2025 Standard of Cover

Jackson Hole Fire/EMS

Wyoming

1-800-757-3724
info@esci.us www.esci.us
www.esci.us

Emergency Services Consulting International
Helping Change the World, One Community at a Time

Contents

Executive Summary

Emergency Services Consulting International (ESCI), the consulting firm of the International Association of Fire Chiefs, was engaged by Teton County, Wyoming, to conduct a comprehensive strategic planning process for Jackson Hole Fire/EMS (JHFEMS). The primary objective of this partnership was to develop a Standard of Cover report, distinct from the broader strategic plan, that would guide operational decisions and improve service delivery for the community.

The Standard of Cover process began with an extensive data collection and analysis phase. ESCI reviewed historical incident data, response times, resource allocation, and service demand patterns across Teton County. National standards and best practices were evaluated to benchmark JHFEMS performance and identify areas for improvement. Stakeholder engagement played a pivotal role, with input from department leadership, staff, and community representatives informing the analysis and recommendations.

Multiple service delivery scenarios were modeled to assess financial impacts, operational feasibility, and potential outcomes for each approach. These scenarios considered current staffing, apparatus deployment, station locations, and community risk profiles. ESCI worked closely with JHFEMS leadership to ensure recommendations were tailored to local needs, priorities, and fiscal realities. Each scenario was evaluated for its ability to enhance emergency response capabilities, resiliency, and overall community safety.

Key recommendations arising from the study include optimizing station placement to reduce response times, investing in targeted staffing enhancements, and updating apparatus deployment strategies to better match service demand. The report also emphasizes the importance of continued data-driven decision-making, ongoing training, and community outreach to foster preparedness and resilience. ESCI advises the adoption of a phased implementation plan that allows JHFEMS to address operational gaps while managing budgetary constraints incrementally.

Overall, these Standard of Cover reports provide Teton County and Jackson Hole Fire/EMS with a framework for informed decision-making, ensuring that fire and emergency medical services remain responsive, efficient, and aligned with best practices. By implementing these recommendations, JHFEMS can enhance its ability to protect lives and property, foster community trust, and achieve sustainable growth in service capacity.

Introduction

Emergency Services Consulting International (ESCI), the consulting firm of the International Association of Fire Chiefs, was contracted by Teton County to undertake a comprehensive strategic planning process for Jackson Hole Fire/EMS (JHFEMS). This collaboration aimed to ensure the highest standards of service and preparedness for the community. Although the strategic plan is documented separately, this report focuses on the standards of cover developed through data analytics, national standards, and best practices. The goal is to provide a robust framework that guides the operations and enhances the efficacy of Jackson Hole Fire/EMS in protecting and serving the residents of Teton County.

Acknowledgments

Jackson Hole Fire/EMS

Fire Chief | Mike Moyer

Deputy Fire Chief | Brian Coe

Executive Assistant | Shannon Burns

Emergency Manager | Rich Ochs

Fire Marshal | Ray Lane

Battalion Chief | Matt Redwine

Battalion Chief | Brian Carr

Battalion Chief | Chris Stiehl

Emergency Services Consulting International Team

Chris Armstrong | Project Consultant

Katie Harrold | GIS & Data Analytics Manager

Rodney Mascho | Data Analytics

Scott Moore | Fire Service Finance

Joe Powers | Managing Director & Project Manager

Organizational Overview

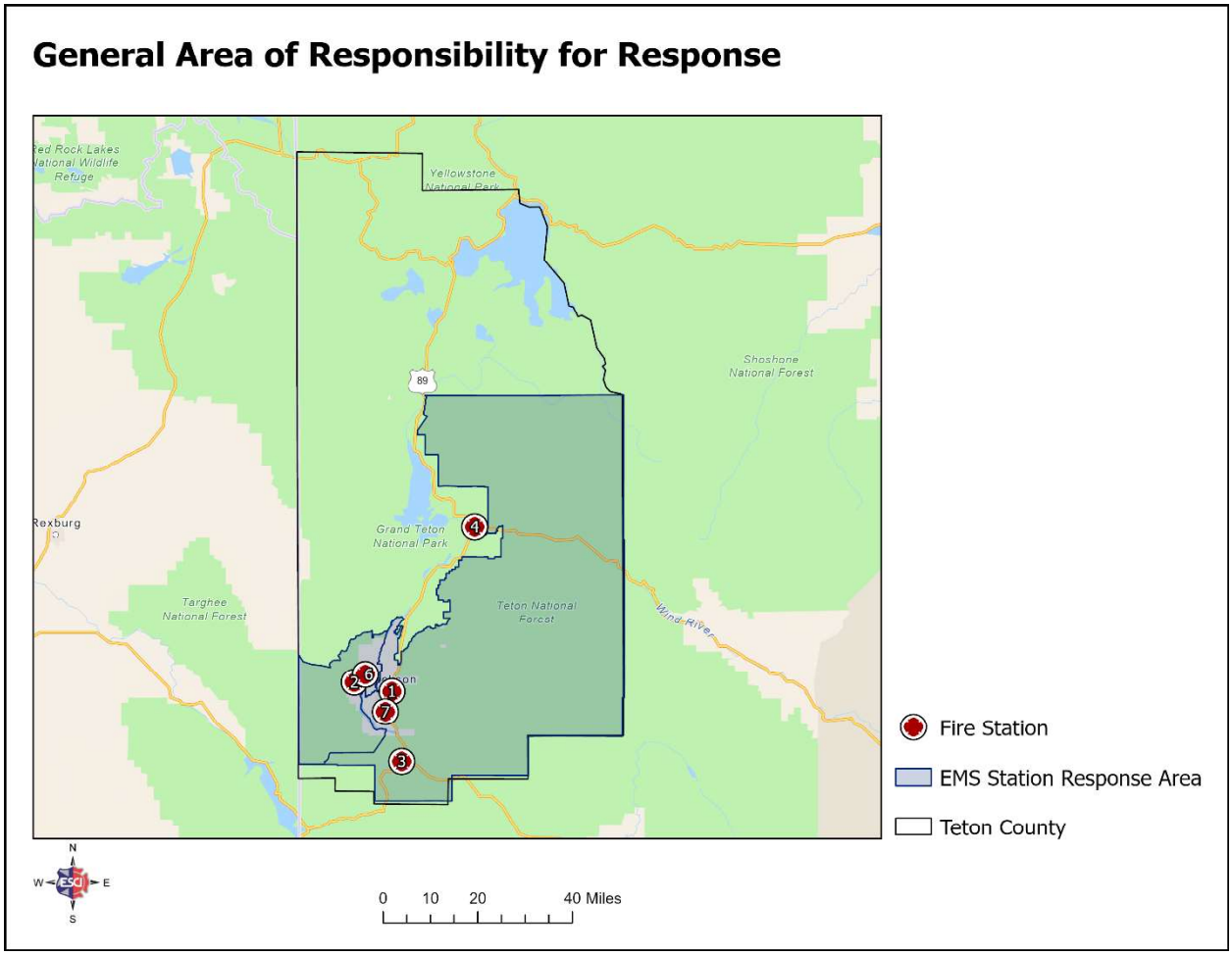
Service Area Population & Demographics

The Jackson Hole Fire/EMS response area and defined boundaries are not straightforward. JHFEMS works closely with the National Park Service, United States Forest Service, Wyoming State Forestry, Teton Village Fire District, Jackson Hole Airport Fire Department, and Teton County (Idaho) to provide first-due response, mutual aid, and automatic aid to Teton County, WY. Grand Teton National Park and Yellowstone National Park provide EMS, wildland, and structure fire response. Within the National Forest, the USFS provides only wildland fire response, while Jackson Hole Fire/EMS handles all EMS and structure fire response. Generally, the following figure illustrates the area of primary responsibility for Jackson Hole Fire/EMS.

Yellowstone National Park and Grand Teton National Park account for nearly 44.7% of Teton County's land, and federal resources generally cover emergency response.

The service area in 2025 is characterized by a median household income of $114,562, reflecting a relatively affluent community. It is essential to note that only a small percentage of the total Teton County land area is privately owned; the federal and state governments own the remainder. Although the U.S. Census indicates the daytime population density is low, with only 11.8 people per square mile, the Jackson Hole Visitor & Tourism Board states otherwise. According to that board, the area receives an average of 25,000 visitors daily. With a census population of 22,473, this brings the whole community's population to 47,473.

Figure 1. General Area of Responsibility



Housing data reveals that 26% of units are vacant, and 29% of homes were built before 1980, suggesting a mix of older and potentially underutilized housing stock. The population is aging, with 17% older than age 65, and 12% of households include individuals with disabilities. The daily population shift is difficult to define because of the seasonal impacts of tourism and the workforce; however, local resources state that an average of 9,827 workers commute in and out of the area daily. Reports from the Wyoming Department of Transportation show that, during the summer months, more than 20,000 vehicles travel through the Teton Pass in and out of the Jackson Hole community. For more information on tourism, refer to the section titled "*Impacts of Tourism"* on page 13.

Social support indicators show that 2% of households receive public assistance, and 6% are below the poverty line. The housing market is relatively balanced, with 41% of

homes renter-occupied and 59% owner-occupied. Many homes (28%) have gas appliances and require carbon monoxide alarms. Interestingly, there are no households without a vehicle, indicating a high level of vehicle ownership. The school-age population (grades 1-8) makes up 9% of the community, while high school-aged individuals account for 4%. Education levels are fairly high, with 46% of residents holding a college degree.

As an additional reference to bring attention to the complexity of the Teton County land ownership and responsibility environment, the following figure shows a Teton County land map. In the figure, to the west are the Caribou-Targhee National Forest and the Jedidiah Smith Wilderness, to the east and south are the Bridger-Teton National Forest, and to the north is Yellowstone National Park. Because of the complexity of the environment, it's difficult to obtain and define the exact borders for the area of responsibility.

The following two figures outline land ownership and the community's profile.

Figure 2. Teton County Land Map

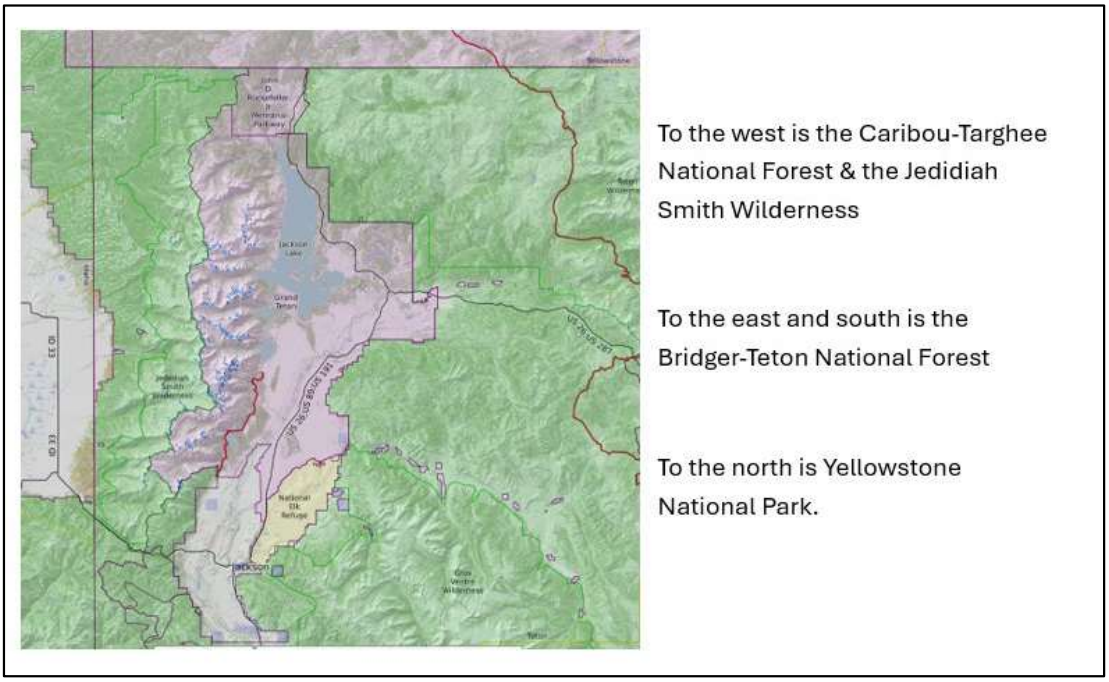
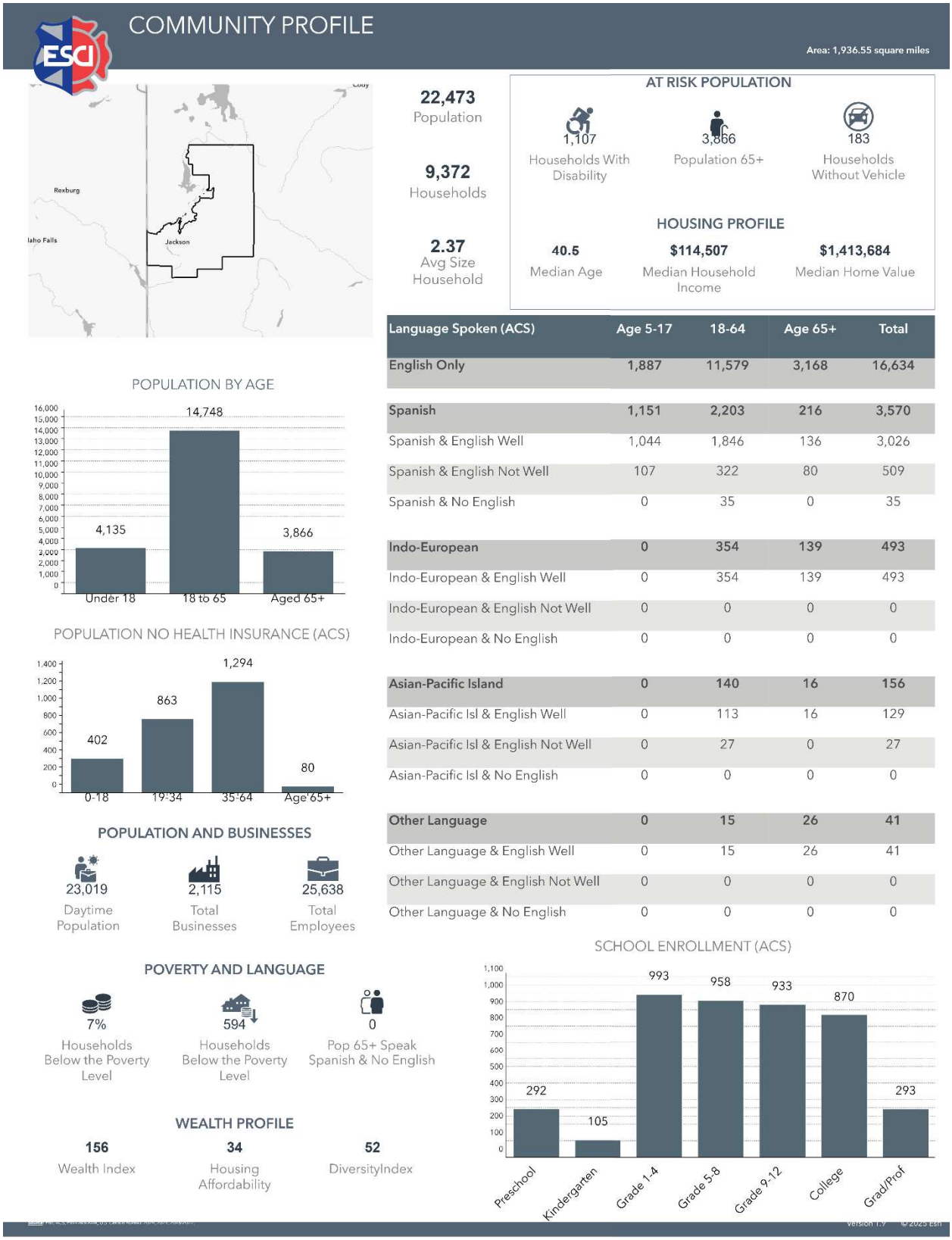


Figure 3. Jackson Hole Community Profile

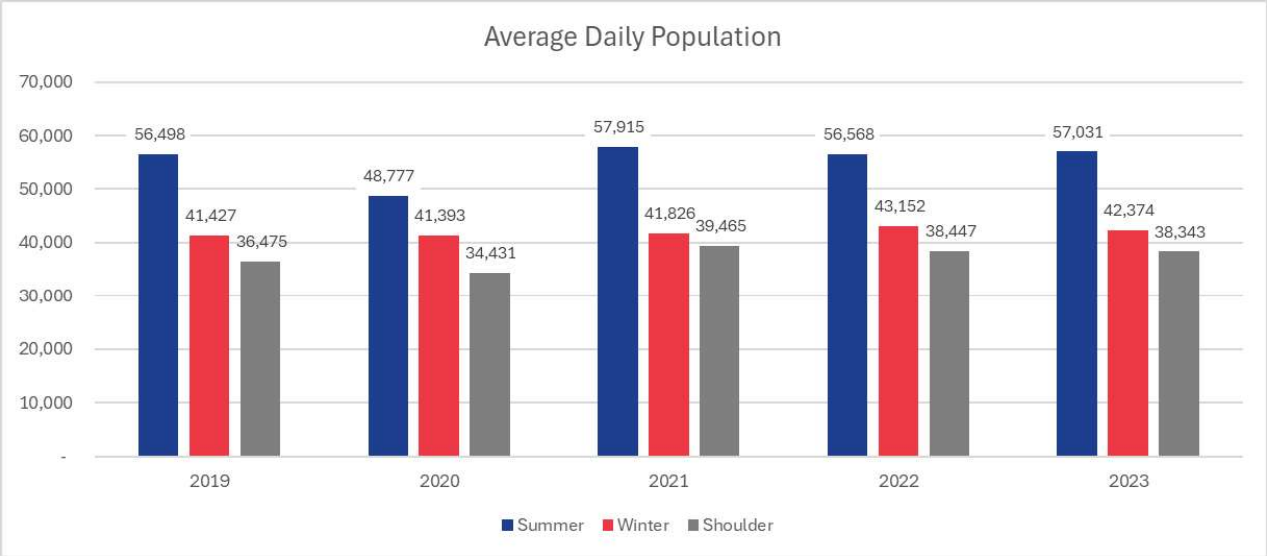


Language Spoken (ACS)	Age 5-17	18-64	Age 65+	Total
English Only	**1,887**	**11,579**	**3,168**	**16,634**
Spanish	**1,151**	**2,203**	**216**	**3,570**
Spanish & English Well	1,044	1,846	136	3,026
Spanish & English Not Well	107	322	80	509
Spanish & No English	0	35	0	35
Indo-European	**0**	**354**	**139**	**493**
Indo-European & English Well	0	354	139	493
Indo-European & English Not Well	0	0	0	0
Indo-European & No English	0	0	0	0
Asian-Pacific Island	**0**	**140**	**16**	**156**
Asian-Pacific Isl & English Well	0	113	16	129
Asian-Pacific Isl & English Not Well	0	27	0	27
Asian-Pacific Isl & No English	0	0	0	0
Other Language	**0**	**15**	**26**	**41**
Other Language & English Well	0	15	26	41
Other Language & English Not Well	0	0	0	0
Other Language & No English	0	0	0	0

Impacts of Tourism

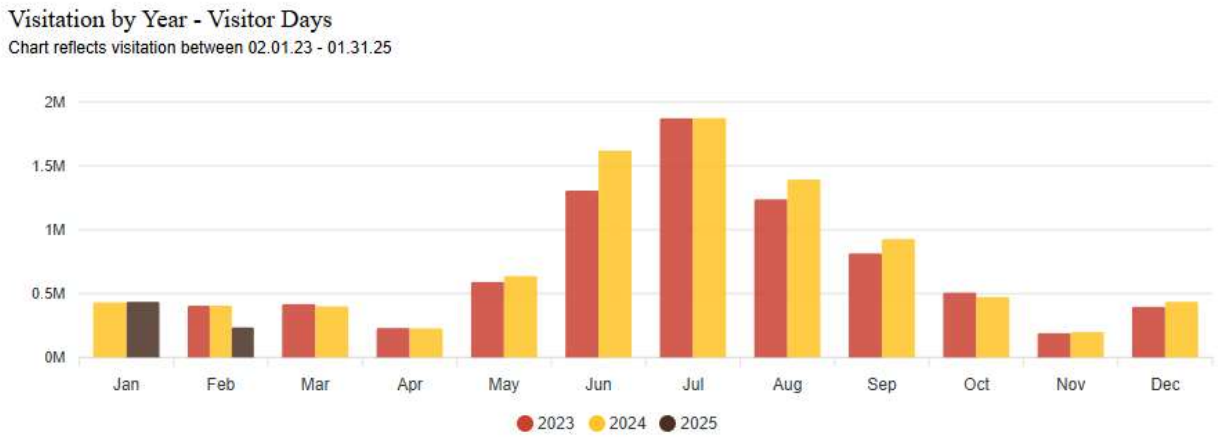
Referring to the Jackson Hole Travel & Tourism Board's (JHTTB) 2024 Annual Report, tourism in the area profoundly impacts the local economy and community. In 2023, travel-related spending in Teton County reached an impressive $1.688 billion, making a significant contribution to the financial health of local businesses. This influx of visitors supports the economy and generates substantial tax revenue, with $98.7 million in visitor-paid taxes collected during the year. These funds are crucial for maintaining and improving public services, including fire safety and emergency response capabilities. The following figure, using public data from the JHTTB, shows that, on average in 2023, the daily population can rise as high as 57,031 in the summer. The average daily population shown in the following figure includes visitors, residents, commuters, and part-time residents.

Figure 4. Daily Population Estimates



The JHTTB plays a vital role in managing and supporting the tourism industry. Its visitor services team interacted with over 600,000 visitors during their stays in the destination and assisted more than 37,000 people as they planned their trips. This level of engagement ensures that tourists are well-informed about safety protocols, including fire safety measures, which are essential for preventing incidents and ensuring the well-being of both visitors and residents. The following figure illustrates visitation in the community.

Figure 5. JHTTB Visitation by Month



Moreover, the economic benefits of tourism extend to job creation, with 8,198 local jobs supported by the tourism industry. These employment opportunities are critical for the community, providing livelihoods for many residents and contributing to the region's overall stability. The revenue generated from tourism also enables the JHTTB to fund various environmental protection efforts, such as fire prevention initiatives, which are crucial for maintaining the natural beauty and safety of Jackson Hole.

In summary, tourism in Jackson Hole brings significant economic benefits and supports essential public services, including fire safety. The JHTTB's efforts in managing tourism and promoting safety protocols play a crucial role in ensuring that the community and its visitors can enjoy a safe and thriving environment.

Socioeconomic Landscape

Jackson Hole and Teton County present a unique socioeconomic landscape characterized by a significant wealth gap. This area is known for its stunning natural beauty, attracting affluent individuals and families who own large homes and estates. The local economy heavily relies on this wealthy population, as many local businesses and individuals provide landscaping, home maintenance, and personal assistance.

Local businesses and workers in Jackson Hole often depend on the affluent residents for employment opportunities. Jobs in hospitality, real estate, construction, and personal services are prevalent, catering to the needs of homeowners. This dynamic creates a robust service industry that supports the local economy.

Affordable housing is a critical issue in Teton County. The high cost of living and real estate prices make it challenging for the working population to find affordable homes.

The Teton County Affordable Housing Department has initiatives in place to address this issue, including the development of affordable rental and ownership units. These programs aim to ensure that a significant portion of the workforce can live locally, contributing to a diverse and well-functioning community.

The wealth gap in Jackson Hole is one of the most pronounced in the United States. Teton County has the highest per-capita income from assets, highlighting the concentration of wealth in the area. This disparity is evident in the contrast between the ultra-wealthy residents and the working population, the latter of whom often struggle with the high cost of living and limited affordable housing options.

Overall, while Jackson Hole and Teton County benefit from the economic contributions of their affluent residents, the community faces significant challenges related to affordable housing and economic inequality. Efforts to bridge this gap are ongoing, with a focus on creating a more inclusive and sustainable community.

History & Formation of the Department

Jackson Hole Fire/EMS was founded in 2004. Before its establishment, each fire station in Teton County operated as an individual volunteer fire department, and a hospital-based service provided EMS. Integrating a single, unified department under the Joint Powers Authority (JPA) allowed for more efficient and coordinated emergency services across the region. This consolidation brought together the resources and personnel of multiple stations, enhancing the overall capability to respond to emergencies in both the Town of Jackson and Teton County.

Description of the Services Provided

Jackson Hole Fire/EMS provides comprehensive emergency response services, including responses to medical emergencies, structure fires, wildland fires, and hazardous incidents. The organization also engages in emergency management, fire prevention, code enforcement, electrical safety inspection, public education, and training. JHFEMS boasts a robust team of 114 members, consisting of 46 career staff and 68 volunteers.

JHFEMS operates out of six stations, two of which are staffed by career personnel. Each station has a Type 1 engine, a tender with a 3,000-gallon capacity, and various wildland units (Types 3 and 6). JHFEMS also operates rescue trucks and five transport ambulances offering advanced life support. Additional resources include a 100-foot

aerial, hazmat units, mass casualty trailers equipped for 50 patients, and a tactical EMS (TEMS) team that ensures 24/7 emergency response.

Station 1 (Jackson) is equipped with Engine 11 and Medic 10 and staffed by a three-person crew, while Station 6 (Moose-Wilson Road) is equipped with Engine 61 and Medic 60 and is staffed by a three-person crew. Both stations operate with A-B-C shifts on a 48/96 schedule at the paramedic level. The operations staff in fire stations are supervised by company officers and a battalion chief. As a note, JHFEMS is budgeted to provide five personnel at Station 1 and four at Station 6. The additional authorized positions provide "staffing relief" to ensure JHFEMS does not drop below the minimum staffing level.

The Prevention Division is active in reviewing plans for new construction projects and conducting electrical permits, plan reviews, and inspections (over 2,000 annually). They also review wildland-urban interface areas and fire systems, including fire sprinklers, fire alarms, and commercial cooking systems. Annual maintenance inspections are prioritized based on risk, and the division also handles fire investigations and car seat inspections. Public education and school programs are key components of their prevention strategy.

The Training Division is responsible for overseeing a comprehensive training program tailored to fire and EMS education, as well as professional development. This division manages certifications for EMR, EMT, EMT-I, paramedics, firefighters, apparatus operators, and fire officers, as well as commercial driver's licenses. Training also handles specialty certifications such as hazmat technician, swift water rescue technician, and rope rescue certification.

Additionally, the Training Division maintains thorough records on all certifications, training sessions, and physical fitness evaluations. It is responsible for the oversight of the training facility and the development of training programs. This division is managed by one captain who coordinates training efforts and utilizes expertise from available operations personnel to address any instructional needs that arise.

The Training Division also leads wildland fire training, leveraging resources like The Ember Shower and IBHS Wildfire Research. The Community Wildfire Protection Plan (CWPP) serves as a collaborative, community-driven framework that outlines local priorities for mitigating wildfire risk. This non-regulatory document guides fuel

treatments, safe and effective wildfire response, public education programs, and community preparedness.

In the past, the Training Division was staffed with a Battalion Chief and Training Captain. Through personnel and resource transfer, the Training Division is now staffed with one member, the Training Captain. The workload appears to exceed the capacity of one full-time employee.

Recommendation 1: ESCI recommends conducting a workload analysis of the Training Division and considering the addition of one full-time employee (at a chief officer level) to oversee the administration and operational deployment of training.

Teton County Emergency Management (TCEM) operates as a division of Jackson Hole Fire/EMS. The responsibilities of TCEM encompass all phases of emergency management, including preparedness, response, recovery, and mitigation, specifically for Teton County. Additionally, TCEM extends these services to the Town of Jackson through an emergency management resolution. The division collaborates with local, state, and federal agencies, as well as non-governmental organizations, to develop, maintain, and implement a range of emergency plans. Furthermore, TCEM provides training and develops emergency exercises for both citizens and first responders. The division is staffed by two full-time employees: the emergency management coordinator, who is nominated by the Board of County Commissioners and appointed by the governor in accordance with state statute; and an emergency management program specialist.

JHFEMS collaborates with multiple entities, including the National Park Service, the United States Forest Service, Wyoming State Forestry, the Teton Conservation District, non-profits, industry partners, and individual landowners.

Governance & Lines of Authority

Jackson Hole Fire/EMS operates under a Joint Powers Authority (JPA), established through a 2004 agreement between the Town of Jackson and Teton County. This governance structure allows for coordinated management and funding of fire protection and emergency medical services across both jurisdictions. JHFEMS combines paid and volunteer staff, with all employees officially working for Teton County. The fire chief, hired by the county administrator, oversees JHFEMS's operations, including fire suppression, prevention, emergency medical response, and emergency management. JHFEMS's funding is shared between the Town of Jackson and Teton

County, with a 46/54 split, respectively. This collaborative approach ensures efficient resource allocation and unified command, enhancing the safety and well-being of the community.

Financial Analysis

Funding & Budget Process

JHFEMS operates under a unique funding structure as a jointly funded department by both Teton County and the Town of Jackson. This partnership allows for shared oversight but can also create friction during the budgeting process—particularly when determining staffing levels or capital investments. The Town of Jackson's significant role in financial decision-making, owing to its funding contribution, means that alignment between both entities is essential but not always guaranteed. Against this backdrop, JHFEMS follows a structured, multi-phase budget process designed to incorporate input from leadership, operations staff, and financial administrators.

- Teton County and the Town of Jackson jointly fund JHFEMS. The Town of Jackson has significant input into budget decisions due to this joint funding arrangement. This can lead to challenges where the Town of Jackson and Teton County may disagree on funding levels, particularly for new full-time employees or capital expenses.
- The budget process for JHFEMS begins early in the fall with CIP (Capital Improvement Planning) for a five-year period. This is presented as a forecast to the Teton County commissioners and Town Council, but no approvals are necessarily made at this stage.
- Formal budget planning commences in January. The fire chief prepares a budget proposal that is reviewed by the county administrator, who makes recommendations. Subsequently, the fire chief presents this proposal to the joint boards of the County Commission and the Town Council.
- Divisional budgets are often presented by battalion chiefs and assistants and integrated into the larger system using OpenGov software. Station captains also provide input and make requests for operational or capital expenses using a departmental process for proposals.
- Revenues are generated from various sources including ambulance transport, special events coverage, wildland fire deployments, electrical plans reviews, and inspections.

- JHFEMS has started to generate new revenue through charging for fire inspections and plan reviews, which began in January 2025. However, this revenue is not expected to be a gross amount.

Revenue & Expenditure Overview

The Teton County FY2024/2025 budget provides detailed budget information for Teton County, which is a major funding source for JHFEMS. While it doesn't isolate JHFEMS revenues within the Teton County budget, it offers insights into the overall financial planning.

- **Overall Trends**: Teton County's budget overview indicates a focus on maintaining service levels and addressing increasing costs. The proposed FY2025 budget reflects changes due to factors like inflation and service demands.
- **General Fund Revenue**: The General Fund, which supports many Teton County services, including potential contributions to JHFEMS, projects revenues of $74,623,196 in the adopted FY2025 budget. This is an increase from the $72,712,583 actual revenue in FY2022 and $68,415,618 actual revenue in FY2023. The estimated revenue for FY2024 is $70,146,877. Primary revenue sources include sales and use taxes and property taxes.
- **General Fund Expenditures**: The adopted FY2025 General Fund expenditures are budgeted at $57,442,464, compared to actual expenditures of $60,606,542 in FY2022 and $67,361,700 in FY2023. The estimated expenditure for FY2024 was $51,897,922. Public safety is a significant expenditure category that includes JHFEMS.
- **Special Revenue Funds**: Teton County also utilizes special revenue funds for specific purposes, some of which may relate to JHFEMS activities (e.g., the Fire/EMS Fund). These funds have their own revenue and expenditure streams.
- **Capital Projects Funds**: The county has various capital projects funds, indicating a structured approach to long-term capital planning and funding. These funds are typically financed through specific excise taxes (SPET) and other sources. The FY2024-2025 capital expenditures by fund show a significant allocation to Fund 37, Capital Projects, with a budget of $16,333,977. Specific capital expenses for JHFEMS, such as apparatus/vehicles and SCBA replacements, are also listed in the "FY2025 Budget Worksheet Final".

FY2025 Budget Worksheet Overview

The "FY2025 Budget Worksheet Final" provides a more direct view of the proposed FY2025 budget for JHFEMS:

- **Salaries and Benefits:** A total of $6,677,300 is requested for FY2025, compared to a budget of $6,024,951 in FY2024 and actual spending of $5,397,596 in FY2023. This includes a request for a new permit technician position at $94,239.
- **Operating Expenses:** A total of $1,730,685 is budgeted for FY2025, a decrease from the $1,938,875 budgeted in FY2024 and slightly below the $1,912,533 actual spending in FY2023.
- **Capital Expenses:** A total of $1,441,332 is approved for FY2025, 14.9% higher than the $1,254,400 budgeted in FY2024.
- **Outside Contracts:** A total of $540,000 is budgeted for FY2025, an increase from the $520,000 budgeted in FY2024 and the $500,000 in FY2023. This is specifically for the Idaho Emergency Services Contract, whereby Teton County (Idaho) Fire Rescue provides fire and EMS response to the Alta and Grand Targhee areas of Teton County.

Capital Improvement Planning (CIP):

- JHFEMS engages in CIP planning with a five-year forecast presented to the Teton County and Town of Jackson boards early in the season. This long-term planning informs the more serious budget planning that begins in January.
- The significant capital expenses requested in the FY2025 budget likely stem from these longer-term capital plans. The detailed list of capital expenses indicates specific projects and equipment replacements that have been identified as needed through the CIP process.

Audit Report Recommendations

The prior audit report provides an external review and recommendations for JHFEMS, which touch on operational and organizational aspects that have financial implications:

- **Key Recommendation 1**: Immediately fill key positions recommended in the report to ensure adequate staff capacity. This would directly impact salary and benefits expenditures.
- **Key Recommendation 2**: Improve and clarify public information. This might require some allocation of funds for communication efforts.
- **Key Recommendation 3**: Revise the organizational structure per Section 4 of the report. Implementing these structural changes could lead to changes in staffing and associated costs.
- The report also emphasizes the need for better integration of career and volunteer staff, which could have implications for training budgets.
- Recommendations regarding vehicle and equipment maintenance and station budgets also highlight areas that require financial attention and planning.

JHFEMS operates with a detailed annual budget process informed by long-term capital planning. Funding is secured through a joint agreement with Teton County and the Town of Jackson. The proposed FY2025 budget indicates increases in salaries and benefits and significant planned capital expenditures, reflecting ongoing needs and priorities identified through their planning processes. The Gannon Report provides recommendations that could influence future operational and financial decisions. The Teton County budget documents offer a broader context for Teton County's overall financial health and its support for various departments, including potentially JHFEMS.

Review of Services Provided

Emergency Services Response Types

Jackson Hole Fire/EMS provides a comprehensive range of emergency services to ensure the safety and well-being of the community. One of their primary services is fire-based EMS transport, with many firefighters trained to the paramedic level. This advanced training allows them to deliver high-quality medical care during emergencies. JHFEMS operates with paid staff out of two fire stations, while volunteers with varying levels of participation staff the remaining stations. This combination of paid and volunteer staff ensures that emergency services are available throughout the region.

In addition to EMS transport, JHFEMS is responsible for structural firefighting. However, it is important to note that the current staffing levels are insufficient and do not meet national standards or industry best practices. Despite these challenges, JHFEMS remains committed to providing effective fire suppression services. They also offer specialized services such as wildland firefighting, hazardous materials (hazmat) response, swift water rescue, and technical rescue. These specialized teams are trained to handle a wide range of emergencies, ensuring that the community is well-protected.

Jackson Hole Fire/EMS provides fire and EMS services to all of Teton County, except for areas where federal resources are the primary response, such as Grand Teton National Park and Yellowstone National Park. Within Teton Village and the Jackson Hole Ski Resort community, the Teton Village Fire Protection District serves as the primary fire suppression provider, while JHFEMS is the EMS provider. This collaboration attempts to ensure that all areas within Teton County receive the necessary emergency services.

Another critical aspect of JHFEMS's operations is the provision of interfacility transports for critical and non-critical patients. In many cases, ambulances are required to transport patients to specialized medical facilities in Idaho Falls, Idaho, and Salt Lake City, Utah. These long-distance transports can remove the ambulance from the local system for many hours, highlighting the importance of efficient resource management and coordination.

Operational Staffing & Assignment Evaluation

Jackson Hole Fire/EMS deploys as a combination department with at least seven (7), and up to ten (10) full-time firefighters (including one battalion chief) working 48-hour shifts. To achieve an effective response force (ERF), JHFEMS relies heavily on volunteer response to fill in the gaps in critical tasks during specific emergencies. JHFEMS policy outlines the extent to which volunteers dedicate themselves to in-station shifts each month. EMS providers and ambulance drivers are required to pull shifts, and non-EMS providers must respond to 50% of their station's average.

Jackson Hole Fire/EMS has approximately 65 rostered volunteers at various stages in their onboarding, tenure, and training. However, only nineteen (or 29%) of these volunteers responded to twenty or more calls for service in 2024. JHFEMS operates a volunteer response model where the system only requests volunteer response on specific incidents and not on all dispatched calls. This model offloads the responsibility for volunteers to respond to low-acuity calls and maintains a more active reserve.

The heavy reliance on volunteers presents both opportunities and challenges for Jackson Hole Fire/EMS. On the one hand, volunteers bring additional manpower and skills, enhancing JHFEMS's ability to respond to a wide range of emergencies. They also foster a strong sense of community involvement and support. On the other hand, the availability of volunteers can be unpredictable, leading to potential staffing shortages during critical incidents. JHFEMS must continuously recruit, train, and retain volunteers to ensure a stable and reliable volunteer force.

To address these challenges, Jackson Hole Fire/EMS employs several strategies. They offer regular training sessions, certification programs, and incentives to encourage volunteer participation. Additionally, they have implemented a robust communication system to coordinate volunteer responses and ensure timely and efficient deployment during emergencies.

Despite these efforts, maintaining adequate staffing levels remains a persistent issue. JHFEMS faces the ongoing task of balancing the demands of emergency response with the availability of personnel. This challenge is exacerbated by the geographical spread of the Jackson Hole area, which can lead to longer response times and increased reliance on mutual aid from neighboring jurisdictions.

Jackson Hole Fire/EMS operates with a combination of full-time firefighters and dedicated volunteers. Although this model offers valuable resources and community

engagement, it also necessitates careful management and ongoing support to ensure effective and safe operations. By adhering to national standards and best practices, JHFEMS strives to deliver high-quality emergency services to the residents of Jackson Hole and the surrounding areas, as well as its numerous visitors.

Volunteer Participation

Based on the volunteer activity data provided by JHFEMS to ESCI, there is evidence that JHFEMS volunteers participate in incident responses at a significantly lower rate than what ESCI has noted throughout the United States. However, this is a testimony to the response model that JHFEMS employs, which ensures that volunteers are only requested on incidents where actual emergencies exist.

JHFEMS volunteers offer a valuable service to the community, and many are dedicated to the services they provide. However, volunteers in Teton County face challenges from competing priorities such as family and work commitments.

Figure 6. Volunteer Participation by Station

Station	Number of Active Volunteers	2024 Incidents Requesting Volunteers	50% of Activity Average per Volunteer (Policy)	Number of Volunteers Meeting the Policy Requirement	% of Active Volunteers Meeting the Commitment
Station 1	21	31	3.9	13	62%
Station 2	10	154	15.3	9	90%
Station 3	8	96	6.4	7	88%
Station 4	5	42	7.8	4	80%
Station 6	5	20	3.4	4	80%
Station 7	17	134	9.6	10	59%

The preceding table illustrates the 2024 JHFEMS volunteer participation based on volunteer station assignments. JHFEMS has approximately 66 active volunteers who participate widely in response to incident pages. Within Section IV – Active Volunteer Member of the Membership Policy, published in January 2025, JHFEMS requires that firefighters respond to at least 50% of the station's average member responses.

Recommendation 2: ESCI recommends reviewing volunteer commitment levels, collaborating with volunteer stakeholders, and determining volunteer performance measures that support community service delivery, promote volunteer retention, and maintain high performers in the system.

Cross-Staffing Model

Jackson Hole Fire/EMS operates on a 48-96 schedule with firefighters, company officers, and a battalion chief on duty each day. JHFEMS employs a cross-staffing model where personnel swap between emergency resources based on the type of call for service and the recommendations of the computer-aided dispatch (CAD) system. Although this approach aims to maximize resource utilization, it introduces several critical issues that compromise the effectiveness and safety of emergency response operations. When an engine company crew cross-staffs a ladder truck, the ladder truck becomes unavailable if the engine is on a call, delaying critical operations such as ventilation, search and rescue, and elevated water streams. Similarly, when the medical crews cross-staff engines, it removes a medic unit from the system, delaying emergency medical response times.

Safety concerns also arise with cross-staffing. Firefighters check their personal protective equipment (PPE) during shift changes to ensure readiness. Cross-staffing increases the risk of leaving critical PPE on another resource when swapping back and forth between apparatus, which can compromise firefighter safety during an emergency.

Cross-staffing also impacts training and proficiency. Firefighters are trained in various specialized areas, such as engine company work, rural water supply, and ladder truck operations. Cross-staffing demands proficiency in multiple areas, which can dilute the effectiveness and competence of firefighters in specialized tasks. Engine, ladder truck, and heavy rescue operations each require specialized training and experience, and cross-staffing can hinder the proficiency needed for these critical roles.

Operational delays are another significant issue. Cross-staffed crews must wait for the full dispatch to occur before moving equipment to the correct apparatus, hindering the timely deployment of resources during an emergency. To enhance the effectiveness and safety of emergency response operations, JHFEMS should identify the essential resources needed for various emergency scenarios and ensure these resources are adequately staffed.

Recommendation 3: ESCI recommends that future staffing and deployment strategies support permanent staffing models and use cross-staffing as a back-up deployment plan rather than a primary response model.

Figure 7. JHFEMS Daily Resources & Staffing outlines the daily minimum staffing and cross-staffing model. That figure is seen below.

Under the "Staffing Designation" column, the following abbreviations are used:

- **CS:** Cross-Staffing (Staff is frequently moved off these resources as needed.)
- **PD:** Permanent Staffing (This position is not cross-staffed and remains in place.)
- **VOL:** Volunteer (This resource is primarily deployed with available volunteers.)

Staff Allocation for Emergency Functions

Jackson Hole Fire/EMS deploys as a combination department with at least seven full-time firefighters working 48-hour shifts. To achieve an effective response force (ERF), JHFEMS relies heavily on volunteer response to fill in the gaps in critical tasks during emergencies.

Figure 7. JHFEMS Daily Resources & Staffing

Station Designation	Unit	Resource Type	Minimum Daily Staffing	Budgeted Daily Staffing	Staffing Designation	Minimum Level of EMS Care
Station 1	Medic 10	Ambulance	2	2	CS	PM
Station 1	Engine 11	Engine	1	3	CS	PM
Station 1	Battalion	Command	1	1	PD	EMT
Station 1	Medic 20	Ambulance			VOL	
Station 1	Truck 16	Ladder Truck			VOL	
Station 1	Tender 17	Water Tender			VOL	
Station 1	Engine 12	Engine			VOL	
Station 2	Engine 21	Engine			VOL	
Station 2	Rescue 24	Rescue			VOL	
Station 2	Tender 27	Water Tender			VOL	
Station 2	Brush 28	Wildland			VOL	
Station 3	Engine 31	Engine			VOL	
Station 3	Rescue 34	Rescue			VOL	
Station 3	Tender 37	Water Tender			VOL	
Station 3	Brush 38	Wildland			VOL	
Station 4	Engine 41	Engine			VOL	
Station 4	Rescue 44	Rescue			VOL	
Station 4	Tender 47	Water Tender			VOL	
Station 6	Medic 60	Ambulance	3	2	CS	PM
Station 6	Engine 61	Engine		2	CS	PM
Station 6	Medic 50	Ambulance			VOL	
Station 6	Tender 67	Water Tender			VOL	
Station 6	Brush 68	Wildland			VOL	
Station 7	Medic 70	Ambulance			VOL	
Station 7	Engine 71	Engine			VOL	
Station 7	Rescue 74	Rescue			VOL	
Station 7	Tender 77	Water Tender			VOL	
Station 7	Brush 78	Wildland			VOL	
Minimum Daily Staffing:			**7**	**10**		

National Standards Alignment

The National Fire Protection Association (NFPA) 1710 and NFPA 1720 are critical standards that outline the minimum requirements for the organization and deployment of fire suppression operations, emergency medical operations, and special operations by career and volunteer fire departments, respectively. These standards are designed to ensure that fire departments can effectively respond to emergencies and provide the highest level of service to the public. Both NFPA 1710 and NFPA 1720 set forth criteria, including the necessary staffing levels, response times, and operational procedures, for various types of incidents.

Adhering to national standards and best practices, such as those outlined in NFPA 1710 and NFPA 1720, is essential for maintaining the safety and effectiveness of fire department operations. By aligning these standards, fire departments can ensure that they are providing consistent and reliable services that meet the expectations of the communities they serve. This alignment also helps with benchmarking performance, identifying areas for improvement and implementing best practices that have been proven to enhance operational efficiency and safety.

One of the critical aspects of both NFPA 1710 and NFPA 1720 is the emphasis on adequate staffing levels. NFPA 1710 specifies that a minimum of four (4) firefighters should be assigned to each fire suppression unit to ensure that they can safely and effectively perform their duties. Similarly, NFPA 1720 also emphasizes the importance of having sufficient staffing levels for volunteer fire departments. In situations where only two (2) firefighters are available, they are not permitted to enter immediately dangerous to life or health (IDLH) conditions during firefighting operations. Instead, they must remain outside until sufficient staff arrive to form a team that can safely enter the hazardous environment. This requirement is crucial for protecting the safety of firefighters and ensuring that they can perform their tasks without undue risk.

Jackson Hole Fire/EMS operates at staffing levels below national standards and industry best practices. JHFEMS operates suppression apparatus in urban and suburban environments with staffing of 3-4 persons if the cross-staffed ambulances are not committed to medical transports. If the shift is fully staffed, with no staff leave taken and ten total personnel, suppression apparatus with 2-3 may still be available personnel even if ambulances are committed.

If Jackson Hole Fire/EMS is dispatched to a fire, it lacks enough firefighters to fight the fire until assistance arrives safely from the volunteers. This requires a significant reliance on the availability of volunteers in the area. If one of the ambulance units is unavailable due to another emergency incident or a non-emergency transfer, the number of on-duty firefighters decreases.

Staff Scheduling Methodology

Jackson Hole Fire/EMS operates on a 48/96-hour shift schedule, as visualized in Figure 8 below. This means that firefighters work for 48 consecutive hours, followed by 96 hours off. This schedule is designed to provide a balance between work and rest periods, allowing firefighters to have extended time off to recover and spend time with their families.

The 48/96 schedule is structured to align with natural circadian rhythms, promoting consistent sleep patterns and reducing the risk of chronic fatigue and burnout. Firefighters work two consecutive 24-hour shifts, during which they are on duty and ready to respond to emergencies at any time. After completing their 48-hour shift, they have four consecutive days off, providing ample time for rest and personal activities.

This schedule has several benefits, including fewer commuting trips, which can reduce travel-related stress and expenses. It also allows for longer rest periods, which can improve overall well-being and job satisfaction. However, working two consecutive 24-hour shifts can lead to short-term fatigue, and being away from family for 48 hours might be challenging for some firefighters.

Overall, the 48/96-hour shift schedule is designed to enhance the work-life balance of firefighters, ensuring they are well-rested and ready to respond to emergencies effectively.

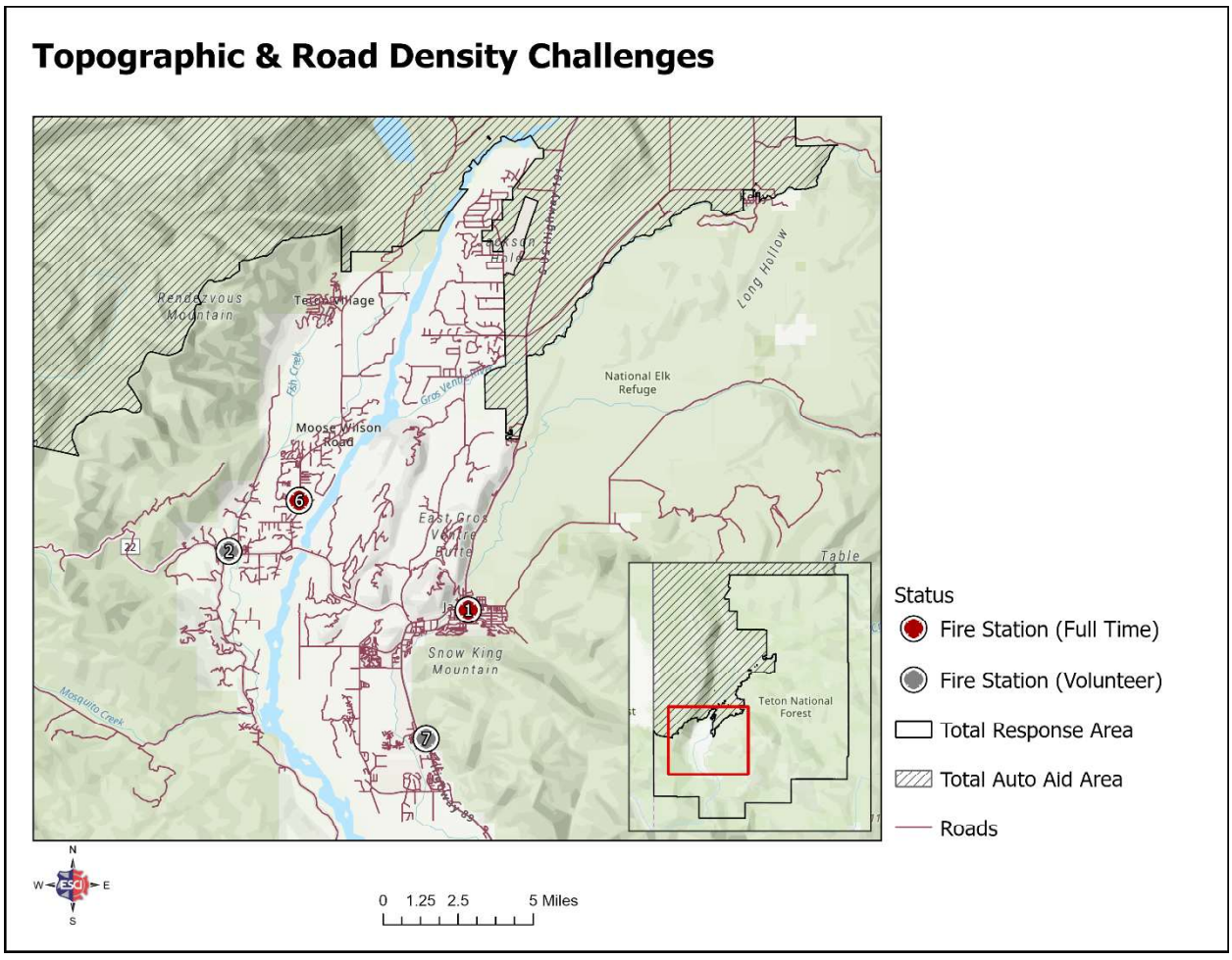
Figure 8. Sample 48/96 Shift Schedule

Community Risk Assessment

Topography

The topography of Teton County and the Jackson Hole area presents significant challenges for the fire department and community risk management. The Teton Range, with peaks such as the Grand Teton reaching 13,775 feet, creates formidable barriers for emergency responders. Navigating this steep and rocky terrain often requires specialized equipment and highly trained personnel, impacting response times and effectiveness.

Figure 9. Topographic & Road Density Challenges



The valley's geographical isolation also presents challenges for emergency response. Surrounded by the towering peaks of the Teton Range, the region functions as a geographical island, with limited routes in and out. This natural barrier not only complicates transportation logistics but also intensifies the challenges on mutual aid

resources from agencies outside the valley. Additionally, a significant portion of the community workforce commutes from outside the valley, creating delays in assembling personnel during emergencies and further straining local preparedness efforts.

For more information, refer to page 191 of the Teton County/Town of Jackson Emergency Operation Plan – 2025, updated and published on April 15, 2025.

Open spaces and interface areas, like the expansive valley floors and the adjacent Bridger-Teton National Forest, are high-risk zones for wildfires. These areas, where urban development interfaces with wildland vegetation, necessitate comprehensive risk assessments and targeted fire management strategies. JHFEMS must be prepared to address the unique fire dynamics and behavior in these zones, which are prone to rapid fire spread and require coordinated mitigation efforts.

The Snake River, while a crucial water resource, also poses a barrier during emergency operations, affecting both access and logistics. High elevation, rugged terrain, and the mix of open spaces with densely vegetated areas demand a well-coordinated, adaptable, and proactive approach from JHFEMS to manage and mitigate community risks effectively.

Wildfire Risk

The wildfire risk in Teton County and the Jackson Hole area is a multifaceted challenge that requires a robust and informed approach. The region's climate, characterized by dry summers and occasional drought conditions, significantly exacerbates the likelihood and severity of wildfires. Historical data on past wildfire incidents, such as the 2012 Horsethief Canyon Fire, which burned over 3,000 acres, underscores the recurrent threat and the potential for extensive property damage and ecological impact.

Accessibility issues further complicate wildfire management. The rugged terrain and limited road networks can hinder the rapid deployment of firefighting resources. Helicopters and other air support are often essential in these scenarios, although high winds and dense smoke can hamper their effectiveness.

Moreover, large homes and estates, particularly in the more affluent areas, add another layer of complexity. These properties, often surrounded by combustible vegetation, require tailored fire prevention strategies, including creating defensible space and using fire-resistant building materials.

Collaborative efforts between Jackson Hole Fire/EMS, the National Park Service, the National Forest Service, and community organizations are critical in developing and implementing comprehensive wildfire preparedness and response plans. Education and engagement of residents in fire-safe practices are equally important in mitigating the overall risk and enhancing the community's resilience to wildfires.

Teton County Community Wildfire Protection Plan – 2024

The 2024 Teton County Community Wildfire Protection Plan (CWPP) is a comprehensive update to the 2014 plan designed to reduce wildfire risk and enhance community resilience. Developed collaboratively by local, state, and federal stakeholders, the plan addresses the growing threat of wildfires in Teton County, which has seen over 130,000 acres affected since 2014. It incorporates advanced wildfire risk modeling and hazard assessments to identify high-risk areas and prioritize mitigation efforts. Key strategies include pre-fire planning, public education, vegetation management, and structural hardening. The CWPP also aligns with federal and state frameworks such as the Healthy Forests Restoration Act and FEMA's hazard mitigation planning, ensuring a coordinated and science-based approach to wildfire preparedness and response.

The CWPP has a positive impact on the community by fostering a culture of shared responsibility and proactive risk reduction. It emphasizes protecting life, property, and critical infrastructure through defensible space standards, fuel treatment projects, and improved emergency response capabilities. The plan also supports environmental stewardship by promoting resilient landscapes and safeguarding watersheds, wildlife habitats, and scenic resources vital to Teton County's economy and quality of life. Through its action-oriented framework, the CWPP empowers residents, landowners, and agencies to work together in building a fire-adapted and resilient community.

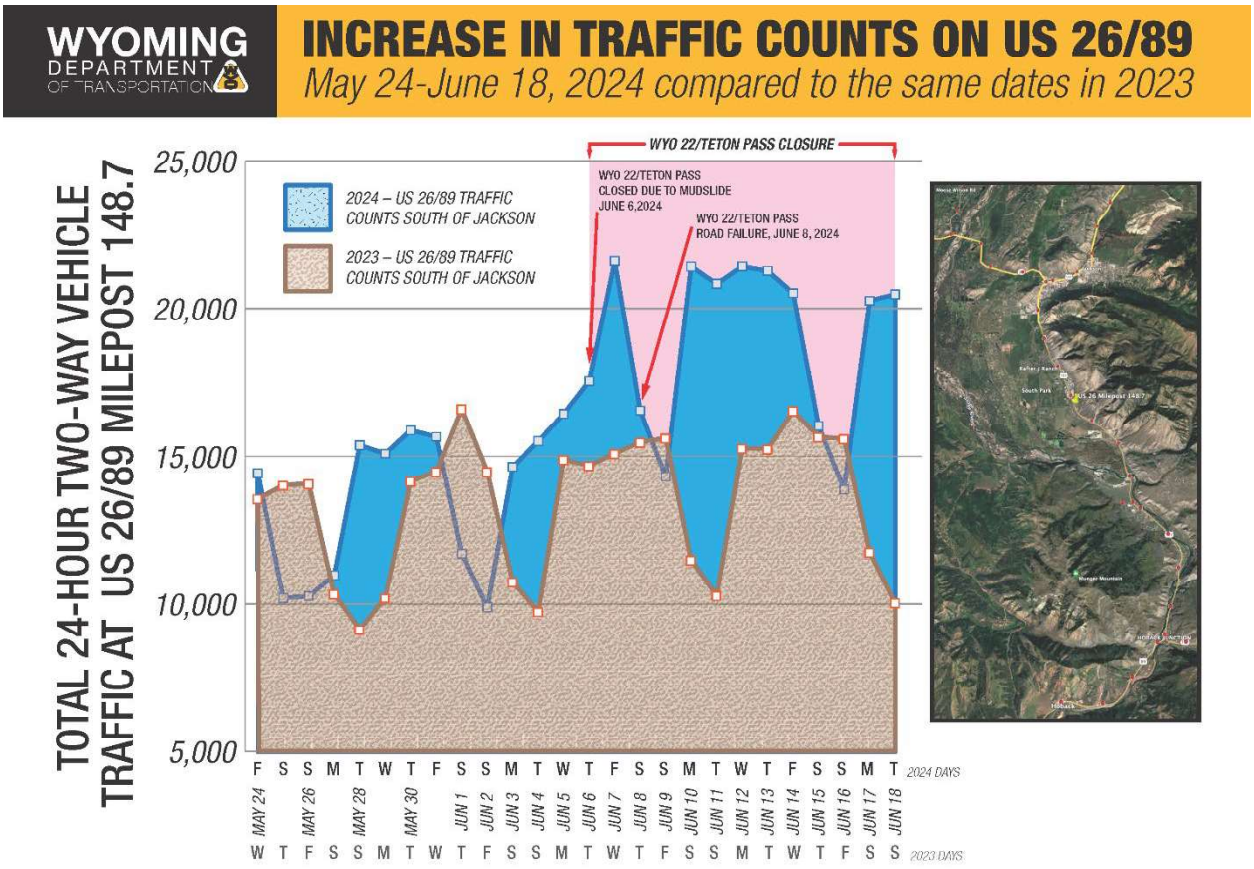
Transportation

Transportation networks in the Jackson Hole area are crucial for both everyday mobility and emergencies. The region's primary transportation infrastructure consists of a road network connecting the towns and rural areas within Teton County. These roads, while essential, often traverse rugged terrains and can be susceptible to closures due to severe weather conditions, landslides, or other natural events, posing significant challenges during emergency operations and evacuations.

As an example, in June 2024, the community's road network was impacted by a mudslide and roadway failure on Highway 22, closing Teton Pass. The resulting traffic

impacts and detours were measured by the Wyoming Department of Transportation, as shown in the following figure. With only three ways into the community, the commuting workforce, Jackson Hole Fire/EMS's mutual aid partners, and visitors were delayed and forced to travel long distances to bypass the closure.

Figure 10. Teton Pass Road Closure



The area has no railroad infrastructure, which limits the capacity for large-scale transportation of goods and emergency supplies. The absence of rail lines necessitates a heavy reliance on road transport, further highlighting the importance of maintaining and improving the road network to ensure resilience and accessibility in times of crisis.

Jackson Hole Airport facilitates air transport and serves as a vital link for residents and emergency services. The airport's capacity to accommodate helicopters and other air support is vital for wildfire management and medical emergencies. However, its operations can be affected by adverse weather conditions, including high winds and heavy snowfall.

Although providing essential water resources, waterways, including the Snake River, present their own set of risks. The river acts as a natural barrier for the transportation network. Limited access to bridges across the river dissects the community.

In conclusion, the transportation infrastructure in the Jackson Hole area, encompassing roads, the absence of rail lines, the critical role of the airport, and the challenges posed by waterways, requires a comprehensive and proactive approach to ensure community safety and resilience.

Planning & Zoning Risk Areas

Teton County and the Town of Jackson have long recognized the importance of meticulous planning and zoning to maintain the region's unique character, natural beauty, and community resilience. These efforts are encapsulated in a comprehensive plan that guides development, land use, and environmental stewardship within the region.

The comprehensive plan of Teton County and the Town of Jackson encompasses a multifaceted approach to land use and development. This plan includes specific zoning regulations delineating residential, commercial, agricultural, and recreational areas. Teton County and the Town of Jackson aim to balance growth with preserving the area's scenic landscapes and wildlife habitats by designating specific zones.

Environmental stewardship is a cornerstone of the comprehensive plan. Teton County and the Town of Jackson focus on protecting natural resources, including waterways, forests, and open spaces. Efforts include implementing stringent guidelines for new developments to minimize environmental impact, promoting sustainable building practices, and encouraging using renewable energy sources.

Given the region's susceptibility to natural disasters, the comprehensive plan incorporates emergency preparedness and resilience provisions. These include developing and implementing wildfire preparedness and response plans and ensuring that the transportation infrastructure is resilient to severe weather conditions and other natural events.

The plan also addresses future development and growth management. By setting clear guidelines and standards for new developments, Teton County and the Town of Jackson aim to ensure that growth occurs in a controlled and sustainable manner. This

is crucial for maintaining the area's quality of life and avoiding overdevelopment that could strain resources and infrastructure.

Figure 11. Future Development

Development	Details	Station
North Cache & Perry Hotel	190,000 sq. ft., largest in Jackson's History, 109 Hotel Rooms, 33 Residential Units	1
Snow King Condos	175,000 sq. ft., 72 Residential Units	1
Hitching Post	Limited Information Available	1
Loop	194 Residential Units	1
Virginian	Potentially 224 Residential Units	1
JHMR	60 Residential Units	1
185 Glenwood	Potentially 30 Residential Units, 38,000 sq. ft. of Hotel	1
Mogul	33 Residential Units	1
Teton County School District	24 Residential Units	1
Millward Hotel	66 Room Hotel and 7 Residential Units	1
Justice Center	Potential for 80,000 sq. ft.	1
Browse N Buy	3 Residential Units	1
Pearl & Cache	Commercial 80,000 sq. ft. with 18 Rental Units	1
Pearl Street Bagel Property	Mixed Use Retail with 21 Residential Units	1
North South Park	Neighborhood with 1,800 Residential Units – Largest Development in Teton County's History.	7
Lower Valley Housing Development	23 Townhouses	7
Near Smiths	75 Residential Units	7
Teton Village	Large Hotel & Luxury Residences – 25 Units	TV
Cabins at Targhee	22 Residential Units Outside of Alta	Alta
	Approximate Number of Residential & Hotel Units:	**3,500**

Service Delivery & Performance

Service delivery and performance are the metrics that best illustrate the services provided by the fire department to a community.

Service Demand Analysis

When assistance is requested, a demand for service from the fire department is solicited. Analyzed by each calendar year, the primary analyses of service demand include the types of incidents, when they occur, and where they occur.

Incident Type Analysis

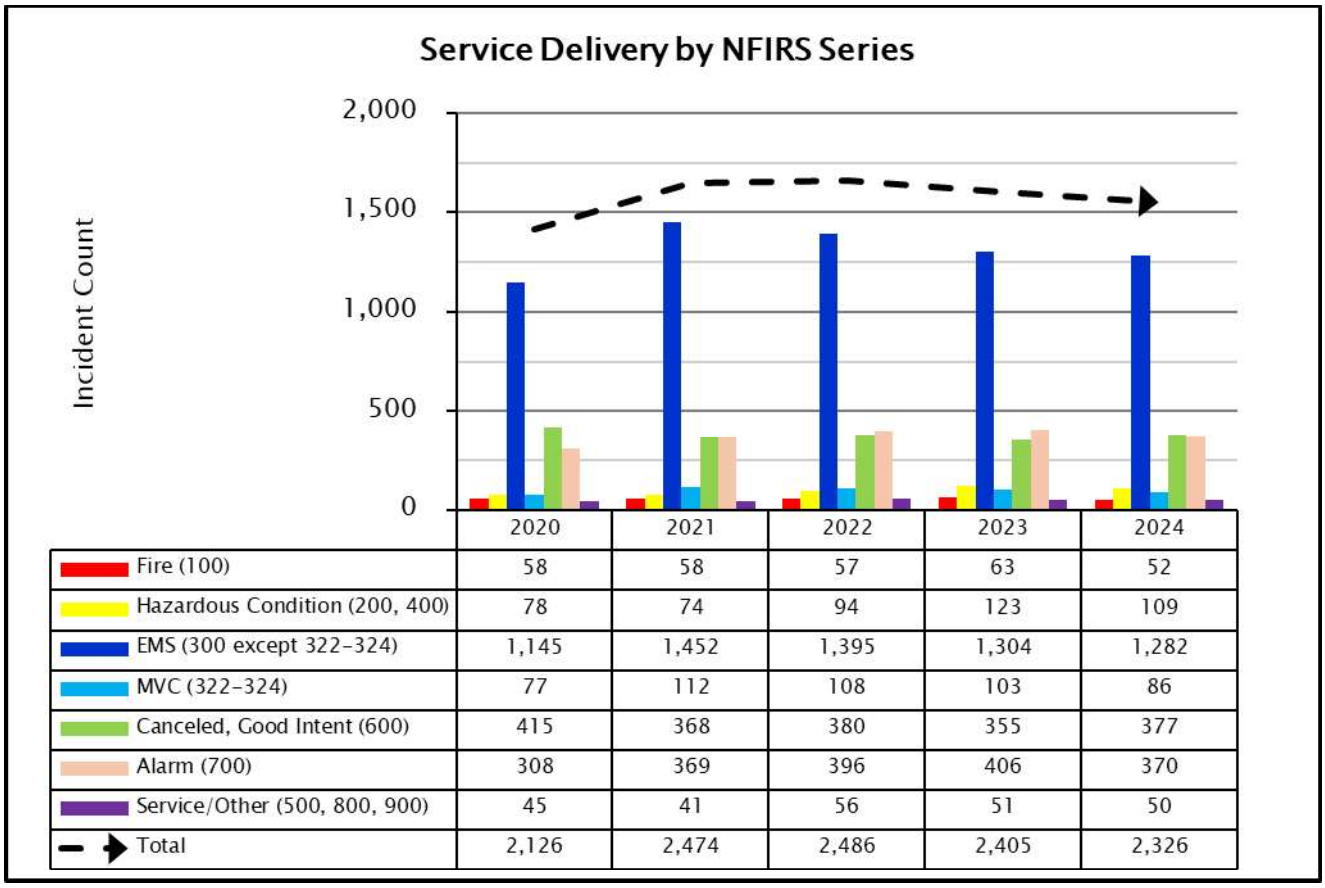
Documentation of response to incidents includes recording the type of incident that was found by an arriving unit. The National Fire Incident Reporting System (NFIRS) and its successor, the National Emergency Response Information System (NERIS), are industry-standard systems used by the local fire department to record this information. The systems track over one hundred incident types, which are grouped into series as illustrated in the following figure.

Figure 12. NFIRS Incident Series

Incident Series	Incident Heading
100-Series	Fires
200-Series	Overpressure Rupture, Explosion, Overheat (No Fire)
300-Series	Rescue and Emergency Medical Service (EMS) Incidents
400-Series	Hazardous Condition (No Fire)
500-Series	Service Call
600-Series	Canceled, Good Intent
700-Series	False Alarm, False Call
800-Series	Severe Weather, Natural Disaster
900-Series	Special Incident Type

The following figure illustrates the types of incidents JHFEMS has responded to over the past five years.

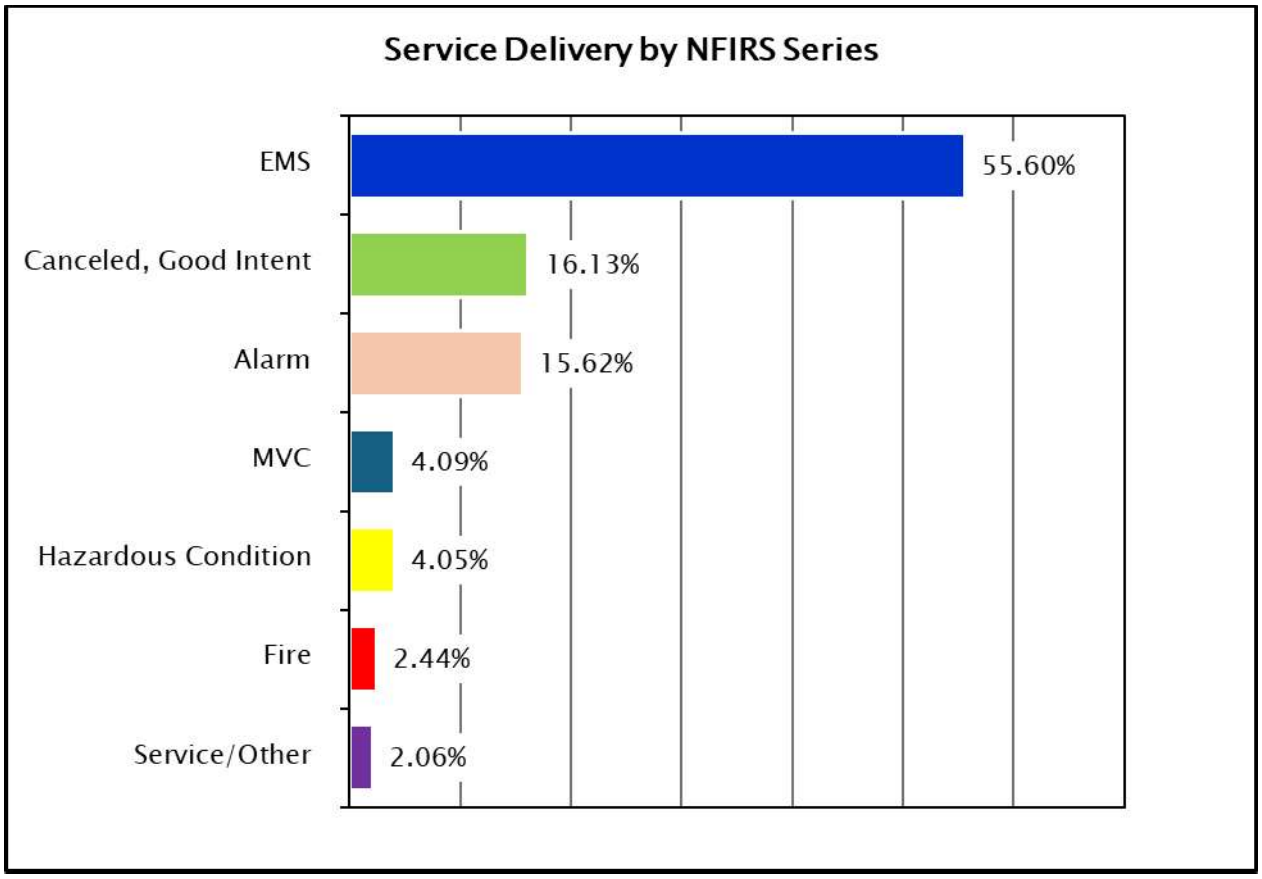
Figure 13. JHFEMS Service Demand by NFIRS Series, 2020–2024



	2020	2021	2022	2023	2024
Fire (100)	58	58	57	63	52
Hazardous Condition (200, 400)	78	74	94	123	109
EMS (300 except 322–324)	1,145	1,452	1,395	1,304	1,282
MVC (322–324)	77	112	108	103	86
Canceled, Good Intent (600)	415	368	380	355	377
Alarm (700)	308	369	396	406	370
Service/Other (500, 800, 900)	45	41	56	51	50
Total	2,126	2,474	2,486	2,405	2,326

Another consideration is to determine the percentage represented by each category comprising the entirety of service demand, as illustrated in the following figure.

Figure 14. JHFEMS Service Demand by NFIRS Series, 2020–2024



Temporal Analysis

Another data point documented for each incident response is the time at which it occurs. This may be analyzed from three different views—by month, day, and hour—as illustrated in the following figures.

Figure 15. JHFEMS Service Demand by Month, 2020–2024

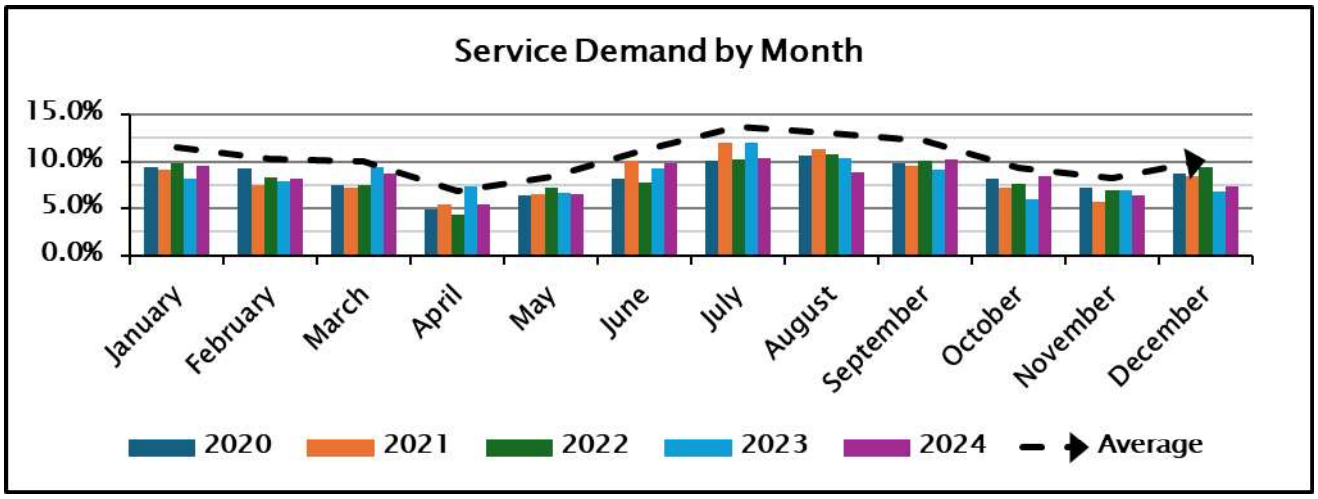


Figure 16. JHFEMS Service Demand by Day, 2020–2024

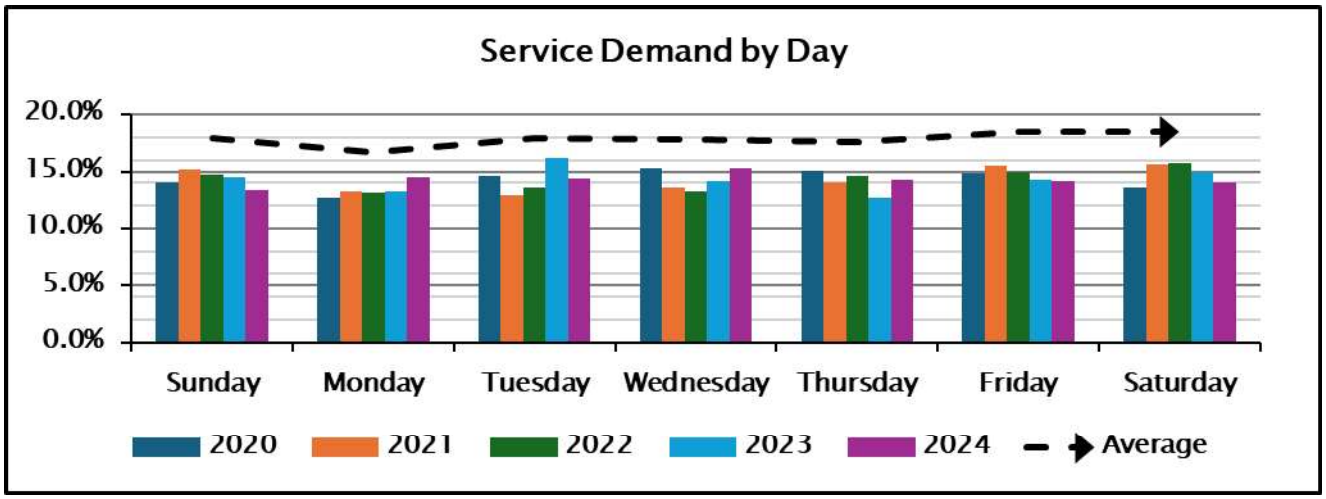
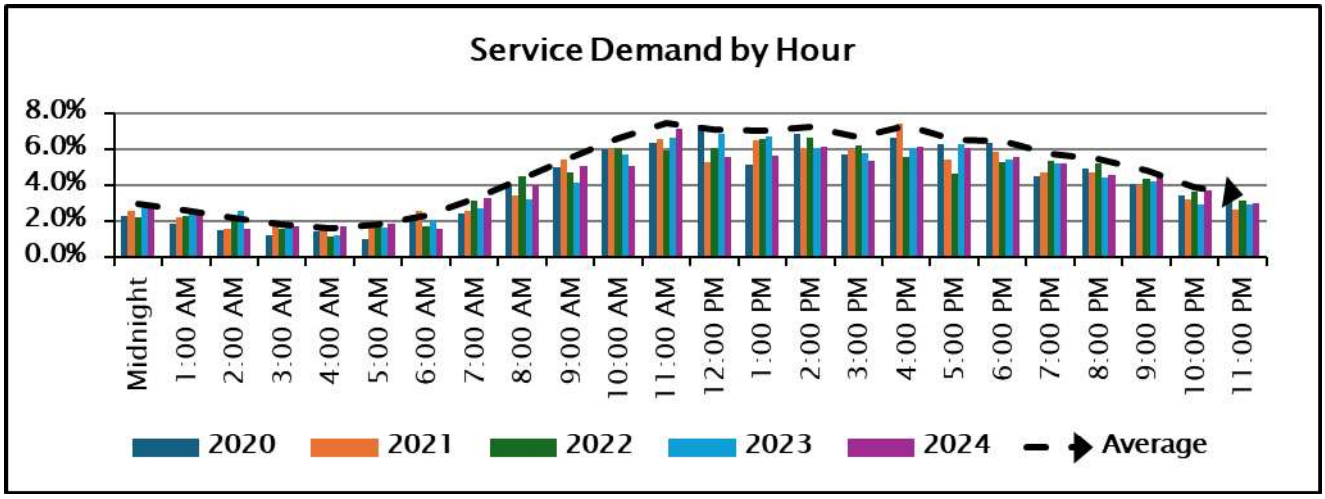


Figure 17. JHFEMS Service Demand by Hour, 2020–2024



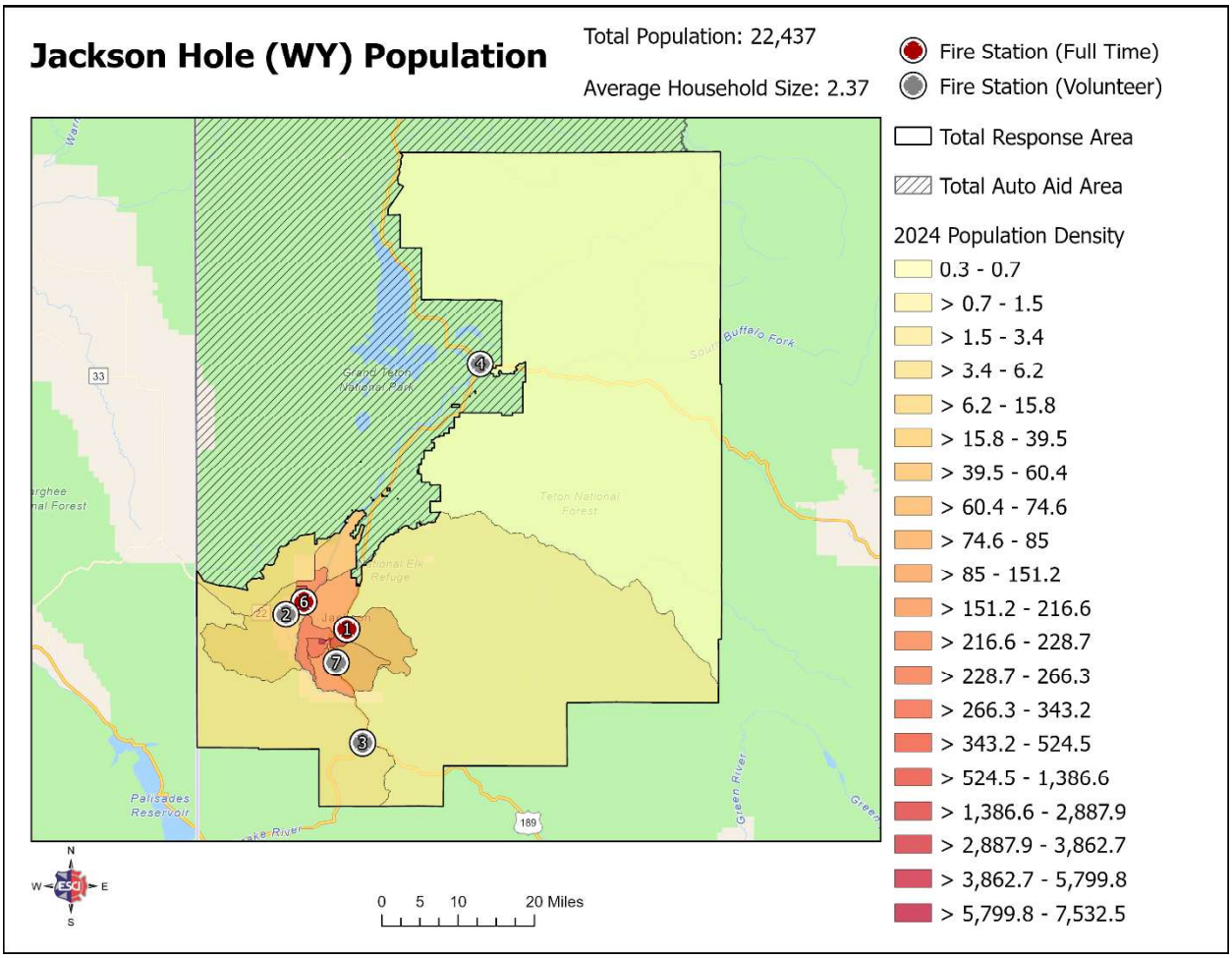
One additional note for time of day: based on a recently published national study, from 2018 to 2020, the occurrence of residential structure fires with fatalities were highest between midnight and 1:00 AM. The eight-hour peak period (11:00 PM to 7:00 AM) accounted for 45% of residential fatal fires[1].

[1] *Fatal Fires in Residential Buildings (2018–2020),* Topical Fire Report Series Volume 22, Issue 2 /June 2022, U.S. Department of Homeland Security, U.S. Fire Administration, National Fire Data Center.

Geographic Analysis

The location of incidents is closely related to the population density within the community. In other words, where there is greater population density (number of people per unit area such as square mile), there tends to be greater incident density. Heat maps are used to display this information. To compare the initial relationship of incidents and population, the first information needed is the population density, as illustrated in the following figure.

Figure 18. JHFEMS Population Density, 2024



Another datapoint documented for each incident response is the location of the incident, either by address and/or the latitude and longitude of the incident. The first view of incident density includes all responses within the service area, regardless of incident type, as illustrated in the following figures.

Figure 19. JHFEMS Incident Density (All Incidents), 2019–2023

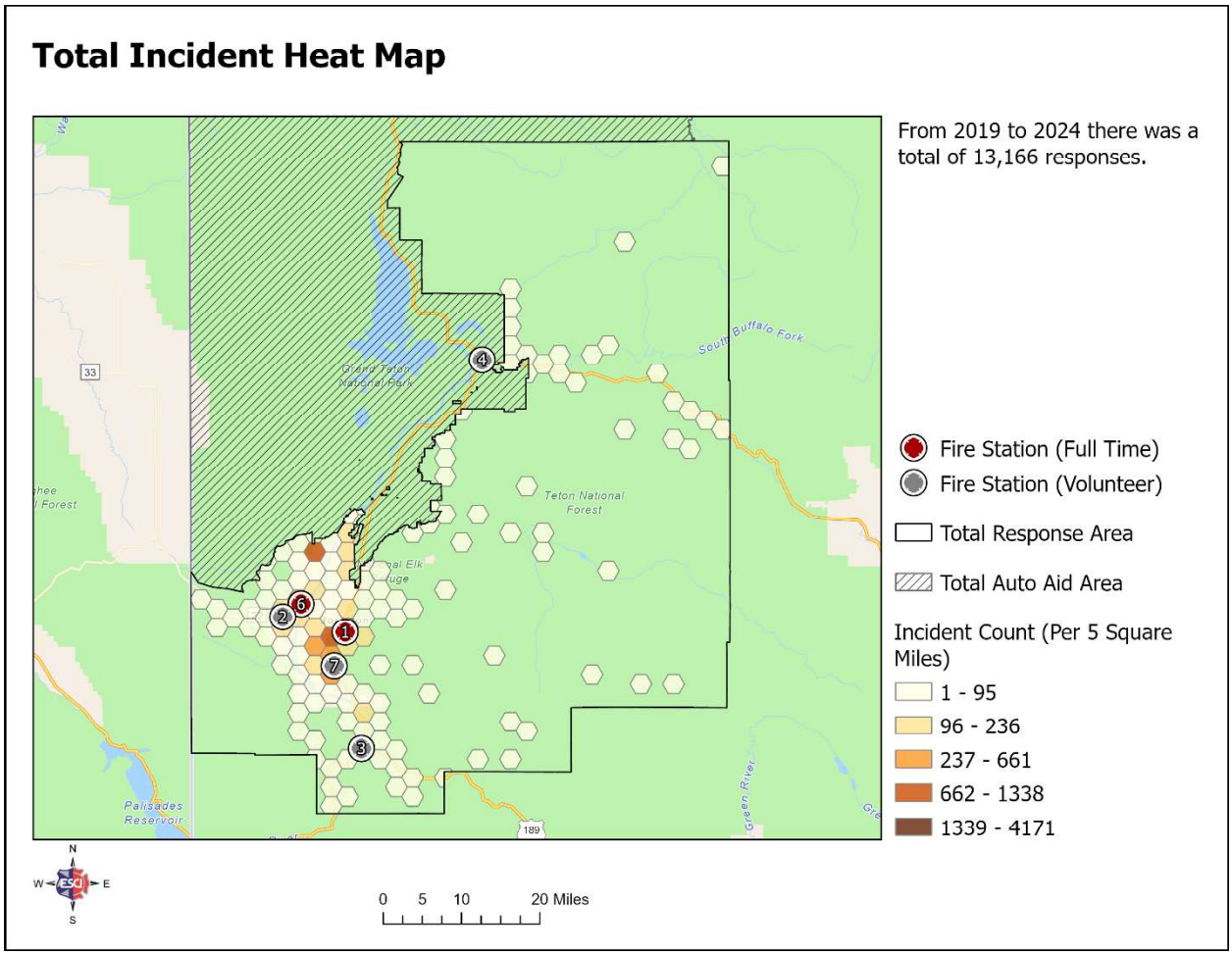
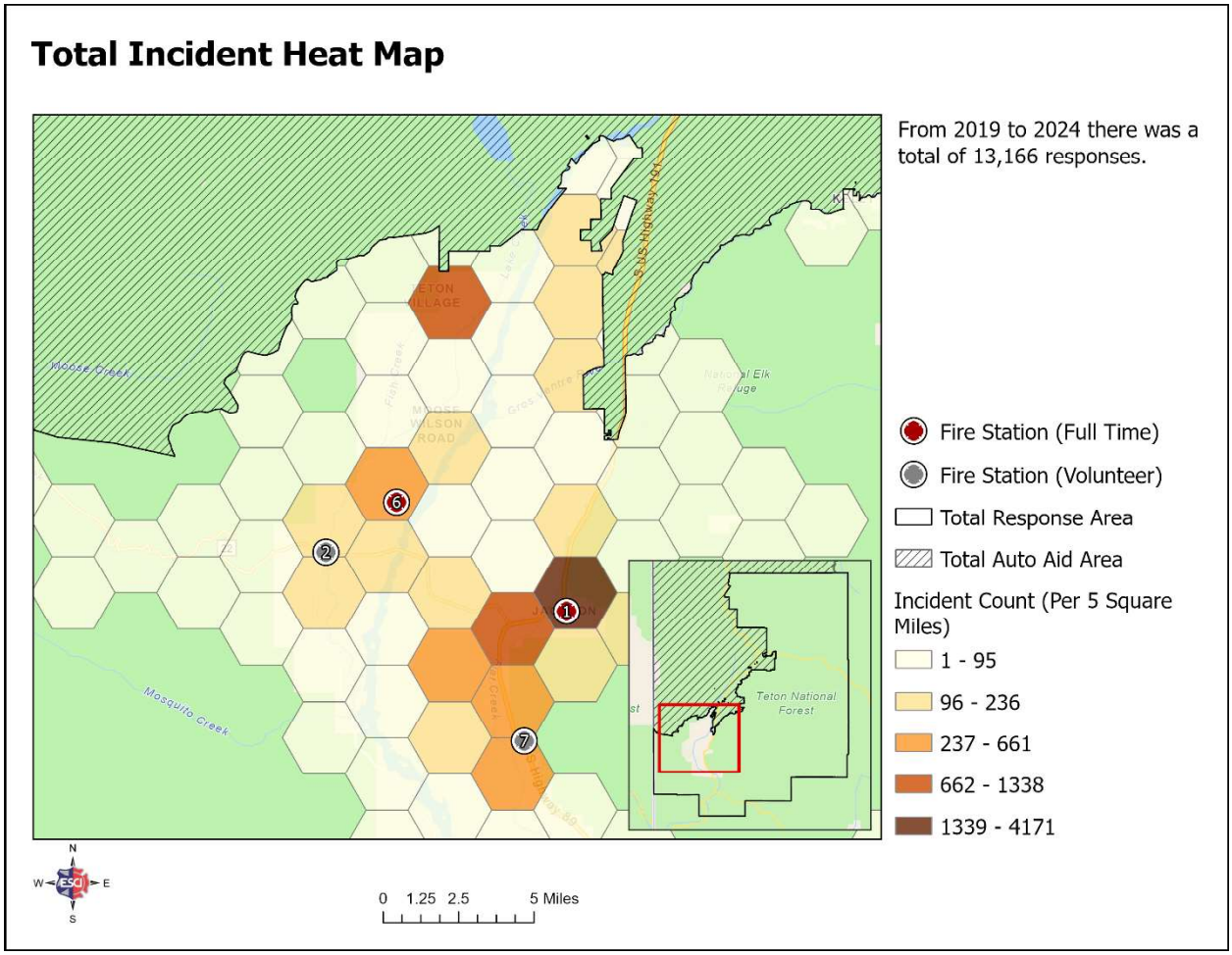


Figure 20. Detail of JHFEMS Incident Density (All Incidents), 2019–2023



As an important note, the incidents shown for Teton Village are only those incidents where JHFEMS was requested and responded. This density analysis does not account for the incidents that the Teton Village Special Fire District responded to without outside assistance.

The second view of incident density includes only emergency medical services incidents, as illustrated in the following figures.

Figure 21. JHFEMS Incident Density (EMS), 2019–2023

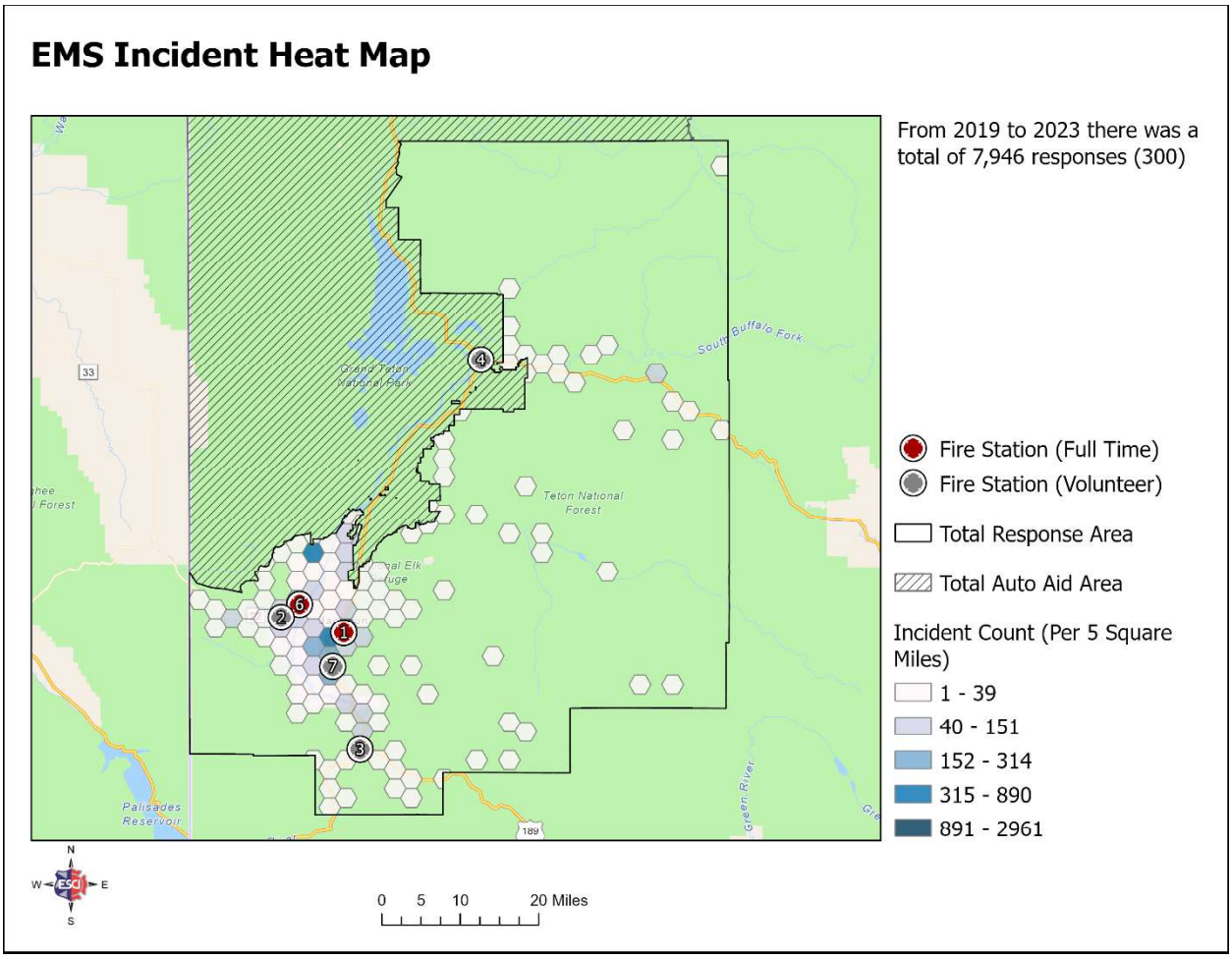
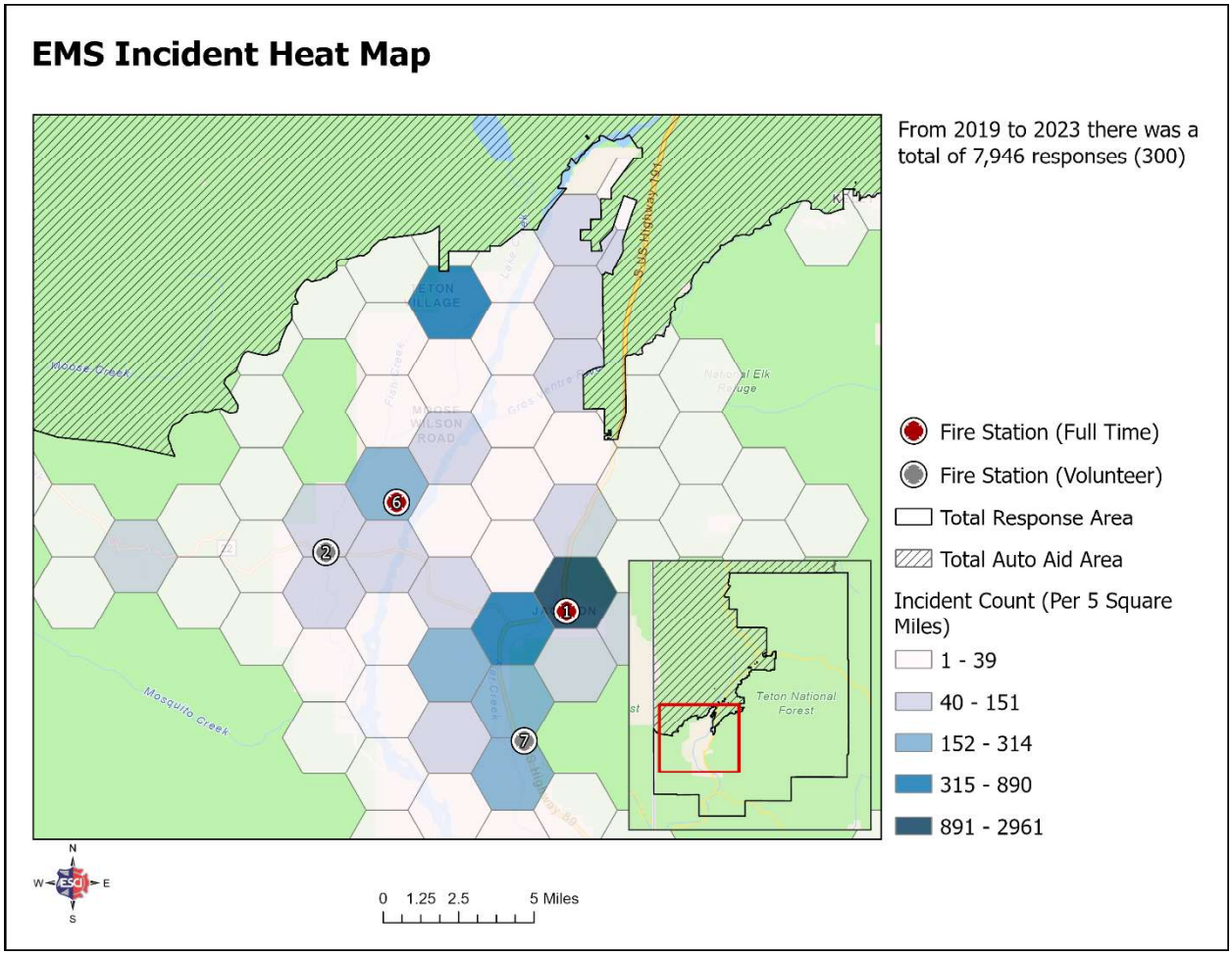


Figure 22. Detail of JHFEMS Incident Density (EMS), 2019–2023



As an important note, the incidents shown for Teton Village are only those incidents where JHFEMS was requested and responded. This density analysis does not account for the incidents that the Teton Village Special Fire District responded to without outside assistance.

The third view of incident density includes only fire incidents, as illustrated in the following figures.

Figure 23. JHFEMS Incident Density (Fire), 2019–2023

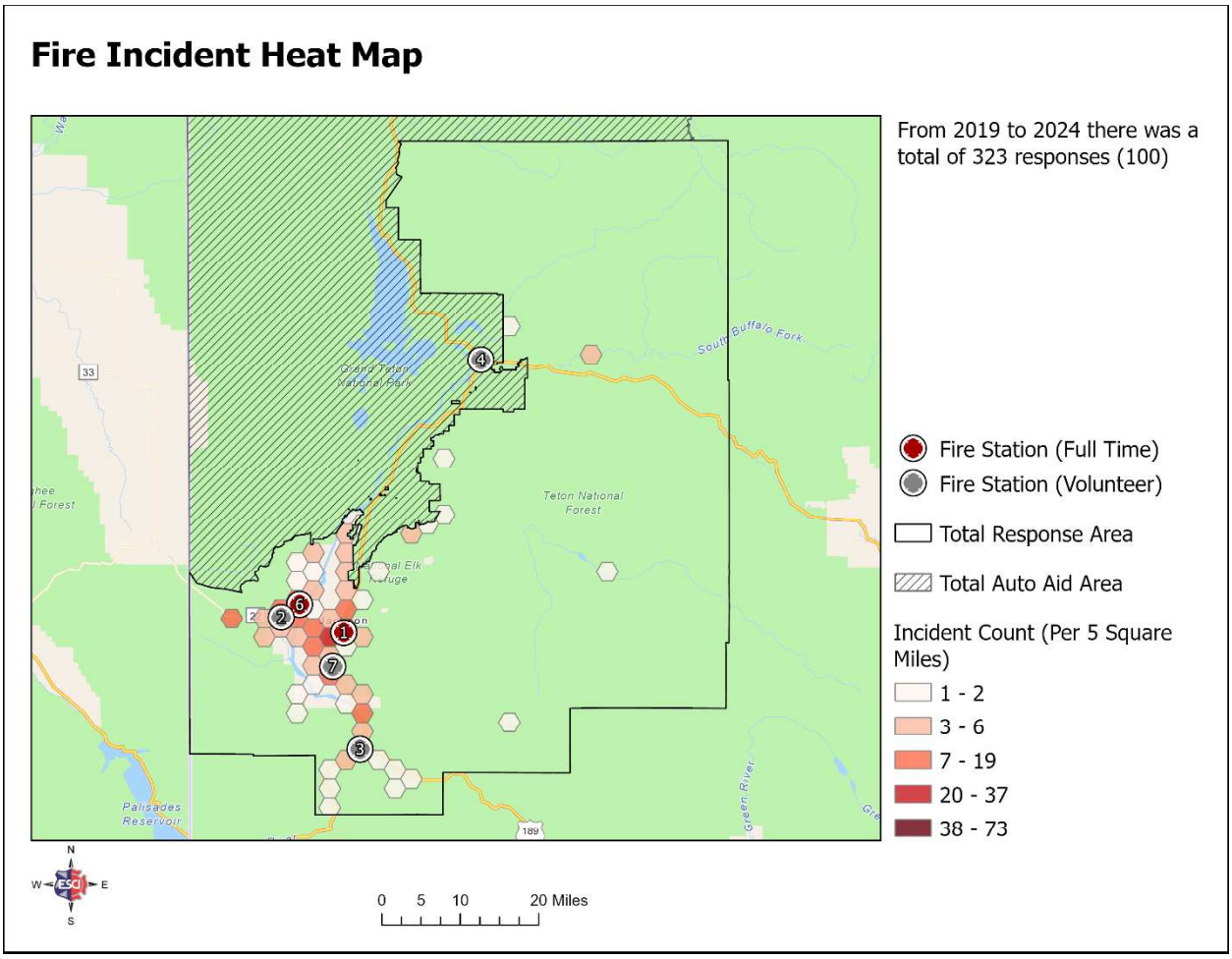
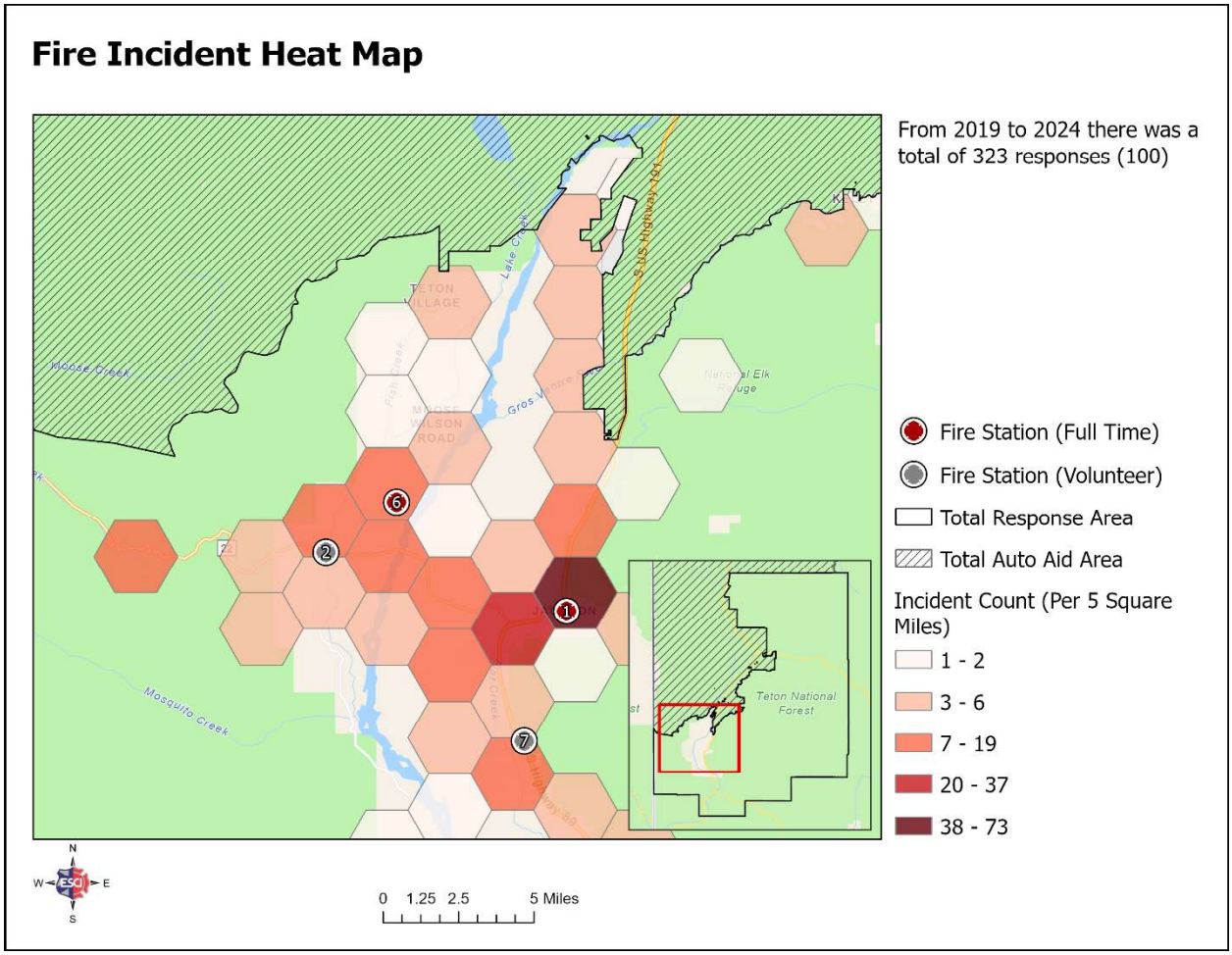


Figure 24. Detail of JHFEMS Incident Density (Fire), 2019–2023



As an important note, the incidents shown for Teton Village are only those incidents where JHFEMS was requested and responded. This density analysis does not account for the incidents that the Teton Village Special Fire District responded to without outside assistance.

However, because the two agencies share the same CAD, the following figure outlines the 140 responses in 2024 by the Teton Village Fire Department.

Figure 25. 2024 Teton Village Fire Department Responses

Type of Incident	Number of Responses
Medical Emergency	13
Alarm	113
Fire	3
Hazardous Materials	7
Other	4

Resource Distribution Analysis

The placement of emergency services resources within the community should be compared to the locations of incident density and should be guided by various industry standards and best practices.

ISO Distribution

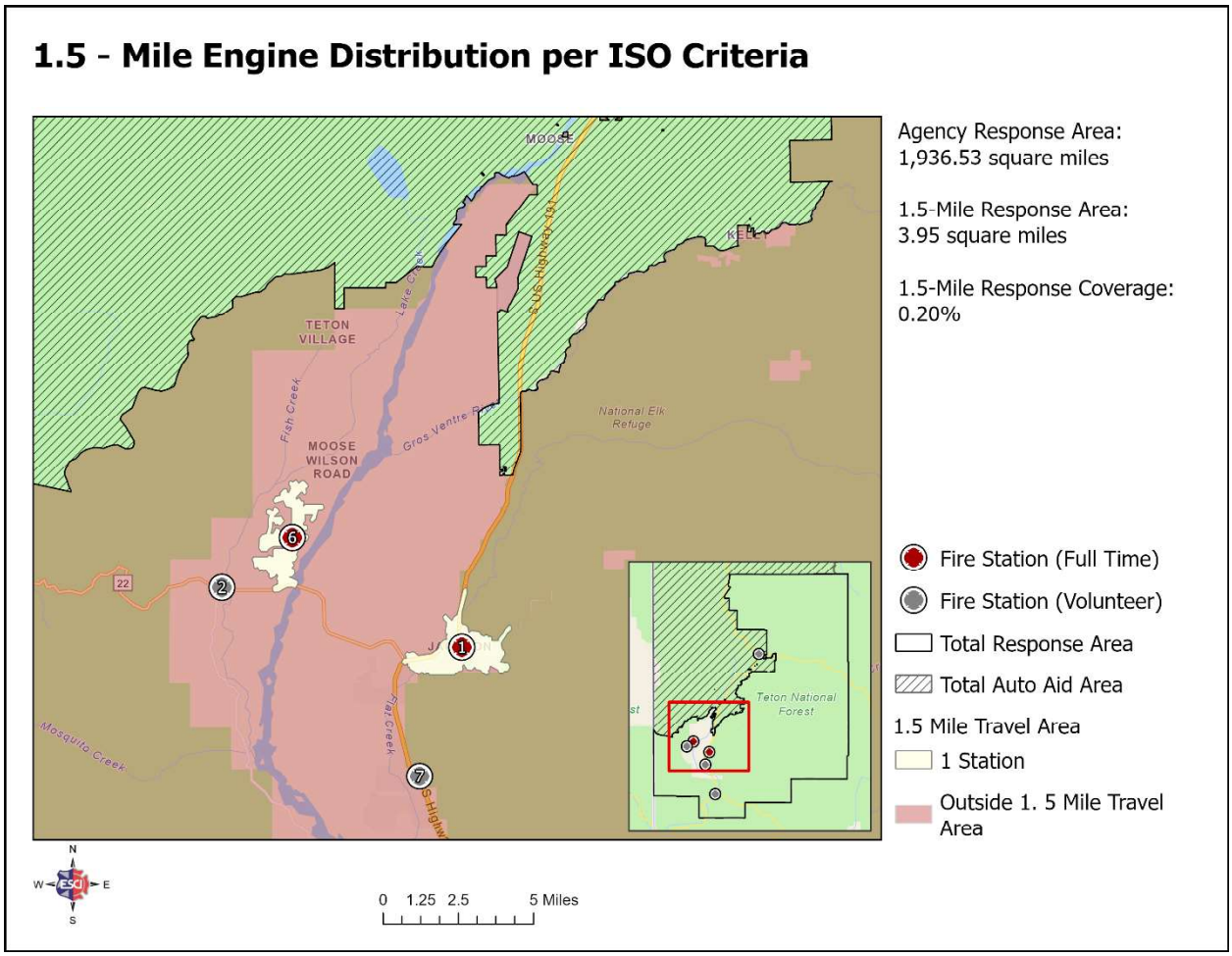
The Insurance Services Office, Inc. (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. A community's ISO rating is an important factor when considering fire station and apparatus concentration, distribution, and deployment, as there is a correlation between a community's ISO rating and the cost of fire (homeowner's) insurance for residents and businesses.

To receive maximum credit for station and apparatus distribution, ISO evaluates the percentage of the community (contiguously built-upon area) that is within specific distances of fire stations, central water supply access (fire hydrants), engine/pumper companies, and aerial/ladder apparatus.

1.5-Mile Engine Distribution

ISO's first measure is the overall percentage of the service area that lies within a 1.5-mile travel distance of the first due fire engine from a fire station, as illustrated in the following figure.

Figure 26. JHFEMS 1.5-Mile Engine Distribution

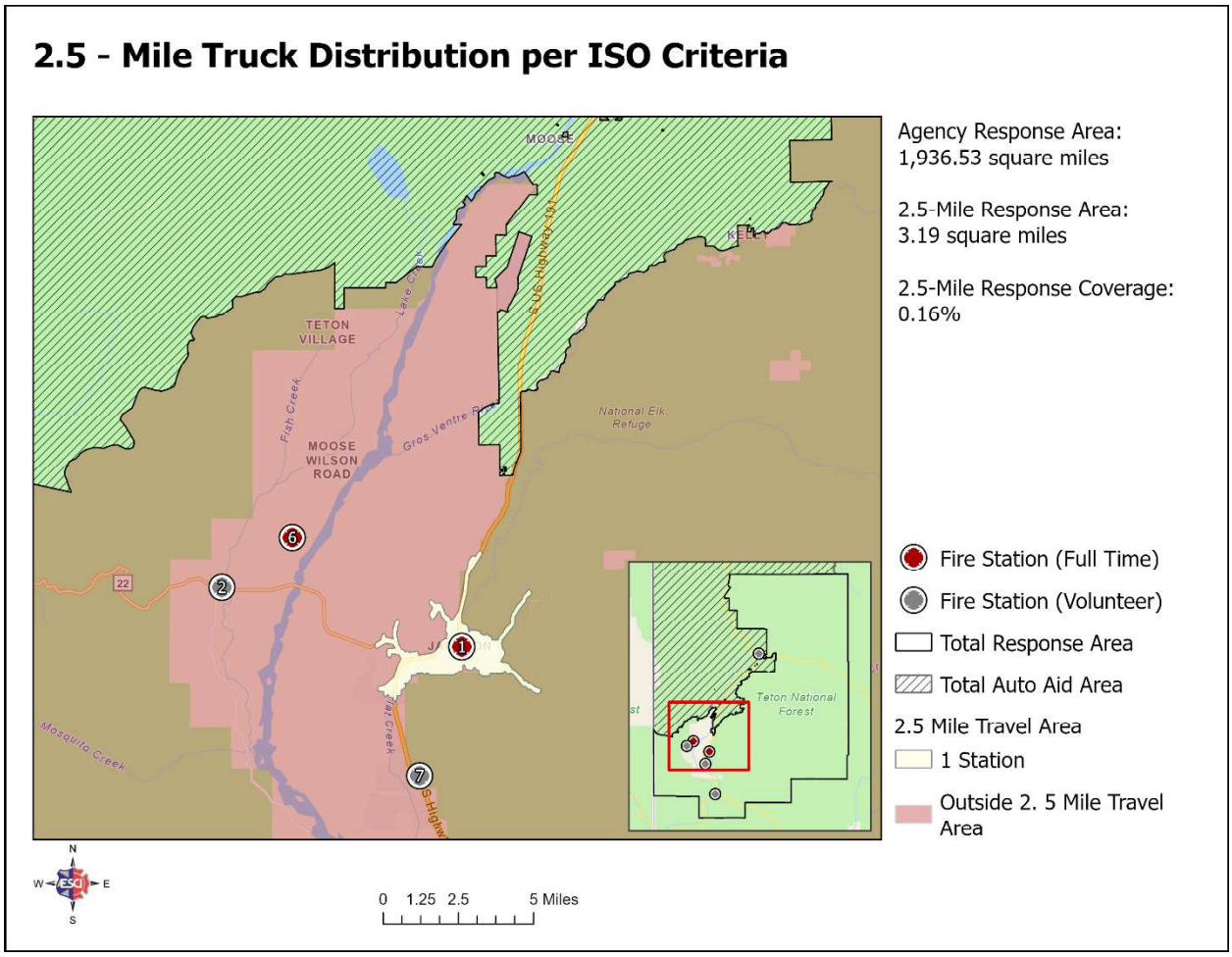


2.5-Mile Aerial Distribution

ISO's second measure is the overall percentage of the service area that lies within a 2.5-mile travel distance of the first due aerial apparatus from a fire station, as illustrated in the following figure.

It is important to know that this resource is not permanently staffed.

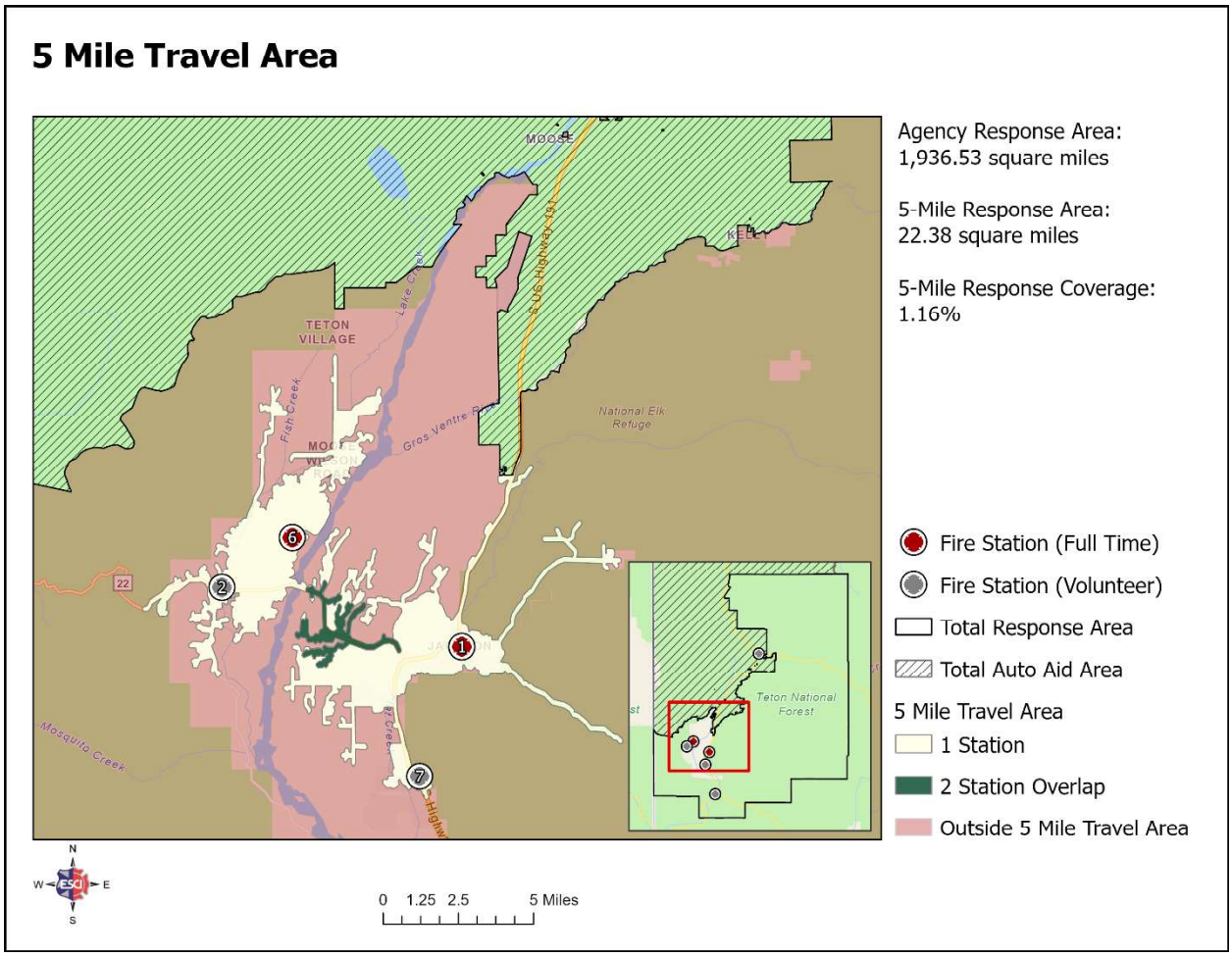
Figure 27. JHFEMS 2.5-Mile Aerial Distribution



5-Mile Distribution

ISO's third measure is the overall percentage of the service area that lies within a 5-mile travel distance of a fire station, as illustrated in the following figure. Areas outside of the 5-mile travel distance are subject to a PPC® rating of 10 (no fire department protection available).

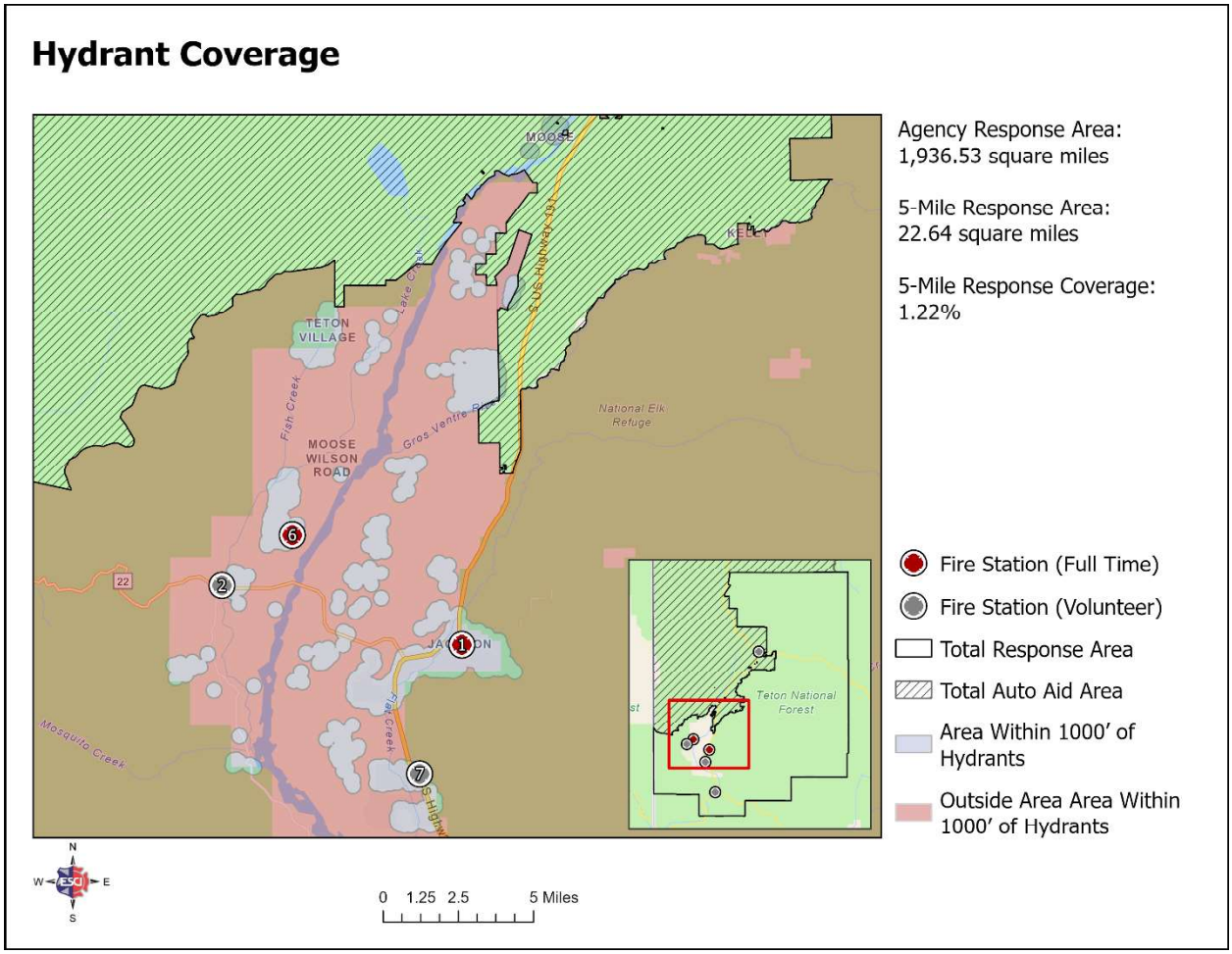
Figure 28. JHFEMS 5-Mile Station Distribution



Water Supply

ISO's fourth measure is the overall percentage of the service area that lies within a 1,000-foot travel distance of a fire hydrant, as illustrated in the following figure. Exceptions are made when a fire department can show that a dry hydrant or a suitable water tanker operation can provide the needed volume of water for fire suppression activities for a specific period.

Figure 29. JHFEMS Hydrant Distribution



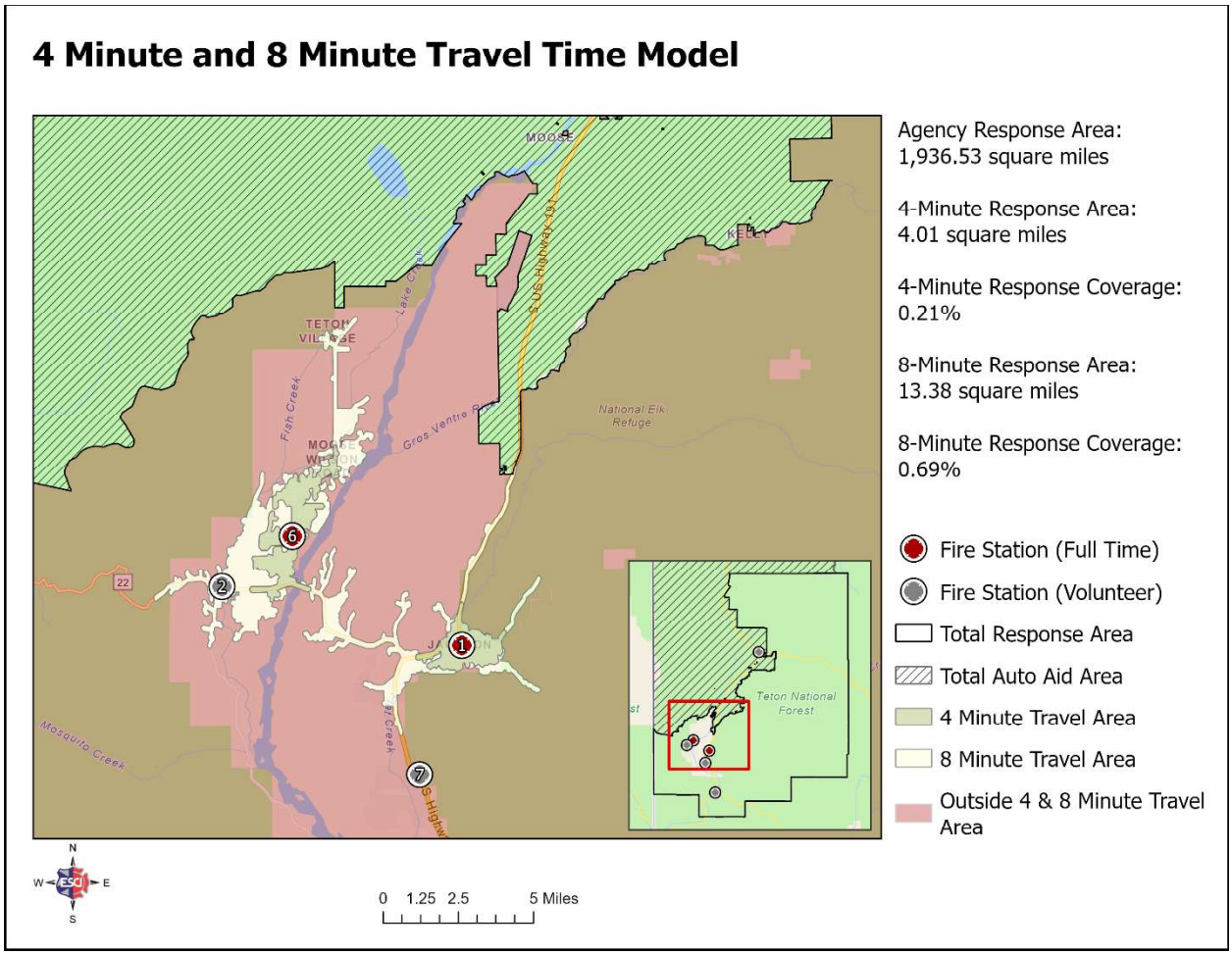
NFPA Distribution

The National Fire Protection Association (NFPA) is an industry trade association that develops and provides standards and codes for fire departments and emergency medical services for use by local governments.

The standard, NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, serves as a national consensus standard for career fire department performance, operations, and safety. Within this standard, a travel time of four (4) minutes 90% of the time is identified as the benchmark for *career* departments to reach emergency incidents within their jurisdiction with the first arriving unit. Additionally, the balance of the response (called the effective response force or ERF) is required to arrive at the incident within eight (8) minutes, 90% of the time.

The following figure illustrates the service area that falls within the four- and eight-minute travel times of a fire station.

Figure 30. JHFEMS 4/8-Minute Travel Time per NFPA Criteria



The previous graphic provides theoretical travel times based on all units within the station at the time of dispatch. The following figure illustrates actual travel times during calendar years 2020-2024, grouped into four-minute increments.

Figure 31. JHFEMS Travel Time Analysis, 2020-2024

Travel Time Category	2020	2021	2022	2023	2024
4 Minutes or Less	51.01%	47.50%	55.27%	58.96%	59.12%
4-8 Minutes	18.35%	20.39%	16.71%	15.54%	14.79%
8-12 Minutes	9.97%	11.46%	11.13%	10.77%	11.53%
Greater than 12 Minutes	20.67%	20.65%	16.89%	14.72%	14.55%

Resource Concentration Analysis

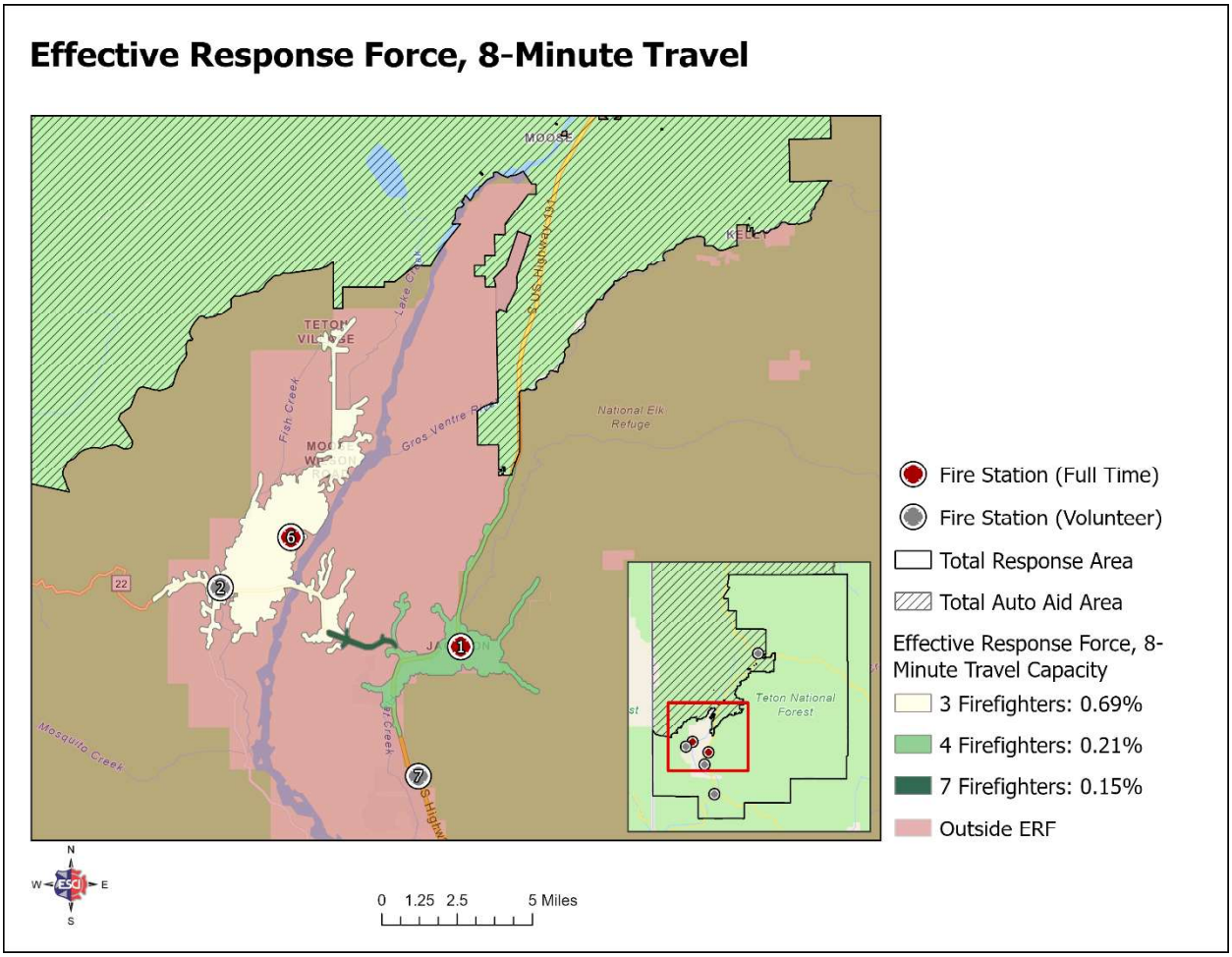
Each of the prior measures provided a view specifically associated with the arrival of the first unit to an incident scene. While arriving at an incident in a quick and safe manner is important, the ability to safely mitigate the incident is also impacted by the arrival of sufficient resources within an appropriate amount of time. The measure of this ability is referred to as effective response force (ERF) and ensures that sufficient personnel and resources arrive on scene early enough to safely control a fire or mitigate other types of emergencies prior to substantial damage, injury, or loss of life. ERF is also commonly referred to as the "full assignment" to the incident. The following figure illustrates the ERF recommended through standards such as NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* and the Commission on Fire Accreditation (CFAI) Standards of Cover.

Figure 32. NFPA 1710 ERF Recommendations Based on Risk

Function/Task	Single-Family Residence (2,000 ft²)	Open-Air Strip Shopping Center (13,000-196,000 ft²)	3-Story Garden Apartment (1,200 ft²)
Command	1	2	2
Apparatus Operator	1	2	2
Handlines (2 members each)	4	6	6
Support Members	2	3	3
Victim Search and Rescue Team	2	4	4
Ground Ladders/Ventilation	2	4	4
Aerial Ladder Operator (If Ladder Used)	(1)	(1)	(1)
Initial Rapid Intervention Team	4	4	4
Initial Medical Care Component	N/A	2	2
Total	**16 (17)**	**27 (28)**	**27 (28)**

The following figure illustrates the concentration of firefighters that may arrive within the eight-minute travel time. Where responses from more than one station overlap, the number of firefighters arriving increases.

Figure 33. JHFEMS Effective Response Force per NFPA 1710



Resource Reliability Analysis

To consider the reliability of a unit to respond to incidents within their primary response, workload and zone unit first arrived should be analyzed.

Commitment Time

A fair measure of workload by each unit within a fire department is to evaluate the amount of time assigned to incidents as compared to the total time the unit is in service, called a commitment factor. While there are limited formal performance measures to use as a target measure, in May 2016, the Henrico County (VA) Division of Fire published an article after studying their department's EMS workload.[2] As a result of the study, the Henrico County Division of Fire developed a commitment factor scale for their department. The following figure is a summary of the findings as they relate to commitment factors and may be utilized by JHFEMS leadership as a base for developing internal workload measures. These workload measures may vary based on the type of apparatus (i.e., fire engine versus transport ambulance).

[2] *How Busy Is Busy?* Retrieved from https://www.fireengineering.com/articles/print/volume-169/issue-5/departments/fireems/how-busy-is-busy.html

Figure 34. Commitment Factors as Developed by Henrico County (VA) Division of Fire, 2016

Factor	Indication	Description
16%–24%	Ideal Commitment Range	Personnel can maintain training requirements and physical fitness and can consistently achieve response time benchmarks. Units are available to the community more than 75% of the time.
25%	System Stress	Community availability and unit sustainability are not questioned. First due units are responding to their assigned community 75% of the time, and response benchmarks are rarely missed.
26%–29%	Evaluation Range	The community served will experience delayed incident responses. Just under 30% of the day, first due ambulances are unavailable; thus, neighboring responders will likely exceed goals.
30%	"Line in the Sand"	Not Sustainable: Commitment Threshold—The community has a less than 70% chance of timely emergency service, and immediate relief is vital. Personnel assigned to units at or exceeding 30% may show signs of fatigue and burnout and may be at an increased risk of errors. The required training and physical fitness sessions are not consistently completed.

The following figures illustrate the commitment factors by unit; the highlighted units are primarily staffed.

Figure 35. JHFEMS Commitment Times (Station 1), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
BC1	1.2%	5.0%	1.8%	2.1%	0.9%	-0.4%
BC2	1.1%	1.8%	1.5%	0.9%	0.9%	-0.1%
BC3	1.2%	2.1%	1.8%	1.3%	1.0%	-0.2%
BC6	0.0%	0.0%	0.2%	0.3%	0.3%	0.2%
E11	2.9%	7.8%	4.2%	3.4%	3.0%	0.1%
E12	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%
M10	7.4%	16.7%	9.9%	7.7%	7.8%	0.4%
M20	4.1%	5.1%	3.9%	2.7%	3.2%	-1.0%
R14	0.3%	0.7%	0.5%	0.3%	0.0%	-0.3%
T16	0.2%	1.1%	1.0%	0.1%	0.2%	0.0%
T17	0.3%	0.3%	0.4%	0.2%	0.2%	-0.1%
UTV1	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%

Figure 36. JHFEMS Commitment Times, Summer Peak (Station 1), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
BC1	1.3%	10.4%	2.3%	1.4%	0.8%	-0.5%
BC2	1.4%	3.8%	1.8%	1.2%	1.4%	-0.1%
BC3	1.4%	4.6%	1.7%	1.9%	1.0%	-0.4%
BC6	0.0%	0.1%	0.2%	0.3%	0.4%	0.4%
E11	2.9%	8.5%	4.5%	3.3%	4.2%	1.3%
E12	0.0%	0.0%	0.0%	0.1%	0.3%	0.3%
M10	8.3%	23.6%	10.2%	10.0%	9.5%	1.1%
M20	4.2%	5.5%	3.2%	1.2%	3.1%	-1.1%
R14	0.5%	1.2%	0.6%	0.2%	0.0%	-0.5%
T16	0.2%	0.8%	0.4%	0.1%	0.4%	0.1%
T17	0.6%	0.6%	0.4%	0.1%	0.5%	-0.1%
UTV1	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%

Figure 37. JHFEMS Commitment Times, Winter Peak (Station 1), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
BC1	1.8%	1.3%	1.8%	2.4%	1.2%	-0.5%
BC2	1.1%	0.8%	1.8%	1.0%	0.7%	-0.4%
BC3	1.2%	0.9%	2.1%	1.5%	1.1%	-0.2%
BC6	0.0%	0.0%	0.1%	0.4%	0.3%	0.3%
E11	3.8%	5.1%	5.9%	5.1%	2.7%	-1.0%
E12	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
M10	9.6%	13.2%	12.7%	8.6%	9.0%	-0.6%
M20	5.0%	5.8%	6.1%	4.9%	4.7%	-0.3%
R14	0.1%	0.7%	0.3%	0.6%	0.0%	-0.1%
T16	0.2%	0.7%	1.0%	0.2%	0.2%	-0.1%
T17	0.2%	0.2%	0.4%	0.4%	0.1%	-0.1%
UTV1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Figure 38. JHFEMS Commitment Times (Station 2), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B28	0.2%	0.9%	0.0%	0.0%	0.0%	-0.2%
E21	0.5%	2.0%	0.6%	0.6%	0.7%	0.1%
R24	0.4%	1.0%	0.4%	0.3%	0.2%	-0.2%
T27	0.2%	0.5%	0.3%	0.1%	0.1%	-0.1%

Figure 39. JHFEMS Commitment Times (Station 3), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B38	0.1%	0.1%	0.0%	0.3%	0.0%	0.0%
E31	0.3%	1.0%	0.3%	0.4%	0.5%	0.3%
M30	0.9%	0.1%	0.2%	0.0%	0.0%	-0.9%
R34	0.6%	0.9%	0.6%	0.4%	0.2%	-0.4%
T37	0.3%	0.2%	0.2%	0.1%	0.1%	-0.2%

Figure 40. JHFEMS Commitment Time (Station 4), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
E41	0.1%	0.6%	0.2%	0.2%	0.5%	0.4%
R44	0.4%	0.9%	0.6%	0.5%	0.4%	0.0%
T47	0.1%	0.1%	0.1%	0.1%	0.0%	-0.1%

Figure 41. JHFEMS Commitment Times (Station 6), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B68	0.2%	0.5%	0.0%	0.0%	0.1%	-0.1%
E61	1.1%	3.5%	1.8%	1.7%	1.2%	0.1%
E638	0.1%	1.1%	0.2%	0.1%	0.0%	-0.1%
M50	3.9%	3.0%	4.0%	1.7%	2.8%	-1.1%
M60	5.1%	11.2%	6.5%	5.7%	4.2%	-0.9%
MCI1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
T67	0.1%	0.5%	0.3%	0.1%	0.1%	0.0%

Figure 42. JHFEMS Commitment Times, Summer Peak (Station 6), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B68	0.6%	1.4%	0.0%	0.1%	0.0%	-0.6%
E61	1.3%	6.9%	2.0%	1.7%	1.4%	0.1%
E638	0.3%	1.5%	0.3%	0.1%	0.0%	-0.3%
M50	2.6%	2.9%	4.1%	0.9%	2.4%	-0.2%
M60	5.3%	18.0%	6.6%	6.8%	4.8%	-0.5%
MCI1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
T67	0.1%	1.3%	0.2%	0.0%	0.1%	0.0%

Figure 43. JHFEMS Commitment Times, Winter Peak (Station 6), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B68	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E61	1.4%	1.5%	1.8%	2.6%	1.1%	-0.3%
E638	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%
M50	6.2%	4.0%	4.9%	3.5%	4.9%	-1.3%
M60	7.7%	10.6%	9.4%	8.4%	5.8%	-1.9%
MCI1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
T67	0.1%	0.2%	0.4%	0.1%	0.2%	0.0%

Figure 44. JHFEMS Commitment Times (Station 7), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B78	0.1%	0.5%	0.1%	0.1%	0.2%	0.1%
E71	0.6%	2.4%	0.9%	0.6%	0.7%	0.1%
M70	0.6%	0.4%	0.3%	1.1%	0.7%	0.1%
R74	0.4%	1.8%	0.3%	0.2%	0.1%	-0.3%
T77	0.3%	0.3%	0.2%	0.2%	0.1%	-0.2%

Response Zone Coverage by Response Zone Units

Ideally, incidents within each fire station response zone (or planning zone) would receive initial services from a unit primarily responsible for that zone (usually the closest unit). Following the same concept as the commitment factor, although no formal standard exists, this should occur for greater than 75% of incidents. This allows for units that may be committed already on other calls or the first arriving unit available, being a unit that is not normally the closest unit. While this is not a specific standard, it is a starting point for JHFEMS's leadership to consider when evaluating the reliability of units and the potential need for additional resources.

The following figure illustrates the percentage of times that the primary responsible unit for a zone was the first to arrive on a call in that zone.

Figure 45: JHFEMS Zone Unit First Arrival, 2020–2024

Zone	2020	2021	2022	2023	2024
Station 1	82.75%	86.86%	88.21%	91.68%	89.42%
Station 2	2.77%	1.45%	0.78%	1.58%	3.72%
Station 3	45.00%	30.77%	28.57%	30.77%	50.00%
Station 4	N/A	N/A	N/A	N/A	N/A
Station 6	54.35%	52.54%	63.33%	67.21%	56.10%
Station 7	14.63%	12.73%	8.33%	18.75%	6.00%

Response Performance Analysis

How quickly a unit arrives at the scene of a caller's emergency is a key factor in their valuation of the services provided. Industry standards and best practices recommend that departments regularly monitor this performance (total response time), as well as all the following time performance measures that are subsets of total response time:

- Alarm handling time
- Turnout time
- Travel time
- Response time
- Total response time

In analyzing response performance, ESCI, aligned with national standards and best practices, generates percentile measurements of time performance. Percentile measurements are a more accurate measurement of performance standard compliance.

A 90th percentile measurement means that 10% of the values are greater than the value stated, and all other data are at or below this level. This can be used as a performance objective to determine the degree of success in achieving the goal.

As this report progresses through response performance analysis, it is important to keep in mind that each component of response performance is not cumulative. Each is analyzed as an individual component, and the point at which the percentile is calculated exists in a set of data unto itself. Each of the following analyses only included those incidents where the response was coded as "emergency" priority.

Important Considerations for Data Analytics

To complete the analysis of incident response data, ESCI collaborated with JHFEMS leadership and representatives from the Teton County Sheriff's Office (communications center) to integrate data from both JHFEMS's records management system (RMS) and the computer-aided dispatch system at the communications center. Based on the steps taken to achieve the data analysis, ESCI recommends the following actions to streamline future analysis.

Recommendation 4: JHFEMS leadership should coordinate with the communications center leadership to verify the alarm handling component of response performance. There appears to be abnormally lengthy alarm handling times.

Recommendation 5: JHFEMS leadership should evaluate, at least annually, the newly implemented policies for crew members to document the response priority for unit responses. This is a key component for limiting response time performance to emergency responses only.

Recommendation 6: JHFEMS leadership should coordinate with the communications center and records management software vendor to include the transfer of latitude/longitude from the CAD system to the RMS system for each incident. This allows for geographic analysis of service delivery.

Alarm Handling Time

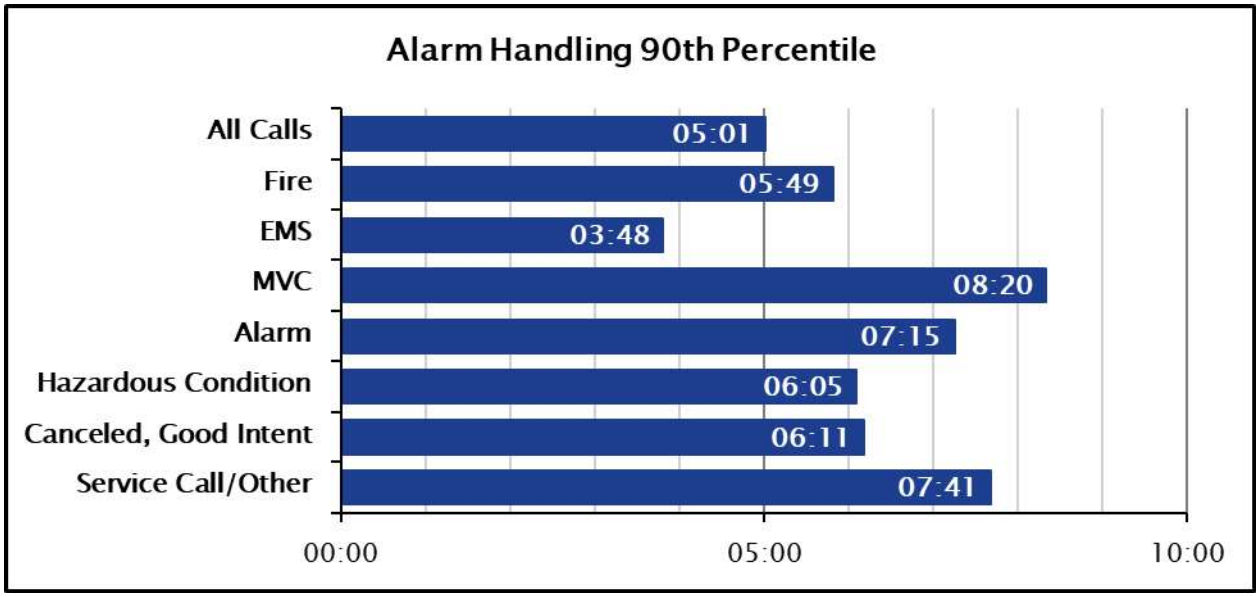
The measure of time between answering the 911 call and dispatch of resources is known as alarm handling time. For this measure, there is one applicable standard as illustrated in the following figure.

Figure 46. NFPA 1225 Standard

Standard	Performance
NFPA 1225: *Standard for Emergency Services Communications* (2022 Edition)	60 seconds at the 90th percentile

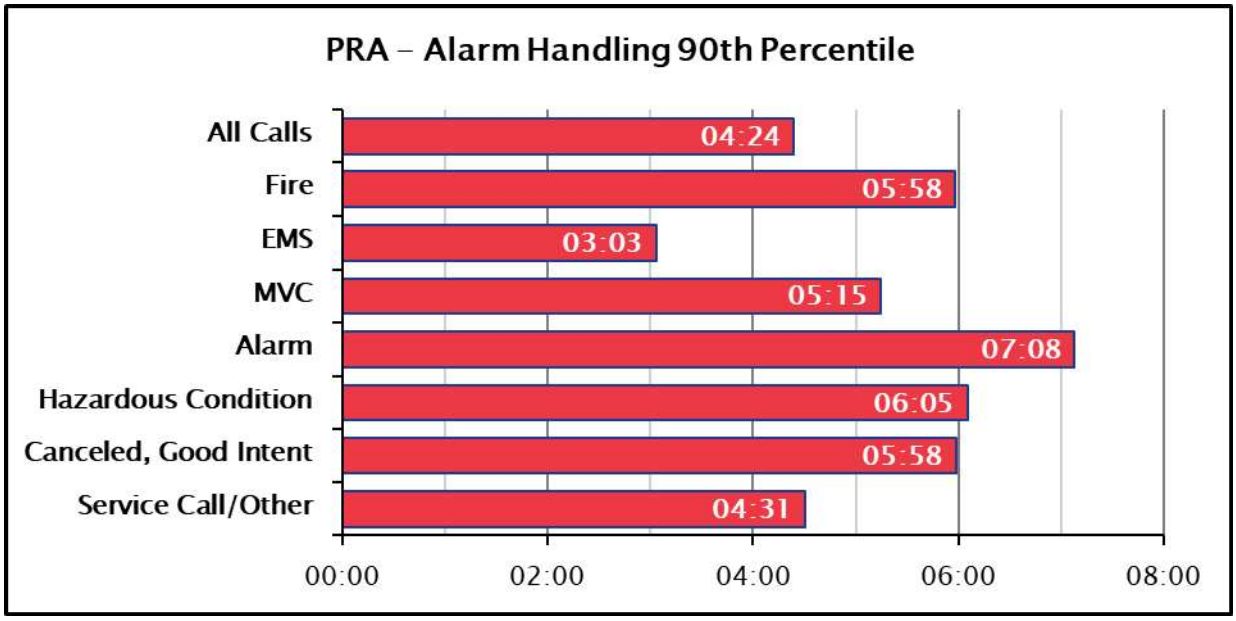
The following figure illustrates JHFEMS's alarm handling time performance.

Figure 47. Alarm Handling Time Performance, 2019–2024



The following figure shows the performance of the entire service area, including rural and remote areas, displaying the performance for only the populated response area as defined on page 93 later in the report.

Figure 48. PRA – Alarm Handling Time Performance, 2019–2024



As a note regarding the information depicted above, fire, EMS, and MVC incidents are typically handled by on-duty personnel and result in low turnout times, demonstrating good response performance. Alternatively, ESCI believes that the Teton County 911 Center has processes in place to hold fire alarms and other service calls before dispatching them, ensuring that the incident is not false or awaiting law enforcement to arrive and request fire or rescue services.

Recommendation 7: ESCI recommends that Jackson Hole Fire/EMS collaborate closely with the 911 center to examine and enhance the data collection and timestamp records for a more accurate reporting of turnout time, travel time, and response time.

Turnout Time

The measure of time between notifying the fire department (dispatching) and the time that the first unit goes enroute is known as the turnout time.

Figure 49. NFPA 1710 Standard for Turnout Time

Standard	Performance
NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile

The following figures illustrate the turnout times for the first responding units.

Figure 50. Turnout Time Performance, 2019–2024

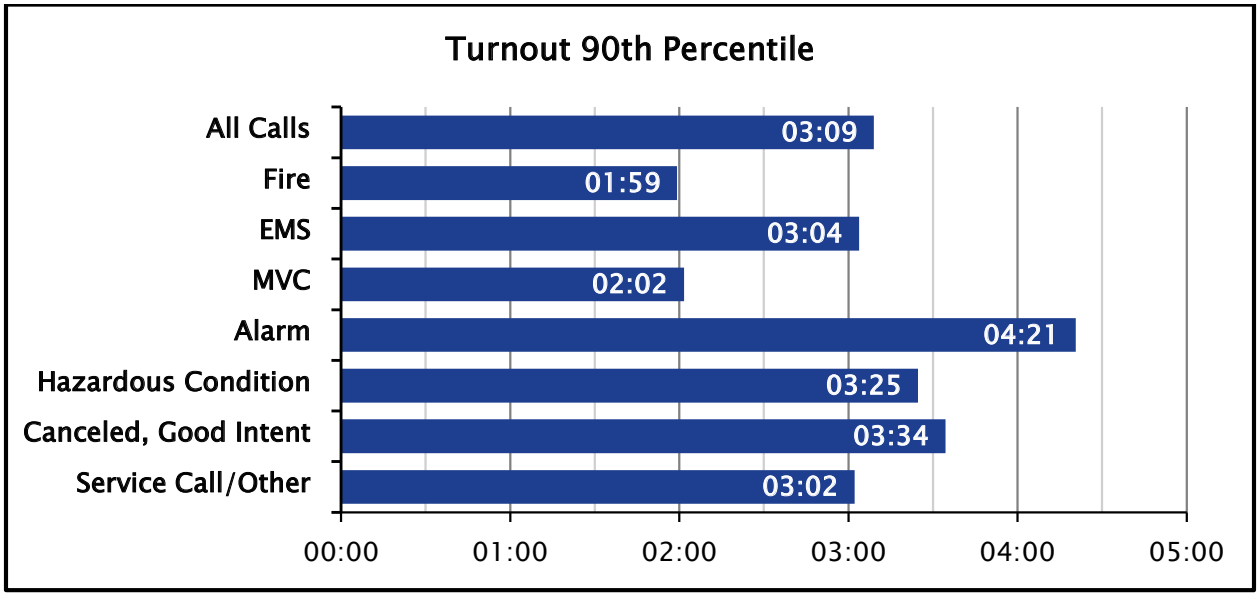


Figure 51. Turnout Time Performance (Career Stations), 2019–2024

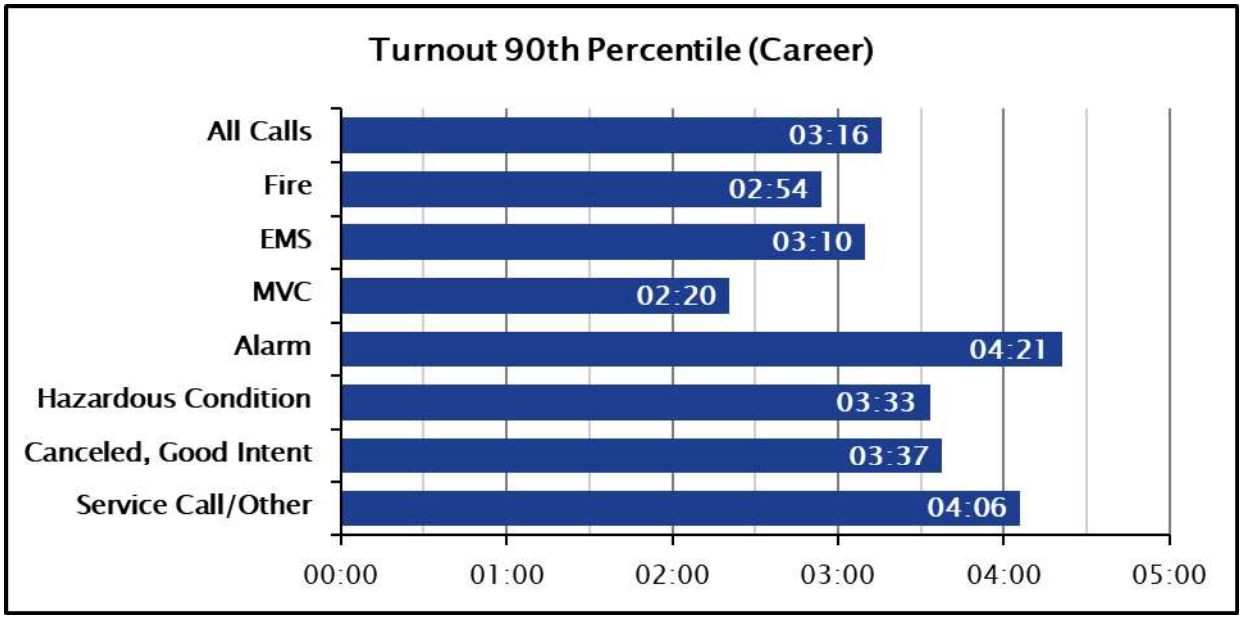
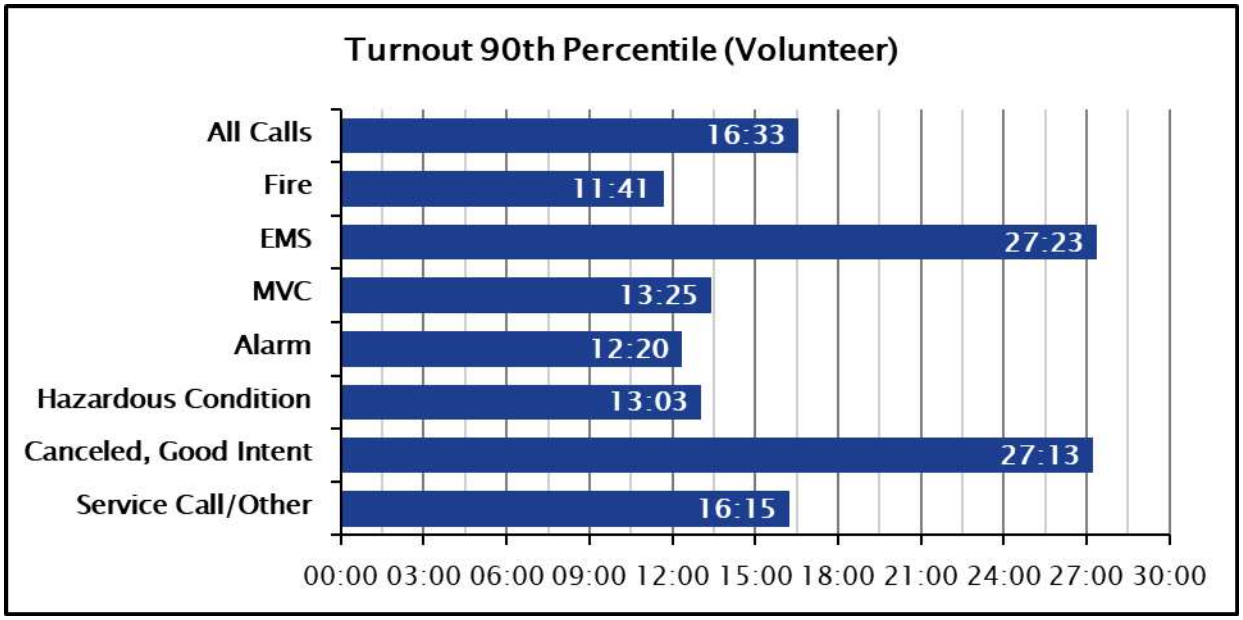


Figure 52. Turnout Time Performance (Volunteer Stations), 2019–2024



The preceding figures show the performance of the entire services area, including rural and remote areas. The following figures show the performance times for only the populated response area, as defined on page 93 later in the report.

Figure 53. PRA – Turnout Time Performance, 2019–2024

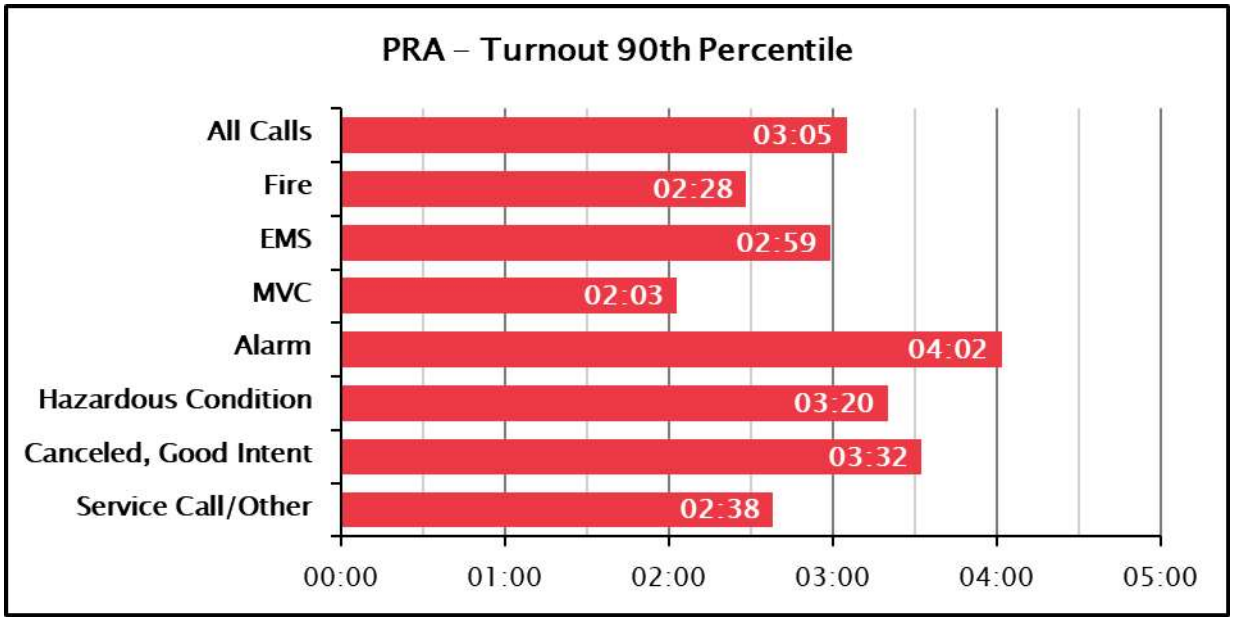


Figure 54. PRA – Turnout Time Performance (Career Stations), 2019–2024

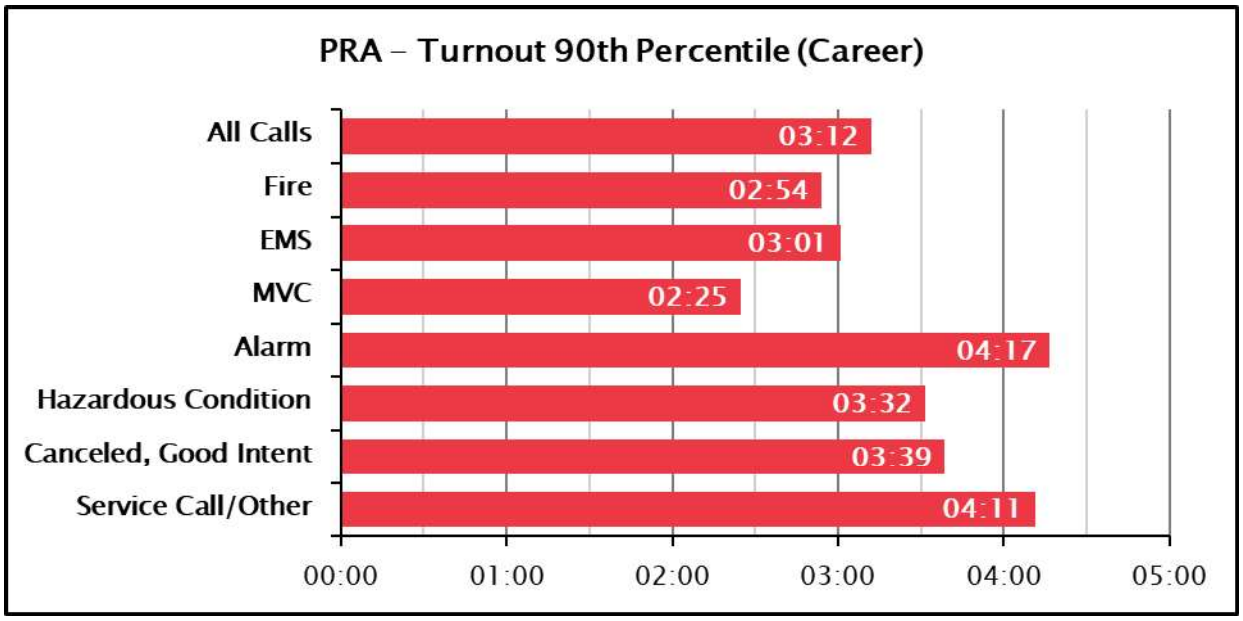
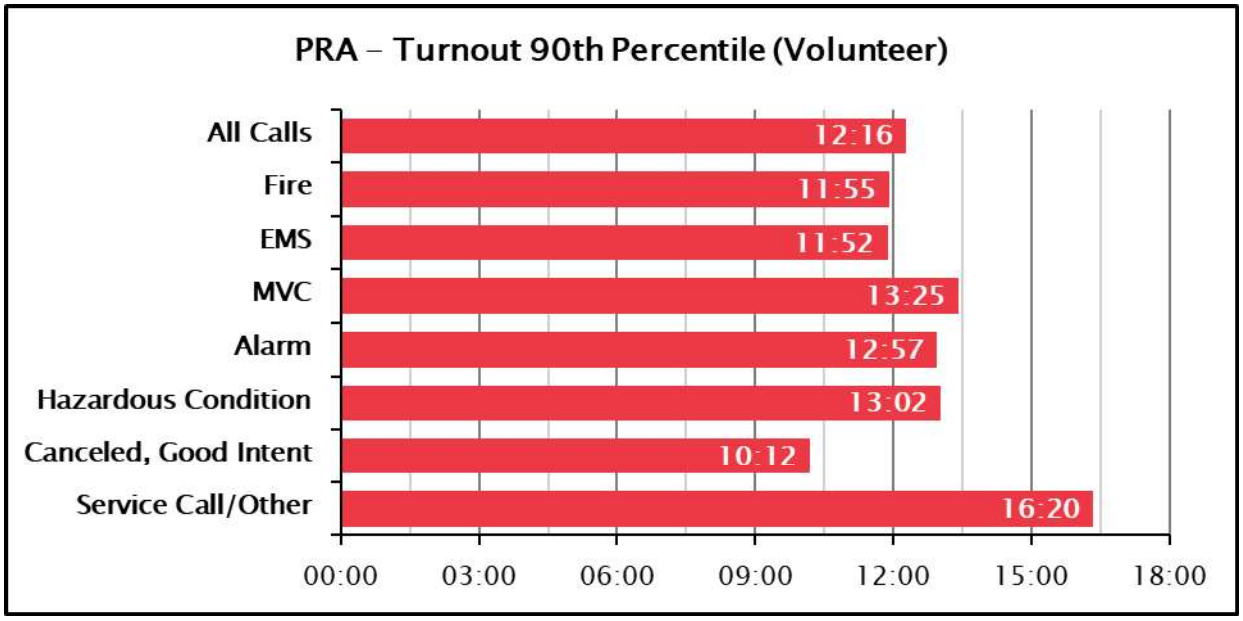


Figure 55. PRA – Turnout Time Performance (Volunteer Stations), 2019–2024



As this is the first measure under direct control of the JHFEMS, the department's leadership may consider the various actions that occur within this measure and determine if there are areas where process changes could improve performance. These factors include:

- Systems used to notify personnel of an incident.
- Station design as it relates to the movement of personnel from living quarters to the apparatus bay.
- Personnel adhering to department policies and acting with appropriate speed towards the apparatus.
- Time required to don protective equipment prior to responding.
- Moving equipment between apparatus when units are cross-staffed.
- Time from starting apparatus until radio system is capable of transmitting.

Travel Time

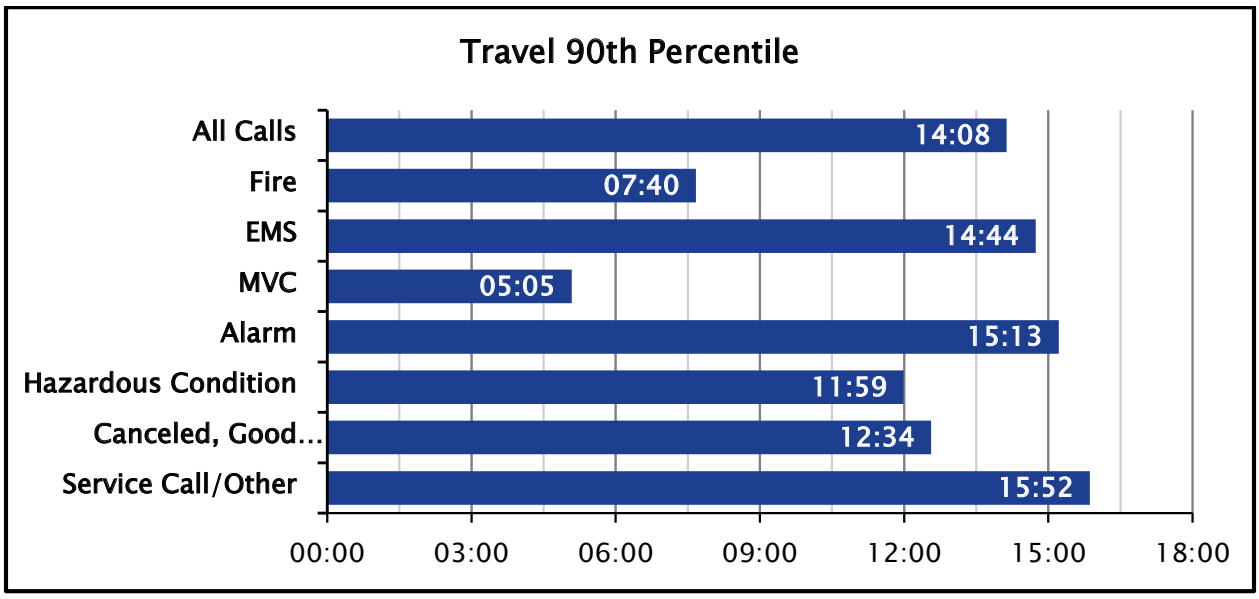
The measure of time between apparatus moving towards the scene of the emergency and arrival at the scene of the emergency is known as travel time. For this measure there is one applicable standard as illustrated in the following figure.

Figure 56. NFPA 1710 Standard for Travel Time.

Standard	Performance
NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*	4 minutes at the 90th percentile

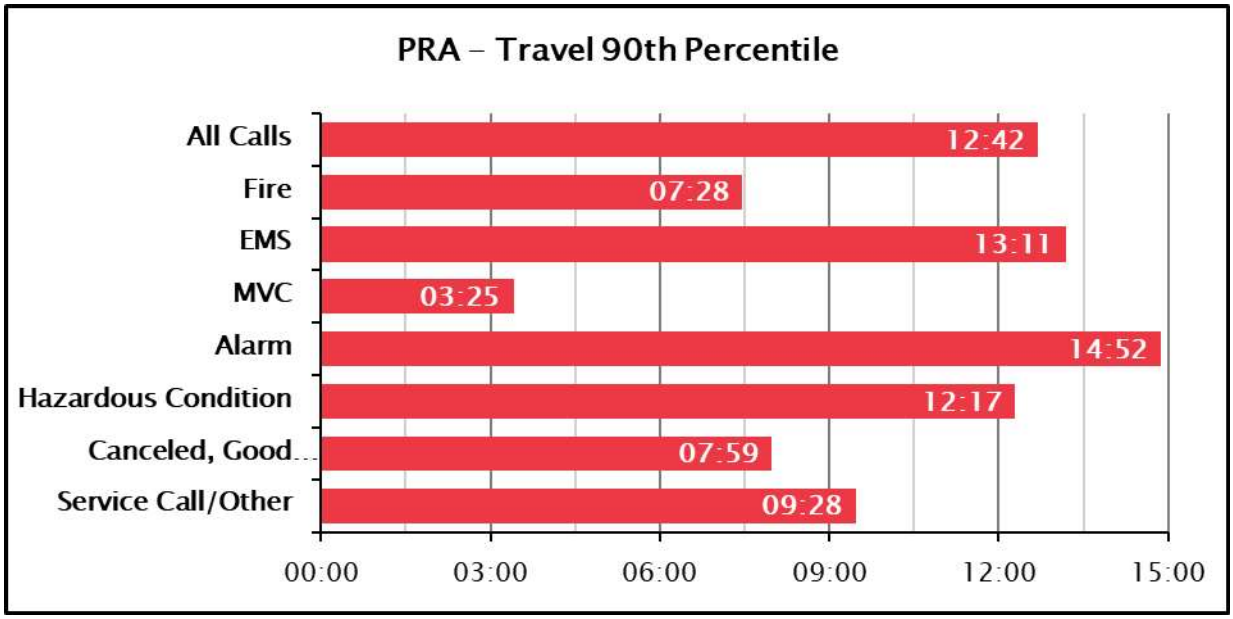
The following figure illustrates the travel time for the first responding units.

Figure 57. Travel Time Performance, 2019–2024



The following figure shows the performance of the entire service area, including rural and remote areas, displaying the performance for only the populated response area as defined on page 93 later in the report.

Figure 58. PRA – Travel Time Performance, 2019–2024



The following figures show the locations of incident responses that exceed eight (8) minutes, or 480 seconds, in travel time.

Figure 59. Total Incidents Near Population Center – Travel Time Greater than 480 Seconds

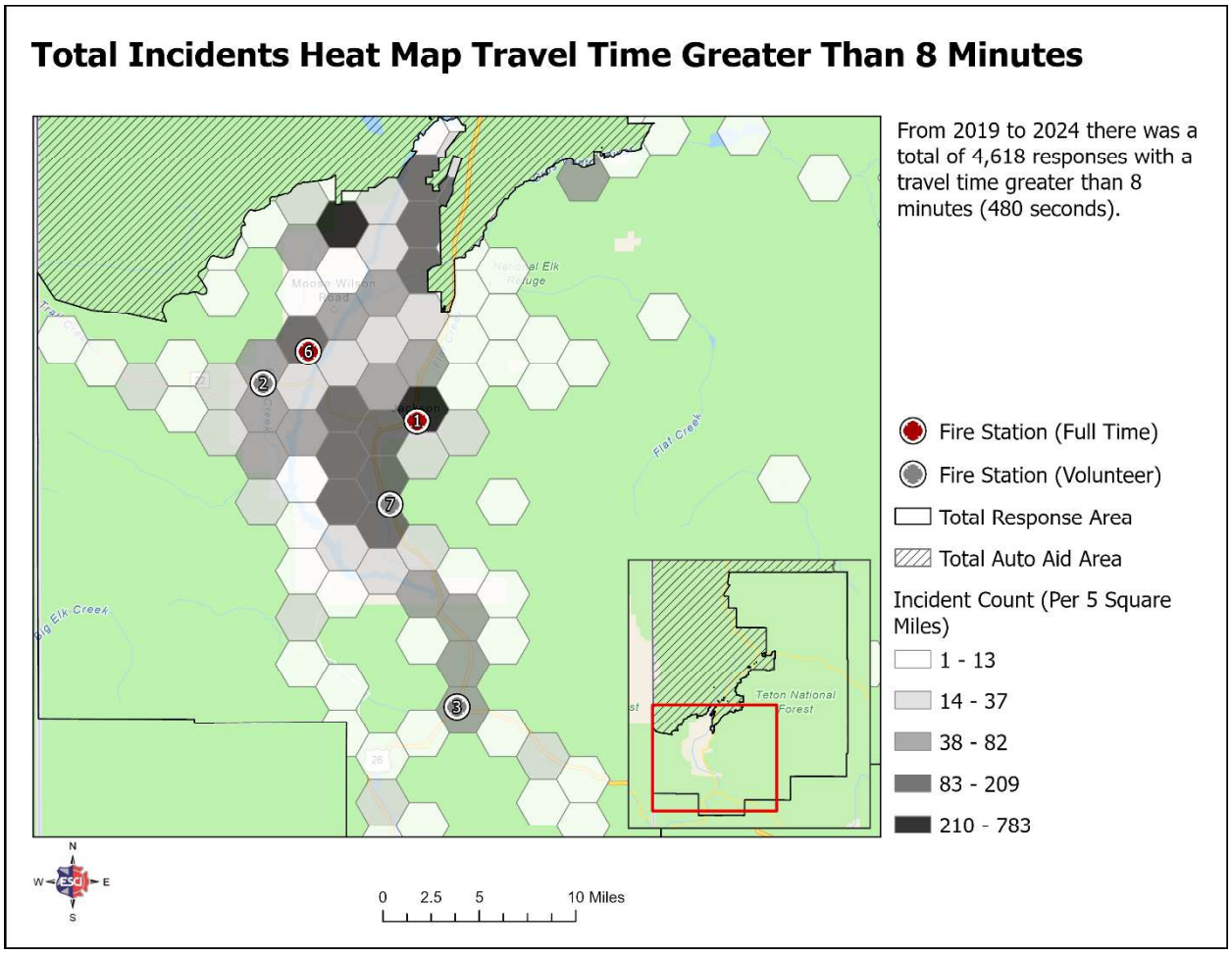
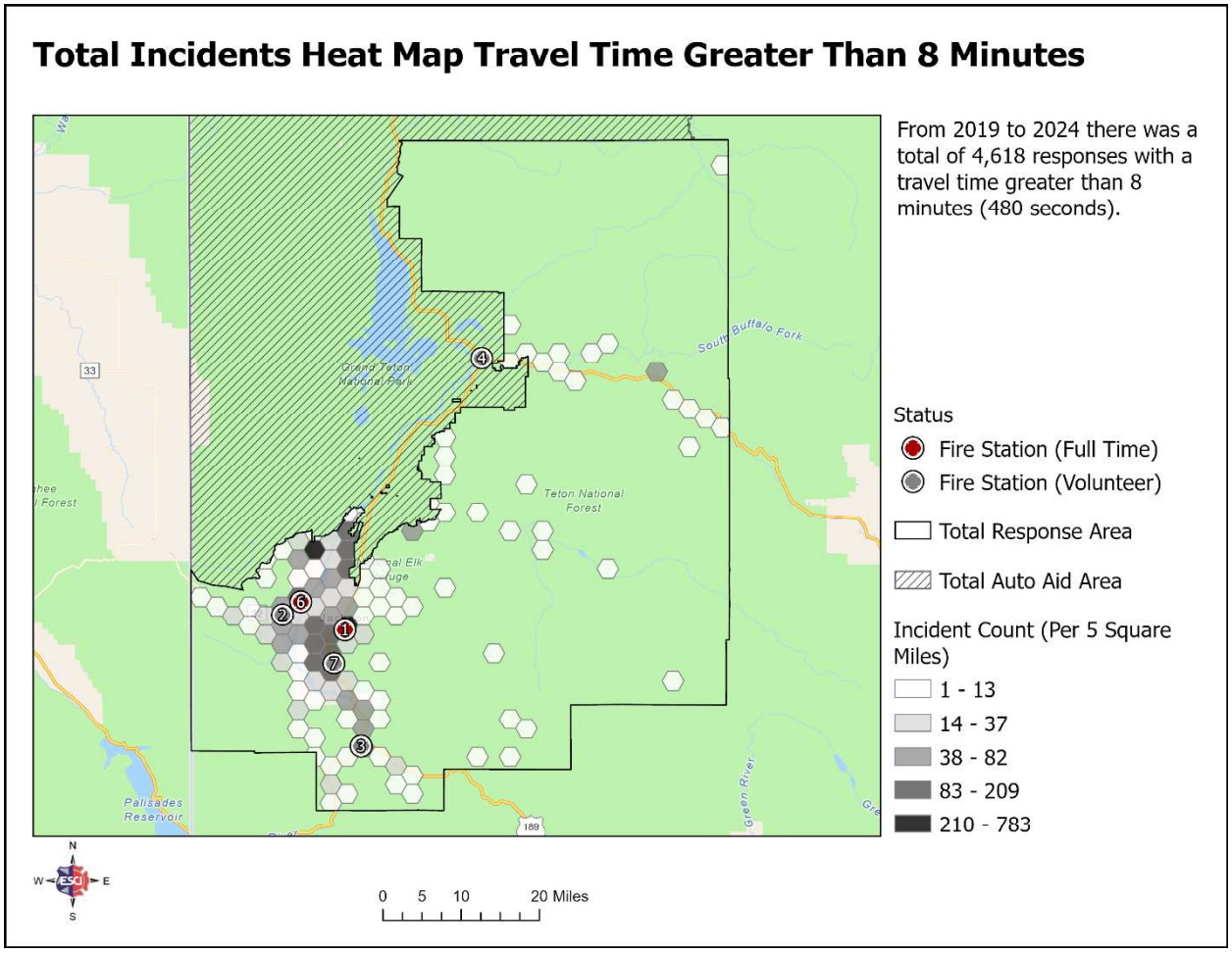


Figure 60. Total Incidents – Travel Time Greater than 480 Seconds



Response Time

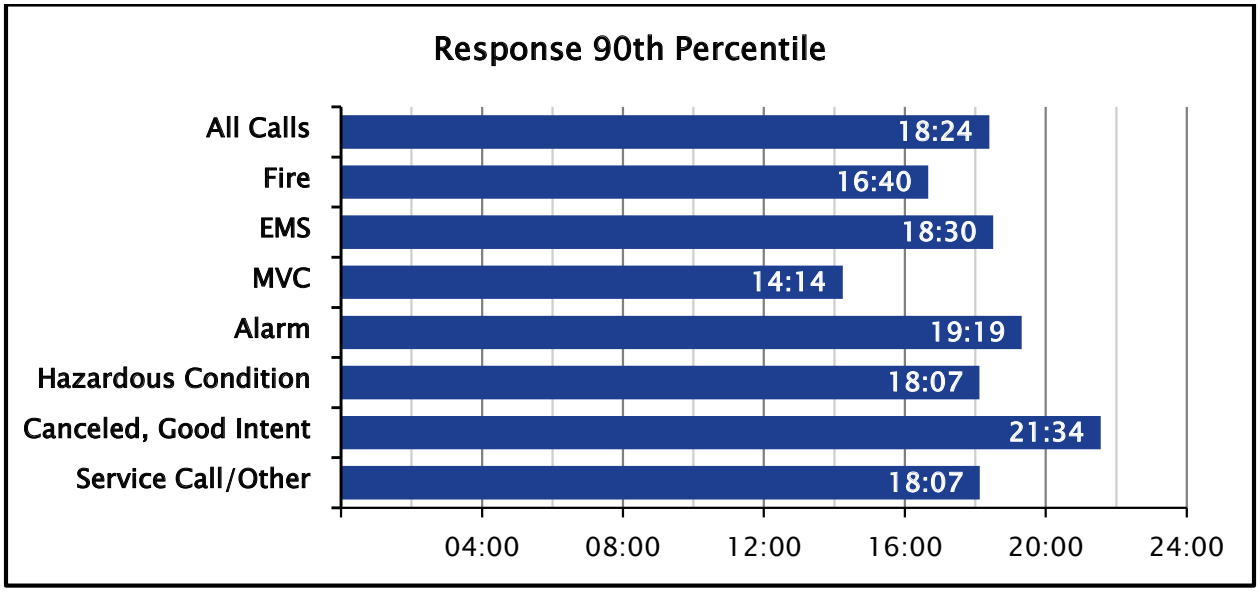
The measure of time between dispatch of units and arrival at the scene of the emergency is known as response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Figure 61. NFPA 1710 Standard for Response Time

Standard	Performance
Turnout Time	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile
Travel Time	4 minutes at the 90th percentile
Combined	Fire and Special Operations Incidents 5 minutes, 20 seconds at the 90th percentile All Other Incidents 5 minutes at the 90th percentile

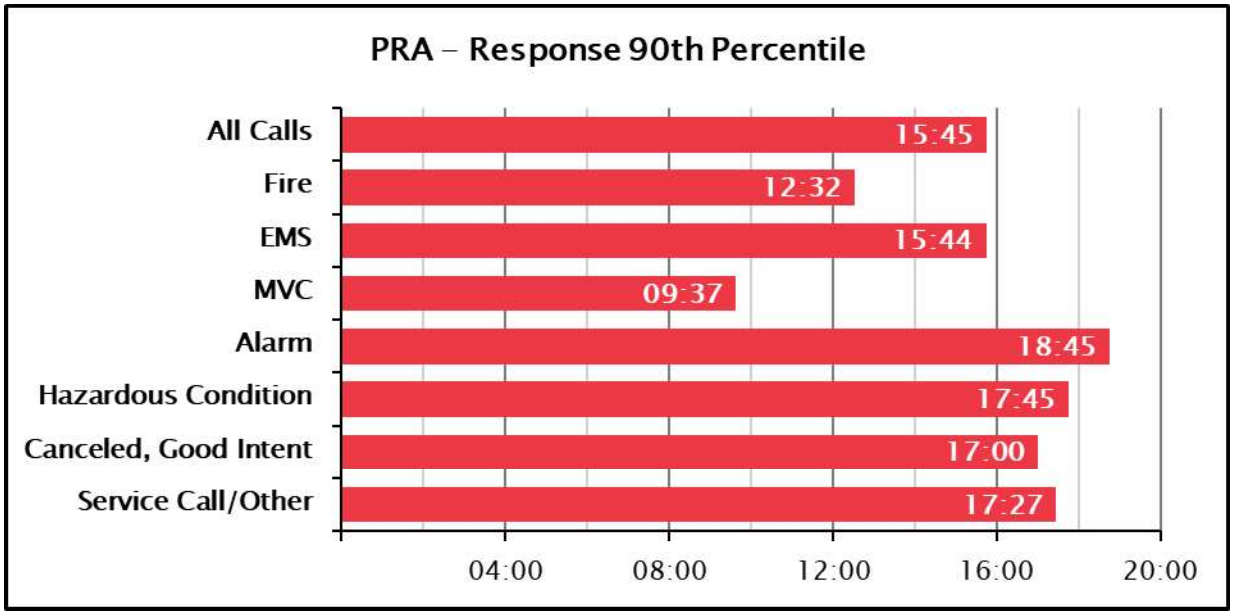
The following figure illustrates the response time for the first responding units.

Figure 62. Response Time Performance, 2019–2024



The following figure shows the performance of the entire service area, including rural and remote areas, displaying the performance for only the populated response area as defined on page 93 later in the report.

Figure 63. PRA – Response Time Performance, 2019–2024



Total Response Time

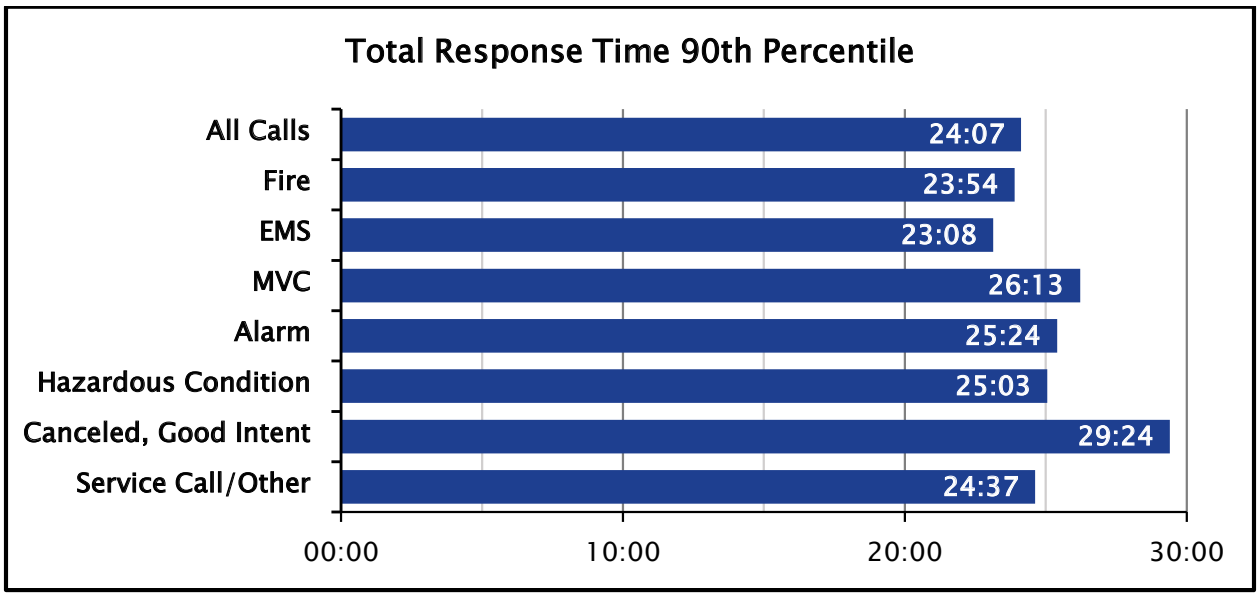
The measure of time between answering the 911 call and arrival at the scene of the emergency is known as total response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Figure 64. NFPA 1710 Standard for Total Response Time

Component	Performance
Alarm Handling Time	60 seconds at the 90th percentile
Turnout Time	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile
Travel Time	4 minutes at the 90th percentile
Combined	Fire and Special Operations Incidents 6 minutes, 20 seconds at the 90th percentile All Other Incidents 6 Minutes at the 90th percentile

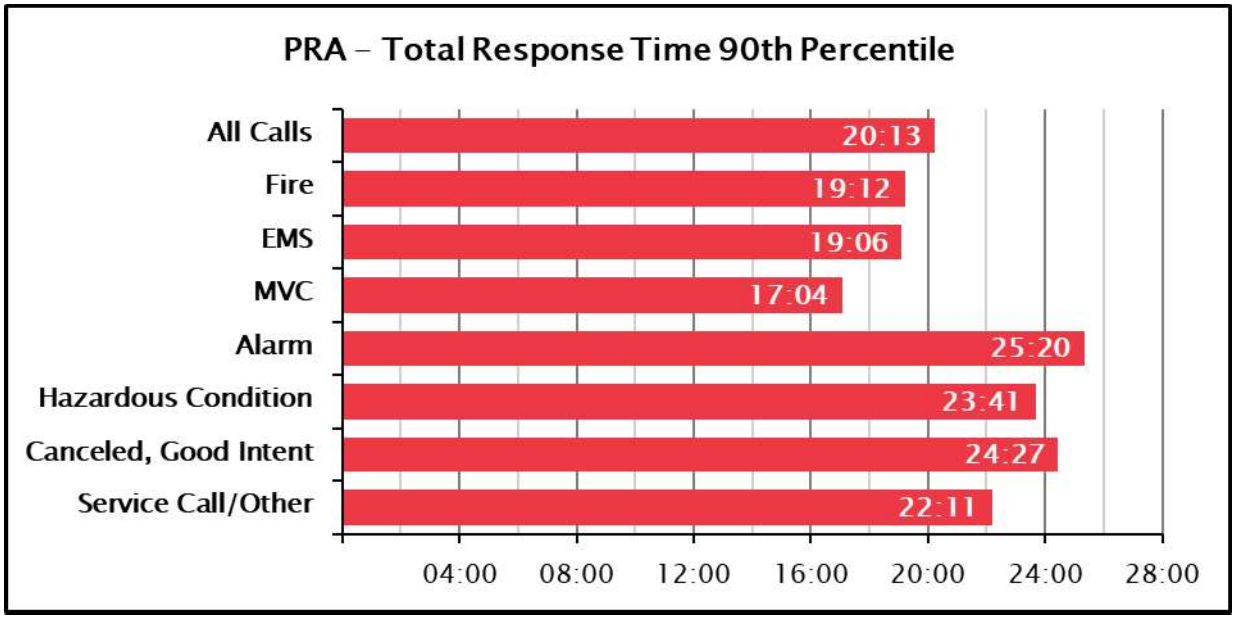
The following figure illustrates the total response time for the first responding units.

Figure 65. Total Response Time Performance, 2019–2024



The following figure shows the performance of the entire services area, including rural and remote areas, displaying the performance for only the populated response area as defined on page 93 later in the report.

Figure 66. Total Response Time Performance, 2019–2024



Mutual & Automatic Aid

Fire departments throughout the nation enter into agreements with neighboring agencies whereby resources are shared. Within an automatic aid agreement, resources from all agencies are included in an initial dispatch to the incident. Within a mutual aid agreement, outside agency resources are only dispatched upon the request of the primary agency.

The following figure illustrates the agreements currently in place for Jackson Hole Fire/EMS.

Figure 67. Automatic & Mutual Aid Agencies

Agency	Agreement Type
Teton Village Fire Protection District (Volunteer)	Auto
Grand Teton National Park (Federal Resource)	Auto
Bridger Teton National Forest (Wildland Only)	Mutual

As with other information, the use of automatic and mutual aid is documented within the system for each response. The following figure illustrates the use of automatic and mutual aid during the study period.

Figure 68. Aid Given/Received, 2020–2024

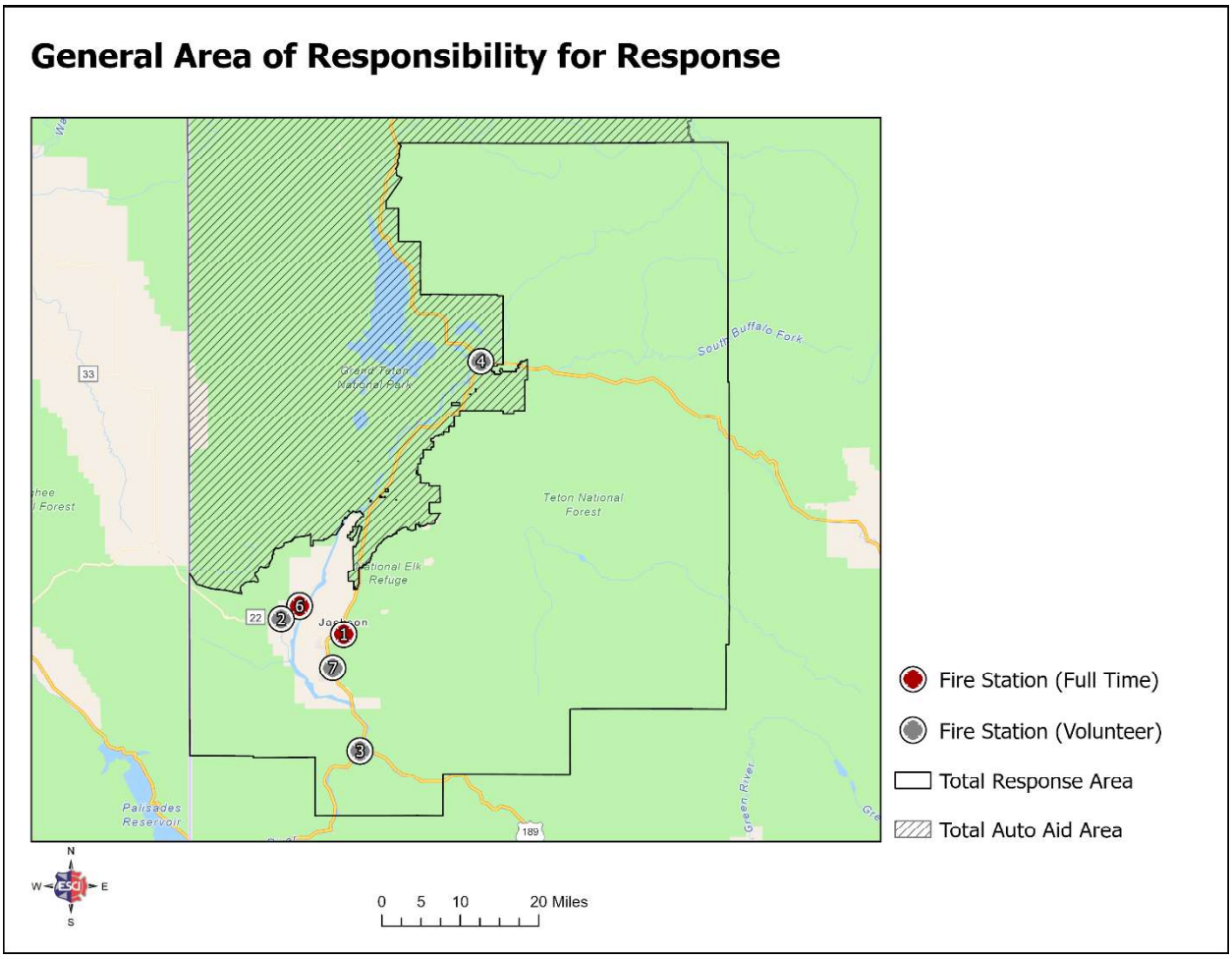
Description	2020	2021	2022	2023	2024
Mutual aid received	53	33	35	22	39
Automatic aid received	9	6	17	22	11
Mutual aid given	32	16	17	13	20
Automatic aid given	11	8	3	20	16
Other aid given	2	1	0	1	1

Facilities

Locations of Facilities

Jackson Hole Fire/EMS operates eight facilities, six of which are fire stations primarily used for emergency response. However, only two fire stations are staffed by career staff, and the remaining are staffed by available volunteers. The following figure visualizes career-staffed versus volunteer-staffed stations.

Figure 69. Fire Stations Within the Area of Responsibility



Facilities Review

In general, the facilities operated by Jackson Hole Fire/EMS are in good condition and are well-maintained. However, Stations 2 and 3 are in poor condition and need significant financial investment to either remodel or replace their facilities. The following figure provides the conditions of JHFEMS stations.

Figure 70. Self-Reported Facility Conditions

Name	Condition	Primary Use	Staffing Model
Fire Administration	Good	Administrative Support	Career Admin
Emergency Operations Center	Good	Disaster Support	Career Admin
Station 1	Very Good	Emergency Operations	Career Staff
Station 2	Poor	Emergency Operations	Volunteer
Station 3	Poor	Emergency Operations	Volunteer
Station 4	Fair	Emergency Operations	Volunteer
Station 6	Good	Emergency Operations	Career Staff
Station 7	Good	Emergency Operations	Volunteer

Figure 71. Facility Rating Schedule

Excellent	• Like-new condition. • No visible structural defects. • The facility is clean and well-maintained. • The interior layout is conducive to function with no unnecessary impediments to the apparatus bays or offices. • No significant defect history. • Building design and construction match the building's purposes. • Age is typically less than ten years.
Good	• The exterior has a good appearance with minor or no defects. • Clean lines, good workflow design, and only minor wear on the building interior. • The roof and apparatus apron are in good working order, absent any significant full-thickness cracks or crumbling of the apron surface, or visible roof patches or leaks. • Building design and construction match the building's purposes. • Age is typically less than 20 years.
Fair	• The building is structurally sound, with a weathered appearance and minor non-structural defects. • The interior condition shows normal wear and tear but flows effectively to the apparatus bay or offices. • Mechanical systems are in working order. • Building design and construction may not match the building's purposes well. • Shows increasing age-related maintenance but with no critical defects. • Age is typically 30 years or more.
Marginal	• The building is structurally sound, with a weathered appearance and moderate non-structural defects. • Full-thickness cracks and crumbling concrete on the apron may exist. • The roof has evidence of leaking and/or multiple repairs. • The interior is poorly maintained or shows signs of deterioration with moderate non-structural defects. • Problematic age-related maintenance and/or defects are evident. • It may not be well-suited to its intended purpose. • Age is typically greater than 40 years.
Poor	• The building is cosmetically weathered and worn with potential structural defects, although not imminently dangerous or unsafe. • Large, multiple full-thickness cracks and crumbling concrete on the apron may exist. • The roof has evidence of leaking and/or multiple repairs. • The interior is poorly maintained or shows signs of advanced deterioration with moderate to significant non-structural defects. • Problematic age-related maintenance and/or major defects are evident. • It may not be well-suited to its intended purpose. • Age is typically greater than 50 years.

Fire Station 1

Figure 72. Facility Review for Station 1

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 1

Address:
60 East Pearl Avenue
Jackson, WY 83001

Primary use (check all that apply)
☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 18,200	# of Stories:	2 + Basement
Dates of Construction	Original: 2021	Last Remodel:

Facilities Rating

General Condition ■ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 7

Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Apparatus Exhaust Removal System	■ Yes ☐ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds: 7	# of Bedrooms: 7	# of Back-in: 4	# of Drive-Through:

Notes or Comments:

Fire Station 2

Figure 73. Facility Review for Station 2

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 2

Address:
1315 West Street
Wilson, WY 83014

Primary use (check all that apply)
☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 2800	# of Stories:	1
Dates of Construction	Original: 1965	Last Remodel:

Facilities Rating

General Condition ☐ Very Good ☐ Good ☐ Fair ■ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0			
Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ■ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	☐ Yes ■ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in: 2	# of Drive-Through:

Notes or Comments:

Fire Station 3

Figure 74. Facility Review for Station 3

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 3

Address:
10995 South Highway 89
Hoback, WY 83001

Primary use (check all that apply)
☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 2500	# of Stories:	1
Dates of Construction	Original: 1975	Last Remodel:

Facilities Rating

General Condition ☐ Very Good ☐ Good ☐ Fair ■ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0

Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ■ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	☐ Yes ■ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in: 2	# of Drive-Through:

Notes or Comments:

Fire Station 4

Figure 75. Facility Review for Station 4

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 4

Address:
4 Moran Town Road
Moran, WY 83013

Primary use (check all that apply)
☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 2100	# of Stories:	1
Dates of Construction	Original: 1975	Last Remodel: 1985

Facilities Rating

General Condition ☐ Very Good ☐ Good ■ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0

Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ■ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	☐ Yes ■ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in: 2	# of Drive-Through:

Notes or Comments:

Fire Station 6

Figure 76. Facility Review for Station 6

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 6

Address:
2505 Moose Wilson Road
Wilson, WY 83014

Primary use (check all that apply)
☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 8,000	# of Stories:	1
Dates of Construction	Original: 1994	Last Remodel: 2006

Facilities Rating

General Condition ☐ Very Good ■ Good ☐ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 4			
Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Apparatus Exhaust Removal System	■ Yes ☐ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds: 4	# of Bedrooms: 4	# of Back-in: 2	# of Drive-Through:

Notes or Comments:

Fire Station 7

Figure 77. Facility Review for Station 7

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Station 7 - Includes Maintenance Bldg

Address:
3230 Adams Canyon Drive
Jackson, WY 83001

Primary use (check all that apply)
☐ Administration ■ Maintenance ■ Emergency Ops ☐ Special Ops ■ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 9800	# of Stories:	2
Dates of Construction	Original: 1994	Last Remodel:

Facilities Rating

General Condition ☐ Very Good ■ Good ☐ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0			
Kitchen Facilities	■ Yes ☐ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in: 4	# of Drive-Through:

Notes or Comments:

Emergency Operations Center

Figure 78. Facility Review for the EOC

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Emergency Operations Center

Address:
3240 Adams Canyon Drive
Jackson, WY 83001

Primary use (check all that apply)
☐ Administration ☐ Maintenance ☐ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ■ Other (specify):

Structure

Square Footage: 5,000	# of Stories:	2
Dates of Construction	Original: 1995	Last Remodel: 2010

Facilities Rating

General Condition ☐ Very Good ■ Good ☐ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ■ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0

Kitchen Facilities	☐ Yes ■ No	Emergency Ops Center	■ Yes ☐ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ■ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	☐ Yes ■ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	☐ Yes ■ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	☐ Yes ■ No
# of Beds:	# of Bedrooms:	# of Back-in:	# of Drive-Through:

Notes or Comments:

Fire Administration

Figure 79. Facility Review for Fire Administration

Facility Information and Condition Worksheet

Complete facilities and apparatus information using these tables. Use one table for each facility.

Facility Name / Station Number:
Fire Administration

Address:
40 East Pearl Avenue
Jackson, WY 83001

Primary use (check all that apply)
■ Administration ☐ Maintenance ☐ Emergency Ops ☐ Special Ops ☐ Training
☐ Communications Center ☐ Other (specify):

Structure

Square Footage: 5,000	# of Stories:	1 + Basement
Dates of Construction	Original: 1992	Last Remodel:

Facilities Rating

General Condition ☐ Very Good ■ Good ☐ Fair ☐ Poor ☐ Critical

5. Very Good	4. Good	3. Fair	2. Poor	1. Critical
As New, No Defects, Performing as intended	Minor defects Performing as intended	Moderate defect Functioning but worn	Minor or major defect Not functioning as desired	Major defect Not functioning **OR** Risk to safety and health
Preventive Maintenance	Conditional Repair	Repair	Repair **OR** Replace	**Immediate** Repair **OR** Replace

Facilities & Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 0

Kitchen Facilities	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Training/Meeting Rooms	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ■ No
Equipment Storage	■ Yes ☐ No	Shower Facilities	☐ Yes ■ No
Apparatus Exhaust Removal System	☐ Yes ■ No	Firefighter PPE Extractor	☐ Yes ■ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	☐ Yes ■ No
# of Beds:	# of Bedrooms:	# of Back-in:	# of Drive-Through:

Notes or Comments:

Staffing & Resource Performance Goals

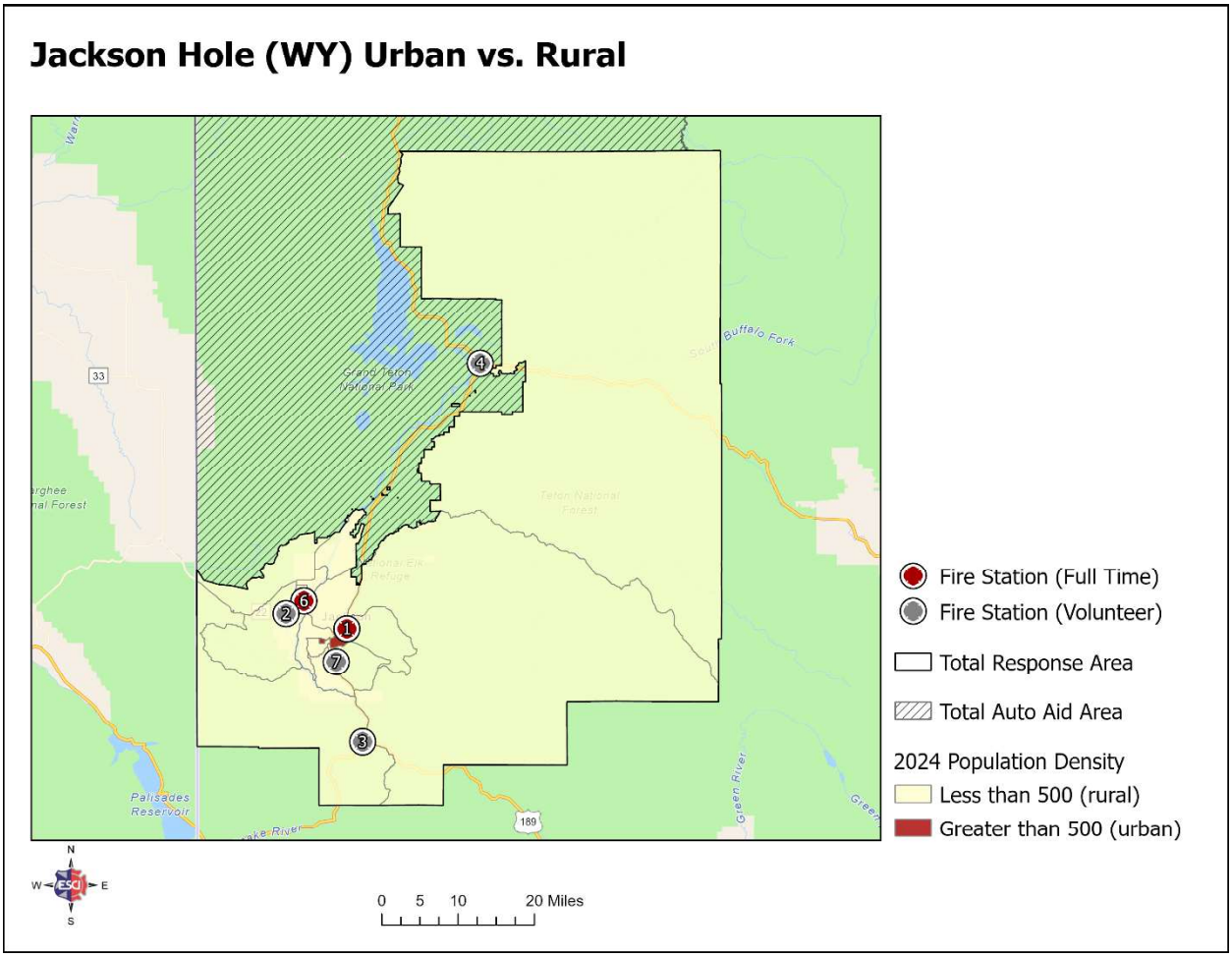
Applicable Standards Discussion

When discussing fire department response standards, NFPA 1710 and NFPA 1720 are key guidelines set by the National Fire Protection Association. NFPA 1710 applies to career fire departments and outlines the standards for response times and staffing in urban areas. Specifically, it mandates that fire departments should have the first engine company on the scene within four (4) minutes and a full complement of firefighters on the scene within eight (8) minutes.

On the other hand, NFPA 1720 addresses the standards for volunteer fire departments, which are more common in rural areas. It specifies different response times based on population density. For example, in rural areas (defined as those with fewer than five hundred people per square mile), the standard recommends that firefighters arrive within 14 minutes and have a minimum of six (6) personnel respond to a fire incident.

The following figure illustrates the small urban area in Teton County centered around the Town of Jackson. This is a small area compared to the large Teton County land mass; however, the densely populated area is also impacted by a large influx of tourists and visitors throughout the year.

Figure 80. Urban & Rural Areas



Jackson Hole Fire/EMS, as a combination department that relies on volunteer callback to achieve an effective response force, must balance the requirements of both NFPA 1710 and NFPA 1720. Although the career staff might adhere to the standards outlined in NFPA 1710 for urban responses, the volunteer callback system aligns more closely with the guidelines of NFPA 1720, particularly in more rural and less densely populated areas of their jurisdiction. This dual adherence ensures that JHFEMS can effectively respond to incidents across a diverse geographical area, maintaining both urban and rural response capabilities.

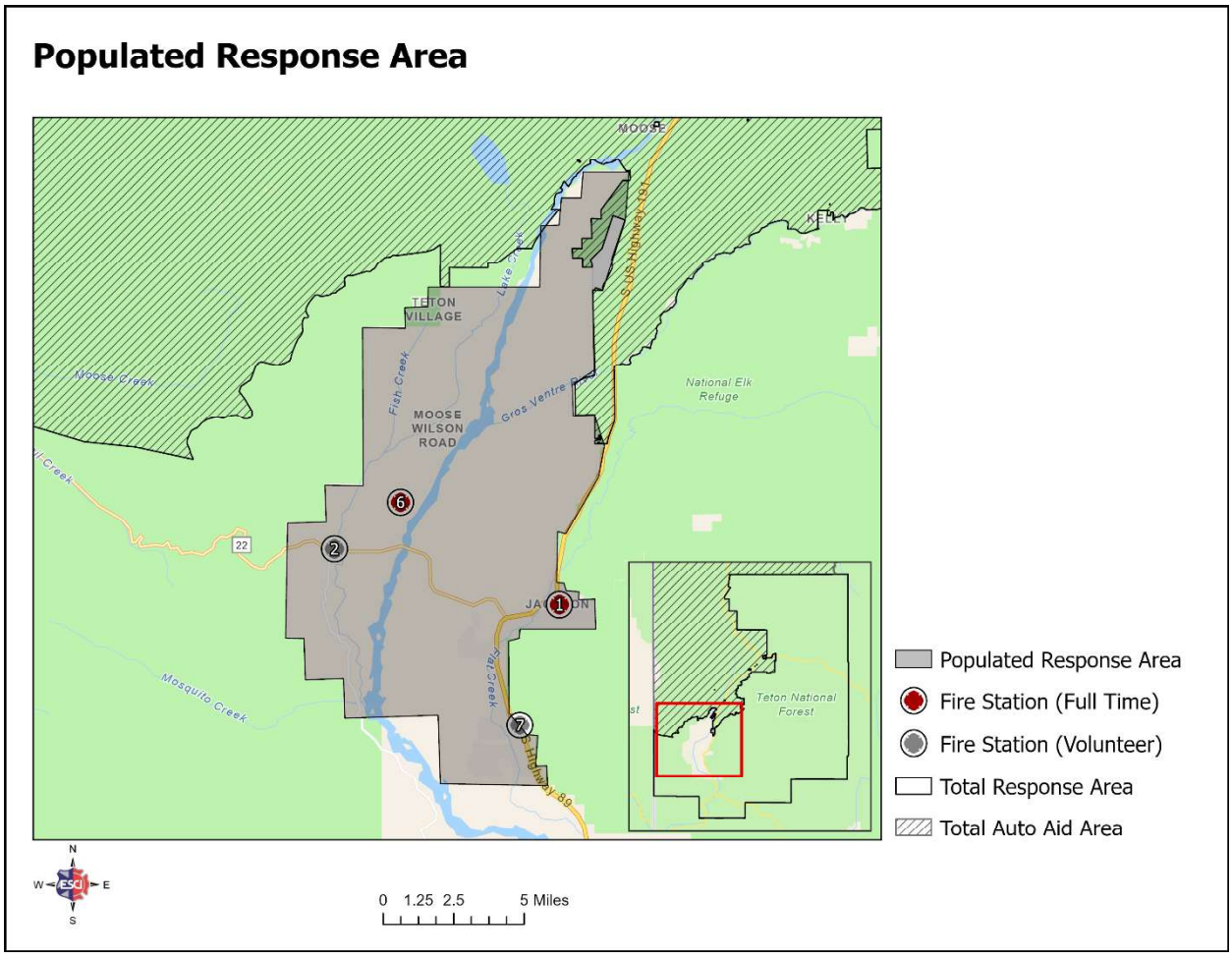
NFPA 1221 specifies that the alarm processing time, which is the duration from when the communication center receives an alarm to when the emergency response units are dispatched, should not exceed 60 seconds, 90% of the time. This standard ensures that emergency calls are handled promptly and efficiently, enabling a swift response to incidents. The goal is to minimize delays in dispatching emergency services, thereby

enhancing the overall effectiveness of emergency response operations and improving public safety.

Populated Response Area

To add a level of uniformity to the application of performance measurement and standards, ESCI defined an area referred to as the "populated response area (PRA)." This area of Teton County generally indicates where incidents occur, as well as the locations of residential and tourism populations. Within the recommended staffing and response standards, ESCI used the populated response area as a zone for increased service delivery performance. The following figure visualizes the populated response area.

Figure 81. Populated Response Area



Critical Tasking by Incident Type

Critical tasking for Jackson Hole Fire/EMS refers to the essential and immediate actions that firefighters must perform during an emergency to ensure the safety of individuals and property. These tasks include search and rescue operations, fire suppression, ventilation, and medical aid. Firefighters must quickly assess the situation, prioritize their actions, and work efficiently as a team to mitigate hazards and prevent further damage. Effective critical tasking requires thorough training, clear communication, and the ability to adapt to rapidly changing conditions.

To ensure Jackson Hole Fire/EMS can respond effectively across Teton County's varied urban and rural areas, each risk classification—such as low, moderate, and high-risk fires—is paired with specific staffing and task requirements that match the incident's demands. This strategy enables the department to deploy career and volunteer personnel and resources in accordance with standards such as NFPA 1710 and NFPA 1720, while tracking performance and enhancing service in both populated and remote areas. Detailed breakdowns for each risk type, including tasks such as fire suppression, search and rescue, and medical aid, help ensure that emergencies are met with a tailored and sufficient response, thereby enhancing safety for residents and visitors alike.

Fire Suppression – Low Risk

Low-risk fire incidents are those emergent calls for service that are unlikely to cause injury or significant property damage. Examples of low-risk fire incidents may include vehicles, trash, brush, and other non-structural fires.

Figure 82. Critical Tasking: Fire – Low Risk

Critical Task	Required Staff
Attack Hose Line Deployment	2
Vehicle Operations	1
Effective Response Force:	**3**

Figure 83. Resource Needs: Fire – Low Risk

Resource (2025 Staffing Model)	Staffing
Suppression Apparatus (Career)	3
Total Personnel:	**3**

Benchmark Statements

For 90% of low-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit staffed with at least three firefighters shall be 7 minutes, 20 seconds in the populated response area and 10 minutes, 20 seconds elsewhere.

The first arriving unit for low-risk fire responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water-pumping capacity
- Advancing a charged fire suppression attack hose line for fire control or rescue.

The response model achieves the effective response force with the first arriving unit.

Fire Suppression – Moderate Risk

Moderate-risk fire incidents are calls for service that are unlikely to cause injury or significant property damage. Examples may include single-family homes, utility facilities, small commercial and business occupancies, and storage facilities.

Figure 84. Critical Tasking: Fire – Moderate Risk

Critical Task	Required Staff
Incident Command	1
Attack Hose Line Deployment	2
Secondary Hose Line Deployment	2
Search & Rescue	2
Water Supply	1
Engine Operations	2
Aerial Operations	1
Support Functions – Ventilation – Utility Control – Forced Entry	2
Medical Assistance & Rehab	2
Effective Response Force:	**15**

Figure 85. Resource Needs: Fire – Moderate Risk

Resource (2025 Staffing Model)	Staffing
Suppression Apparatus (Career)	3
Suppression Apparatus (Career)	3
Battalion	1
Minimum Required Volunteer Response with Fire Apparatus	8
Total Personnel:	**15**

Benchmark Statements

For 90% of moderate-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three (3) firefighters, shall be 7 minutes, 20 seconds in the populated response area and 10 minutes, 20 seconds elsewhere.

The first arriving unit for moderate-risk fire responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water pumping capacity
- Advancing a charged fire suppression attack hose line for fire control or rescue.

For 90% of all moderate-risk structure fire responses within the area of responsibility, the total response time for the arrival on scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the effective response force (ERF), shall be 10 minutes, 20 seconds in the populated response area and 14 minutes and 20 seconds elsewhere.

The effective response force for moderate-risk fire responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Establishing an incident command system
- Providing an uninterrupted water supply
- Advancing a charged fire suppression attack hose line and a backup line for fire control
- Complying with the OSHA requirements of two-in and two-out
- Completing forcible entry
- Searching for and rescuing at-risk victims
- Ventilating the structure
- Controlling utilities
- Placing elevated master streams into service from aerial apparatus.

Fire Suppression – High Risk

High-risk fire incidents are those that are likely to cause injury or significant property damage. Examples of high-risk fire incidents may include multi-family occupancies, large single-family homes, places of assembly, high-rise buildings, medical care buildings, industrial buildings, and mixed-use facilities.

Figure 86. Critical Tasking: Fire – High Risk

Critical Task	Required Staff
Incident Command	1
Attack Hose Line Deployment	4
On-Deck Crew & Rapid Intervention Crew	2
Search & Rescue	4
Water Supply	2
Engine Operations	2
Aerial Operations	2
Support Functions – Ventilation – Utility Control – Forced Entry	2
Medical Assistance & Rehab	2
Effective Response Force:	**21**

Figure 87. Resource Needs: Fire – High Risk

Resource (2025 Staffing Model)	Staffing
Suppression Apparatus (Career)	3
Suppression Apparatus (Career)	3
Battalion	1
Minimum Required Volunteer Response with Fire Apparatus	14
Total Personnel:	**21**

Benchmark Statements

For 90% of high-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three (3) firefighters, shall be 7 minutes, 20 seconds in the populated response area and 10 minutes, 20 seconds elsewhere.

The first arriving unit for high-risk fire responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water pumping capacity
- Advancing a charged fire suppression attack hose line for fire control or rescue
- Initiating other fire ground operations in accordance with department policies and procedures.

For 90% of all high-risk structure fire responses within the area of responsibility, the total response time for the arrival on scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the effective response force (ERF), shall be 10 minutes, 20 seconds in the populated response area and 14 minutes, 20 seconds elsewhere.

The effective response force for high-risk fire responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Establishing an incident command system
- Providing an uninterrupted water supply
- Advancing a charged fire suppression attack hose line and a backup line for fire control
- Complying with the OSHA requirements of two-in and two-out
- Completing forcible entry
- Searching for and rescuing at-risk victims
- Ventilating the structure
- Controlling utilities
- Placing elevated master streams into service from aerial apparatus.

Emergency Medical Services – Low Risk

Low-risk EMS incidents involve medical calls for service that the emergency medical dispatch process determines are non-emergencies. Examples of low-risk EMS incidents may include ground-level falls without injury, general illness, low-acuity abdominal pain, and those incidents classified by ProQA as Alpha and Bravo.

Figure 88. Critical Tasking: EMS – Low Risk

Critical Task	Required Staff
Primary Patient Care & Incident Command	1
Vehicle Operations	1
Effective Response Force:	**2**

Figure 89. Resource Needs: EMS – Low Risk

Resource (2025 Staffing Model)	Staffing
Transport Ambulance (or Engine)	2 (3)
Total Personnel:	**2 (3)**

Benchmark Statements

For 90% of low-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two (2) emergency medical technicians, should be 10 minutes in the populated response area and 12 minutes elsewhere.

The first arriving unit for low-risk emergency medical responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Administering emergency medical patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Providing patient transport to the closest appropriate facility.

The response model achieves the effective response force with the first arriving unit.

Emergency Medical Services – Moderate Risk

Moderate-risk EMS incidents involve those medical calls for service that the emergency medical dispatch process determines are emergent. Examples of moderate-risk EMS incidents may include chest pain, difficulty breathing, stroke, and those incidents classified by ProQA as Bravo and Charlie.

Figure 90. Critical Tasking: EMS – Moderate Risk

Critical Task	Required Staff
Incident Command	1
Primary Patient Care Provider	1
Secondary Patient Care Provider	1
Vehicle Operations	2
Effective Response Force:	**5**

Figure 91. Resource Needs: EMS – Moderate Risk

Resource (2025 Staffing Model)	Staffing
ALS Transport Ambulance	2
Suppression Apparatus	3
Total Personnel:	**5**

Benchmark Statements

For 90% of moderate-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two (2) emergency medical technicians, shall be 7 minutes in the populated response area and 10 minutes elsewhere.

The first arriving unit for moderate-risk emergency medical responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR).

For 90% of moderate-risk emergency medical responses in the area of responsibility, the total response time for the arrival of all fire and other EMS units and personnel necessary to complete the first alarm assignment, otherwise referred to as the effective response force (ERF), shall be 10 minutes in the populated response area and 14 minutes elsewhere.

The effective response force for moderate-risk emergency medical response shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Assisting transport personnel with packaging the patient
- Providing advanced life support
- Providing patient transport to the closest appropriate facility.

Emergency Medical Services – High Risk

High-risk EMS incidents involve those medical calls for service that the emergency medical dispatch process determines are life-threatening. Examples of high-risk EMS incidents may include cardiac arrest, shootings, stabbings, and those incidents classified by ProQA as Charlie, Delta, and Echo.

Figure 92. Critical Tasking: EMS – High Risk

Critical Task	Required Staff
Incident Command	1
Primary Patient Care Provider	1
Secondary Patient Care Provider	1
Medical Equipment Operator	1
Vehicle Operations	2
Effective Response Force:	**6**

Figure 93. Resource Needs: EMS – High Risk

Resource (2025 Staffing Model)	Staffing
ALS Transport Ambulance	2
Suppression Apparatus	3
Supervisor	1
Total Personnel:	**6**

Benchmark Statements

For 90% of high-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two (2) emergency medical technicians, one of whom is an advanced life support-level EMT, shall be 7 minutes in the populated response area and 10 minutes elsewhere.

The first arriving unit for high-risk emergency medical responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR).

For 90% of high-risk emergency medical responses in the area of responsibility, the total response time for the arrival of all fire and other EMS units and personnel necessary to complete the first-alarm assignment, otherwise referred to as the Effective Response Force (ERF), shall be 10 minutes in the populated response area and 14 minutes elsewhere.

The effective response force for high-risk emergency medical response shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Assisting transport personnel with packaging the patient
- Providing patient transport to the closest appropriate facility.

Recommended Response Time Standards

The following recommended standards align with and contribute to performance improvement if continuously measured and shared with policymakers in Teton County and the Town of Jackson. As an accepted national standard, all the time measurements are 90th percentile, rather than average. Additionally, ESCI recommends measuring and reporting only emergent responses.

Performance Measure	90th Percentile Time Standard	Reference	Area
Alarm Handling Time	1:00	NFPA 1221	All Areas
Turnout Time (EMS)	1:00	NFPA 1710	All Areas
Turnout Time (Fire)	1:20	NFPA 1710	All Areas
Travel Time	5:00	NFPA 1710	Populated Response Area
Travel Time	8:00	NFPA 1710/1720	Rural
Effective Response Force	10:00	NFPA 1710/1720	Populated Response Area
Effective Response Force	14:00	NFPA 1710/1720	Rural

Recommendation 8: ESCI recommends adopting response time standards that mix national standards, best practices, and community needs.

Recommendation 9: ESCI recommends reporting on JHFEMS's performance against the adopted standards every quarter to the governing bodies of Teton County and the Town of Jackson.

Deployment Recommendations

The following discussion first addresses the baseline capacity for Jackson Hole Fire/EMS, then provides four scenarios. Each of the scenarios discusses station staffing, deployment, and overall system adjustments.

Baseline Discussion

Jackson Hole Fire/EMS deploys from Fire Station 1 and Fire Station 6, with a minimum of seven (7) career personnel on duty daily. The model utilizes cross-staffed personnel to support suppression and EMS transport resources.

Figure 94. Baseline Resource Staffing

Resource	Minimum Staffing Available	Budgeted Daily Staffing	Staffing Model
Engine 11	3	3	Primarily staffed by career personnel
Engine 61	0	2	Utilizes Medic 60's personnel if available
Medic 10	0	2	Utilizes Engine 11's personnel if available
Medic 60	3	2	Primarily staffed by career personnel
Truck 16	0	0	Utilizes Engine 11's personnel if available
Battalion Chief	1	1	Primarily staffed by career personnel
Total:	**7**	**10**	

Engine 11 and Engine 61 are primarily staffed with career firefighters. These engines serve as the primary fire suppression apparatus, equipped with hoses, water, tools, and personnel to combat fires effectively. Each engine is staffed with three (3) personnel, despite national standards recommending a crew of four (4) for optimal safety and effectiveness. In addition to their firefighting capabilities, these fire engines often function as first responders to medical emergencies, providing crucial initial care until medical transport arrives.

Medic 10 and Medic 60, known as medic units, are the dedicated medical transport resources within Jackson Hole Fire/EMS. These units are staffed by firefighters/EMTs who have undergone specialized training to reach advanced levels, such as paramedics. This training enables them to provide critical care in various medical emergencies. Each medic unit must be staffed by at least two (2) personnel, one to drive and the other to provide care. Two (2) personnel can typically handle basic life support (BLS) incidents. However, certain medical situations, particularly those

involving severe or advanced life support (ALS) conditions, may necessitate the presence of additional personnel.

Truck 16, often referred to as a ladder truck, is an aerial apparatus outfitted with ladders and specialized equipment for structural firefighting. According to National Standards, a ladder truck should be staffed with four (4) personnel to ensure optimal efficiency and safety during operations.

The battalion chief serves as the daily operational supervisor for the 48-hour shift. Utilizing an SUV-style vehicle, the chief travels between stations to effectively manage personnel. Moreover, the chief is tasked with responding to incidents that demand more intricate incident command structures.

A staffing relief factor should be included in all operational personnel discussions. Relief factors account for scheduled and unscheduled leave used by operational staff to maintain a minimum daily staffing value without relying on overtime. For this study, ESCI uses a staffing relief factor of 1.36, a common value for fire departments similar to Jackson Hole Fire/EMS that is consistent with JHFEMS's current staffing and budgeted positions.

Figure 95. Baseline Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Incidents w/in 8 Mins.	Address Points w/in 8 Mins.
Baseline	7	12.45	7,660	6,565

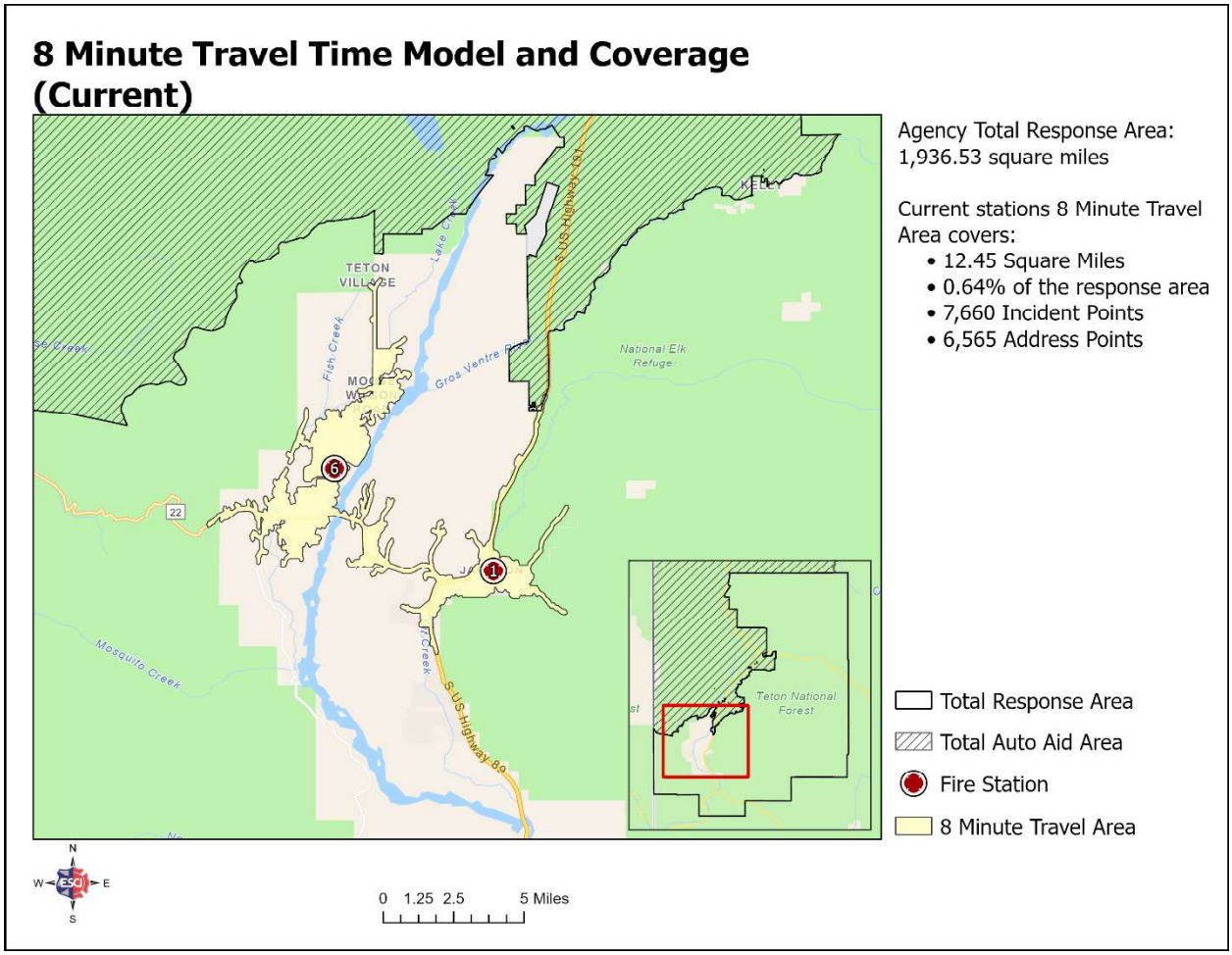
The following figure outlines the number of personnel required for different incident types. Furthermore, the figure outlines the volunteer supplement required to fill the personnel needs. This table assumes that all resources are available and not already committed to an incident.

The following figure illustrates typical incident types and required staffing for these incidents. Additionally, the figure shows the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 96. Personnel Required (Baseline)

Baseline Staffing:	7 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
BLS EMS Transport	2	2	0	5
ALS EMS Transport	5	5	0	2
Cardiac Arrest	6	6	0	1
Small Fire	3	3	0	4
Structure Fire	15	7	8	0
Large Structure Fire	21	7	14	0

Figure 97. Baseline 8-Minute Response Capacity



Future Staffing & Deployment Scenarios

The following scenarios are divided into stand-alone elements to achieve the desired staffing and deployment strategies. The list of those scenarios is as follows:

- **Baseline:** Current deployment as described above
- **Scenario A:** Relocate and staff Fire Station 7
- **Scenario A-1**: Staff Fire Station 7 in the existing location
- **Scenario B:** Build a new fire station north of the Town of Jackson
- **Scenario C:** Staff an additional ambulance at Teton Village
- **Scenario D:** Fully staff Teton Village
- **Scenario E:** Eliminate cross-staffing by staffing two engines, two medics, and a battalion chief

ESCI used Teton County parcel data and Jackson Hole Fire/EMS's past incident response data to develop the following scenarios. By analyzing address and incident point density, ESCI determined how many address points and incident points would be captured by the recommended deployment changes in each scenario. Using GIS analysis, they defined eight-minute travel times by stations and estimated how many past incidents and address points could be covered within that time frame. These scenarios were then compared to the current deployment.

As an important note regarding using address points, the methodology provides accurate analysis for all types of occupancies except for hotels and some multi-family occupancies. Hotels and motels generally have a single address point but many individual occupancies. The same is true for apartment buildings in some cases.

Scenario A:

Recommendation 10: ESCI recommends relocating Fire Station 7 to an area near High School Road and staffing the station with three (3) additional personnel per shift.

This scenario involves constructing a new facility and relocating Fire Station 7 to a property on or near High School Road. By staffing this location with three (3) additional personnel, the response to the southern end of the populated area is improved, and resources are also made available to residential developments being constructed in the vicinity. The new minimum staffing level is set at 10, and an additional suppression apparatus, Engine 71, is provided.

However, if the High School Road community does not see an influx of residential or commercial units, the current location is marginally better placed for response capacity. In this recommendation, Station 7 should receive permanent staffing as outlined above, but it should only be moved if community growth is expected to the north of the current location. Scenario A-1 provides details on this option.

The following figure outlines the comparison between the baseline and Scenario A.

Figure 98. Baseline vs. Scenario A Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
A	10	17.06	37%	8,695	14%	8,205	25%

Figure 99. Scenario A: Resource Staffing

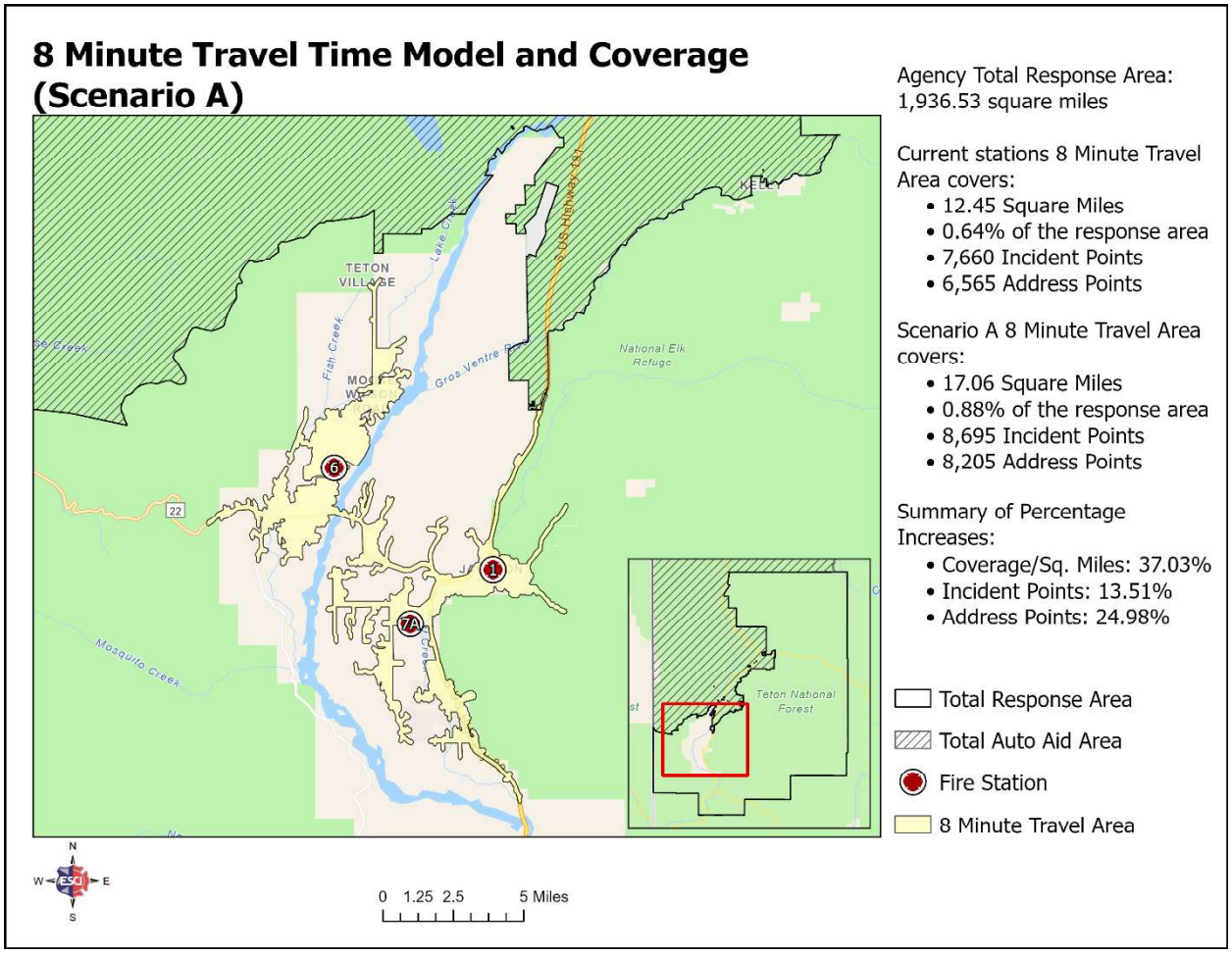
Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily Staffed by Career Personnel
Engine 61	0	Utilizes Medic 60's Personnel or Volunteers
Medic 10	0	Utilizes Engine 11's Personnel or Volunteers
Medic 60	3	Primarily Staffed by Career Personnel
Truck 16	0	Utilizes Engine 11's Personnel or Volunteers
Engine 71	3	Primarily Staffed by Career Personnel
Medic 70	0	Utilizes Engine 71's Personnel or Volunteers
Battalion Chief	1	Primarily Staffed by Career Personnel
Total:	**10**	

The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 100. Personnel Required (Scenario A)

Staffing	10 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	8
EMS Moderate Risk	5	5	0	5
EMS High Risk	6	6	0	4
Fire Low Risk	3	3	0	7
Fire Moderate Risk	15	10	5	0
Fire High Risk	21	10	11	0

Figure 101. Scenario A 8-Minute Response Capacity



Financial Impact

The following provides an estimated financial impact of the scenario.

- **Personnel Costs:** Using the 1.36 staffing relief factor, JHFEMS would need to add 11 new personnel (assuming Firefighter/EMT level), which could cost roughly between $100,000 to $140,000 per person annually based upon current firefighter/EMT salaries and benefits. This would result in an estimated annual increase of $1,100,000 to $1,540,000 for wages and benefits.
- **Capital Costs:** This scenario involves constructing a new fire station. The cost of a new fire station is highly variable but could range from several million dollars. The $200,000 budgeted for "Fire Station Design/Prep" in FY2025 suggests initial planning costs.

Scenario A-1:

Recommendation 11: ESCI recommends staffing Station 7 with three (3) additional personnel per shift.

This scenario pertains to staffing Station 7 at its current location. By augmenting the personnel complement at this station with three (3) additional staff members, the response capabilities to the southern portion of the densely populated area are enhanced. The revised minimum staffing level is established at ten (10) personnel, and an extra suppression apparatus, Engine 71, is deployed.

The following figure outlines the comparison between baseline and Scenario A-1.

Figure 102. Baseline vs. Scenario A-1 Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
A-1	10	18.79	51%	8,827	16%	8,636	32%

Figure 103. Scenario A-1: Resource Staffing

Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily Staffed by Career Personnel
Engine 61	0	Utilizes Medic 60's Personnel or Volunteers
Medic 10	0	Utilizes Engine 11's Personnel or Volunteers
Medic 60	3	Primarily Staffed by Career Personnel
Truck 16	0	Utilizes Engine 11's Personnel or Volunteers
Engine 71	3	Primarily Staffed by Career Personnel
Medic 70	0	Utilizes Engine 71's Personnel or Volunteers
Battalion Chief	1	Primarily Staffed by Career Personnel
Total:	**10**	

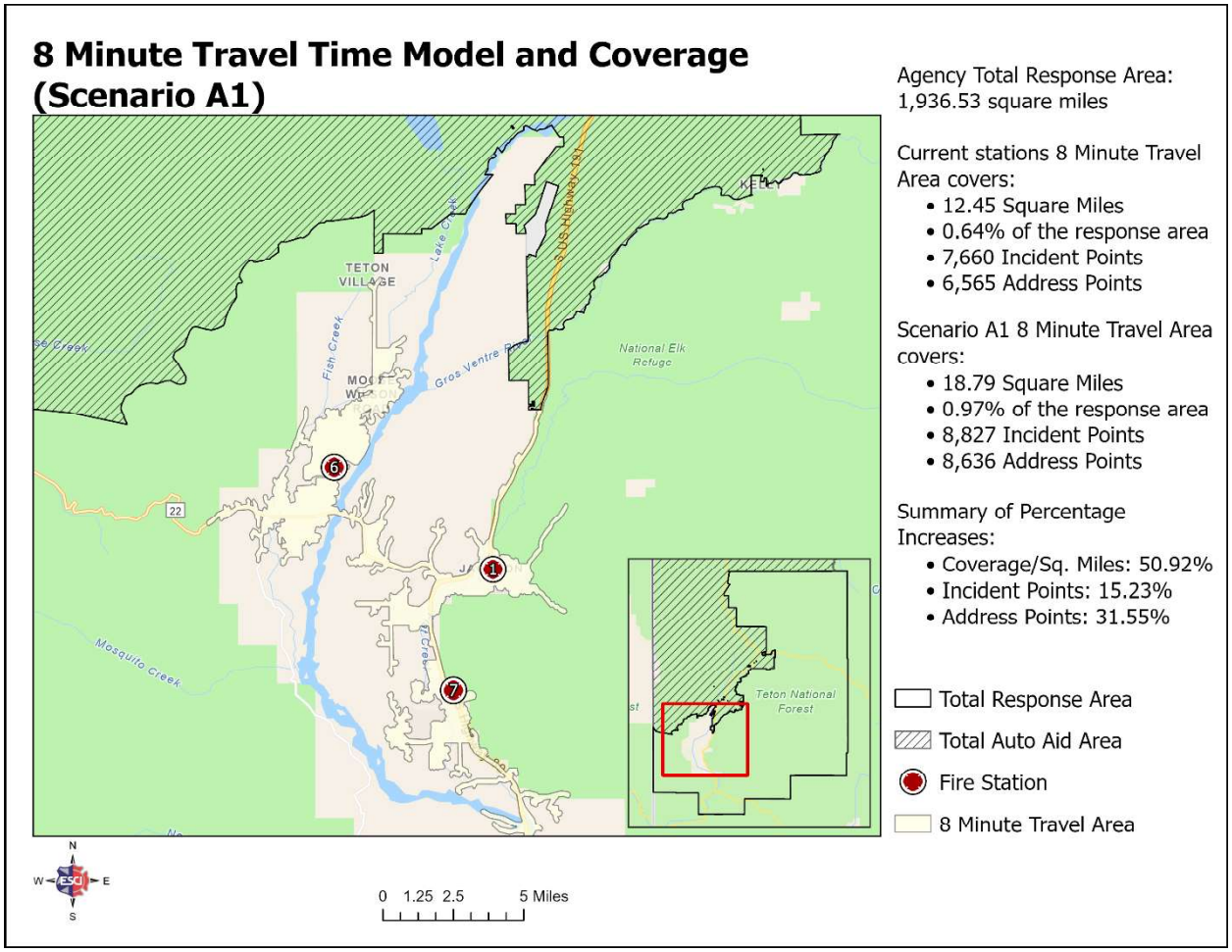
The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to

address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 104. Personnel Required (Scenario A-1)

Staffing	10 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	8
EMS Moderate Risk	5	5	0	5
EMS High Risk	6	6	0	4
Fire Low Risk	3	3	0	7
Fire Moderate Risk	15	10	5	0
Fire High Risk	21	10	11	0

Figure 105. Scenario A-1 8-Minute Response Capacity



Financial Impact

The following provides an estimated financial impact of the scenario.

- **Personnel Costs**: Applying the 1.36 staffing relief factor, JHFEMS must recruit 11 additional firefighter/EMT staff. Each new hire costs roughly $100,000 to $140,000 annually, including salaries and benefits. Consequently, the total yearly expense is projected to rise by approximately $1,100,000 to $1,540,000 in wages and related costs.
- **Capital Costs**: Capital costs would include upfit or renovation of Fire Station 7 to meet code requirements and create separation for living quarters.

Scenario B

Recommendation 12: ESCI recommends building Fire Station 8 north of the Town of Jackson and staffing it with a minimum of three (3) personnel per day to mitigate a response gap in the populated response area.

Scenario B entails the construction and staffing of Station 8 in the northern segment of the populated response area. This location addresses a recognized gap in historical incidents, coverage of populated response areas, and address points. The revised minimum staffing level is set at 10, and an additional suppression apparatus, Engine 81, is allocated. The subsequent figure illustrates the comparison between the baseline and Scenario B.

Figure 106. Baseline vs. Scenario B Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
B	10	16.37	32%	8,362	9.2%	7,314	11.4%

Figure 107. Scenario B: Resource Staffing

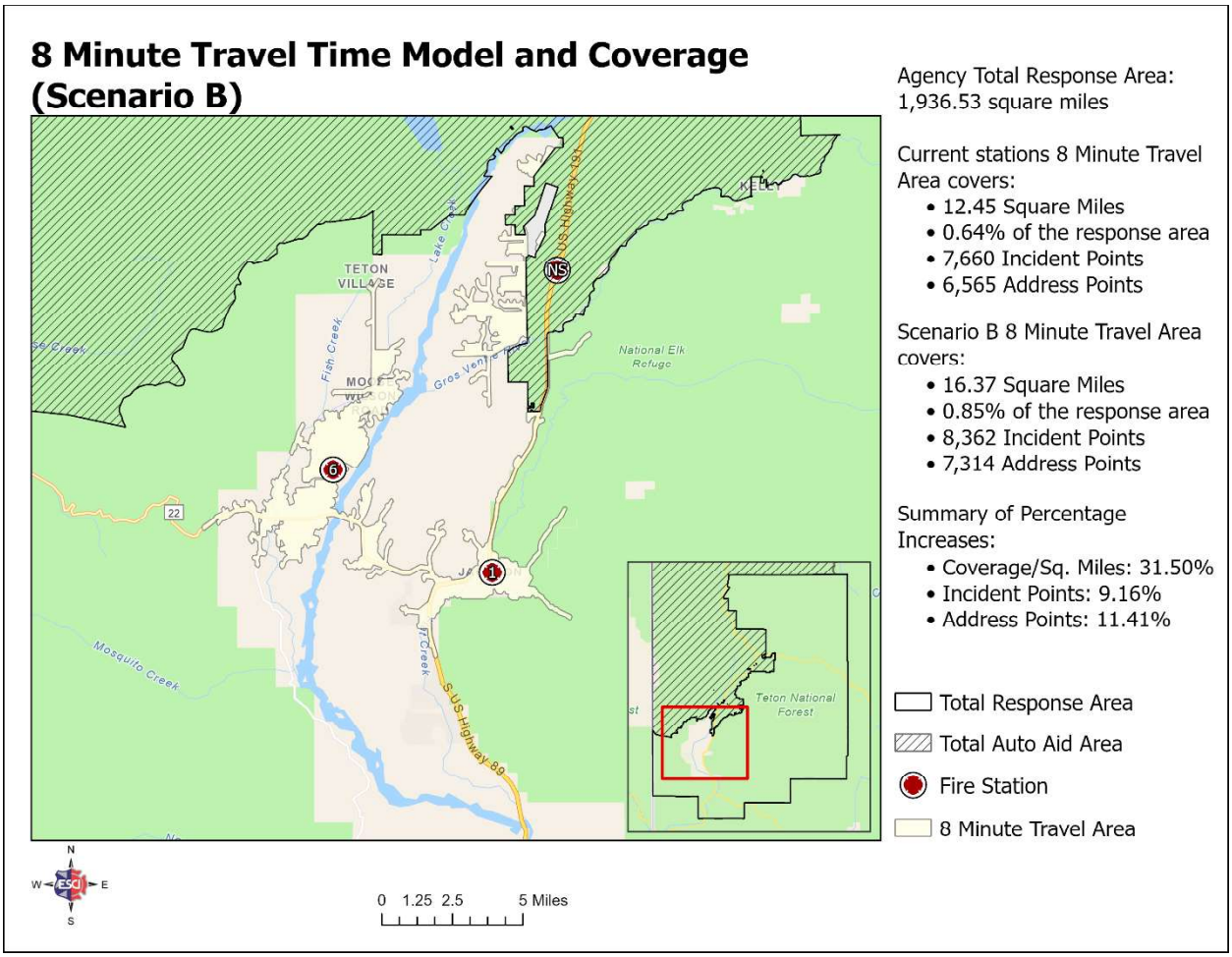
Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily Staffed by Career Personnel
Engine 61	0	Utilizes Medic 60's Personnel or Volunteers
Medic 10	0	Utilizes Engine 11's Personnel or Volunteers
Medic 60	3	Primarily Staffed by Career Personnel
Truck 16	0	Utilizes Engine 11's Personnel or Volunteers
Engine 81 (New)	3	Primarily Staffed by Career Personnel
Medic 80 (New)	0	Utilizes Engine 81's Personnel or Volunteers
Battalion Chief	1	Primarily Staffed by Career Personnel
Total:	**10**	

The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 108. Personnel Required (Scenario B)

Staffing	10 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	8
EMS Moderate Risk	5	5	0	5
EMS High Risk	6	6	0	4
Fire Low Risk	3	3	0	7
Fire Moderate Risk	15	10	5	0
Fire High Risk	21	10	11	0

Figure 109. Scenario B 8-Minute Response Capacity



Financial Impact

The following provides an estimated financial impact of the scenario.

- **Personnel Costs:** Using the 1.36 staffing relief factor, JHFEMS would need to add 11 new personnel (assuming firefighter/EMT level), which could cost roughly between $100,000 and $140,000 per person annually based on current firefighter/EMT salaries and benefits. This would lead to an estimated annual increase of $1,100,000 to $1,540,000 for wages and benefits.
- **Capital Costs:** This involves constructing a new fire station and acquiring a new engine (Engine 81). The capital costs would be similar to those estimated for Scenario A: $350,000 to $400,000 for a new engine and several million dollars for a new fire station.

Scenario C

Recommendation 13: ESCI recommends staffing a transport ambulance at Teton Village during peak season (and at Station 1 during off-peak season) to reduce the reliance on the cross-staffing model and address the gap in service delivery when a cross-staffed resource is deployed.

Scenario C involves dedicated staffing applied to Medic 50 and co-locating Medic 50 at the Teton Village Fire Protection District's fire station. The revised minimum staffing level is set at 9, excluding Scenario B's Station 5. The subsequent figure illustrates the comparison between the baseline and Scenario C.

Figure 110. Baseline vs. Scenario C Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
C	9	14.47	16.2%	8,655	12.9%	7,666	16.8%

Figure 111. Scenario C: Resource Staffing

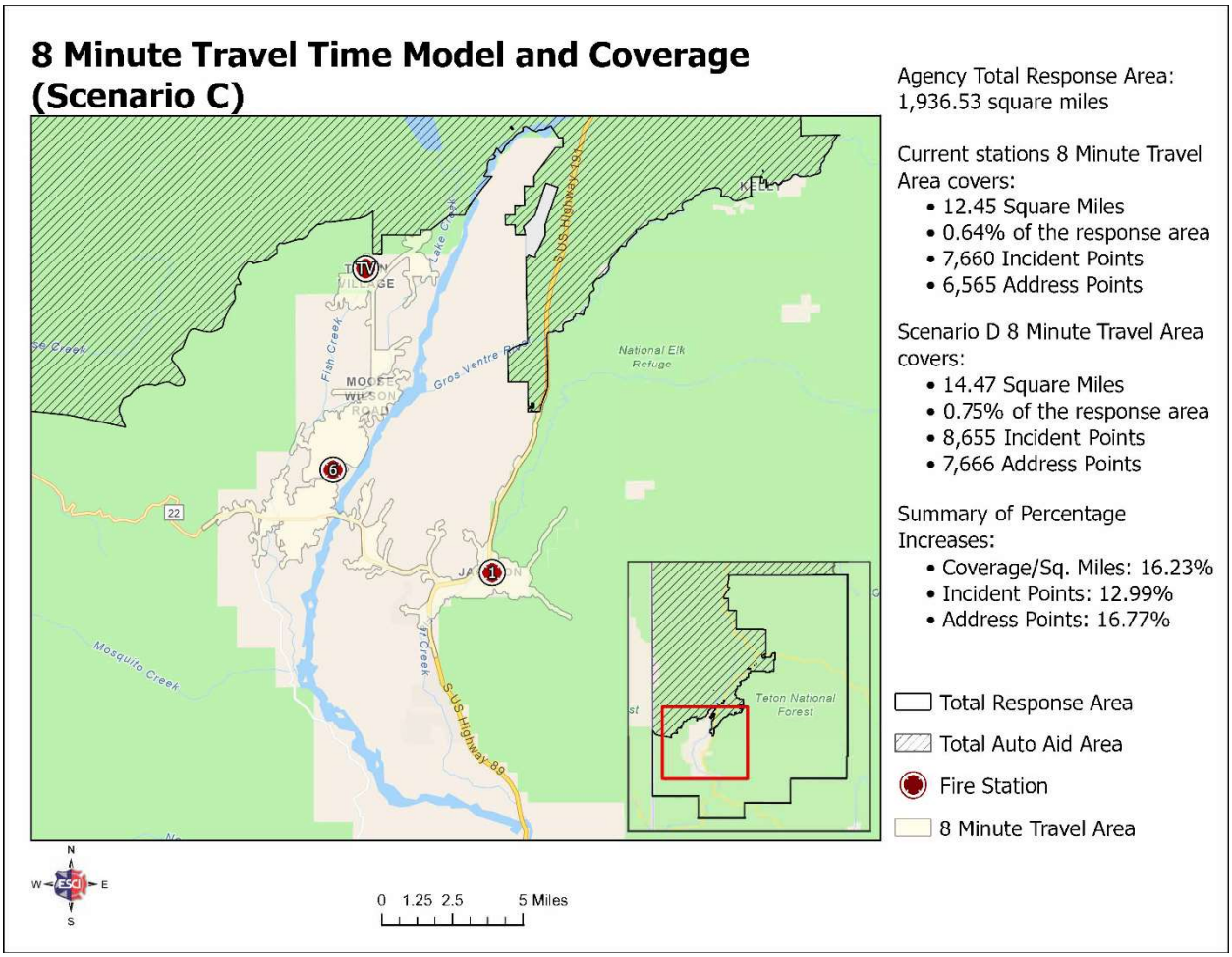
Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily Staffed by Career Personnel
Engine 61	0	Utilizes Medic 60's Personnel or Volunteers
Medic 10	0	Utilizes Engine 11's Personnel or Volunteers
Medic 60	3	Primarily Staffed by Career Personnel
Truck 16	0	Utilizes Engine 11's Personnel or Volunteers
Medic 50	2	Primarily Staffed by Career Personnel
Battalion Chief	1	Primarily Staffed by Career Personnel
Total:	**9**	

The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 112. Personnel Required (Scenario C)

Staffing	9 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	7
EMS Moderate Risk	5	5	0	4
EMS High Risk	6	6	0	3
Fire Low Risk	3	3	0	6
Fire Moderate Risk	15	9	6	0
Fire High Risk	21	9	12	0

Figure 113. Scenario C 8-Minute Response Capacity



Financial Impact

The following provides an estimated financial impact of the scenario.

- **Personnel Costs:** Staffing an ambulance typically requires at least two (2) personnel per shift. Using the 1.36 staffing relief factor, JHFEMS would need to add seven (7) new personnel (assuming firefighter/EMT level), which could cost roughly between $100,000 to $140,000 per person annually based upon current firefighter/EMT salaries and benefits. This would result in an estimated annual increase of $700,000 to $980,000 for wages and benefits.
- **Capital Costs:** Capital costs would be neutral.

Scenario D

Recommendation 14: ESCI recommends, when the time is appropriate, to consolidate with the Teton Village Fire Protection District and fully staff its station with an engine and ambulance. The ambulance's deployment location should be based on peak season tourism activity.

Scenario D encompasses staffing of the Teton Village Fire Station. This scenario would materialize only if the Teton Village Fire Protection District (TVFPD) merged with Jackson Hole Fire/EMS. In this scenario, daily minimum staffing is set at 12 personnel, who will be allocated across Stations 1, 6, and Teton Village.

Figure 114. Baseline Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
D	12	14.47	16.2%	8,655	12.9%	7,666	16.8%

Figure 115. Scenario D: Resource Staffing

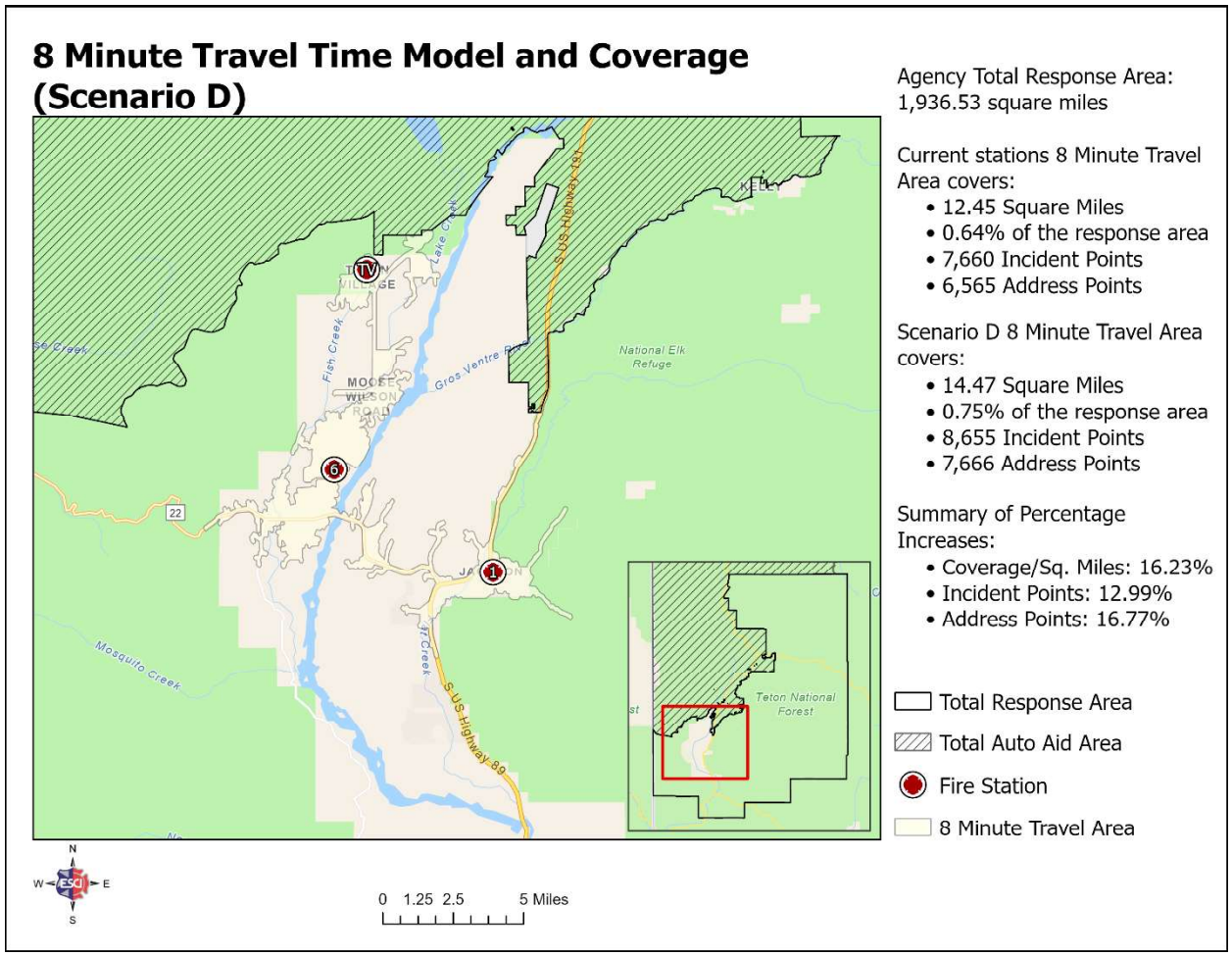
Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily Staffed by Career Personnel
Engine 61	0	Utilizes Medic 60's Personnel or Volunteers
Medic 10	0	Utilizes Engine 11's Personnel or Volunteers
Medic 60	3	Primarily Staffed by Career Personnel
Truck 16	0	Utilizes Engine 11's Personnel or Volunteers
Engine 51	3	Primarily Staffed by Career Personnel
Medic 50	2	Primarily Staffed by Career Personnel
Battalion Chief	1	Primarily Staffed by Career Personnel
Total:	**12**	

The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 116. Personnel Required (Scenario D)

Staffing	12 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	10
EMS Moderate Risk	5	5	0	7
EMS High Risk	6	6	0	6
Fire Low Risk	3	3	0	9
Fire Moderate Risk	15	12	3	0
Fire High Risk	21	12	9	0

Figure 117. Scenario D 8-Minute Response Capacity



TVFPD and JHFEMS share the same CAD. The following figure outlines the 140 responses in 2024 by the Teton Village Fire Department to provide insight into the perceived increase in workload.

Figure 118. 2024 Teton Village Fire Department Responses

Type of Incident	Number of Responses
Medical Emergency	13
Alarm	113
Fire	3
Hazardous Materials	7
Other	4

Financial Impact

The following provides an estimated financial impact of the scenario.

- **Personnel Costs:** Utilizing the 1.36 staffing relief factor, JHFEMS would require 19 additional personnel, assuming they are at the firefighter/EMT level. The estimated annual cost per individual ranges approximately from $100,000 to $140,000, considering current salaries and benefits for firefighter/EMT personnel. Consequently, the projected annual increase in wages and benefits would amount to approximately $1,900,000 to $2,660,000.
- **Capital Costs:** The consolidation with TVFD would involve taking ownership of the appropriate capital assets and the building lease agreement. ESCI does not have data on the age and condition of the TVFD apparatus and other capital equipment.

Scenario E

ESCI recommends that future staffing and deployment strategies support permanent staffing models and use cross-staffing as a back-up deployment plan rather than as a primary response model.

This scenario involves fully staffing two suppression and two emergency medical transport ambulances to remove cross-staffing from the current staffing model. For more information on cross-staffing, please refer to the section titled *Cross-Staffing Model* on page 25.

Figure 119. Baseline vs. Scenario E Capacity Table

Scenario	Daily Min. Staffing	Sq. Miles w/in 8 Mins.	Imp	Incidents w/in 8 Mins.	Imp	Address Points w/in 8 Mins.	Imp
Baseline	7	12.45		7,600		6,565	
E	11	12.45	0%	7,600	0%	6,565	0%

Figure 120. Scenario E: Resource Staffing

Resource	Total Number Available	Staffing Model
Engine 11	3	Primarily staffed by career personnel
Engine 61	2	Primarily staffed by career personnel
Medic 10	2	Primarily staffed by career personnel
Medic 60	3	Primarily staffed by career personnel
Truck 16	0	Utilizes Engine 11's personnel if available
Battalion Chief	1	Primarily staffed by career personnel
Total:	**11**	

The following figure illustrates typical incident types and required staffing. Additionally, the figure details the number of career staff and volunteers needed to address the incident. Lastly, the figure indicates the number of 24-hour staff available to respond to concurrent incidents.

Figure 121. Personnel Required (Scenario E)

Staffing	11 Personnel Available			
Incident Type	Personnel Required	Career Personnel	Volunteers Needed	Available Career Staff
EMS Low Risk	2	2	0	9
EMS Moderate Risk	5	5	0	6
EMS High Risk	6	6	0	5
Fire Low Risk	3	3	0	8
Fire Moderate Risk	15	11	4	0
Fire High Risk	21	11	10	0

Financial Impact

Scenario E – Fully staff two suppression, two medics, and one battalion.

- **Personnel Costs:** Using a staffing relief factor of 1.36, JHFEMS would need to recruit 15 new personnel at the firefighter/EMT level. The estimated cost per person, including salaries and benefits, ranges from approximately $100,000 to $140,000 annually. This would lead to an extra annual expense of about $1.5 million to $2.1 million for wages and benefits.
- **Capital Costs:** As this scenario utilizes the current fleet and simply eliminates the cross-staffing model, no new apparatus or equipment would create an impact.

Summary of Scenarios

Figure 122. Summary of Scenarios | Performance Impacts

Scenario	Description	Square Miles w/in 8 Mins.	Improvement	Incidents w/in 8 Mins.	Improvement	Address Points w/in 8 Mins.	Improvement
Baseline	Current Staffing & Station Locations	12.45	N/A	7660	N/A	6565	N/A
Scenario A	Relocate & Staff Fire Station 7	17.06	37%	8695	14%	8205	25%
Scenario A-1	Staff Fire Station 7 in the Current Location	18.79	51%	8,827	16%	8,636	32%
Scenario B	Build a New Fire Station North of the Town of Jackson	16.37	32%	8362	9.20%	7314	11.40%
Scenario C	Staff Additional Ambulance at Teton Village	14.47	16.20%	8655	12.90%	7666	16.80%
Scenario D	Consolidate and Fully Staff Teton Village	14.47	16.20%	8655 (+TVFD fire incidents)	12.90%	7666	16.80%
Scenario E	Elimination of Cross-Staffing	12.45	N/A	7660	N/A	6565	N/A

Figure 123. Summary of Scenarios | Staffing & Finance Impacts

Scenario	Description	Daily Minimum Staffing	Budgeted Daily Staffing*	Financial Impact Description	Average Personnel Expense Potential	Capital Considerations
Baseline	Current Staffing & Station Locations	7	10	N/A	N/A	N/A
Scenario A	Relocate & Staff Fire Station 7	10	14	11 New Personnel & Construction	$1,320,000	New Facility
Scenario A-1	Staff Fire Station 7 in the Current Location	10	14	11 New Personnel	$1,320,000	Existing Facility Upfit & Renovation
Scenario B	Build New Fire Station North of Jackson	10	14	11 New Personnel, Apparatus, and Station Construction	$1,320,000	New Facility & Apparatus
Scenario C	Staff Additional Ambulance at Teton Village	9	12	7 New Personnel	$840,000	None
Scenario D	Consolidate and Fully Staff Teton Village	12	16	19 New Personnel	$2,280,000	New Apparatus
Scenario E	Elimination of Cross-Staffing	11	15	15 New Personnel	$1,800,000	None

*Includes the staffing relief factor outlined in the *Baseline Discussion* section starting on page 106.

Considerations for Informing Decision-Making

To ensure that resource allocation and operational performance remain aligned with community needs, the Standard of Cover must be grounded in an up-to-date and accurate delineation of the populated service area (PSA). Conducting an annual review and update of this boundary enables leadership to base their decisions on current realities, reflecting changes in population patterns, development, and usage that directly influence service demands. Such proactive evaluation supports a more responsive and effective deployment of personnel and apparatus, enhancing both efficiency and public safety outcomes.

Recommendation 15: ESCI recommends that Jackson Hole Fire/EMS update the populated service area annually to support performance gap analysis within their area of responsibility.

In considering when to implement the previously outlined scenarios for Jackson Hole Fire/EMS, it becomes clear that setting hard and fast trigger points is an exceptionally nuanced endeavor. The unique geography, population characteristics, and risk profile of the Jackson/Teton County area set it apart from most communities in the nation. While JHFEMS's incident response load remains relatively low compared to other like-sized urban systems, the overarching community risks and the potential for significant loss—both in terms of human life and property—far outweigh raw incident numbers as a metric for change.

Many Jackson Hole area residents, as well as those in greater Teton County, maintain expectations for emergency services that are closely aligned with the highly resourced communities from which they relocated. The local building stock consists of high-value assets and unique properties, introducing a level of risk and required service that is uncommon elsewhere. Furthermore, the region's appeal as a world-class destination brings waves of visitors and tourists, each group arriving with its own expectations for emergency response. These visitors often partake in strenuous activities at high altitude, sometimes far outside their usual physical experience, further elevating the likelihood and severity of emergency incidents. The presence of these transient populations complicates resource planning, as their numbers can fluctuate dramatically and unpredictably throughout the year.

Scenarios A and A-1 are best triggered by the buildout and occupation of new residential communities near High School Road and south of Jackson. Even if these

developments do not generate a significant increase in call volume, the expectations of new residents for prompt service and improved response times from staffed stations will necessitate action. Unlike other regions where mutual aid and neighboring departments can offset increased demand, Jackson Hole Fire/EMS operates with minimal external support—functioning, in effect, on an island, and making internal deployment strategies even more critical.

Scenario B is similarly anchored in community expectations. Although there is some evidence that response times to established communities north of Jackson could be improved, actual call volume remains low, and there is not a major concentration of service demand. However, the implementation of Scenario B would close existing response gaps, enhancing equity in service delivery, and, crucially, providing permanent emergency coverage to the local airport—an asset currently underserved.

Scenario C addresses the variable demands resulting from seasonal tourism, particularly the winter influx into Teton Village. Assigning an additional ambulance to the community during ski season would relieve pressure on existing resources, while redeploying it to the Town of Jackson in the summer would help accommodate shifting visitor patterns. The challenge of lengthy EMS transports, especially when air operations are unavailable and staff must be cross-deployed, remains a key concern. Here, the trigger should not be a specific number of incidents, but rather the comfort level of Teton County leadership with extended periods where fewer emergency resources are available for new incidents. These occurrences warrant regular review and should be reported to policymakers on a quarterly basis to inform future decisions.

Scenario D hinges on the capacity and reliability of the Teton Village Fire Protection District. If these volunteers can no longer meet incident response needs, close coordination between JHFEMS and volunteer leadership will be essential to anticipate and address emerging fire suppression challenges before they become acute.

Scenario E echoes many of the pressures found in Scenario C, focusing particularly on the community's willingness to tolerate operational gaps caused by cross-staffing. With EMS incidents representing the most significant draw on system resources, every emergency medical call pulls staff away from fire suppression. This leaves the area, which boasts some of the highest-value properties and a large tourist presence, dependent on volunteers and without substantial neighboring support. Determining

the acceptable threshold for out-of-service units becomes a policy question, rather than one of strict incident counts.

In summary, the distinctive features of the JHFEMS service area, including geographic isolation, low baseline call volume, extreme population fluctuations, ultra-high-value properties, a mix of permanent and temporary residents with high service expectations, and weather- or injury-related unpredictability, render it impractical to rely solely on rigid trigger points like incident counts or narrowly defined performance deficiencies. Instead, the system must prioritize adaptive strategies informed by community expectations, ongoing risk assessment, and the tolerance of local policymakers for gaps in service. This flexible, risk-based approach is the only viable path for a community as singular as Jackson Hole.

List of Recommendations

Table of Figures