with adequate call coverage as approximately 60% of the schedule is covered regularly, with difficulties most noted on weekdays. There is a minimum expectation of involvement to maintain skills and currency in knowledge. Still, as the agency needs to maintain its roster of eligible EMTs, few repercussions are carried out for inadequate contribution.

CCEMS also collaborates with Star Valley Emergency Medical Services (SVEMS) out of Wyoming with a formal written memorandum of understanding to provide EMS coverage for the east side of Caribou County. There is funding for training, although these funds have not increased significantly, which causes challenges with affordably maintaining individual EMT

licenses. There have been few compensatory raises toward the EMS workforce previously; however, there was a recent 25% stipend increase to help address EMT retention.

Most patients are transported to Caribou Medical Center in Soda Springs for stabilization. The primary air transport services utilized by CCEMS are Classic Air, Air Idaho, and the University of Utah; these services are used in the setting of long transports, remote calls, and critical patients, based on the discretion of the transport agency. The agency has developed training programs that are in person and online to help attract EMS staff and make it easier for people to obtain a license. The agency permits using “drivers” before obtaining an EMS license to help recruit, engage, and encourage EMS personnel while they work on final testing. EMT classes are budgeted and provided using in-house instructors every other year.

4.1.2.2. ITAFOS CPO Overview

ITAFOS CPO Emergency Response Team is a privately operated group with a non-transport license through the ITAFOS Conda Phosphate Operations. This privately owned phosphate mining and fertilizer company operates a phosphate processing plant. This plant is located 16 miles northeast of Soda Springs. The agency uses licensed EMTs who are also employed in various capacities within the operations. These individuals respond to emergencies within the parameters of the mine only, with little overlap amidst outside agencies, as the agency reports no assistance with EMS calls outside of the perimeter of the ITAFOS CPO.

4.1.2.3. Kiewit Mine Overview

Kiewitt Mine Overlaps with ITAFOS CPO. Kiewit provides contracting mine services for the Conda Phosphate Operations at the Dry Valley/North Rasmussen Ridge Mines. This agency is licensed at the Basic Life Support (BLS) non-transport level.

4.1.2.4. Monsanto Fire and Rescue Overview

Monsanto Fire and Rescue is a non-transport licensed agency that responds to emergencies within the Monsanto plant. The plant is approximately 5 square miles and has about 450 employees. EMS Is provided 24/7 through EMTs, who also perform dual roles at the plant. When there is an emergency, these EMTs respond to the call and are paid for their duties. A helicopter is used for transport if the incident involves a critical patient, such as a heart attack or stroke; these patients are typically transported to Portneuf Medical Center by Classic Air. If the incident is determined non-critical, the patient is evaluated by Monsanto EMTs for first aid and consideration of EMS ground transport versus self-transport. Many EMTs working at the Monsanto Plant are also active with the local volunteer EMS agency and the local search and rescue agency. Continuing education and recertification are performed using in-house instructors. There is an available ambulance on site that is fully stocked with all necessary equipment for the internal movement of the patient on company grounds to an on-site advanced practitioner. The agency can obtain and restock medical supplies and purchase large patient equipment. Charting is performed through paper patient care documentation; no electronic patient care report is utilized. The company does not apply for grants; all funding for the agency, including personnel and operating expenses, is provided through Monsanto Fire and Rescue.

4.1.3. Hospital Access Overview

Caribou Medical Center (CMC) is a critical access hospital in Soda Springs. CMC is a level IV trauma center that partners with the University of Utah to offer teleconsultations with specialists in critical care, wound, burn, and stroke. Services offered include emergency medicine, primary care, surgical care, in-patient care, labor and delivery, and outpatient services. There is also a small family medicine clinic located in Grace, ID. [16]

4.2. County EMS System Resource Assessment Overview

The following information came from transport and non-transport agencies licensed in Caribou County. Two agencies participated in a formal survey, including one transport agency and one non-transport agency. One agency participated in a face-to-face site visit, and one agency performed a phone interview.

4.2.1. Organizational/Operational Assessment

EMS services in Caribou County are primarily performed by one licensed transport agency. Non-transport agencies who contribute to EMS services, though only in the confines of privately owned and funded mining operations. The transport agency expressed significant concerns regarding the sustainability of the current EMS model, which is licensed at the BLS level and provides a stipend to personnel per call and paid-on-call. This agency frequently breaks even with minimal annual reserve for capital expenses. While the county Commissioners provide budget oversight for the agency, there are significant funding challenges, primarily as there is no ambulance taxing district; this places reliance upon billing reimbursement and continued general funds from property tax, sales tax, and license/registration. The agency has an elected leadership structure within its members; however, the Public Safety Director, who works a regular day-time schedule, provides agency leadership overseeing day-to-day operations of EMS and responding to EMS calls when others are unavailable. While this gives consistency to agency oversight, it also presents difficulties for this individual, who must simultaneously perform other tasks assigned to the all-encompassing role of the Public Safety Director.

This agency endorses a low/moderate sustainability rating with the concern that if EMS in Caribou County continues its current model, it may only succeed with additional funding or restructuring. Other surrounding agencies contribute to the county EMS system, with Star Valley EMS in Wyoming providing coverage to the furthest east reaches of the county. This eastern area is geographically challenging for Caribou County to access promptly due to weather, geography, and distance. Each of these neighboring systems would be unable to absorb the call volumes or provide EMS coverage in Caribou County if the system in Caribou County fails. Because the community needs more awareness about the state of EMS in the county, the transport agency has put forth campaigns and exhaustive efforts regarding EMS recruitment and retention; unfortunately, these efforts have raised little public concern.

Moreover, while the county residents have little insight into the challenges faced by the agency, and despite the lack of perceived problems, the agency knows that the community has an overall favorable view of EMS. Given this, the transport agency and county leadership strongly support a continued local EMS model emphasizing continuity and caring for patients

and neighbors in their community. The agency and county leadership strongly believe implementing or using an outside agency would harm the healthcare in Caribou County.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: Per a subjective report by the single transport agency, EMS sustainability in Caribou County has questionable long-term sustainability, rated 51/100.

- **EMS Agency Financial Situation:** The transport agency reports breaking even consistently with a negligible annual carryover. The system relies upon grant support for capital purchases and the general tax support provided by the county. There is billing revenue, which has a 55% net billing reimbursement.

- **EMS Agency Communications Strategy and Outreach**: There is uncertainty about whether there is an effective communication strategy and community outreach plan that is effective or productive, particularly after the transport agency attempted multiple modes of public communication with the community that proved unfruitful.

- **Community View of EMS Agencies**: The community has a favorable view of EMS agencies in Caribou County. Although the county residents have little insight into the current condition of the agency or few solutions for recruitment and retention of personnel, the community strongly supports a local county-based agency; the community would not be supportive of the use of a private ambulance service or a service that is based outside of the county.

- **Elected Official Support of EMS Agencies:** Agencies feel well-supported by local oversight.

- **Agency & System Response Outlook:** Significant concerns are expressed about the future of EMS in Caribou County as it is currently modeled. The transport agency is hopeful that there may be a higher rate of compensation for EMTs instead of using a paid-per-call/paid-on-call model and moving to a part-time wage. There is also a desire to progress to the Intermediate Life Support (ILS) service level. Agencies express a dismal future with anticipation of takeover by outside agencies if things continue to decline, specifically about the shortage of EMS personnel with few personnel incentives, limited funding, and rising operation costs.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** The county's single licensed transport agency is public and county-based, with several private non-transport agencies also providing coverage at privately operated mining operations and manufacturing industries. The transport agency has budgetary oversight by the County Commissioners and is overseen by the Director of Public Safety, also identified as the EMS Director. Within the agency itself are elected roles of leadership.

- **Service Delivery Partners:** Other neighboring county agencies are noted to be the most vital service delivery partners. These agencies include Bear Lake, Bannock, and Lincoln County, Wyoming.

- **Medical Direction:** The medical director is moderately involved in EMS training, quality assurance, and chart review and is an intermediary between the hospital and the EMS service.

- **Communications & Interoperability:** Radio communications are reported to offer quality reception, interoperability, and reliable communications throughout the county and between outside agencies and counties.

- **Mutual Aid Systems & Agreements:** CCEMS has a formal, written mutual aid agreement with Lincoln County, Wyoming. Most of the mines in the area do not have written mutual aid agreements between the transport agency and their private mining operations.

- **Community Health EMS (CHEMS):** The agencies are aware of CHEMS but are not interested in developing a program due to a lack of funding, program reimbursement, and staffing challenges surrounding the 911 system.

- **Patient Care Documentation System**: The transport agency utilizes the patient care reporting system provided by The Idaho Bureau of Emergency Medical Services and Preparedness (hereafter referred to as the Bureau) for documentation.

4.2.1.3. Response Overview

- **Level of Service**: The county contains BLS licensed agencies, both transport and non-transport, that cover the entirety of the county except for the eastmost portion of the county with services provided by Star Valley EMS, which operates at an ALS Level.

- **Agency Response Concern**: There have been approximately 21 to 50 times that EMS calls were difficult to respond to in the last year, as noted by CCEMS. Privately owned non-transport operations report very few instances in which the agency could not respond to a request for help. However, it has become more challenging amongst private organizations to ensure an EMT is on each shift, especially regarding additional compensation for licensure and the uncompensated expense of individual licensure maintenance.

- **Helicopter Response & Utilization:** Classic Air, Air Idaho, and University of Utah helicopter services are used for critical patients or in circumstances of longer transport times or remote areas.

- **Factors Impacting Response Times** – Primarily, challenges identified in responding to requests for service for CCEMS included personnel shortages, time of day, and location. Less likely, challenges include simultaneous callouts, geography, equipment or vehicle issues, or weather.

- **Response to Public Lands:** Approximately 15% of calls are located on public lands and create response times upwards of one hour or more; this takes an ambulance out of service for prolonged periods. While there are three total stations staffed at any given time, not all stations have full coverage, so in the case of a lengthy rescue, there may be few backfill possibilities for secondary callouts.

4.2.2. Workforce & Resource Assessment

Despite the diligence and hard work of all EMS personnel and leadership in the county, the workforce and resources available in Caribou County are one of the most challenging aspects of sustainability. Transport and non-transport agencies have similar challenges regarding a decreasing number of EMTs. In private agencies, individuals have separate duties while on-site, independent from emergency response. The decreasing number of licensed staff at these agencies who are eligible for response is multifactorial, possibly due to increasing challenges with maintaining the EMT license or due to few rewards or additional compensation for maintaining their license or carrying out specialized duties. These agencies can maintain sufficient equipment and can purchase and update supplies. Within the transport agency, there has been a recent increase in stipends provided to EMTs to help address personnel retention. Various incentives have been discussed, including retirement accounts and compensation rates for EMTs to be more comparable to a part-time occupation. Due to budget constraints, training and education opportunities are limited, so very few formal training programs are attended to by individuals outside of an in-house biannual EMT course. The transport agency has three stations throughout Caribou County that need updates or maintenance. However, the agency can acquire equipment and supplies, though it relies on grant support.

4.2.2.1. Staffing Overview

- **Staffing Structure:** the transport agency uses a paid-on-call and paid-per-call model with non-transport agencies operating full-time with EMT coverage provided by the privately employed workforce on a per-needed basis within their mining operation.

- **Responder Average Age:** The average age of the primary transport agency is 55 to 64, while the average age of the private non-transport companies is 25 to 34 years, possibly reflective of the manufacturing and mining industries operating each agency.

- **Staffing Numbers:** Collectively, there are a reported 29 EMTs and one EMR affiliated and working in the county.

- **Staffing Concerns:** As rated by the transport agency, subjective average staffing stability is identified as moderately limited. (45/100) As detailed above, there are frequently challenges with finding call coverage.

- **Staffing Strengths:** Within the transport agency, flexible scheduling is a strength, as is the ability to employ shift workers and the cross coverage of EMTs between the transport agency and other licensed non-transport agencies or other local entities such as search and rescue. Approximately 60% of the schedule is covered. A Public

Safety Director who provides some leadership over the agency; this individual also works full-time during the week and assists with EMS calls as required.

- **Recruitment & Retention:** The agency has discussed the implementation of retirement accounts or raising compensation rates to EMTs so that stipends may be comparable to a part-time occupation.

4.2.2.2. Training & Education Overview

Training and education are performed at monthly meetings, under the guidance of the medical director, and based upon syndromes that are frequently encountered or based on a critical call or a call that warrants further discussion. Due to limited funding and the limited training and education budget, most training is performed in-house, and very few external educational opportunities are attended. The medical director is involved in the training to the extent of recent trends seen in call volumes. There is a biannual EMT class that is conducted to recruit new personnel.

4.2.2.3. Facilities Overview

- **Station Locations:** EMS stations are in Grace, Bancroft, and Soda Springs. The remaining agencies are in privately owned and operated mining or manufacturing operations.

- **Station Condition:** Each station in Caribou County is noted to be in adequate condition. The agency is concerned about outdated buildings that need future updates, with more training equipment and storage space required. None of these stations can accommodate full-time employee sleeping quarters or living quarters.

- **Facility Needs:** The transport agency reports needing to remodel existing outlying stations to place equipment inside, repair roofs, and install heating, ventilation, and air conditioning systems. There is limited annual carryover for significant capital expenses.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The current equipment and supplies in possession of CCEMS and Kiewitt Mine are noted to meet the agency's needs regarding functionality and use appropriateness but also need to meet needs regarding age.

- **Condition:** The agency noted that most mandated equipment on ambulances was in good shape, except for portable suction units, mobile radios, and automated external defibrillators, which were reportedly in mediocre condition. Current equipment and supplies in possession of non-transport agencies are noted to be in good condition.

- **Funding:** The transport agency has been awarded grants for an ambulance and a power load system. The non-transport agencies do not apply for grants.

- **Needs/Shortages**: Ambulances are stocked with supplies and equipment that are noted to meet the county's needs. However, some privately owned non-transport agencies express concern about providing adequate supplies and equipment. There is also a county reserve fund to purchase capital equipment if needed. However, if there is an increase in scope of practice or an increasing level of care, more equipment is necessary. Given the relatively fixed budget, there is concern regarding the affordability or feasibility of purchasing new equipment without grant supplementation. There are also concerns about the increasing expense of durable medical supplies, which makes financing capital equipment or supplies with carryover challenging to budget.

4.2.3. Financial Overview

The following discussion is primarily based on information shared by Caribou County EMS. This agency faces concerns regarding limited budget and limited carryover each year for significant capital expense or improvement unless augmented by grants or additional compensation from county general funds. Personnel expenses are also a nominal portion of the budget, which significantly limits the possibility of providing wages and benefits for personnel. The agency is supported with revenue from billing and property tax alone without a tax levy; this creates significant challenges regarding flexibility in rising expenses across the board.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is shared that $157,419 in expenses is dedicated to EMS personnel costs within Caribou County; this includes salaries and benefits. The agency pays for one full-time secretary who also performs in-house billing with $63,000 for EMT stipends; this has increased nearly 25% in one year and was previously $50,570.

- **Operational Expenses:** It is estimated that $168,175 is dedicated to operations within Caribou County, including expenses related to disposable supplies, training, and facility fees.

- **Capital Expenses:** An annual capital expense budget is shared as $130,000, as evidenced by 2021 financial statements; however, the transport agency received an ambulance grant this last year, and the county did procure funds to match that sum. Due to this ambulance match, this sum is shared to be a total of $300,000 for FY 2023, which is $170,000 more than the typical annual capital expense budget.

4.2.3.2. Revenue Overview

- Caribou County has no ambulance taxing district, and revenues are primarily received from sales tax, license plates, and property taxes. (County property tax levy rate: .004893372%).

- The transport agency currently bills for service using an in-house billing service with a 45% loss to contractual adjustments. 2021 billing revenue is shared at $118,860,

which includes both 911 and interfacility transfers (which constitute 10% of call volume)

- Non-transport agencies do not bill for service as they are privately owned companies.
- The transport agency is eligible for grants, applying for several each year, and most recently, was awarded a grant to leverage the cost of an ambulance.
- Anticipated annual carryover: $24,000

4.2.4. Resource Assessment Additional Factors

The 2023 budget provided the most current financial snapshot of the county. This year, however, the county is over budgeting $170,000 to leverage the cost of an ambulance, of which an awarded grant will fund a portion; this year's budget is $40,000 more than a typical year. This means that revenues, minus average expenses, leave a financial deficit. This gap must then be met with some of the annual carryover and additional support from general tax support by the county or grant funding. Without creating an ambulance taxing district, increasing ambulance licensure level to increase the fees, or seeing an increase in reimbursement rates, there will continue to be difficulties with providing adequate compensation to EMTs or providing for capital expenses without significant support from alternate funding sources or through intercounty collaboration.

The challenges facing the EMS system in Caribou County are multifactorial, with a great need for EMS personnel and increased funding; both conditions are elemental for long-term sustainability. Increased stipends were made to personnel, which did little to increase recruitment or retention. However, given that 40% of the budget currently supports stipends for personnel, this leaves little room for further expanding a stipend or even compensating full-time employees. The population in Caribou remains static with little to no increase in call volumes, which would directly translate to increased billing reimbursement. Ground emergency medicine transportation may be possible given that 35% of transports are Medicaid, but with approximately one call per day, this payout will likely be nominal. If more funds were available, the transport agency believes that an increase in pay for existing employees and volunteers would be most important, as well as the addition of new employees and education and training.

REFERENCE LIST

[1] Wikipedia contributors. (2023c). Caribou County, Idaho. *Wikipedia*. https://en.wikipedia.org/wiki/Caribou_County,_Idaho

[2] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/cariboucountyidaho,US/PST045222

[3] Caribou County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[4] University of Idaho Extension. (2022b, December 13). *Caribou: Total housing units*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=18

[5] University of Idaho Extension. (2022a, December). *Highlights for Caribou*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029

[6] Massachusetts Institute of Technology. (2023, February 1). *Living Wage Calculator - Living wage Calculation for Caribou County, Idaho*. Living Wage Calculator, from https://livingwage.mit.edu/counties/16029

[7] University of Idaho Extensions. (2022, December 13). *Caribou: Employment by industry*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=17

[8] University of Idaho Extensions. (2023, March 29). *Caribou: Agricultural Workers*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=100050

[9] University of Idaho Extension. (2023, April 25). *Caribou: Poverty rate by age*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=11

[10] Zillow. (2023). *Caribou County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/1587/caribou-county-id/

[11] University of Wisconsin Population Health Institute. (2023). *Caribou, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/caribou?year=2023

[12] University of Idaho Extension. (2023a, April 13). *Caribou: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16005&IndicatorID=29

[13] *Medicaid & Health | Idaho Department of Health and Welfare*. (n.d.). https://healthandwelfare.idaho.gov/services-programs/medicaid-health

[14] University of Idaho Extension. (2023c, May 10). *Caribou: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=5

[15] University of Idaho Extension. (2021, September 27). *Caribou: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16029&IndicatorID=100013

[16] *Caribou Medical Center - Soda Springs, Idaho*. (2022, August 19). Caribou Medical Center. https://cariboumc.org/

FRANKLIN COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) in Franklin County is served by one transport agency funded primarily through billing reimbursement with supplemental general funds from the County; there is no special ambulance taxing district. There is an emphasis on internal billing collection to support EMS operations to sustain the system without reliance upon supplemental general funds or dependence upon carryover for significant expenses; this translates to a continued need for grants to leverage capital expenses. The agency's greatest strength is the hard work and commitment of partially compensated Emergency Medical Technicians (EMTs) who have created what was once a thriving system; these same dedicated EMTs are why the agency continues to exist. Without a budget to support a full-time, career-based agency, emphasis on EMS personnel recruitment and retention is paramount to the survival of this system.

Franklin County is a transportation corridor between Logan, Utah, and other cities in Idaho, with thousands of out-of-state motorists traversing the length of the County. The rural county has become a residential suburb for Logan, with seasonal and second homeowners and an influx of seasonal recreationalists into the area, placing a great demand on the EMS system.

The population growth has resulted in a nearly 10% increase in EMS calls in the last year, with more than two requests for EMS service per day. Despite colossal recruitment efforts, the county has seen a slow decline in EMS personnel. Despite these attempts at recruiting additional personnel, there remains a burden on a handful of dedicated and resilient members to manage this increased call volume. There is significant concern about the aging demographic of the EMTs in Franklin County and that if one or two were to leave the area, the current system would fail.

The Franklin County EMS system is being pushed to a breaking point, particularly considering limited tax support, little compensation to a decreasing number of EMTs, increasing EMS call volumes, increased cost of living, and challenges with decreasing billing reimbursement. Despite the monumental efforts performed by existing personnel to uphold the current system, the future and sustainability of EMS in its' current operational structure are tenuous.

Strengths	Opportunities
• Dedicated, experienced, and well-trained Emergency Medical Technicians (EMTs). • Paid-per-call compensation to EMTs. • Single agency transport coverage for the entire county. • Medical Director collaboration with both county agencies. • In-house billing reimbursement with a high rate of return. • Strong communication and relationship with the local hospital.	• Consider implement an ambulance taxing district. • Based on call volumes, increasing personnel compensation and considering employing full-time Emergency Medical Services (EMS) personnel, or paying personnel to be on call in addition to per call. • Implementation of a tourism tax, with revenues specifically benefiting EMS. • Improve collaboration between county agencies with formal, written agreements. • Submitting for Ground Emergency Medicine Transportation (GEMT) reimbursement. • Consider a partnership with the hospital or other form of service consolidation within the county. • Consider the use of Community Health Emergency Medical Services (CHEMS) in conjunction with fulltime employment in collaboration with the hospital.
Challenges	**Threats**
• Increasing call volumes, population growth, and increasing tourism. • Decreasing numbers of EMTs with challenges in recruitment and retention. • Purchase of significant capital expenditures outside of leveraging with grants. • The agency frequently transports non-taxpayer, out-of-state populations.	• Increasing agency costs. • Decreasing net billing revenue with little benefit from GEMT. • Further increasing county population growth. • Insufficient recruitment and retention of EMTs. • Lack of an ambulance taxing district.

Table A: Franklin County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Franklin County contains Idaho's oldest non-native settlement, which was established in 1860. The county is approximately 663 square miles, of which 4.7 square miles is water. [1] With a southcentral location, the county seat is in Preston (population 5,571). The county also has five smaller communities, predominately located on its east side, each containing fewer than 500 residents. The county has several highways running through it, including Highway 91, a direct route from Logan, Utah, to Eastern Idaho and provides a corridor for recreation enthusiasts and travelers alike. [2] The eastern and western counties contain portions of Caribou and Cache National Forest, with 35% of the county designated as federal and state land. [3]

Demographic	2010	2020	2022
Population	12,786	14,194	15,189
Land Area	663.65 sq mi	663.02 sq mi	663.02 sq mi
Per Capita	19.3 PPSM	21.4 PPSM	22.9 PPSM
PPSM: *People per square mile*			

Table B: Franklin County Population & Geography

2.2. Economics

Overall, the average unemployment rate in 2021 was 3.1%, with 7,211 jobs in the county. [4] The average wage per job in 2021 was $39,701, a 4.2% increase between 2020 and 2021. [5] The overall poverty rate is 8%, less than that throughout Idaho. [4] As of 2021, just over 10% of children under 18 live below the poverty level. The poverty rate for those over the age of 65 is 6.5%. [6] Moreover, a salary based on living wage data indicates an annual salary of $31,803 with a poverty salary of $13,582. [7]

Equally represented, farming and government industries contribute to 30% of the workforce, with 12% involved in retail trade and 8% in construction. [8] In 2022, the average number of agricultural workers was 1,339 annually, with the peak month of workers noted in October. Migrant workers make up 31% of Franklin County's agricultural workers. [9]

The county had a population increase of 3% last year. [4] As of 2021, there were 4,933 housing units in Franklin County, with more than 75% of those housing units as owner-occupied, over 16% occupied by renters, and 8% identified as vacant. [10] The number of housing units has steadily increased in the last several decades. It is among Idaho's highest owner-occupied counties, which translates to stability with a net migration rate of nearly 2%. [11] The median age in the county is 34; this number has been gradually increasing over the last decade. [12] However, with almost 31% of the population under 18, this is offset by a growing elderly population. [13]

Franklin County has a high rate of owner-occupied homes. In a review of average home prices in 2023 as compared to median values noted by the 2021 United States (US) Census with a home priced at $232,500, the current market values are rapidly increasing at 71% more in Franklin County with an average home priced at $398,523 in 2023; this requires a net household income of $77,245 concerning a 35% optimal debt to income ratio. [1, 14]

Metric	Data
Total Population (2022)	15,189
Median Age (2020)	34.2 years old
Poverty Rate (2021)	8%
Number of Jobs (2021)	7,211
Average Annual Wage per Job (2021)	$39,701
Unemployment Rate (2023)	3.1%

Table C: Franklin County Economic Factors

2.3. Social Determinants of Health

Franklin County ranks 15 out of 43 ranked counties in Idaho for health outcomes and health factors. It is ranked in the higher middle range of counties in Idaho regarding length of life and quality of life. It is ranked in the higher mid-range of counties for health factors that can be modified (such as tobacco use, alcohol consumption, or increasing physical activity). [15] In Franklin County, there are 3.5 primary care physicians per 10,000 in population, less than the 6.3 physicians per 10,000 in Idaho. Five primary care physicians are practicing in Franklin County, similar to 2014. [16] There is a community health center, access to home health, hospice, skilled nursing, and long-term care. Labor and delivery services are available in the county. [17]

Of the population estimate of 15,189, nearly 31% is under 18, and 14.6% is over 65, making the percentage of those in a non-working age range account for over 45% of the population. [13] As of 2019, 13% of people under 65 had no health insurance, and 5.7% of children under 18 had no health insurance. [18]

2.4. Indicator Impacts to EMS

Franklin County is the rural gateway of Idaho and, similar to many Idaho counties, is among the top counties experiencing exponential growth in tourism, housing units, and population growth. Franklin County ranks number 15 amongst counties in Idaho for change rank, with nearly 19% population change over the last two decades. [19] With this population increase, there has also been a significant increase in home prices, which is likely to pose challenges, especially concerning an acceptable debt-to-income ratio regarding affordability of homes with current housing prices; this will ultimately affect the ability for people to remain in Franklin County or move into the area. This will directly impact the recruitment and retention efforts of EMS personnel. If a full-time EMS agency is considered, competitive wages and cost of living will likely pose significant challenges. A growing workforce population in the 18-64 age range may increase the potential EMS workforce, mainly if a full-time EMS model were considered. However, in light of a partially compensated agency and an average working commute time of more than 25 minutes, this working population could also be working outside of the area during daytime hours, further limiting the availability of EMS personnel during working hours. [1] Thirty-one percent of the population is under 18 (compared to an average of 24.7% in Idaho), which means there may be the possibility of recruiting this younger population into the workforce. [13]

With volunteerism comes the need for flexibility in leaving a job to answer an EMS call. Regarding workforce flexibility, 41% of the population is self-employed in Franklin County (compared to 26% Idaho-wide). [20] Meanwhile, declining numbers of agricultural workers thought to provide the most flexibility comprise only 15.7% of the workforce in Franklin County. [9]

When considering long-term employee retention or recruitment, the ability of someone to rent or own a home in a given area should be regarded, primarily if EMS personnel are partially compensated and working another full-time position. Given the average market value of a house at $398,523, a median household income in Franklin County of $64,774, and an average wage per job of $39,701, this makes housing affordability unfeasible in Franklin County without living at a suboptimal debt-to-income ratio. [4, 14]

SECTION

3

CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed to be accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Per state-recorded data, in 2021, there were 638 requests for service; 632 of those requests were 911 response requests. In 2022, there were 699 incidents; 695 were 911 response requests. (Comparatively, the single countywide transport agency reported 732 calls for 911, resulting in 473 patient transports in 2022.) This highlights an increase in call volume of 10% in the last year. Chute time is rapid, likely due to the ability of responders to be close to the ambulance and for personnel having the ambulance nearby or at their home to initiate immediate response. While the agency-reported data is distinctly different from the state-reported data, it may be due to unknown/undocumented interfacility transports classified as 911 callouts. Franklin County Fire Department uses a program other than the state-provided documentation system, so little is known about data in response. However, the agency did report responses to six events in 2022.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Franklin County Ambulance Association	*435*	*196*	**631**	*464*	*230*	**694**
Ambulance Total	*435*	*196*	**631**	*464*	*230*	**694**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Franklin County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Franklin County Ambulance Association	*3 min*	*11 min*	**14 min**	**38 min**	**139 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Franklin County (2022)

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Franklin County Sheriff's Office dispatches EMS and provides emergency medical dispatching services. Text alert software sends messages to EMS and fire personnel on personal mobile devices.

4.1.2. EMS Agency Overview

Franklin County is covered by one transport agency licensed at the Intermediate Life Support (ILS) level and interfaces with one non-transport agency licensed at a Basic Life Support (BLS) level. The non-transport agency primarily assists with a select portion of calls involving extrication, rescues, and those that require assistance gaining patient access. Both agencies are tax-funded and provide some form of compensation to personnel. However, only one full-time employee exists at each agency; neither of these full-time employees is the EMS director or chief. The transport agency interfaces with the local critical access hospital and performs transfers for the local hospital. There is a search and rescue organization in Franklin County that functions under the sheriff's office; this agency is not licensed as an EMS resource, so if a search or rescue arises that needs medical assistance, EMS is simultaneously dispatched to assist with patient care.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Franklin County Ambulance Association	Transport	Intermediate Life Support (ILS)	Scheduled	Paid per Call
Franklin County Fire District	Non-Transport	Basic Life Support (BLS)	Unscheduled	Paid on Call/ Paid per Call

Table F: List of EMS Agencies Located in Franklin County

4.1.2.1. Franklin County Ambulance Association Overview

Franklin County Ambulance Association (FCAA) is a public, tax-based agency with no special taxing district. The agency covers all of Franklin County and is overseen by the county commissioners. This service is licensed at an ILS level and is staffed with EMS personnel who are paid per call. The agency has one full-time administrative assistant who performs the billing, reporting, and budget work and performs office operations with one part-time office assistant; these two staff members are also partially compensated EMTs and actively respond to calls as needed. The agency has 25 other affiliated EMS providers. Most of these are licensed medical professionals, with a few drivers also available, and about half of these individuals are actively volunteering and regularly meet the minimum requirements set forth by the agency. Despite attempts at recruitment through local high school mentorship programs, the challenge with recruiting and retaining EMS personnel is multifactorial and thought to be due to increased work travel commutes, retirement, relocation of EMTs, decreasing numbers of businesses permitting EMS response during work hours, and challenges mentoring and recruiting new volunteers from local high schools. To accommodate shortages and improve response time, EMS personnel can take the ambulance to their place of work or to their home to respond to calls more expeditiously.

The agency meets monthly for training, and the medical director is highly involved in training and quality improvement. The agency primarily transports to Franklin County Medical Center. The agency also performs interfacility transports to outlying hospitals, including Portneuf Medical Center in Pocatello, McKay Dee Hospital in Ogden, Utah, Intermountain Medical Center and University of Utah in Salt Lake City, Primary Children's Hospital, and Logans Regional in Logan.

4.1.2.2. Franklin County Fire Department Overview

Franklin County Fire Department (FCFD) is a tax-based first response fire department funded by the fire district, using a compensated paid-per-call model with a non-transport BLS license. The agency assists EMS in the county by performing extrications and specialized rescues, including high-angle rescue and water rescues. FCFD has one full-time employee who is also the Fire Marshall. The remainder of the department consists of 30 members of paid-per-call firefighters. The department has one Emergency Medical Responder (EMR), 15 EMTs, and two Advanced EMTs (AEMTs). The department holds two in-house trainings each

month – typically, one is EMS-related and one fire-related. Franklin County Fire District Commissioners provide oversight.

4.1.3. Hospital Access Overview

Established in 1929, Franklin County Medical Center is a critical access center in Preston with 20 acute care beds and 35 beds for skilled long-term care. The hospital also provides home health and hospice, swing beds, internal medicine, obstetrics, pediatrics, women's health, sports medicine, and family medicine. The facility comprises a hospital with an attached long-term care unit and Willow Valley Medical Clinic and Specialty Clinic. Obstetrics, including labor and delivery services, are also available. [17]

4.2. County EMS System Resource Assessment Overview

The following information has arisen from the two agencies licensed in Franklin County. One agency is a non-transport agency, and one is a transport agency. The data from the following is from a comprehensive Resource Assessment Survey in which both agencies participated. Additionally, one agency participated in an in-person agency site visit, and one agency participated in a phone consultation.

4.2.1. Organizational/Operational Assessment

EMS agencies in Franklin County operate in cooperation on one percent of EMS calls. Because of the proximity of the County to Utah, much of the response area is also very close or extends into Utah, and many patients are subsequently transferred to Utah hospitals. Minimal collaboration or few formal written mutual aid agreements exist between the two agencies in the county or between agencies outside of the county. However, both agencies in Franklin County share a medical director, which is noted to improve communications between agencies and the hospital. The agency does have some informal associations and affiliations with neighboring counties; however, because of their geographic location, many of the agencies in neighboring counties are a significant distance away; this limits the collaboration amongst these regional services.

There is mixed sentiment about the stability and sustainability of the current system. Each agency shares concerns about communications amongst county agencies, limited future planning, lack of a community outreach plan, and no communications strategy. There is also concern about the current structure and provision of EMS with the decline in EMS personnel, increasing call volumes, and growing challenges with billing reimbursement, which is the agency's primary funding source.

4.2.1.1. EMS Agency Perceptions

- EMS Agency Stability: There are mixed sentiments regarding the sustainability and stability of the current EMS system in Franklin County, ranging from 30/100 to 75/100. The numerical stability assignments likely correlate with their respective operational, financial, and personnel situations.

- **EMS Agency Financial Situation:** Non-transport services are well-funded with surpluses each year, and the transport agency is getting by with deficits most years.

- **EMS Agency Communications Strategy and Outreach**: Agencies report having limited communications plans amongst agencies within the county without adopted or effective communication strategies or community outreach plans.

- **Community View of EMS Agencies**: All agencies believe their services are viewed favorably by the community in Franklin County.

- **Elected Official Support of EMS Agencies:** Agencies similarly feel that local and state oversight has limited knowledge of day-to-day operations, future planning, contingency planning, or challenges faced by the department. Agencies attempt to handle most challenges independently, so it is thought that if there are no complaints or concerns aired, it is most likely presumed that there are no challenges or difficulties; it is assumed that all is well.

- **Agency & System Response Outlook:** While there is apprehension about the future of EMS in Franklin County, the agencies work well together. Though there is an expressed desire and noted need, there is uncertainty regarding the ability to fund full-time EMS response or increase compensation to EMS providers. Agencies in the county feel strongly that their committed and well-trained EMS personnel are the bright spot of EMS in Franklin County. Each agency knows that the skills and abilities of their personnel provide a strong foundation, and each responder contributes to help complete the picture of EMS in Franklin County. There is hope for continued collaboration amongst county agencies and county oversight and increasing reimbursement fees to bolster personnel expenses and provide personnel with a higher compensation rate.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** FCAA is a public, county-based EMS agency. FCFD is a public, county, fire-based, first-response agency.

- **Service Delivery Partners:** The most vital service delivery partner is noted to be the medical director. Other county agencies, including law enforcement and the local hospital, are also reported to be service delivery partners.

- **Medical Direction:** Countywide average involvement from medical directorship in training and quality assurance is 83/100, with exceptional and integral involvement and close working relationship noted by the transport agency.

- **Communications & Interoperability:** Radio communications in Franklin County are often limited, and radios do not meet functionality requirements, quality reception, or reliable interagency reception or amongst outside counties.

- **Mutual Aid Systems & Agreements:** No formal agreements have been written between county agencies or neighboring counties.

- **Community Health EMS (CHEMS):** There needs to be more knowledge about or interest in incorporating CHEMS into the current EMS model.

- **Patient Care Documentation System:** Both agencies in Franklin County use the patient care reporting system provided by The Idaho Bureau of EMS and Preparedness (hereafter referred to as the Bureau). FCFD uses a private paid subscription for patient care reporting but does not submit reports for incidents through the state reporting system.

4.2.1.3. Response Overview

- **Level(s) of Service**: The transport agency is licensed at the ILS level, while the non-transport first response agency is at the BLS level.

- **Agency Response Concern**: There have been several instances of difficulty within the last year with response to 911 calls; however, an ambulance has always been able to respond to a call. There are concerns about this challenge, with response times increasing in the next few years, primarily if the individuals who respond to the bulk of the 911 calls or interfacility transfers are unavailable for response.

- **Helicopter Response & Utilization:** The transport ambulance determines the necessity for helicopter response based on patient acuity, remote response, and lengthy extrication. Occasionally, search and rescue or the fire department assists with setting up a landing zone.

- **Factors Impacting Response Times:** In the last year, there have been 0 to 10 times of difficulty in responding to EMS requests for response. Challenges in response amongst the agencies most commonly involve personal shortages but location, simultaneous callout, and geography.

- **Response to Public Lands:** Minimal impact is noted by agencies as these responses are typically performed by search and rescue.

4.2.2. Workforce & Resource Assessment

Staffing is a challenge for the transport and non-transport agency. Most EMS personnel have a primary position of employment outside of EMS without the ability to leave to attend to EMS incidents; this makes weekday and daytime call coverage a concerning period to ensure EMS coverage. Further challenging recruitment and retention, transport personnel are paid per call only with concerns that progressing to a paid-on-call model would be considered full-time employment, which would be challenging for financial sustainability. The transport agency has attempted to draw interest from local high school mentorship programs to address recruitment and retention shortages. Despite this extensive undertaking, the agency has yet to have significant success in retaining any new EMS responders, as most students leave the area after graduation. Both agencies in Franklin County employ one full-time individual to perform administrative tasks within the department. Both individuals are also expected to fulfill the duties of 911 response in the absence of alternate responders, translating to challenges with completing administrative

tasks (including patient billing, which is the agency's primary source of financial stability) while simultaneously performing 911 or interfacility response. The overall picture of resources and workforce in Franklin County is quite concerning. Although there is a willingness and continued dedication of existing staff, there is little optimism for the future, particularly regarding adequate EMS coverage with significant effort and individual sacrifice put forth by the EMTs.

4.2.2.1. Staffing Overview

- **Staffing Structure:** The transport agency in Franklin County has one full-time paid office staff and one part-time office staff. The EMS director is not compensated for duties. The remainder of the EMS personnel are compensated per call. FCFD operates with one full-time fire investigator and staff paid-per-call for fire response and EMS co-response as requested.

- **Responder Average Age:** There is an average age of EMS responders of 44 years in the county; however, it is reported to be 35 to 45 years within the non-transport fire department and between 45 to 55 within the EMS transport agency.

- **Staffing Numbers:** Within Franklin County, there are a reported two EMRs, 29 EMTs, and 12 AEMTs licensed.

- **Staffing Concerns:** Amongst agencies, Franklin County has a moderate average staffing stability rating of 52/100. Weekday, daytime call coverage is often the most challenging given that EMS personnel maintain employment outside of EMS. Several EMTs are also business owners; these challenges have even begun to affect their businesses, especially as there has been an increase in EMS calls, which draws them away from their businesses and creates additional sacrifices in schedule and income potential. There are also concerns about the aging of the EMS personnel affiliated with the transport agency as these individuals are retiring. There are fewer younger EMS personnel that can maintain affiliation as this population is moving away to obtain jobs; this poses significant concern for recruitment and retention possibilities. Unanimously, there needs to be more staff to cover the 911 call schedule in the county. Each EMT is experienced and valued by the agency, though this is often felt to be overlooked, undervalued, and underappreciated by county leadership.

- **Staffing Strengths:** In Franklin County, personnel are dedicated and willing to help. Many have been with the agency for years. Additionally, compensation is present but limited, often leading to limited time outside of necessary employment to assist with EMS.

- **Recruitment & Retention:** The agency is hopeful that if there is a possibility to increase compensation and increase benefits, this may lead to increased retention and recruitment.

4.2.2.2. Training & Education Overview

Each agency provides internal training and education. The training and education budget is limited, though personnel can often attend local regional training and conferences. While the medical director dedicates time to help with agency quality and improvement, it is often challenging to increase the skills of individual EMS providers. The transport agency regularly hosts Basic EMT courses, but EMS instructors are affiliated with each department. Frequently, the non-transport agency provides an instructor to help collaborate with the transport agency on courses, especially as each firefighter is encouraged to be dual licensed in fire and EMS.

4.2.2.3. Facilities Overview

- Station Locations: The transport agency pays rent to the county to operate from an agency station owned and maintained by the county. Personnel are permitted to take the ambulance to their home or their place of work during their call shift to enable expedient response. The non-transport agency operates from two stations: the primary station is in Preston, and the second is in Dayton.

- Station Condition: Current facilities are noted to meet the needs for location, condition, and size in Franklin County.

- Facility Needs: The transport agency has a good working relationship with the county to maintain the facility; however, there is little budget for major capital improvement or expansion without significant expense. The fire department has land in the City of Franklin on which they would like to build a station eventually; this raises concerns about an increased maintenance budget and capital expense.

4.2.2.4. Equipment/Supplies Overview

- Adequacy: The current equipment and supplies in possession of county agencies are noted to meet the needs of the county EMS system.

- Condition: Throughout Franklin County, most equipment is in good or even excellent condition; however, the patient transport monitor is noted to be mediocre and will likely be a significant expense to replace or repair.

- Grants: Grants have been requested for an automated external compression device, stair chair, and ambulances through statewide grant opportunities. The non-transport agency has not applied for grants but relies upon fire district funds to purchase significant capital equipment.

- Needs/shortages: The transport ambulance has received new ambulances that must be equipped, including acquiring a new patient transport monitor. The non-transport agency expresses a need for updated training aids.

4.2.3. Financial Overview

Financial information was shared via in-person site visits and survey instruments within the county. The transport agency expressed uncertainty about the future, especially with limited reimbursement from Medicare and Medicaid, and given the reliance upon billing reimbursement for system operation. General funds from the county augment the system; however, no special taxing district exists in Franklin County. This creates uncertainty about the future, particularly regarding expanding services to accommodate population growth, increasing compensation for EMS personnel to address recruitment or retention, or implementing a full-time agency. Significant change is likely unfeasible under the current funding model.

4.2.3.1. Expenses Overview

- **Personnel Expenses:** It is estimated that $235,254 in expenses is dedicated to EMS personnel costs in Franklin County. This information is regarding one transport service and one non-transport service.

- **Operating Expenses:** $290,870 in expenses is estimated to be dedicated to operations such as disposable supplies, training, and facility expenses.

- **Capital Expenses:** The total annual countywide capital expenses are approximately $31,000. There is an unknown carryover amount; however, a significant sum will be needed to leverage funding with a recently awarded ambulance grant. This sum arises from annual carryover and general tax support from the county.

4.2.3.2. Revenue Overview

- Franklin County Ambulance Association is funded through billing revenue and supplemented by general funds, including registration fees and property taxes, estimated at $80,000. Net billing revenue in 2021 was shared to be $267,427. Occasionally, private donations are made to the non-transport agency, but neither agency relies upon fundraising.

- Transport agency performs internal billing, with an unknown gross versus net billing and a non-disclosed payer mix.

- There is no ambulance taxing district present in Franklin County.

- One of the most prominent concerns about the budget is that the county would like the transport agency to be self-supporting, but insurance companies are decreasing the payout per call. If funding were available, the agency would add more employees, provide benefits for them, and increase pay for existing employees. The agency is also hopeful that GEMT will positively impact its billing revenue.

4.2.4. Resource Assessment Additional Factors

Franklin County is a growing population and is part of the metropolitan statistical area of Logan, Utah. Given its proximity to neighboring cities, housing prices have increased, and there has been a noted increase in growth and cost of living. This increased cost of living makes maintaining an EMS system using a paid-per-call model challenging, especially related to recruitment, retention, and long-term sustainability. While EMS personnel receive some compensation, they must also work full-time elsewhere, which impacts availability and overall EMS coverage, especially during daytime hours.

Despite a 10% increase in call volume within the last year, the call volume remains on the lower end to progress to a full-time agency without dedicated funding to augment operating costs. While moving to a full-time, career-level agency would be challenging under the current structure, it would address several issues currently facing the agency with response to incidents and inter-facility transfers. Despite agency reliance upon net billing revenue as the primary source of agency funding, the current funding model cannot fully support the system, with a noted deficit present. Without another revenue stream, ambulance taxing district, or a collaborative approach to funding with another county agency or department, the system will be unable to progress from its current model. This model demonstrates a continued need for supplemental general tax funds or grant support to leverage capital expenses to offset personnel and operational costs.

There are specific needs for EMS personnel and increased funding in Franklin County. Despite drastic measures taken to recruit and retain new EMS providers, fewer EMS personnel are affiliated than in years past. Without additional benefits, compensation, and funding, the decreasing numbers of EMS personnel and limited financial support may translate to an eventual decline in the EMS system in Franklin County.

REFERENCE LIST

[1] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/franklincountyidaho,us/pst045222

[2] Franklin County. (2019, September 19). *The Official Website of the State of Idaho*. https://www.idaho.gov/counties/franklin/

[3] Franklin County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[4] University of Idaho Extension. (2022a, December). *Highlights for Franklin*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041

[5] University of Idaho Extension. (2022, July 10). *Franklin: Wage per job*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=16

[6] University of Idaho Extension. (2023, April 25). *Franklin: Poverty rate by age*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=11

[7] Massachusetts Institute of Technology. (2023, February 1). *Living Wage Calculator - Living wage Calculation for Franklin County, Idaho*. Living Wage Calculator. from https://livingwage.mit.edu/counties/16041

[8] University of Idaho Extensions. (2022, December 13). *Franklin: Employment by industry*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=17

[9] University of Idaho Extensions. (2023, March 29). *Franklin: Agricultural Workers*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=100050

[10] University of Idaho Extension. (2022b, December 13). *Franklin: Total housing units*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=18

[11] University of Idaho Extension. (2023, April 12). *Franklin: Migration and natural change*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=2

[12] University of Idaho Extension. (2023, May 10). *Franklin: Median Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=100012

[13] University of Idaho Extension. (2023, May 10). *Franklin: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=5

[14] Zillow. (2023). *Franklin County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/2275/franklin-county-id/

[15] University of Wisconsin Population Health Institute. (2023). *Franklin, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/franklin?year=2023

[16] University of Idaho Extension. (2023a, April 13). *Franklin: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=29

[17] FCMC. (2022, May 25). *FCMC*. FCMC - Critical Access Hospital in Southeastern Idaho. https://www.fcmc.org/

[18] University of Idaho Extension. (2021, September 27). *Franklin: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=100013

[19] University of Idaho Extension. (2022, December 13). *Franklin: Population*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=1

[20] University of Idaho Extension. (2023, March 30). *Franklin: Self-employment rate*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16041&IndicatorID=15

ONEIDA COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION
1
CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) throughout Oneida County is provided by a single transport agency funded through net billing revenue from fewer than one EMS incident per day. The agency best describes the financial situation of countywide EMS as "breaking even consistently." with no county tax support or ambulance taxing district funds allotted. What the system lacks in funding, it makes up for with its close-knit EMS team. Several strengths of Oneida EMS include the relationships among Emergency Medical Technicians (EMTs), the relationship with the medical directors and their support, and the support from the local hospital, county leadership, and the community. While the system has recruitment challenges, the model and history of mentorship have sustained the EMS system to date. The EMS community in Oneida County describes one another as "family."

The system depends entirely on net billing revenue and continued grant funding as the only means to provide facility and equipment maintenance, capital improvements, and small stipends to EMS personnel for call coverage. To offset personnel expenses and benefit the greater good, each EMT performs a specific uncompensated role in promoting a sustainable EMS operation; these roles capitalize on an EMT's unique skill or ability. This model strongly emphasizes willingness, individual sacrifice, trust, and communication without the desire for recognition.

EMS sustainability in Oneida County capitalizes on individual EMTs' continued desire to serve their friends, family, and community without the want for compensation or personal accomplishment. Despite the current willingness of personnel to donate their time, promoting long-term growth and sustainability with increasing costs of living and rising operational costs will be challenging, particularly without continued grant support, alternate forms of funding, or support and knowledge from state-level EMS leadership.

Strengths	Opportunities
• Dedicated Emergency Medical Services (EMS) personnel. • Devoted and attentive medical directors. • A strong relationship between the county leadership and EMS. • Collaboration between the hospital and EMS unit. • Use of an elected-board of skilled individuals to help perform systemwide activities, outside of EMS-related skills. • One agency providing coverage for the entire county. • Judicious use of budget and finances.	• Consider further collaborative efforts with the hospital. • Ground Emergency Medicine Transportation (GEMT) reimbursement opportunity to increase billing revenues.
Challenges	**Threats**
• Extensive capital improvement projects/maintenance.	• A decreasing billing reimbursement. • Loss of personnel needed to sustain the county EMS system. • Increasing county population. • Potential culture change from stipend-provided EMS to career-level EMS. • Large expenditures and increasing operational costs. • A decreasing number of Emergency Medical Technicians (EMTs) on the county's west side, especially with access issues. • Recruitment and retention of EMS personnel.

Table A: Oneida County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Oneida County, formed in 1864, is in the southeast portion of Idaho and named after a member of an Iroquoian tribe out of New York State from where original settlers came. [1] The county is approximately 1,200 square miles, including 1.5 square miles of water. [2] Malad City is the county seat and the only established city in Oneida County, with multiple smaller unincorporated communities throughout. The county has two interstates that run its expanse, serving as the primary travel corridor between Montana and Utah and Utah and Boise. Interstate 15 is on the county's east side, and a section of Interstate 84 is on the southwest side.[1] No roads pass directly from one side of the county to another, making direct access from Malad City to Interstate 84 challenging. Over 55% of the public land in the county is federal and state land, including a large portion of the Cerlew National Grassland and portions of Caribou National Forest and Sawtooth National Forest. [3]

Demographic	2010	2020	2022
Population	4,286	4,564	4,712
Land Area	1,200.06 sq mi	1,198.95 sq mi	1,198.95 sq mi
Per Capita	3.6 PPSM	3.8 PPSM	3.93 PPSM
***PPSM:** People per square mile*			

Table B: Oneida County Population & Geography

2.2. Economics

Between 2021 and 2022, there was a 3% increase in the population of Oneida County. [4] As of 2021, there were 2000 housing units in Oneida County, with more than 77% of those units being owner-occupied, 10% occupied by renters, and 12% of housing units as vacant. Moreover, the number of housing units has steadily increased over the last two decades as Oneida County has one of the highest percentages of owner-occupied housing rates in Idaho. [5]

The county has an average overall poverty rate of 10.8%, similar to Idaho as a whole, with 13.5% of children under the age of 18 living below the poverty level and 8.1% of those over

the age of 65 living below the poverty level. [4, 6] Moreover, the average unemployment rate in 2021 is 2.2%, lower than that of Idaho. [4] With 2,654 jobs in the county, the average wage per job in 2021 was $33,173, an 8% decrease between 2020 and 2021. [4, 7] Of those jobs, nearly 26% of industries are government-related, followed by farming and agriculture (19%) and retail trade (10%). Healthcare accounts for just over 3% of jobs. [8] In 2022, the average number of agricultural workers was 641 annually, with the peak month of workers noted in October. Migrant workers make up 22% of Oneida County's agricultural workers. [9]

As of 2021, the median home value in Oneida County per United States (US) Census was $192,800 (compared to Idaho's $266,500). [2] However, in the review of average home prices in 2023, compared to median home values noted by the 2021 US Census, the current market values are nearly 61% more than US Census values, with an average home on the market priced at $310,244; this requires a net household income of $60,137 concerning an optimal 35% debt to income ratio. [10]

Metric	Data
Total Population (2022)	4,712
Median Age (2020)	40.7 years old
Poverty Rate (2021)	10.8%
Number of Jobs (2021)	2,654
Average Annual Wage per Job (2021)	$33,173
Unemployment Rate (2023)	3.8%

Table C: Oneida County Economic Factors

2.3. Social Determinants of Health

Oneida County is ranked #21 of 43 ranked counties in Idaho as it pertains to health outcomes and health factors. It is ranked in the higher middle range for length of life and quality of life. It is ranked among the healthiest counties regarding health factors (health factors are modifiable factors including tobacco use, alcohol consumption, or physical exercise). [11] There are 4.4 primary care physicians per 10,000 population, less than the 6.3 physicians noted per 10,000 people in Idaho. Two primary care physicians are located in Oneida County, similar to 2016. [12] The healthcare landscape comprises a hospital, a community health center, access to home health, skilled nursing, and two long-term care facilities. [13]

The population is estimated at 4,712, with nearly 27% under 18 and 21% over 65. [14] The percentage of those without health insurance has remained relatively stable, with 13% of people under 65 having no health insurance and 7.1% of children under 19 having no health insurance. [15] The transport agency shared the following payer mix: Medicare 45%, Medicaid 14%, out-of-pocket 10%, and commercial insurance 31%.

2.4. Indicator Impacts to EMS

Oneida County contains two interstate corridors and is near larger urban areas in Utah, with an overall recent population growth of 3%. [4] As the cost of living continues to increase in the Utah metropolitan areas, Oneida County will most likely continue to experience population growth, impacting call volumes. This county relies almost entirely upon billing revenue for sustainability, particularly given that no general tax support or ambulance taxing district is present. The county has a high percentage of commercial insurance, and Medicare and Medicaid coverage constitutes almost 60% of the payer mix. While this may cause present concern, programs such as GEMT may be a hopeful aid to augment EMS revenues.

The age structure in Oneida County is changing, with fewer individuals in the working age range (18-64), with this percentage having decreased nearly 10% over the last two decades, with an increasing population in the 65 and older age range. [14] Ultimately, in addition to increasing call volumes due to comorbidities and an aging population, this increasing age and low unemployment rates may lead to challenges in recruiting EMS personnel. [4]

Oneida County has a high rate of owner-occupied homes, which suggests population stability. However, when considering the long-term retention of employees, whether an employee can rent or own in a given area should be considered. Given the current housing inventory price of $310,244, the median household income of $65,632, and an average wage per job of $33,173, housing affordability is feasible with a dual-income household but challenging with a single-wage-earning home. [2, 10] In the recruitment setting, particularly concerning housing affordability, the need for a family to work multiple jobs may exist, further limiting the ability to be recruited into or retained by a partially compensated EMS position.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed to be accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Per state data, a total of 314 requests for service occurred in 2022, with 221 callouts specifically for 911. The remaining calls likely consist of standby and interfacility/medical transports. (Comparatively, the single countywide agency reported 308 calls for 911, resulting in 180 patient transports with an additional 130 interfacility transfers.) Call volumes for 911 incidents have remained relatively stable, with an increase in noted interfacility transports. There is an average call volume of 0.8 EMS calls per day, with approximately 76% of patients transported in 2021 and 91% transported in 2022.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Oneida County EMS	*185*	*57*	**242**	*203*	*18*	**221**
Ambulance Total	*185*	*57*	**242**	*203*	*18*	**221**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Oneida County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Oneida County EMS	*8 min*	*12 min*	**20 min**	**22 min**	**59 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Oneida County (2022)

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

A 911 call reaches Oneida County Sheriff's Office, and the ambulance is dispatched by radio. No emergency medical dispatching services are available, but the county does have E-911 capabilities. The Public Safety Answering Point (PSAP) dispatches 911 calls for EMS, fire, law enforcement, and search and rescue.

4.1.2. EMS Agency Overview

A single EMS agency provides all 911 EMS coverage and interfacility transport services in Oneida County. This system involves collaboration with other county resources, such as a municipal fire department and a search and rescue division that operates under the statutory authority of the sheriff's office. While the fire department can assist, EMS performs its vehicle extrication.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Oneida County Ambulance	Transport	Intermediate Life Support (ILS)	Scheduled	Paid-per-Call/ Paid-on-Call

Table F: List of EMS Agencies Located in Oneida County

4.1.2.1. Oneida County Ambulance Overview

Oneida County Ambulance (OCA) is a public EMS agency licensed up to the intermediate level of service covering all of Oneida County. This agency is staffed by on-call EMS personnel, licensed up to the Advanced Emergency Medical Technician (AEMT) level. There are no full-time paid personnel as part of the service, but EMS personnel are paid a stipend per incident. Two medical directors share the directorship of this organization, and both are highly involved in quality improvement and training; each also works at the local critical access hospital emergency room, which helps improve collaboration between the hospital and the agency. The agency has a leadership structure with a group of elected board members who perform a variety of roles to oversee and operate the agency. Each individual has a different responsibility to keep the agency working seamlessly, including positions such as president, information technologist, maintenance, and accountant. The county commissioners provide minimal oversight, except for the county's collaboration with the annual budget and audits.

Given the unique geographic layout and distribution of infrastructure within the county, two ambulance stations are required to provide adequate coverage. The primary station in Malad City is on the county's east side, and the other is in Holbrook, which is located on the county's west side. The Malad City station performs most of the 911 call coverage while assisting with interfacility transports for the local hospital. Based on their location and call types, they primarily transfer patients between the local hospital to Portneuf Medical Center in Pocatello or other medical facilities in Utah. Patients from 911 response callouts are typically transported to Oneida County Hospital (Nell J Redfield Memorial Hospital) for stabilization. The agency has nine EMTs, 15 AEMTs, and five drivers affiliated with the agency. This agency does work collaboratively with other county resources; however, it is more likely to interface with agencies in neighboring counties. OCA provides extrication and often can reach patients independently, even in the most remote county areas.

4.1.3. Hospital Access Overview

Oneida County Hospital, or the Nell J. Redfield Memorial Hospital, is a critical access hospital and TSE-verified level IV trauma facility in Malad City with an emergency room, inpatient medicine, attached long-term care facility, and home health program. There is also a family health clinic, Oneida County Clinic, in Malad City. Labor and delivery services are currently not available in Oneida County. [16]

4.2. County EMS System Resource Assessment Overview

The following information has arisen from one transport agency listed in Oneida County. This agency participated in a formal resource assessment survey and a face-to-face site visit to provide information about the agency.

4.2.1. Organizational/Operational Assessment

Though reportedly "breaking even consistently," Oneida County EMS is considered 100% sustainable, as reported by the single EMS agency that is licensed up to an intermediate life support (ILS) level of care and uses a paid-per-call stipend. This system is led by a collective group of elected members with specialized skills outside of EMS to maintain efficient operations. The county has a unique geography, with a remote station on the westmost side and a primary station on the east. EMS in the county collaborates closely with law enforcement, search and rescue, and the local hospital and has excellent interagency communication. Notwithstanding the other regional challenges with recruitment and retention of EMS personnel, the county maintains a stable group of personnel who actively respond to requests for response, with members actively mentored by other EMTs who have been with the system since the early development years. Each member takes pride in their collective accomplishments and uncompensated duties outside of medical services; each takes pride in providing EMS without reliance upon general tax support, though each is fiscally aware. The County Commissioners provide little direct oversight, and the medical directors help fill this leadership role by functioning as one of the most valuable assets to the system; these two medical directors are highly involved in countywide EMS and share responsibilities with education and training as well as providing some operational insight and regular feedback for improvement.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: The stability and sustainability of the EMS system, as reported by the single agency in Oneida County, is considered stable. (100/100).
- **EMS Agency Financial Situation:** The system is reportedly "breaking even consistently.". However, there is some carryover from year to year; this carryover is reinvested. The agency support primarily comes from billing revenue without general tax support from the county. The agency takes pride in self-sustaining without reliance upon the county for supplemental fax funding, though aware that grants are needed to maintain agency stability, purchase capital equipment, and leverage funding.
- **EMS Agency Communications Strategy and Outreach**: There is an effective and productive written and adopted communications strategy for countywide EMS.
- **Community View of EMS Agencies**: The community views the countywide EMS favorably. County citizens know each EMS member while respecting and appreciating their service and dedication to the community.
- **Elected Official Support of EMS Agencies:** The agency feels supported by local elected oversight and the Idaho EMS Bureau. The County Commissioners are noted to be fully supportive of EMS and appreciative that the system does not require funding for operation.
- **Agency & System Response Outlook:** EMTs take pride in being a collaborative team and helping one another successfully operate a county-wide system while providing

excellent patient care to families, friends, neighbors, and visitors to the area. Oneida County EMS is described as a family, each with a responsibility or position in helping the organization succeed. OCA feels optimistic about recruiting and mentoring new personnel who will fit with their EMS family to carry out their mission statement; there is always a list of prospective personnel for the next EMT class to keep the agency operating. New and updated equipment with electronic apps and electronic record keeping has made daily EMS tasks less of a burden; this enables EMS personnel to focus more on operations. Collaboration and cooperation of the elected oversight team and the medical directors who oversee the agency are integral to the agency's success.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** The only licensed agency in the county is a public entity with finances overseen by the County Commissioners. Additionally, the EMS personnel elect board members amongst themselves, who then collectively guide EMS in the county and report to the County Commissioners as necessary. These board members each perform a unique role to keep operations running smoothly. None of these members are compensated for the additional duties. However, each board member contributes to the best of their knowledge and ability without wanting recognition or compensation for their other responsibilities.

- **Service Delivery Partners:** The two medical directors and the local critical access hospital are the most vital service delivery partners.

- **Medical Direction:** The medical directors are highly involved in training, quality assurance, and chart review. The co-medical directors are noted to be the greatest ally for EMS; these two individuals are highly supportive and active in helping to make some operational decisions and assisting with education, licensure, and recertification.

- **Communications & Interoperability:** Radio communications offer interoperability features and functionality that meet the county's needs. Poor radio reception is often noted throughout the county's western side, this limits radio communication amongst other local counties and local agencies.

- **Mutual Aid System & Agreements:** Written mutual aid agreements are in place with neighboring and collaborating agencies. EMS in this county commonly interfaces with Bannock County and agencies in Utah, especially on the county's west side.

- **Community Health EMS (CHEMS):** There is an awareness of CHEMS but no interest in actively developing a program.

- **Patient Care Documentation System**: Patient care reporting is performed using an electronic patient care reporting system provided by The Idaho Bureau of EMS and Preparedness.

4.2.1.3. Response Overview

- **Level of Service**: The single county agency is licensed up to an ILS/Advanced level of care.

- **Agency Response Concern**: There has never been a time when EMS calls are challenging to respond to. If no one immediately responds to a call, EMS providers collaborate through texting or phone calls, and someone will ultimately answer the callout or transport. Most of the members involved in EMS also work full-time outside of EMS, so there is constant collaboration amongst the crew to help accomplish adequate call coverage.

- **Helicopter Response & Utilization:** A helicopter is requested for 911 callouts in remote county areas, for incidents involving significant traumatic injury, and for patients with increased acuity who responding EMS providers believe would benefit from immediate ALS level of care.

- **Factors Impacting Response Times:** In order of significance, the county's most prevalent challenges in response include geography, location, weather, time of day, or simultaneous calls. Less likely factors impacting response include equipment or vehicle issues or personnel shortages.

- **Response to Public Lands:** Response times from either ambulance station are almost always about twenty minutes, even to the most remote part of the county. A search and rescue division that can be utilized to access remote public lands.

4.2.2. Workforce & Resource Assessment

The overall workforce and resource assessment in Oneida County is best described as resilient and resourceful, though with needs to replace much of the aged equipment and expand structures. It is occasionally challenging to recruit individuals, but staffing models are maintained with EMS personnel who receive stipends and perform uncompensated additional duties in assisting with other operational needs (examples of roles include treasurer/accountant, information technology, and maintenance). These dual-role personnel are well-trained and well-versed in skills other than EMS, essential to maintaining the system at a cost-effective and operational level. While there are certainly staffing concerns, these concerns are primarily combated through communication and collaboration with a shared leadership model. Long-term sustainability is thought feasible using individual talents within the leadership board and a shared mental model regarding the true essence of volunteerism and service to the community. The equipment and vehicles are aging, but the cost to replace an ambulance, even in the setting of a grant co-share cost match, is quite significant. Given this, assigned personnel maintain ambulances, equipment, and facilities and perform regular maintenance guard the annual carryover jealously.

4.2.2.1. Staffing Overview

- **Staffing Structure:** County EMS personnel are paid a stipend per each call or inter-facility transfer. No full-time employees provide EMS leadership and oversight or response within the county.

- **Responder Average Age:** The average age of EMS providers is 45 to 54 years of age; this average age has remained relatively constant as those who have been involved in EMS longer help mentor those who are younger and newer; this maintains a relatively stable age range of EMS personnel.

- **Staffing Numbers:** The single agency reports 26 total staff members affiliated and active; this includes nine EMTs, 15 AEMTs, and two Emergency Medical Responders (EMRs). The agency maintains an active list of members and has no trouble recruiting.

- **Staffing Concerns:** An active list of EMS personnel is maintained; some issues occasionally arise, including jealousy, contention, and inadequate communication. While there are typically challenges finding staffing for weekends and holidays, EMS coverage is largely well-staffed, and new EMS members can generally be recruited. In addition to providing EMS-related activity, community members who are well-suited with knowledge complementing specific board positions are sought out and recruited. Occasionally, people with necessary expertise outside of medical skills are hard for leadership to find.

- **Staffing Strengths:** Good communication is the greatest strength between members. Communication and scheduling have improved significantly after a scheduling app was developed by the information technology board member. This app facilitates ready shift trades and prompt access to scheduling information and allows everyone to participate in the schedule creation. Communication and collaboration between the hospital and EMS are also excellent, improving staff retention. Many employers in the area understand the need for EMTs to attend to incidents, which dramatically enhances response-ability.

- **Recruitment & Retention:** There has been consideration toward paying for on-call time and payment-per-call to increase retention. However, there is no fixed budget system to maintain personnel costs. Many people work full-time outside of EMS, so sacrifice and time away from family and work impact an individual's ability to maintain a long-term position with OCA. This community is small, so the recruitment of new personnel is challenging.

4.2.2.2. Training & Education Overview

- EMS Training and Education in Oneida County is performed through regular in-house training and annual refresher programs. EMT and AEMT courses are provided on an as-needed basis through in-house educators. Local physicians and medical staff assist with regular training exercises and education, and outside providers from EIRMC occasionally visit to do presentations, discussions, and refreshers. Two EMS

providers working in Oneida County are credentialed to provide AEMT training and refreshers. Hospital and EMS conferences are attended, particularly the regional conferences, as limited compensation is available for training.

4.2.2.3. Facilities Overview

- Station Locations: There are two ambulance stations located in Oneida County. The county has two Interstate thoroughfares with substantial traffic flow from Salt Lake City to Boise and northward to Montana. There is no direct route of access from the eastmost ambulance station, located in the population center of Malad City, to the westmost station in the rural community of Holbrook. The limited access between the two EMS stations makes response-ability from the remote Holbrook station necessary but challenging, particularly given the duplicative need for ambulances, facilities, and active EMS personnel in a decidedly remote location. Though affiliation agreements are in place with neighboring counties to help with EMS coverage, this assistance is rarely necessary as response times are expeditious. Personnel staff each station, but fewer people live in Holbrook, so finding station coverage can be challenging. The Holbrook station covers a large area of public land and a stretch of Interstate 84, traversing the county's southwest corner.

- Station Condition: Current facilities are noted to meet the needs for location and condition but not for size to house all equipment.

- Facility Needs: There is a need to enlarge the facility to house all equipment and vehicles and to continue vehicle maintenance. An elected board member provides regular building and vehicle maintenance. There are currently no living quarters at the station to accommodate personnel if needed.

4.2.2.4. Equipment/Supplies Overview

- Adequacy: OCA's current equipment and supplies are noted to meet needs. New extrication equipment is needed, but there have been challenges in applying for grants due to difficulties with personnel credentialing and training to use the extrication equipment.

- Condition: Aside from radios and communication devices, most mandated equipment is in good or excellent condition. Both mobile radios and handheld radios are in mediocre condition.

- Grants: Because this system is highly reliant upon billing income, there is a continued reliance upon awarded grants to leverage the cost of capital equipment. This year, an ambulance grant was awarded, which required $80,000 from the county; this copay is anticipated as it has been long budgeted through previous carryover and reinvestment. Several other grants were awarded in 2022, including the EMS State Dedicated Grant, Local ARPA, and the Stots Grant. Leadership exercises caution with accepting grant support regarding the amount that needs to be leveraged. Capital expenses are typically budgeted years in advance to strategically apply for grants only

when enough billing revenue and interest have been generated to make the purchase.

- **Needs/Shortages**: Five ambulances are in possession. However, three of the four currently in operation are between 11-20 years old, and these ambulances are beginning to require more maintenance by the skill of an elected board member. OCA anticipates replacing some large patient care equipment shortly and needs upgraded radios and communications equipment.

4.2.3. Financial Overview

Data was shared from the county's one transport agency, which continues to maintain financial stability with little to no reliance on tax support despite increases in operational costs. The county EMS system is primarily funded from billing revenue with a guarded annual carryover amount. This carryover is reinvested and carefully overseen by the elected agency treasurer and the County Commissioners. The finances are audited through the county system after the billing revenues return to general funds. These billing revenues are then dispersed back to EMS the following year. The agency-elected accountant/treasurer reinvests the carryover into the Local Government Investment Pool by the agency treasurer with an annual interest return.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is shared that approximately $55,534 in expenses are dedicated to personnel costs in the county. There is no compensation for on-call time; however, a stipend is provided per incident.

- **Operational Expenses:** It is shared that $94,698 in expenses are dedicated to operating costs in the county. This includes disposable supplies, training, and other reoccurring payments, including a blanket policy for insurance and workman's compensation.

- **Capital Expenses:** It is shared that in a typical year, capital expenses are budgeted at $50,000; however, this year is an unusual year with approximately $130,000 budgeted for capital expenses given the cost-share for an ambulance received on a grant; this includes equipment maintenance, ambulance repairs, and facilities maintenance at the two separate ambulance stations.

4.2.3.2. Revenue Overview

- Ambulance services in Oneida County are provided by a single agency that relies upon billing revenue for financial support. There is no tax levy or additional tax support received from the county.

- An anticipated carryover and reserve fund of approximately $500,000. This is reinvested into the government investment pool each year and budgeted carefully for capital expenses.

- The agency shared that in 2022, revenues from 911 transports constituted $56,220, and interfacility transfer revenue comprised $90,000, totaling 2023 revenues to an estimated $146,220.
- A portion of the agency funding comes from grant support each year. A grant for an ambulance this year was received, constituting $86,000.

4.2.4. Resource Assessment Additional Factors

OCA receives no tax support from the county. Currently, Oneida County operates the ambulance service at cost or slightly over cost with little supplementation from the carryover and reserve. This may present challenges and limitations with increasing expenses, vehicle replacement values, facility improvements, or major repairs to facilities or equipment. The agency invests annual carryover, providing a carryover/reserve fund from where a potential unforeseen expense may come, particularly regarding the increasing age of ambulances and facilities. A modest budget requires low personnel and operational costs, which limits the ability to compensate personnel. Given these limitations, grant sources for increased capital expenses need to be relied upon for large capital expenditures, or other sources of revenues, such as supplemental tax support, would need to be explored to increase funding.

The mentality amongst providers in Oneida County is unique, with the preservation of a volunteer mentality. This is rare and is highly esteemed. However, in the setting of a rising cost of living and increasing capital expenditures, long-term succession planning currently being implemented through mentorship is essential to preparing for the future. Today, in its current operation, the agency maintains its day-to-day operations, and personnel and the agency itself are held in high regard by the community. This model will only be sustainable long-term with the continued hard work, sacrifice, and dedication of the devoted EMS personnel in Oneida County.

REFERENCE LIST

[1] Wikipedia contributors. (2023a). Oneida County, Idaho. *Wikipedia*. https://en.wikipedia.org/wiki/oneida_county,_idaho

[2] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: Oneida County, Idaho; United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/oneidacountyidaho,US/PST045222

[3] Oneida County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[4] University of Idaho Extension. (n.d.). *Highlights for Oneida*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071

[5] University of Idaho Extension. (2022, December 13). Oneida*: Total housing units*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=18

[6] University of Idaho Extension. (2023, April 25). Oneida*: Poverty rage, by age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=11

[7] University of Idaho Extension. (2022, February 23). *Oneida: Wage per job*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=16

[8] University of Idaho Extension. (2022, December 13). Oneida*: Employment by industry*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=17

[9] University of Idaho Extension. (2023, March 29). Oneida*: Agricultural workers*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspxRegionID=16071&IndicatorID=100050

[10] Zillow. (2023a). Oneida *County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/1282/oneida-county-id/

[11] University of Wisconsin Population Health Institute. (2023b). Oneida*, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/oneida?year=2023

[12] University of Idaho Extension. (2023, April 13). Oneida*: Number of primary care physicians*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16007&IndicatorID=29

[12] *Medicaid & Health | Idaho Department of Health and Welfare*. (n.d.). https://healthandwelfare.idaho.gov/services-programs/medicaid-health

[13] University of Idaho Extension. (2023i, May 10). Oneida*: Age*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=5

[14] University of Idaho. (2021, September). Oneida*: Health insurance coverage*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16071&IndicatorID=100013

[15] *Nell J. Redfield Memorial Hospital*. (n.d.). Nell J. Redfield Memorial Hospital. https://www.oneidacountyhospital.com/

POWER COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) is provided by a single agency throughout Power County, funded through an ambulance taxing district. In the last several years, the county has had significant challenges with billing reimbursement that have impacted the single agency operation. The county describes a palpable concern that has prompted discussions about the affordability of continuing Advanced Life Support (ALS) level services in Power County. This deficit has affected paramedic retention by requiring the remaining staff to take on more responsibilities with less compensation, further threatening the retention of paramedics. Solutions are being explored regarding what type of EMS model and licensure level would be affordable yet beneficial to Power County residents. In collaboration with overseeing County Commissioners, new leadership plans to evaluate and revitalize the long-term vision of EMS in Power County relative to tax support, billing, and reimbursement, hoping to maintain the countywide ALS level of care.

Long-term EMS system sustainability in Power County primarily depends on the stability of personnel and funding. In a county primarily supported by agriculture and manufacturing industries and with a growing population, the system is enduring funding challenges that directly impact long-term sustainability. To maintain the ALS level of care, an increase in funding and reimbursement are being prioritized to help meet operational and personnel needs. However, grants for capital equipment or alternate funding sources are necessary to continue leveraging expenses and offset operational and personnel costs. Despite challenges facing the personnel and leadership in Power County, the strengths of this agency lie in its dedicated personnel and overall openness to consider alternate EMS models. There is an urgency that without sufficient funding, adequate retention, or collaboration with other internal or external county agencies, maintaining EMS in Power County at an ALS level of care will be challenging.

Strengths	Opportunities
• Dedicated leadership and Emergency Medical Services (EMS) personnel. • Collaboration with other counties, agencies, and county leadership. • One transport agency for coverage of the entire county. • Existence of a county ambulance taxing district.	• An improved collaborative effort with the local hospital. • Collaboration with other neighboring agencies to support a regionalized model. • Collaborate with the hospital for the implementation of a Community Health Emergency Medical Services (CHEMS) program. • Consider alternate funding models through collaboration. • New leadership. • Ground Emergency Medicine Transportation (GEMT) reimbursement.
Challenges	**Threats**
• Staff retention due to a lack of competitive compensation. • Consistent EMS leveled service across the entire county. • Necessary future capital improvement (building updates) expenses. • Improving the billing process to increase net billing reimbursement. • Challenges in providing competitive compensation impact staff and leadership and directly affect retention. • Limited budget flexibility.	• An increasing competitive wage in nearby agencies. • Billing reimbursement and county funding model to support full-time EMS model. • Funding challenges threaten to decrease the level of service.

Table A: Power County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Power County is located in Southeast/Southcentral Idaho and was named after the initial hydroelectric power plant placed on American Falls Reservoir in 1902. The county is 1,443 square miles, which includes 38 square miles of water (American Falls Reservoir and the Snake River). American Falls, a portion of West Pocatello (including the Pocatello Regional Airport), and Rockland in the south portion of the county are located within Power County and multiple unincorporated communities in the outlying county. American Falls is the County Seat. Interstate 86 runs through this county from east to west and is a significant transportation corridor across Eastern Idaho. [1] Public land constitutes approximately 36% of the county, and the county land is primarily flat plains and agricultural land. [2] Portions of Craters of the Moon National Monument and Preserve, Curlew National Grassland, Minidoka National Wildlife Refuge, Sawtooth National Forest, and Caribou National Forest are found within this county. [3] The estimated 2022 population is 8,068; the area has seen an increase in 251 residents in the last 12 years with an estimated 3.2% overall growth rate with 1% population change within the previous two years. [4]

Demographic	2010	2020	2022
Population	7,817	7,878	8,068
Land Area	1,404.24 sq mi	1,403.83 sq mi	1,403.83 sq mi
Per Capita	5.56 PPSM	5.6 PPSM	5.74 PPSM
PPSM: *People per square mile*			

Table B: Power County Population & Geography

2.2. Economics

As of 2021, there were 2,938 housing units in Power County, with 65% occupied by homeowners, 26% occupied by renters, and 8% vacant homes. [5] Over 30% of the population is under 18, over 16% is over 65, and approximately 47% of individuals are within the non-working age range. [6] Conversely, of those unemployed, the average rate in 2021 was 3.8%, slightly higher than Idaho, with 4,893 jobs in the county. [7] A 2% decrease in the average wage per job was noted, and as of 2021 was $50,445. [8] Of those jobs, 21%

are in manufacturing, 18% are in agriculture, 14% are in government-related activities, nearly 7% are in transportation/warehouse, and 5% are in fishing and forestry. [9] In 2022, the average number of agricultural workers was 1,516, with the peak month of workers noted in October. In October, migrant workers comprise 152% of Power County's agricultural workers. These workers farm more than 486,000 acres of ground in the county. [10] The overall poverty rate is 12.7%, which is also slightly higher than in Idaho, with 16% of children under 18 living below the poverty level. [6, 11]

In 2021, the United States (US) Census identified a median home value in Power County of $160,000 (as compared to Idaho's $266,500). [4] However, in a review of average home prices in 2023, compared to median home values noted by the 2021 US Census Bureau, the current market values are nearly 73% more, with an average home priced at $276,697; this requires a net household income of $53,600 concerning a 35% optimal debt to income ratio. [12]

Metric	Data
Total Population (2022)	8,068
Median Age (2020)	34.5 years old
Poverty Rate (2021)	13%
Number of Jobs (2021)	4,893
Average Annual Wage per Job (2021)	$50,445
Unemployment Rate (2023)	4%

Table C: Power County Economic Factors

2.3. Social Determinants of Health

Power County, in terms of health outcomes and health factors, is ranked #30 out of 43 ranked counties in Idaho. It is ranked in the lower middle range of counties for health outcomes regarding quality and length of life and lower midrange for health factors that can be modified or improved upon (such as tobacco use, increased physical exercise, or drug and alcohol consumption). [13] There are 2.5 primary care physicians per 10,000 population, significantly less than the 6.3 physicians per 10,000 in Idaho. Two primary care physicians are located in Power County, similar to 2016. [14] The county residents have access to a community health center, skilled nursing center, and two long-term care facilities. As of 2019, 18% of people under the age of 65 had no health insurance coverage, and 8.1% of children under the age of 19 had no health insurance coverage.

2.4. Indicator Impacts to EMS

Located in Southcentral Idaho, the county sees annual seasonal population expansions with a predominance of agricultural and manufacturing laborers with a stable and young population, which is likely attributable to the county industries. Public land comprises 36% of the county, and 911 calls to these areas are often resource-intensive and costly,

prompting prolonged EMS response and long scene times; these calls often require close collaboration with neighboring counties and other internal county resources. The county has a high poverty rate, an increasing cost of living, and rising home prices; these elements may affect long-term economic stability, disturb succession planning ventures, and impact local personnel recruitment and retention.

Power County has predominant industries of farming, agriculture, and manufacturing or production, each of which is an industry with a higher reported injury rate. [15] The county's median age is young, but this young age is likely representative of the labor force employed in the industries noted previously. The population influx of migrant workers, the higher poverty rates, and the high rates of uninsured contribute to challenges for the healthcare landscape. Additionally, elevated poverty rates and more uninsured may contribute to higher EMS call volumes with challenges with net billing revenue.

Moreover, the county's number of primary care providers and the low health ranking may suggest that the growing county population has challenges accessing preventative medicine. Combined with the current poverty rate and predominant industries, these disparities may infer an increase in EMS usage for medical and trauma-related incidents.

Though the county's growth has remained stable, housing prices have increased significantly. Rising living costs and a relatively static personnel budget may present challenges with providing employees with a competitive and livable wage. When considering long-term employee retention, the ability of someone to rent or own a home in Power County should be considered. Given the current housing market price of $276,697, median household income in Power County of $61,909, and an average wage per job of $50,445, housing affordability is feasible in portions of Power County for a multi-income household but challenging in homes with a single household income. [4, 12]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed to be accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Call volume over the last two years has remained relatively stable. As reported by the Idaho EMS Bureau call volumes, there was a nominal decrease in call volume performed by Power County Emergency Medical Services (PCEMS) between 2021 and 2022 and a slight increase in call volume for a collaborative agency, Bannock County Ambulance District (BCAD), which assists with incident response on the east side of the county. (Comparatively, in 2022, the single countywide agency reported 728 calls for 911, resulting in 404 patient transports with 41 interfacility transfers.) Bannock County has a collaboration agreement to cover portions of the interstate and Pocatello Regional Airport, and this call volume reflected is likely just within their contractually agreed-upon collaborative area. The total call time is 71 minutes, possibly secondary to the average between EMS responses from two separate stations in Power County, as Station 2 is staffed with non-career personnel. Because the Rockland station is often unscheduled, the agency may be unable to provide coverage for a callout in this area, which would require reliance upon the primary station, located a distance away, or a neighboring agency support such as Fort Hall Fire and EMS (FHFD) or Bingham County Aberdeen Fire Department AFD). Interfacility transfer coverage is 5% of the call volume for Power County EMS.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Bannock County Ambulance District	*30*	-----	**30**	*24*	*4*	**28**
Power County EMS	*376*	*251*	**767**	*400*	*251*	**757**
Ambulance Total	*406*	*251*	**797**	*424*	*254*	**785**

Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Power County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Bannock County Ambulance District	*4 min*	*18 min*	**22 min**	**37 min**	**105 min**
Power County EMS	*3 min*	*6 min*	**9 min**	**36 min**	**71 min**

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Power County (2022)

SECTION
4
CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Power Communications Center, the Public Safety Answering Point (PSAP), is part of the Power County Sheriff's Office. It provides dispatch services for the Power County Sheriff's Office, American Falls Police Department, Power County Ambulance, American Falls City and Rural Fire Departments, and Rockland Fire Departments. EMS is dispatched when a 911 call reaches the Power County Sheriff's Office. Power County does not utilize Emergency Medical Dispatching (EMD) services.

4.1.2. EMS Agency Overview

EMS in Power County is provided by one licensed transport agency that provides EMS Services throughout the majority of Power County. There is some collaboration amongst neighboring agencies, most notably the BCAD in the east portion of the County covering parts of Interstate 86 and the Pocatello Regional Airport. FHFD does provide some agency response to the Fort Hall Indian Reservation areas within Power County and provides some collaborative support for some off-reservation calls. There are search and rescue and fire departments within the county. However, none of these agencies currently has a transport or non-transport license.

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Power County EMS	Transport	Advanced Life Support (ALS)	Scheduled/ Unscheduled	Career/Paid on Call and Paid per Call

Table F: List of EMS Agencies Located in Power County

4.1.2.1. Power County Emergency Medical Services Overview

Power County EMS (PCEMS) is a public and tax-based agency with the following coverage area: Interstate 86 milepost 17.5 to milepost 56, Hwy 37 milepost 64.5 to the south county line, and Hwy 39 to the north county line. The County Commissioners provide budgetary oversight for PCEMS. Using a combination of full-time and partially compensated staff, PCEMS provides EMS response out of two stations. Station 1 is located in American Falls and is staffed by one full-time, career, ambulance-based Paramedic and one Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT) at all times. Station 2 is in the south portion of the county in Rockland and is staffed by a paid-per-call/paid-on-call compensated and unscheduled model. There are nineteen EMS personnel affiliated with PCEMS and two part-time administrators, and the career station has employed four paramedics and four advanced EMTs to provide coverage for the entirety of the schedule. While these staff members are primarily located at Station 1, the ambulance can respond to any area throughout the county and rendezvous with the Basic Life Support (BLS) agency in Rockland. Personnel attend monthly training and are compensated for their attendance. The agency transports patients to Power County Hospital and Portneuf Medical Center. The agency has operation agreements with FHFD, which provides some response to the south and northeast county, and BCAD, which provides service to a portion of the interstate near and including the Pocatello Regional Airport.

4.1.3. Hospital Access Overview

Power County Hospital District is a county-owned, not-for-profit, critical access hospital and skilled nursing facility in American Falls. The 10-bed critical-access hospital includes a 20-bed skilled nursing facility and an associated rural family health clinic in American Falls and Aberdeen. [16]

4.2. County EMS System Resource Assessment Overview

The following information has arisen from one transport agency licensed in Bear Lake County. The agency participated in a formal survey and a face-to-face site visit.

4.2.1. Organizational/Operational Assessment

Most of the county is covered by a single EMS Agency that reports a below-average sustainability rating in its current operational model. EMS is provided by a single ALS-level agency throughout the county; an ambulance taxing district and billing revenue support this agency. Though there have been challenges with the agency's financial sustainability in recent years, there is hope for the future of EMS in Power County with new leadership and structural changes. Collaboration between EMS personnel, the County Commissioners, and agency leadership has resulted in budget reworking through a collaborative approach to evaluating and planning the future of EMS, particularly regarding countywide affordability. Though the last few years have been challenging for the system, the community maintains a favorable view of the agency, and the agency is optimistic about its future.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability**: There is a low/moderate agency stability and sustainability rating reported by the EMS system in Power County (noted to be 48/100).
- **EMS Agency Financial Situation:** The agency is in a transition phase regarding finances as there has been a period in which billing and reimbursement were suboptimal, with a substantial portion of write-offs and adjustments. However, a new billing agency has been contracted, anticipating increasing net billing revenue. Over the last few years, there have been several instances where the County Commissioners have redirected funds to the ambulance service district that were previously designated for other purposes.
- **EMS Agency Communications Strategy and Outreach**: There is no written or adopted communications strategy for the agency, and there is no community outreach plan that is either effective or productive.
- **Community View of EMS Agencies**: Community members have a favorable view of the agency.
- **Elected Official Support of EMS Agencies:** The agency is in a transition phase with leadership. However, communications between agency leadership and the county commissioners are reportedly improving. The county commissioners provide oversight of the budget and basic operations in collaboration with the EMS Director. While there is engagement and communication between EMS and the Commissioners, there has been historic unrest over several complex issues, such as evaluating the definition of "essential services," what level of service the county needs, and what level the county can afford.
- **Agency & System Response Outlook:** Significant concerns exist about county oversight with a desire for The Idaho Bureau of EMS and Preparedness (hereafter referred to as the Bureau) or the State of Idaho to provide more assistance to help advocate for the agency and EMS personnel. There needs to be more funding for personnel to provide competitive compensation to EMTs and paramedics. Lack of competitive wages results in low retention and turnover and encourages personnel to seek work in other occupations or with other EMS agencies. EMS personnel are being asked to do more with fewer resources, and the stress of this, coupled with a lack of compensation, is making long-term retention of EMS personnel in Power County difficult.
- **Agency Optimism:** There are individuals in the EMS community who are eager and willing to help with promotional opportunities. Employees are dedicated and determined to see success in change within Power County. The agency leadership feels optimistic about the agency's future, especially with recent collaboration regarding the funding model and agency coverage and especially with the new billing agency contracted, as there are hopes of increasing the net billing revenue.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** EMS is provided by a public and tax-based ambulance district overseeing two EMS stations; one EMS station is located in the southern portion of the county in Rockford, with a primary station in American Falls. The agency has a full-time director who oversees a full-time, career, paramedic, and Advanced EMT crew in the primary station and simultaneously manages a scheduled partially compensated Basic EMT licensed ambulance in Rockford station.

- **Service Delivery Partners:** Medical directorship is a noted strength in the county with other strong service delivery partners, county commissioners, and other county agencies, including search and rescue and the American Falls Police Department.

- **Medical Direction:** The medical director is somewhat involved in training and moderately engaged in quality assurance and chart review.

- **Communications & Interoperability:** Radio communications are reported to offer quality reception, interoperability, and reliable communication with neighboring counties.

- **Mutual Aid Systems & Agreements:** There are written mutual aid agreements with outside agencies, particularly Bingham County agencies, FHFD, and BCAD.

- **Community Health EMS (CHEMS):** There is no knowledge of CHEMS within the county and no interest in developing a program.

- **Patient Care Documentation System:** Patient reporting is performed using an unspecified electronic patient care reporting system.

4.2.1.3. Response Overview

- **Level of Service**: The station in American Falls is licensed as an ALS level of service. This ambulance can respond throughout the county, either independently or in solidarity with the unscheduled and partially compensated BLS ambulance located in Rockford.

- **Agency Response Concern**: In the last year, there have been 11 to 20 reported occasions when there was difficulty responding to 911 incidents.

- **Helicopter Response & Utilization:** Helicopter response is used only for critical patients. Because American Falls is located centrally between several helicopter companies, the helicopter used is closest in proximity, as requested by dispatch.

- **Factors Impacting Response Times:** In order of significance, the factors affecting response most likely included location, simultaneous call, and personnel shortages. Weather, geography, equipment or vehicle issues, and time of day were less likely to affect call response.

- **Response To Public Lands:** The county hosts year-round recreation with remote areas for snowmobiling, hiking, dirt bikes, all-terrain vehicles, hunting, and reservoir activities. There are more trauma calls in the summer and fall months, which requires PCEMS to work closely with search and rescue, especially in remote locations, and when assistance is needed with patient extrication in remote settings.

4.2.2. Workforce & Resource Assessment

The workforce and resources in Power County meet minimum expectations and needs, as described by the single transport agency. Four full-time paramedics and four full-time EMTs provide coverage, except in portions of the southernmost county, covered with partially compensated EMTs. Given the distance and response time, a second station exists in Rockton; however, there have been significant challenges with the recruitment and retention of EMTs at this station, especially in recent years. There are concerns related to retention with the current full-time paramedic staffing structure, especially given the challenges of providing competitive wages compared to neighboring counties. Recruitment and retention are among the agency's most significant challenges, both in the station staffed by career personnel and in the station staffed by partially compensated EMTs. There is also little carryover for significant expenses, so the agency relies heavily upon grant support to leverage these expenses. Budgeting for considerable capital would be challenging without grant support or additional funding.

4.2.2.1. Staffing Overview

- **Staffing Structure:** EMS is provided throughout the county using a combined staffing structure. Eight full-time staff members, including four paramedics and four EMTs, provide career EMS coverage out of American Falls using a paramedic/EMT team to provide around-the-clock coverage. EMS is provided out of the secondary station in Rockland by unscheduled, partially compensated, paid-per-call EMTs. One agency director and an assistant oversee the agency.

- **Responder Average Age:** The responder's average age in the county is 35 to 44 years.

- **Staffing Numbers:** Affiliated within the county and active with the agency are two emergency medical responders, 10 EMTs, 10 AEMTs, five paramedics, and three non-licensed staff.

- **Staffing Concerns:** There are significant concerns with maintaining paramedics on staff due to the limited ability to compensate competitively. There have been recent losses of several paramedics to outside agencies at a higher pay rate. More paramedics must be employed to cover the entire shift schedule at Station 1; often, these shifts require administrative coverage or extra comp time by EMS personnel without overtime pay. Station 2 is rarely staffed with a full schedule, so this often requires Station 1 to cover a larger call area with long response times and little ability to backfill for a secondary callout.

- **Staffing Strengths:** Staff is generally flexible and able to accommodate shift trades. Unfortunately, no overtime is paid for extra hours, so personnel are provided comp time for these additional hours. Unfortunately, EMS personnel can rarely carry these hours over long enough to use them at a different time.

- **Recruitment & Retention:** The agency shares that increasing pay for full-time staff by matching the competitive wages elsewhere in the area is essential to retention. Also, the agency believes that the ability to pay out for overtime and pay holiday rates would be conducive to retention.

4.2.2.2. Training & Education Overview

- In-house training is performed monthly with in-house refresher training for EMS licensure and skill maintenance.

- Introductory basic EMT courses are offered at regular intervals, with the agency covering all costs with a two-year commitment following completion of the course.

- The medical director is involved in quality improvement and chart review, but little is contributed toward ongoing education or hands-on skills maintenance.

4.2.2.3. Facilities Overview

- **Station Locations:** The agency has two EMS stations – The primary station is in American Falls and houses a training facility, living quarters, offices, and the ambulance bay. There is also a station in Rockland which does not have personnel quarters.

- **Station Conditions:** The agency endorses moderate facility conditions, averaging their combined station condition at 59/100.

- **Facility Needs:** The primary station in American Falls is also county-owned and has multiple needs. Power County performs maintenance on all facilities through a contractual agreement. There are needs related to the buildings, including regular maintenance and repairs. However, there is no funding for this, and there is no rainy-day fund. Station 2, the Rockland station, is noted to be in poor condition; however, this station is maintained by the county and is also a portion of the local fire department.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy**: Current equipment and supplies are noted to meet the agency's needs regarding equipment age, functionality, and use appropriateness. The agency can obtain supplies and adequately stock the ambulance.

- **Condition**: Some mandated equipment on ambulances was noted to be in excellent condition by the agency. Immobilization devices, traction splints, portable suction

devices, and mobile radios were reported to be in good condition, and scoop stretchers and portable handheld radios were in poor condition.

- **Funding:** Within the county, grants are regularly sought to leverage large capital equipment purchases such as ambulances. A grant was awarded in 2022 for a defibrillator on a new ambulance for the Rockland site. The agency has also submitted grant applications for automated external compression devices, radios, and ambulances. There is little carryover for capital purchases, which places a continued reliance upon grant support.

- **Needs/Shortages**: There is little to no carryover for emergency use or rainy-day funds. A grant recently acquired an ambulance; however, there is the cost-share for an ambulance and the remainder of aged ambulances that need significant mechanical repairs or replacement.

4.2.3. Financial Overview

The following discussion is based on financial information shared by Power County EMS. This county faces limitations regarding a relatively fixed budget with little carryover and significant challenges with billing reimbursements in the last few years. Because of the difficulties with revenue and increasing expenses, there have been concerns about providing countywide full-time EMS at an ALS level of service. The rising cost of living, increasing operational expenses, and inability to compensate paramedics with competitive wages are currently challenging the EMS system's longevity at an ALS level, which may require ingenious methods for ongoing sustainability. Because there is limited annual carryover, there is a continued need for grant support to leverage capital expenses to offset operations and personnel expenses, especially to maintain an ALS level of care for the greatest population.

4.2.3.1. Expense Overview

- **Personnel Expenses:** It is shared that $419,600 in expenses is dedicated to EMS Personnel costs within Power County, which is approximately 45% of the overall budget. This includes salaries and benefits. Within the county, four full-time paramedics and four full-time EMTs are employed, with additional employees paid-per-call and paid-on-call. The remainder goes to paid-per-call compensation for EMTs at the southmost station.

- **Operational Expenses**: It is estimated that $450,780 is committed to operations within Power County; this is approximately 48% of the budget and is dedicated to disposable supplies, training, and facility expenses.

- **Capital Expenses:** It is shared that $50,000 is budgeted for capital expenses each year; this typically is used to purchase ambulances or large equipment items such as gurneys or patient monitors.

4.2.3.2. Revenue Overview

- Power County ambulance taxing district levy: 0.0002490%
- The Power County Ambulance District contributes tax support of $310,120 in addition to sales tax and ag-exemption replacement funds.
- A contracted fee is collected to perform scheduled interfacility transports at the local hospital; this fee may be soon adjusted due to a new out-of-county agency recently contracting to provide interfacility transports.
- Due to challenges with a previous third-party billing company, there were many write-offs and contractual adjustments in the last few years. Therefore, net billing revenue for 2022's latter half is approximately $69,496. No additional billing information was provided.

4.2.4. Resource Assessment Additional Factors

The county has had challenges in the last year, with a low percentage of billing revenue collected and a significant portion written off, further contributing to a system deficit. This calculated financial gap suggests additional tax support or grant acquisition is needed for continued operation. Based on the limited billing information provided, the projected net billing revenue is approximately 29% of the total funding, which suggests that over 70% of the required funds would come from tax funding or other sources of income. Personnel expenses contribute to 45% of the cost, which has been a point of discussion in recent months. Leadership and oversight evaluate methods to decrease personnel expenses while maintaining a full-time paramedic-leveled ambulance. Thus, supplemental funds or grants will continue to be necessary to support the agency. The county has identified needs for significant capital improvement in the next few years, such as infrastructure improvement, maintenance, and ambulance replacement. Given that there is minimal carryover and an unknown reserve fund, the current budget makes system maintenance and growth challenging.

Aside from finances, one of the county's most pressing needs to maintain services is its personnel and retention. There has been little increase in the taxing district revenue in Power County, making it challenging to make incremental raises for retention. Despite this, the county maintains a system with dedicated employees who continue to uphold the system while genuinely serving as its foundational asset. New leadership may contribute to a fresh perspective toward countywide EMS, emphasizing continued and urgent deliberation regarding the future of EMS in Power County to develop a vision for adequate and optimal EMS coverage with insufficient funding.

REFERENCE LIST

[1] Wikipedia contributors. (2023). Power County, Idaho. *Wikipedia*. https://en.wikipedia.org/wiki/power_county,_idaho

[2] Power County. (2008). *County Profile Data. Idaho Department of Health and Welfare: EMS Bureau*.

[3] County, P. (n.d.). *Power County, Idaho*. Power County. https://www.co.power.id.us/

[4] United States Census Bureau QuickFacts. (n.d.). *U.S. Census Bureau QuickFacts: United States*. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/powercountyidaho,US/PST045222

[5] University of Idaho Extension. (2022b, December 13). *Power: Total housing units*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=18

[6] University of Idaho Extension. (2022c, December 12). *Power: Labor force participation rate*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=12

[7] University of Idaho Extension. (2022a, December). *Highlights for Power*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077

[8] University of Idaho Extension. (2022a, February 23). *Power: Wage per job*. Indicators Idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=16

[9] University of Idaho Extensions. (2022, December 13). *Power: Employment by industry*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=17

[10] University of Idaho Extensions. (2023, March 29). *Power: Agricultural Workers*. Indicators Idaho. Retrieved October 2, 2023, from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=100050

[11] University of Idaho Extension. (2023, April 25). *Bannock: Poverty rate by age*. Indicators Idaho. Retrieved October 2, 2023, fromhttp://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=11

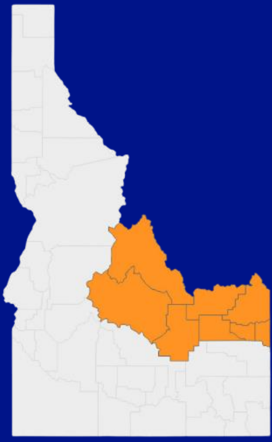
[12] Zillow. (2023). *Power County Home Values*. Retrieved June 30, 2023, from https://www.zillow.com/home-values/689/power-county-id/

[13] University of Wisconsin Population Health Institute. (2023). *Power, Idaho*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/idaho/power?year=2023

[14] University of Idaho Extension. (2023a, April 13). *Power: Number of primary care physicians*. Indicators Idaho http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16077&IndicatorID=29

[15] Ag, J., Baccaglini, L., Haynatzki, G., Achutan, C., Loomis, D., & Rautiainen, R. (2021). Agricultural Injuries among Farmers and Ranchers in the Central United States during 2011-2015. *Journal of Agromedicine*, *26*(1), 62–72. https://doi.org/10.1080/1059924x.2020.1845268

[16] *Power County Hospital – All new site.* (n.d.). https://www.pchd.net/



EAST
Area of Responsibility (AOR)

County-Focused Resource Assessments for the Following Counties in the East AOR:

- Butte
- Clark
- Custer
- Fremont
- Jefferson
- Lemhi
- Madison
- Teton

AORs are geographic boundaries created solely for the purpose of this study and are not intended to be utilized as a means of regionally grouping counties for any official purposes.

About the Area – Bordered by Montana to the north and Wyoming to the east, the East AOR encompasses high desert and rugged mountain terrain. The area reflects an agricultural, ranching, and mining heritage and features a wide variety of outdoor and recreational opportunities.

The geographic footprint covers a land area of 17,341 square miles, an estimated population of 127,978 people and population density of 7.34 persons per square mile. State data for 2022 reports 7,987 EMS calls and a total of 327 licensed EMS providers among 22 licensed EMS agencies (12 public and 10 private). The issues of rough terrain, difficult road conditions, and long travel times to definitive care are commonly shared challenges among all EMS agencies.

Two of the counties are served by paid/career Fire/EMS agencies, the remainder depend on volunteer staffing models. The recent trends of rapid growth in population and tourism have caused an increased service demand for EMS agencies that already face significant challenges in staffing and funding.

BUTTE COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION

1

CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Lost Rivers Emergency Medical Technicians (EMTs), based in Arco, provides emergency medical services (EMS) to 2,234-square-mile Butte County and, through a long-standing verbal agreement, supports South Custer County Ambulance in Mackay on an as-needed basis. [1] The agency is all-volunteer, licensed at the Intermediate Life Support (ILS)/Transport level. Funded entirely by patient billing revenue and a small stipend from Butte County, Lost Rivers responds to nearly three-hundred 911 calls annually. Utilizing Lost Rivers critical access hospital (CAH) in Arco as a primary emergency care facility, the agency also transports emergency patients across the desert to definitive care facilities in Rexburg, Idaho Falls, and Pocatello. Air medical resources Air Methods/Air Idaho and Life Flight Network are dispatched based on patient acuity, availability of staff, and transport distance. The agency maintains a good working relationship with the Advanced Life Support (ALS)/Transport units at the Idaho National Laboratory (INL). In common with all transport agencies in the Eastern Idaho counties, remote mountainous terrain, winter weather, rural roads and highways, and emergency response to public lands and frontier communities are ever-present challenges for Lost Rivers EMTs.

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey (RAS) indicate that the agency's strength is in its leadership, organization, training systems, and dedication of the volunteer EMTs. It is threatened by pending funding deficits, staff attrition, and the need for a new transport ambulance.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 70/100. The agency has a 70% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths. Challenges. Opportunities. Threats. (S.C.OT.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "IFT" refers to Inter-Facility Transfers whereby the local ambulance service transports patients from one medical facility to another. "CAH" designates a Critical Access Hospital.

Strengths	Opportunities
• Lost Rivers Community Hospital • Strong commitment to volunteerism • Stable, effective agency leadership • Relationships w/ neighboring agencies	• New IFT protocols w/ Lost Rivers CAH • Potential additional staff from new residents • Establishment of ambulance taxing district
Challenges	**Threats**
• Aging of workforce • Lack of "new blood" entering EMS • Need for new transport ambulance. • Need for new IFT agreement w/ Lost Rivers CAH • Establish a Howe substation • Cost / availability of housing	• Low pass rate/licensure rate for internal EMS class students • Eventual retirement of EMS Director • Eventual exhaustion of carry-over funds • Staff attrition

Table A: Butte County SCOT Analysis

SECTION
2
CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Located in the high-desert region of east-central Idaho, ranging in elevation from 4,829' to 11,402' at the top of Big Boy Peak, Butte County is the third least-populated county in the state. [2] Featuring the incorporated cities of Arco (county seat, population 879), Butte City (pop. 81), Moore (pop. 162), Howe (unincorporated, pop. 303) and several rural communities, the county is named for the prominent buttes that arise from the Snake River plain. [3] Settled in 1878 and named Kennedy Crossing, Arco has the distinction of being the first city in the world to be illuminated by atomic power. [4, 5] Much of the eastern portion of the county is occupied by the Idaho National Laboratory and the southwestern portion includes the visitor center at the Craters of the Moon National Monument and Preserve. [6] Substantial recreational opportunities exist on large sections of the Caribou-Targhee and Salmon-Challis National Forests to the north and west of Arco. [7]

After a population decrease of 7.16% (207 persons) between 2010 and the beginning of 2021, the post-COVID era has created a "growth spurt" in Butte County. With a population increase of 4.2% (110 persons) between 2020 and 2022, the rate has currently leveled out at 3% for 2022-2023. [8, 9]. The growth rate is somewhat self-limiting due to lack of available housing, distance from larger metropolitan areas, availability of jobs, and winter weather conditions. [10] Butte County residents occupy 1,129 households, of which 31.5% had children under the age of 18 living with them; the average household size is 2.54 persons. [11] The median age in 2022 is 41.7 years compared to 45.3 in 2021. [12] Among Idaho's rural counties, this is an interesting trend and speaks to stakeholders' reports of an aging population. Butte's median age in 1980 was 27.8, 33.3 in 1990, 38.8 in 2000, and 45.3 in 2021. [13] The current median in Idaho is 37.4. [14] Butte County encompasses 1,453 square miles of public lands (894,614 acres) and county government received $418,237 in Payment in Lieu of Taxes (PILT) funds in 2022. [15]

Demographic	2010	2020	2022
Population	2,891	2,574	2,684
Land Area	2,234 sq mi	2,234 sq mi	2,234 sq mi
Per Capita	1.29 PPSM	1.15 PPSM	1.20 PPSM
PPSM: *Persons Per Square Mile*			

Table B: Butte County Population & Geography: U.S. Census Bureau 2023

2.2. Economics

The Idaho Bureau of Labor Statistics (July 2023 update) reports that Butte County, located in the Idaho Falls Metropolitan Statistical Area (MSA), has experienced a post-Covid growth rate (4.2%) nearly twice that of the balance of the state.

The economy of Butte County is highly dependent on the Idaho National Laboratory (INL). The county has the highest average annual wage ($107,071) in the state and employment numbers strongly reflect the presence of the INL, that employs approximately 5,700 scientists, engineers, and support staff members in multiple nuclear and nonnuclear experimental facilities. The INL website states that, “No Idaho county is more enmeshed with INL than Butte County. Nearly a quarter of its 2,234 square miles lie within the DOE Site’s boundaries. Just over 60 percent of INL’s 890 square miles are in Butte County.” Butte County has experienced steady job growth since the 1970’s, with a large bump of 20% in the 2000’s and a current annualized rate of 3%. By category, government accounts for 2.3% of jobs, health care/social assistance equaled 1.3%, retail trade/services amounted to 1.6%, and professional/technical services accounted for 60.2%, largely due to the presence of the Idaho National Laboratory. [16]

Apart from the influence of the INL, tourism around the Craters of the Moon National Monument and a wealth of outdoor recreation opportunities has a positive impact on the local economy. Agricultural products and businesses account for nearly $50 million in annual sales. [17]

Metric	Data
Total Population (2023)	2,684
Median Age	44.3 years old
Poverty Rate	23%
Number of Jobs (2023)	1,467
Average Annual Wage per Job (2023)	$41,000
Unemployment Rate (2023)	4.2%

Table C: Butte County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings. County Health Rankings are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Despite the current growth rate, there are some striking social indicators in Butte County. The poverty rate at 23.0% and food insecurity rate at 12.4%, are higher than averages in Idaho of 10.8% and 8.2% respectively. [18,19] This dynamic appears to be peculiar to the younger population demographic, with the poverty rate for children under age 5 at 43.3% and under age 18 at 21.4%. The rate for people 65 and over is 5.3%. Note: Indicators Idaho reports the 2021 poverty rate at 15.8% whereas the Idaho Department of Labor Butte County statistics for July 2023 show the rate at 23.0%.

2020 data indicates that Butte County has 3.9 primary care physicians per 10,000 population, compared to 6.3/10,000 in Idaho. [20] Currently, there is one primary care physician in the county. In 2019, 10.5% of the population under age 65 had no health insurance and 5.3% of children under the age of 19 were uninsured. [21] Butte County has an overall ranking of 34th of 43 for Health Outcomes and a ranking of 22 for Health Factors. [22] The Quality-of-Life ranking is 35th of 43 counties. [23]

Access to Care: Lost Rivers Critical Access Hospital and adjacent medical center in Arco offers comprehensive medical care, including emergency services, cardiology, behavioral health, surgery, and imaging services.

Percentage of Population Without Health Insurance: 10.5% under age 65, 12.3% overall [24]

Insurance Payor Mix (per RAS Q43)**:** Medicare = 55%, Medicaid = 25%, Commercial/Private = 20% (RAS)

Crime Rate: 34/10,000 compared to 107/10,000 in Idaho. [25]

2.4. Indicator Impacts to EMS

Butte County is an anomaly from the perspective of demographic data and its impact on emergency medical services. The median age of 44.3 years, with 25.8% of the population over age 65, supports the agency's reports in the Resource Assessment Survey and on-site visits that there is a dearth of "young people" that want to be trained as volunteer EMTs, and that the EMS unit faces annual attrition due to "aging out" and retirement. Of the 1,105 employed persons in Butte County, 177 (16.0%) live outside the county and 567 (51.3%) leave the county for work. [26] Like other rural Eastern Idaho Counties, when 60+% of the workforce lives elsewhere or works outside the area, the effect on EMS staffing is significant. Average wages in non-retail/service occupations in the county are well above the state average and make it difficult for a potential full-time EMS structure to pay wages that attract employees.

The presence of Lost Rivers Critical Access Hospital and its ancillary medical services is a definite positive for the county and provides an Emergency Room (ER) resource much closer than Rexburg or Idaho Falls. Historically, the inter-facility transfer (IFT) volume provided to EMS by Lost Rivers has been a significant source of income.

The presence of the INL has been both a boon and a detriment for Lost Rivers EMTs. The training opportunities and Advanced Life Support/Paramedic (ALS) hand-off support are real benefits, but increased utilization of INL's paramedic transport capabilities by Lost Rivers Hospital has impacted Lost Rivers EMT's IFT income.

2.4.1. Housing

As of July 1, 2022, The U.S. Census Bureau reported 1,295 housing units in Butte County of which 79.4% were owner occupied. The 939 households in the county have an average occupancy of 2.70 persons. Rocket Mortgage (9/15/23) reported that despite a significant upswing in median home prices from 2021-2022, in May 2023 Butte County home prices were down 13.3% compared to last year, selling for a median price of $238,000. There are currently fifty-four homes for sale in the county and zero rental properties available. [27] Butte County's property tax levy rate is .74% of a property's assessed fair market value. [28]

Zillow (September 2023) reports the following data regarding Butte County:

	Butte County	Idaho
Median Home Price: (+13.7% 2021-2022)	$238,000	$444,457
Median Monthly Rental Cost: (2 Br. Apt.)	$824	$1,310
Median Income per Household:	$41,552	$83,777
Median Income per Capita:	$48,844	$54,537

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS System Demand

3.1. Call Volume Overview

On average, Lost Rivers EMTs responds to just under 375 calls per year. The first-out ambulance has a total call time average of just over 90 minutes, reflecting responses to local emergencies, and the second-out ambulance has a total call time of just over four hours, due to its primary use as a long -distance IFT unit. The agency experiences a 22% rate of cancellations-enroute and treat/non-transport calls. [28] Agency administration indicates that IFT's have historically been the bread-and-butter of Lost Rivers EMTs' revenue stream, but increased use of INL-based ALS transfer crews by Lost Rivers Critical Access Hospital has impacted that resource. Lost Rivers EMTs, INL EMS, and Lost Rivers CAH are currently negotiating Memorandums of Understanding (MOUs) and interagency communications systems that should restore the local agency's IFT volume.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Lost Rivers EMTs	*257*	*157*	**414**	*291*	*83*	**374**
Ambulance Total	*257*	*35*	**414**	*291*	*83*	**374**

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Butte County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Ambulance 1	*10 min*	*5 min*	16 min	18 min	99 min
Ambulance 2	*17 min*	*10 min*	28 min	67 min	244 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Butte County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Lost Rivers EMS is dispatched through the Butte County Sheriff's Office dispatch system (Butte Control). The Mackay EMS unit, 25 miles north of Arco, also uses Butte Control for dispatch. EMTs use 700mhz mobile radios in the ambulances and 700mhz hand-held units in the field. Radio and cell phone coverage can be a challenge in remote areas of the county. The unit uses a first-response system and EMTs can respond directly to a scene if they are closer to the scene than to the ambulance shed when dispatched.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Lost Rivers EMTs	Private Non-Profit Self-Entity	ILS/Transport	Scheduled	Volunteer

Table F: List of EMS Agencies Located in Butte County

4.1.2.1. Agency Overview: Lost Rivers EMTs

Established in 1985, Lost Rivers EMTs, based in Arco, is a private, non-profit self-entity. The all-volunteer unit is licensed at the Intermediate Life Support (ILS) / Transport level and supervised by a part-time, volunteer EMS Director. Other elected unit officers include a president, vice-president, secretary, treasurer, and training officer. Medical direction is provided by an ER-certified physician based at Lost Rivers CAH. Lost Rivers utilizes two front-line ambulances and an auxiliary All-Terrain Vehicle (ATV) for emergency medical response.

The ambulance shed (photo below) is centrally located in Arco and includes equipment storage areas, a training room, and kitchen. The agency's response area is all of Butte County (2,234 sq mi) and includes significant coverage on state and federal lands. Patients are transported to Lost Rivers CAH in Arco, Madison Memorial Hospital in Rexburg, and definitive care facilities in Idaho Falls and occasionally, Pocatello. Lost Rivers EMTs has close working relationships with South Custer EMS in Mackay, INL EMS, and air medical providers Air Methods/Air Idaho and Life Flight Network. In common with all transport agencies in the Eastern Idaho counties, remote mountainous terrain, winter weather, rural roads and highways, and emergency response to public lands and frontier communities present ever-present challenges for Lost River EMTs.

Figure G: Image of Lost Rivers EMTs Station & Location (Bob Foster photo)

4.1.2.2. Agency Overview: Idaho National Laboratory Emergency Medical Services (INL EMS)

INL EMS is a private, federally funded agency that contracts with the Department of Energy (DOE) and Department of Defense (DOD). State licensed at the ALS (Paramedic) / Transport level, INL EMS provides emergency medical services to employees of the site. The agency also assists neighboring EMS units in adjacent counties on an as-needed basis for IFTs and Mass Casualty Incidents (MCI) on state highways. Due to company and Federal restrictions, INL did not formally participate in this project or the Resource Assessment Survey.

The EMS Sustainability Planners for the East and Southeast Areas of Responsibility (AORs) did, however, have the opportunity to interview the INL EMS Coordinator who provided the information that follows.

INL EMS is a paid full-time career agency that typically recruits through local, regional, and national advertising. The organization reports that like its neighboring agencies, "it is hard to find qualified people." Due to its federal funding status INL EMS it is precluded from billing for patient care services.

INL EMS' primary responsibility is the "federal reservation" area of the Idaho National Laboratory that employs approximately 5,900 researchers and support staff. EMS personnel are dispatched by on-site Emergency Medical Dispatchers (EMD). The agency typically responds to 40-50 on site calls annually and did 120 IFTs, primarily for Lost Rivers Hospital,

in 2022. The EMS Director stated that INL EMS is currently working with Lost Rivers Hospital and Lost Rivers EMTs to route the majority of IFTs through Lost Rivers EMTs in order for INL staff to remain on site to cover their primary duty obligations.

INL EMS' optimum staffing is 80 licensed EMS personnel, preferably at the Paramedic level. The agency currently employs approximately 70 EMS staff members, about 10% of whom have secondary jobs with other EMS agencies. Operating from three stations on the federal reservation, the organization operates five ALS ambulances and typically has three Paramedics and seventeen Firefighter/EMTs schedule per shift. Response times average 10 minutes from dispatch to enroute, 15 minutes from enroute to on scene (plus 10-minute delays if security gates are encountered enroute), and two-to-three hours transport times to definitive care facilities in Rexburg or Idaho Falls.

While the full-time staff has excellent prospects for job security health insurance benefits, challenges to employee retention include lack of a retirement plan and difficulty in skills maintenance due to low incident volume. INL EMS staff receive ongoing training from internal instructors, the Medical Director, and attendance at regional and national conferences.

Just over 60% of Idaho National Laboratory's 890 square miles are in Butte County and INL EMS has a continuing objective to expand outreach programs and training opportunities with EMS agencies in other neighboring counties.

4.1.3. Hospital Access Overview

The Lost Rivers CAH website states that, established in 1958 and located on the north side of Arco, the 14-bed Lost Rivers Critical Access Hospital and Medical Center, provides a full-service ER, surgery, acute care, behavioral health, cardiology, and other ancillary services to residents and visitors to Butte and Custer Counties.

East Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 STEMI, Level 1 ICU and Level III NICU facility. [21] EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac catheter lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [29]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II S-T Elevation Myocardial Infarction (STEMI) facility. [30]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded Neo-Natal Intensive Care Unit (NICU). It is a general medical and surgical facility that includes a cardiac ICU (Intensive Care Unit), onsite emergency department, and a med/surg ICU. [31]

Madison Memorial Hospital (MMH) (now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI (magnetic resonance imaging), and family medicine. [32]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

Lost River EMTs benefits from a strong leadership team and a core of dedicated volunteer EMTs. Operating in a rural/frontier environment, the agency has adapted extremely well to the demands of its geographically diverse coverage area. Current population growth in the county is self-limiting due to a lack of available and affordable housing. Lost Rivers has an excellent relationship with community members and local government officials and has established effective working relationships with nearby first responder agencies and law enforcement. The organization is financially viable due to its volunteer structure, but that structure is threatened by attrition and difficulty in attracting and licensing new EMS providers.

- **EMS Agency Stability:** Lost Rivers EMTs reported a projected sustainability factor of 70/100, meaning that the agency has a 70% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies. The organization benefits from dedicated, experienced leadership, and committed volunteers. Long-term sustainability is potentially threatened by workforce aging; several of the current EMTs are in their 70's and eight senior unit members retired in 2022. Agency leadership cited a "lack of new blood" coming into the system and decreasing financial resources as major threats moving forward.

- **EMS Financial Situation:** The agency is funded through patient billing revenue and a $10,000 allowance from Butte County for facilities maintenance and utilities. The budget is carefully managed by the unit officers but is currently dependent on annual carryover to meet the upcoming year's expenses. The county does not have an ambulance taxing district and given the area's growth rate and decline in EMS volunteers, is likely to face budget deficits in upcoming years.

- **EMS Communication Strategy and Outreach:** Butte County does not have a Community Health EMS (CHEMS) program but drafts an annual community outreach plan.

- **Community View of EMS Agencies:** Despite Lost Rivers EMTs being long-time residents and representing a variety of demographics within the community, there is a feeling that the agency is an "out-of-sight, out-of-mind" service provider. Lost Rivers has a good reputation for consistent reliable emergency response and maintains a positive working relationship with elected officials, Butte County Sheriff's Office, the local Search and Rescue (SAR) unit, and Lost Rivers Hospital.

- **Elected Official Support of EMS Agencies:** Lost Rivers reported a "good working relationship" with elected county commissioners.

- **Agency Systems and Response Outlook.** Lost Rivers EMTs are a well-organized, well-managed and well-trained unit. They are, however, feeling the pressure of limited staffing, impending budget challenges, and increased incident volume. The ambulance station in Arco is clean, well-organized, and adequate to meet current operational needs. The agency expressed a desire to locate a subsidiary station in Howe, where there are enough resident EMTs to staff a Quick Response Unit (QRU), to improve response capabilities in that area.

Agency Optimism: Lost Rivers EMTs provides much-needed emergency medical services for the residents and visitors of Butte County. Conversations with local stakeholders clearly demonstrate that the need for appropriate, reliable emergency medical response is critical to the well-being of the community. EMS staff stated that, "our staff is well organized into operational assignments for building maintenance, vehicle maintenance, training, scheduling, etc. We do a good job of optional module training for the EMTs. Our real challenge is in housing availability and cost and future staffing. We've tried everything to get new people into the system, even offering free training classes, but very few responses."

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** The current volunteer structure is marginally stable in that 15% of the staff takes 80% of the shifts and three people cover shifts seven days per week. The volunteer commitment is very strong but burn out rates high. The agency does incentivize staff by paying for each EMT and their family to attend one out-of-area training conference annually, sponsors a Christmas party and summer picnic, and provides uniform shirts and winter coats. Lost Rivers holds one training class per year in conjunction with the South Custer unit in Mackay. Class is taught by well-qualified, experienced internal instructors but success statistics are discouraging. The current class started with 22 students of which 10 finished and five-to-six typically pass the NREMT (National Registry of EMTs) exam and become licensed. Lost River EMTs benefits from very strong leadership and a powerful sense of volunteerism. The current EMS Director has 32 years' EMS experience, 28 years as an EMS Instructor, and is a retired Registered Nurse (RN) from Lost Rivers Hospital. The unit treasurer stated, "I always wanted to be an EMT because my grandmother was an EMT in Mackay". The grandmother became an EMT at age 50 and actively ran calls until the age of 80. The leadership, level of administrative organization, and financial management provided by the EMS Director and assistant are outstanding and the glue that holds the unit together. "Our scheduling system works very well but

we are within one-to-two people of not being able to cover shifts if some key people were to leave or not be available. 15% of the crew covers 80% of shifts. 12 people consistently run, and three people run seven days per week". "Staff is very well organized into operational staff assignments for building, vehicle maintenance, training, scheduling, etc. The unit is organized into three, day shift and three, night shift crews of three or four people per shift, that rotate on the call schedule. There are three EMS personnel living in Howe that first respond to calls in that area. Seven volunteer drivers respond to calls as available."

- **Service Delivery Partners:** Lost Rivers' key support relationships are with County Commissioners, community members, Lost Rivers CAH / Medical Center.
- **Medical Direction**: The Medical Director was reported at 51/100 for involvement in EMS training and 60/100 for involvement in Quality Assurance (QA) and chart review.
- **Communications and Interoperability:** Lost Rivers responded that their radios offer interoperability features and functionality that meet current needs, offer quality reception most of the time, and allow EMTs to reliably communicate with other agencies and counties.
- **Mutual Aid Systems and Agreements:** Lost Rivers does not have formal written agreements with neighboring agencies but has long-standing verbal agreements with South Custer EMS (Mackay) and INL EMS for mutual support.
- **Community Health EMS (CHEMS):** "We are aware of the concept of CHEMS but are not interested in developing a program".
- **Patient Care Documentation System (e-PCR):** Lost Rivers uses Image-Trend Elite for e-PCRs.
- **Inter-facility Transports (IFT):** Lost Rivers reported 155 interfacility transports in 2022 and includes IFT revenue with total patient billing receipts for the agency. Lost Rivers is currently in the process of establishing formal IFT protocols with Lost Rivers Medical Center and INL EMS.

4.2.1.3. Response Overview

- **Level(s) of Service:** Lost Rivers EMTs is non-profit, self-governed service licensed at the ILS – Transport level. The agency does an excellent job with very limited resources and was able to respond to all calls for service in 2022.
- **Agency Response Concerns:** In addition to the standard menu of community emergencies, Butte County EMS has additional challenges related to response to backcountry illness/injury, farm machinery accidents, and motor vehicle accidents on the US 20/26/33 and US 93 highway corridors. Cooperative efforts with Butte County Search & Rescue (SAR), U.S. Forest Service (USFS) personnel, and extrication teams from INL, Madison and Bonneville counties are frequently required, and scene times can be very long. The agency reports that it makes regular use of air medical

resources. Lost Rivers EMTs, like other agencies in the region, is experiencing an increasing volume of local “lift assists” (response to a patient’s residence to help them after a fall) and has purchased specialized equipment for that purpose.

- **Helicopter Response and Utilization:** Lost Rivers dispatches air medical support based on distance from scene to definitive care, Mechanism of Injury/Nature of Illness (MOI/NOI), weather conditions, and availability of ground transport staff.

- **Factors Impacting Response Times:** The elements most impactful to response times are location, weather, geography, time of day, simultaneous call, personnel shortages, equipment, or vehicle issues.

- **Response to Public Lands:** There are challenges with response to emergencies on public lands; “we have a great amount of USFS and Bureau of Land Management (BLM) ground in our response area. Calls are not frequent, about 10% of total calls, but do take a lot of time, especially in summer when Craters of the Moon gets 100,000 visitors”. Emergency incidents on public lands pose access issues due to terrain, distance, and road conditions and can take the primary duty crew out of service for extended periods of time.

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** After losing eight key staff to retirement and relocation in 2021/2022 Lost Rivers currently has 22 team members licensed at the following levels: Paramedic (1), AEMT (7), EMT (9), EMR (3). The unit also includes volunteer drivers that do not hold EMS licenses. It is preferred that EMTs live within twenty minutes of the ambulance shed and the agency is dedicated to maintaining a chute time (dispatch to enroute) of two minutes or less. Three-person crews are scheduled on a 6:00am-6:00pm day shift and 6:00pm-6:00am night shift. Of the 20 licensed EMTs, 12 consistently cover shift and three take shifts seven days per week. While the unit is “holding its own” it is challenged by aging staff that will soon retire, lack of “new blood” coming into the system, and significant challenges getting new EMTs through the training, testing, and licensing process.

- **Responder Average Age:** The average age of the unit’s team is 45-54.

- **Staffing Numbers:** “It is difficult to cover nights, weekends and backfill when the transfer crew is out. EMS calls are highest during tourist season when EMTs are most busy at other jobs. Our biggest concern is difficulty bringing new people into the system and keeping the EMTs we have. Retirements are a real threat to our unit; we lost eight people to retirement in 2022.”

- **Staffing Concerns: “**No interest from (younger demographic) in becoming EMTs. Less than half the people that start training classes get licensed. Our biggest concern is long-term availability of funds to pay EMTs. The county budget does not support us and commissioners could cut our budget at any time.”

- **Recruitment & Retention:** "There is no housing - affordable or otherwise – for new people to move to the area. We've tried everything to get new people into the system, even free training classes, but very few responses. Maybe get four-to-seven new people licensed every two years."

4.2.2.2. Training & Education Overview

- Lost Rivers conducts internal training classes taught by in-house instructors. Classes are scheduled on an annual basis by current training or staffing needs and include Optional Modules. "We do a good job of Optional Module training for EMTs." Each EMT has an opportunity to attend one out-of-area conference per year, with their family if they choose, at agency expense." The current EMT class was conducted in conjunction with the Mackay (Custer County) EMS unit. It started with 22 students of which 10 completed the class and are preparing for NREMT (National Registry of Emergency Medical Technicians) testing.

4.2.2.3. Facilities Overview

- **Station Location:** Lost River maintains one physical plant centrally located in Arco.

- **Station Condition:** The station (shed) houses two ambulances, one ancillary vehicle, equipment/supply storage, restroom, kitchenette, and training room. It adequately meets the needs of the agency. The ambulance shed is an older building in an industrial/manufacturing area of central Arco and was rated 52/100 for overall adequacy. The Arco building and equipment are maintained by the volunteer EMTs, with utilization of outside resources as needed.

- **Facility Needs:** Lost River would like to establish a satellite facility in Howe (18 miles northeast of Arco) to better serve that portion of its coverage area. The unit has three EMTs that live in or near Howe and first respond to 911 calls there, but ambulance travel time from Arco to Howe is frequently thirty minutes or more.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The EMS first-out ambulance meets current needs, but the reserve/IFT ambulance is due for replacement. Lost Rivers reports that its equipment and supplies meet current needs in terms of age/condition, functionality, and use appropriateness. Emergency medical supplies are purchased through standard sources, but inventory rotation is challenging due to relatively low call volume and seasonality.

- **Condition:** Key patient care equipment was rated as "good" across the board.

- **Funding:** The agency recently submitted an unsuccessful Dedicated Grant application for a new ambulance and will continue to apply for capital equipment grants as available.

- **Needs/ Shortages:** In response to RAS Q72 the respondent stated that “we have not had any luck with Dedicated Grants. No one has the time to properly write or administer grants.”

4.2.3. Financial Overview

Lost Rivers is funded through patient billing revenue generated through the services of a third-party billing company and receives a small stipend from Butte County to pay for utilities and building maintenance. The agency depends on a tight budget that provides carryover from year to year to maintain operations. Inter-facility transfers (IFT) are significant sources of income but were compromised in 2021/2022 when Lost Rivers Hospital made frequent use of ALS transport units from the INL. The agency survives financially due to its volunteer structure. The operating budget is covered entirely by patient billing income resulting in a zero net operational cost for county residents.

While the agency has sustained itself through volunteer staffing and frugal budget management, total dependence on patient billings is a serious concern. With a payor mix of 55% Medicare and 25% Medicaid and average billing adjustments of 45%-50% of gross, the billing income foundation is in constant jeopardy.

Key Indicators Overview:	Butte County	East AOR
EMS Calls/Capita	.11	.076
Cost per Call	$687.28	$979.57
Cost per Capita (annual)	$74.51	$77.43

4.2.3.1. Expense Overview

FY 2022 Expenses =	$215,377
FY 2022 Operating Expense =	$200,000
FY 2022 Personnel Expense =	$3,525
FY 2022 Capital Expense =	$0.00

4.2.3.2. Revenue Overview

County budget revenue =	$10,000
Patient billing Revenue =	$214,785
Contributions/Other Income =	$ 595
Total Revenue =	$225,380
Carryover / Reserve =	$11,852

4.2.4. Resource Assessment Additional Factors

Lost Rivers EMTs response to RAS Q44 and Q45, budget concerns, was: "There are not many (bright spots) on the horizon. Hope that patient billings stay up or we'll be bankrupt. We receive no local taxing district support and pray that the county doesn't cut our utilities/building maintenance allocation." "One of our major challenges is long term availability of funds to cover cost of supplies, equipment, maintenance of ambulances, and upkeep of our building."

In response to RAS Q46: Utilization of additional funding, if available, key factors were rated:

1. Personnel – add more employees
2. Increased pay for existing employees
3. Training existing employees / continuing education
4. Training new recruits
5. Provide fringe benefits
6. Equipment upgrades
7. Facility Upgrades

"(One) real challenge is housing availability and cost. We've tried everything to get new people into the system, even free training classes, but very few responses. (We) maybe get seven-to-nine new people licensed every two years. No interest from younger generation (millennials) in becoming EMTs. Less than half the people that start training classes become licensed."

“(Our major challenge) is long-term availability of funds to pay EMTs. (The) county budget does not support us, and commissioners could cut out budget at any time. The staff is aging and very few younger people are coming into the system.”

REFERENCE LIST

[1] Interviews with agency conducted January – August 2023 online, phone and in-person.

[2] [4] [6] [7] [17] [28] Butte County Idaho. (2023). Homepage. https://buttecountyid.us

[3] [5] Wikipedia. (July 2023). *Butte County Idaho.* Last modified 11/02/23. https://en.wikipedia.org/wiki/Butte_County.Idaho

[8] [12] [13] [14] University of Idaho Extension. (2023). *Indicators Idaho: Butte County. Population Characteristics.* http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16023

[9] [11] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Butte County, Idaho.* *https://www.census.gov/quickfacts/buttecountyidaho*

[10] Sperling's Best Places. (2023) *Butte County Idaho.* https://www.bestplaces.net

[15] U.S. Department of the Interior. (2022). *Butte County Idaho.* *https://www.pilt.doi.gov*

[16] Idaho Bureau of Labor Statistics. (2023). *Butte County Economic Overview.* Last updated: July 2023. https://lmi.idaho.gov/...labor-force-statistics. Enter East Region and County Name.

[18] University of Idaho Extension. (2023). *Indicators Idaho: Butte County. Income and Poverty.* http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16023

[19] [20] [21] [22] [24] University of Idaho Extension. (2023). *Indicators Idaho: Butte County. Health.* http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16023

[23] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Butte County Idaho.* *https://www.countyhealthrankings.org/explore-health-rankings/idaho/butte?year=2023*

[25] University of Idaho Extension. (2023). *Indicators Idaho: Butte County. Crime and Safety* http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16023 *Crime and Safety.*

[26] Idaho Bureau of Labor Statistics. (2023). *Butte County Economic Overview.* Last updated: July 2023. https://lmi.idaho.gov/...labor-force-statistics. Enter East Region and County Name.

[27] Zillow. (2023). *Butte County Idaho Home Values.* Zillow. https://www.zillow.com/home-values/355/butte-county-id/

[29] Eastern Idaho Regional Medical Center. (2023). Homepage. https://eirmc.com/

[30] Idaho Falls Community Hospital. (2023). Homepage. https://www.idahofallscommunityhospital.com

[31] Mountain View Hospital. (2023) Homepage. https://www.mountainviewhospital.org/

[32] Madison Memorial Hospital. (2023) Homepage. https://madisonmemorial.org/

CLARK COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Clark County Ambulance is an all-volunteer agency serving the least populated county in Idaho. [1] With a geographic area of 1,765 square miles containing 806 residents, Clark is bordered by Fremont, Butte, Lemhi, and Jefferson counties in Idaho and Beaverhead County, Montana on the north. [2, 3] With only two incorporated cities, Dubois (county seat) and Spencer, Clark County Ambulance has very limited population and revenue resources to draw on. [4]

Licensed at the Basic Life Support (BLS)/Transport level, the agency is staffed by thirteen volunteer Emergency Medical Technicians (EMTs) and three drivers and administered by a part-time Emergency Medical Services (EMS) Director that also serves as the County Emergency Manager. With the recent transition of the previous long-time director to a new job position outside the county, the current Director has been in place approximately six months. Although the agency's call volume is low at 75-85 calls per year, the remoteness, challenging terrain, and severe weather conditions contribute to run times (time from dispatch to back-in-service) of over six hours.

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey (RAS) indicate that the agency is in good condition regarding vehicles and equipment. The foundational strength of Clark County Ambulance is the dedication and loyalty of staff personnel and the EMS Director. All are unified in making the best possible efforts to deliver an appropriate, reliable response to 911 emergencies. It is the structural component of the service that results in a Sustainability Rating of 0/100. Low call volume, minimal budget, difficult access to training support and insufficient staff numbers decreases the probability that the agency will be able to sustain itself long term. The formation of an ambulance taxing district could support financial sustainability. Implementation of a structured scheduling system could decrease the level of stress and

burn-out currently reported by EMS staff. The agency may be able to explore mutually beneficial tie-in opportunities with the Eastern Idaho Public Health Clark County Office in Dubois.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 0/100. The agency has a 0% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "NREMT" refers to the National Registry of Emergency Medical Technicians.

Strengths	Opportunities
• Historically strong leadership • Volunteer spirit • Working relationships with neighboring EMS agencies • Positive community perception • Buildings, equipment, vehicles	• Structured scheduling system • Tie-in with local medical clinic • Formation of ambulance taxing district
Challenges	**Threats**
• High rate of staff burnout • Seasonality: highest call volume during busiest season for staff • Low NREMT pass rate / licensure rate for student EMTs • Low call volume	• Agency is a line item in the county budget. • Limited patient billing revenue • Overall economic viability of area • Agency sustainability rating = 0

Table A: Clark County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

The banner on Clark County's homepage declares, "Clark County is not just another County – it's another Country!" [5] The County website says that "the area offers several working ranches that offer a 'wild west experience' where guests can get 'down and dirty' with cowboys and ranch hands. [6] From cattle drives to hayrides, the world looks better from the back of a horse." [7]

Originally a stage stop on the route between Salt Lake City and the Montana mining camps, Dry Creek (now Dubois) was founded in 1864. [8] Officially established as an Idaho county in 1919, the county is NOT named for the famous co-leader of the Corps of Discovery as many might assume. Its namesake is Sam K. Clark, an early settler on Medicine Lodge Creek located northwest of Dubois. The city of Dubois is named after U.S. Senator Fred Dubois, a prominent political figure in Idaho's early history. Clark includes the unincorporated communities of Humphrey, Kilgore, and Spencer, known for its opal mines. [9]

Bisected by Interstate 15 leading to 6,800' Monida Pass, Clark County is largely agricultural and extremely rural, encompassing portions of the Caribou-Targhee, Nez Perce, and Salmon-Challis National Forests. The Nez Perce National Historical Trail winds through rugged areas of the county as does the Lost Gold Trails Byway. [10]

Clark County has a total land area of 1,765 square miles of which 1,127 (64%) are public lands. County government received $168,439 in Payment in Lieu of Taxes (PILT) funds in 2022. [11] During the period 2021-2022 Clark County experienced a total population increase of 2%, or 16 residents. [12] From a high of 1,022 residents in 2000, the population declined 3.9% from 2000-2010, and declined 19.6% between 2010 and 2020. [13] The average age of a Clark County resident in 2021 was 39.8, compared to 30.7 in 2000 (the population high-water mark), and to 37.4 in the state of Idaho. [14] The county ranked 22nd in median age (highest to lowest) out of the 44 Idaho counties. [15] Approximately 8.7% of families and 11.3% of the population were below the poverty line, including 21.5% of those under age 18 and 5.9% of those age 65 or over. [16]

Demographic	2010	2020	2022
Population	982	790	806
Land Area	1,765 sq mi	1,765 sq mi	1,765 sq mi
Per Capita	0.56 PPSM	0.45 PPSM	.46 PPSM
PPSM: *People per square mile*			

Table B: Clark County Population & Geography

2.2. Economics

The Idaho Bureau of Labor Statistics (July 2023) reports that of a total civilian workforce of 385 individuals, 78 (20.3%) are employed in Trade, Transportation and Utilities occupations, 76 (19.7%) in Public Administration, 45 (11.7%) Education and Health Services, and 45 (11.7%) in Natural Resources and Mining. The balance of the workforce is engaged in retail/service, recreation, agriculture, and real estate. The average wage per job in 2022 was $55,639. Key employers by number of jobs are the Clark County School District, Clark County, a private land and cattle company, and state and Federal jobs (ITD, USFS, USDA). Clark County commuter data indicates that 32% of jobholders live and work in the county while 56% commute to other counties for work. [17]

Metric	Data
Total Population (2023)	806
Median Age	39.8 years old
Poverty Rate	5.2%
Number of Jobs (2023)	385
Average Annual Wage per Job (2023)	$55,639
Unemployment Rate (2023)	4.2%

Table C: Clark County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings. County Health Rankings are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number one is regarded as the healthiest in the state.

Due to size and population, Clark County is not ranked on the Healthiest Communities Scores for Idaho. [18] There are zero primary care physicians. [19] The Clark County Health Department in Dubois provides a wide range of services including primary care, women's health, pediatric care, lab testing and immunizations. Approximately 30% of the resident population lacks health insurance coverage. [20]

2.4. Indicator Impacts to EMS

The absence of local healthcare access within the county creates the need for residents to travel a minimum of 45 miles to Rexburg or 50+ miles to Idaho Falls to reach the closest medical care facility. A long enough distance in good weather, the trip can be hazardous to impossible in winter conditions. The occupations in farming and ranching contribute to high-acuity trauma due to the livestock and machinery involved. Rugged and remote geography combined with substantial increases in seasonal tourism creates transportation/extrication challenges when incidents occur in the backcountry. The volume of semi-truck and seasonal RV traffic on the Interstate 15 corridor between Idaho and Montana results in several serious motor vehicle accidents annually. These factors point to the necessity of and increased demand for a local EMS service.

Housing cost and availability combined with incomes that are significantly below the state average make it difficult to live and work in the county (56% of employed residents work outside Clark County), which in turn affects EMS staffing levels and availability. [21] The percentage of the population without health insurance (30%), combined with very low annual call volume (75-80 calls/year) significantly limits the billing income capability of Clark County EMS. [22]

2.4.1 Housing

As of July 1, 2022, the U.S. Census Bureau reported that there were 486 housing units in Clark County of which 62.8% were owner-occupied with an average of 2.90 persons per household. Currently, the average home value is $262,116, down 0.3% over the past year. [23] Zillow lists only two properties for sale, one residential and one commercial, and zero properties available for rent. Clark County's property tax levy rate is .47% of assessed fair market value. [24] Zillow (9/23) reports the following data for the Clark County housing market.

	Clark County	Idaho
Median Home Price (+27.1% 2021-2022)	$262,116	$444,457
Median Monthly Rental Cost (2 Br. Apt)	$787/month	$1,310/month
Median Income per Household:	$57,066/yr	$83,877/yr
Median Income per Capita	$47,615	$54,537

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Clark County EMS typically responds to 75-85 calls per year, of which an average of 27%, approximately 25 calls/year, are cancelled enroute or treat/non-transport (ambulance arrives on scene but does not transport a patient). [25] The run volume corresponds to the seasonal influx of visitors/recreationists and increase in agricultural industry activity in the period from Memorial Day to Labor Day.

It should be noted that Transport Time (depart scene to arrival at destination hospital) at 80.02 minutes reflects the distance from incidents in Clark County to definitive care in either Madison or Bonneville counties. [28] Similarly, the time from "depart hospital" to "back in service" is related to distance of travel. Total call time of 3.75 hours, based on 61 calls resulting in patient transport, is also indicative of the time the county may be without EMS response capability if the duty crew is on the transport and a backup crew is not available.[26]

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Clark County EMS	*63*	*24*	87	*53*	*19*	72
Ambulance Total	*63*	*24*	87	*53*	*19*	72

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Clark County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Clark County EMS	*21 min*	*11 min*	32 min	80 min	224 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Clark County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Calls to 911 are routed to EMS personnel via the Clark County Sheriff's Office dispatch center. Responders utilize a mobile app for GPS and call-specific data. Emergency Medical Dispatch (EMD) is not available. Field communications involve mobile radios in the ambulances, and hand-held radios and cell phones carried by the EMTs. Typical of many rural/frontier response areas, "black holes" for communications exist and GPS triangulation from cell phone towers is not always reliable.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Clark County Ambulance	Public/ County-Owned	BLS-Transport	Unscheduled	Volunteer/Pd. Run

Table F: List of EMS Agencies Located in Clark County

4.1.2.1. Agency Overview: Clark County EMS

Clark County EMS is a public, county-owned EMS agency licensed at the BLS /Transport level. The emergency response coverage area is all of Clark County and agency administration is coordinated by a part-time EMS Director that also serves as the County Emergency Manager. Current staffing consists of 16 personnel: EMT (12), Emergency Medical Responder (MR) (1), and Drivers (3). Two of the active EMT's are also Clark County deputy sheriffs and two also cover call with neighboring counties. The agency is funded as a

line item in the County budget and by patient billing income. EMTs and Drivers are volunteer on-call and compensated at a flat rate for patient transport and cancelled-enroute/treat non-transport incidents. The unit utilizes one ambulance station located in central Dubois and EMTs are permitted to first-respond via Privately Owned Vehicle (POV) if the call scene is closer to their present location than they are to the ambulance station. Based on call location, Mechanism of Injury / Nature of Illness acuity, number of patients, availability of transport crew, and level of patient care required, Clark County either utilizes air medical (Air Methods/Air Idaho) or transports to Madison Memorial Hospital in Rexburg or Eastern Idaho Regional Medical Center in Idaho Falls. Under similar circumstances to utilization of air medical resources, Clark County occasionally transfers patients from its ambulance to advanced life support (ALS) units from Madison and Bonneville counties for transport from the field to definitive care.

Figure G: Images of Clark County

(Left: stock photo: bing.com/images. Right: Bob Foster photo)

4.1.3. Hospital Access Overview

Eastern Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level I ST-Elevation Myocardial Infarction (STEMI, Level 1 ICU and Level III Neo-Natal Intensive Care Unit (NICU) facility. [27] EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac catheter lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [28]

Idaho Falls Community Hospital, also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [29]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [30]

Madison Memorial Health (MMH; previously Madison Memorial Hospital) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI, and family medicine. [31]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the RAS and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

Clark County EMS is the county's sole resource for emergency medical response. Though limited by factors previously discussed in this report, the presence of a viable transport ambulance service is vital to the well-being of the community. In the absence of a local EMS unit, patients in the Clark County coverage area would either be transported POV or wait one-to-two hours until neighboring units from Madison or Bonneville could respond. The organization's short-term viability and long-term sustainability are dependent upon continued county funding, diligent billing practices, strong leadership, and a dedicated volunteer base.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** What stability the agency has is predicated upon strong leadership, dedicated volunteers and adequate vehicle and equipment resources. The fact that Clark's sustainability rating is 0/100 speaks for itself. This rating means that the agency has a 0% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

- **EMS Agency Financial Situation:** Total revenue for the last fiscal year was $55,398 consisting of $27,000 in county funding and $28,398 from patient billing revenue. The EMS Director has applied successfully for Community Development Block Grant (CDBG) funding for vehicles and equipment. The agency described itself as being "significantly underfunded."

- **EMS Communication Strategy and Outreach:** Clark County does not have a CHEMS (Community Health EMS) program but does write an annual community outreach plan (RAS Q6). The EMS Director is active in regional EMS associations and the east Idaho Time Sensitive Emergency committee.

- **Community View of EMS Agencies:** Clark County EMS is well-regarded by the community for its dedication to volunteerism and efforts to provide an appropriate, reliable response to 911 emergencies.

- **Elected Official Support of EMS Agencies:** The EMS Director has a good working relationship with county staff and elected officials.

- **Agency Systems and Response Outlook:** With respect to the substantial efforts of the EMS Director and volunteer EMTs, under present circumstances the sustainability prospects for Clark County EMS are dismal. The county, however, needs an ambulance service and is constantly exploring options to increase the stability of the system.

- **Agency Optimism:** The EMS Director, EMT staff, Search and Rescue (SAR), Clark County Sheriff's Office (CCSO), and county staff have positive working relationships. The organization's "bright spot" was, "the team is very well organized and follows up with assigned tasks."

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** "Our team is very well organized and efficient. They have high morale and willingness to support the local system." The EMS Director has a dual role as the county Emergency Manager and interacts frequently with county staff and elected officials. The EMS team has specific responsibilities related to training, inventory/supply, and building/vehicle maintenance. The agency's staffing model is unscheduled, all-volunteer.

- **Service Delivery Partners:** Clark's strongest partners in service delivery are local Search & Rescue (SAR), neighboring EMS agencies, and hospitals in Rexburg and Idaho Falls

- **Medical Direction:** The Medical Director was reported at 52/100 for involvement in EMS training and 52/100 for involvement in Quality Assurance (QA) and chart review (medical review of patient care reports completed by EMS providers).

- **Communications and Interoperability:** Clark County EMS responded that their radios offer interoperability features and functionality that meet current needs, offer quality reception most of the time, but do not allow EMTs to reliably communicate with other agencies and counties.

- **Mutual Aid Systems and Agreements:** The agency does not have formal (written) EMS mutual aid and/or automatic aid agreements with neighboring EMS units.

- **Community Health EMS (CHEMS):** "We are aware of the concept of CHEMS but are not interested in developing a program. It was noted, however, that the Eastern Idaho Public Health Department has an office located in Dubois and the EMS Coordinator did mention doing cooperative community outreach and education with Public Health.

- **Patient Care Documentation System:** Clark County uses Image Trend Elite for e-PCRs.

4.2.1.3. Response Overview

- **Level of Service:** Clark County EMS is a public, county-owned service licensed at the BLS/Transport level. Clark County EMS provides much-needed emergency medical services for the residents and visitors of Clark County. Conversations with community stakeholders make it clear that despite the low annual call volume, when the next nearest ambulance is 45 miles away, it is of critical importance to have an EMS presence in the county.

- **Agency Response Concerns:** The agency reported difficulty in responding to 911 calls "11-20 times" last year. Minimal staffing levels and use of an unscheduled "respond as available" system compromise consistent response capability. Staff expressed concern that "if some people leave the county to go shopping or attend an event, there will be no one left to cover (call)."

- **Helicopter Response and Utilization:** Clark County requests air medical resources "based on patient needs, transport time and incident location."

- **Factors Impacting Response Times:** Logistics, weather, and geographic challenges to emergency response have been described previously in this report but deserve mention again here as they can be significant. Conditions most impactful to response times were listed as: Location, Weather, Geography, Personnel Shortages, Simultaneous Call, Time of Day, and Equipment or vehicle issues. There are two primary contributors to response difficulty: 1) the majority of the EMTs on staff work in high-volume seasonal occupations and have limited availability to cover call in peak season. 2) Many peak- season 911 calls are for geographically difficult locations; people get sick in camp, have ATV/UTV accidents or hiking accidents in the mountains etc. These calls are extremely demanding of time and resources; total call times for backcountry emergencies often extend over six-to-eight hours. With the limited availability of EMTs, a backup crew is rarely available for subsequent calls when the first-out crew is committed. Further, the long distance from definitive medical care results in increased demand for EMS transport of the "typical" emergent and non-emergent medical needs of community residents.

- **Response to Public Lands:** Cooperative efforts with Clark County Search & Rescue (SAR) and U.S. Forest Service (USFS) personnel are utilized for response to remote areas, and in the case of highway accidents, extrication teams from INL, Madison and Bonneville counties are frequently required.

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** Clark County is currently staffed by one EMR, twelve EMTs, and three volunteer drivers, and rated its staffing level at 19/100, meaning that the agency currently has 19% of its optimal staffing number. Clark County EMS draws volunteers from a very limited population base and given that a portion of the population is seasonal (Memorial Day – Labor Day only), and that over 50% of

jobholders leave the county for work, the challenges of filling a call schedule are substantial.

- **Responder Average Age:** The average age of the staff is 45-54 and the agency reported that the loss of two-to-three key members would be crippling.
- **Staffing Numbers:** The survey indicated that typically, four-to-five staff members cover 80%-90% of the call schedule.
- **Staffing Concerns:** Input from the EMTs indicates that one of the contributors to burnout is that with so few people to cover call, unit members that take time off or leave the county for whatever reason experience guilt and worry for their colleagues that are left to cover call in their absence.
- **Recruitment & Retention:** Specific benefits that would increase the ability to recruit/retain staff were health insurance and retirement benefits and the two primary concerns related to sustainability were staff compensation and a “lack of people coming into the system.”

4.2.2.2. Training & Education Overview

The Clark County EMS training system consists of annual courses at currently needed licensure levels, conducted by in-house instructors with support from subject matter experts from neighboring EMS units. In an EMT class conducted during Spring 2023, three of four candidates completed the course. The medical director is reported as being somewhat involved in the training process (RAS, Q16), rated at 52/100, indicating involvement at 52% of optimum.

4.3.2.3. Facilities Overview

- **Station Locations, Conditions, and Facility Needs:** Clark County EMS maintains one ambulance station that houses two ambulances, equipment, and supplies. It is an older building centrally located in Dubois. Its adequacy rating was 48/100 in the survey with deficits for condition and size. The agency does not have a capital improvement fund. The EMS Coordinator/County Emergency Manager has a small office in the county administration building.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The agency reports that its equipment and supplies meet current needs in terms of age/condition, functionality, and use appropriateness.
- **Condition:** The key emergency medical equipment items were rated “Good to Excellent.”
- **Funding:** In 2021 the EMS Director executed a successful CDBG application that resulted in the purchase of a new, fully equipped ambulance.

- **Needs and Shortages:** Emergency medical supplies are purchased through standard sources, but inventory rotation is difficult to balance with licensing requirements due to low call volume.

4.2.3. Financial Overview

In response to RAS, Q4 and Q5, the agency rated its overall financial sustainability at 0/100 and reported its situation as being "significantly underfunded". The county does not have an ambulance taxing district; operating expenses are funded as a line item in the county budget and supplemented by patient billing revenue. The part-time EMS Coordinator's salary is paid by the county. Capital expenses for new equipment and vehicles are dependent upon grant funding.

Key Indicators Overview:	Clark County	East AOR
EMS Calls per Capita	.11	.076
Cost per Call	$687.28	$979.57
Cost per Capita (annual)	$66.12	$77.43

4.2.3.1. Expense Overview

FY 2022 Operating Expense =	$22,300
FY 2022 Personnel Expense =	$25,000
FY 2022 Capital Expense =	$6,000

4.2.3.2. Revenue Overview

Patient Billing Revenue = $22,418

Collected Revenue vs Adjusted Charges: $22,418 / $46,185

Gross Billing = $46,185 Net Billing Collection % = 48.5%

(Intermountain Management annual billing report, calendar year 2022)

Other Income: County Budget Revenue = $27,000

Annual Carryover / Reserve / Deficit = ($3,882)

4.2.4. Resource Assessment Additional Factors

"The burnout rate among volunteer EMTs is very high even in a low call volume agency. Recruitment is extremely difficult. Agency survival depends on committed volunteers and strong leadership." The system is supported by dedicated volunteers who take calls for no compensation and stand to earn a maximum of $45.00 for an ambulance run that could take six hours or more. Even at the average call time of 172 minutes (nearly three hours), EMT's earn $15 per hour while in the field. Take into consideration the wages they may be losing if they report to a call from work, and the net is not attractive. At present the system budget does not allow consideration of a paid-call stipend.

With significant limitations on patient billing income due to low call volume and a net collections percent of 48.5%, the prognosis for increased income from that source is poor. The formation of an ambulance taxing district to sustain future EMS operations may or may not be a real option for the county, depending on the priorities of the citizens and elected officials.

"Our need for financial support for compensation for full- and part-time staff is critical. (The) small, rural community just does not have adequate resources to support the system it needs."

REFERENCE LIST

[1] [2] [4] [5] [6] [7] [9] Clark County Idaho. (2023). Homepage. https://www.clark-co.id.gov

[3] [8] [10] Wikipedia. (2023). *Clark County Idaho*. https://en.wikipedia.org/wiki/Clark_County,_Idaho

[11] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho Forest Factbook: County Atlas of Forest Land and the Forest Product Industry.* https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[12] [14] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Clark County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/clarkcountyidaho

[13] [15] University of Idaho Extension. (2023). *Indicators Idaho: Clark County. Population Characteristics.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16033

[16] University of Idaho Extension. (2023). *Indicators Idaho: Clark County. Poverty.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16033

[17] [21] Idaho Bureau of Labor Statistics (August-September 2023). *Clark County Labor Force and Economic Profile.* https://lmi.idaho.gov/.../labor-force-statistics. (Enter East Region and County Name)

[18] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Clark County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/clark?year=2023

[19] University of Idaho Extension. (2023). *Indicators Idaho: Clark County. Health.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16033

[20] Data USA. (2023). *Clark County Idaho.* https://www.datausa.io.

[22] Data USA. (2023). *Clark County Idaho.* https://www.datausa.io.

[23] [24] Zillow. (2023). *Clark County Home Values*. Zillow. https://www.zillow.com/home-values/4428/dubois-id/

[25] [26] Agency interviews conducted January – September 2023. Online, phone, in-person.

[27] [28] Eastern Idaho Regional Medical Center. (2023). Homepage. https://eirmc.com/

[29] Idaho Falls Community Hospital. (2023). Homepage. https://www.idahofallscommunityhospital.com

[30] Mountain View Hospital. (2023). Homepage. https://www.mountainviewhospital.org/

[31] Madison Memorial Health. (2023). https://madisonmemorial.org/

CUSTER COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Situated in the high desert and imposing mountains of central Idaho, Custer County is a unique combination of rural, frontier and wilderness environments. Ninety percent of the county is comprised of government lands and the rugged mountain ranges bordering the Salmon River provide not only phenomenal opportunities for the outdoor recreationist but significant logistical challenges for emergency first responders. [1]

Emergency Medical Services (EMS) in Custer are provided by three distinctly different agencies. Most remote is Stanley Ambulance, a Basic Life Support (BLS)/Transport unit serving the northwest portion of the county and affiliated with the Salmon River Clinic and Hospital District. Centrally located in Challis, North Custer Hospital District Emergency Medical Services, also licensed at the BLS-Transport level, features a unique and innovative partnership with the physician assistants (PA) and medical staff at the Challis Area Health Clinic. Responding to 911 emergencies in the southern portion of the county, Mackay Emergency Medical Services, with an Intermediate Life Support (ILS)/Transport licensure, represents the EMS division of the South Custer Hospital District. While the combined annual call volume at 300-400 incidents is relatively low, the Custer County agencies have developed hybrid volunteer paid call/paid run staffing systems that provide an appropriate and reliable response to medical and trauma emergencies. Two of the agencies, Stanley, and Challis, have effectively integrated physician assistant level Ambulance Based Clinicians (ABC) with their on-call EMS crews.

Each EMS unit's response area within the 4,938 square mile county is large, geographically challenging, treacherous in winter, and characterized by long transport times to definitive care. Mackay EMS for example, describes its coverage area as "from the Butte County line to Willow Creek Summit and all the drainages into the Wood River Valley. We cover the

Copper Basin country to the divide at Double Springs, and Sawmill Canyon in Little Lost. Our response area of 1,545 square miles is the size of the state of Rhode Island."

In the absence of a critical access hospital (CAH), residents and visitors of Custer County have access to full-time medical care at the Salmon River Clinic in Stanley and Challis Area Health Clinic in Challis, while the southern part of the county is served by the part-time, primary care Mackay Clinic (open Tuesday and Thursday from 9am to 5pm and by appointment). Patients requiring more advanced care utilize the services of St. Luke's Wood River Hospital in Sun Valley, Steele Memorial Hospital in Salmon, or Lost Rivers Medical Center in Arco. Drive times of nearly three hours are required to access higher level definitive care facilities in Rexburg, Idaho Falls, and Twin Falls.

The initial perception of the Custer County EMS system may be, "why not consolidate the units into one system for the sake of administrative and financial efficiency?", careful examination, however, demonstrates that while opportunities to streamline may exist, the system has adapted to the unique geography, limited transportation corridors, and individual needs of the communities it serves. Integration of EMS with hospital districts and clinics has provided financial and staffing support for the agencies. The presence of strong, capable EMS Directors combined with the dwindling, but dedicated volunteer EMS staff carries the system at present.

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey indicate that the combined agencies are surviving but directly threatened by funding limitations, attrition and age of the workforce, and needs for new transport ambulances.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 45/100. The county has a 45% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "NREMT" refers to the National Registry of Emergency Medical Technicians. "PA" refers to Physician Assistant."

Strengths	Opportunities
• Leadership is dedicated and experienced. • Strong volunteer spirit • Strong community support • Existing hospital taxing districts • Existing billing systems • Training support from PA's • Unique structure of N. Custer Ambulance	• Greater integration of resources • Adjusted levy rates in hospital districts • Evaluation and update of patient billing schedules • Develop county-wide EMS strategic and funding plans.
Challenges	**Threats**
• Facility and equipment maintenance/replacement • Low success rate on grant applications • Low pass rate on NREMT exam • Geographically remote location • Lack of new recruits to EMS system • Deficits in communication systems	• Financial gap/deficit • Aging / retirement / attrition of workforce • Attrition of workforce • Need for new ambulances

Table A: Custer County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

The banner heading on the Custer County website reads, "CUSTER COUNTY, IDAHO – We Are What America Used to Be." [2]

"Historical and scenic Custer County, founded in 1881 and located in Central Idaho, has a population of 4,368 and an area of 4,938 sq. miles. Its landscape consists of arid desert, flat green valleys, and rugged rocky peaks and contains the highest mountain in Idaho, Mount Borah at 12,662 ft. The county seat is Challis, with a population of just over 1,000. Other towns include Mackay, Stanley, and Clayton. Custer County relies on ranching, mining, and tourism as its main resources. Custer County contains much of the Frank Church River of No Return Wilderness and the famous Salmon River as well as the Sawtooth National Recreation Area." [3]

Custer County has experienced a post-COVID increase in population, particularly significant in the 2020-2022 period, when the population grew by 232 persons, or 5.4%. [4] The county's mountainous geography and larger percentage of public land, 2,935,288 acres or 90% of the total land area, tend to limit property available for development. [5] Custer County government received $840,021 in PILT funds in 2022. [6] There were eight building permits issued in the past year. [7] Median household income as of July 2023 is $47,663 and per capita personal income is $48,61. [8] The county has a relatively high poverty rate of 15.1%. [29] The median age of a Custer County resident is 53.4 years with 33.3% over the age of 65 and 16.9% of the population is under the age of 18. [9]

Demographic	2010	2020	2022
Population	4,368	4,274	4,506
Land Area	4,938 sq mi	4,938 sq mi	4,938 sq mi
Per Capita	1.13 PPSM	1.16 PPSM	2.10 PPSM
PPSM: *People per square mile*			

Table B: Custer County Population & Geography

2.2. Economics

The Idaho Bureau of Labor Statistics (July 2023) reports that Custer County's civilian labor force is 2,269 and the county has an unemployment rate of 3.8%. Whereas Natural Resources and Mining accounted for 428 jobs with an average annual income of $83,543 in 2012, by 2022 this industry provided 104 jobs at an average annual income of $66,539. Construction jobs have increased from 50 (average wages of $32,045) in 2012 to 88 (average income of $42,261) in 2022. 2022 data shows that other key employment sectors include Trade, Transportation, and Utilities (278 jobs, $34,547 average income) and Education and Health Services (234 jobs, $29,587 average income). The largest public sector employers in the county are the U.S. Forest Service, Challis Joint School District, Mackay Joint School District, Custer County. Primary private employers include Redfish Lake Lodge, Mountain Village Resort, and Thompson Creek Mining. It is estimated that of 2,269 civilian workers, 754 live and work in the county. Another 486 were employed in the county but lived outside, and 554 people commute to other counties for work. [10]

Metric	Data
Total Population (2023)	4,506
Median Age	53.4 years old
Poverty Rate (2021)	8.1%
Number of Jobs (2023)	2,269
Average Annual Wage per Job (2023)	$40,140
Unemployment Rate (2023)	3.8%

Table C: Custer County Economic Factors

2.3. Social Determinants of Health

County Health Ranking are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Custer County Rankings [11]: Health Outcomes (18). Health Factors (17). Length of Life (18). Quality of Life (18). Health Behaviors (19). Clinical Care (30). Social and Economic Factors (20). Physical Environment (1). The county's Overall Health Ranking is 14th of 43 counties. [12] Custer County has no primary care physicians. [13]

Access to Care:

The Challis Area Health Center website states that: "At the Challis Area Health Center our goal is to provide the highest quality healthcare to our community. As the only Federally Qualified Health Center serving central Idaho, we offer acute, chronic, and primary emergency medical care for patients of all ages."

Salmon River Clinic (SRC): Located in Stanley, the Salmon River Clinic homepage states that SRC "provides a full spectrum of family practice and urgent care."

Mackay Clinic: The Mackay Clinic is a Medicare Certified Rural Health Clinic centrally located in Mackay. The current notice on the clinic website indicates that the facility is "Open part-time and by appointment."

Eastern Idaho Public Health (EIPH) Department (District 7) has two offices in Custer County

For care beyond the capabilities of the local clinics, residents and visitors travel to Steele Memorial Medical Center in Salmon, Lost Rivers Medical Center in Arco, or higher-level hospitals in Rexburg, Idaho Falls and Twin Falls.

Percentage of Population Without Health Insurance: 13.5% under age 65, 13.2% overall [14]

Insurance Payor Mix (RAS Q43): Medicare = 50% Medicaid = 30% Self-Pay = 16% Other = 4%

Crime Rate: (incidence of serious crimes): Lemhi = 43/10,000 Idaho = 107/10 [15]

Housing

The total number of housing units was 3,143 in 2022 of which 77.6% are owner-occupied [16]. Currently, the median home value is $333,694.[17] Fair market rent for a two-bedroom unit is $810 per month [18] County residents have an average number of 2.44 persons per household. [19] As of August 15, 2023, there are approximately 84 homes listed for sale in Custer County, down 3.8% over the last year. [20] Zillow.com had one residential property listed for rent. The county's property tax rate is .31% of assessed fair market value. [21]

Zillow (9/23) reports the following housing data for Custer County:

	Custer County	Idaho
Median Home Price:	$333,694	$444,457
Median Monthly Rental Cost: (2 Br Apt):	$810	$1,310
Median Income per Household:	$47,663	$83,877
Median Income per Capita:	$23,356	$54,537

2.4. Indicator Impacts to EMS

Sperlings bestplaces.com reports that located within the Twin Falls Metropolitan Statistical Area (MSA), the cost-of-living index for Custer County is 83.6/100 compared to the state of Idaho at 106.1/100. Health care costs index at 107.1/100, housing at 84.6/100, and grocery costs index at 93/100. [22] While the comparatively lower cost of living is attractive to new residents, anecdotal evidence from site visits indicates that excepting the North Custer Hospital District EMS unit in Challis, recruitment for EMS positions among new move-ins has been negligible. The median age of nearly 54 years tends to support anecdotal data from surrounding counties that the general aging of the population and the pending "aging out" and retirement of current EMS personnel is of concern in terms of future staffing. [23] Forty-six percent of the civilian workforce that either lives or works outside the county limits the availability of working EMTs to fill the ambulance call schedule. [24]

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In 2022, Custer County received 300 calls for service, which represents combined 911 call volume for the Challis, Mackay, and Stanley units, up slightly from the 2021 call volume of 291. For 2022, 199 incidents resulted in patient transport and 101 (34%) were cancelled enroute or treat/non-transport. [25] While the average total response time of 16 minutes is longer than the national average of 14 minutes for rural EMS units reported by the Journal of the American Medical Association in July 2017, it is consistent with the response times of rural EMS units in neighboring counties. [26]

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
No. Custer - Challis	*129*	*72*	201	*136*	*87*	223
So. Custer - Mackay	*20*	*27*	47	*35*	*7*	42
Stanley Ambulance	*39*	*4*	43	*28*	*7*	35
Ambulance Total	*188*	*103*	291	*199*	*101*	300

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Custer County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
North Custer/Challis	*11 min*	*6 min*	17 min	65 min	191 min
South Custer/Mackay	*6 min*	*5 min*	12 min	43 min	93 min
Stanley	*12 min*	*8 min*	20 min	79 min	171 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Custer County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

Custer County emergency medical services are provided by:

North Custer Hospital District Emergency Medical Services in Challis,

South Custer Hospital District Mackay EMS located in Mackay, and

Stanley Ambulance (serving the Salmon River Hospital District), operating from Stanley.

Each agency is affiliated with a hospital district and funding systems are quite different. Also following separate staffing structures, the agencies are a unique example of how rural/frontier EMS units in Idaho have functionally and organizationally adapted to their environment.

4.1.1. Public Safety Answering Point (PSAP) Overview

EMS units in Challis and Stanley are dispatched through the Custer County Sheriff's Office 911 system. The Mackay unit is dispatched through the Butte County Sheriff's Office 911 system (Butte Control). Neither system offers Emergency Medical Dispatch (EMD) capability. The Challis unit pays $1,500 per year for dispatch services while there is no cost assessment for the Stanley unit, and Mackay pays Butte County $1.50 per call. The Challis unit has a tiered call-out system where the initial 911 alert is followed up by phone tree and email contact. Communication in the field consists of vehicle-based mobile radios, handheld VHF radios and cell phones in the field. In response to RAS Q20, all three agencies report periodic deficits in the reliability of radio communications in the field, attributable to a lack of repeaters.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Nort Custer County: Challis	Public - Transport	BLS – Transport	Scheduled	Volunteer Pd. Call/Pd. Run
South Custer County: Mackay	Public - Transport	ILS – Transport	Unscheduled	Volunteer Paid Transport
Stanley Ambulance	Public - Transport	BLS – Transport	Scheduled	Volunteer Pd. Call/Pd. Run

Table F: List of EMS Agencies Located in Custer County

4.1.2.1. Agency Overview: North Custer Hospital District Ambulance Service: Challis

The North Custer Hospital District website states that: "North Custer Hospital District (NCHD) Emergency Medical Services is a Basic Life Support agency that provides 911 emergency medical services to 3,200 square miles of northern Custer County. NCHD staff consists of part-time paid EMTs and the Challis Area Health Center's physician assistants who serve as Ambulance Based Clinicians (ABC). We pride ourselves on providing timely and appropriate emergency care for patients in our area of service."

Licensed at the BLS-Transport level, North Custer Ambulance Service (Challis) is overseen by the North Custer Hospital District Board of Directors. Daily operations are coordinated by a full-time EMS Director. EMTs respond either from their current location (home, work, etc.) or from an EMS building that houses two ambulances and a training/report office/crew break area. The staffing model is unique in that each of the four physician assistants associated with the Challis Area Health Center takes rotating seven-day shifts on the ambulance. Running as Ambulance Based Clinicians, the physician assistants are supplemented by paid on-call EMS crews licensed at the EMT level.

Figure G: Images of Challis Ambulance Service (Bob Foster photos)

4.1.2.2. Agency Overview: South Custer Hospital District: Mackay EMS

Mackay EMS is a public EMS agency, licensed at the Intermediate Life Support (ILS)Transport level, and funded by the South Custer Hospital Ambulance Taxing District. The Custer County Commissioners also serve as the ambulance taxing district commissioners. Daily operations are overseen by a paid, part-time EMS Director that also serves as the volunteer fire chief and volunteer reserve deputy sheriff. Additional support is provided by a paid part-time administrative assistant.

Mackay EMS has a coverage area the size of Rhode Island; 1,545 square miles extending from the Butte County line on the south to Willow Creek Summit on the north. Responding to 911 calls from one station housing two ambulances centrally located in Mackay, the agency has a close working relationship with Lost Rivers EMTs in Arco and transports emergency patients to Lost Rivers Medical Center. Mackay does not do long distance transport, relying on either air medical provider Air Methods/Air Idaho or handoffs to Lost Rivers EMTs for that purpose.

4.1.2.3. Agency Overview: Stanley Ambulance

Stanley Ambulance is a public agency financed by the Salmon River Hospital District, patient billing income, and an annual Fireman's Ball fundraiser. Operating from a single ambulance bay attached to the Salmon River Clinic, Stanley is a volunteer/paid-call/paid run unit licensed at the BLS-Transport level. Serving the Salmon River Clinic Hospital District since 1972, Stanley's service territory is remote and mountainous and includes the Salmon River Clinic Hospital District boundaries in Custer County extending to the Blaine County line and Banner Summit. Due to its proximity to Sun Valley, Stanley EMS utilizes Air St. Luke's for air medical and transports patients (weather permitting) to St. Luke's Wood River Hospital in Ketchum. Stanley also does hand-offs of high acuity patients to the Ketchum paramedic unit.

4.1.2.4. Agency Overview: Thompson Creek Mine EMS

The Thompson Creek Mine, one of the largest molybdenum mines in the United States, has a private EMS agency licensed at the BLS/Transport level. The company did not participate in this research project.

4.1.3. Hospital Access Overview

EMS units in Custer County transport patients to Steele Memorial Medical Center, that is a non-profit 18 bed Critical Access Hospital (CAH). SMMC is a Medicare Certified, Level IV Trauma Center, with an associated Rural Health Clinic. (Steele) provides a comprehensive spectrum of care for the varied health requirements of patients in Custer, Lemhi, and surrounding counties.

Also frequently utilized is Lost Rivers Critical Access Hospital. Established in 1958 and located on the north side of Arco, the 14-bed Lost Rivers Critical Access Hospital and Medical Center, provides a full-service Emergency Room (ER), surgery, acute care,

behavioral health, cardiology, and other ancillary services to residents and visitors to Butte and Custer Counties.

Ambulances from Custer transport patients to definitive care facilities in Rexburg and Idaho Falls. Stanley Ambulance also transports to St. Luke's Wood River Hospital in Ketchum, weather and road conditions permitting. [27]

Eastern Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 S-T Elevation Myocardial Infarction (STEMI), Level 1 Intensive Care Unit (ICU) and Level III Neo-Natal Intensive Care Unit (NICU) facility. EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac catheter lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [28]

Idaho Falls Community Hospital, also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [29]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [30]

Madison Memorial Hospital (MMH; now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI, and family medicine. [31]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Due to its unique staffing model, close association with the Challis Area Health Clinic and strong support from medical and administrative staff North Custer / Challis has the most sustainable system of the three agencies serving Custer County. The units have strong leadership and a dedicated volunteer base. Aging and attrition among staff are serious threats to long-term sustainability.

- **EMS Agency Financial Situation:** One agency reported breaking even consistently while two incur deficits most years. One agency reported anticipating a critical budget deficit in FY 2023-2024.

- **EMS Agency Communications Strategy and Outreach:** The EMS system does not have formal community outreach plans, but the local clinics and EMS agencies participate regularly in community activities and service projects.

- **Community View of EMS Agencies:** All agencies in the Custer system reported strong community support. The EMS units are active in providing standby ambulances and crews for special events and participate in annual fundraising activities.

- **Elected Official Support of EMS Agencies:** Interaction with elected officials ranged from "very little" to "strong", and all units expressed satisfaction with their governance and oversight systems.

- **Agency & System Response Outlook:** While the Custer EMS system has made unique operational adaptations to its service environment, the long-term viability of the system as it exists today is questionable. Future sustainability is dependent upon leadership and leadership succession, ability to find and retain qualified staff, and identification of funding sources sufficient to support increasing costs of doing business.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** Custer County emergency medical needs are met by separately licensed EMS agencies located in Challis, Stanley, and Mackay. Although each agency is affiliated with and partially funded through a hospital taxing district, the organizational structures are quite different. While these structures are not integrated into a county-wide system, they have evolved to fill the specific needs of each geographic coverage area. Each EMS agency in Custer benefits from the presence of dedicated, experienced EMS Directors. One of the directors is paid full-time (Challis) and two (Stanley and Mackay) are paid part-time. All three have dual roles and additional responsibilities in the community or region. Succession planning is a potential issue as none of the agencies have deputy directors or "second-in-command" personnel. The agencies are supported by third-party billing systems and, in one instance, a paid part-time administrative assistant. The Challis unit benefits from a close working relationship with medical and administrative personnel at the Challis Area Health Clinic. The agencies report having good-to-excellent working relationships with their governing bodies and "somewhat agree" that they are well-supported by the EMS Bureau. The in-county agencies not only support one another on an as-needed basis, they each have good working relationships with air medical and ground transport resources in neighboring counties.

- **Service Delivery Partners:** The agencies in the county identified the Medical Director, board members of the hospital district and county commission, local health care facilities, and community members as supportive components of the EMS system.

- **Medical Direction:** Each unit has a different Medical Director; relationships and involvement of the Medical Director are rated at 51/100, 75/100, and 90/100 respectively, meaning that levels of involvement in training and patient care chart review ranged from "somewhat involved" to "very involved".

- **Communications and Interoperability:** terms of interoperability/functionality, quality of reception, and interagency communication capability, two of the units rated their radio systems as inadequate and one unit reported satisfactory functionality. It was not specified if these observations were due to type, age, and quality of the mobile and handheld radios, or a result of geography and repeater locations. Both issues would benefit from further research.

- **Mutual Aid Systems and Agreements:** Two of the three EMS units have formal, written mutual aid agreements with neighboring agencies and one does not. All organizations, however, support one another and EMS providers from adjacent counties. The three agencies work regularly with local law enforcement, Search and Rescue (SAR) units, and air medical providers.

- **Community Health EMS (CHEMS):** Although there are no formal CHEMS programs in Custer County, two of the three agencies have very close working relationships with their local health clinics for continuity of patient care. The EMS organizations are very active in support of local community events.

- **Patient Care Documentation System:** The Image Trend Elite e-PCR platform is in use countywide.

- **Inter-facility Transports (IFT):** None of the EMS units transport patients from one definitive care facility to another, but patient transfers from the local clinic to definitive care are done on an as-needed basis. As a result, none of the agencies reported any revenue from IFTs.

4.2.1.3 Response Overview

- **Levels of Service:** On a comprehensive basis, the individual EMS agencies in Custer County provide efficient, compassionate emergency medical care to residents and visitors. The long-term ability of the units to provide consistent services is directly dependent upon quality of leadership, staffing adequacy, and a secure, dependable source of funding. The agencies rated their long-term sustainability at 25/100, 50/100 and 60/100 respectively, meaning that the probability of continuing to deliver an appropriate, reliable response to medical and trauma emergencies ranged from 25% to 60% with an overall average of 45%. "Bright spots" in the organizations were listed as: "Outstanding crew attitude, excellent community relations; Good continuity of care between the ambulance crews and the local clinics; We excel in our use of trauma priorities to identify patients that should be transported by air ambulance." (Note: all three EMS units use standard criteria for air medical transport: incident location, patient acuity, availability of ground transport resources, distance to most appropriate destination facility). "We adapt well to the changes in

our (seasonal) population and use our resources appropriately to get our patients to definitive care in the safest and fastest way possible, given the challenges of our remote locations."

- **Agency Response Concerns:** All three EMS units stated that they were able to respond appropriately to all 911 calls in 2022. Key concerns, however, include long response times to incidents in remote areas, lack of backup crews when the duty crew is out on a lengthy call or transporting a patient to out-of-area definitive care facilities, challenging weather conditions, and availability of responders in the daytime and on weekends.

- **Helicopter Response and Utilization:** Uniformly, the individual EMS agencies request air medical support based on patient needs, Mechanism of Injury (MOI) / Nature of Illness (NOI), incident location and distance to definitive care, weather conditions, and availability of ground transport personnel. Air medical for Custer County is provided by Air St. Luke's and Air Methods/Air Idaho, with occasional support from Life Flight Network.

- **Factors Impacting Response Times:** Difficult access, winter road and driving conditions, and distance to hospitals in Salmon (59 miles, 67 minutes' drive time), Arco (80 miles, 79 minutes' drive time), Rexburg (167 miles, 2 hours 48 minutes' drive time) and Idaho Falls (148 miles, 2 hours 26 minutes' drive time), all contribute to long transport and extended total call times.

- **Response to Public Lands:** Approximately 33% of Custer County's 911 calls are to incidents on public lands located in remote, mountainous regions. "The substantial amount of public and government lands in our response area contribute to long response times." Issues most impactful to response times were prioritized as: Location, Weather/Geography, Time of Day, Simultaneous Call, Personnel shortages, and Vehicle/Equipment Issues.

4.2.2. Workforce & Resource Assessment

4.2.2.1 Staffing Overview

- In terms of staffing resources, the Custer County EMS system includes a total of 42 licensed personnel and four volunteer Drivers.

- Each agency utilizes some variation of a combination of volunteers and paid-call / paid-run compensation. Two units use formal shift schedules, and one is an unscheduled system 24/7/365 where staff responds on an as-available basis. Finding enough people to fill the call schedule is a commonly shared challenge. Comments on the Resource Assessment Survey were universal in stating that across the board, 30% - 50% of the staff responded to 90% of the calls. The average age of the EMTs is 45 – 54 and all units are concerned about aging-out, retirements, and a lack of public interest in joining the EMS program. Overall staffing adequacy was rated at 40% - 50% of optimum numbers of personnel. Critical concerns relative to long-term staffing are:

- "I have half the number of people I had three years ago. No new recruits are coming into the system."
- "(The biggest issue…) is staff retention and aging of workforce."
- "Our staff is limited, and we rely on a few people for a lot of work. We have some very active EMTs that are over age 70 and when they retire it will leave a large void."

4.2.2.2. Training & Education Overview

All three organizations provide in-house training complemented by attendance at regional conferences and subscription-based online courses. The agencies have varying policies for paying for attendance at out-of-area conferences. Good working relationships with adjacent EMS agencies provide opportunities of cross-utilization of in-house instructors and the medical directors occasionally provide subject-specific training. The Physician Assistant/Ambulance Based Clinician (PA/ABC) providers in two of the units are very active in the training process. Two of the units have EMS classes in progress as of this writing, but all express frustration with "the 0% to 50% pass rate on the National Registry of Emergency Medical Technicians (NREMT) exam". All units expressed difficulty in arranging for EMS students to take the NREMT exam at College of Eastern Idaho (CEI) in Idaho Falls.

4.2.2.3. Facilities Overview

- **Station Locations:**
  - Challis – Adjacent to the Challis Area Health Clinic
  - Stanley – Attached to the Salmon River Medical Clinic
  - Mackay – Centrally located in Mackay
- **Facility Needs:** In response to RAS Q50 (Facilities), Challis and Mackay reported that current facilities met their overall needs in terms of location, condition, and size. The Stanley ambulance garage is attached to the west end of the Salmon River Clinic and was described as adequate in location and condition with a deficit for size and facility adequacy. During the site visits, it was noted that the ambulance facilities were clean, well-organized and in good repair.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Although the overall age and condition of EMS equipment were reported as adequate to meet the needs of daily operations, deficiencies were noted for ambulances, radios, and Automated External Defibrillator (AED) / Vital Signs monitors.
- **Condition:** Building maintenance and upkeep is universally performed by staff, with utilization of outside resources for maintenance and repair on an as-needed basis.

Maintenance and repair (M&R) on the ambulances is a challenge as travel is required to access qualified mechanical repair facilities.

- **Funding:** The Mackay unit recently received a Dedicated Grant award for a new ambulance and Stanley had been awarded funds for new radios. One of the agencies had capital facility improvement funds in the budget; one unit conducts an annual fundraiser for the purchase of new equipment. The county has had minimal success with grant applications, reporting two successful grant requests in the last ten years.

- **Needs/Shortages:** All the units reported a need for new ambulances.

4.2.3 Financial Overview

Each of the agencies in Custer County receives financial support from individual hospital taxing districts; two use third party companies for patient billing and one benefits from the patient billing capability of its associated health clinic. One agency reported breaking even consistently while two incur deficits most years. One agency reported anticipating a critical budget deficit in FY 2023-2024.

Key Indicators Overview	Custer County	East AOR
EMS Calls per Capita	.0665	.076
Cost per Call	$2,699.99	$979.57
Cost per Capita (annual)	$151.43	$77.43

4.2.3.1. Expense Overview

FY 2022 Expenses:	$682,364
FY 2022 Operating Expenses:	$256,959
FY 2022 Personnel Expense:	$210,615
FY 2022 Capital Expense:	$214,800 (includes $112,800 in grant funds)

4.2.3.2. Revenue Overview

Hospital Taxing District Revenues: $314,451

Grant Revenue: $112,800

Matching Funds for Grants: $102,000

Billing Revenue: $133,434

(Average billing adjustments: Gross billing vs net receipts = 30%)

Total Revenue: $662,685

Carryover/Reserve/Deficit: ($19,629)

4.2.4. Resource Assessment Additional Factors

The most critical issues referenced in "the future of EMS" (RAS Q85, 86) are:

"Retention and aging of workforce are key issues". "Long-term staffing is a huge problem". "We hope to find an innovative staffing solution to help address staffing challenges."

"The low pass rate on the NREMT exam is a problem". "EMS training and testing process needs a major overhaul."

"Due to our remote location(s) we need to upgrade communications systems, specifically the radios and availability of repeater stations."

"EMS in Idaho is provided by dedicated volunteers and paid providers. We care about our communities and the people in them but are stretched thin. Our equipment and facilities need to be upgraded regularly and our traditional volunteer base is diminishing in favor of responders who need and want to be paid and recognized for their work. We need the legislature to provide more funding at the agency level (rather than the county level) to ensure we can recruit, train, and retain staff and maintain our equipment and facilities. Traditionally training expenses are not eligible for grant funding but this is one of our greatest expenses so it would be nice to be able to apply for training grants; I think it would be easy to measure success in terms of exam pass rated, class attendees, etc."

REFERENCE LIST

[1] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[2] [3] [7] [21] Custer County, Idaho (2023). Homepage. https://custercountyidaho.org

[4] [16] [18] [19] [23] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Custer County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/custercountyidaho

[5] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[6] U.S. Department of the Interior (2022). *https://www.pilt.doi.gov*

[8] [10] [24] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/…/labor-force-statistics

[9] [11] [13] [14] University of Idaho Extension. (2023). *Indicators Idaho: Custer County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16037

[12] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Custer County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/custer?year=2023

[15] [31] Madison Memorial Health. (2023). Homepage. https://madisonmemorial.org/

[17] [20] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/Custer-county-id/

[22] Sperling's Best Places. (2023). *https://www.bestplaces.net/county*

[25] [26] Idaho Bureau of Emergency Medical Services and Preparedness (2021-2023). https://healthandwelfare.idaho.gov/providers/emergency-medical-services-ems/emergency-medical-services-ems-providers

[27] St. Lukes Wood River Medical Center. (2023). https://www.stlukesonline.org/communities-and-locations/facilities/hospitals-and-medical-centers/st-lukes-wood-river-medical-center

[28] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[29] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[30] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

FREMONT COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Located in the extreme northeast corner of the state and lacking a local critical access hospital (CAH), Fremont County's basic medical needs are met by emergency and family medicine clinics and the Fremont County Emergency Medical Services (FCEMS) system. Definitive care is provided by Madison Memorial Hospital (MMH) in Rexburg, and facilities located in Idaho Falls: Eastern Idaho Regional Medical Center (EIRMC), Mountain View Hospital, and Idaho Falls Community Hospital (IFCH). Ground transport times from scene to destination range from 25-90 minutes, depending on incident location within the county. [1] Winter weather can severely impact road conditions, from difficult to impassable, and the primary travel corridor, State Highway 20, is subject to high levels of commercial truck traffic, farm equipment movement, and heavy tourism-related travel.

Responding to over 1,000 distinct EMS calls annually, Fremont County Emergency Medical Services is a rural agency licensed at the Advanced Life Support (ALS-Paramedic)/Transport level. Coordinated by a full-time Emergency Medical Services (EMS) Director, the system is funded through billing revenues and an ambulance taxing district administered by the three elected County Commissioners that also act as the Ambulance District Commissioners. The ambulance taxing district currently has a supplemental levy in place that accounts for over half of its annual operating budget. Continuation of the supplemental levy is subject to voter approval. The agency receives sporadic support from grants and gift donations.

Typical 24/7 response staffing consists of a full-time mobile (roving) Paramedic supported by paid-call/paid-run Emergency Medical Technicians (EMTs). Three on-call EMTs are scheduled for 12-hour shifts 7am – 7pm and 7pm – 7am through three geographic units: Island Park in the north, Ashton in the center of the county and St. Anthony in the south. At full staffing, this model provides nine on-call EMTs and one on-shift Paramedic 24/7/365.

The operational ability of Fremont County EMS to consistently provide appropriate, reliable response to 911 emergencies lies in the leadership provided by the EMS Director, dedication and expertise of the mobile Paramedics, on-scene coordination of patient care by the Paramedic and available EMTs, and reliability of response vehicles. The financial viability of the agency is dependent upon the ambulance district levy, supplemental levy, patient billing income, wildland fire reimbursements, and responsible budget management. Organizational stability is predicated upon positive working relationships among the three response units, communication between the EMS Director and county officials, and active involvement of the Medical Director.

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey indicate that primary concerns for agency sustainability are the availability of qualified personnel commensurate with increasing call volume, ability to provide adequate compensation to retain and develop staff, and dependable sources of revenue.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 50/100. The agency has a 50% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "BLM" refers to the Bureau of Land Management.

Strengths	Opportunities
• Stability in leadership • Good working relationship between EMS Director and commissioners • Solid support from Medical Director • Long-term relationship with neighboring agencies • Effective third-party billing system • Positive community image and outreach • Ambulance taxing district in place	• Potential tie-ins with local clinics • Expansion of existing community education program • Future critical care designation • Stabilize financial reimbursement situation with BLM regarding responses on St. Anthony Sand Dunes • Maximize wildland fire income
Challenges	**Threats**
• Need deputy EMS Director • Facility improvements and replacement • Staffing difficulties nights/weekends • Lack of community hospital • Current staffing 80% of optimum • 67% of staff lives outside county	• Inadequate staffing in two units • Renewal of supplemental levy subject to voter approval • 68% of patient billings through Medicare/Medicaid • Billing revenue 44% of gross billings • Annual deficit

Table A: Fremont County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

The terms "Fremont County" and "Adventure Paradise" are synonymous in the lexicon of the outdoor recreationist. Bordered by Montana on the north and Wyoming on the east, Fremont is the gateway to Yellowstone National Park (YNP) and the primary access point for approximately four million park visitors annually. [2] The 10,600-acre St. Anthony Sand Dunes BLM Recreation Area typically attracts nearly 400,000 discreet users per year. [3] Fremont features other storied destinations that draw thousands of international, regional, and local visitors summer and winter alike. [4] Including the Henry's Fork River; Mesa Falls; Island Park's Big Springs and Johnny Sack Cabin; Harriman State Park; Sawtelle Peak and Two Top; and Henry's Lake, the stunning beauty of the mountains and waterways are a mecca for hikers, fly fishermen, mountain bikers, photographers, and ATV and snowmachine riders. [5]

Named for famed western explorer and military officer John C. Fremont, the county was created legislatively in 1893, the first to be established after Idaho was admitted to the Union. [6] With a long and rich history dating back to the fur trade days of the early-1800's, and currently characterized by an economy based on agriculture, light manufacturing, small business, and travel/tourism, Fremont still reflects the rural heritage of former railroad, timber, mining, and ranching industries. [7]

Fremont County has a total land area of 1,896 square miles. [8] Federal lands encompass 702,126 acres (61% of total land area) and county government received $1,345,900 in Payment In Lieu of Taxes (PILT) funding in 2022. [9,10] The City of St. Anthony (pop.3,752), located adjacent to SH-20 and the Henry's Fork River, is the county seat and benefits economically from its proximity to nearby Rexburg and Brigham Young University-Idaho (BYU-I). [11] The cities of Ashton and Island Park are bordered by national forest lands and the county boundaries include the smaller rural communities of Warm River, Drummond, Parker, Egin, Newdale, Felt and Teton. [12] While experiencing a 3.0% increase in population in 2021-2022, Fremont's annualized population growth mirrored state trends for the period 2020-2022 at 1.5%. [13] The median age of a Fremont County resident is 38 years, with 74.8% over the age of 18 and 17.3% over the age of 65. [14]

Demographic	2010	2020	2022
Population	13,242	13,388	13,978
Land Area	1,896 sq mi	1,896 sq mi	1,896 sq mi
Per Capita	7.0 PPSM	7.1 PPSM	7.4 PPSM
PPSM: *People per square mile*			

Table B: Fremont County Population & Geography

2.2 Economics

Located in the Rexburg, Idaho Metropolitan Statistical Area (MSA), Fremont County has a total civilian labor force of 7,981 and an unemployment rate of 2.7%. [15] Median household income is $61,875 with a per capita personal income (2021) of $42,503. [16] The average annual wage per job is $41,132. [17] Real per capita income in the county has risen steadily from an annual average of $27,777 in 2021 to $42,503 in 2023. [18]

From an employment perspective the largest industries in Fremont County are Retail Trade (674 people), Health Care and Social Services (630 people), and Educational Services (537 people). [19] By annual salary, the highest paying industries are Utilities ($64,306); Professional/Scientific/Technical Services ($56,250), and Public Administration ($48,693). [20] Approximately 3,691 residents, 56.3% of the workforce, work outside the county, which has significant staffing implications for FCEMS, particularly in the smaller communities where “mom and pop” retail shops and owner-operated service/trades businesses are common. [22] There are 2,617 self-employed individuals, which represents 42.0% of the workforce. [23] On the positive side, the job market has increased by 2.4% over the last year. [24] The county’s largest employers are Fremont County Joint School District, Fremont County, and the Idaho Department of Juvenile Corrections. [25] The sales tax rate is 6.0% and the grocery cost index is 91, versus 100 in the U.S. [26]

Metric	Data
Total Population (2023)	13,978
Median Age	38 years old
Poverty Rate (2023)	12.6%
Number of Jobs (2023)	6,555
Average Annual Wage per Job (2023)	$41,194
Unemployment Rate (2023)	2.7%

Table C: Fremont County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings. County Health Rankings come from the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population

Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Fremont County Rankings: Health Outcomes (9). Health Factors (15). Length of Life (10). Quality of Life (16). Health Behaviors (18). Clinical Care (24). Social and Economic Factors (11). Physical Environment (5). Fremont County's Overall Health Ranking is 10th of 43 counties.

Fremont County has 3.0 primary physicians per 10,000 population compared to the Idaho average of 6.3 per 10,000. There are currently four primary care physicians in the county, compared to two in 2016. [27]

Access to Care: Minor emergency and family practice clinics in Fremont County:

Fremont Medical Center (St. Anthony)

Grand Peaks Medical (St. Anthony)

Ashton Medical Clinic (Ashton)

Island Park Medical Clinic (Island Park)

Percentage of Population Without Health Insurance: 16.9% [28]

Insurance Payor Mix (RAS Q43): Medicare = 30%, Medicaid = 38%, Commercial/Private = 27%, Self-Pay = 5%

Crime Rate: (incidence of serious crimes): Fremont = 63/10,000 pop. Idaho = 107/10,000 pop. [29]

Housing: There are 8,806 housing units in Fremont County of which 83.3% are owner occupied. [30] County residents have an average number of 2.99 persons per household. [31] As of August 15, 2023, there are approximately 291 homes listed for sale in Fremont County with an average home value of $415,198, representing a decrease of 8.9% in value in the last year. [32] The property tax rate in Fremont County is .68% of a property's assessed fair market value. [33]

Zillow (9/23) reports the following data for the Fremont County housing market:

	Fremont County	Idaho
Median Home Price:	$415,198	$444,457
Median Monthly Rental Cost: (2 Br. Apt.):	$830/month	$1,310/month
Median Income per Household:	$61,875	$83,777
Median Income per Capita:	$40,803	$54,537

2.4. Indicator Impacts to EMS

Sperling'sbestplaces.com reports that the cost-of-living index for Fremont County ranges from 86/100 in St. Anthony to 106/100 in Island Park. Health care costs index at 95.1/100 and housing at 123/100.

Emergency and family medicine resources for Fremont County are provided by a part-time clinic (Island Park), full-time clinic (Ashton), and a two-full time clinics/family medicine practices in St. Anthony. The nearest hospital, Madison Memorial Hospital in Rexburg, is 54 miles from Island Park and 14 miles from St. Anthony. Although the services provided by the local clinics are excellent, the absence of a hospital in Fremont County significantly impacts the EMS transport system. Any emergency patient needing care beyond the capability of the clinics requires transport by ground ambulance or air medical to facilities in Rexburg, Idaho Falls, or beyond. The wait for a bed in mental and behavioral health care facilities can be substantial. The geographic orientation of the county, weather conditions, one highway route, and emergencies in remote areas frequently result in long transport times and prolonged periods of patient contact.

While the median age of county residents is relatively young (38) the percentage of the population over age 65 (18%) and the gradual aging of the general population not only impacts staffing of the EMS units as older EMTs "age out" or retire, but care characteristics and medical needs of the resident population change. The large number of employed individuals that work outside the county (3,691) compared to those that live and work in-county (1,503) limits the availability of working EMTs to fill the call schedule. Further, local businesses that are owner-operated or have small numbers of employees cannot afford to have staff leave the premises for EMS calls. On the positive side, a steady growth rate, relatively low median age, potential for affordable housing, and proximity to BYU-Idaho (Rexburg) are important sustainability factors.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In 2022, FCEMS received 1,050 calls for service, of which, 852 resulted in ambulance transport and 198 were cancelled enroute or treat/non-transport. Historically, annual call volume has increased at a rate of 1.5%-2.0%. The St. Anthony response area typically accounts for 50% of the call volume, with the balance divided roughly equally between Island Park and Ashton. Due to absence of a hospital in the county, the agency does very few interfacility transports (IFT) but does on occasion transport patients from one of the local clinics to a definitive care facility in either Madison or Bonneville counties. There were 10 such transports in 2022. Air medical is dispatched to FCEMS calls based on patient need, number of patients, scene location, and proximity of scene to definitive care facilities.

On average, annual call volume is nearly evenly split between Trauma and Medical. Cardiac and respiratory emergencies, ground level falls, motor vehicle accidents (including ATV/UTV and snowmachines) and mental health incidents are primary call types. Fremont County's suicide rate is approximately four per year. Injury motor vehicle accidents accounted for 65 calls in 2020, of which seven were fatalities. The agency does have unique emergency medical care challenges in geographic areas containing significant numbers of second- or vacation homes in that non-resident homeowners "bring their medical conditions with them" and their primary care providers are in another state. Similarly, very high numbers of tourism visitors traveling to Yellowstone National Park (nearly three million per year pass through Fremont County) and 400,000 annual patrons of the St. Anthony Sand Dunes present challenges unique to non-residents from insurance coverage and primary provider perspectives.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Fremont County EMS	706	350	1,056	852	198	1,050
Ambulance Total	706	350	1,056	852	198	1,050

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Fremont County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Fremont County EMS	9 min	11 min	21 min	49 min	96 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Fremont County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

FCEMS is dispatched through the Fremont County Sheriff's Office (FCSO) 911 center utilizing computer aided dispatch technology. Emergency Medical Dispatch (EMD) is not available. FCEMS compensates FCSO $36,000 annually for dispatch services. FCSO dispatch also provides services for multiple Fremont County departments, Search and Rescue (SAR), and the Island Park and North Fremont volunteer fire departments. The South Fremont volunteer fire department has its own dispatcher. The agency utilizes Active 911 for call specifics and GPS access. Communication in the field consists of vehicle-based mobile radios, handheld radios, and cell phones. There are areas of the county that are “black holes” for communication and areas where cell phone triangulation is not dependable.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Fremont County Emergency Medical Services	Government: County-owned	ALS – Transport	Scheduled	F/T Pd. Admin (1) Pd. Shift Medic (13) Pd. Call/Pd. Run EMT (42)

Table F: List of EMS Agencies Located in Fremont County

4.1.2.1 Agency Overview

Fully volunteer until converting to a minimally compensated paid call/paid run system in 2010, each EMS crew responds from a full-service building (“shed” in the local parlance), located in their city, that houses two ALS-level ambulances, ancillary vehicles, equipment/supplies, restroom/shower facilities, and a combined training room/report office. The Ashton shed is shared with North Fremont County Volunteer Fire Department and the St. Anthony building includes overnight sleeping quarters for the on-duty Paramedic. An additional, seasonal, EMS building is located on Bureau of Land Management (BLM) property at the St. Anthony Sand Dunes.

When fully staffed, each of the three EMS units has three EMTs on call that respond from home, work, family activities, etc. Dispatched though the Fremont County Sheriff’s 911 dispatch center, crews have first-response capability and report either to the scene or to the ambulance shed. The operational rule of thumb for first response is “don’t pass the ambulance shed to get to the scene and don’t pass the scene to get to the shed”. The units are mutually supportive; if one unit is understaffed or already deployed and a subsequent 911 call comes in, the neighboring unit can respond. EMS personnel that are highly competent in the operation of snow machines, ATVs, and the Sand Rail (used for emergency response at the St. Anthony Sand Dunes) frequently support the sheriff’s department volunteer Search and Rescue (SAR) teams (one of the highest call volume SAR units in Idaho). FCEMS supports the county’s three volunteer fire departments at structure fires and conversely, the fire departments provide extrication at motor vehicle accidents. FCEMS provides financial support for maintenance, repair, and replacement of extrication equipment.

FCEMS transports patients to Madison Memorial Hospital (Rexburg), and Idaho Falls facilities Eastern Idaho Regional Medical Center (EIRMC), Mountain View Hospital, and Idaho Falls Community Hospital (IFCH). Air medical resources (Air Methods/Air Idaho) are called on an as-needed basis based on number of patients, Mechanism of Injury (MOI)/Nature of Illness (NOI), acuity, and transport distance.

Figure G: Images of Fremont County EMS (Bob Foster photos)

4.1.3. Hospital Access Overview

East Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 S-T Elevation Myocardial Infarction (STEMI), Level 1 ICU and Level III Neo-Natal Intensive Care Unit (NIC)U facility. EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac catheter lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located near the EIRMC campus. [34]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [35]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [36]

Madison Memorial Hospital (now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI, and family medicine. [37]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Fremont County Emergency Medical Services operates in a hybrid rural/frontier environment and has adapted extremely well to the demands of its coverage area. The Paramedic chase car/first response system is very effective and well-integrated with the paid-call/paid-run on-call EMTs. The agency faces chronic critical staffing challenges in two of its units. In response to Resource Assessment Survey Q4, agency ability to sustain EMS operations long-term, FCEMS rated itself at 50/100.

- **EMS Agency Financial Situation:** Long-term financial viability is dependent upon a voter-approved supplemental levy and "gets by but experiences deficits most years." Income from wildland fire reimbursements is variable year-to-year. Revenue from the

ambulance taxing district is subject to the state-mandated 3% cap and a fixed percentage of new construction valuation. FCEMS utilizes a contract billing agency for patient billing and realizes a net billings income of approximately 44% of gross.

- **EMS Communication Strategy and Outreach:** FCEMS does not have a formal Community Health EMS (CHEMS) program but regularly conducts wellness checks as requested. The agency has a structured community outreach program and is active in conducting accident prevention and CPR/AED/First Aid classes. The agency maintains a significant number of Automated External Defibrillators (AED) located in schools and community buildings.

- **Community View of EMS Agencies:** FCEMS has a positive perception in the community and is highly regarded for its outreach programs and efforts to consistently deliver an appropriate, reliable response to medical and trauma emergencies. It has historically had a good level of involvement in local schools and community organizations. FCEMS trains regularly with the FCSO SAR unit, the county's volunteer fire departments and Air Methods/Air Idaho. FCEMS has a strong working relationship with nearby Madison County Fire/EMS.

- **Elected Official Support of EMS Agencies:** The agency is "well supported" by the county and ambulance district commissioners.

- **Agency and System Response Outlook:** Staffing levels were reported at 32/100, meaning that the personnel roster is at 32% of optimum levels. Ongoing personnel shortages were reported in two units. By most subjective standards in the EMS world, call volume approaching 1,000 incidents per year is a breakover threshold for conversion from a volunteer-based model to a full-time staffing system. Fremont has reached that threshold and current forecasts indicate that the conversion to a full-time model would cost approximately $783,000 per year.

Agency Optimism: The agency would "like to go to critical care designation. If there are no changes in funding availability and staff recruitment/retention, our ability to deliver reliable, appropriate emergency medical care will decrease as call volume increases. There is a great need for consistent, reliable funding sources and we must figure out a sustainable way to have a competent workforce available to respond to calls."

4.2.1.2 Agency Administration Overview

- **EMS Agency Structure:** FCEMS has had three agency administrators since becoming an ambulance taxing district in 1996. As mentioned above, there is currently no redundancy in the EMS Director position and a need exists for a deputy director to assist and in the absence of the Director. While somewhat unwieldy due to schedule coordination and meeting redundancy, the organizational structure of an EMS Director and presidents and elected officers in three separate units has been workable. Communication and coordination among the EMS Director, ambulance district commissioners and county staff are consistent and productive. FCEMS reflects its volunteer heritage in structure and function. Each of the three EMS units elects its own officers and has monthly unit meetings addressing scheduling,

administrative issues, and specific training topics. Call schedules are initially circulated for shift sign-up at the monthly meeting, and EMTs can track and sign up for "empty" shifts via the When-to-Work app. The EMS Director is full-time/paid supported by a part-time/paid administrative assistant. One current objective is to recruit and hire a qualified deputy EMS director that would serve various capacities, including acting as a "second in command" when the Director is off duty. The relationship between the EMS Director and ambulance district commissioners is very good and one of the commissioners is a member of the EMS Sustainability Task Force. Working relationships between FCEMS, FCSO, FCSAR, and the three volunteer fire departments are effective. The agency has positive training and working relationships with Air Methods/Air Idaho and Madison County EMS. Assistance from the EMS Bureau was available when needed. FCEMS documents run reports via written documentation during a call, from which data is then transferred to the Image Trends Elite e-PCR database. The EMS Director and Medical Director regularly conduct Quality Assurance (QA) and Quality Improvement (QI) meetings with licensed EMS staff.

- **Service Delivery Partners**: Fremont identified the Medical Director, county/ambulance district commissioners, Fremont County Search & Rescue (FCSAR), Fremont County Sheriff's Office (FCSO), and the local community as its strongest external partners. The agency has strong working relationships with Madison Memorial Hospital, Eastern Idaho Regional Medical Center, and Air Methods/Air Idaho.

- **Medical Direction:** Support from the Medical Director was rated as "strong" (80/100), and the Medical Director is actively involved in training and quality assurance.

- **Communications and Interoperability:** FCEMS utilizes 700MHz radio equipment and indicated that mobile and handheld radios were effective in terms of interoperability, quality reception, and reliable communication with other agencies and counties.

- **Mutual Aid Systems and Agreements:** Fremont reports having mutual aid agreements with Madison County EMS and Air Methods/Air Idaho. FCEMS has positive working relationships with EMS agencies in Montana to the north, Wyoming to the east, and Clark County EMS to the west. Some Fremont EMTs also hold Wyoming EMS licenses.

- **Community Health EMS (CHEMS):** The agency does not currently have a formal CHEMS program but would be interested in working with neighboring counties and health care organizations to develop one. FCEMS does substantial community outreach for education and prevention and maintains AEDs in local schools and public buildings.

- **Patient Care Documentation System:** Fremont utilizes standardized paper forms for charting in the field and transfers those notes and a formal e-PCR to Image Trend Elite.

- **Inter-facility Transports (IFT):** While FCEMS does not typically do IFTs, the agency does transport patients from the local medical clinics to definitive care facilities in Rexburg and Idaho Falls and assists Madison County EMS with IFTs on an as-needed basis. Fremont has protocols for transporting individuals that are in custody at the Fremont County Jail to the hospital, also on an as-needed basis.

4.2.1.3 Response Overview

- **Levels of Service:** FCEMS consistently provides efficient, compassionate emergency medical care to residents and visitors to Fremont County. Its long-term ability to continue to provide services is dependent upon availability of staff that will work within the paid-call/paid-run system, and a consistent, dependable source of funding. Operating at the ALS/Transport licensure level, Fremont reports that, "our staff has a positive attitude about covering gaps in the schedule and back up calls. We have close relationships with the community and are pleased to be able to provide ALS-level service in a very rural area. Our staff delivers quality emergency medical education and prevention programs to the public and we have a good relationship with local elected officials."

- **Agency Response Concerns:** In the past year FCEMS had difficulty in responding to calls 0-10 times Key concerns, however, include long response times to incidents in remote locations, particularly to the St. Anthony Sand Dunes and scenes in Island Park during severe winter weather conditions, and chronic shortage of staff availability in two of the EMS units.

- **Helicopter Response and Utilization:** The agency utilizes air medical resources under appropriate circumstances and in accordance with state protocols. Fremont is highly dependent on good working relationships with Air Methods due to the frequency of response to remote emergencies and to that end, trains regularly with Air Methods staff.

- **Factors Impacting Response Times:** Both the Ashton and Island Park units maintain a fleet of ATVs, snowmachines and med sleds for specialized response to emergencies in remote, mountainous geographic areas of the county. The St. Anthony unit stations a specially built and equipped EMS sand rail for incident response on the BLM-owned and operated St. Anthony Sand Dunes.

- **Response to Public Lands:** The agency listed the factors most impactful to response times as: Location, Geography, Weather, Simultaneous call, Personnel shortages, Time of day, and Equipment or vehicle issues. Public (USFS, BLM, State) lands comprise 61.2% of the county's land area (1,141 of 1,862 square miles) which accounts for location and geography impacts as well as increased total call times to incidents in remote locations. [37]

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** FCEMS is staffed by one full-time paid EMS Director; a part-time paid administrative assistant; 55 licensed EMS personnel, and one true volunteer. Licensure levels include Paramedic (13), AEMT (10), EMT (25), and EMR (7). 67% of the staff lives outside Fremont County.

- **Responder Average Age:** The average age of the staff is 45-54.

- **Staffing Numbers:** Future sustainability of the current staffing model was rated at 32/100, meaning that the agency has a 32% probability of being able to sustain delivery of an appropriate, reliable response to medical and trauma emergencies.

- **Staffing Concerns:** Typically, approximately 20% of the rostered EMTs take 90% of the 911 calls. The agency would like to transition to a full-time structure with critical care capability; estimated cost for this transition is $783,000 annually. The fact that 67% of the staff lives outside the county, and the economic/employment factors previously described, scheduling adequate coverage for nights, weekends, and holidays is an ongoing challenge.

- **Staffing Strengths:** Per the Resource Assessment Survey, current staffing is reported at 32% of optimum levels, with a need for 5 additional active EMTs in each of the units in Island Park and Ashton.

- **Recruitment and Retention:** The agency reports that availability of funding for full-time positions, health insurance, retirement or long-term service benefits, and scholarships for attending conferences and out-of-area training classes would enhance recruitment and retention efforts.

4.2.2.2. Training & Education Overview

EMS training at the agency level is largely dependent on in-house instructors, with support from on-line training programs, regional conferences, and the Medical Director.

FCEMS' training system consists of special subject and refresher topics taught by in-house instructors at unit meetings and on scheduled training dates, complemented by on-line subscription training courses and regional conferences. The medical director conducts periodic training for all unit members and training classes for the paramedics. The Agency conducts full EMT courses on an as-needed basis and annual refresher and optional module classes at all licensure levels.

4.2.2.3. Facilities Overview

- **Station Locations:**
  - Island Park (North end of Fremont County)
  - Ashton (Central Fremont County)
  - St. Anthony (South end of Fremont County)
  - Egin Lakes (St. Anthony Sand Dunes BLM Recreation Area)
- **Station Conditions:** Fremont states that current facilities, described previously in this report, meet operational needs in terms of location, but not size or physical condition.
- **Facility Needs:** The overall condition of the physical plants was rated 36/100, with a need for upgrades at the Ashton station, replacement of the St. Anthony station, and addition of crew quarters in Island Park. Physical plant maintenance and repair (M&R) is largely performed by the volunteer staff, with assistance from other county departments and outside vendors as needed. The capital improvement fund was described as "small."

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Vehicles, facilities, supplies, and equipment are adequate to respond to 911 emergencies. Vehicle maintenance is performed by local vendors. The agency's communications and operations equipment meet current needs. Supplies are obtained though standard EMS purchasing resources and are adequate to meet the needs of frontline and secondary ambulances. The agency maintains a central supply cache in St. Anthony, with auxiliary supply storage capability in Ashton and Island Park. Volunteer staff are responsible for ambulance stocking and inventory and each unit has a supply officer that coordinates rotation and inventory with central supply.
- **Condition:** FCEMS reports that its operational equipment and supply inventories meet current needs in terms of age/condition, functionality, and use appropriateness. The agency rates the condition of the equipment as "good-to-excellent" and attempts to use as many grant resources as possible to replace capital equipment and ambulances. The equipment used daily supports an appropriate, reliable response to medical emergencies.
- **Funding:** Future needs include patient assessment equipment that reflects upgrades in technology and communications capability.
- **Needs and Shortages:** FCEMS maintains six transport ambulances and a small fleet of ancillary emergency response vehicles. There is currently a need to replace two of the ambulances, both of which have been ordered but not delivered.

4.2.3. Financial Overview

Total income to the agency from all sources is $1,441,311, resulting in per capital cost to county residents of $134.56 annually. The current supplemental levy, which expires on 12/31/23 is $200,000 per year. A new supplemental levy in the amount of $400,000 per year takes effect 1/1/24 and lasts two years. Subsequent renewal is subject to voter approval. The agency reports that it “gets by but experiences a deficit each year.” (RAS Q5) The deficit for FY 2022 was $188,248, which deficit has historically been absorbed by budget carryover from the previous fiscal year. The supplemental levy is the mainstay of financial viability for FCEMS. FCEMS has a wildland fire program, but reimbursement revenue is unpredictable year-to-year depending on fire conditions and frequency of deployments. The agency is exploring designation as a critical care transport unit to augment patient billing income.

Key Indicators Overview	Fremont County	East AOR
EMS Calls per Capita	.077	.076
Cost per Call	$1,381.14	$979.57
Cost per Capita (annual)	$148.73	$77.43

4.2.3.1. Expense Overview

FY 2022 Expense Total:	$2,079,075
FY 2022 Operating Expense:	$382,689
FY 2022 Personnel Expense:	$889,686
FY 2022 Capital Expense:	$556,700

4.2.3.2. Revenue Overview

Patient Billing Revenue: $448,935

Collected revenue vs adjusted charges: $448,935 vs. $741,236.

(Data from Intermountain Management annual billing report, calendar year 2022)

Gross billings = $1,019,858 Net billings collection % = 44.02%

Adjustments = $319,719 (31.3%) Adjusted charges collection % = 60.57%

Other Income:

Ambulance taxing district revenue: $1,441,312 (including $200,000 supplemental levy)

Wildland Fire Deployment Reimbursement: variable year-to-year

Carryover / Reserve / Deficit: ($188,200)

4.2.4. Resource Assessment Additional Factors

Key factors for utilization of additional funding were rated in order of priority:

1. Personnel – add more employees

2. Increase pay for existing employees

3. Facility upgrades (living quarters in Island Park and building remodel/replacement in St. Anthony)

4. Provide fringe benefits

5. Training/continuing education for existing employees

6. Training new recruits

7. Equipment upgrades

"We need new station facilities for F/T staff, funding for F/T positions. (Agency) would like to go to critical care designation. If there are no changes in funding availability and staff recruitment our ability to deliver reliable, appropriate care will decrease as call volume increases. Would be nice to have a deputy director and full-time administrative assistant."

“We must figure out a consistent way to have a competent workforce available to respond to calls. Great need for consistent, reliable funding resources.”

REFERENCE LIST

[1] Idaho Bureau of Emergency Medical Services and Preparedness. (2021-2023). https://healthandwelfare.idaho.gov/providers/emergency-medical-services-ems/emergency-medical-services-ems-providers

[2] [4] [5] [6] [7] [8] [11] [12] Fremont County, Idaho (2023). Homepage. https://www.co.fremont.id.us

[3] Bureau of Land Management. (2023). https://www.blm.gov

[9] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[10] U.S. Department of the Interior (2022). *https://www.pilt.doi.gov*

[13] [14] [18] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Fremont County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/fremontcountyidaho

[15] [16] [17] [19] [20] [21] [22] [23] [24] [25] Idaho Bureau of Labor Statistics (August-September 2023).- https://lmi.idaho.gov/.../labor-force-statistics

[26] Sperling's Best Places. (2023). https://www.bestplaces.net/county

[27] [28] [29] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/.../labor-force-statistics

[30] [31] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Fremont County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/fremontcountyidaho

[32] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/Fremont-county-id/

[33] Fremont County, Idaho (2023). Homepage. https://www.co.fremont.id.us

[34] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[35] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[36] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

[37] Madison Memorial Health. (2023). https://madisonmemorial.org/

JEFFERSON COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Emergency Medical Services (EMS) for Jefferson County are provided by Mud Lake Ambulance, licensed at the Basic Life Support (BLS)/Transport level, and Central Fire District/EMS, a licensed non-transport Quick Response Unit (QRU). Mud Lake responds directly to emergency scenes and transports patients by ground ambulance or air medical (via Air Methods/Air Idaho) to definitive care facilities in Rexburg and Idaho Falls. Central Fire responds to emergency scenes and utilizes Idaho Falls Fire/EMS, through a fee-based agreement, to transport patients to definitive care facilities. Mud Lake Ambulance is funded by an ambulance taxing district and patient billing income whereas Central Fire EMS is financed through the Fire District budget. Central Fire has a structured fire-based command staff; Mud Lake is coordinated by a volunteer EMS Director and elected officers. Both agencies are staffed by volunteer Emergency Medical Technicians (EMTs).

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey (RAS) indicate that the strength of the Jefferson County EMS system lies in the leadership and professionalism of the agency administrators/EMS directors and the dedication of volunteer EMTs. The primary weakness of the system is that the non-transport QRU responds to the preponderance of 911 calls and depends on an agreement with Idaho Falls Fire/EMS for patient transport. Not only is the cost for this agreement substantial, the loss of patient billing income (a QRU does not bill patients for services) is significant. From a perspective of continuity of care and rapid transport, having a QRU respond to a scene and then dispatch another agency for transport is of questionable efficiency. It is also incongruous that one county agency is funded by an ambulance taxing district, and another is not; there is potentially an advantage in financial and operational efficiency for the county by establishing one overarching ambulance taxing district. While the system is currently functionally stable, it is threatened by its dependence on volunteer EMTs,

reliance on an annual transport agreement, and the absence of a uniform funding mechanism.

OVERALL SUSTAINABILITY RATING:

Agency responses to Resource Assessment Survey Question 4 = 65/100. The county has a 65% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "QRU" refers to a Quick Response Unit that first responds to medical and trauma emergencies but does not transport patients.

Strengths	Opportunities
• Organizational leadership • Dedicated volunteer base • Community support • Mud Lake Ambulance Taxing District • Working relationships with neighboring EMS agencies • Comparatively young median age of population • Community/population growth	• Central Fire/EMS obtaining transport designation. • Pending ability of Central Fire/EMS to implement patient billing system. • Potential for consolidation of EMS services • Creation of county-wide ambulance taxing district
Challenges	**Threats**
• Increasing costs of doing business • Staffing adequacy • Needs for transport ambulances. • Community/population growth • Need for physical plant and equipment upgrades	• Sustainability of volunteer model • Dependence on fire district funding • Dependence on Idaho Falls Fire/EMS for patient transport • Lack of billing income for QRU • Difficulty in attracting "new recruits"

Table A: Jefferson County SCOT Analysis

SECTION

2

CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

Starting in the mid-1860's as a series of stage stops on the Salt Lake City (Utah) to Virginia City (Montana) Stagecoach Line, and later named after President Thomas Jefferson, Jefferson County settlements of Market Lake, Rigby (county seat) and Ririe gained new life in the late-1870's with the arrival of the Utah and Northern Railway. Relying on a complex series of canals to deliver water from the Snake River, farm communities continued to grow as the county was created in 1913 and adopted its present boundaries in 1917. [1]

With a total area of 1,106 square miles and a 2022 population of 33,428 Jefferson is surrounded by neighboring Idaho counties of Clark, Fremont, Madison, Bonneville, Bingham, and Butte. [2] Containing the Camas National Wildlife Refuge and part of the Targhee National Forest, Jefferson encompasses 309 square miles of public land (190,191 acres) and county government received $558,762 in Payment in Lieu of Taxes (PILT) funds in 2022. [3] [4] The county is intersected by six major highways: Interstate 15, US Highway 20, and State Highways 22, 28, 33 and 48. [5] Largely dependent economically on agriculture, Jefferson encompasses the rural cities of Hamer, Lewisville, Menan, Mud Lake, Ririe and Roberts, and the unincorporated communities of Grant, Heise, Monteview, Terreton, and Rigby. [6] Rigby claims the distinction of being the birthplace of Philo T. Farnsworth, who invented the television in 1927. The "birthplace of TV" is stamped in perpetuity on the city's seal. [7]

2.1. Demographics

Due in part to its proximity to Idaho Falls, Jefferson County has outpaced the rapid growth rates of its neighboring counties, with a population increase of 18.2% between 2010 and 2020, and additional expansion of 8.2% from 2020 to 2022. [8] Jefferson has a younger population than surrounding counties, with a median age of 32.6 and 32.4% of residents under the age of 18. [9] Housing availability tracked with population growth, increasing by 9.2% to 10,865 units between 2021 and 2022. [10] 82.4% of the housing units are owner-occupied, with an average of 3.25 people per household. [11] Renters occupy 16.5% of housing units, at a median gross monthly rent of $890. [12] Currently the median household income in Jefferson is $69,097 with a per capital personal income of $42,307. [13] The median value of owner-occupied housing units in the period 2017-2021 was $245,100 compared to the current median sales price of $446,903, down 6.1% from 2021. [14] People in poverty represent 8.0% of the population, compared to 12.5% in Idaho. [15] 13,6% of individuals under the age of 65 lack health insurance, while 11.2% of residents over the age of 65 lack health coverage. [16]

Demographic	2010	2020	2022
Population	26,140	30,891	33,428
Land Area	1,106 sq mi	1,106 sq mi	1,106 sq mi
Per Capita	23.63 PPSM	27.93 PPSM	30.22 PPSM
PPSM: *People per square mile*			

Table B: Jefferson County Population & Geography

2.2. Economics

Jefferson County, located in the Idaho Falls Metropolitan Statistical Area (MSA), has a civilian labor force of 16,127. [17] With a 2023 unemployment rate of 2.7%, compared to 2.4% a year ago, Jefferson experienced an increase in the labor force of 661 people (+4.3%) in the period July 2022 to July 2023. [18] Major sources of employment by numbers of workers include Education and Health Services (1,575), Trade/Transportation/Utilities (1,418), Manufacturing (1,084), and Construction (980). [19] Significant employers are the Jefferson County School District, West Jefferson School District, Idahoan Foods, Broulim's Food Town, and Idaho Gold Corporation. [20] Local and state government jobs account for five of the top ten employers. Average annual wages range from a low of $13,862 (Leisure and Hospitality) to a high of $66,640 (Professional and Business Services). [21]

Metric	Data
Total Population (2022)	33,428
Median Age	31.9 years old
Poverty Rate (2023)	8%
Number of Jobs (2023)	16,127
Average Annual Wage per Job (2023)	$41,225
Unemployment Rate (2023)	2.7%

Table C: Jefferson County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings, indicatorsidaho.org. County Health Rankings come from the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Jefferson County Rankings: Health Outcomes (8). Health Factors (4). Length of Life (11). Quality of Life (10). Health Behaviors (7). Clinical Care (19). Social & Economic Factors (2). Physical Environment (8). [22] Jefferson's Overall Health Ranking is 9th of 43 counties. [23] The county has 1.9 primary care physicians per 10,000 population compared to an average of

6.3 in Idaho. [24] Despite recent population growth, there are the same number of primary care physicians in Jefferson (6) as there were in 2016. [25]

Access to Care:

Jefferson County residents have access locally to three family medicine clinics:

The newly created Rigby Medical Center website indicates that the Rigby Medical Center is a new emergency/family practice facility opening in September 2023.

The Community Care Rigby homepage describes the facility as a walk-in clinic that accepts Medicare/Medicaid. This facility is an affiliate of physician-owned Mountain View Hospital and provides primary and urgent care services Monday through Saturday from 8am to 8pm.

Upper Valley Family Medicine (family practice that accepts Medicare/Medicaid). Per the description of services on the facility's homepage, Upper Valley provides a full menu of care for newborns, families, adults, women, pediatric patients, and wellness/sports physicals. The facility offers minor surgical procedures and treatment for minor emergencies such as fractures and lacerations.

Definitive care at the hospital level is provided by Madison Memorial Hospital (MMH) in Rexburg and facilities in Idaho Falls.

Percentage of Population Without Health Insurance: 13.6% under age 65, 11.2% overall. [26]

Insurance Payor Mix (RAS Q43): Medicare = 16.8%   Medicaid = 8.3%   Commercial = 50.1% Other = 16.8%.

Crime Rate: (incidence of serious crimes)   Jefferson = 59/10,000 pop.   Idaho = 107/10,000 pop. [27]

Housing: There are 10,865 housing units in Jefferson County, of which 82.4% are owner-occupied. [29] As of August 15, 2023, there are approximately 327 homes for sale with a median home listing value of $446,903. [30] There are 22 rental properties available, ranging in cost from $775/month for a studio apartment to $1,575/month for a 3-bedroom 2-bath townhouse. [31] The property tax rate in Jefferson County is .61% of a property's assessed fair market value. [32]

Zillow (9/23) provides the following data regarding the Jefferson County housing market:

	Jefferson County	Idaho
Median Home Price:	$446,903	$444,457
Median Monthly Rental Cost: (2 BR Apt)	$1,081/month	$1,310/month
Median Income per Household:	$69,097	$83,877
Median Income per Capita:	$42,307	$54,537

2.4. Indicator Impacts to EMS

In 2021 Sperling'sbestplaces.com reported that the cost of living for Jefferson County (Rigby data) indexed at 101.1/100 compared to the state of Idaho at 106/100. Housing indexed at 118.8/100, grocery costs at 92.3/100 and healthcare at 107.7/100. The lower comparative percentage of Medicare and Medicaid recipients (25.1% combined) and higher percentage of commercial/other payers (66.9%) indicate the potential for higher patient billing recovery rates than in counties with twice the percentage of Medicare/Medicaid patients.

The availability of minor emergency treatment and family practice medical services is an asset for residents and visitors of Jefferson County as is access to definitive care facilities fifteen miles away in Rexburg and Idaho Falls. The comparatively higher cost of living, compounded by high monthly rents and median home prices support data showing that 30% of the working population live outside the county and 70% of employed persons commute to other counties for work. [33] These indicators contribute to difficulty in filling EMS on-call schedules for day shifts. Further, the cost of living presents challenges in developing a competitive wage structure should the local EMS agencies shift from volunteer to paid staff. In stark contrast to "aging of workforce" issues reported as critical factors in EMS staffing by neighboring counties, the young median age of county residents (31.9 years) and age of EMS personnel (45-54 years in one unit, and 35-44 years in another) may contribute to a more stable staffing resource.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In 2022 the Jefferson County EMS System (Central Fire QRU and Mud Lake Ambulance) reported a total of 1,546 EMS calls for service. Central Fire, a non-transport Basic Life Support (BLS) Quick Response Unit (QRU), recorded 1,448 EMS incidents with a "50% transport rate" and Mud Lake Ambulance, a BLS/Transport agency, reported 98 EMS incidents with 83 transports and two interfacility transfers. Patient transport on behalf of the Central Fire QRU is done by Idaho Falls Fire/EMS and Madison County Ambulance. In 2021 Idaho Falls did 640 patient transports, Mud Lake did 36, and Madison County Ambulance did 14. Both Central Fire and Mud Lake allow EMTs to respond to EMS calls in private vehicles.

Mud Lake utilizes air medical resources for "backcountry rescues, gunshot victims, gross long bone fractures and extreme head wounds due to vehicle accidents." Central Fire calls helicopters according to "state protocols, S-T Elevation Myocardial Infarction (STEMI)/time sensitive emergencies (TSE) and major trauma." With reference to EMS responses to incidents on public lands Mud Lake indicated that "distance is a major factor." Central Fire stated that "We have a technical rescue team for our recreational areas when there is a water rescue, trail rescue or high angle rescue. All is funded from fire district funds. We cross train with the outlying districts in our area and have good mutual aid with all in the community."

The call times reported below reflect Mud Lake Ambulance's call times and the call times experienced by Idaho Falls Fire/EMS and Madison County Ambulance when responding to incidents initially dispatched in Jefferson County to Central Fire QRU. [34] Procedurally, Central Fire QRU responds to a scene and subsequently requests transport support from the neighboring agencies depending on the needs of the patient(s). Response times for Idaho Falls and Madison to Jefferson are shown in the tables as "IF (Idaho Falls) for Jefferson" and "Madison for Jefferson." The Countywide Average is calculated on a straight average of total time divided by three and not adjusted for the relative call volume of each responding agency.

Agency	Transp	Non-Transp	2021 TOTAL	Transp	Non- Transp	2022 TOTAL
Central Fire/EMS	640	218	858	669	779	1448
Mud Lake Ambulance	64	36	100	83	15	98
Ambulance Total	704	254	958	752	794	1,546

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Jefferson County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
IF for Jefferson	2 min	18 min	20 min	40 min	84 min
Madison for Jefferson	1 min	19 min	21 min	43 min	91 min
Mud Lake	8 min	7 min	15 min	61 min	123 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Jefferson County (2022)

Section 4 Context

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS System Resource Assessment

4.1. County System Overview

4.1.1. Public Safety Answering Point (PSAP) Overview

Both Mud Lake Ambulance and Central Fire QRU are dispatched through the Jefferson County Sheriff's Office 911 dispatch system. Dispatchers are Emergency Medical Dispatch (EMD) qualified. Mud Lake does not pay for county dispatch services. Central Fire pays $24,000 annually for combined Fire/EMS dispatch. Both agencies utilize mobile apps and vehicle-based mobile radios, hand-held radios, and cell phones to communicate in the field. Similarly, both agencies report that their radio systems are effective in terms of interoperability features, quality reception, and interagency communication.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Central Fire QRU	Public: Non-Transport; Combined Fire/EMS	BLS	Scheduled	Volunteer/Pd Run, Paid EMS Chief
Mud Lake Ambulance	Public: Transport	Basic Life Support (BLS)	Unscheduled	Volunteer

Table F: List of EMS Agencies Located in Jefferson County

4.1.2.1. Agency Overview: Mud Lake Ambulance

Staffed by volunteers, Mud Lake Ambulance is a public agency licensed at the BLS/Transport level. Operating within a specific geographic area corresponding to the boundaries of its ambulance taxing district, Mud Lake provides EMS services to the communities of Mud Lake, Terreton, Hamer and Monteview. While the Jefferson County Commissioners also serve as the Mud Lake ambulance taxing district commissioners, Mud Lake Ambulance perceives itself as being "very separate, both geographically and otherwise, from Jefferson County and Central Fire." The agency, however, is currently working cooperatively with the county commissioners to develop stronger integration of the countywide EMS system. Mud Lake is currently staffed by a volunteer EMS Coordinator supported by elected officers, six Advanced EMTs (AEMTs), eight EMTs, and seven non-EMS licensed personnel (drivers). The agency has one EMS station in central Mud Lake housing two BLS ambulances and a training/meeting room. Non-transport EMS chase vehicles are staged in Hamer and Monteview. EMS personnel respond to incidents from home, work, or other activities and the agency allows first response to scene via private vehicle. Patients are typically transported to Madison Memorial Hospital in Rexburg and hospitals in Idaho Falls. Air medical resources are provided by Air Methods/Air Idaho.

4.2.1.2 Agency Overview: Central Fire/EMS

The Central Fire District homepage states that "The Central Fire District is composed of three full-time professionals and approximately eighty part-time volunteers that live and/or work within the areas we serve. Central Fire District is comprised of four fire stations (Rigby Fire/EMS, Ririe, Lewisville, Menan), and operates EMS Quick Response Units (QRU) in addition to providing fire protection."

Central Fire/EMS is a public agency functioning as a QRU licensed at the BLS/Non-Transport level. The agency is currently in the process of converting to a transport model and is not part of an ambulance taxing district. The agency administrators report to a five-member board of fire district commissioners. The formal management staff consists of a part-time Commissioner Secretary/Financial Manager, and full-time positions of District Chief, Assistant District Chief, EMS Chief, and Office Manager. Covering a geographic area of 220 square miles, Central Fire is currently staffed by fifty-three EMTs and eighteen non-EMS licensed response personnel and provides emergency medical services to the cities of Rigby, Ririe, Lewisville, and Menan, as well as responding on an as-needed basis to calls in nearby Madison and Bonneville counties. Central Fire has a fee-based patient transport agreement with Idaho Falls Fire/EMS in Bonneville County.

4.1.2.3 Agency Overview: Roberts QRU

While a portion of Jefferson County has been traditionally served by the Roberts QRU, the agency is currently inactive pending qualification for relicensing.

Figure G: Images of Jefferson County EMS Agencies (Bob Foster photos)

4.1.3. Hospital Access Overview

Mud Lake Ambulance transports patients to the following facilities. Central Fire/EMS is currently a non-transport agency whose patients are transported by Idaho Falls Fire/EMS to the same facilities.

Eastern Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 S-T Elevation Myocardial Infarction (STEMI), Level 1 Intensive Care Unit (ICU) and a Level II Neo-Natal Intensive Care Unit (NICU) facility. EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac catheter lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [35]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [36]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [37]

Madison Memorial Hospital (MMH; now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI, and family medicine. [38]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey and in-person and virtual contact with EMS Directors/Agency Administrators, and

other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The current viability and sustainability of Mud Lake Ambulance and Central Fire/EMS are directly correlated to the strength and dedication of local unit leadership, a long-term, experienced command staff, and the dedication of volunteer EMTs. One agency has a structured leadership succession plan, and one does not. In response to RAS Q4 (Sustainability) the Mud Lake unit rated itself at 60/100 and Central Fire/EMS reported 70/100, meaning that the units have an overall probability of 65% of being able to sustain delivery of an appropriate, reliable response to medical and trauma emergencies.

- **EMS Agency Financial Situation:** In terms of financial stability Mud Lake stated that the agency "breaks even consistently" due to support from patient billings and ambulance district taxes and Central Fire reported that in the absence of an ambulance taxing district EMS is "funded through the fire district and currently receiving nothing from the county or state for EMS coverage." Central Fire, due to its non-transport status, does not bill patients for EMS services.

- **EMS Communication Strategy and Outreach:** Neither agency currently has a Community Health EMS (CHEMS) program but "would be interested in partnering with other agencies to develop one." Central Fire/EMS has a formal, written communications and community outreach program.

- **Community View of EMS Agencies:** Both agencies are highly regarded in the community for efficiency, professionalism, and efforts to deliver an appropriate, reliable response to medical and trauma emergencies.

- **Elected Official Support of EMS Agencies:** Interaction and support from county and Fire/EMS commissioners was described as "minimal" in some area of operations and "excellent" in overall administration.

- **Agency Systems and Response Outlook:** Staffing levels were reported at 10/100 by Mud Lake and 60/100 by Central Fire, meaning that the agencies are staffed at 10% and 60% of optimum levels. Vehicles, facilities, supplies, and equipment were reported as adequate to respond to medical emergencies by both agencies. Support from the Medical Director was rated at 80/100 and perception of involvement/support from commissioners was rated as "neutral" by both units. Assistance from the Idaho Bureau of Emergency Medical Services and Preparedness ("the Bureau") (RAS Q9) was reported as "adequate" with the proviso that "it is extremely frustrating when they are not available or cannot answer a question. There are times when repeated call backs are necessary to get the info we are looking for."

- **Agency Optimism:** The organizations reported "bright spots" as, "Our EMTs are skilled and very professional. We have a great relationship with our transport service

providers and local law enforcement. Our unit is staffed with dedicated individuals that are community minded."

4.2.1.2. Agency Administration Overview

- **EMS Agency Structure:** Mud Lake Ambulance is governed by the Jefferson County Commissioners and led operationally by an elected unit president/EMS Coordinator and officers (Vice-President, Secretary/Treasurer). The unit is staffed by volunteers that respond to 911 calls on an as-available basis. The agencies identified its "bright spots" as, "we are very conservative but could prevent costly repairs by upgrading equipment and purchasing a new transport ambulance. Our EMTs are skilled and very professional. We have a great relationship with our (neighboring EMS units) and our law enforcement partners." The non-transport QRU at Central Fire/EMS operates under the direction of a formal fire-based command structure that reports to an elected board of five Fire/EMS commissioners. The operational command structure consists of the Fire Chief, Assistant District Chief, and EMS Chief, all full-time, paid positions. Command is supported by a paid full-time office manager, paid part-time commissioner secretary/financial manager, and four Battalion Chiefs attached to substations in Rigby, Ririe, Lewisville, and Menan. The Battalion Chiefs supervise a subordinate tier of Captains, Lieutenants, Tech Rescue Leaders, Fire Trainer and SCBA Technician, all of whom receive remuneration in the form of a fixed stipend and hourly rate when on call or run. The Jefferson County Commissioners execute an annual fee-based patient transport agreement with the City of Idaho Falls Fire Department. This annual fee covers all necessary ambulance transports dispatched through Central Fire District and Roberts Fire District with their Quick Response Units. As previously mentioned, the Central Fire District is in the process of transitioning to a BLS/Transport designation.

- **Service Delivery Partners:** Key partners in service delivery were reported as the Medical Director, the community and other county agencies, elected officials, and destination medical facilities in Rexburg and Idaho Falls.

- **Medical Direction:** Both agencies rated support from the Medical Director in training and chart review (medical reviews of patient care reports completed by EMS personnel) as 80/100, or "above average" and felt that medical direction was supportive of overall EMS operations.

- **Communications and Interoperability:** Jefferson County EMS units indicated that mobile and handheld radios were effective in terms of interoperability, quality reception, and reliable communication with other agencies and counties.

- **Mutual Aid Systems and Agreements:** Central Fire/EMS and Mud Lake both have mutual aid systems and agreements with neighboring EMS agencies. The Central Fire QRU has agreements with Idaho Falls Fire/EMS for patient transport.

- **Community Health EMS (CHEMS):** There are no CHEMS programs in Jefferson County but both agencies indicated that in the future they would be interested in partnering

with neighboring EMS and community health care organizations to develop CHEMS outreach protocols.

- **Patient Care Documentation System:** Both Jefferson County EMS units transfer written patient care information recorded in the field to the Image Trend Elite e-PCR system.

4.2.1.3. Response Overview

- **Levels of Service:** The individual EMS response units in Jefferson County consistently provide efficient, compassionate emergency medical care to residents and visitors to the county. Long-term sustainability is dependent upon consistent, reliable funding sources and availability of qualified EMS personnel. The agencies utilize air medical resources under appropriate circumstances and in accordance with state protocols and have strong historical working relationships with neighboring EMS organizations. Regarding their perception of the future of EMS in the community Jefferson's EMS system would benefit from the creation of a county-wide ambulance taxing district and operations personnel feel very positive about the support EMS receives from the local community. Additional items that would strengthen EMS resources are the addition of new ambulances, upgraded equipment, and enhanced training opportunities. As previously mentioned, the Central Fire QRU is in the process of transitioning to a BLS/Transport designation.

- **Agency Response Concerns:** One agency reported difficulty in responding to 911 incidents 0-10 times in 2022 and another indicated response challenges 11-20 times. See also "Factors Impacting Response Times" and "Response to Public Lands" sections below.

- **Helicopter Response and Utilization:** Both agencies utilize air medical resources under appropriate circumstances and in accordance with state protocols. Of note for dispatching rotary aircraft were "back country rescues, gunshot victims, gross long bone fractures, extreme head trauma due to motor vehicle accidents (MVA), and time sensitive emergencies (TSE)"

- **Factors Impacting Response Times:** Both agencies reported that access issues and patient transport from incidents in remote areas take first-out crews out of service for subsequent emergency calls and that finding backup crews is difficult.

- **Response to Public Lands:** In relation to responses to emergency incidents on public lands, distance, weather, terrain, and access were noted as typical challenges. Central Fire/EMS maintains "a technical rescue team for water, trail, and high angle rescues."

Regarding difficulty in responding to calls, in order of "Most Impactful" to "Least Impactful," the agencies ranked the criteria as follows:

Central Fire

1. Time of Day
2. Simultaneous Call
3. Location
4. Personnel Shortages
5. Geography
6. Weather
7. Equipment or Vehicle Issues

Mud Lake

1. Location
2. Personnel Shortages
3. Weather
4. Time of Day
5. Geography
6. Simultaneous Call
7. Equipment or Vehicle Issues

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** County-wide, Jefferson is served by six AEMTs, sixty-one EMTs, and twenty-five non-licensed EMS personnel (drivers and other technical support staff).
- **Responder Average Age:** Mud Lake Ambulance, an all-volunteer structure reports the average age of staff at 45-54 years, and Central Fire QRU, operating under a structured fire-based organizational system, has an average staff member age of 35-44.
- **Staffing Numbers:** One agency utilizes an unscheduled "respond as available" system and another has a structured shift schedule. Agencies reported staffing adequacy at 10/100 and 60/100 (10% of optimum and 60% of optimum) and indicated on-going challenges with EMS recruitment, ability to pay for shift coverage, and lack of benefits as barriers to increased recruitment/retention.
- **Staffing Concerns:** Shift coverage is difficult for daytimes and weekends. The most significant concerns/threats regarding staffing are "very few new recruits", "burn out from EMTs", "lack of ability to adequately compensate EMS staff", "too many days on call per month."
- **Staffing Strengths:** Recruitment outreach for new EMS personnel consists of word-of-mouth advertising and social media posting.

- **Recruitment and Retention:** The specific benefits that would further recruitment and retention of staff are health insurance and retirement.

4.2.2.2. Training & Education Overview

Mud Lake and Central Fire both offer in-house continuing education/refresher courses provided by resident and adjunct instructors supported by on-line training programs. Medical Director involvement in training is reported as "very good". The agencies take advantage of courses offered by neighboring EMS and health care organizations.

4.2.2.3. Facilities Overview

- **Station Locations:** Mud Lake and Central Fire/EMS report that current facilities meet their overall needs based on location, condition, and size. Each agency dispatches front line ambulances out of one centrally located station; Central Fire/EMS from Rigby and Mud Lake Ambulance from Mud Lake.

- **Station Conditions:** The current condition of physical plants is rated at 90/100 and 72/100 respectively, meaning that average overall functionality of the physical plants is 81% of the desired condition. The Mud Lake facility is an older "ambulance shed" building containing an ambulance bay, small restroom, and training/meeting room. The Mud Lake volunteer fire department facility is a short distance from the ambulance shed, and a future combined facility could possibly better serve the needs of a growing community.

- **Facility Needs:** Central Fire identified a "need to have overnight facilities in our response areas. We recently completed a five-space sleeping area in our Rigby station". Facilities maintenance is performed by volunteer staff and outside resources as needed.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Overall, the agencies feel that equipment and supplies meet current needs in reference to age/condition, functionality, and use appropriateness. EMS supplies are obtained through standard sources and there is not currently a challenge in adequately stocking the frontline ambulances.

- **Condition:** The condition of key patient care items is reported as good-to-excellent with needs for upgrades in immobilization devices, extremity splints, and a stair chair. The reliability of mobile handheld radios was described as mediocre-to-excellent depending on the environment in which they are being used.

- **Funding:** In recent years, the agencies have submitted successful applications for EMSAVE grants and grants for new radios and specialized rescue vehicles. Reserve and capital funds are described as "limited" and are a function of unapplied or "leftover" funds from operations and personnel budget line items.

- **Needs and Shortages:** There is a county-wide need for two new transport ambulances.

4.2.3. Financial Overview

Mud Lake Ambulance is funded through a combination of ambulance taxing district revenue and patient billing income. Central Fire EMS is financially supported by the fire department budget. The countywide budget total for EMS services in 2022 was $931,000 with offsets of $48,000 from the Mud Lake Ambulance taxing district and $33,000 in patient billing revenue (Mud Lake). Based on the total budget, annual per capita cost for EMS services is $27.31. Mud Lake reports "breaking even" most years but it could be argued that the Central Fire/EMS QRU operates at a deficit of $850,000 since all its funding flows through the fire department budget.

Key Indicators Overview	Jefferson County	East AOR
EMS Calls per Capita	.046	.076
Cost per Call	$580.85	$979.57
Cost per Capita (annual)	$27.31	$77.43

4.2.3.1. Expense Overview

FY 2022 Expense Total:	$931,000
FY 2022 Operating Expense:	$98,000
FY 2022 Personnel Expense:	$290,000
FY 2022 Capital Expense:	$800,000 (includes two transport ambulances)

4.2.3.2. Revenue Overview

Patient Billing Revenue: $33,000 (Gross Billings = $45,000. Adjustments = $12,0000 (26.6%)

Note: Patient billing is done by private third-party vendor

Other Income: $11,000 (donations: $10,500 Central, $500 Mud Lake)

$35,000 (Mud Lake Ambulance Taxing District)

Carryover / Reserve: $0.00

4.2.4. Resource Assessment Additional Factors

The Jefferson County EMS services both stated, "as we are a fast-growing state and county, the people moving in, and the general population expect to have these services available. When visiting with (local constituents) they are amazed that EMS is not an essential service. Even though they deny school bonds, we believe they would support ambulance/EMS (taxing) districts. It is hard to get new recruits and hard to make the existing ones feel valued and respected. (Our) biggest concern is matching payroll to number of EMS calls. It is becoming increasingly difficult to maintain on-call personnel. We need to hire more full-time personnel."

"It is hard to get new recruits and hard to make the existing ones feel valued and respected. We hope to generate new enthusiasm with a new vehicle, newer equipment, and new training opportunities."

REFERENCE LIST

[1] [5] Jefferson County, Idaho (2023). https://en.wikipedia.org/wiki/Jefferson_County,_Idaho

[2] [6] [7] [32] Jefferson County, Idaho (2023). Homepage. https://www.co.jefferson.id.us

[3] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[4] U.S. Department of the Interior (2022). https://www.pilt.doi.gov

[8] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Jefferson County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/jeffersoncountyidaho

[9] [10] [11] [12] [15] [16] [22] [24] [25] [26] [27] [28] University of Idaho Extension. (2023). *Indicators Idaho: Jefferson County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16051

[13] [17] [18] [19] [20] [21] [33] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/.../labor-force-statistics

[14] Data USA. (2023). https://www.datausa.io. i.e., *datausa.io.* (County or major city)

[23] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Jefferson County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/jefferson?year=2023

[29] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Jefferson County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/jeffersoncountyidaho

[30] [31] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/jefferson-county-id/

[33] Idaho Bureau of Emergency Medical Services and Preparedness (2021-2023). https://healthandwelfare.idaho.gov/providers/emergency-medical-services-ems/emergency-medical-services-ems-providers

[35] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[36] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[37] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

[38] Madison Memorial Health. (2023). https://madisonmemorial.org/

LEMHI COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Lemhi County is a remote, rural county located on the northcentral border of Idaho. [1] In-county access to medical care is provided by Steele Memorial Medical Center (SMMC), a non-profit 18-bed Critical Access Hospital (CAH), that includes a rural health clinic. Patients that require advanced care are transported by air medical or ground ambulance to definitive care facilities in Rexburg (156 miles, 2.5-hour drive time) and Idaho Falls (164 miles, 3.25-hour drive time). Both routes are via challenging mountain highways (US-20 and ID-28) that are treacherous to impassible during the winter.

Public emergency medical services (EMS) for the county are provided by the volunteer-based Lemhi County EMS System that includes transport ambulance units in Leadore and Salmon, as well as a non-transport QRU (Quick Response Unit) in Gibbonsville. An additional non-transport QRU located in Elk Bend ceased operations in the winter of 2023 due to lack of staffing. Lemhi County EMS has a close working relationship with Lemhi County Search and Rescue (SAR) that is state licensed at the Emergency Medical Technician (EMT)/Basic Life Support (BLS) non-transport level. The county also includes two private EMS companies; Lemhi Interfacility Transfer (LIFT) that provides Interfacility transport (IFT) services to Steele Memorial Medical Center, and Jervois Mining USA-Idaho Cobalt Operation that has a dedicated EMS unit licensed at the Advanced Life Support (ALS) Paramedic transport level. An additional EMT/BLS unit for the U.S. Forest Service (USFS) Salmon-Challis National Forest is licensed by the Idaho State Bureau of Emergency Medical Services and Preparedness ("the Bureau").

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey indicate that the Lemhi County EMS System is strong in leadership/administration and has adequate facilities, equipment and supplies to support appropriate, reliable response to 911 emergencies. Two front-line transport ambulances are

outdated and in need of replacement. The System faces substantial threats from inadequate staffing and minimal funding resources.

OVERALL SUSTAINABILITY RATING:

Agency responses to Resource Assessment Survey Question 4 = 55/100. The county has a 55% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym 'NREMT" refers to the National Registry of Emergency Medical Technicians. A "QRU" is a Quick Response Unit that first responds to medical and trauma emergencies but does not transport patients. "IFT" refers to Inter-facility Transports or Transfers from one medical facility to another.

Strengths	Opportunities
• Stability in leadership • Dedication of volunteer staff • Community support • Effective billing system: low adjusted % • Population growth rate may provide additional staff. • Aggressive training program	• Establish an ambulance taxing district. • IFTs with Steele Memorial Hospital • Develop paid staff system
Challenges	**Threats**
• Availability of new recruits • Aging of current staff • Low pass rate on NREMT exam • Current staffing 50% of optimum • Staff leaving county for day jobs. • Maintain driving skills commensurate with winter and mountain road conditions	• Lack of scheduling system in one unit leads to higher burnout rate. • Inability to attract "new recruits". • Total dependence on billing income • Off-line status of Elk Bend QRU

Table A: Lemhi County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Established in 1869 and named after Fort Lemhi, a remote Mormon missionary settlement in former Washington Territory, Lemhi County encompasses a total area of 4,569 square miles and is the fourth-largest county in Idaho by area. [2] The defining feature of the county, the Salmon River, cuts through the center of Lemhi before turning west; the county's eastern border with Beaverhead County, Montana is the Continental Divide. [3] Surrounded by the Idaho counties of Idaho, Clark, Butte, Custer, and Valley and bordered by the Montana counties of Ravalli and Beaverhead, Lemhi includes 2,641,870 acres of public lands in the Salmon, Challis and Targhee National Forests and the Frank Church - River of No Return Wilderness. [4] County government received $1,108,791 in Payment in Lieu of Taxes (PILT) funds in 2022. [5]

Rich in cultural history, human occupation of the Lemhi and Salmon Rivers dates back 14,000 years. Initially populated by the Lemhi Band of the Shoshoni Tribe, the county's first American visitors (arriving August 12, 1805) were Meriwether Lewis and members of the Lewis and Clark Expedition. [6] "For Sacajawea, their guide and interpreter, the Lemhi Valley was her birthplace and her brother, Cameahwait, was the chief of the Lemhi Band." [7] Mountain Men such as Jim Bridger and Jedediah Smith followed in the wake of the Lewis and Clark Expedition, and the first gold miners ventured into the area in 1862. [8]

Originally part of Washington Territory and designated the Idaho county of Lemhi in 1866, misplacement of the bill approving the initial legislative action led to a second passing of the bill in 1869. [9] Platted in 1867, Salmon City (Salmon) became the county seat in September of 1870. [10] The county currently includes the cities of Leadore and Salmon and unincorporated communities of Carmen, Cobalt, Elk Bend, Gibbonsville, and Lemhi. [11] Farming, ranching, mining, and the railroad industries have been followed by recreational tourism to form the basis for Lemhi's economic history. [12]

Lemhi County has experienced a post-COVID increase in population, particularly significant in the period from 2020-2022, when the population grew by 266 persons, or 3.3% [13]

Due to its mountainous geography the county has maintained a relatively low density of 1.80 people per square mile. [14] The total number of housing units was 4,590 in 2021 and 4,674 in 2022, an increase of 1.8%. [15] During the period 2017-2021, 60.4% of all housing units were owner-occupied (compared to 82.5% in 2022), 12.8% were occupied by renters, and

26.8% were vacant. [16] In 2022, the Fair Market Rent for a two-bedroom rental was $826/month, requiring a total household income of at least $33,040 per year. [17] Currently, median household income in Lemhi was $46,105 with a per capita personal income of $50,927. [18] The median value of owner-occupied housing units in the period 2017-2021 was $217,900 compared to the current median sales price of $368,410, up 4.9% from 2021. [19]

2022 U.S. Census Bureau data shows that the median age of a Lemhi County resident is 53.4 years compared to 37.4 in Idaho. 18.0% of the population is under the age of 18, 50.6% between the ages of 18 and 64 years, and 31.4% over the age of 65. Persons in poverty represent 12.4% of the population, compared to 12.5% in Idaho. [20] 13.5% of individuals under the age of 65 lack health insurance, while 11.8% of people over the age of 65 lacked health coverage. [21]

Demographic	2010	2020	2022
Population	7,936	7,974	8,240
Land Area	4,570 sq mi	4,570 sq mi	4,570 sq mi
Per Capita	1.74 PPSM	1.74 PPSM	1.8 PPSM
PPSM: *People per square mile*			

Table B: Lemhi County Population & Geography

2.2. Economics

Located in the Twin Falls Metropolitan Statistical Area (MSA,) Lemhi County has a civilian labor force of 4,102 people. [22] With a 2023 unemployment rate of 3.9%, compared to 3.6% a year ago, Lemhi experienced an increase in the labor force of 7.9% (307 persons) in the period June 2022 to June 2023. [23] Major sources of employment by number of workers include Education and Health Services (647); Trade/Transportation/Utilities (455); Public Administration (414); and Leisure/Hospitality (365). [24] Mining and construction businesses account for over 300 jobs in the county. [25] The average wage per job is $47,150 annually. [26] An estimated 43.1% of jobholders live and work in the county, another 11% are employed in the county but live outside, and 20% commute to other counties for work. [27]

Metric	Data
Total Population (2022)	8,240
Median Age	52.6 years old
Poverty Rate (2021)	12.4%
Number of Jobs (2023)	4,102
Average Annual Wage per Job (2023)	$47,150
Unemployment Rate (2023)	3.9%

Table C: Lemhi County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings, indicatorsidaho.org. County Health Ranking are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Lemhi County Rankings: Health Outcomes (39). Health Factors (27). Length of Life (41). Quality of Life (14). Health Behaviors (24). Clinical Care (14). Social & Economic Factors (36). Physical Environment (19). [28] The county's overall health ranking is 39th out of 43 counties. [19] Lemhi County has 8.0 primary care physicians per 10,000 population compared to the Idaho average of 6.3 per 10,000. [29] There are currently seven primary care physicians in Lemhi compared to five in 2016. [30]

Access to Care: The Steele Memorial website indicates that (SMMC), founded in 1950 and located in Salmon, "is the only hospital and Rural Health Clinic in Lemhi and Custer counties." "We provide a comprehensive spectrum of care for the varied health requirements of our patients throughout every stage of their lives. From our Obstetrics Services, Specialty Services to aged care, and the philanthropic Foundation, SMMC is here to keep our community living well together."

For care beyond the capabilities of SMMC, residents and visitors travel to Madison Memorial Hospital (MMH) in Rexburg (156 miles, 2.5-hour drive time) or definitive care facilities in Idaho Falls (161 miles, 2.75-hour drive time).

Percentage of Population Without Health Insurance: 13.5% under age 65, 11.8% overall. [31]

Insurance Payor Mix (RAS Q43): Medicare = 57% Medicaid = 19% Commercial = 24%

Crime Rate: (incidence of serious crimes): Lemhi = 0/10,000 pop. Idaho = 107/10,000 pop. [32]

Housing: There are 4,674 housing units in Lemhi County of which 82.5% are owner-occupied. [33] County residents have an average number of 2.31 persons per household. [34] As of August 15, 2023, there are approximately 111 properties listed for sale in Lemhi County with a median home price of $368,410, representing an increase of 5.1% in the last year. [35] Zillow.com currently lists three residential properties for rent. [36] The property tax rate in Lemhi County is 0.45% of a property's assessed fair market value. [37]

Zillow (9/23) provides the following data for the Lemhi County housing market:

	Lemhi County	Idaho
Median Home Price:	$368,410	$444,457
Median Monthly Rental Cost (2 Br Apt):	$1,430/month	$1,310/month
Median Income per Household:	$62,100	$83,877
Median Income per Capita:	$55,033	$54,537

2.4. Indicator Impacts to EMS

Sperling's bestplaces.com reports that the cost-of-living index for Lemhi County indexes at 90.4/100 compared to the state of Idaho at 106.1/100. Health care costs index at 105.4/100, housing at 97.6/100 and grocery costs at 94.2/100.

The availability of emergency and general medical care at Steele Memorial Medical Center (SMMC) is a distinct advantage to both residents and visitors to Lemhi County and as a destination facility for ambulance transports. Due to the presence of privately-owned Lemhi Interfacility Transfer (LIFT), that provides IFTs for SMMC, Lemhi EMS System is rarely called upon to make long haul transports to facilities in Rexburg and Idaho Falls. This does, however, eliminate the opportunity for IFT income to the agency. The comparatively low cost of living in the county, despite the ten-year increase in the price of homes (156%) is attractive to new residents. [38] Interview data from EMS leadership indicates that new move-ins that have previous experience in EMS and related fields have been willing to support the EMS unit. The median age of nearly 53 years tends to support anecdotal data from surrounding counties that the general aging of the population and the pending "ageing out" or retirement of current EMS personnel is of concern. Of the total workforce, 1,768 live and work in the county, while another 1,269 either live outside the county or commute to other counties for work. [39] This factor limits the availability of working EMTs to fill the daytime call schedule.

SECTION
3
CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

In 2022 the Lemhi County EMS System received 938 calls for service, which represents combined 911 call volume for the Salmon, Leadore, Gibbonsville, and former Elk Bend unit. 768 incidents resulted in patient transport and 170 were cancelled enroute or treat/non-transport. [40] The system reported having difficulty responding to calls 0-10 times in the past year. Considering that volunteer on-call EMTs are responding from home, work or other activities, the average chute time (dispatch to enroute) of 8.0 minutes is admirable.

Under appropriate circumstances Lemhi allows EMS personnel to respond to 911 emergencies via Privately Owned Vehicle (POV) and utilizes air medical resources "when the accident is too severe to handle or transport time constraints exist because of long distance from any hospital." The agency was able to respond to all 911 EMS calls in 2022 and does not have formal Memorandums of Understanding (MOU) with any neighboring EMS units.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Leadore	*21*	*14*	35	*26*	*20*	46
Salmon/Gibbonsville	*296*	*280*	576	*742*	*150*	892
Ambulance Total	*317*	*294*	611	*768*	*170*	938

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Lemhi County (2021-2022)

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Leadore	*7 min*	*8 min*	27 min	61 min	155 min
Salmon	*8 min*	*9 min*	16 min	24 min	55 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Lemhi County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

Access to calls in the non-incorporated areas of the county is challenging. The response to the Resource Assessment Survey Q3, service area geography was, "We run from the south end of Lemhi County to the Montana line (on the Continental Divide) and sometimes over that line to Hayden Creek on the north end along SH-28, 66 miles north-to-south. East to west are mountainous roads and trails from the top of the Lemhi Mountains to the top of the Beaverhead Mountains. We also run up Bannock Creek to the Montana border and cover the Little Lost River area south of the Pahsimeroi Valley. To get to this location would take us 2.5 hours on good roads with a 4X4 ambulance."

In 2022, the 911 emergency call volume for the Lemhi County EMS System was 892, of which 742 resulted in patient transport. [41] Lemhi County does not have an ambulance taxing district or provide financial support for ambulance operations. The system is funded by billing revenues and occasional grant and donation income.

4.1.1. Public Safety Answering Point (PSAP) Overview

The Salmon unit of the Lemhi County EMS System is dispatched through the Lemhi County Sheriff's office 911 system. Leadore and Gibbonsville are dispatched through State Comm (Idaho State Communications System) relay of the initial 911 call. The agencies do not provide financial support for 911 dispatch. The Code Red Emergency Alert system is utilized to communicate emergency situations to local residents. Communication in the field consists of mobile radios in the ambulances and hand-held radios and cell phones while on scene. There are geographic locations in the response area that are "dead zones" for radio and cell phone communication.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Leadore EMTs	Public/ Transport	BLS/ Transport	Scheduled	All Volunteer
Lemhi County EMS System: Salmon	Public/ Transport	BLS/ Transport	Scheduled	Paid-Call/Paid Run
Gibbonsville QRU	Public Non-Transport	BLS/Non-Transport	Unscheduled	All Volunteer

Table F: List of EMS Agencies Located in Lemhi County

4.1.2.1. Lemhi County EMS System Overview

Historically separate EMS units but presently operating under one state license, the Lemhi County EMS System is a public agency funded entirely by patient billing income. The system consists of EMS units based in Leadore (BLS-Transport), Salmon (BLS-Transport) and Gibbonsville (QRU). A QRU unit located previously in Elk Bend is currently out of service due to lack of staffing. The coverage area for the comprehensive EMS system is "all of Lemhi County (4,569 square miles) in central Idaho. (We have) occasional runs into neighboring southern Montana and neighboring Idaho counties to the east, west, south." The system is supervised by a paid, part-time EMS Director that also serves as the Lemhi County Emergency Manager.

Staffing in the Salmon unit is on a scheduled shift, paid-call/paid-run system. The unit maintains a four-bay ambulance building in central Salmon that also houses an office and training center, as well as storage for equipment and supplies. Leadore and Gibbonsville are all-volunteer, unscheduled, always-on-call units. Gibbonsville QRU (26 miles from Salmon) maintains two unmanned response stations and responds to incidents via chase car. Leadore (46 miles from Salmon) operates under the direction of an elected unit president and officers and maintains one ambulance "shed" housing two ambulances. EMS personnel from all units respond to incidents from home, work, or other activities and the system allows first response to scene via private vehicle.

The Lemhi EMS System transports patients to Steele Memorial Hospital in Salmon, Madison Memorial Hospital (MMH) in Rexburg and Idaho Falls facilities Eastern Idaho Regional Medical Center (EIRMC), Mountain View Hospital, and Idaho Falls Community Hospital IFCH). Air medical resources (Air Methods/Air Idaho) are called on an as-needed basis based on number of patients, Mechanism of Injury/Nature of Illness (MOI/NOI), acuity, distance to definitive care, and availability of ground transport personnel.

4.1.2.2. Agency Overview: Salmon EMS

The licensed staff of the Salmon unit consists of three EMRs and twelve EMTs. There are two volunteer drivers on the roster. The average age of a Salmon EMT is 45 – 54. Ambulance personnel have a scheduled, paid call/paid run system, and respond to 911 calls either from home, work, or other activities. The unit's four ambulances are housed in a centrally located facility in Salmon. Key support systems for the agency were listed as: Medical Director, Lemhi County Sheriff's Office (LCSO), Lemhi County Search and Rescue (LCSAR), county commissioners, community members and Steele Memorial Hospital.

Figure G: Images of Lemhi County (Bing: stock photos)

4.1.2.3. Agency Overview: Leadore Ambulance

The Leadore unit of the Lemhi County EMS system covers the southern end of the county and supports Salmon and Gibbonsville on an as-needed basis. The unit is entirely volunteer and the thirteen EMTs and two drivers on staff respond on an as-available basis. Leadore's activities are coordinated by an elected board of officers that work in conjunction with the EMS Director in Salmon and share the same Medical Director. The Leadore unit has one building housing two ambulances.

4.1.2.4. Agency Overview: Gibbonsville QRU

The Gibbonsville QRU is staffed by three EMS personnel and one driver. Staff respond to 911 emergencies in either private vehicle or EMS chase cars. Gibbonsville operates under the supervision of the System EMS Director and Medical Director.

4.1.2.5. Agency Overview: (Lemhi Inter-Facility Transfer (LIFT)

The following quotes are from the contractual agreement between LIFT and Steele Memorial Hospital and are used with the expressed permission from LIFT owner and CEO Gina McFarland, Registered Nurse, Ambulance Based Clinician (RN, ABC).

"The expressed purpose of LIFT is primarily to transfer patients who have been thoroughly evaluated in the emergency department or medical/surgical department and are requiring definitive care that cannot be administered in the critical access setting."

Licensed at the Advanced Life Support (ALS)-Transport level, LIFT has one ambulance that is staffed by RN/ABC providers that are employed by Steele Memorial Hospital and contracted to LIFT. LIFT frequently uses licensed EMTs from the Lemhi County EMS System as drivers, paid on a per trip basis. The LIFT staffing model "ensures that adequate staffing and needed medications will be available for each ground transfer and that each transfer will be done with licensed professional staff to promote a safe and effective transfer."

Providing approximately 40 – 50 transfers annually, LIFT operates on a break-even basis through patient billings to Medicare, Medicaid, and private insurers, and a flat fee per transfer agreement with Steele Memorial Hospital that is specific to patient transports from outside facilities to swing bed care at Steele. "LIFT receives no grants or outside money to maintain the business which makes sustainability a challenge." Transfer destinations are "approximately 75% to EIRMC, 20% to either Providence St. Patrick Hospital or Community Medical Care in Missoula, Montana and the remainder to Idaho Falls Community Hospital."

4.1.3. Hospital Access Overview

EMS units in Lemhi County transport patients to Steele Memorial Medical Center (SMMC) that "is a non-profit 18 bed Critical Access Hospital (CAH). SMMC is a Medicare Certified, Level IV Trauma Center, with an associated Rural Health Clinic. The SMMC website states that "(Steele) provides a comprehensive spectrum of care for the varied health requirements of our patients throughout every stage of their lives."

Ambulances from Lemhi also transport patients to definitive care facilities in Missoula Montana, Rexburg and Idaho Falls, Idaho.

East Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 S-T Elevation Myocardial Infarction (STEMI) Level 1 Intensive Care Unit (ICU) and Level III Neo-Natal Intensive Care (NICU) facility. EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac cath lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [42]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [43]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [44]

Madison Memorial Hospital (MMH; now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service

24/7/365 Emergency Room (ER), labor and delivery, orthopedic surgery, MRI, and family medicine. [45]

Providence St. Patrick Hospital. Located in Missoula Montana, St. Patrick's provides definitive care for procedures ranging from pulmonary and lung surgery to cardiac care and orthopedic surgery. [26]

Community Medical Center, Missoula Montana. Community Medical Center offers a wide range of health care services, including emergency medicine, cancer care, heart care, maternity care, and surgical services. [46]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** The current sustainability of the Lemhi County EMS system is directly related to the strong leadership provided by the EMS Director, president of the Leadore EMS unit, and members of the Gibbonsville QRU. The availability of trained, dedicated volunteers is crucial to the ability of the units to respond to emergency incidents.

- **EMS Agency Financial Situation**: In response to RAS Q5 (financial situation), Leadore states that the unit is "breaking even consistently.". Salmon reports that "we get by but have deficits most years." The county EMS system's total dependence on patient billing income is a critical factor for long-term sustainability.

- **EMS Agency Communications Strategy and Outreach:** The Lemhi County EMS System does not have a Community Health EMS (CHEMS) program and develops a structured community outreach and strategic plan on an annual basis. The individual units are active in local and regional community events.

- **Community View of EMS Agencies:** The Lemhi System feels well-supported by the community and Medical Director, that it has a positive working relationship with local elected officials, and "somewhat agrees" that it is well-supported by the Bureau.

- **Elected Official Support of EMS Agencies**: Because the EMS Director has a dual role as the County Emergency Manager, communication with elected officials is frequent and working relationships positive.

- **Agency & System Response Outlook**: Lemhi stated that "We can barely cover our own call volume and would not have the capability to absorb calls from neighboring

counties." Staffing was reported at 19/100, or 19% of optimum levels, with ongoing personnel shortages in all units. Vehicles, facilities, equipment, and supplies are adequate to respond to 911 emergencies. The system rated its combined sustainability factor at 55/100. Lemhi is concerned that "we barely scrape by each year and there is no fallback plan. We are at the mercy of the county budget and have no separate taxing authority. We do not expect any exciting progress in these areas." With reference to "bright spots," respondents stated that, "Our organization is very good at working together and giving the patient the best care possible with the time we have with them. We work well with the other EMS agencies around us."

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** The Lemhi County EMS System ("Lemhi") is administered by a part-time EMS Director that also serves as the County Emergency Manager. The Leadore EMS unit is governed by officers (President, Vice-President, Secretary/Treasurer) that are elected annually. In total, "Lemhi County Emergency Management is the local government agency responsible for disaster preparedness and the coordination of response to emergencies (EMS) and disasters. This department works closely with other local agencies, volunteer organizations, state, and federal agencies to help our community prepare for natural, man-made disasters, and emergencies. Lemhi County Emergency Services provides 24-hour service through the dedication of Emergency volunteer staff." [47] The current viability and sustainability of the Lemhi County EMS System are directly correlated with the strength and dedication of the EMS Director and local unit leadership. The individual EMS units have experienced and capable leaders, but lack of a structured succession plan is a potential threat to long-term organizational stability.

- **Service Delivery Partners:** Key partners in service delivery were reported as the Medical Director, other county agencies (law enforcement and Search and Rescue), county commissioners, Steele Memorial Hospital, and community members.

- **Medical Direction:** As a system, Lemhi rated Medical Director involvement in training and chart review as 51/100, or average. All units agreed, however, that overall support of EMS operations by the Medical Director was very good.

- **Communication and Interoperability:** The most remote units of the Lemhi County EMS System reported that mobile and handheld radios were deficient in terms of interoperability, quality reception, and reliable communication with other agencies and counties. Radio functionality was better in the more populated areas near Salmon. Mountainous terrain and location of repeaters was cited as contributing factors for substandard radio communication capability.

- **Mutual Aid Systems and Agreements:** The "umbrella licensing structure" of Lemhi County EMS leads to some confusion on this question as the individual units maintain a certain "separateness" from the overall system. The individual organizations, however, have a strong mutual support relationship that has

developed over time. No formal written agreements with neighboring EMS agencies were noted.

- **Community Health EMS (CHEMS):** Although there is a basic awareness of CHEMS programs, no formal structures exist in Lemhi County.

- **Patient Care Documentation System:** Lemhi documents run reports in written form during a call then transfers data to the Image Trends Elite e-PCR database.

- **Inter-facility Transports (IFT):** All Inter-facility patient transport from Lemhi County to definitive care facilities is done by the private LIFT company described in Section 4.1.2.4 above.

4.2.1.3. Response Overview

- **Levels of Service:** The Lemhi County EMS System consistently provides efficient, compassionate emergency medical care to residents and visitors of Lemhi County. Its long-term ability to continue to provide consistent services is dependent upon availability of staff that will work within the volunteer and paid call/paid run systems and consistent, dependable sources of funding. The system has both informal working agreements in place with neighboring agencies but is at service capacity. If a neighboring agency should cease to operate, "it would have a bad impact on us because we don't have the resources to help those in need. We are also a great distance from other support agencies."

- **Agency Response Concerns:** All agencies within the Lemhi County EMS System reported having difficulty responding to 911 incidents "0-10 times" in 2022. Reflecting similar staffing issues in neighboring counties, however, the lack of availability of backup staff when the first-out crew is engaged or on a long transport, is of substantial importance. See also "Factors Impacting Response Times" and "Response to Public Lands" below.

- **Helicopter Response and Utilization:** Air medical is requested based on "distance, patient acuity, Mechanism of Injury (MOI)/Nature of Illness (NOI), and factors involving weather conditions and availability of ground transport personnel." "We call for a helicopter when the accident is too severe for (our ambulance) to handle the transport or time constraints because of long distance from any hospital."

- **Response to Public Lands:** Approximately 5% of Lemhi's calls are to public lands and the system responds regularly to incidents in remote, mountainous geographic regions. "When trailheads and roads are closed, that impacts us greatly because that increases the amount of time it takes us to get to the persons that are injured. It also takes search and rescue (SAR) longer to respond." "We cooperate with Search and Rescue (SAR) and helicopters on backcountry calls. Backcountry calls typically take six-to-eight hours." The issues that were impactful to response times were identified as: Location, Geography, Personnel shortages, Weather, Time of Day, Equipment or vehicle issues, and Simultaneous call.

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** Staffing adequacy was rated at 40/100 for Leadore and 19/100 for Salmon and Gibbonsville, meaning that the units are staffed at 40% and 19% of optimum levels.

- **Responder Average Age:** The average age of a Lemhi County EMT is 45-54.

- **Staffing Numbers:** The Lemhi County EMS Systems is staffed by a total of twenty-seven EMTs, four EMRs, and five Drivers.

- **Staffing Concerns:** The biggest concerns or threats regarding staffing are: "Ability to recruit new people and retain the ones we have. We do recruitment through word of mouth and social media. No one wants to volunteer, and we can't keep enough people to go on runs or are interested in taking the (training) classes." Regarding shift coverage issues, responses were, "We don't have shifts; we are all volunteers and respond when needed for an ambulance call no matter what we are doing." "It is very difficult to fill the shifts." "We are very short staffed due to recent injuries to people that covered a lot of shifts. Two EMTs had to take work leave to work outside the county." "Some of our (more senior) EMT's would be finished now but they still feel the need to help more than the need to walk away because of health or burnout."

- **Recruitment and Retention:** The top priorities for benefits that would enhance recruitment and retention were health insurance, a structured Cost of Living Adjustment (COLA) plan, and increased pay.

4.2.2.2. Training & Education Overview

Lemhi reported that "We have a strong training program and staff divides up work assignments for building and vehicle maintenance." "All training is done in-house with our training officer, and we try to stay in-county and as regionally as possible. It is very difficult to recruit new people and (we) have challenges with the National Registry of Emergency Medical Technicians (NREMT) exam pass rate. We are currently (Spring, 2023) doing an EMR class. Classes two nights a week and every other Saturday."

4.2.2.3. Facilities Overview

- **Station Locations:** The agency maintains a fleet of four ambulances stationed in Salmon, two ambulances stationed in Leadore, and two chase vehicles assigned to Gibbonsville. There is a need for three new ambulances; three of the first-out ambulances are 2007 and 2008 models.

- **Station Conditions:** The overall condition of facilities (ambulance buildings) was rated at 51/100. Building and vehicle maintenance is performed by EMS volunteers and local professional resources as needed.

- **Facility Needs:** Lemhi reports that the agency's facilities meet current needs in terms of location and condition, but not size.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The system's equipment and supplies meet needs in terms of age/condition, functionality, and use appropriateness. EMS supplies are obtained through standard sources and there is not currently a challenge in adequately stocking the frontline ambulances.

- **Condition:** The condition of key patient care items is rated from mediocre to excellent. The functionality of mobile and handheld portable radios is evaluated as mediocre to good.

- **Funding:** "Mostly, we have applied for grants or purchased needed equipment with rainy-day funds to keep up with technology and new medical devices requirements. We have a capital reserve fund. We do a good job of keeping ahead and planning." The agency received a grant in 2022 to provide a patient loading system in one of the ambulances stationed in Leadore.

- **Needs and Shortages:** The system reported current needs for upgrades in stair chairs and scoop stretchers.

4.2.3. Financial Overview

Lemhi County EMS System is not part of an ambulance taxing district and other than a stipend for the EMS Director, does not receive county funding support. Income consists of patient billing revenue, occasional grants, and donations from fundraising. Total 2022 income from all sources was $275,000. Based on total budget, per capita cost for EMS services is $33.73 annually but since expenses are covered by billing revenue, there is no direct cost to Lemhi residents. The system reports that while it sometimes breaks even, it experiences a funding deficit most years. "We are concerned about getting paid from people we transport that don't pay their bill and having enough money to buy and upgrade our equipment."

Key Indicators Overview	Lemhi County	East AOR
EMS Calls per Capita	.114	.076
Cost per Call	$293.18	$979.57
Cost per Capita (annual)	$33.73	$77.43

4.2.3.1. Expenses Overview

FY 2022 Expenses: $275,264

FY 2022 Personnel Expense: $133,000

FY 2022 Operating Expense: $82,324

FY 2022 Capital Expense: $60,000

4.2.3.2. Revenue Overview

Patient Billing Revenue: $275,000 (Gross Billings = $311,973. Adjustments = $44,447 (14.24%) Note: Patient billing done by county clerk

Other Income: $0.00

Carryover/Reserve/Deficit: ($264.00)

4.2.4. Resource Assessment Additional Factors

Utilization of additional funding, if available. Key factors were rated in order of priority.

1. Personnel – add more employees

2. Increase pay for existing employees

3. Provide fringe benefits

4. Training existing employees/continuing education

5. Training new recruits

6. Equipment upgrades

7. Facility upgrades

In summary, the agency stated that, "We are concerned for the future of our organization because of our location in a very small community, and don't have the resources or funds to hire and pay EMS. We also struggle with recruiting people from the community to take the EMT course because we cannot offer pay or any benefits. Being situated on one of Idaho's busiest highways, we could be in a bad situation if we run out of people to volunteer as EMTs."

"For FY 2023 the Salmon EMTs went over $22,000 in personnel expenses from what was budgeted. We do not see that income from billing would make up for that $22,000. At this

point I would like to give a pay increase to the 13 EMTs that are running 24/7 to keep coverage in Lemhi County. The feedback I am getting from my volunteers is that we are tired and burnt out and that at the end of the day getting a paycheck is at least some incentive to run as much as we do."

"We need more financial support from the State. Whether that financial help looks like providing the EMTs insurance or helping rural agencies pay their volunteers, it is very strenuous to put that much work and effort into something and not be benefitted or receive any aid from it in any way. That is why we are struggling to find people to volunteer. If agencies like ours were able to receive just a small amount of funding to help provide a small salary or insurance, maybe we would have better luck getting more people to be EMTs."

REFERENCE LIST

[1] [11] [12] [37] Lemhi County, Idaho (2023). Homepage. https://www.lemhicountyidaho.org

[2] [3] [6] [7] [8] [9] [10] [14] Lemhi County, Idaho (2023) https://en.wikipedia.org/wiki/Lemhi_County,_Idaho

[4] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[5] U.S. Department of the Interior (2022). https://www.pilt.doi.gov

[6] [7] [8] Lemhi County, Idaho (2023) https://en.wikipedia.org/wiki/Lemhi_County,_Idaho

[13] [15][16] [33] [34] [38] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Lemhi County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/lemhicountyidaho

[17] Data USA. (2023). https://www.datausa.io. i.e., *datausa.io.* (County or major city)

[18] [20] [22] [23] [24] [25] [26] [27] [39] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/.../labor-force-statistics

[19] [35] [36] Zillow. (2023). Lemhi Home Prices & Home Values / Zillow. https://www.Zillow.com/Lemhi-County-Id/

[21] [28] [29] [30] [31] [32] University of Idaho Extension. (2023). *Indicators Idaho: Lemhi County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16059

[40] [41] Idaho Bureau of Emergency Medical Services and Preparedness (2021-2023). https://healthandwelfare.idaho.gov/providers/emergency-medical-services-ems/emergency-medical-services-ems-providers

[42] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[43] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[44] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

[45] Madison Memorial Health. (2023). https://madisonmemorial.org/

[46] St. Patrick's Medical Center, Missoula MT. (2023). https://www.providence.org/locations/mt/st-patrick-hospital

[47] Lemhi County, Idaho (2023). https://www.lemhicountyidaho.org

MADISON COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

The Madison County Fire Department (MCFD) homepage describes the department as being "Dedicated to protecting the lives and property of Madison County's residents, the Madison Fire Department maintains a standard of excellence in Firefighting, Emergency Medical Services (EMS), Rescue, Fire Prevention, Education, and Community Service. The Madison Fire Department is a well-coordinated team of professionals who serve the community with Integrity, Honor, Pride, and Courage".

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey (RAS) indicate that Madison Fire/Emergency Medical Services (EMS) is strong from organizational, operational, and management/leadership perspectives; the key challenges for the agency are staffing and funding. Citing difficulty in developing a competitive wage structure and the need for ongoing funding adequate to compensate for increased costs of doing business, Madison has been creative and innovative in budget management and identification of revenue producing programs in education, training, and wildland fire. Madison has good to excellent physical plants and the necessary EMS equipment and supply resources to consistently deliver appropriate, reliable responses to emergency medical and trauma incidents. The organization has an excellent reputation for integrity and professionalism in the local and regional community. Madison's objective for the utilization of potential new funding is to "increase service capacity."

Despite its organizational and operational strengths, however, Madison faces serious ongoing challenges in developing adequate funding for a competitive salary and benefits structure and faces critical needs in recruiting qualified EMS personnel.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 85/100. The agency has an 85% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources. The acronym "BYU-I" refers to Brigham Young University-Idaho. "IFT" refers to Inter-Facility Transports whereby the ambulance service transfers patients from one medical facility to another.

Strengths	Opportunities
• Dynamic, experienced, long-term leadership • Supportive governing board relationships • Positive community and peer perceptions • Efficient budget management • Paramedic training program • Robust wildland fire program • Updated physical plants. • Formal career progression system • Effective patient billing system • Availability of local/regional healthcare resources • High incidence of health insurance coverage	• Revenue-based EMS training programs • IFT income maximization • Resort tax • Workforce availability from BYU-I EMS
Challenges	**Threats**
• 55% of real property in county is non-taxable: govt., religious, education. • No resort tax mechanism • Escalating housing cost • Reliance on grants, wildland fire income • Avg. line staff length of service: 1-2 years • Rapid population growth	• Inability to provide a competitive wage • Lack of flexibility in taxing district levy rates • Trained staff migrate to larger, better-paying Fire/EMS agencies. • Inconsistent funding sources

Table A: Madison County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

With a footprint of 473 square miles and 2022 population of 54,976, Madison County is the third-smallest county in Idaho by geographic area and seventh-fastest- growing by population. [1] Originally settled by members of the Church of Jesus Christ of Latter-day Saints, the county was part of neighboring Fremont County prior to being separately designated and named for U.S. president James Madison in 1913. [2] Located in Rexburg and founded as the Bannock Stake Academy in 1888, privately-owned Brigham Young University-Idaho (formerly Ricks College and now commonly referred to as BYU-I) spans 430 acres with over 40 buildings and has an annual enrollment of more than 32,000 students. [3]

Located in Idaho's Upper Snake River Valley, Madison is bordered by the counties of Fremont (north), Teton (east), Bonneville (south), and Jefferson (west). It is intersected by major highways US 20 and SH 30 and contains part of the Targhee National Forest. Incorporated cities include Rexburg (county seat) and Sugar City, with the unincorporated communities of Archer, Burton, Thornton, and Hibbard. [4] [5] Madison contains 103 square miles of public lands (63,115 acres) and county government received $138,137 In Payment in Lieu of Taxes (PILT) funds in 2022. [6] [7]

Due to its proximity to Idaho Falls and location of BYU-Idaho, Madison County has mirrored the rapid post-COVID growth rates of its neighboring counties. Between 2020 and 2022 the population increased 5.8%, from 52,908 to 55,989. [8] The median age of a Madison County resident at 23.5 years, the lowest in the United States, reflects the presence of the BYU-I student population. [9] Persons under the age of 18 represent 27.1% of the population and persons aged 65 years and older, 6.9%. [10] As of July 1, 2022, 50.8% of Madison's 15,187 housing units were owner-occupied with a relatively high average of 4.49 persons per household. [11] City-Data.com reports that as of September 2023 renters make up 44.5% of the population and renter-occupied apartments increased from 2,907 in 2000 to 5,492 presently, again reflecting the influence of the student population. The median value of owner-occupied housing units in the period 2017-2021 was $260,600 compared to $400,226 today. [12] The percentage of persons in poverty is reported at 24.3% (compared to 12.5% in Idaho), median household income at $53,498, per capita income at $25,648, and unemployment rate at 2.6%. [13]

Demographic	2010	2020	2022
Population	37,536	52,913	55,989
Land Area	473 sq mi	473 sq mi	473 sq mi
Per Capita	79.4 PPSM	111.8 PPSM	118.4 PPSM
***PPSM:** People per square mile*			

Table B: Madison County Population & Geography

2.2. Economics

Madison County, located in the Idaho Falls Metropolitan Statistical Area (MSA) and Rexburg micropolitan area, has a civilian labor force of 24,160, and a 2023 unemployment rate of 2.3%. [14] Major sources of employment by numbers of workers include Education and Health Services, (reflecting the presence of BYU-I, District 7 Public Health, and Madison Memorial Hospital), at 5,506 jobs; Trade/Transportation/Utilities at 3,400, Professional & Business Services at 2,198, and Manufacturing at 1,035. [15] Significant employers are BYU-I, Madison School District, Madison Memorial Hospital, Wal-Mart, Melaleuca, and the City of Rexburg. [16] Average annual wages range from a low of $30,789 (Professional & Business Services) to a high of $44,734 (Education & Health Services). [17]

Metric	Data
Total Population (2023)	55,989
Median Age	23.5 years old
Poverty Rate (2021)	24.3%
Number of Jobs (2023)	24,160
Average Annual Wage per Job	$38,573
Unemployment Rate (2023)	3.9%

Table C: Madison County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings (indicatorsidaho.org). County Health Ranking are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Madison County Rankings: Health Outcomes (6). Health Factors (3). Length of Life (2). Quality of Life (19). Health Behaviors (6). Clinical Care (8). Social/Economic Factors (1). Physical Environment (38). [18] Madison's Overall Health Ranking is 6th of 43 counties. [19]

The county has 4.9 primary care physicians per 10,000 population compared to 6.3 per 10,000 in Idaho. [20] There are 26 primary care physicians in Madison compared to 27 in 2016. [21]

Access to Care:

A basic Google search lists the following family medicine clinics in Madison County:

Complete Family Care (Rexburg).

Upper Valley Family Practice (Rexburg).

Seasons Family Medicine (Rexburg).

Rexburg Medical Clinic (Rexburg).

Fall River Medical (Rexburg).

Vista Health Care (Rexburg).

Madison Health Family Medicine (Rexburg).

In addition to two health departments, Eastern Idaho Public Health District (EIPH) and Rexburg Health Department, the county also features a wide variety of specialty care facilities ranging from medical imaging to orthopedic/spinal medicine and eye care/surgery.

Definitive care at the hospital level is provided by Madison Memorial Hospital (MMH) in Rexburg and facilities in Idaho Falls.

Percentage of Population without Health Insurance:9.4% under age 65, 7.3% overall [22]

Insurance Payor Mix (RAS Q43): Medicare = 38%   Medicaid = 25%   Self-Pay = 10%

Commercial = 30%

Crime Rate (incidence of serious crimes): Madison = 30/10,000 pop.   Idaho = 107/10,000 [23]

Housing: Housing units in Madison increased 9.0% from 13,938 in 2021 to 15,187 in 2023, of which 50.8% are owner-occupied. [24] Nearly 5,500 housing units are renter-occupied, again reflecting the student population at BYU-I. [25] As of 9/9/23 there are approximately 200 homes for sale in Madison County with a median listing price of $400,226, down 6.0% from 2022. [26] Median home prices in Rexburg have remained constant over the last year, at $545,000. [27] Zillow.com currently lists 47 rental properties in the county with monthly rents ranging from $900 for a one-bedroom to $1,500+ for three-bedroom units. Out of 44 counties in Idaho, Madison has the 11th highest property tax rate at 0.76% of assessed fair market value ($7.60 for every $1,000 of real estate value). [28]

Zillow (9/23) provides that following data for the Madison County housing market:

	Madison County	Idaho
Median Home Price:	$400,226	$444,457
Median Monthly Rental Cost:	$900-$1,500	$1,130
Median Income per Household:	$53,498	$83,877
Median Income per Capita:	$25,648	$54,537

2.4. Indicator Impact for EMS

Sperlings bestplaces.com reports that the cost of living for Madison County indexes at 93.4/100 compared to the state of Idaho at 106/100. Housing indexes at 108.9/100, grocery costs at 92.2/100 and healthcare at 113.7/100. These indicators, combined with high median rents and home prices, contribute to significant challenges in developing a competitive wage structure for EMS personnel that is sufficient to support in-county residence.

From a shift-coverage perspective, Madison shares potential challenges for staffing, scheduling, and local residence. Of a total civilian work force of 24,160 the Idaho Bureau of Labor Statistics reports that 34.4% of workers live and work in the county, 31.7% are employed in Madison but live outside, and 31.1% commute to other counties for work. The young median age of county residents and the presence of a large student population at BYU-I creates potential for staff recruitment from a wide range of demographic profiles.

Although patient billing income is potentially enhanced by the high number of residents with health insurance, the percentage of Medicare and Medicaid recipients (63%) contributes to lower reimbursement rates for emergency medical services.

The availability of a large array of local and regional healthcare providers, the presence of Madison Memorial Hospital, and proximity to definitive care facilities in Idaho Falls, are significant factors contributing to the effectiveness and degree of utilization of emergency medical services.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS System Demand

3.1. Call Volume Overview

In 2022 Madison Fire/EMS reported 2,389 EMS 911 calls for service of which 1,633 (68.4%) resulted in patient transport. Nearby Fremont County Emergency Medical Services responded to 40 EMS calls in Madison County. Madison EMS personnel respond while on shift and do not respond to calls in private vehicles. The agency reports being able to make an appropriate response to all emergency incidents. Madison uses standard criteria of distance, patient acuity, most appropriate destination, and availability of ground transfer resources, for utilization of air medical provider(s) (Air Methods/Air Idaho).

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non-Transp*	2022 TOTAL
Madison Fire/EMS	*911*	*882*	1,793	*1,633*	*756*	2,389
Ambulance Total	*911*	*882*	1,793	*1,633*	*756*	2,389

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Madison County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Madison Fire/EMS	*1 min*	*6 min*	7 min	32 min	63 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Madison County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

Emergency medical services in Madison County are provided by Madison County Fire/EMS, a full-time, paid, career agency supplemented by an active reserve program. Madison is an Advanced Life Support (ALS)-Transport agency with a Critical Care designation. BYU-Idaho has a student volunteer organization that primarily focuses on support for on-campus events and utilizes Madison Fire/EMS for incidents requiring patient care and transport.

4.1.1. Public Safety Answering Point (PSAP) Overview

Madison Fire/EMS crews are dispatched through the Madison County Sheriff's Office (MCSO) dispatch center. Emergency Medical Dispatch (EMD)) is not currently available. Field communication is via vehicle-based mobile radios, hand-held radios, and cell phones. Radio communication is rated as effective for functionality, interoperability, reception, and interagency communication.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Madison Fire/EMS	Public/ Transport	ALS/Critical Care	Scheduled	Paid, Full-time, Career
BYU – EMS	Private/Non-Transport	BLS	Unscheduled	Uncompensated
Air Methods dba Mercy Air Services	Private/Air Medical	ALS/Critical Care	Scheduled	Paid, Full-time, Career
Rocky Mountain Holdings/ AirMedCare Network	Private/ Membership	ALS/Critical Care	Scheduled	Paid, Full-time, Career

Table F: List of EMS Agencies Located in Madison County

4.1.2.1. Agency Overview: Madison County Fire/EMS

Madison County Fire/EMS is a public, county-owned, full-time career agency licensed at the Advanced Life Support (ALS) /Critical Care transport level. With a primary coverage area within the geographic boundaries of the county, Madison also provides as-needed response support to Yellowstone National Park (YNP) and the neighboring counties of Jefferson and Fremont. The agency is supported by an ambulance taxing district wherein the county commissioners also serve as the ambulance district commissioners. Madison also has a board of fire district commissioners, reports regularly to the Rexburg City Council, and is party to a joint-powers agreement overseen by the county Emergency Services Board.

Madison is a fire-based ambulance service currently staffed by twenty-eight full-time staff and sixty part-time personnel that includes fifty EMTs and twenty-five Paramedics and a reserve/on-call roster. The EMS staff is complemented by a full-time mechanic and administrative assistant. The EMS Division is supervised by a full-time EMS Chief that works in conjunction with a formal Fire/EMS command staff.

Figure G: Images of Madison County EMS Agencies (Bing: stock photos).

4.1.2.2. Agency Overview: BYU-Idaho Emergency Medical Services

The BYU-I EMS website states that "BYU-Idaho Emergency Medical Services is a Basic Life Support (BLS) EMT agency dedicated to helping our community at BYU-Idaho. As a volunteer standby agency, we staff various campus events such as dances, devotionals, sporting events, etc. Standby teams typically consist of two licensed, NREMT certified personnel. The agency operates as a private, non-transport Quick Response Unit (QRU) and utilizes Madison Fire/EMS for patient care and transport. The agency depends upon both Madison Fire/EMS and the College of Eastern Idaho (CEI) for EMS training." BYU-I EMS did not provide any further information relevant to this report.

4.1.2.3. Agency Overview: Mercy Air (Air Methods/Air Idaho)

Mercy Air is a division of Air Methods licensed in Idaho, that provides air medical services for California and Nevada.

Parent company Air Methods, whose motto is "One Mission. One Team", provides vital air medical services to EMS agencies throughout the state of Idaho. A privately-owned company with an administrative office and air base in Idaho Falls, the full-time, paid, career agency not only "has one job and that's the patient" (Website YouTube video), but is active in various state and regional EMS working groups, such as the East Region Time Sensitive Emergency Council (TSE). The agency is also extremely progressive in delivering local and regional training programs for EMS services.

Due to company information privacy concerns, Air Methods did not participate in the Resource Assessment Survey (RAS) but company representatives did meet in person with EMS Sustainability Planners from the Southeast and East Areas of Responsibility (AOR). The information below is a summary of key points from that interview:

- Air Methods maintains rotary aircraft resources in Salmon, Idaho Falls, Driggs and West Yellowstone and a fixed-wing aircraft in Idaho Falls.

- The agency strives (successfully) to partner with area EMS providers to "fill a critical rural education need (training)" and coordinate protocols for air medical transport based on patient acuity, Method of Injury (MOI) / Nature of Illness (NOI), most appropriate destination facility, scene location and transport distance, and availability of ground transport resources.

- On a company-wide basis, Air Methods annually "conducts over 100,000 transports amassing over 150,000 flight hours."

4.1.2.4. Agency Overview: Rocky Mountain Holdings, LLC dba AirMedCare Network

Rocky Mountain Holdings, LLC dba AirMedCare Network (AMCN) is a privately owned, membership-based air medical transportation company. Their website states that, "When requested by healthcare professionals, our caring and experienced crews can arrive at the scene quickly and transport patients to the closest appropriate medical facilities. We're America's largest air ambulance membership network." AMCN did not provide any further information relevant to this report.

4.1.3. Hospital Access Overview

Madison County EMS transports patients to the following facilities:

Madison Memorial Hospital (MMH; now Madison Memorial Health) opened in 1951 and located in Rexburg, serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 Emergency Room (ER), labor and delivery, orthopedic surgery, MRI, and family medicine. [29]

East Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 S-T Elevation Myocardial Infarction (STEMI), Level 1 Intensive Care Unit (ICU) and Level III Neo-Natal Intensive Care (NICU) facility. EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac cath lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [30]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [31]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [32]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Madison County Fire/EMS reported a projected sustainability factor of 85/100, meaning that the agency has an 85% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies. Very strong from organizational, operational, and management/leadership perspectives, the key challenges for the agency are staffing and funding. Citing difficulty in developing a competitive wage structure and the need for ongoing funding adequate to compensate for increased costs of doing business, Madison has been creative and innovative in budget management and identification of revenue producing programs in education, training, and wildland fire. Madison has good to excellent physical plants and the necessary EMS equipment and supply resources to consistently deliver appropriate, reliable responses to emergency medical and trauma incidents. The organization has an excellent reputation for integrity and professionalism in the local and regional community. Madison's objective for the utilization of potential new funding is to "increase service capacity." The department lives up to its commitment to be a "well-coordinated team of professionals who serve the community with Integrity, Honor, Pride, and Courage."

- **EMS Agency Financial Situation:** In terms of financial stability Madison responded that the agency "gets by but has deficits most years. We are basically running a bankrupt system."

- **EMS Communication Strategy and Outreach:** Madison County Fire/EMS has a robust community outreach program supported by a written public relations and communications plan. The agency does not have a Community Health EMS (CHEMS) program but is interested in partnering with neighboring medical and EMS providers to develop one.

- **Community View of EMS Agencies:** Madison Fire/EMS is highly regarded in the community for its efficiency, professionalism, and ability to consistently deliver an appropriate, reliable response to medical and trauma emergencies.

- **Elected Official Support of EMS Agencies:** Madison's external organizational structure includes supervision and reporting to four unique governing boards described elsewhere in this report. Input from agency staff and elected officials indicates strong and positive working relationships among all stakeholders.

- **Agency and System Response Outlook:** Very strong from organizational, operational, and management/leadership perspectives, the key challenges for the agency are staffing and funding. Citing difficulty in developing a competitive wage structure and the need for ongoing funding adequate to compensate for increased costs of doing business, Madison has been creative and innovative in budget management and identification of revenue producing programs in education, training, and wildland fire. Madison has good to excellent physical plants and the necessary EMS equipment and supply resources to consistently deliver appropriate, reliable responses to emergency medical and trauma incidents. The organization has an excellent

reputation for integrity and professionalism in the local and regional community. Madison's objective for the utilization of potential new funding is to "increase service capacity."

- **Agency Optimism:** Madison reported that, "we meet demand for all calls, staff retention is good right now, biggest bright spot is education outreach. Working with school districts on carer education at the high school. Considering establishing a regional training center."

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** While organizational relationships with several oversight boards may seem unwieldy, the relationships are reported as positive. The overall management of the department is the responsibility of a formal command staff that includes the Department Chief, Deputy Chief, and Division Chief that report to an Emergency Services Board. The operational sections of the department are divided into three platoons supervised by Battalion Chiefs. Mid-management consists of the county Emergency Manager, Fire Inspector, and Administrative Services Manager. The current viability and sustainability of Madison County Fire/EMS is directly correlated with the strength and dedication of department leadership and a long-term, experienced command staff. The duties and responsibilities of the EMS Chief are well-integrated with the fire-related functions of the department.

- **Service Delivery Partners:** Madison's strongest partners in emergency service delivery include the County Commissioners (also ambulance district commissioners), the Board of Fire District Commissioners, Madison County Emergency Management, Madison Memorial Hospital, Eastern Idaho Public Health, and local government. Assistance from the Bureau was reported as "adequate" (RAS Q9).

- **Medical Direction:** Support from the agency's long-term Medical Director was rated adequate in terms of involvement in training and chart review.

- **Communication and Interoperability:** Madison's current communications systems meet the agency's needs in terms of functionality and interoperability, quality reception and ability to reliably communicate with other agencies and counties.

- **Mutual Aid Systems and Agreements:** Madison has a long history of cooperative response with neighboring EMS agencies and implements formal, written mutual aid agreements on an as-needed basis. Fremont and Jefferson counties have very close working relationships with Madison and have developed effective patient hand-off protocols to ensure continuity of patient care.

- **Community Health EMS:** The Madison County community benefits from consistent and effective outreach in delivery of education and prevention services from the EMS department. Agency leadership is active in community programs and events. Madison Fire/EMS conducts an active EMS/Wildland Fire training program in the local high school. (See Section 4.2.2.2 below)

- **Mobile Medical Trailer:** The Madison Fire Department Overview: Medical Trailer states that: "Madison Fire Department is excited to announce the availability of a **Mobile Medical Clinic**. The unit is available for response anywhere in the nation to provide paramedic level care for responders and other personnel during times of emergency. For medical treatment, the clinic offers four sick beds, and all staffing personnel are Firefighter II Arduous Level, nationally certified paramedics and EMT's. Additionally, the clinic features a satellite dish with high-speed internet, wireless internet for Command Teams, two VOIP lines, web cam, fax, scanner, copier, printer, and on-site dispensing of antibiotics and steroids."

- **Patient Care Documentation System (e-PCR):** Madison utilizes the Image Trend Elite platform for e-PCR reporting.

- **Inter-facility Transports (IFT):** Madison Memorial Hospital is the initial destination facility for patient transport from neighboring counties in Idaho and Montana. Patients requiring more advanced care from higher-level health care providers are frequently transferred from Madison Memorial to hospitals in Idaho Falls, and with some regularity to facilities in Salt Lake City, Utah. The IFT system is a source of "significant revenue" for Madison Fire/EMS.

4.2.1.3. Response Overview

- **Levels of Service:** From a response capacity perspective, Madison "is at capacity for response in our own area." One neighboring Quick Response Unit (QRU) is transitioning to transport designation which will help. We could not absorb additional volume." The agency provides patient care at the ALS/Transport (Paramedic) level and has a Critical Care designation. Patients requiring higher levels of care are transported from Madison Memorial Hospital to medical facilities in Idaho Falls and Salt Lake City, Utah. Air medical is provided by Air Methods /Air Idaho. Madison has long-standing and efficient working relationships with neighboring EMS agencies, Air Methods/Air Idaho, BYU-I EMS, and local and regional medical facilities.

- **Agency Response Concerns:** Madison reported having difficulty responding to 911 calls 0-10 times in 2022. Specific challenges, particularly related to IFTs, occur during wildland fire season when department members are deployed on assignment and not available for their regular shifts. Of primary importance on a long-term basis is recruitment, retention, and development of experienced crews and maintenance of staff levels commensurate with the county's population growth.

- **Helicopter Response and Utilization:** Dispatch of rotary aircraft resources is based on standard protocols related to transport distance, patient acuity, most appropriate destination facility, and availability of ground transport. Air Methods/Air Idaho typically provides helicopter response. Madison conducts both local and regional trainings with Air Idaho, District 7 Health Department, law enforcement, Madison Memorial Hospital, and neighboring EMS agencies to ensure efficiency and quality of patient care when rotary aircraft resources are required.

- **Response to Public Lands:** Regarding difficulty in responding to 911 calls reported in section 3.1 above, in order of "Most Impactful" to "Least Impactful," Madison ranked the criteria as follows: Location, Geography, Weather, Simultaneous call, Personnel shortages, Time of day, and Equipment or vehicle issues. With reference to responses to emergency calls on public lands, Madison stated that, "(we) rendezvous with Yellowstone National Park in conjunction with Fremont County EMS. (These calls) do impact 911 response capabilities. Access is a challenge."

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** Madison is a paid, full-time, career organization that includes part-time, reserve, and administrative personnel. Madison EMS utilizes a fire-based, structured shift scheduling system. A, B, and C shifts are supervised by a Battalion Chief supported by a Captain, Lieutenant, and four additional fire/EMS personnel.

- **Responder Average Age:** The average age of licensed EMS employees is 35-45.

- **Staffing Numbers:** The staff roster currently includes fifty EMTs and twenty-five Paramedics.

- **Staffing Concerns:** Staffing adequacy is reported at 49/100, meaning that the agency is staffed at 49% of optimum levels. Administration reports "difficulty in backfilling for illness, injury, vacations, and wildland fire deployments. The schedule is very tight during the summer and wildland fire season." The academic calendar at BYU-Idaho provides for significant fluctuations in the student population that effects Madison's call volume.

- **Staffing Strengths:** Full-time staff are required to live within twenty-minutes response time of Station 1-Rexurg and part-time/reserves within fifteen minutes of the station nearest their home residence. The agency has a formal Career Progression Guidance Program that enables personnel to advance from Fire/EMS Cadet to Firefighter/EMT or Firefighter Paramedic. Further training is available for transition to Senior Firefighter/EMT and Senior Firefighter/Paramedic and subsequently to mid-management and command staff positions. Each stage of career development is accompanied by pay raises tied to completion of progressively higher levels of skills certifications.

- **Recruitment and Retention:** From a recruitment and retention perspective, "we have difficulty in filling Firefighter/EMT positions. Have had one Firefighter/Paramedic position open for over a year. Our shift scheduling system is efficient. The staff is well-trained. We have very good people and a command structure that is long-term, experienced and works well together. The BYU-Idaho EMS system is a good contributor to present and future staffing. (Our) biggest concern is that we run with operations staff that have one-to-two years' experience due to loss of personnel to local and regional agencies that have higher pay rates."

4.2.2.2. Training & Education Overview

Madison provides in-house initial training classes and continuing education and refresher courses. It has recently (February 2023) implemented a Paramedic Education Course that enrolled over thirty students, many of whom are currently members of neighboring EMS agencies. Madison utilizes in-house instructors, conferences, specialty training by adjunct medical professionals and online EMS education resources for developmental and continuing education.

Thie department has an aggressive community outreach education program. “During each trimester, Madison Fire Department teaches a three-week long wildland fire course for Madison High School and Sugar-Salem High School seniors. During those three weeks, students will attend one evening class a week, then participate in a field day on the Saturday following the final class.”

Madison’s new Paramedic Program is conducting its first class in accordance with the outline posted on its website: “Madison Fire Department is both a 911 Emergency Response Department and a Fire/EMS Training Center. Our practitioners provide medicine at the Critical Care Paramedic level and have experience providing medical care in the Rotor Wing, Fixed Wing, Ambulance, Emergency Room, and Clinic environments. Additionally, our providers have practiced EMS in wildland fire, rural, and urban settings. Our personnel are some of the very best and are well respected in the community and industry. As a part of the MFD Paramedic Program Family, you will be mentored every step of the way. Our knowledgeable faculty and staff will work with you to help you find success.”

4.2.2.3. Facilities Overview

- **Station Locations:** Madison Fire/EMS operates three stations within the county: Rexburg, Archer, and Sugar City. Current facilities meet needs in terms of location, condition, and size. The overall condition rated of physical plants is reported at 90/100. Madison utilizes internal staff and external resources for facilities maintenance. The following station descriptions are posted on the Madison County EMS website:

  - **Station 1:** City of Rexburg, includes facilities for operations, crew quarters, training, conference room, administrative, command staff. Station 1 is staffed by 12 full-time shift employees, command staff and “numerous paid-call EMS and fire responders.”

  - **Station 2**: Archer Townsite. “This satellite station enhances Fire and EMS coverage to the southern portion of Madison County. Station 2 is staffed by paid call personnel who are trained EMTs and Firefighters.”

  - **Station 3**: Sugar City. “This satellite station enhances Fire and EMS coverage to the northern portion of Madison County. Station 3 is staffed by paid call personnel that are trained EMTs and Firefighters.”

- **Station Condition(s):** Overall condition, functionality, and location of stations is reported as “excellent”. Madison has made consistent and substantial reinvestments in its physical plants.

- **Facility Needs:** No significant facility needs other than regular maintenance noted at this time.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** Equipment utilized daily supports an appropriate, reliable response to 911 incidents. Madison Is able to obtain EMS supplies from standard sources sufficient to stock front-line response vehicles.

- **Condition:** The overall condition of key EMS response and patient assessment and treatment equipment are excellent.

- **Needs and Shortages:** Equipment and supplies meet needs for age and condition, functionality, use appropriateness.

4.2.3. Financial Overview

Madison is funded through a combination of taxing district revenue, patient billing income, wildland fire deployment, interfacility transfers (IFT), education class fees, BYU-Idaho cost share, and grant funds. From a sustainability perspective the department reports that “We get by but have deficits most years.” For the period FY 2013 to FY2019 Madison was able to make up annual operating deficits from reserve funds but those funds were exhausted during the COVID-19 Pandemic. Agency administration did a “massive budget overhaul” in 2020 to cut expenses moving forward and relied on ARPA and CARES grants for reinvestment in capital equipment.

The district tax levy is set at the maximum allowable by State statute for ambulance districts. Approximately 55% of property within the county has tax-exempt status.

The agency bills for patient care and transport services (including treat/non-transport fees) through a private, third-party vendor. Billing income in 2022 was $830,411 and taxing district proceeds totaled $1,015,521. Based on the expense budget, annual cost per capita for EMS is $40.23. Madison contracts with a private third-party grant writer that made successful applications for ARPA ($1,515,270) and CARES ($325,000) grants but experienced little success with the state dedicated grant program. The County does have impact fees including fire, police, streets and parks, and capacity fees include water and sewer. Fire impact fees = $123/site for single family residential and $131/unit for multifamily, community developments and apartment complexes.

Key Indicators Overview	Madison County	East AOR
EMS Calls per Capita	.043	.076
Cost per Call	$942.87	$979.57
Cost per Capita (annual)	$40.23	$77.43

4.2.3.1. Expenses Overview

FY 2022 Expenses:	$2,212,513
FY 2022 Operating Expense:	$498,540
FY 2022 Personnel Expense:	$1,735,106
FY 2022 Capital Expense:	$18,867

4.2.3.2. Revenue Overview

Patient Billing Revenue (net):		$830,411
	Gross Billings =	$1,939,022
	Net Billing Revenue =	$830,411 (42.8% of gross billings)
	Disallowed =	$579,471 (29.9%)
	Uncollected =	$123,859 (.064%)
	Pending =	$405,280 (20.9%)
Other Income:		$328,453.

Other income includes wildland fire deployments, EMS outreach classes and cost-share from BYU-Idaho.

Annual Carryover/Reserve = $0.00

4.2.4. Resource Assessment Additional Factors

"We are basically operating a bankrupt agency. Barely break-even year to year. (Our) biggest concern is that the budget does not allow for paying competitive salaries. We are just happy if we can continue each year and we (work hard) to explore additional revenue streams, i.e., IFT (Inter Facility Transfer) opportunities, education programs, wildland fire, critical care transport, resort tax."

"Funding and staffing will be ongoing challenges. Need to reinforce and develop training and continuing education programs. Any additional funding resources will be committed to increasing service capacity. Always confronted with doing more with less. Very difficult to balance funding limitations with escalating costs and growth factors."

Key factors: "Overall ongoing funding challenges. 3% cap and limitations on capturing revenue from new growth. Limitations on ambulance levy rates are constricting. Super majority rule for changes in levy rates and supplemental levies is an obstacle as is inability to effectively campaign for these issues."

REFERENCE LIST

[1] [4] Madison County, Idaho (2023). Homepage. https://www.co.madison.id.us

[2] [3] [5] Madison County, Idaho (2023). https://en.wikipedia.org/wiki/Madison_County,_Idaho

[6] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[7] U.S. Department of the Interior (2022). https://www.pilt.doi.gov

[8] [10] [11] [24] [25] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Madison County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/madisoncountyidaho

[9] Data USA. (2023). https://www.datausa.io. i.e., *datausa.io.* (County or major city)

[12] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/Madison-county-id/

[13] [14] [15] [16] [17] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/.../labor-force-statistics

[18] [20] [21] [22] [23] 2022 University of Idaho Extension. (2023). *Indicators Idaho: Madison County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16065

[19] University of Wisconsin Population Health Institute. (2023). *County Health Rankings: Madison County, Idaho.* Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/idaho/madison?year=2023

[24] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Madison County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/madisoncountyidaho

[25] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Madison County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/madisoncountyidaho

[26] [27] [28] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/Madison-county-id/

[29] Madison Memorial Health. (2023). https://madisonmemorial.org/

[30] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[31] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[32] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

TETON COUNTY

This report was commissioned by the Idaho Bureau of Emergency Medical Services and Preparedness beginning in January 2023, to gather data in support of legislative and funding activities intended to ensure access to appropriate, reliable EMS response for residents and visitors across the State of Idaho. As part of the research for this project, data was gathered from publicly available government sources, a constructed EMS agency resource assessment data-gathering tool, and through targeted interviews with key community stakeholders. While the data and information in this report is deemed to be accurate, relevant, and reliable, it is not exhaustive.

SECTION 1 CONTEXT

Section 1 reflects an aggregation of data and information that was available from a resource assessment data-gathering tool utilized by the independent EMS Planners between January and August of 2023, data integrated from the University of Idaho's Indicators website, Idaho Bureau of EMS and Preparedness' data tracking systems – Biospatial and IGEMS, and direct EMS agency interviews (in-person, online/virtual, and/or over the phone). This section represents an assessment of the current status of the EMS system within the county based on available data.

1. EXECUTIVE SUMMARY

Teton County Fire & Rescue (TCFR) is a full-time, career Fire/Emergency Medical Services (EMS) agency licensed at the Advanced Life Support (ALS-Paramedic) Transport level. Initially organized in the 1960's as a local Quick Response Unit (QRU) staffed by volunteers and the emergency room physician at Teton Valley Hospital (TVH) (the first ambulance was the physician's personal station wagon), the unit evolved into a hospital-based, volunteer Intermediate Life Support (ILS) Transport service. By approximately 2005 the volunteer staffing model was no longer viable due to lack of personnel and Teton County established an ambulance taxing district that supported a full-time, paid EMS system. Operated and administered by Teton Valley Hospital and funded through the taxing district, Teton County EMS (TCEMS) was staffed by hospital-based Emergency Medical Technicians (EMTs) licensed up to the Advanced Emergency Medical Technician (AEMT) level. Following several years of complex negotiations, TCEMS was incorporated into the Teton County Fire Department in 2016 and the ambulance taxing district dissolved. The resulting combined agencies were re-named Teton County Fire and Rescue (TCFR) and operate under a fire-based command system.

Teton County Idaho shares a common border with Teton County Wyoming. The nearest Wyoming EMS resources available to service Grand Targhee Resort, Alta Wyoming and the north side of Teton Pass are in Jackson Hole Wyoming. Due to long response times, geographic barriers, and staffing challenges on the "Jackson side", Teton County Wyoming contracts with Teton County Idaho to provide Fire/EMS response to those areas of Wyoming north of the crest of Teton Pass. On average, Wyoming calls account for 10%-15% of TCFR's annual call volume. TCFR ambulances and emergency medical personnel are licensed to respond in Wyoming and are dispatched through the Teton County Idaho county sheriff's office dispatch system.

Critical long-term issues identified in site visits, phone interviews, email exchanges and the Resource Assessment Survey indicate that the TCFR Fire/EMS system is dedicated to consistent delivery of appropriate, reliable response to 911 incidents. Facilities, vehicles, and equipment meet the needs of current, but not future, call volumes. The department is sustained financially by a taxing district, patient billing revenues on the EMS side, wildland fire reimbursement, the Wyoming coverage contract, and newly implemented impact fees. TCFR faces serious ongoing challenges in staffing with qualified personnel, lacks sufficient revenue to keep pace with escalation of wages and benefits costs, and does not have a capital reinvestment fund adequate for maintenance and/or replacement of buildings and apparatus. High housing costs and lack of availability of residential properties for sale or rent (see Section 2.3) are critical impediments to maintenance of living wages for existing staff and recruitment of new Firefighter/EMTs.

OVERALL SUSTAINABILITY RATING:

Agency response to Resource Assessment Survey Question 4 = 70/100. The agency has a 70% probability of being able to sustain an appropriate, reliable response to medical and trauma emergencies.

Note: Strengths, Challenges, Opportunities, Threats (S.C.O.T.) analysis was done during in-person agency visits, phone conversations, emails, and the Resource Assessment Survey process. Statements in quotation marks are taken from the same sources.

Strengths	Opportunities
• Organization, Leadership, Planning • Presence of effective Chief Financial Officer • High staff retention rates • Good community relationships/support • Presence of critical access hospital • Presence of Air Idaho base • Effective billing practices • Recent implementation of impact fees • Wildland fire program	• Long-term benefit of impact fees • Continue an effective strategic planning process. • Implement an internal growth/development program for future leadership. • Maximize patient billing income. • Identify and implement IT/technology update systems
Challenges	**Threats**
• Availability/affordability of housing • Inability to attract qualified candidates for open positions. • Need to remodel/replace Station 1 (Driggs) • % of staff that lives outside the county creates difficulty in staffing for call back/backfill	• Renewal of the service contract with Teton County, WY is at discretion of the commissioners. • Increased EMS demand due to Grand Targhee Resort expansion and local growth • Near-term retirement of two deputy chiefs • Insufficient funding to meet future personnel costs. • Insufficient funding to meet future capital expenses.

Table A: Teton County SCOT Analysis

SECTION 2 CONTEXT

Section 2 reflects publicly available aggregated data primarily sourced from the University of Idaho's Indicator website, which includes data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the University of Wisconsin's Population Health Institute (Community Health), and the U.S. Bureau of Economic Analysis. Other data sources consulted are cited where appropriate.

2. COUNTY INDICATORS

2.1. Demographics

Surrounded by the Wyoming Range and Grand Tetons to the east, the Palisades Range to the south, and the Big Holes to the West, the county shares a common border with Teton County Wyoming. [1] Named for the adjacent Teton mountains and river and discovered in 1808 by John Colter, a member of the Lewis and Clark Corps of Discovery, Teton Valley was formerly known as Pierre's Hole (name derived from early French trapper Pierre Tevanitagon). [2] Native Americans camped in the area in the good-weather months and early fur trappers held their annual rendezvous near the current site of the city of Driggs. [3] Established as a county in 1915 and originally settled by Latter-day Saint pioneers, Teton is the second-smallest county in Idaho and features three incorporated cities; northernmost Tetonia, centrally located Driggs (the county seat), and Victor (city with highest population in the valley) to the south. [4] [5]

Bisected by the Teton River and State Highway 33 (SH-33) and within a short drive of world-class flyfishing on the Snake, Teton, Henry's Fork, and South Fork rivers, Teton County has evolved from a quiet, rural farming and ranching community to a destination mecca for outdoor recreationists. [6] Like many Idaho communities, the county has experienced expansive growth in the post-COVID era. [7] Projected expansion of the Grand Targhee Ski and Summer Resort (GTSR) on the Wyoming side of the Valley is expected to further impact the already strained infrastructure, including emergency medical services. The demand for "affordable" employee housing in the Jackson Hole, Wyoming market has substantially impacted the City of Victor, where many Jackson employees now live. There is one private airport located in the city of Driggs.

Teton County lies at an elevation of 6,200' and encompasses 449 square miles of land area. [8] It is bisected geographically by the Teton River that flows westward to the Snake River Plain. [9] Federal lands, comprised primarily of the Targhee National Forest, occupy 35% (159 square miles/98,227 acres) of the land area and county government received $243,683 in Payment in Lieu of Taxes (PILT) funds in 2022. [10] [11] Teton is bordered by the Idaho counties of Fremont (north), Madison (west), Bonneville (south) and Teton County, Wyoming to the east. [12] Major roadway access is provided by SH-31 across winding Pine Creek Pass from the southwest, SH-32 from the north, and SH-33 from the west. [13] Travelers between Jackson Hole, Wyoming and Victor, Idaho cross steep and high-elevation Teton Pass. All the roads traverse mountainous areas and are extremely treacherous in winter. SH-32 and SH-33 close periodically during blizzard conditions.

Part of the Jackson, Wyoming Metropolitan Statistical Area (MSA), Teton County maintained a stable population level of 3,500-4,000 persons between 1920 and 1990 but has experienced extreme growth in the period 2000-2020. [14] The population expanded 74.4% between 1990-2000; 69.5% from 2000-2010; and 23.3% between 2010-2022. [15] Following the major negative economic impact of the Great Recession of 2008, from which Teton Valley had a very slow recovery, the post-COVID era has seen significant population increases, with population growth at an average rate of 5.5% annually. [16] [17] Despite the increase in number of housing units from 5,815 in 2020 to 6,486 (11.5%) in 2022, availability of housing, especially in the rental market, is extremely tight. [18] 75.8% of housing units are owner-occupied, with an average of 2.74 persons per household. [19] With a median age of 39.6, the county has a significant population (64.6%) in the 18-64 age demographic. [20]

Demographic	2010	2020	2022
Population	10,170	11,630	12,544
Land Area	451 sq mi	451 sq mi	451 sq mi
Per Capita	22.54 PPSM	25.80 PPSM	27.81 PPSM
PPSM: *People per square mile*			

Table B: Teton County Population & Geography

2.2. Economics

Of the 8,037 jobs in the county, self-employed individuals account for 3,077 or 38.3% of the total. [21] Anecdotal evidence from County economic development staff suggests that this dynamic developed during the COVID era when significantly more people began working from home, and from the large “second home” component of self-employed individuals that reside in Teton Valley during the summer and elsewhere during the winter months. Not surprisingly given the high rate of population and housing units growth (building permits increased from 260 to 386 issued from FY2020-FY2021), construction accounts for 1,223 jobs (15.8%). [22] [23] With a significant increase of 2,034 jobs from 2010-2020, led by an increase of 24.8% in the “other services” sector, there has been a corresponding decrease in traditional farm/ranch occupations and jobs in this category represent only 6.5% of total employment. [24] Local farmers and ranchers attribute this dynamic to mechanization and consolidation of traditional family farms into large agricultural conglomerates. From a wage perspective, Teton County ranks 22nd in Idaho with an average wage per job of $48,403. [25] The county’s current unemployment rate is 2.1%; due to housing cost and availability, several local retail/service enterprises resort to bussing in employees from neighboring communities to staff their businesses. [26]

Metric	Data
Total Population (2023)	12,544
Median Age	39.6 years old
Poverty Rate	8.1%
Number of Jobs (2023)	8,037
Average Annual Wage per Job (2023)	$48,403
Unemployment Rate (2023)	2.1%

Table C: Teton County Economic Factors

2.3. Social Determinants of Health

NOTE: 2022 data are based on the Indicators Idaho County Health Rankings. County Health Ranking are listed in the Mobilizing Action Toward Community Health Project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Rankings show each county's comparative position within the state. The county receiving number 1 is regarded as the healthiest in the state.

Access to Care: The Teton Valley Healthcare website states that "Teton Valley Health Care is the source of health and healing for all who choose to live, work, and play in the Teton Valley community. We are healthcare at its best, not too big and committed to providing a full range of exceptional, community focused, and patient-centered medical care."

2020 data indicates that Teton County has 5.1 primary care physicians per 10,000 population compared to 6.3/10,000 in Idaho. [27] There are currently six primary care physicians in the county. [28] Due to the presence of Teton Valley Health Care that includes Teton Valley Hospital, Driggs Clinic, Victor Clinic and Cache Clinic, access to basic and emergency health care is excellent. 15.8% of the population over age 65 does not have health insurance and the 15.7% under age 65 without health insurance ranked 16th highest among Idaho's 44 counties. [29] Teton County has an Overall Health ranking of 5th of 43 counties, with a 5 for Health Outcomes, Health Factors, and Quality of Life, and a clinical care rating of 34. [30] Mental health care resources are limited, and the Teton County Sheriff's Office (TCSO) reported that Teton County experienced seven suicides in 2022. Although Teton County Mental Health Coalition is active in implementing the 2019 Idaho Suicide Prevention Plan; TCSO spokesperson Mitch Golden, in an interview with news reporter Jeannette Boner, recently stated regarding the suicide rate that, "It's a myriad of factors. We are a remote community with long stretches of winter, depression becomes a problem and then there is always a concern over the lack of resources."

Percentage of Population Without Health Insurance: 15.7% under age 65, 9.5% overall [30]

Insurance Payor Mix (RAS Q43): Medicare = 35% Medicaid = 30% Out of Pocket = 10%

Commercial = 25%

Crime Rate = 28/10,000 compared to 107/10,000 in Idaho [31]

Housing: Housing prices in Teton County have taken an interesting turn in the period July 2022 to July 2023, in that the median sold prices for homes with three bedrooms or less have increased 14.6% (increase of 47.9% for two-bedroom homes) and sold prices for homes with four bedrooms or more have declined 12.3%. [32] Depending on the source consulted, median list price for homes currently on the market hovers in the $800,000 range. [33] Availability of homes for sale remains extremely low with thirty-eight residential properties listed on Zillow.com/Driggs. Rockethomes.com reports a total of 124 homes for sale countywide in July 2023, of which 16% are in the 4+ bedrooms category. In July 2023 the median rental rate for a two-bedroom apartment in Teton County was $2,254 which is $710 (46%) more than the median of $1,544 for Idaho. [34] Despite significantly high rental rates, the availability of rental units remains low with RentalSource.com listing seven houses for rent and two apartments for rent in the county.

Zillow (9/23) reports the following data for the Teton County housing market:

	Teton County	Idaho
Median Home Price: (+14.3% 2022-2023)	$794,250	$444
Median Monthly Rental Cost: (2 Br Apt.)	$2,254/month	$1,544/month
Median Income per Household:	$75,837	$83,777
Median Income per Capita:	$53,564	$54,537

2.4. Indicator Impacts to EMS

Sperling's bestplaces.com reports that the cost-of-living index for Teton County Idaho is 114.1 compared to Idaho at 105.5 (USA basis is 100). Health care costs index at 113.8 and housing at 153.6.

A study of the Teton region's affordable housing situation performed by WSW Consulting in March 2022 presented the following data: (quotes from Wendy Sullivan, WSW Consulting)

"All of these areas (Teton County Wyoming and Teton County Idaho) are ... close to a 0% vacancy rate, meaning that people coming to your area or fill jobs just can't find a unit."

"... about 15-19% of jobs are being unfilled, which is huge. About a third of businesses/services have reduced hours or services. This includes essential services."

"80% of employers surveyed said housing is their primary obstacle to recruiting new workers." "The long-term prognosis for filling current and future open positions is bleak."

These data points clearly illustrate the recruitment/retention and living/thriving wage relationships at work in Teton County. Current data from the Idaho Bureau of Labor Statistics (August 2023) indicate that 28% of employed persons live and work in the county,

16% are employed in Teton County but live outside, and 56% of Teton Valley workers commute to other counties for work.

The presence of Teton Valley Healthcare's (TVH) broad menu of medical services, that includes the hospital and three community clinics, is a definite positive for the county. TVH maintains a positive working relationship with TCFR and TCSAR and is currently seeking to further strengthen the system through expanded training and QA programs. Further, as will be seen later in this report, the Interfacility Transfer (IFT) volume from TVH to facilities in Rexburg and Idaho Falls is an important source of income for TCFR.

SECTION 3 CONTEXT

Section 3 primarily reflects data aggregated for each county and EMS agency from the Idaho Bureau of EMS and Preparedness data tracking systems – Biospatial and IGEMS. While there are occasional discrepancies between this data and agency-reported data, the information below is generally deemed accurate.

3. EMS SYSTEM DEMAND

3.1. Call Volume Overview

Reflective of county population trends, the TCFR Battalion Chief for EMS reports that TCFR typically experiences a 5%-7% increase in EMS call volume annually. Currently, however, the accelerated growth rate in Teton Valley has resulted in a 23% increase in EMS calls and a 28% increase in IFT's (Inter Facility Transfer) in the first seven months of 2023. Approximately 10% of EMS responses are to locations in Wyoming. Due to staffing constraints in the Teton County Wyoming EMS unit, TCFR occasionally does IFT's from St. John's Hospital in Jackson to hospitals in Idaho Falls and Pocatello.

Agency	*Transp*	*Non-Transp*	2021 TOTAL	*Transp*	*Non- Transp*	2022 TOTAL
Teton County Fire & Rescue	*384*	*137*	521	*500*	*261*	761
Ambulance Total	*384*	*137*	521	*500*	*261*	761

QRU: *Quick Response Unit*
Transp: *Indicates the total transports for the agency.*
Non-Transp: *Indicates the total non-transport calls for the agency.*
Note: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table D: State Reported 911 EMS Call Volumes for Teton County

Agency	Chute Time	Driving Time	Total Response Time	Transport Time	Total Call Time
Teton County Fire & Rescue	*8 min*	*7 min*	16 min	56 min	91 min

NOTE: *All times are based on annual averages of 911 calls, only.*
Chute Time: *Total time (minutes) from unit/agency dispatch notification to initiating a response.*
Driving Time: *Total time (minutes) from unit/agency initiating a response to arriving at the scene.*
Total Response Time: *Total of the Chute Time and Driving Time (minutes).*
Transport Time: *Total time (minutes) from departing the scene to arriving at the transport destination.*
Total Call Time: *Total time (minutes) starting from unit/agency dispatch to the call ending/unit cleared.*
NOTE: *Information reported in this table is based on data entry provided by the EMS agencies to the Bureau of EMS and Preparedness through its IGEMS reporting platform. Some filtering of data has been conducted by the Bureau to rule out potential call duplication and/or potential inaccuracies.*

Table E: State Reported 911 Call Times for Teton County (2022)

SECTION 4 CONTEXT

Section 4 reflects mixed methods data and information collected from a combination of interviews (either in-person, over the phone, or online) conducted generally between January 2023 and August 2023 with EMS agency staff, documented EMS agency administrators, and an 86-question in-depth peer-reviewed EMS resource assessment data-gathering tool that was assembled for this project specifically. Some of the information listed below is entirely qualitative/subjective, and some is quantitative/objective. In cases where agencies did not provide detailed information or chose not to share information, high-level generalizations are noted. In many cases, additional analysis will be needed in future strategic planning phases of this work (outside of the scope of the current contract) to quantify specific sustainability gaps within each EMS agency and county. Although all registered EMS agencies in the State of Idaho were contacted, some agencies within various counties elected not to participate in the EMS assessment; therefore, data is deemed reliable but, in some cases, incomplete. Any pictures or images included in this section were either directly taken by the EMS Planner (with permission) or shared by an authorized representative of the EMS agency.

4. EMS SYSTEM RESOURCE ASSESSMENT

4.1. County System Overview

Staffed by twenty-six full-time Firefighter EMTs and Firefighter Paramedics, TCFR responds to an average of 900 911 calls annually (including responses to Wyoming incidents), of which 750 are EMS and 150 fire. Staff members at the rank of captain and below are members of Idaho Association of Firefighters (IAFF) Local 4667 and the current collective bargaining agreement (CBA) is in place until 2025.The agency has an active, well-organized, and well-respected wildland fire program. TCFR maintains three stations; Tetonia (not staffed, housing fire apparatus, equipment and supplies only), Driggs (staffed full-time and housing two ambulances with fire apparatus, equipment/supplies, crew quarters and administrative offices), and Victor (one ambulance, fire apparatus, equipment/supplies, crew quarters and report office).

TCFR's primary destination facility is Teton Valley Hospital, a 13-bed Critical Access Hospital (CAH) with a fully staffed Emergency Room (ER) 24/7/365. Advanced care is provided by Madison Memorial Hospital (MMH) in Rexburg, and Idaho Falls facilities Eastern Idaho Regional Medical Center (EIRMC), Mountain View, and Idaho Falls Community Hospitals (IFCH). The agency did 188 Interfacility Transfers (IFT) in 2022. Air Methods/Air Idaho Rescue maintains a staffed base at Driggs Airport, adjacent to the Driggs Fire/EMS station and a short distance from Teton Valley Hospital. Patient transport by either ground or air can be difficult to impossible during severe winter weather conditions.

Teton County Search and Rescue (TCSAR), operating under the auspices of the Teton County Sheriff's Office, is an Idaho licensed EMS agency at the Emergency Medical Responder (EMR) level. It is an all-volunteer organization, financed by an annual fundraiser, that is currently developing a more integrated working relationship with TCFR.

4.1.1. Public Safety Answering Point (PSAP) Overview

TCFR is dispatched through the Teton County Sheriff's Office (TCSO) dispatch center and contractually pays $150,000 annually for dispatch services. Emergency Medical Dispatch (EMD) is not available. Calls are also delivered to cell phones via a mobile app. EMS personnel utilize 700mhz mobile radios in the ambulances and 700mhz hand-held radios in the field. Radio and cell phone coverage has some deficiencies in areas on the west and south borders of the county, but it is anticipated that a new repeater in the city of Victor (soon to come online) will remedy much of that problem. EMS personnel respond from staffed stations in Driggs and Victor according to geographic location of the call. An effective backup system exists such that duty crews can cover subsequent calls and command staff are available on an as-needed basis.

4.1.2. EMS Agency Overview

Agency	Agency Type	Licensure Level	Staffing Type	Compensation Type
Teton County Fire & Rescue	Public: First Dist.	ALS/ Transport	Scheduled	Paid, Full-time, Career
Teton County SAR	Public: Sheriff's Office	EMR/Non-Transport	Unscheduled	None - All Volunteer

Table F: List of EMS Agencies Located in Teton County

4.1.2.1. Agency Overview: Teton County Search and Rescue (TCSAR)

TCSAR is an all-volunteer unit, licensed at the EMR level. Its website states that, "33 volunteers gave 3.812 hours (of service) in 2022. We are a group of volunteers dedicated to providing the public prompt, professional emergency services for people that are lost, injured, stranded, or in need of rescue primarily within Teton County Idaho." TCSAR is entirely financed by a community fundraising event held in February of each year. TCSAR is currently under much stronger leadership than has sometimes been the case and is collaborating with the county Local Emergency Planning Committee (LEPC), Teton County Fire & Rescue, and Teton Valley Healthcare (hospital) to develop more effective working relationships. The unit recently completed an EMR training class (14 registered, 10 attended first class, six completed, one licensed) coordinated and instructed by Teton County Fire & Rescue staff.

4.1.2.2. Agency Overview: Teton County Fire and Rescue

Teton County Fire & Rescue is a public, tax-based agency licensed at the ALS/Transport level. The agency is governed by three elected Fire District Commissioners, representing north, central, and south geographic area of the county, that have statutory responsibilities for administering fire district funds, facilities, equipment, and personnel to ensure appropriate, reliable fire and EMS response for the county. Daily operations management is

performed by the Fire Chief, two Deputy Chiefs and on-duty Battalion Chiefs and Captains. The department employs a full-time Chief Financial Officer (CFO). Rank and file firefighter/EMTs and paramedics below the rank of Battalion Chief are members of Idaho Association of Fire Fighters (IAFF) Local 4667 and the current collective bargaining agreement is in place until 2025.

The department is staffed by 26 full-time Firefighter EMTs and Paramedics licensed in both Idaho and Wyoming. TCFR has a well-organized and well-respected wildland fire and fuels mitigation program and plays a leadership role in annual inter-agency planning for wildland fire season in the Teton Basin Ranger District (Targhee National Forest).

While Teton Valley Hospital (TVH) is the primary destination for ambulance transport, TCFR regularly does Inter-facility Transfers to Madison Memorial Hospital in Rexburg and to Eastern Idaho Regional Medical Center and Idaho Falls Community Hospital. As previously mentioned, the department has a working relationship with Teton County Wyoming EMS to do IFTs from St. John's Hospital in Jackson Hole to definitive care facilities in Idaho and occasionally, Utah. Air Methods/Air Idaho has a rotary aircraft base at the Driggs Airport and is utilized on an as-needed basis. The Air Methods crews have a close working and training relationship with TCFR, TCSAR, and Teton Valley Healthcare. TCFR is currently in year two of a five-year contract with Teton County Wyoming County Commissioners to provide fire and EMS response to those areas of Wyoming adjacent to the border with Idaho.

Figure G: Images of Teton County (Bob Foster photos)

4.1.3. Hospital Access Overview

First opened under private ownership in 1939, Teton Valley Hospital (located in central Driggs) became a county-owned facility in 1965 and now includes the Driggs Clinic, Victor Clinic, and Cache Clinic under the Teton Valley Health Care banner. Teton Valley Hospital is a 13-bed Critical Access Hospital (CAH) that holds three advanced-care designations: Level IV Trauma Center, S-T Elevation Myocardial Infarction (STEMI) II, and Stroke III emergency response. TVHC offers a broad menu of medical services, ranging from a 24/7/365 Emergency Room (ER) to orthopedics and sports medicine.

East Idaho Regional Medical Center (EIRMC), located in Idaho Falls and opened in 1986, is a Level II Trauma, Level II Stroke, Level 1 STEMI, Level 1 ICU and Level III NICU facility.

EIRMC houses Idaho's only Burn Center (opened in 2018); the Burn Center staff is very active in public outreach and offers regular training programs for EMS units. EIRMC has 318 licensed beds, provides wound and hyperbaric therapy, stroke care/neurological surgery, and a cardiac cath lab. EIRMC houses the regional Air Methods business office and a helicopter landing zone. There is a cancer center and numerous ancillary medical specialty facilities located in proximity to the EIRMC campus. [35]

Idaho Falls Community Hospital (IFCH), also located in east-central Idaho Falls, is a Level II Trauma Center, Level II Stroke Center, and Level II STEMI facility. [36]

Mountain View Hospital, a physician-owned facility in Idaho Falls, recently opened a new, expanded NICU. It is a general medical and surgical facility that includes a cardiac ICU, onsite emergency department, and a med/surg ICU. [37]

Madison Memorial Hospital (MMH; now Madison Memorial Health) opened in 1951 and located in Rexburg serves the counties of Fremont, Jefferson, Madison, Teton, Clark, and Lemhi. It also provides care for patients in portions of southwestern Wyoming and southern Montana. MMH is a regional, non-profit healthcare facility that is the only self-sustaining, community-owned, non-critical access hospital in Idaho. Madison offers a full-service 24/7/365 ER, labor and delivery, orthopedic surgery, MRI, and family medicine. [38]

4.2. County EMS System Resource Assessment Overview

4.2.1. Organizational/Operational Assessment

NOTE: Data for the following measures were extrapolated from the Resource Assessment Survey (RAS) and in-person and virtual contact with EMS Directors/Agency Administrators, and other stakeholders within the county and EMS system. Detailed support information is included in the body of the comprehensive report that follows.

4.2.1.1. EMS Agency Perceptions

- **EMS Agency Stability:** Residents and visitors of Teton County benefit from the presence of a full-time/career Fire/EMS department whose operations are well-coordinated with Teton Valley Healthcare and Air Methods. TCSR rated its sustainability factor at 70/100, meaning that the agency has a 70% factor of long-term sustainability, and strives to maintain a level of staffing and financial ability commensurate with increased incident volume and future growth.

- **EMS Agency Financial Situation:** Projected future income is insufficient to meet capital needs for facilities and personnel costs. TCFR exhausted its FY 2022-2023 contingency budget to balance the budget forecast for FY 2023-2024. The Department recently formed a working group composed of the Fire Chief, Deputy Chief-Operations, CFO, Local 4667 President, and one Fire Commissioner to conduct strategic planning focused on future needs.

- **EMS Communication Strategy and Outreach:** The agency has adopted a written communications/outreach plan and is positively perceived by the community. TCFR

conducts a formal strategic planning process on an annual basis that includes a public relations and community outreach component. TCFR previously had a grant-funded Community Health EMS (CHEMS) program that was discontinued when the grant funds were exhausted. Department staff are actively involved in community education programs.

- **Community View of EMS Agencies:** The Teton Valley community has a positive perception of TCFR's professionalism and ability to consistently provide an appropriate, reliable response to 911 emergencies.

- **Elected Official Support of EMS Agencies:** TCFR command staff, mid-management, and union officials and membership have a positive working relationship with the three elected fire district commissioners. The commissioners meet with staff monthly or more frequently as needed. Command staff and the fire district commissioners meet with the elected county commissioners at least twice per year.

- **Agency Systems and Response Outlook:** Agency management (command staff) is long-term and experienced, and the high staff retention rate contributes to efficiency and effective teamwork in the field. The department faces long-term challenges in being able to recruit qualified individuals for open positions due to costs and availability of housing. Vehicles, facilities, equipment, and supplies are adequate to support ongoing operations.

- **Agency Optimism:** TCFR is at capacity for response to 911 incidents in its current coverage areas of Idaho and Wyoming and under current conditions would not be able to absorb call volume from neighboring agencies should they cease operations. Department management is optimistic that the recent implementation of impact fees will partially help to offset costs related to future community growth.

4.2.1.2. Agency Administrative Overview

- **EMS Agency Structure:** TCFR's management structure is reflective of a fire-based EMS agency and composed of a three-person Command Staff (Chief and two Deputy Chiefs), Chief Financial Officer, three Battalion Chiefs and three Captains. TCFR's administrative systems, administrative, and operational protocols are strong, the Command Staff and Battalion Chiefs are experienced and well-trained. Those internal systems necessary to maintain operational readiness to respond to emergencies within the county are well-established. The major challenge that the department faces is that the two Deputy Chiefs are likely to retire in the next 5-6 years, leaving a significant gap in the command staff. This issue has been identified in the long-term strategic plan. "Our shift system works well. The station rotation system (periodically rotating duty crews between the Driggs and Victor stations) is effective. The new Fire Chief (hired in June 2022) has brought welcome organizational and operational changes and created an atmosphere of open communications. It is noteworthy that there has been no turnover with the advent of a new Chief. We feel that we consistently deliver an appropriate level of care and are able to respond to all calls for service. We were able to respond to all 911 emergency calls in 2022. Call-backs

are difficult to fill due to the percentage of staff that live outside the county. We would like to be able to attract qualified candidates to enable us to function at maximum staffing levels. Our equipment is good but the physical plants, especially crew quarters and restrooms at the Driggs Station need to be remodeled or replaced. We feel that we have positive and open communications with command staff and the commissioners."

- **Service Delivery Partners:** TCFR's strongest partners in service delivery include the Fire District Commissioners, Teton Valley Health Care, Air Methods/Air Idaho, Teton County Sheriff's Office (TCSO), and TCSAR.
- **Medical Direction:** Until recently TCFR/EMS had two Medical Directors: one specifically dedicated to EMS, and one acting as a liaison between Teton Valley Health Care and TCFR/EMS. With the retirement of the EMS Medical Director, the agency now has one individual providing medical direction and liaison with Teton County Health Care. The Medical Director is actively involved in training and chart review.
- **Communication and Interoperability:** Teton's current communications systems meet the agency's needs in terms of functionality and interoperability, quality reception and ability to reliably communicate with other agencies and counties. TCFR has had issues with both radio and cell phone communications in certain geographic locations on the west and south perimeters of the coverage area but a new repeater in Victor will soon be in service to improve the situation.
- **Mutual Aid Systems and Agreements:** TCFR has an annually renewable fuels mitigation agreement with the U.S. Forest Service (USFS) for the purpose of reducing the risk of wildland fire in Teton County. The agency also has a five-year agreement with Teton County Wyoming to provide Fire and EMS response to those areas adjacent to the Idaho/Wyoming border, including Grand Targhee Ski and Summer Resort and Highway 33 to the top of Teton Pass.
- **Community Health EMS:** Teton conducted a 12-month grant-funded CHEMS program trial in the mid-2000's but determined that continuation past the grant cycle was not sustainable. The agency is, however, very active in support of community events and delivers a structured education and prevention program.
- **Patient Care Documentation System:** TCFR utilizes Image Trend Elite e-PCR reporting for Idaho and the WATRS Next Generation program for reporting in Wyoming.
- **Inter-facility Transports (IFT):** Teton provided 188 IFTs in 2022 and is projected to do over 200 in 2023. The agency regularly transports patients from Teton Valley Hospital in Driggs to facilities in Rexburg and Idaho Falls, and, has a verbal agreement with Teton County Wyoming EMS to provide IFT capability for St. John's Hospital in Jackson when Wyoming EMS units are not available.

4.2.1.3. Response Overview

- **Levels of Service:** The agency is highly effective and capable of ALS/Transport response to current demand. It does not have the capacity to absorb additional call volume should an EMS unit in neighboring counties cease to operate. The hiring of a new Fire Chief in June 2022 resulted in improvement of organizational systems and operational readiness. The department utilizes a formal, participative strategic planning and goal setting process. The Deputy Chiefs and Battalion Chiefs are being given regular opportunities to expand their skills and administrative abilities in the interest of continuing to build long-term strength and stability in the Command Staff and overall management team.

- **Agency Response Concerns:** TCFR was able to respond appropriately to all 911 EMS calls in 2022. The organization has an effective mutual support structure between the Driggs and Victor stations and engages command staff in emergency response on an as needed basis. Call-back and fill-in for shift vacancies related to illness/injury, vacation, wildland fire deployments, and long-haul IFTs are challenging due to the percentage of staff that lives outside Teton County.

- **Helicopter Response and Utilization:** Teton County benefits from the presence of an Air Methods/Air Idaho base at the Driggs airport. Close availability of rotary aircraft enhances rapid air medical response and contributes to improved patient outcomes. Air Idaho is requested based on transport distance, patient acuity, most appropriate destination facility, and availability of ground transport.

- **Factors Impacting Response Times:** Severe winter weather can seriously impact response capability due to poor road conditions and compromised visibility in blizzard situations.

- **Response to Public Lands:** Teton County residents and visitors benefit from the presence of a full-time FIRE/EMS resource that enables personnel to respond to incidents from stations in Driggs and Victor. The agency reported that "approximately 50% of the response area is public lands requiring remote access. 12% of calls are to the Grand Targhee Resort area, located on USFS property. The primary impact of these incidents is long scene times and necessity for air medical support. TCFR works closely with TCSAR on backcountry incidents.

4.2.2. Workforce & Resource Assessment

4.2.2.1. Staffing Overview

- **Staffing Structure:** The crews are organized into three "48-on", "96-off" shifts: A, B, and C. Each shift is staffed by a Battalion Chief, two Captains, two Driver/Operators, and three Firefighter/EMTs. Reserves are called in on an as-needed basis. The three Battalion Chiefs have additional individual responsibilities as EMS Chief, Training Officer, and Vehicles/Equipment Officer. The agency reports that optimum staffing is 36 Firefighter/EMTs and that current staffing is at 80% of optimum levels. 69% of employees live in Teton County and 31% live outside the valley, some as far away as

Pocatello and Blackfoot. Call-back of extra personnel for major emergencies or backup is very difficult due to being below optimum staffing and the number of employees that live outside the county.

- **Responder Average Age:** The average age of TCFR staff is 35-44 years.

- **Staffing Numbers:** TCFR employs 26 full-time/career personnel, one full-time CFO, and 10 Firefighter/EMT reserves. EMS licensure levels are Paramedic (17), AEMT (1), EMT (18). Command staff consists of a Chief (hired 6/22) and two Deputy Chiefs.

- **Staffing Concerns:** Current challenges to staffing are availability and cost of housing; insufficient new annual income to offset increased cost of salary increases; Cost of Living Adjustment (COLA), and benefits; and lack of qualified applicants for open positions.

- **Staffing Strengths:** The department typically has good staff retention rates but extreme difficulty in filling open positions. Training and development are coordinated by a full-time Battalion Chief/training officer and consists of internal classes, on-line courses, conferences, and attendance at the National Fire Academy. TCFR commissioned a full-scale wage/salary/benefits survey in 2021 and is currently operating under a wage structure developed in 2021-2022 and reflected in the Collective Bargaining Agreement (CBA). The response to Q65 "Benefits" was, "Agency has an outstanding benefits package".

- **Recruitment and Retention:** Despite a highly competitive wage and benefits structure, the department has substantial difficulty in filling open positions due to these factors.

4.2.2.2. Training & Education Overview

TCFR has a full-time Battalion Chief that oversees training and education through the development and implementation of an annual training schedule. The department provides in-house training through resident instructors and receives additional education from Air Methods and Teton Valley Hospital subject matter experts. The medical director conducts in-person quarterly and annual training presentations. and the department follows up with class practical skills exercises. The department conducts at least one inter-agency table-top and operational training scenario in conjunction with the county emergency manager, TCSAR, and TCSO. Staff members attend regional classes and courses at the National Fire Academy.

4.2.2.3. Facilities Overview

- **Station Locations:**
  - Station 1 – Driggs: Staffed full-time for Fire/EMS response.
  - Station 2 – Victor: Staffed full-time for Fire/EMS response.
  - Station 3 – Tetonia: Not staffed. Fire apparatus and equipment storage.
- **Station Conditions:** All three stations are older, energy-inefficient, steel structures that need significant capital reinvestment.
- **Facility Needs:** The Tetonia building meets current needs for housing equipment and supplies. Station 1 in Driggs is an old steel building located adjacent to Driggs Airport. Ingress/egress is direct onto two-lane SH-33 and very difficult due to consistently heavy traffic. Current needs are roof repairs, a complete overhaul of IT systems and equipment, implementation of a cybersecurity system, remodel or replacement of crew quarters and restroom/shower facilities. Crew quarters are housed in an upstairs loft crowded with HVAC ductwork; there are not separate quarters for men and women, and the one shower is inadequate for multi-gender use. The Victor station adequately meets current operational needs but is in dire need of upgraded IT systems and tech equipment. The agency has started collecting impact fees towards upgrading physical plants and equipment to meet increased service demand from the growing population.

4.2.2.4. Equipment/Supplies Overview

- **Adequacy:** The department has one new ambulance and one new rescue truck on order. The cost of the rescue truck chassis increased $16,800 over the estimate and the department used capital reserve funds to cover the difference. Overall, vehicles, equipment and supplies meet current needs and are adequate to provide appropriate, reliable emergency response.
- **Condition:** TCFR responded that equipment and supplies used daily support an appropriate, reliable response to 911 emergencies and meet present needs in terms of age/condition, functionality, and use appropriateness. The condition of the equipment was rated “excellent” on all items.
- **Funding:** Under the direction of the new Fire Chief, rolling stock inventory has been optimized, with an added budget benefit of $53,951 in asset sales during FY 2023. The department received EMSAVE grants for the period 2022-2024 and an ARPA vehicle grant in 2022. The department has a structured fleet management/replacement program and evaluates the capital vehicle budget on an annual basis.
- **Needs and Shortages:** There were currently no challenges in obtaining EMS supplies to adequately stock the frontline ambulances.

4.2.3. Financial Overview

TCFR described its historical financial situation as "breaking even consistently." Subsequent follow-up with the CFO and command staff, however, determined that the upcoming FY 2023 -2024 budget will include no contingency funds and the department faces a significant challenge in funding both operations and personnel with the pending renegotiation of the FY 2025 collective bargaining agreement with Local 4667. Further, while the increased demand for EMS services contingent to projected population growth is partially offset by impact fees, those fees cannot be used for personnel expenses. The effect of a significant expansion of Grand Targhee Resort may require re-negotiation of the "Wyoming contract" since there is no provision for the resort to compensate Teton County Idaho for impact costs associated with the expansion project.

TCFR's total budget for FY 2023 is $4,692,327. The agency utilizes a third-party billing agency and billing revenue in FY 2022 was $322,424. The Fire/EMS service contract with Teton County Wyoming (5-year contract) contributes $500,000 annually. In mid-2023 TCFR began collecting impact fees to offset the costs (excepting personnel) of increased EMS demand through rapid population growth. While the agency has rated itself as "getting by" in the Resource Assessment Survey, there is no annual budget surplus and the cost of keeping up with salaries, benefits, and COLA exceeds new income, resulting in cuts to other budget line items to meet compensation requirements. TCF&R will use its entire $300,000 contingency fund to balance the budget for FY 2024. In short, the current ratio of new income to increasing expenses is non-sustainable.

Key Indicators Overview	Teton County	East AOR
EMS Calls per Capita	.062	.076
Cost per Call	$5,942.00*	$979.57
* Combined Fire/EMS		
Cost per Capita (annual)	$396.21	$77.43

4.2.3.1. Expenses Overview

FY 2023 Expenses =	$4,970,147
FY 2023 Operating Expense =	$495,940
FY 2023 Personnel Expense =	$3,877,825
FY 2023 Capital Expense =	$56,349

4.2.3.2. Revenue Overview

Property Tax Revenue $3,247,537

Other Taxes, Interest $218.369

Other Income:

EMS Billing $322,294 (Previous year net billing revenue = 55.3% of gross charges)

Wyoming Contract $480,000

Grants $147,876

Misc. Income $50,821

FY 2023 Carryover / Reserve / Deficit = ($17,000)

4.2.4. Resource Assessment Additional Factors

Teton County Fire & Rescue's response to RAS Q44 and Q45 stated that the biggest financial concerns are, "Ability to keep up with inflation for personnel costs (and) pending capital facilities costs. We are currently working with the cities and counites to implement impact fees." Impact fees can be used for non-personnel expenses related to increased demand related to new construction and population growth. Based on report data, the coverage contract with Wyoming and revenue from wildland fire deployments is key to balancing the annual budget. The Wyoming contract is subject to renewal negotiations and approval by Teton County Wyoming Commissioners and Teton County Idaho Fire Protection District Commissioners. Wildland fire income is totally dependent on the frequency and duration of personnel and equipment deployment.

In response to RAS Q46: utilization of additional funding, if available, key factors were rated:

1. Increase pay for existing employees

2. Training existing employees/continuing education

3. Facility upgrades

4. Training new recruits

5. Personnel – add more employees

6. Equipment upgrades

7. Provide fringe benefits

In summary, “Moving forward, I see us improving the EMS services we offer. Hope to move EMTs up to AEMT level and increase optional modules. Have plans to adapt ambulances, stations, and personnel to the needs of a rapidly growing and changing community. Adequate funding will be an on-going challenge. Maintaining staff levels in rural areas with high housing costs and high costs of living is very difficult. We have a serious lack of capital funds for critical facilities remodeling and upgrades.”

REFERENCE LIST

[1] [4] [8] [9] [12] [13] [22] Teton County, Idaho (2023). Homepage. https://www.tetoncountyidaho.gov

[2] [3] [5] [6] Teton County, Idaho (2023). https://en.wikipedia.org/wiki/Teton_County,_Idaho

[7] [14] [15] [17 [19]] U.S. Census Bureau. (2023). *US Census Bureau Quick Facts – Teton County, Idaho*. U.S. Department of Commerce. Retrieved from https://www.census.gov/quickfacts/tetoncountyidaho

[10] Policy Analysis Group, College of Natural Resources, University of Idaho. (2019). *Idaho forest factbook: county atlas of forest land and the forest product industry.* Retrieved from https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/cnr/research/PAG/idaho-forest-factbooks/county_factbook_august_2019.pdf

[11] U.S. Department of the Interior (2022). https://www.pilt.doi.gov

[16] [20] [27] [28] [29] [30] [31] University of Idaho Extension. (2023). *Indicators Idaho: Teton County.* Retrieved from http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16081

[18] [32] [33] Zillow. (2023). (County Name) ID Home Prices & Home Values / Zillow. https://www.Zillow.com/Teton-county-id/

[21] [23] [24] [25] [26] Idaho Bureau of Labor Statistics (August-September 2023). https://lmi.idaho.gov/.../labor-force-statistics

[34] Sperling's Best Places. (2023). https://www.bestplaces.net/county

[35] Eastern Idaho Regional Medical Center. (2023). https://eirmc.com/

[36] Idaho Falls Community Hospital. (2023). https://www.idahofallscommunityhospital.com

[37] Mountain View Hospital. (2023). https://www.mountainviewhospital.org/

[38] Madison Memorial Health. (2023). https://madisonmemorial.org/

Appendix A. EMS Agency Resource Assessment

The EMS Agency *Resource Assessment* is an 86-question, in-depth peer-reviewed data-gathering tool that was assembled for this project, specifically. Some of the questions listed within it are designed to be entirely qualitative and some are quantitative. Although all registered EMS agencies in the State of Idaho were contacted, some elected not to provide responses for the *Resource Assessment*, as participation in providing responses was completely voluntary. Being a data-gathering tool designed by the EMS Planners specifically for this project, EMS agency anonymity was offered to each participant in cooperation for their participation. Only one response per agency was accepted as a part of this data-gathering process.

Agency Information

1. What is your name and preferred contact information?

2. What agency do you represent?

3. Please briefly describe your agency's service territory / geographic footprint.

Perceptions

The following questions relate to your perceptions regarding your EMS agency.

4. Overall, on a scale of 1-100, how stable/sustainable is your EMS agency?

5. Which statement below best describes your agency's financial situation?

6. My agency has a written and adopted communication strategy and community outreach plan that is effective and productive. (Agree - Disagree Scale)

7. My agency is viewed in a favorable light by the members of my community. (Agree - Disagree Scale)

8. My agency is well supported by our local oversight entity (county, special district, etc.). (Agree - Disagree Scale)

9. My agency is well supported by the Idaho EMS Bureau. (Agree - Disagree Scale)

10. Please describe your relationship, engagement and interaction with county officials.

Organizational

The following questions relate to your organizational structures and processes.

11. Is your agency **public** or **private**? (List type)

12. Which public/private agency structure best describes your organization?

13. Who are your strongest partners in service delivery?

14. To what extent is your medical director involved in EMS training?

15. To what extent is your medical director involved in quality assurance and chart review?

16. Please describe the process by which you are dispatched, and who is involved? How does the call get to you? (Example: When someone calls 911 for an ambulance, the call originates at the county sheriff's dept. who then transfer's it to a fire/EMS dispatcher who then dispatches your unit.)

17. Is your dispatch entity using emergency medical dispatch (EMD) qualified personnel or medical priority dispatch software (MPDS)?

18. What is your agency's dispatch cost annually? If none, please indicate 0.

19. Please indicate how effective your radio communications are in the grid below. (Grid question regarding interoperability and radio functions)

20. Do you have formal (written) EMS mutual and/or automatic aid agreements with your neighboring agencies?

21. If a neighboring agency who you regularly work with closed, how would that impact your service delivery?

22. What is your agency's knowledge of or interest in CHEMS (Community Health EMS)?

Budget

The following questions relate to your agency's EMS budget (where possible, please separate fire activities).

23. For the current budget year, what are your anticipated EMS operating costs?

24. For the current budget year what is your anticipated EMS capital expense (i.e. planned purchase of ambulances, stretchers, computers, etc.)?

25. For the current budget year what is your anticipated EMS personnel expense?

26. For the current budget year what is your anticipated EMS carryover/reserve?

27. For the last fiscal year, what was your total 911 EMS revenue?

28. For the last fiscal year, what was your total interfacility transfer EMS revenue?

29. For the last fiscal year, please describe the tax support your agency received (i.e. ambulance district funds, general funds, or similar).

30. For the last fiscal year, please describe any billing revenue your agency received.

31. Please describe the difference, if any, between billing revenue received vs gross billings.

32. For the last fiscal year, please describe any contracted or fee-for-service revenue received.

33. For the last fiscal year, please describe any other revenue streams received (i.e. donations, grants, etc.).

34. Do you have a special taxing district supporting EMS?

35. What is your agency's special taxing district levy rate? (If applicable)

36. What is your total county property tax levy rate?

37. Have you received any EMS related grants in the last two years?

38. Please tell us about which grant(s) you received, the amount for each grant and any matching or cost share requirements.

39. How much income did you make in fundraising in your last fiscal year?

40. Do you bill for services?

41. Through what means do you perform billing? (If applicable)

42. Do you know what your payor mix percentages are by category? (If applicable: Medicare, Medicaid, Out of Pocket, Commercial)

43. What are your biggest concerns regarding your budget?

44. What are some bright spots regarding funding/budgeting that you are excited or hopeful for?

45. Please rank the following items from your highest priority to lowest, if additional funding were available: personnel, pay increase, training, equipment, facilities, fringe benefits

46. Please describe your patient care reporting system. Do you utilize electronic (EPCR) or paper reporting?

47. To which hospital(s) does your agency typically transport patients? (please list all regularly used)

48. Which air medical service(s) does your agency use? (please list all)

Facilities

The following questions relate to your EMS agency's facilities.

49. Does your agency's current facilities meet your overall needs in the following categories? (Location, Condition, Size)

50. How would you rate the overall condition of your facilities (buildings, garages, etc.)?

51. How many ambulance stations do you currently operate out of?

52. Describe your priority needs for current and/or future facilities. What are your maintenance and repair processes? Do you have a rainy-day fund?

Staffing/Training/Education

The following questions relate to your EMS agency's staffing and training.

53. Of the options below, which best reflects your agency's staffing structure? (Career, uncompensated volunteer, paid on-call/per call, combination)

54. How many full time staff does your organization currently have?

55. What is the average age of your team?

56. How many EMRs does your agency currently have?

57. How many EMTs does your agency currently have?

58. How many Advanced EMTs does your service currently have?

59. How many Paramedics does your service currently have?

60. How many non-EMS licensed response personnel (i.e. drivers) does your agency have?

61. How well staffed is your agency? Consider what would happen if you lost a key team member, retirements or unforeseen circumstances.

62. What shift coverage issues do you currently have?

63. What is working well with your current staffing situation?

64. What specific benefits would increase your ability to recruit/retain volunteer staff?

65. What are your biggest concerns or threats regarding staffing?

66. Does your agency provide in-house continuing education/refresher courses?

67. Please describe the training programs/partnerships/organizations you use for current staff or new recruits.

Equipment & Supplies

The following questions relate to your EMS agency's equipment and supplies.

68. Does your agency's equipment and supplies meet your needs in the following categories? (Age/condition, Functionality, Use appropriateness)

69. My agency is able to obtain supplies to adequately stock the frontline ambulance(s).

70. Please rate the condition of the following key items: (List of BLS items like defibrillators, splints, etc.)

71. Please tell us about any grant requests you have made regarding equipment and supplies in the last two years.

72. Does the equipment you utilize on a daily basis support an appropriate reliable response to 911 calls and/or emergency medical calls?

73. Please tell us about your agency's equipment needs and how you resolve equipment issues. Do you have a reserve fund and what is the effect of supply shortages and/or aging equipment on your day-to-day operations?

Performance

The following questions relate to your agency's performance metrics.

74. What level of service best describes your agency? (ALS, ILS/Advanced, BLS, Emergency Medical Responder)

75. How many 911 EMS calls did your agency respond to in 2022?

76. How many 911 EMS calls resulted in a patient transport in 2022?

77. How many interfacility or medical transports did your agency perform in 2022?

78. Do you allow EMS personnel to respond to EMS calls in private vehicles?

79. In the last year, how often have you had difficulty responding to 911 calls?

80. Under what scenarios does your agency call for a helicopter and why?

81. Please rank the following from most impactful to response times to least impactful for your unique agency: Location, simultaneous call, personnel shortages, time of day, weather, geography, equipment/vehicle issues

82. Overall, please tell us about the bright spots where your organization excels in best practices and efficiency?

83. Please tell us about how your agency's responses to public lands and recreational facilities (trailheads, snowmobile parks, hunting areas, etc.) impact staffing, funding, equipment and response times. Feel free to share the approximate percentage of calls that go to these areas and how that impacts your overall operations.

84. Please tell us a little about what the future of EMS looks like for you? Feel free to share information about new technologies, operational advancements and organizational evolutions that you look forward to integrating at some point.

85. What is one issue, above all else, you would like the state and the Idaho Legislature to know about your agency and EMS in Idaho?

Appendix B. EMS Planner Professional Bios

Joe Palfini – North AOR

Joe Palfini has served as a leader in public safety and healthcare for more than 25 years within rural and urban healthcare delivery systems across the country. As an EMS provider, trauma nurse, and firefighter, he gained extensive experience in trauma, critical care, and prehospital medicine as a prehospital provider and member of a rotor-wing air medical flight crew member. He worked at cutting-edge clinical facilities, including the R Adams Cowley Shock Trauma Center in Baltimore, Maryland, and responded to large scale disasters as a founding member of the Texas Emergency Medical Task Force, and as a member of the Texas Task Force One Urban Search and Rescue Team.

In 2001, he joined the United States Army, serving in operational and leadership roles, including clinical positions in a Forward Surgical Team, and deployed in support of Operation Iraqi Freedom, commanding a 44-bed hospital in the combat zone. In these roles, Joe was provided unique opportunities to develop programs aimed at improving healthcare delivery for underserved communities within the operational theater and led initiatives to improve healthcare delivery to injured Soldiers, including the development of a training program for Army nurses supporting the evacuation of severely injured Soldiers from field hospitals back to definitive care.

While maintaining operational and leadership roles in the prehospital and public safety setting, he was recruited into a new role as a senior executive for a nationally renowned regional EMS and emergency healthcare delivery system organization in Texas, shaping innovations to prehospital medicine, disaster response, and regional communications systems for the metropolitan, rural, and frontier communities serving nearly three million citizens. In this role, he helped to develop, implement, and improve regional and statewide trauma, cardiac, stroke, and EMS mutual aid systems that support local governments with daily operations, and during mass casualty incidents and large-scale disasters.

Starting Bison Six Emergency Group in 2021, he has led large project management and stakeholder engagement activities, including civilian-military collaboration program improvement for the evacuation of injured Soldiers during a wartime scenario, delivery of several innovative educational programs for EMS and hospital clinicians, and contributed to research on delivery of high-quality clinical care in rural, austere, and communities impacted by disaster nationwide.

ANDREW MENTZER – NORTH CENTRAL AOR

Andrew Mentzer is a policy professional, native to Idaho, with nearly 20 years of public, private, and nonprofit experience. He holds a bachelor's degree in political science, master's certification in community and regional planning, and master's degree in public administration, all from Boise State University. Andrew is also a doctoral student in the Public Policy and Administration program at Boise State.

His experience includes extensive planning, strategy, programming, grants, and implementation work. Andrew co-authored the *2014 Idaho Water Survey*; wrote Idaho's pre-apprenticeship playbook, Emergency Fuels Plan (ESF-12); created Valley County's *Singletrack Sidewalks* platform; co-authored Blaine County's *Climate Action Plan*; and has built numerous innovative programs and strategies for local housing conversion, workforce development, waste management, recycling, and sustainability. He was formerly the Executive Director for the West Central Mountains Economic Development Council and has owned and operated two successful Idaho-based businesses over the years. In his spare time, Andrew enjoys being outdoors with his wife, Genny, and black lab Sam.

TIM NOWAK – SOUTHWEST AOR

Tim Nowak is a professional fire & EMS consultant with Public Consulting Group LLC (PCG) and brings over 20 years of industry experience to this project. Tim began his career in Wisconsin and eventually transitioned to Colorado, then to Florida, and back to Wisconsin as he entered his full-time consulting role. He holds a bachelor's degree in fire science, an undergraduate certificate in human resource management, and an associate degree as a fire protection technician.

His work experience spans across rural through urban communities, volunteer through career organizations, and prehospital through in-hospital working environments. Tim has been extensively involved in EMS continued education and content development throughout his entire career, publishing over 200 articles and producing hundreds of hours of continued education content, in addition to publishing a magazine focused on EMS professional development. Within his career roles, he has functioned as a prehospital EMT through critical care paramedic provider, EMS educator, quality assurance specialist, data manager, operational company officer, and executive chief officer.

In his role as an executive chief officer, Tim oversaw the logistics & procurement, special operations, community risk reduction, preparedness, and community paramedicine programs for a countywide EMS agency responding to over 50,000 incidents per year. After functioning in this role, Tim became a professional consultant working with fire departments, EMS agencies, and communities throughout the country leading projects as a subject matter expert, technical advisor, and in filling various project management roles.

Tim remains credentialed as a Nationally Registered Paramedic and has been a board member on various state and national EMS associations, as well as a member to multiple state EMS work groups and committees. Throughout his career, he has held critical care paramedic, basic and advanced life support instructor, supervisory through managing paramedic officer, and fire officer credentials.

Recent Project Experience

Lead Subject Matter Expert – Countywide EMS System Feasibility Study (MI)
Lead Subject Matter Expert – Countywide EMS Agency Analysis (IN)
Lead Subject Matter Expert – Paramedic Staffing Study (MD)
Lead Subject Matter Expert – Countywide EMS Analysis (SC)
Lead Subject Matter Expert – Countywide Ambulance Service Feasibility Study (MI)
Lead Subject Matter Expert – Countywide EMS System Analysis (NC)
Lead Subject Matter Expert – EMS Organizational Model Study (NY)
Lead Subject Matter Expert – Parish-wide EMS Feasibility Study (LA)
Lead Technical Advisor – Commission on Accreditation of Ambulance Services (CAAS) Accreditation Project (TX)
Lead Technical Advisor – Fire & EMS Non-Profit to Municipal Transition of Services (WI)
Lead Technical Advisor and Creator – Annual Report and Community Focus Report (PA)
Subject Matter Expert – Countywide EMS and Hospital Base Station Evaluation (CA)
Subject Matter Expert – Dispatch Equity and Operational Efficiency Study (TX)
Whitepaper Author – *An Abstract of Challenges Facing Michigan's Rural EMS Agencies* (MI)

DAWN RAE & JASON FERRERA – SOUTH CENTRAL AOR

Dawn Rae is a 23-year EMS clinician who began her career in 2000 as a volunteer EMT in a rural fire department providing frontier EMS response and simultaneously worked as a wildland firefighter/EMT for the U.S. Forest Service. In 2002, she completed the Paramedic Program at Central Oregon Community College and began her paramedic career in 2003.

In 2011, Dawn was part of a four-person team brought together to develop a Community Paramedic Program. This group was responsible for creating Community Paramedicine in Idaho and was part of a nationwide effort to establish this expanded healthcare offering.

In 2018, she brought this experience to the rural setting as a Community Health Paramedic/EMS Manager in central Idaho. In her eighteen months of employment, she managed, educated, and worked with department personnel while participating in regional EMS collaboratives, brainstorming ways to improve the delivery of prehospital care.

Today, Dawn operates as a career EMS provider in the Community Paramedic role she helped create and holds a Bachelor of Health Science from Boise State University.

Jason Ferrara came to EMS as a second career. He obtained a Bachelor of Business Economics from Boise State University and went to work in the financial technology sector. After several years and an interest in EMS that wouldn't wane, he obtained his EMT-B certification while working full-time.

He transitioned to a full-time student role after being accepted into the Idaho State University Paramedicine Program. Simultaneously, he became part of the local EMS agency, initially as a volunteer before being promoted to a full-time EMT and ultimately a Paramedic upon graduation.

After several years, an opportunity to combine these disparate experiences in the fire and EMS software space presented itself. In this role, he supported departments moving to a technology-forward operating model. Jason spent nearly three years meeting with career and volunteer departments across the Pacific Northwest to understand how they operate, their unique challenges, and how EMS functions at the department, regional, and state levels.

Today, Jason works in the evolving intersection of healthcare and artificial intelligence. In this role, he brings his experience as a clinician, patient, and parent to help shape how hospital emergency departments interact with patients and what the future patient experience looks like.

LENA DICKERSON – SOUTHEAST AOR

Lena Dickerson has called East Idaho home for eighteen years and lives in Bonneville County. With over twenty years of experience as an Emergency Medical Technician in volunteer and career agencies, she is licensed as a nationally registered paramedic. With a working history as a field training officer and assistant director for an ambulance service, she assisted the agency's transition from a part-time Intermediate Life Support service to a full-time Advanced Life Support service while structuring one of Idaho's first community paramedicine programs. Former work also included wilderness medicine, wildland firefighting, and volunteer structure firefighting with fieldwork as a Public Information Officer and Medical Unit Leader in the Incident Command System.

In 2004, she obtained a Bachelor's degree in Business Administration and then pursued a Master's in Clinical Health Services as a Physician Assistant in 2017 from the University of Washington. She honorably graduated with a thesis presentation about the recruitment and retention of rural Emergency Medical Services (EMS) providers relative to the community paramedicine concept. She then attended a rural emergency medicine physician assistant (ERPA) fellowship at The Mayo Clinic. Currently working in critical care, she practices as an ERPA in urban and rural emergency departments. She is a Comprehensive Advanced Life Support educator, assists with EMS agency education and mentorship, and daily collaborates with EMS field and hospital clinicians.

Intending to help be part of the greater solution for nationwide EMS challenges, Lena devotes much of her time to studying and furthering her knowledge as an educator, mentor, strategist, and practitioner.

BOB FOSTER – EAST AOR

Bob Foster is a 32-year resident of Eastern Idaho and currently lives in Teton Valley. He has 20 years' experience as an Idaho-licensed Advanced EMT and was the administrator of a rural, volunteer EMS agency for 10 years. During his active career Bob was a NOLS-certified Wilderness EMT and a member of the Himalayan Rescue Association Mount Everest Base Camp EMS team. Bob is the former vice-chairman of the East Idaho Region VII Crisis Intervention Team and a certified Critical Incident Stress Management facilitator. His field work has included certification as Operations Section Chief and Logistics Officer in the Incident Command System. Bob was privileged to represent rural emergency medical services on the Idaho EMS Advisory Council (EMSAC) and chaired the East Region Time Sensitive Emergency (TSE) Committee.

Bob presently serves as an elected fire commissioner for Teton County Fire and Rescue and has been a board member of Silver Star Communications since 2006. He holds a master's degree in organizational development and a graduate teaching credential in business and industrial management. Bob has 35 years' experience as a strategic planner and currently consults with a wide variety of public and private organizations.

An avid outdoorsman, Bob spends his "spare time" working as the transportation and guest logistics coordinator for a historic flyfishing lodge and fully enjoys all the recreational opportunities offered in Rocky Mountain region.