

# Financial Evaluation of Minnesota's Ground Ambulance Industry

An analysis of cost collection data submitted pursuant to Minnesota Statute §62J.49

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Emergency Medical Services Regulatory Board
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# **Executive Summary**

This report presents a comprehensive analysis of ground ambulance cost collection in Minnesota, focusing on key financial data and trends in the ground ambulance service sector. The report contains information on operational expenses, personnel costs, operational cost per transport, revenue sources, and financial sustainability for ambulance services in the state.

#### **Key Findings**

- 1. **Operational Expenses**: Minnesota ground ambulance services collectively reported operational expenses totaling \$455,627,714.20 during the reporting period. This underscores the substantial financial commitments required to maintain not only the essential emergency medical services (EMS) response, but also the cost associated with being ready for that response.
- 2. **Personnel Salary and Benefits**: A significant portion of operational expenses, approximately 75%, is attributed to personnel salary and benefits. This highlights the importance of addressing labor-related costs in ambulance service budgeting and planning. This is particularly challenging during a time of a well-documented workforce shortage in the current EMS deployment paradigm across the state.
- 3. **Operational Cost Per Transport**: Operational costs per transport have surged, with an increase ranging from 55% to 189% since 2010. This escalation in expenses signifies the financial challenges faced by ambulance services in providing efficient and accessible healthcare transportation.
- 4. **Cost Variation by Service Level**: The annual cost to operate a single ambulance varies significantly based on the level of service (Advanced Life Support ALS vs. Basic Life Support BLS) and whether it is staffed by volunteers, career (paid), or a combination of both. A volunteer BLS ambulance costs an average of \$90,000 per year to operate, while a career-based ALS ambulance costs approximately \$1.2 million per year to operate.
- 5. **Capital Investments**: In 2023, ambulance services reported investments exceeding \$60 million in capital resources to maintain and enhance emergency medical service capabilities. These investments indicate the ongoing need for modernization and equipment upgrades.
- 6. **Insurance Billables and Payments**: Ambulance services reported \$1.2 billion in insurance billables but received approximately \$450 million in insurance payments during the reporting period. The discrepancy between billables and actual payments raises questions about reimbursement rates and financial viability of ambulance services throughout the state.
- 7. **Financial Loss**: Alarmingly, 72% of reporting ambulance services reported some level of financial loss when comparing operational expenses to insurance revenues. This highlights the financial vulnerability of EMS providers, especially in light of increasing costs.
- 8. **Other Revenue Sources**: Ambulance services statewide reported an additional \$32.8 million in revenue from sources beyond insurance billables. These diverse revenue streams such as fundraising,

government subsidies, and fees charged for standby coverage among others all play a crucial role in sustaining ambulance services.

9. **Governmental Funding**: Nearly half (46%) of reporting ambulance services indicated that they did not receive any governmental funding, emphasizing the reliance on other revenue sources and the need for potential policy interventions.

This report reveals significant financial challenges and disparities within the ambulance service sector. Increasing operational costs, and a high percentage of financial loss underscore the need for a comprehensive assessment of reimbursement mechanisms and funding sources.

Addressing these challenges is essential to ensure the continued availability of reliable and efficient ground ambulance services across Minnesota. Further analysis and policy considerations are warranted to secure the financial sustainability of EMS providers and guarantee access to critical healthcare transportation for all residents of and visitors to the state.

Dylan J Ferguson Executive Director

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**Emergency Medical Services Regulatory Board** 

# **Purpose**

In an era marked by growing financial pressures on the nation's ground ambulance industry, the need for precise, comprehensive data on the cost of providing emergency medical services has never been more critical. The Emergency Medical Services Regulatory Board, recognizing the importance of such information in ensuring the sustainability and efficiency of its ground ambulance services, initiated a comprehensive effort to collect and analyze cost data associated with these vital services. This formal report is a culmination of those efforts, providing invaluable insights into the cost collection initiatives undertaken for ground ambulance services within the state. Despite the escalating financial challenges faced by ground ambulance providers across the United States, the availability of precise and detailed cost data has been a longstanding issue. This deficiency has hindered the industry's ability to make informed decisions and adapt to evolving financial pressures effectively. In Minnesota, a state recognized for its commitment to healthcare quality and efficiency, addressing this critical information gap became a priority.

The mandate for comprehensive cost collection efforts was enshrined in Minnesota Statute 62J.49, reflecting the state's dedication to transparency and data-driven policy decisions. This report delves into the multifaceted approach taken by Minnesota to address this challenge and presents findings that are instrumental in shaping the future of ground ambulance services within the state.

It is imperative to emphasize that the cost collection efforts undertaken in Minnesota, as documented in this report, are entirely distinct from the ongoing initiatives conducted by the Centers for Medicaid and Medicare Services (CMS) related to Emergency Medical Services (EMS) cost collection. While CMS focuses on a broader national perspective, Minnesota's efforts are tailored to the specific needs and circumstances of its ground ambulance services.

Moreover, this report aligns with and builds upon the 2022 Report from the Office of the Legislative Auditor, providing a more comprehensive understanding of the cost dynamics in Minnesota's ground ambulance industry. By combining the findings from these two critical sources, the state is poised to enact informed policies and strategies that can sustain the quality and accessibility of emergency medical services for its residents.

The primary purpose of this formal report is to present a detailed account of the cost collection efforts undertaken for ground ambulance services in the State of Minnesota. It underscores the pressing need for such information, particularly considering the ongoing financial challenges faced by the industry. By outlining the statutory requirement for cost collection, detailing the methods employed, and presenting key findings, this report aims to equip policymakers, industry stakeholders, and the public with a robust foundation of knowledge. Our intent is to simply present the information that has been obtained in an aggregate format to present a regional and statewide view of the financial conditions related to emergency medical services. However, it should be recognized that not all state or even region trends apply equally to every individual ambulance service. Ultimately, the insights gleaned from this report will inform decisions of national, state, and local policy makers that have the potential to enhance the efficiency, accessibility, and sustainability of ground ambulance services across the state, ensuring that residents receive the care they need in times of emergency.

# Methodology

In January of 2023 staff from the Emergency Medical Services Regulatory Board (EMSRB) developed a cost collection survey utilizing Survey Monkey as a data collection tool. The tool was developed in concert with industry stakeholders of all delivery types in addition to representation of the state's regional EMS systems.

The cost collection instrument was presented to the Board for consideration and met with their approval during their March 16, 2023, board meeting. The survey and instructions were sent out to all ground ambulance service managers in April 2023. Of the 322 ambulance service licenses required to submit data 278 (86.34%) submitted data in time to be included in this report.

Ambulance services were requested to submit data from their last completed fiscal year. For many ambulance services their data was reflective of January 1, 2022 – December 31, 2022.

Data was extracted from Survey Monkey and was placed into a Microsoft Power BI database for analysis.

Pursuant to Minn Stat. 62J.49 all data that was collected for these purposes is considered nonpublic under the Minnesota Government Data Practices Act. As a result, to provide aggregate information and a level to protect confidentiality, geographic analysis of different measures and metrics is restricted to the EMS region level of the ambulance service.

All data submitted was self-reported by ambulance services and the EMSRB did not collect verified financial statements to independently verify the veracity of the information provided.

Finally, there are multiple institutions that hold multiple ambulance licenses. Not all entities were able to report individual cost and revenue figures at a license level and only provided at an enterprise level. In these instances, they were assigned to the EMS region that contained most of their primary service area. A map delineating the regional EMS system boundaries can be located here.

Data in this report only represents revenues and costs of licensed ground ambulance services. It does NOT reflect costs of entities providing only first response services or provide only mobile integrated health care commonly referred to as Community EMT or Community Paramedic. Additionally, it does NOT include costs associated with aeromedical EMS providers.

# **Expenses**

Within the intricate framework of a statewide Emergency Medical Service (EMS) system, myriad expenses converge to ensure the timely and efficient delivery of life-saving care. These expenses encompass a spectrum of financial commitments, ranging from the day-to-day operational costs to capital investments in equipment and infrastructure, and even the invaluable contributions of volunteers.

The evaluation of these expenses, as well as their reporting mechanisms, is integral to comprehending the financial landscape of the EMS system and maintaining its vitality. This section of the report serves as a lens through which we delve into the expense side of the statewide EMS system's balance sheet, unraveling the complexities of operational, capital, and unrealized expenses while considering diverse breakdowns, such as region, service delivery type, and level of service.

At the heart of any EMS system lies a multitude of expenses that collectively enable the provision of timely and high-quality emergency medical care. These expenses can be broadly categorized into three essential types:

<u>Operational Expenses:</u> These encompass the day-to-day costs incurred in running an ambulance service efficiently. Operational expenses encompass salaries and wages, medical supplies, vehicle maintenance, and fuel, among others. Understanding the nuances of these operational expenses is crucial to ensuring the continuity of EMS services and the well-being of the communities they serve.

<u>Capital Expenses:</u> Capital investments are critical to maintaining and upgrading the EMS infrastructure. These expenses include the acquisition of ambulances, medical equipment, and the construction or renovation of EMS facilities. Capital expenses reflect the long-term commitments necessary to sustain and enhance the EMS system's capabilities.

<u>Unrealized Expenses:</u> Volunteer Contributions: In addition to the tangible costs, the EMS system is enriched by the invaluable contributions of volunteers. These volunteers often donate their time, skills, and resources to support the EMS system. Evaluating these unrealized expenses, such as volunteer labor and community contributions, is vital for comprehending the holistic financial picture of EMS services.

## **Exploring Reporting Methods**

The diversity of expenses within the EMS system necessitates equally diverse reporting methods. To gain a comprehensive view of the financial landscape, expenses can be analyzed and reported through various lenses:

*Breakdowns by Region*: Assessing expenses by geographic region offers insights into the unique challenges and demands faced by different areas within the state. It enables targeted resource allocation and ensures that EMS services are tailored to the specific needs of local communities.

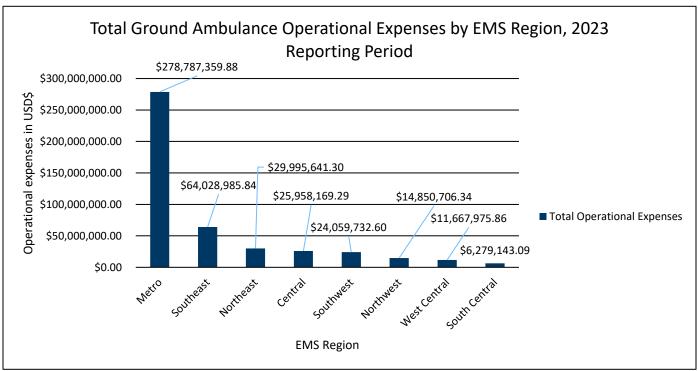
Service Delivery Type - Volunteer vs. Career: Segmenting expenses by service delivery type, whether volunteer-based or career-based, illuminates the distinct financial dynamics and cost structures inherent to each model. This differentiation aids in optimizing resource allocation and service efficiency.

Level of Service: Analyzing expenses based on the level of service provided, such as basic life support (BLS) or advanced life support (ALS), allows for a granular understanding of the costs associated with different tiers of care. This data can inform decisions regarding resource allocation and service expansion.

# **Operational Expenses**

During the 2023 reporting period, Minnesota ground ambulance services reported \$455,627,714.20 in operational expenses. These expenses reflect actual costs in operating a statewide EMS system. This section does not include capital investment expenses, such as buying new ambulances. It also does not include unrealized costs such as the costs saved by volunteerism.

Figure 1. Total ground ambulance operational expenses by EMS region, 2023 reporting period.



During the 2023 reporting period, the total operational expenses incurred by the state's ambulance services varied significantly by EMS region. The Metropolitan EMS region reported the highest amount of operational expenses with \$278,787,359.88 (61%), and the South-Central region reported the lowest amount with \$6,279,143.09 (1.3%). The higher expense total in the Metropolitan region is expected as the overwhelming number of EMS responses occur in that region.

Table 1. Ground ambulance operational expenses by category and EMS region, 2023 reporting period.

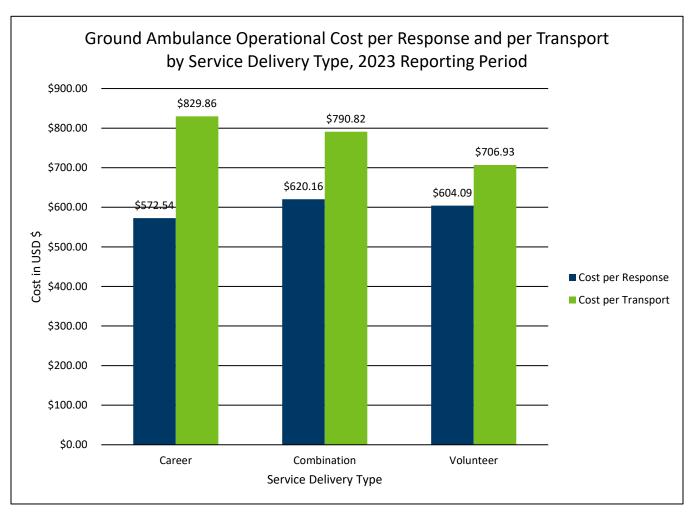
EMS Region	Education	A	ALS Intercept Expenses	undraising Expenses	Other	(:	Personnel Salary/Benefits)	Supplies and Equipment	Travel	Fu	Vehicle el/Maintenance
Central	\$ 73,395.66	\$	41,624.44	\$ 781.47	\$ 4,426,486.17	\$	18,439,297.20	\$ 1,376,312.29	\$ 42,481.82	\$	1,557,790.24
Metro	\$ 561,317.77	\$	-	\$ -	\$ 39,623,696.25	\$	214,804,118.55	\$ 13,350,767.75	\$ 192,951.99	\$	10,254,507.57
Northeast	\$ 201,220.85	\$	69,938.08	\$ -	\$ 4,340,547.88	\$	22,504,714.14	\$ 1,327,378.78	\$ 131,005.58	\$	1,420,835.99
Northwest	\$ 138,680.92	\$	11,569.02	\$ 7,827.24	\$ 1,827,986.79	\$	11,075,634.60	\$ 981,790.42	\$ 32,535.23	\$	774,682.12
South Central	\$ 101,845.08	\$	29,440.48	\$ 3,400.36	\$ 611,682.10	\$	4,818,299.13	\$ 485,277.60	\$ 5,126.57	\$	224,071.77
Southeast	\$ 1,201,406.89	\$	60,030.52	\$ 13,005.11	\$ 10,602,462.45	\$	44,852,952.68	\$ 2,237,647.00	\$ 66,300.20	\$	4,995,180.99
Southwest	\$ 197,796.91	\$	120,313.83	\$ 23,524.14	\$ 3,724,275.66	\$	17,081,165.81	\$ 1,676,142.02	\$ 32,403.94	\$	1,204,110.29
West Central	\$ 48,779.54	\$	34,979.66	\$ 1,400.00	\$ 1,541,623.60	\$	8,922,435.14	\$ 446,219.49	\$ 67,239.00	\$	605,299.43
Statewide	\$ 2,524,443.62	\$	367,896.03	\$ 49,938.32	\$ 66,698,760.90	\$	342,498,617.25	\$ 21,881,535.35	\$ 570,044.33	\$	21,036,478.40

This table presents operational expenses by category for ambulance services in different Minnesota EMS regions. Notable observations from the data are as follows:

- 1. Personnel Costs: Personnel expenses, including salaries and benefits, are the most significant component of operational expenses for all EMS regions. The Metro region has the highest personnel expenses, exceeding \$214 million, while the Central region has the lowest at just over \$18 million. Statewide 75% of operational expenses were related to personnel salary and benefits.
- 2. Supplies and Equipment: Supplies and equipment costs are substantial across all regions, with the Metro region leading with expenses exceeding \$13 million, followed by the SE and NE regions.
- 3. Fundraising Expenses: Most regions do not report significant fundraising expenses, except for the SW and SE regions, which have notable expenditures in this category.
- 4. Travel and Vehicle Fuel/Maintenance: These categories vary across regions but generally represent a smaller portion of the total expenses.

In summary, personnel and supplies/equipment costs are consistently significant expenses for all EMS regions. The Metro region stands out with the highest overall operational expenses, likely due to its larger population and service area. The data also suggests variations in education, ALS, fundraising, and "Other" expenses across regions, reflecting differences in operational priorities and funding sources. EMS regions should analyze these expense patterns to optimize their budget allocation and improve cost-effectiveness in providing emergency medical services.





Operational expenses in Emergency Medical Services (EMS) are typically tracked using a per-transport or perresponse method. In this approach, an EMS agency's total operational costs are divided by the number of patient transports or ambulance responses within a specific period. This method offers a clear and concise way to assess the financial efficiency of EMS services. Both metrics are valuable: the cost per response includes all expenses, covering readiness costs, while the cost per transport is crucial because, in most cases, ambulance services are reimbursed only for EMS responses that result in transporting a patient to an approved destination.

Interestingly, career-based ambulance services have a lower cost per EMS response (\$572.54) compared to volunteer services (\$604.09). This difference can be attributed to economies of scale; career-based services handle a higher volume of EMS responses, which helps distribute expenses more evenly. Conversely, volunteer services show a lower cost per transport (\$706.93) compared to career services (\$829.86). This is likely because volunteer services bill for a higher proportion of patient transports or responses, highlighting the financial distinctions between these two service models.

Figure 3. Ground ambulance operational cost per response and per transport by EMS region, 2023 reporting period.

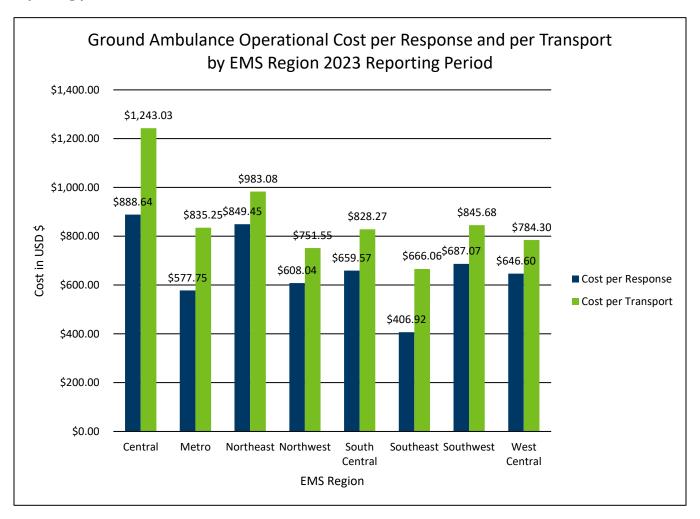


Figure 3 displays similar data from figure 2, but is sorted based on EMS region, and includes all service delivery types. Ambulances services based in the Central region reported the highest average per response and transport costs. Whereas the ambulance services based in the Southeast region had the lowest per response and per transport cost.

Additionally costs per transport have increased significantly over the last twelve (12) years. In a 2010 analysis the U.S. Government Accountability Office calculated that the nationwide median of cost per transport was \$429. Using the historical nationwide median as a benchmark, costs per transport have increased between 55% and 189% depending on region over the last decade.

Figure 4. Ground ambulance operational cost per response and per transport by highest level of agency license, 2023 reporting period.

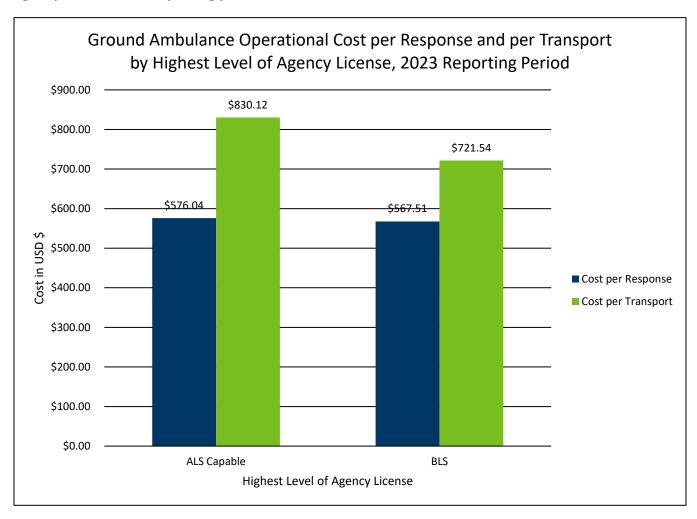


Figure 4 displays similar data from figure 3 but is sorted based on the highest licensure level of the ambulance service. There is not a sizeable difference in the cost per response, but the cost per transport is higher for ALS capable services than BLS services.

Table 2. Operational cost per response and per transport by highest level of service and service delivery type, 2023 reporting period.

Service Delivery Type	ALS Cost per R	esponse	ALS Cost per Tra	ansport	BLS Co	ost per Response	BLS Cost	er Transport
Career	\$	572.86	\$	830.27	\$	540.78	\$	789.11
Combination	\$	654.29	\$	840.47	\$	544.75	\$	683.62
Volunteer	Insufficient Data	a	Insufficient Data		\$	630.40	\$	734.98

The data presents the cost per response and cost per transport for Advanced Life Support (ALS) and Basic Life Support (BLS) ambulance services categorized by service delivery type. Notable insights from the data include:

- 1. Cost Variation by Service Type: ALS services generally have higher costs per response and per transport compared to BLS services across all service delivery types. This is likely due to the increased level of medical care and resources required for ALS interventions.
- 2. Career Services: Career-based ALS services have the highest cost per response and per transport among ALS services, while BLS services delivered by career personnel also have higher costs compared to volunteer-based BLS services.
- 3. Combination Services: Combination services, which may involve a mix of career and volunteer personnel, have intermediate costs between career and volunteer services for both ALS and BLS categories.
- 4. Volunteer Services: Unfortunately, there is insufficient data available for ALS services provided by volunteers, making it challenging to draw specific conclusions about their cost effectiveness. However, volunteer-based BLS services have lower costs per response and per transport compared to career-based BLS services.

In summary, ALS services are generally more costly than BLS services, and the cost variation is influenced by the service delivery type. Career-based services tend to have higher costs than volunteer-based services in both ALS and BLS categories.

**Table 3. Current CMS Ambulance Service Rates by Level of Service** 

Rate	Urban	Rural
ALS 1 Non-Emergency	\$329.34	\$332.57
ALS 1 Emergency	\$521.46	\$526.57
ALS 2	\$754.75	\$762.15
BLS Non-Emergency	\$274.45	\$277.14
BLS Emergency	\$439.12	\$443.43

Table 3 provides the current CMS rates that are effective in the State of Minnesota as of January 1, 2023. CMS provides different rates to rural vs urban ambulance services, which is based on the zip code of where the patient was picked up.

**Table 4. Analysis of Revised Operational Costs and CMS Ambulance Service Rates** 

Highest Level of License	Range of Revised Operational Costs per Transport	Range of CMS Ambulance Service Rates for License Level	Range of Difference between Costs per Transport and Ambulance Service Rates
Advanced Life Support	\$792.78 - \$796.62	\$329.34 – \$762.15	(\$463.44) – (\$34.47)
Basic Life Support	\$644.76 – \$792.50	\$274.45 - \$443.43	(\$370.31) – (\$349.07)

The ambulance service rates provided in table 3 are a base rate. In addition to that base there are also mileage payments that are provided. Those rates are variable and are based on rural vs urban and on how many miles were traveled with a patient. The 2023 mileage rates vary from \$8.71 - \$13.19 per mile based on individual circumstances of a response.

The EMSRB desired to calculate an approximate difference between the costs associated per transport and the difference between the rate schedule approved by CMS. However, because the EMSRB did not have the granular mileage data to do so, it was necessary to implement an alternate method.

For table 4 the operational cost per transport was revised to exclude all operational expenses from the fuel and vehicle maintenance category. This expense type is the primary impetus for the mileage reimbursements provided by CMS, by removing them it was possible to compare base expenses more accurately to the CMS base rate.

This comparison concluded that an ambulance service licensed at the Advanced Life Support level loses between \$34 and \$463 per Medicare/Medicaid transport depending on the ambulance services delivery type (career, combination, or volunteer) and which ALS rate was appropriate for a given patient encounter. An ambulance service licensed at the Basic Life Support level loses between \$349 and \$370 per Medicare/Medicaid transport depending on the ambulance services delivery type (career, combination, or volunteer) and which BLS rate was appropriate for a given patient encounter.

The variance between Medicare rate and actual costs per transport, presents a significant negative impact to Minnesota ambulance services, as 62% of all insurance billables are billed to Medicare or Medicaid.

Figure 5. Yearly operational cost per regularly staffed ground ambulance by EMS region, 2023 reporting period.

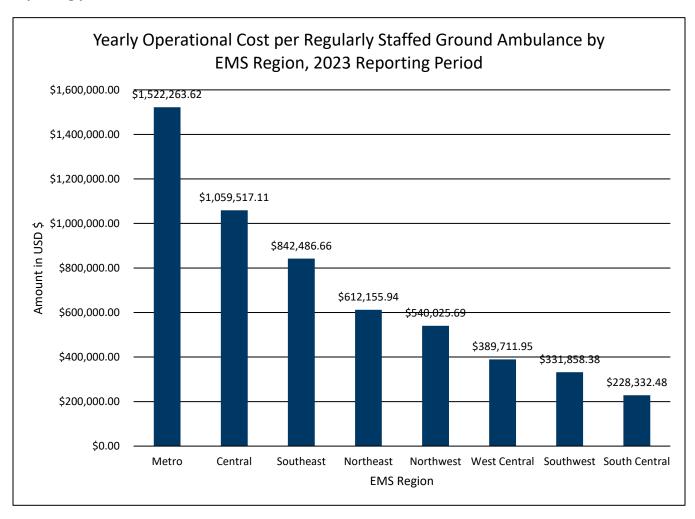


Figure 5 displays the total average yearly operational cost per staffed ground ambulance for each EMS region of the state. Regions with more ALS ambulances and career services have a higher per staffed ambulance cost due to higher expenses associated with those types of units. Regions with predominantly BLS and volunteer services have lower per ambulance costs.

Figure 6. Yearly operational cost per regularly staffed ground ambulance by highest level of agency license, 2023 reporting period.

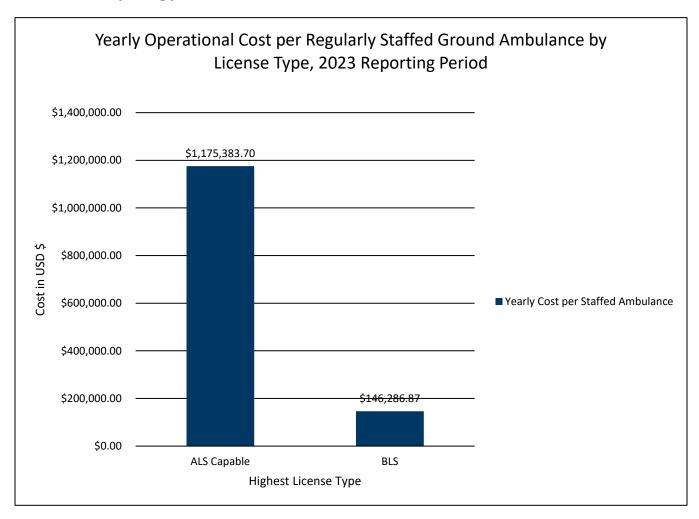


Figure 6 displays the average cost to operate a single ground ambulance in the state of Minnesota. For ALS capable services the average yearly cost was nearly \$1.2 million per ambulance, whereas the BLS average was \$146,286.87. The BLS average is strongly influenced by lower labor costs that are largely subsidized by volunteer EMS providers throughout the state. This subsidy will be examined further in a later section of this report.

Figure 7. Yearly operational cost per regularly staffed ground ambulance by service delivery type, 2023 reporting period.

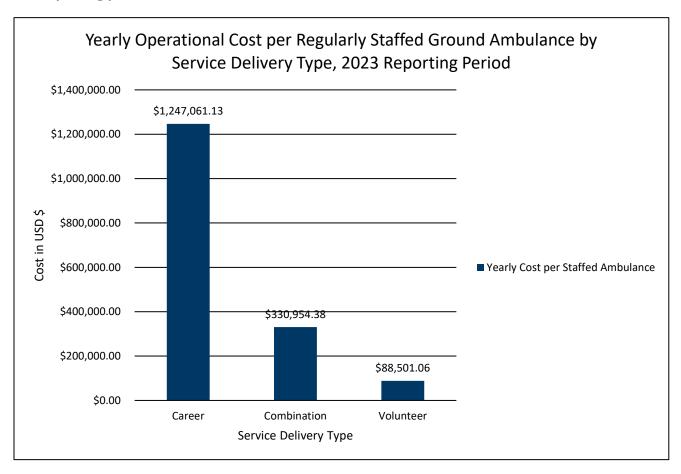


Figure 7 displays the average cost to operate a single ground ambulance in the state of Minnesota by service delivery type. For career services the average yearly cost was \$1.24 million per ambulance, whereas the volunteer service average was \$88,501.06. The volunteer average is strongly influenced by lower labor costs that are largely subsidized by volunteer EMS providers throughout the state.

Table 4. Cost per staffed ambulance by service delivery type and by license type.

Service Delivery Type	ALS	Capable	BLS		
Career	\$	1,269,118.18	\$ 441,635.96		
Combination	\$	550,867.77	\$ 160,678.59		
Volunteer	Insi	ufficient Data	\$ 89,281.17		

Table 4 shows the average yearly cost to operate a single ambulance, broken out by both service delivery type, and highest licensure level. A career-based ALS ambulance cost nearly \$1.3 million to operate whereas a BLS volunteer ambulance had an average operational cost of \$89,281.17. There was insufficient data to calculate amounts for a volunteer ALS capable ambulance service.

#### **Capital Expenses**

Table 5. Capital expenses incurred and projected by ground ambulance agencies by EMS region, 2023 reporting period.

<b>EMS Region</b>	Capital Expenses Paid Last Fiscal Year	Capital Expenses Projected this Fiscal Year
Central	\$ 4,453,584.04	\$ 4,648,700.27
Metro	\$ 37,425,417.34	\$ 26,469,762.16
Northeast	\$ 4,736,480.99	\$ 4,805,901.69
Northwest	\$ 1,267,023.38	\$ 1,287,197.09
South	\$ 228,716.23	\$ 566,076.16
Central		
Southeast	\$ 3,624,172.76	\$ 6,051,925.00
Southwest	\$ 4,038,547.57	\$ 4,756,518.45
West Central	\$ 4,888,021.66	\$ 3,059,330.59
Statewide	\$ 60,661,963.97	\$ 51,645,411.41

Table 5 presents a comparison of capital expenses paid by Minnesota Ambulance Services in the last fiscal year and the projected capital expenses for the current fiscal year across different EMS regions. Notably, the Metro region reports the highest capital expenses in the last fiscal year, totaling approximately \$37.4 million. However, for the current fiscal year, their projected capital expenses are notably lower at around \$26.5 million, suggesting a potential decrease in capital investment due to the completion of projects and an increasingly challenging reimbursement environment. In contrast, the Southeast region reports a substantial increase in projected capital expenses for the current fiscal year, jumping from about \$3.6 million to approximately \$6.1 million. Overall, in the last fiscal year ambulance services made \$60.7 million dollars in capital investments to the operations of the statewide EMS system, that figure has fallen to \$51.6 million in projected investments this fiscal year.

## **Unrealized Expenses—Volunteerism in EMS**

Volunteerism has been a longstanding cornerstone of EMS systems nationwide, and discussions often revolve around quantifying the financial impact of volunteers on these systems. In an effort to analyze the volunteer contribution to Minnesota's EMS system, we requested volunteer and combination ambulance services to provide data on the hours volunteered by their members. We then calculated the total value of these volunteer hours by multiplying the number of hours by \$34.47. This specific rate was sourced from <a href="Independent Sector">Independent Sector</a>, a nonprofit organization specializing in calculating the per-hour value of volunteer work. This value was tailored to the current conditions seen in State of Minnesota.

While most volunteer and combination services did report their volunteer hours, some did not. For those services that did not provide their hour counts, we applied the average number of volunteer hours for their respective classification (combination or volunteer) to ensure a comprehensive analysis. Ambulance services that did not submit any cost collection data are not included in this analysis.

The EMSRB can reliably project that the statewide volunteer labor subsidy at over \$55 million dollars. Based on the number of ambulance services that did not submit data we estimate the figure to be closer to \$61 million.

Table 6. Projected volunteer subsidy in EMS by EMS region, 2023 reporting period.

<b>EMS Region</b>	<b>Projected Volunteer Hours</b>	<b>Projected Volunteer Subsidy</b>
Central	131,835	\$4,544,352.45
Metro	51,964	\$1,791,199.08
Northeast	160,898	\$5,546,154.06
Northwest	147,334	\$5,078,602.98
South	203,302	\$7,007,819.94
Central		
Southeast	313,226	\$10,796,900.22
Southwest	495,380	\$17,075,748.60
West Central	114,560	\$3,948,883.20
Statewide	1,618,499	\$55,789,660.53

Table 6 illustrates the substantial financial impact of volunteer EMS providers in the State of Minnesota across various regions. It reveals a clear correlation between the number of volunteer hours contributed and the resulting monetary value of these hours. The Southeast (SE) and Southwest (SW) regions significantly lead in both volunteer hours and projected subsidy, demonstrating their pivotal role in the state's emergency medical services. While other regions contribute fewer volunteer hours, their financial impact remains significant.

Table 7. Per staffed ambulance cost per year with volunteer subsidy vs without, 2023 reporting period.

EMS Region	Yearly Cost per Staffed Ambulance (Actual)	Yearly Cost per Staffed Ambulance (Volunteer Subsidy Removed)
Central	\$1,059,517.11	\$1,245,000.88
Metro	\$1,522,263.62	\$1,532,044.11
Northeast	\$612,155.94	\$725,342.76
Northwest	\$540,025.69	\$724,702.15
South Central	\$228,332.48	\$483,162.29
Southeast	\$842,486.66	\$984,551.13
Southwest	\$331,858.38	\$567,385.95
West Central	\$389,711.95	\$521,605.18

Table 7 provides a comprehensive view of the average yearly operating costs per staffed ambulance for different EMS regions, both with actual costs and a projection of costs without the volunteer labor subsidy. It reveals substantial variations among the regions, shedding light on the impact of volunteer labor on cost management. Notably, the Central and Metro regions have the highest actual yearly costs per ambulance, at \$1,059,517.11 and \$1,522,263.62, respectively. However, removing the volunteer subsidy would increase these costs further, emphasizing the cost-effectiveness of volunteer labor in these densely populated areas.

Conversely, the South Central (SC) region, with lower actual costs of \$228,332.48, sees a significant cost increase to \$483,162.29 when the subsidy is removed, underscoring the vital role of volunteers in cost savings in less densely populated regions. Overall, the data highlights the essential contribution of volunteer labor in controlling and reducing operating costs per ambulance across the diverse EMS regions in Minnesota. However, with increasing difficulties in recruiting and retaining volunteer EMS providers in rural Minnesota, policy makers should be aware of the financial impacts should volunteerism in EMS continue to decline.

## Revenues

#### **Insurance Revenues**

Figure 8. Statewide payor mix based on insurance billables, 2023 reporting period.

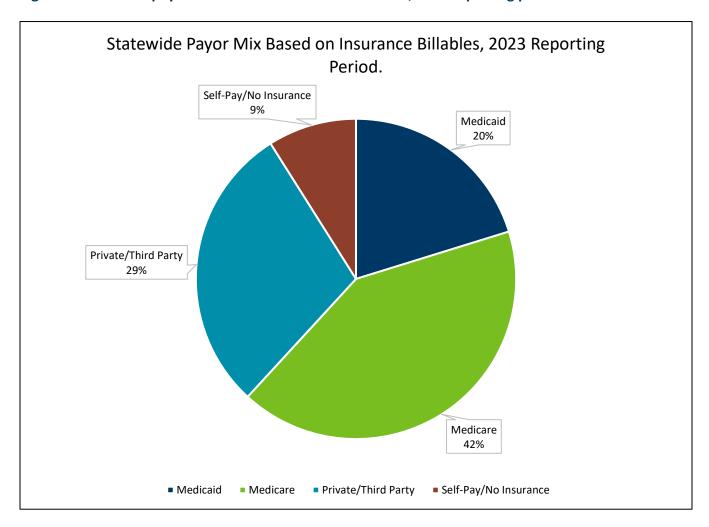


Figure 8 shows a statewide payor mix, based on what percentage of billables were charged to different health care payors. Options for data submission included Medicare, Medicaid, Private/Third Party, and Self-Pay/No Insurance. 62% of ambulance service billables were to public insurance programs whose rates are set at specific caps by law and do not reflect the cost to provide ambulance service. 29% of billables were to private or third-party insurance, and 9% of billables were to individuals identified as self-pay or no insurance.

Table 8. Payor mix of ambulance service based on billables by EMS region, 2023 reporting period.

Region	Medicaid	Medicare	Private/Third Party	Self-Pay/No Insurance
Central	16.96%	46.76%	32.30%	3.98%
Metro	24.31%	38.43%	25.29%	11.97%
Northeast	21.44%	49.97%	24.14%	4.44%
Northwest	27.89%	42.41%	25.66%	4.05%
South	17.02%	52.77%	27.17%	3.03%
Central				
Southeast	6.21%	46.02%	44.42%	3.35%
Southwest	11.14%	51.58%	33.33%	3.94%
West	11.43%	36.65%	43.87%	8.05%
Central				
Statewide	20.22%	41.61%	29.21%	8.96%

Table 8 shows payor mix, based on what percentage of billables were charged to different health care payors by EMS region. Options for data submission included Medicare, Medicaid, Private/Third Party, and Self-Pay/No Insurance. The metro EMS region reported the highest rate of self-pay/no insurance billables with 11.97%, the southeast region had the highest private/third party insurance billables at 44.42%, southwest had the highest percentage of billables billed to Medicare at 51.58%, and the northwest region had the highest rate of Medicaid billables at 27.89%

Table 9. Gross insurance billables by insurance type and EMS region, 2023 reporting period.

Region	Medicaid	Medicare	Private/Third Party	Self-Pay/No Insurance	<b>Grand Total</b>
Central	\$ 11,670,605.50	\$ 32,171,812.40	\$ 22,223,467.64	\$ 2,738,142.58	\$ 68,804,028.12
Metro	\$ 182,924,965.15	\$ 289,242,635.14	\$ 190,325,236.30	\$ 90,102,418.79	\$ 752,595,255.38
Northeast	\$ 15,764,641.38	\$ 36,739,607.69	\$ 17,747,630.43	\$ 3,267,488.98	\$ 73,519,368.48
Northwest	\$ 11,473,223.98	\$ 17,446,675.50	\$ 10,556,869.09	\$ 1,665,613.78	\$ 41,142,382.35
South Central	\$ 2,689,526.75	\$ 8,337,679.28	\$ 4,292,765.43	\$ 478,636.94	\$ 15,798,608.40
Southeast	\$ 10,710,842.51	\$ 79,322,871.20	\$ 76,577,844.61	\$ 5,772,530.03	\$ 172,384,088.35
Southwest	\$ 6,635,638.15	\$ 30,713,271.57	\$ 19,846,413.05	\$ 2,346,423.89	\$ 59,541,746.66
West Central	\$ 3,321,335.64	\$ 10,649,361.70	\$ 12,748,303.86	\$ 2,339,641.45	\$ 29,058,642.65
Statewide	\$ 245,190,779.06	\$ 504,623,914.48	\$ 354,318,530.41	\$ 108,710,896.44	\$ 1,212,844,120.39

Table 9 shows the gross amount billed to each insurer type sorted by EMS region.

Table 10. Gross insurance revenues by insurance type and EMS region, 2023 reporting period.

Region	Medicaid	Medicare	Private/Third Party	Self-Pay/No Insurance	<b>Grand Total</b>
Central	\$ 2,818,453.11	\$ 7,173,907.93	\$ 9,445,343.72	\$ 962,172.04	\$ 20,399,876.80
Metro	\$ 64,349,197.78	\$ 65,323,663.73	\$ 112,366,989.97	\$ 38,140,015.74	\$ 280,179,867.22
Northeast	\$ 3,962,087.69	\$ 10,966,882.12	\$ 10,153,368.26	\$ 1,263,363.07	\$ 26,345,701.14
Northwest	\$ 5,135,082.02	\$ 5,071,503.14	\$ 5,063,761.86	\$ 200,685.31	\$ 15,471,032.33
South Central	\$ 635,175.14	\$ 3,106,161.62	\$ 2,918,403.50	\$ 234,659.13	\$ 6,894,399.39
Southeast	\$ 3,159,669.59	\$ 19,709,525.51	\$ 40,000,144.99	\$ 1,549,107.76	\$ 64,418,447.85
Southwest	\$ 2,257,735.08	\$ 8,933,793.99	\$ 12,542,317.51	\$ 1,195,297.79	\$ 24,929,144.37
West Central	\$ 1,336,413.86	\$ 3,694,224.50	\$ 5,431,723.29	\$ 805,834.07	\$ 11,268,195.72
Statewide	\$ 83,653,814.27	\$ 123,979,662.54	\$ 197,922,053.10	\$ 44,351,134.91	\$ 449,906,664.82

Table 10 displays the gross amount received from each insurance type sorted by EMS region.

Table 11. Net insurance collections by insurance type and EMS region, 2023 reporting period.

Region	Medicaid	Medicare	Private/Third Party	Self-Pay/No Insurance	<b>Grand Total</b>		
Central	\$ (8,852,152.39)	\$ (24,997,904.47)	\$ (12,778,123.92)	\$ (1,775,970.54)	\$ (48,404,151.32)		
Metro	\$ (118,575,767.37)	\$ (223,918,971.41)	\$ (77,958,246.33)	\$ (51,962,403.05)	\$ (472,415,388.16)		
Northeast	\$ (11,802,553.69)	\$ (25,772,725.57)	\$ (7,594,262.17)	\$ (2,004,125.91)	\$ (47,173,667.34)		
Northwest	\$ (6,338,141.96)	\$ (12,375,172.36)	\$ (5,493,107.23)	\$ (1,464,928.47)	\$ (25,671,350.02)		
South Central	\$ (2,054,351.61)	\$ (5,231,517.66)	\$ (1,374,361.93)	\$ (243,977.81)	\$ (8,904,209.01)		
Southeast	\$ (7,551,172.92)	\$ (59,613,345.69)	\$ (36,577,699.62)	\$ (4,223,422.27)	\$ (107,965,640.50)		
Southwest	\$ (4,377,903.07)	\$ (21,779,477.58)	\$ (7,304,095.54)	\$ (1,151,126.10)	\$ (34,612,602.29)		
West Central	\$ (1,984,921.78)	\$ (6,955,137.20)	\$ (7,316,580.57)	\$ (1,533,807.38)	\$ (17,790,446.93)		
<b>Grand Total</b>	\$(161,536,964.79)	\$(380,644,251.94)	\$ (156,396,477.31)	\$ (64,359,761.53)	\$(762,937,455.57)		

Table 11 displays the net collection of insurance revenues by insurance type and EMS region. This value was calculated by taking the gross revenues as reported in table 10 and subtracting the gross billables in table 9. Collectively EMS in Minnesota received nearly \$763 million less than charges that were billed. Publicly funded insurance programs including Medicaid and Medicare had the greatest amount of under reimbursed care totaling \$542,181,216.73.

Table 12. Total operational expenses vs total insurance revenues by EMS region, 2023 reporting period.

EMS Region	Total Insurance Revenues	Total Operational Expenses	Difference of Insurance Revenues vs Operational Expenses						
Central	\$20,399,876.80	\$25,958,169.29	\$ (5,558,292.49)						
Metro	\$280,179,867.22	\$278,787,359.88	\$ 1,392,507.34						
Northeast	\$26,345,701.14	\$29,995,641.30	\$ (3,649,940.16)						
Northwest	\$15,471,032.33	\$14,850,706.34	\$ 620,325.99						
South Central	\$6,894,399.39	\$6,279,143.09	\$ 615,256.30						
Southeast	\$64,418,447.85	\$64,028,985.84	\$ 389,462.01						
Southwest	\$24,929,144.37	\$24,059,732.60	\$ 869,411.77						
West Central	\$11,268,195.72	\$11,667,975.86	\$ (399,780.14)						
Statewide	\$449,906,664.82	\$455,627,714.20	\$ (5,721,049.38)						

Table 12 presents the total collected insurance revenues and the total reported operational expense by EMS region for the 2023 reporting period. The difference of insurance revenues and operational expenses was calculated by subtracting operational expenses from insurance revenues. This difference represents a net operating revenue. Collectively ambulance services in three EMS regions Central, Northeast, and West Central posted negative net operating revenues for the reporting period.

Table 13. Total actual expenses vs total insurance revenues by EMS region, 2023 reporting period.

EMS Region	Total Insurance Revenues	<b>Total Actual Expenses</b>	Difference of Actual Expenses vs Insurance Revenues				
Central	\$20,399,876.80	\$30,411,753.33	(\$10,011,876.53)				
Metro	\$280,179,867.22	\$316,212,777.22	(\$36,032,910.00)				
Northeast	\$26,345,701.14	\$34,732,122.29	(\$8,386,421.15)				
Northwest	\$15,471,032.33	\$16,117,729.72	(\$646,697.39)				
South Central	\$6,894,399.39	\$6,507,859.32	\$386,540.07				
Southeast	\$64,418,447.85	\$67,653,158.60	(\$3,234,710.75)				
Southwest	\$24,929,144.37	\$28,098,280.17	(\$3,169,135.80)				
West Central	\$11,268,195.72	\$16,555,997.52	(\$5,287,801.80)				
Statewide	\$449,906,664.82	\$516,289,678.17	(\$66,383,013.35)				

Table 13 presents the total collected insurance revenues and the total reported expenses, including capital by EMS region for the 2023 reporting period. The difference of insurance revenues and total actual expenses was calculated by subtracting total expenses from insurance revenues. When including capital expenses, ambulance services in all EMS regions except for South Central posted insurance revenue losses when compared to expenses.

Figure 9. Number of reporting EMS agencies grouped by difference between total actual expenses and total insurance revenues, 2023 reporting period.

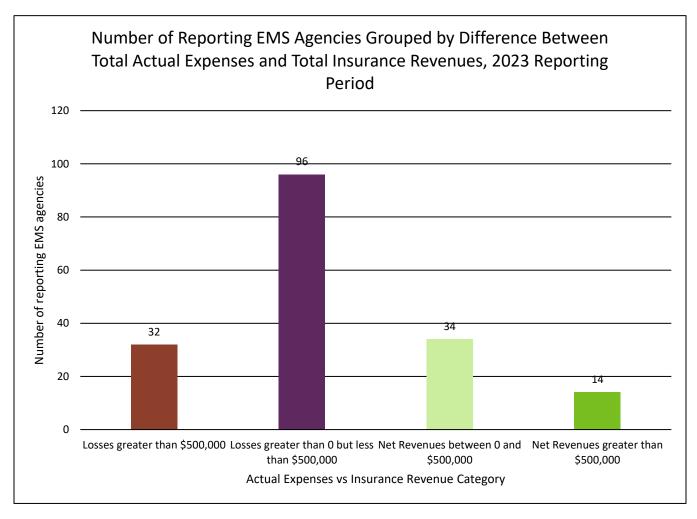


Figure 9 represents an EMS agency level perspective of the data presented in Table 12 and categorizes an ambulance service into a category based on their reported difference in total expenses (including capital) vs insurance revenues. The overwhelming number of operating units reporting fell into a category of posting losses between 0 and (\$500,000). 14 operating units posted revenues greater than \$500,000, and conversely 32 operating units posted losses greater than (\$500,000). Overall, 128 operating units (72%) posted some level of loss during the 2023 reporting period.

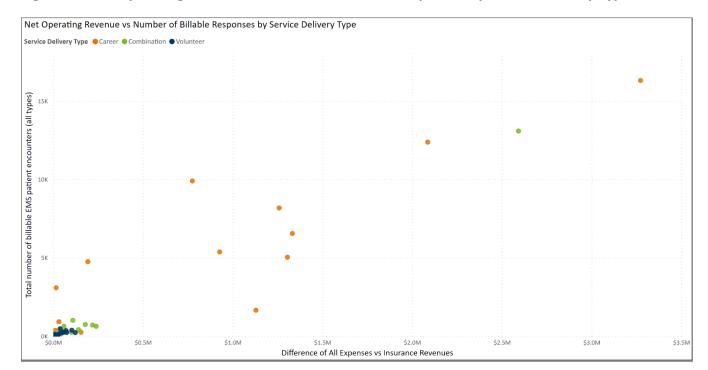


Figure 10. Net Operating Revenue vs Number of Billable Responses by Service Delivery Type

Figure 10 displays only ambulance services that posted a positive or break-even net operating revenue, which was calculated by taking insurance revenues and subtracting both operational and capital expenses for the 2023 reporting period. It does not include the 128 ambulance services that posted losses for the reporting period.

The figure shows on the X-axis (horizontal) shows how much more insurance revenue was collected than expenses. The Y-axis (vertical) shows how many billable transports were handled by the ambulance service. The color of the marker indicates whether the organization reported being volunteer (blue), combination (green), or career (orange).

Generally, ambulance services that had a higher number of billable transports posted higher revenues compared to expenses. Due to scale issues with graphing, ambulance services with greater than 20,000 billable responses were excluded from this analysis.

This information is important as it provides at least one indicator of the billable responses required to ensure that an ambulance service can maintain at least some level of financial stability.

Table 14. Number of Billable Transports of Ambulance Services Posting Break-Even or Positive Net Operating Revenue by Service Delivery Type, 2023 Reporting Period

Service Delivery Type	Minimum	Average	Median			
Volunteer	18	181	176			
Combination	63	1,323	418			
Career	242	5,742	5,029			

Table 14 provides statistics of the same data that was provided in Figure 10. It was determined that the average number of billable transports for volunteer ambulance services posting a positive or break-even net operating revenue was 181, whereas for a combination service that number increased to 1,323, and for a career service the average was 5,742. The minimum and median figures are also provided as part of the analysis.

While these figures should not be relied upon solely to make service delivery decisions, as there are any number of factors that can impact ambulance service sustainability, it is certainly one characteristic that impacts the revenue generation capabilities of an ambulance service.

#### **Non-Insurance Revenue**

Table 15. Other revenues by category and EMS region, 2023 reporting period.

Region	Donations	s/Fundraisers	Stan	dby Services	Gov	vernment Subsidies	Gra	ants	Otł	ner	Per	Capita Fees	Tax	Revenue
Central	\$	485,637.64	\$	19,872.50	\$	278.69	\$	28,358.00	\$	985,238.81	\$	36,085.78	\$	152,233.79
Metro	\$	83,900.00	\$	2,213,283.18	\$	1,409,435.07	\$1	L,176,542.00	\$ 4	,849,861.95	\$	-	\$:	10,677,676.94
Northeast	\$	351,524.61	\$	11,422.00	\$	996,485.75	\$	347,926.78	\$	52,430.69	\$	145,795.95	\$	735,146.32
Northwest	\$	271,546.48	\$	72,477.06	\$	499,659.00	\$	26,637.99	\$	28,504.18	\$	149,602.00	\$	1,703,032.00
South Central	\$	129,316.66	\$	19,482.50	\$	33,471.84	\$	31,237.50	\$	133,656.38	\$	80,001.00	\$	510,176.53
Southeast	\$	217,246.38	\$	176,180.00	\$	81,893.00	\$	222,810.52	\$	190,145.76	\$	814,410.15	\$	6,763.76
Southwest	\$	719,248.40	\$	16,728.13	\$	304,576.40	\$	250,359.87	\$	396,320.75	\$	145,580.28	\$	128,263.50
West Central	\$	141,903.04	\$	28,159.75	\$	34,030.83	\$	164,278.84	\$	63,405.30	\$	93,215.00	\$	129,023.09
Statewide	\$	2,400,323.21	\$	2,557,605.12	\$	3,359,830.58	\$2	2,248,151.50	\$6	5,699,563.82	\$	1,464,690.16	\$:	14,042,315.93

Ambulance services have other sources of revenue other than just insurance revenues. Table 15 provides a summary of those different revenue streams by EMS region. In the 2023 reporting period ambulance services reported approximately 14 million in other revenue streams. Much of those supplemental revenue streams were generated by ambulance services in the Metro EMS region with \$10.677 million.

Figure 11. Number of reporting EMS agencies grouped by amount of governmental funding received, 2023 reporting period.

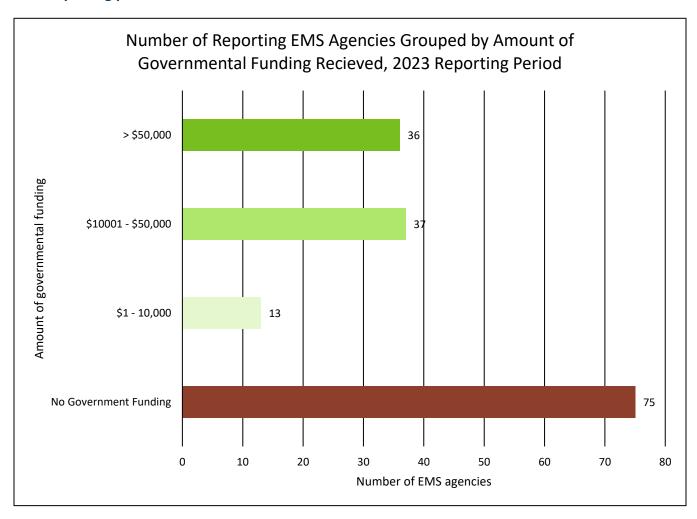


Figure 11 groups reporting operating units by how much governmental funding that was received in the 2023 reporting period. An ambulance service was counted as having received governmental funding if they reported receiving either government subsidies, per capita fees, or tax revenue. 75 (46.5%) services did not receive any governmental funding and 36 services received greater than \$50,000 in governmental funding.

#### **Service Rates**

## **Rates Charged by Ambulance Services**

The EMSRB requested all ground ambulance services to submit their established service rates for a variety of different services. Public and private insurers utilize designated charge codes that are established by the Centers for Medicare and Medicaid services (CMS). The analysis that follows presents the average, median, and 90<sup>th</sup> percentile rates by EMS region. The rate codes included for analysis for BLS, BLS Emergency, ALS 1, ALS 1 Emergency, and ALS 2. The definitions for these charge codes are included below. Additionally more information on CMS ambulance rate definitions can be found here.

<u>Basic Life Support:</u> Basic life support (BLS) is transportation by ground ambulance vehicle and the provision of medically necessary supplies and services, including BLS ambulance services as defined by the State. The ambulance must be staffed by an individual who is qualified in accordance with State and local laws as an emergency medical technician-basic (EMT-Basic). These laws may vary from State to State or within a State. For example, only in some jurisdictions is an EMT-Basic permitted to operate limited equipment onboard the vehicle, assist more qualified personnel in performing assessments and interventions, and establish a peripheral intravenous (IV) line.

<u>Basic Life Support Emergency</u>: When medically necessary, the provision of BLS services, as specified above, in the context of an emergency response. An emergency response is one that, at the time the ambulance provider or supplier is called, it responds immediately. An immediate response is one in which the ambulance provider/supplier begins as quickly as possible to take the steps necessary to respond to the call.

Advanced Life Support Level 1 (ALS 1): Advanced life support, level 1 (ALS1) is the transportation by ground ambulance vehicle and the provision of medically necessary supplies and services including the provision of an ALS assessment or at least one ALS intervention.

Advance Life Support Level 1 Emergency: When medically necessary, the provision of ALS1 services, as specified above, in the context of an emergency response. An emergency response is one that, at the time the ambulance provider or supplier is called, it responds immediately. An immediate response is one in which the ambulance provider/supplier begins as quickly as possible to take the steps necessary to respond to the call.

Advanced Life Support Level 2 (ALS 2): Is the transportation by ground ambulance vehicle and the provision of medically necessary supplies and services including (1) at least three separate administrations of one or more medications by intravenous push/bolus or by continuous infusion (excluding crystalloid fluids) or (2) ground ambulance transport, medically necessary supplies and services, and the provision of at least one of the ALS2 procedure.

The EMSRB also collected information on charges for incidents that did not involve transport and for mileage payments. The differences in when and how ambulance services used these charges varied so much between services that it's nearly impossible to make meaningful comparisons.

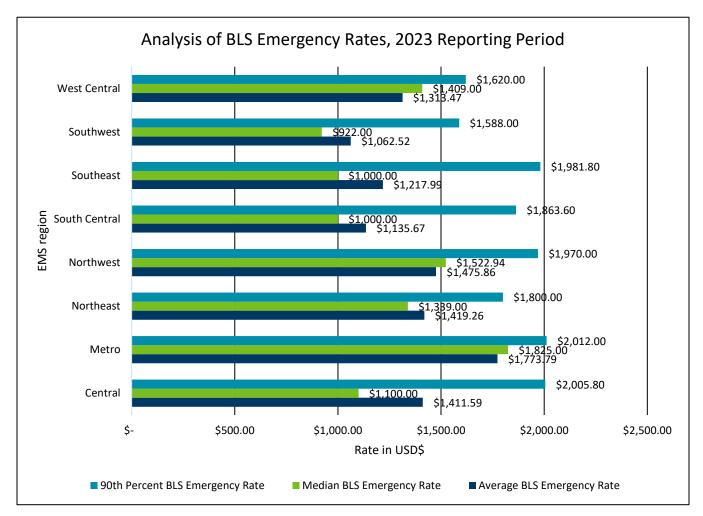


Figure 12. Analysis of BLS emergency ambulance rates, 2023 reporting period

This clustered bar graph visually represents BLS (Basic Life Support) Emergency rates, as defined by Medicare, across Minnesota's eight EMS regions for ambulance services. The graph highlights three key metrics for each region: the Average BLS Emergency Rate, the Median BLS Emergency Rate, and the 90th Percentile BLS Emergency Rate. Among these regions, Metro reports the highest Average BLS Emergency Rate at \$1,773.79, with a median rate of \$1,825.00, and the 90th percentile rate reaching \$2,012.00. In contrast, Southwest exhibits the lowest Average BLS Emergency Rate at \$1,062.52, a median rate of \$922.00, and a 90th percentile rate of \$1,588.00.

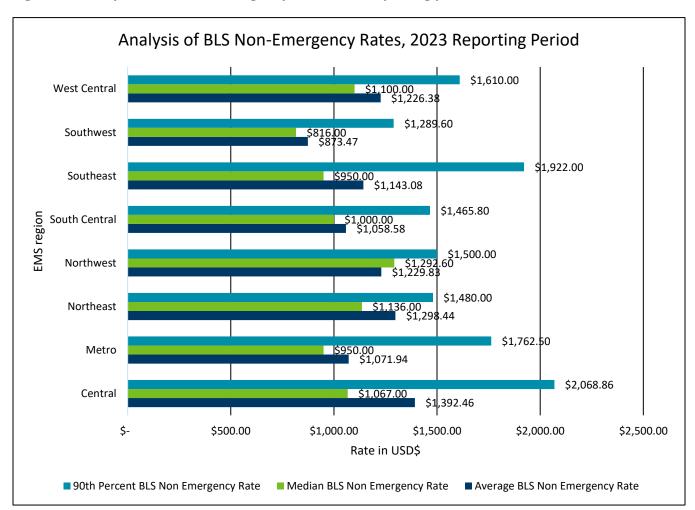


Figure 13. Analysis of BLS non-emergency rates, 2023 reporting period

This clustered bar graph visually presents BLS (Basic Life Support) Non-Emergency rates, as defined by Medicare, across Minnesota's eight EMS regions for ambulance services. The graph emphasizes three key metrics for each region: the Average BLS Non-Emergency Rate, the Median BLS Non-Emergency Rate, and the 90th Percentile BLS Non-Emergency Rate. Central reports the highest Average BLS Non-Emergency Rate at \$1,392.46, with a median rate of \$1,067.00, and the 90th percentile rate reaching \$2,068.86. In contrast, Southwest exhibits the lowest Average BLS Non-Emergency Rate at \$873.47, a median rate of \$816.00, and a 90th percentile rate of \$1,289.60. This visual representation effectively conveys the variation in BLS Non-Emergency rates among different EMS regions, providing valuable insights for stakeholders in the healthcare and emergency services sectors.

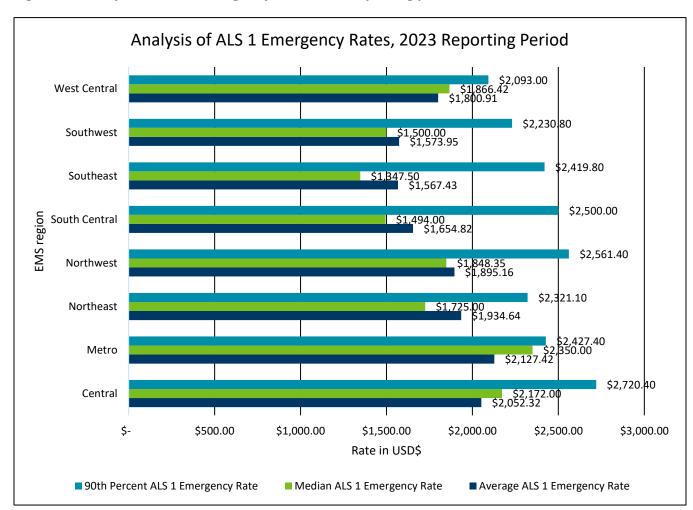
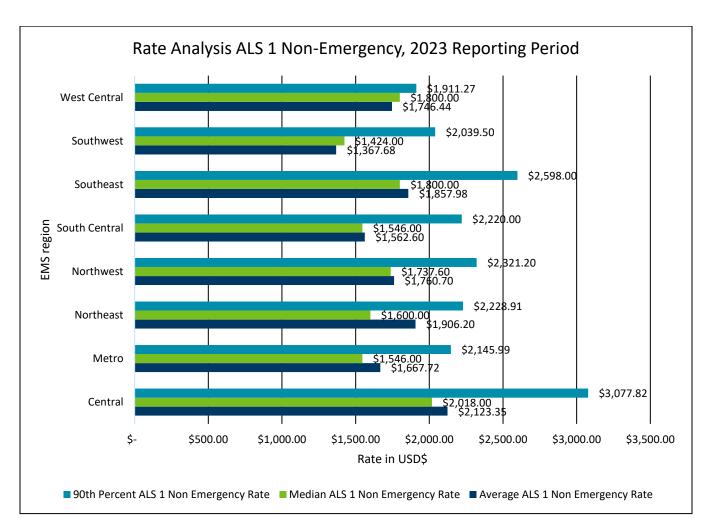


Figure 14. Analysis of ALS 1 emergency rates, 2023 reporting period

This clustered bar graph visually represents ALS 1 Emergency rates, as defined by Medicare, across Minnesota's eight EMS regions for ambulance services. The graph highlights three key metrics for each region: the Average ALS 1 Emergency Rate, the Median ALS 1 Emergency Rate, and the 90th Percentile ALS 1 Emergency Rate. Central reports the highest Average ALS 1 Emergency Rate at \$2,052.32, with a median rate of \$2,172.00, and the 90th percentile rate reaching \$2,720.40. In contrast, Southeast exhibits the lowest Average ALS 1 Emergency Rate at \$1,567.43, a median rate of \$1,347.50, and a 90th percentile rate of \$2,419.80.





This clustered bar graph visually displays ALS 1 Non-Emergency rates, as defined by Medicare, across Minnesota's eight EMS regions for ambulance services. The graph highlights three essential metrics for each region: the Average ALS 1 Non-Emergency Rate, the Median ALS 1 Non-Emergency Rate, and the 90th Percentile ALS 1 Non-Emergency Rate. Central reports the highest Average ALS 1 Non-Emergency Rate at \$2,123.35, with a median rate of \$2,018.00, and the 90th percentile rate reaching \$3,077.82. In contrast, Metro exhibits the lowest Average ALS 1 Non-Emergency Rate at \$1,667.72, a median rate of \$1,546.00, and a 90th percentile rate of \$2,145.99.

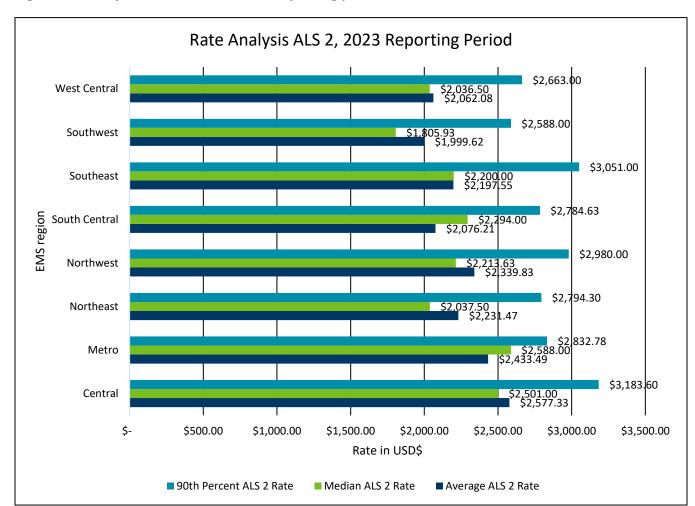


Figure 16. Analysis of ALS 2 rates, 2023 reporting period

This clustered bar graph visually presents ALS 2 rates, as defined by Medicare, across Minnesota's eight EMS regions for ambulance services. The graph emphasizes three critical metrics for each region: the Average ALS 2 Rate, the Median ALS 2 Rate, and the 90th Percentile ALS 2 Rate. Among these regions, Central has the highest Average ALS 2 Rate at \$2,577.33, with a median rate of \$2,501.00, and the 90th percentile rate of \$3,183.60. In contrast, Southwest reports the lowest Average ALS 2 Rate at \$1,999.62, a median rate of \$1,805.93, and a 90th percentile rate of \$2,588.00.

## **Conclusion**

In conclusion, the findings of this ambulance cost collection report shed light on several critical issues plaguing the provision of high-quality emergency medical services (EMS) in our state. The escalating costs associated with delivering these essential services present a significant challenge, making it imperative to examine and address the root causes that contribute to the financial strain faced by EMS providers.

First and foremost, this report and others commissioned by the Emergency Medical Services Regulatory Board highlight the concerning trend of decreasing volunteerism within the EMS sector. The decline in volunteer EMS personnel is placing an ever-increasing strain on overall personnel expenses of the statewide system, which currently account for 75% of statewide operational costs. This growing financial burden on personnel expenses threatens the sustainability of small volume EMS organizations and their ability to maintain optimal service levels in rural Minnesota.

Furthermore, the report underscores the harsh reality that ambulance services often fail to recover the actual costs of providing their services. With a minimum of 62% of billable responses failing to recoup their true expenses, EMS providers face a substantial fiscal gap. This shortfall translates to a financial loss ranging from \$34.47 to \$463.44 for every Medicare or Medicaid response, a situation that is economically unsustainable in the long term. Addressing this issue necessitates a multifaceted approach, including a comprehensive review of billing practices, potential reimbursement adjustments, and strategies to enhance the efficiency of operations without compromising the quality of care.

In light of these findings, it is evident that action is required to ensure the continued availability of high-quality emergency medical services to our communities. Stakeholders in the EMS sector, including government agencies, healthcare institutions, and advocacy groups, must come together to address these challenges.

In conclusion, this report underscores the critical importance of addressing the escalating costs of EMS, the decline in volunteerism, and the inadequate cost recovery mechanisms in place. By addressing these issues head-on, we can work towards sustaining high-quality emergency medical services for all residents of our state, ensuring the health and well-being of our communities in times of crisis.