

# 2025 Long-Range Master Plan Jonesboro Fire Department Jonesboro, Arkansas



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## **Executive Summary**

The Jonesboro Fire Department (JFD) stands as one of the City of Jonesboro's most vital public safety institutions, delivering fire suppression, emergency medical response, risk reduction, and community outreach to more than 80,000 residents and a daytime population that swells to 125,000. As Jonesboro continues to expand in size and complexity, the demands on JFD are expected to rise significantly. This Master Plan identifies challenges and opportunities while outlining a series of short–, mid–, and long–term recommendations to ensure JFD remains equipped to meet current and future needs. The following summary distills these recommendations into a roadmap for sustainable growth, operational excellence, and community safety.

In the short term, the focus is on strengthening leadership, improving firefighter health and wellness, and addressing immediate staffing and training needs. To provide adequate administrative oversight, the plan calls for the addition of a second Assistant Chief position, complemented by leadership and administrative training programs developed in partnership with Arkansas State University. These initiatives will ensure that JFD maintains a clear succession pipeline while enhancing overall organizational capacity. Firefighter health and safety emerge as equally urgent priorities, with recommendations to expand the role of the Wellness Coordinator, establish a peer support hotline with stipends for team members, require comprehensive medical evaluations, and appoint an Infection Control Officer. The installation of source–capture exhaust systems in all stations and the formation of a dedicated safety committee are also proposed to mitigate cancer risks and improve workplace safety.

Operationally, JFD is advised to increase its minimum daily staffing from 29 to 33 personnel in order to keep pace with rising service demand. Radio interoperability with private EMS providers should be improved to strengthen medical response capabilities, while overtime flexibility for Kelly Days will help maintain consistent coverage. Training capacity is another pressing issue. The acquisition of permanent training academy grounds from Craighead County and an increase in per-member training budgets for conferences and specialized courses are key steps in elevating professional development. Enhancing internal communication systems and expanding JFD's social media presence will also strengthen both workforce cohesion and public engagement. Financially, JFD must begin diversifying its revenue streams beyond reliance on the city's general fund, ensuring the resources needed for these initiatives are sustainable in the years ahead.



Over the mid-term horizon, the plan shifts toward expanding service capacity, enhancing emergency medical response, and modernizing infrastructure. Daily staffing should rise further, from 33 to 36 personnel, supported by the addition of a full-time Training Division position to manage the growing volume of professional development. The introduction of a Fire Services Data Analyst will enable more precise performance measurement, service planning, and resource allocation. In line with national trends, the plan also recommends equipping engines and ladder trucks with advanced life support (ALS) capabilities and exploring the feasibility of fire department-based EMS transport, which would reduce dependency on private ambulance providers.

Infrastructure improvements feature prominently in the mid-term recommendations, with the construction of Fire Station 8 to expand geographic coverage and reduce response times across underserved areas of the city. Additional radio operators should be hired to support the 911 Communications Center, while the appointment of a Public Information Officer will improve external communications and community outreach. Workforce development strategies also include regular compensation reviews to maintain regional competitiveness, the introduction of specialty incentive pay for advanced certifications, and the creation of a formal succession planning framework to prepare future leaders within JFD.

The long-term recommendations reflect transformational investments designed to ensure JFD remains resilient as the City of Jonesboro continues to grow. Central to these strategies is the creation of a City Emergency Manager position to coordinate disaster preparedness and response efforts across departments. The development of a Community Paramedicine Program is also proposed, aimed at addressing public health needs more proactively and reducing emergency call volumes. Staffing standards should be elevated to a minimum of four (4) personnel on all fire department units, aligning JFD with national benchmarks for safety and effectiveness. To support leadership and logistics demands, the addition of both a Chief of Staff and a Logistics Manager is recommended.

Finally, the long-term vision includes the construction of Fire Station 9, which will further improve response times and coverage as the city grows, alongside monitoring unit workloads to determine when future apparatus and crew expansions are warranted. Together, these measures will ensure that the Jonesboro Fire Department remains equipped to protect lives and property while adapting to the evolving risks and demands of a growing community.



In conclusion, the recommendations outlined in this Master Plan establish a clear path for the Jonesboro Fire Department. Short-term actions strengthen immediate capacity and firefighter well-being; mid-term strategies expand service delivery, staffing, and infrastructure; and long-term investments institutionalize resilience, broaden community health services, and align JFD with national best practices. By implementing this roadmap, the City of Jonesboro will ensure that its fire department remains a model of professional service, ready to meet the challenges of today while preparing for the opportunities of tomorrow.



# **Acknowledgments**

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## **Community Overview**

Jonesboro, Arkansas, is the fifth-largest city in the state and serves as a regional hub for northeast Arkansas. As the county seat of Craighead County, the city continues to experience steady population growth. It spans approximately 80 square miles and has a population of just over 80,000. Because of Arkansas State University and its role as a regional employment center, the daytime population often reaches approximately 125,000. This increase places additional demand on public infrastructure, including emergency services, particularly during business hours and university events.

The city has a mix of densely populated urban areas, suburban neighborhoods, and rural communities, which creates challenges for fire and emergency services. The Jonesboro Fire Department must respond to emergencies in a variety of settings, including commercial corridors, apartment complexes, rural farmland, and industrial areas. Providing consistent and timely service across such a wide area requires careful planning, strategic use of resources, and a flexible response model.

Jonesboro's population is diverse and continues to change. In addition to a large student population, the city has growing Hispanic and African American communities. Household incomes and living conditions vary widely, leaving some neighborhoods more vulnerable to fire risks and health emergencies. Public education, community outreach, and fair access to services remain important priorities to address these differences.

Two major hospitals, St. Bernards Medical Center and NEA Baptist Memorial Hospital, serve the city and the surrounding region. These facilities draw staff and patients from neighboring counties, making coordination with the fire department essential, especially during severe weather events or mass casualty incidents. Both hospitals play a crucial role in the community's emergency response system.

Jonesboro is also crossed by two active rail lines, Union Pacific and BNSF Railway, which pass through populated areas and carry both freight and hazardous materials. This creates safety and operational challenges, including possible delays in emergency response. Incidents such as derailments or hazardous material leaks require specialized training and close cooperation between local, state, and federal responders. The fire department must remain prepared for rail emergencies that could affect roads, residential neighborhoods, or industrial areas near the tracks.



Environmental risks are another major concern. Located in an area known for frequent severe weather, Jonesboro has faced significant storms. In March 2020, an EF3 tornado caused widespread damage to homes and businesses, highlighting the need for strong disaster response capabilities and coordination. Maintaining readiness and ongoing training is essential for fire crews and the broader emergency management system.

The city is also near the New Madrid Seismic Zone, a fault line capable of producing powerful earthquakes. Although major earthquakes are rare, the potential for severe damage exists. Preparing for such an event requires specialized training, community preparedness, and strong cooperation among local and regional agencies.



## **Governing Body**

Jonesboro operates under a Mayor and Council form of government, as established by the Arkansas State Constitution for first-class cities with populations over 50,000. With just over 80,000 residents, Jonesboro falls into this category.

The Jonesboro City Council is made up of 12 members, with two elected from each of the city's six wards. As the legislative body, the council approves budgets, land use decisions, and municipal regulations. It passes ordinances, resolutions, and policies that guide city operations. The council meets on the first and third Tuesdays of each month at 5:30 PM, and agendas and minutes are available to the public on the city's website. Council members are elected every four years in November, with terms beginning on January 1.

The Mayor of Jonesboro serves as the Chief Executive Officer, responsible for managing city operations, enforcing ordinances, and presiding over City Council meetings. The Mayor sets meeting agendas and works with the City Clerk on matters such as property transactions when approved by the council. The Mayor is elected to a four-year term that follows the same election cycle as the council. The Mayor's administrative staff includes a Chief Administrative Officer, Chief Operating Officer, Director of Communications, Office Manager, and Administrative Assistant.

The City Clerk is also elected every four years and serves as the official recordkeeper and the link between citizens and the government. The clerk maintains records of council meetings, city ordinances, and laws; authenticates documents with the city seal; and administers oaths of office as allowed under Arkansas law.

The City Attorney, elected on the same schedule, manages the city's legal matters. This includes prosecuting misdemeanors, advising the Mayor and council on legal issues, and representing the city in court.

The city also has several key departments. The Jonesboro Police Department has 169 sworn officers and includes specialized units such as SWAT and K9. The Jonesboro Fire Department provides fire protection and life safety services. Other departments important to city operations include Grants and Community Development, Engineering, Sanitation, Finance, Human Resources, and the E911 Center.

As one of two county seats in Craighead County, the other being Lake City, Jonesboro serves as a center for education, healthcare, and industry, which shapes its governing



priorities. Since its incorporation in 1883, the City of Jonesboro has grown significantly, with Arkansas State University and industrial development after World War II contributing to its expansion. Today, Jonesboro is the fifth largest city in Arkansas, and its government continues to adjust to the needs of a growing population and its role as a regional hub.



## **Organizational Overview**

The Jonesboro Fire Department is a career fire agency in Jonesboro, Arkansas, with 136 full-time personnel organized into four divisions:

- Administration: Manages department operations, budgeting, and policy.
- Operations: Handles emergency response with a 48/96 shift schedule across three shifts.
- **Community Risk Reduction**: Focuses on fire code enforcement, inspections, investigations, and public education.
- Training: Provides new recruit, ongoing firefighter, and EMT training.

## **Description of the Current Service Delivery Infrastructure**

The Jonesboro Fire Department operates seven fire stations located across the city's 80 square miles to ensure quick response times. The department is organized into two battalions, each led by a Battalion Chief based at Fire Stations One and Two.

JFD is a basic life support agency, meaning firefighters can provide emergency medical care but do not transport patients to hospitals. Of the 120 operational staff members, approximately 80 are trained and certified in both firefighting and emergency medical care.

Response procedures are guided by Standard Operating Guideline #300, which outlines how crews respond to different types of emergencies, from medical calls to structure fires. Like many fire departments, most of the calls the Jonesboro Fire Department responds to are medical emergencies.

## **Governance & Lines of Authority**

The Jonesboro Fire Department operates as part of the City of Jonesboro's municipal government, with its authority and structure integrated into the city's broader administrative framework. JFD reports to the Mayor and City Council, which oversee public safety operations citywide. The City Council approves JFD's budget, major purchases, and key policies, while the City Clerk keeps official records of council decisions, including funding for new stations or equipment.

The Fire Chief serves as the head of JFD and is responsible for the overall administration, strategic planning, and day-to-day leadership of the department. The Fire Chief reports



directly to the Mayor or a designated city administrator to ensure JFD's priorities align with citywide goals.

Hiring and promotions within JFD are managed by the City of Jonesboro's Civil Service Commission, which oversees testing, interviews, and promotional exams. For example, the commission organizes written exams and physical agility tests for new firefighter candidates to ensure fair and consistent hiring practices.

JFD is organized into four main divisions: Administration, Operations, Community Risk Reduction, and Training. Each division has specific responsibilities and reports through a clear chain of command.

#### Administration

Led by the Fire Chief, the administrative staff manages budgeting, policy development, and coordination with city officials.

#### **Operations**

The Operations Division is the largest division, with 120 full-time firefighters working a 48 hours on/96 hours off shift schedule across three shifts. Each firefighter also receives 10 Kelly Hours off per 24-day cycle, resulting in an average 53-hour workweek. Personnel are stationed at seven fire stations strategically located across the city's 80 square miles to ensure rapid response times.

The chain of command within the Operations Division is as follows:

- The Assistant Chief oversees the entire division.
- Battalion Chiefs supervise two operational battalions across the city.
- Captains manage individual fire stations and apparatus, supervise firefighters, and coordinate emergency responses.
- Driver/Engineers are responsible for driving and operating fire engines, ladder trucks, and other emergency vehicles. They ensure that equipment is positioned correctly at incidents and operates safely and effectively during firefighting or rescue operations
- Firefighters handle emergency calls, conduct inspections, and participate in ongoing training.

The Operations Division responds to fires, medical emergencies, hazardous materials incidents, and other rescue calls. All emergency responses follow established protocols approved by the Fire Chief.



JFD's high level of service has earned it an ISO Class 1 rating from the Insurance Services Office, which benefits residents by helping lower insurance rates. Maintaining this top rating requires strict adherence to standards for staffing, equipment, and response times.

#### Community Risk Reduction

This division is responsible for fire code enforcement, inspections, and fire investigations. The Division Chief also serves as the Fire Marshal and reports directly to the Fire Chief or a designated supervisor. The division works closely with the State Fire Marshal's Office when needed to investigate fire causes and ensure compliance with the Arkansas Fire Prevention Code.

#### **Training**

The Training Division oversees all firefighter training and certification requirements. It ensures that all personnel meet standards set by the Arkansas Fire Training Academy. The Division Chief of Training reports to the Fire Chief or a designated supervisor.

#### **Budget and Oversight**

JFD's budget is approved through the City of Jonesboro's annual budgeting process, with the City Council responsible for reviewing and approving funding for operations, equipment, and expansion. For example, proposals to build new fire stations to maintain the department's ISO Class 1 rating require council approval and may depend on funding sources such as a proposed 1% sales tax.

The Jonesboro Fire Department is deeply connected to the city's administrative structure, with ultimate oversight provided by the Mayor and City Council. The Fire Chief plays a central role in managing daily operations and advocating for the resources necessary to keep up with the city's growth. By adhering to state and national standards, JFD ensures professional and accountable service to the community.

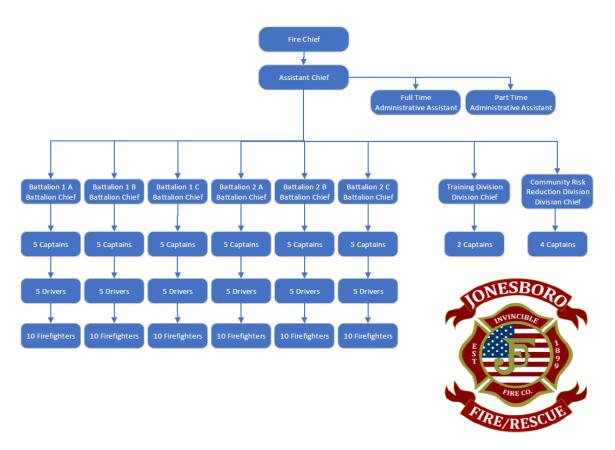


## **Organizational Chart**

This figure illustrates the organizational structure of the Jonesboro Fire Department as of 2024. It outlines the chain of command and shows the rank structure of JFD.

Figure 1. 2024 Organizational Chart

# **Organizational Chart 2024**





# Organizational Planning & Assessment

In today's world, effectively managing a fire and emergency service organization is a complex and expanding challenge, often impacted by financial constraints, political influences, and increasingly demanding community expectations. This effort requires strong leadership that can address these complexities with an efficient and flexible organizational structure, adequate and evolving emergency response structure, evaluation and maintenance of a qualified and competent workforce, and a stable, sustainable financial structure that looks to the future.

When an organization has key management components set in place, it provides a strong foundation that enables it to move forward in an efficient, organized, and unified manner. Lacking that foundation, an organization is left to struggle to find its identity, purpose, continuity, and path forward as it seeks to meet the needs of the community.

## Mission, Vision, Strategic Planning, Goals, & Objectives

The cornerstone of effective organizational management is the development and adoption of a clear mission statement and vision and associated strategic planning with goals and objectives. These fundamental principles serve as a compass, guiding each member of the organization in fulfilling their roles and responsibilities to the community they serve, the organization, and each other.

As the organization evolves, revisiting, revising, and reinforcing these principles in a collaborative and organized process is crucial. This ongoing effort ensures that the organization remains aligned with its mission, vision, and values, and that its work is consistent with its strategic plan.

By including the mission and vision as part of the strategic planning process, the organization establishes a clear picture of its desired future state. The resulting work is guided by the mission and propels the organization toward its vision, while the values reinforce the desired culture and behavior of personnel as they work together to move the organization forward.

Moreover, clearly defining the mission, vision, and values statement can also serve as a powerful tool for attracting and retaining talented personnel who share the same vision and values. Personnel who are aligned with the organization's mission and values tend to be more committed to their work, more engaged in their roles, and more likely to stay



with the organization for the long term. Currently JFD is engaged in creating a Vision Statement, but does have a Mission Statement which is as follows:

"To save lives, protect property, and serve our community as professionals with courage, commitment, and compassion."

#### **Internal & External Communications Processes**

Establishing appropriate documentation, policies, and procedures, and identifying internal and external issues affecting the agency are essential steps for any organization to achieve its goals. This is particularly important in the context of fire and EMS departments, where the ability to respond quickly and efficiently to emergencies can mean the difference between life and death.

To this end, the Jonesboro Fire Department, like many other fire departments across the nation, operates using a traditional paramilitary structure. This structure enables JFD to operate effectively in a high-demand environment where decision-making is decentralized and service delivery depends on standardized rules, regulations, and policies.

These guiding documents are vital for success in training at all levels and meeting the expectations of the citizens served by the department. Moreover, they play a critical role in establishing effective communication within the department and with its various constituent groups.

Communication is one of the most critical components of any fire department. Effective internal communication within the organization, as well as external communication with community partners, is vital to ensuring the efficiency and effectiveness of the fire service agency. Communication deficiencies are one of the more commonly identified issues that prevent a fire service organization from achieving its goals and objectives.

Therefore, it is essential to examine the current practices of the Jonesboro Fire Department regarding both internal and external communications. By doing so, JFD can identify areas for improvement and implement effective strategies to address any communication gaps that may exist.



#### **Internal Communications**

To ensure effective communication within JFD, the department employs a multi-faceted approach to keep all personnel informed, especially given the challenges of irregular email usage and the recent shift from a 24/48 to a 48/96 schedule. JFD primarily shares information via email; however, recognizing that some team members are inconsistent with checking email regularly, JFD has been prompted to rely on additional channels. Previously, under the 24/48 schedule, weekly command staff meetings were held with Battalion Chiefs (BCs) to disseminate critical updates; now, with the 48/96 schedule, JFD has transitioned to quarterly command staff meetings where all BCs convene to receive and subsequently relay information to their Captains. Physical bulletin boards at each station serve as a reliable hub for posting essential updates, ensuring accessibility for all crew members. They also leverage the FirstDue platform, utilizing its events module for scheduling and its inspections module to track related data. To foster personal engagement, the Fire Chief conducts informal station visits for coffee and conversation, though these occur irregularly. Additionally, they hold an annual Chief's meeting around the start of the year-splitting sessions between morning and afternoon to accommodate crew schedules—where they discuss annual goals, needs, and priorities, reinforcing the commitment to transparent and inclusive communication.

#### **External Communications**

Electronic and digital communication channels are indispensable tools that modern organizations employ to connect with their external audiences. The Jonesboro Fire Chief serves as the designated Public Information Officer, overseeing the organization's public outreach. The City of Jonesboro maintains a comprehensive website, with each department hosting a dedicated landing page. The Jonesboro Fire Department's webpage gives access to essential contact information for the organization. It also provides information for contacting the Fire Marshal Division, as well as specific safety tips for concerns like carbon monoxide, cooking safety, and fall prevention, to name a few.

In addition to the JFD webpage, the Jonesboro Fire Department manages a Facebook page that provides information on events and happenings. The department's Facebook page currently boasts over 9,200 followers. ESCI recommends incorporating links to the department's social media accounts on the homepage of their website.



## **Document Control & Security**

Proper record keeping and secure record archiving are essential functions in helping an organization meet legal, regulatory, and business best practices for government agencies. Secure document archiving can also play a critical role in addressing legal and/or other administrative actions confronting a fire department and helping ensure organizational transparency to the community, which is a foundation of public trust.

State law requires public access to certain fire and EMS department documents and records. The City of Jonesboro has a policy in place to facilitate requests for public records which includes the use of a software platform called JustFOIA that can be accessed through the city's website. Much of the time, those who need information from JFD will call headquarters, located at Station 1, to request it.

Hard copy files (paper records) before 1998 are adequately secured in the city's secure storage. Important files that are maintained on computers are backed up on a regular basis as part of the city's IT policy. Computers are also password protected to prevent unauthorized access to files. Computers are further protected through the use of firewalls and virus protection software. Since 1998, all record storage has been digital and is stored on servers or in secure cloud storage.

In addition to protecting documents and records, JFD has a significant investment in facilities, apparatus, equipment, and other items, along with its financial assets that personnel need to ensure are protected. Both city fire stations are consistently locked, with public access controlled and limited to public business areas of the facilities.

The Health Insurance Portability and Accountability Act (HIPAA) includes regulations that require all individually identifiable health care information to be protected to ensure privacy and confidentiality when stored, maintained, or transmitted. JFD has procedures in place to secure all sensitive records of employees, EMS patients, and the agency.

## Reporting & Recordkeeping

Every modern fire department has a tremendous amount of information, data, and records that must be maintained in an efficient manner. As part of the city's information technology infrastructure, JFD utilizes a networked computer system with a Windows operating system. The JFD computers are networked within the agency and the city-wide system.



The Jonesboro Fire Department currently utilizes the records management system (RMS) FirstDue to store incident information. The software is compliant with National Fire Incident Reporting System (NFIRS) standards and incidents. Electronic and hard-copy backup systems for critical data and files are also provided. The RMS is used to maintain incident data, patient care reports, asset management, pre-planning, and fire prevention information. Maintaining these records in the RMS allows for quick and efficient review and retrieval.

City and department records are maintained for employment history, discipline, commendations, work assignments, injuries, exposures, and leave time. Personnel records are maintained in a manner that protects the confidentiality of employee personal data and private medical information.

#### Internal Assessment of Critical Issues

As part of JFD's planning process, ESCI reviewed the Jonesboro Fire Department's leadership's perspective on current critical issues and future challenges. To help jumpstart the process, ESCI considered the following list of potential issues and challenges:

- Organizational Health
  - Staffing Levels
  - Training and Development
  - Mental Health and Well-being
- Financial Health
  - Budget Constraints
  - Diversifying Funding Sources
- · Community Relations
  - Public Perception and Trust
  - Community Outreach
- Technological Adaptability
  - Current Equipment
  - Data and Analytics
- Regulatory Compliance
- · Strategically Planning for the Future



There are three larger critical issues that are more organizationally driven. The first is new fire stations. Overall, the fire station infrastructure for JFD is better than average. The community has invested in new fire stations with a standardized design with the capability to add more staffing as the community grows. Due to the geographic size of the community, distances and response times to certain areas are a concern. Adding additional fire stations to geographically remote areas should assist with incident response. The second is succession planning, which is a very common issue and is specific to the Chief Officer positions that serve in the administration at JFD. The third is discovering new funding sources to support operational and administrative needs. Many municipal fire service organizations have issues with funding the level of service that they would like to provide. This is often due to a community's tax structure and being funded through the General Fund in which funds are shared with other city departments.

## **Internal Assessment of Future Challenges**

The Fire Chief was given the opportunity to evaluate and share what he believes to be future challenges for JFD. At the top of his list was funding, which is a common concern for municipal fire departments. The City of Jonesboro is currently evaluating an opportunity to increase taxes to better support services. The second challenge is the primary mission of Emergency Medical Services (EMS) and maintaining or improving this service. As has been the trend in the modern fire service, EMS has become a larger component of service delivery for fire departments. Over recent years, JFD has been taking strides to add more EMS-certified personnel to their ranks. At the time of this Master Plan, it is understood that about two-thirds of suppression staff are EMTs. Additionally, there are two private ambulance companies that transport in Jonesboro, but there is concern by JFD about their ability to maintain service delivery.

## **Review Elements of Organizational Planning**

## **Operational Planning**

Successful fire service organizations share a common thread of solid planning for both routine daily activities as well as emergency incidents. In managing daily activities and expectations, JFD has established a set of departmental Standard Operating Guidelines (SOGs) that include the Code of Conduct, General Duties and Responsibilities, Following Orders, and Inappropriate Behavior, to name a few. These specific documents outline expectations of all members of JFD, as well as addressing elements such as rules and regulations, general administration, operations, and responsibilities of the Fire Marshal's



Office. One of the challenges of maintaining SOGs is ensuring that they are kept up to date on both department operations and legal standards.

In planning for emergency operations, JFD has additional SOGs that address incident communications, firefighter safety, and fire investigations. JFD also has a foundational operational document referred to as "The Playbook". This document strives to provide a foundation for firefighting operations and associated fire ground activities and tactics at residential and commercial structure fires. There are guidelines for incident command, first and second arriving apparatus, and truck company operations. The document also addresses hydrant operations and the different hose loads utilized on firefighting apparatus.

Recognizing the potential for large-scale incidents that are beyond the capabilities of a single jurisdiction, JFD is part of the mutual aid agreement with the other ten fire departments located in Craighead County. This agreement defines the responsibilities and general guidelines when responding to an incident in each jurisdiction.

#### Administrative Planning

Administrative planning consists of forecasting the organization's needs through the lens of people, equipment, and community organizations. Administrative planning comprises succession planning, capital equipment planning, and community development plans.

#### Succession Planning

Succession planning in the fire service is a critical strategy to ensure leadership continuity and organizational resilience in a high-stakes, dynamic environment. It involves identifying and developing personnel with the potential to fill key roles, such as Fire Chiefs, Battalion Chiefs, and other supervisory positions through targeted training, mentorship, and professional development programs. By fostering a pipeline of skilled leaders, fire departments can maintain operational effectiveness, preserve institutional knowledge, and adapt to evolving challenges like technological advancements and community demands. Effective succession planning mitigates the impact of retirements or unexpected departures, ensuring that the department remains prepared to protect lives and property without disruption.

JFD has no formal or informal succession plan, which has also been identified as a concern by the Fire Chief. JFD is a civil service department with clearly defined positions of Firefighter, Driver/Engineer, Captain, Battalion Chief, Division Chief, Assistant Fire



Chief, and Fire Chief. Much of the concern is identifying and preparing junior officers for the positions of Battalion Chief, Division Chief, Assistant Fire Chief, and Fire Chief. Since JFD follows the civil service process outlined in its manual, it is required that these positions be filled internally. Although filling these positions is often best with the right internal candidate, it is also challenging due to a lack of interest, training, and experience.

#### Capital Equipment/Facilities/Apparatus Planning

Capital equipment, facilities, and apparatus planning for a fire department involves the strategic process of identifying, prioritizing, and budgeting for the acquisition, maintenance, and replacement of critical assets to ensure operational readiness and community safety. JFD evaluates the department's needs for major equipment (e.g., firefighting tools, protective gear), facilities (e.g., fire stations, training buildings), and apparatus (e.g., fire engines, ladder trucks), while considering factors like service life, technological advancements, and compliance with safety standards. JFD utilizes an internal strategic planning process that involves assessing current inventory conditions, forecasting future demands based on community growth or risk profiles, securing funding through grants or municipal budgets, and scheduling replacements or upgrades to avoid service disruptions. Effective planning ensures resources are allocated efficiently, align with the department's long-term goals, and maintain the ability to respond to emergencies effectively.

#### Community Development Planning

The City of Jonesboro has a comprehensive community development and growth plan in place, exemplified by initiatives like the "Destination 100K" program, which prepares the city for its projected population milestone of 100,000 residents. This plan emphasizes strategic investments in infrastructure, affordable housing, and economic development, supported by the Grants and Community Development Department, which secured over \$6.77 million in grant funding in 2023 to support projects like the Community Development Block Grant (CDBG) programs. These programs focus on providing decent housing, enhancing public infrastructure, and fostering economic opportunities, particularly for low– and moderate–income communities, through partnerships with citizens, nonprofits, and the Jonesboro Regional Chamber of Commerce. The city takes pride in having a progressive approach which is further evidenced by its award–winning master parks plan, recognized for inclusivity and accessibility, and ongoing investments



in transportation, tourism, and workforce development to ensure sustainable growth and a high quality of life.

#### **Tactical Planning**

Developing strategies for potential emergency incident response and internal projects is known as tactical planning, which includes preventative maintenance and inspection programs and mass casualty, snow removal, and active shooter plans. These tactical plans support the broader operational and strategic goals and the department's mission.

JFD has established comprehensive standard operating guidelines (SOGs) for many of the common concerns they may see in its community. Along with the standard operational SOGs that address firefighting and EMS incidents, there are many that also address specialty incident responses. These include but are not limited to hazardous materials response, elevator emergencies, bomb threat/explosive device, and confined space rescue.

#### **Organizational Planning**

Organizational planning is also essential and is often overshadowed by emergency response planning efforts. Organizational planning involves two primary types of plans: master and strategic.

#### Master Planning

Master planning involves a comprehensive analysis of a fire department's programs and processes to Provide a 10- to 15-year outlook that guides the department in meeting growth projections and service demands.

JFD has never had a comprehensive long-term Master Plan in place. Fortunately, this gap in planning was identified and ESCI was accessed to provide a plan.

### Strategic Planning

Strategic planning provides an internal and external evaluation of the current conditions, development of initiatives, goals, and tasks organizing and obtaining commitment by the members in a three- to five-year implementation plan.

JFD has participated in an internal strategic planning process with a previous plan encompassing the years of 2019 to 2023, and a subsequent plan that covers 2022 to 2031. Both plans have a focus on adding additional fire stations, increasing staffing, and addressing the associated costs. The goal as stated in the most recent plan is to address the growth of Jonesboro over the last decade. Fire station locations have been identified



to improve community coverage, and the union also accessed the International Association of Firefighters (IAFF) to assist with a fire station location study. The geographic footprint of Jonesboro and the current location of its seven fire stations has certain areas of the city potentially receiving slower response times than other portions of the city.

#### Financial Planning

The budget process is JFD's primary short-term financial planning tool. It provides the framework and funding needed to meet annual or biannual goals, ensuring that day-to-day operations continue while also supporting key priorities such as staffing, equipment replacement, and facility maintenance.

Good financial planning is more than just approving a yearly budget. It requires looking ahead, anticipating future costs, and making sure resources are aligned with the city's broader goals. For a department like the Jonesboro Fire Department where salaries, pensions, and apparatus replacements are major ongoing expenses, planning ahead is critical. These are long-term commitments, and waiting until they are due can strain the city's General Fund.

The annual budget should be paired with longer-range financial planning. Multi-year forecasts and capital improvement plans can help prepare for big investments, such as building new fire stations, purchasing expensive apparatus, or adding staff to meet growing service demands. Taking a longer view also allows the city to better manage the impact of inflation, growth, and future staffing needs.

Combining short-term and long-term planning will help JFD stay ready to meet the community's needs while giving city leaders the information they need to balance public safety with fiscal responsibility.



## **Financial Analysis**

The Jonesboro Fire Department's financial trends over the past five years show a consistent effort to maintain and expand services. Total expenditures have increased from \$12.03 million in 2021 to a projected \$14.81 million in 2025, reflecting 23% growth. The increase is primarily driven by additional staffing, salary adjustments, benefits, and operational investments in equipment and facilities.

# **Total Expenditures Trend**

As shown in the following figure, expenditures remained stable between 2021 and 2023, averaging around \$12 million annually. In 2024, spending rose to \$13.38 million, and the 2025 budget projects \$14.81 million. This increase reflects strategic investments in staffing and operational readiness.

Figure 2. Total JFD Expenditures

| Year        | Total Expenditures | Percent Change |
|-------------|--------------------|----------------|
| 2021 Actual | \$12,026,011.81    | N/A            |
| 2022 Actual | \$12,127,809.53    | 0.85%          |
| 2023 Actual | \$12,079,241.59    | -0.40%         |
| 2024 YTD    | \$13,377,258.75    | 10.75%         |
| 2025 Budget | \$14,808,178.00    | 10.70%         |



#### **Detailed Personnel Accounts**

Personnel expenditures remain the largest portion of JFD's budget, increasing from \$10,172,189 in 2021 to a projected \$13,599,553 in 2025. As shown in the following figure, fire salaries represent the single largest expenditure, with \$8,983,690 budgeted for 2025. Other major personnel cost drivers include group insurance" (\$1,233,385), LOPFI pension contributions (\$2,190,975), and overtime (\$200,000). This upward trend reflects increased staffing levels, salary adjustments, and rising benefits costs to support retention and recruitment efforts.

Figure 3. Personnel Account Expenditures (rounded)

| Description                      | 2021        | 2022        | 2023        | 2024 YTD    | 2025                       |
|----------------------------------|-------------|-------------|-------------|-------------|----------------------------|
| Salaries - Fire                  | 6,701,519   | 7,070,962   | 7,556,899   | 8,289,397   | <b>Budget</b><br>8,983,690 |
| 12 FF - \$1M net \$600K          | 0,701,313   | 7,070,302   | 7,550,055   | (440,712)   | - 0,303,030                |
| ARPA funding                     |             | _           | _           | (440,712)   |                            |
| Holiday Pay                      | 568         | 494         | 522         | 553         | 1,418                      |
| Group Insurance                  | 1,043,154   | 1,077,390   | 1,142,696   | 1,203,766   | 1,233,385                  |
| Pension - City's Contribution    | 595         | 977         | 1,039       | 1,099       | 2,675                      |
| LOPFI - City's Contribution      | 2,829,503   | 2,925,503   | 1,955,623   | 2,060,528   | 2,190,975                  |
| LOPFI - SIT Credit               | (1,033,698) | (1,009,190) | (1,167,640) | (1,189,125) | (1,179,325)                |
| LOPFI - Local & Vol. Plan        | -           | -           | 1,147,652   | 1,298,492   | 1,315,745                  |
| Payroll Taxes                    | 2,734       | 2,607       | 2,715       | 2,809       | 6,729                      |
| Uniforms                         | 28,003      | 32,909      | 46,964      | 56,530      | 85,000                     |
| Laundry & Cleaning               | 6,790       | 7,068       | 10,535      | 16,491      | 12,000                     |
| Travel & Training                | 20,598      | 29,534      | 46,283      | 71,165      | 100,000                    |
| Part-Time Salaries               | 13,518      | 14,369      | 14,249      | 13,927      | 15,000                     |
| Overtime Salaries                | 162,568     | 165,965     | 154,757     | 256,112     | 200,000                    |
| Earned Benefits Payout           | 63,348      | 155,962     | 93,222      | 285,466     | 200,000                    |
| Unemployment/Wkrs. Comp.         | 202,710     | 189,011     | 196,876     | 268,464     | 270,816                    |
| Medicare Contributions           | 84,779      | 90,884      | 95,383      | 108,364     | 123,945                    |
| Longevity Pay                    | 45,500      | 46,500      | 47,000      | 46,520      | 37,500                     |
| O&M Personnel Accounts Sub-Total | 10,172,189  | 10,800,945  | 11,344,772  | 12,349,845  | 13,599,553                 |



#### **Detailed Operations Accounts**

As shown in the following figure, operations expenditures, which cover equipment, facilities, and service costs, decreased from \$1,851,913 in 2021 to a planned \$1,206,125 in 2025. Key operational cost drivers include equipment maintenance, insurance, professional services, and fuel. The higher spending in 2024 and 2025 versus 2023 reflects planned investments in apparatus readiness, technology upgrades, and infrastructure maintenance to support growing service demands. Additionally, a significant reduction in fixed assets was realized due to the creation of a depreciable account from which all fire apparatus are now purchased, rather than through the fixed assets account.

Figure 4. Operations Account Expenditures (rounded)

| Description                          | 2021      | 2022      | 2023    | 2024 YTD  | 2025<br>Budget |
|--------------------------------------|-----------|-----------|---------|-----------|----------------|
| Telephone Expense                    | 4,811     | 133       | -       | -         | -              |
| Insurance & Licenses                 | 70,385    | 88,212    | 114,133 | 137,195   | 133,000        |
| Professional Services                | 37,508    | 8,111     | 17,989  | 8,250     | 100,000        |
| Postage                              | 1,011     | 1,591     | 1,193   | 884       | 1,500          |
| Advertising & Printing               | 1,148     | 1,052     | 3,320   | 11,038    | 10,000         |
| Maintenance Bldg. & Grns.            | 27,072    | 10,083    | 12,850  | 12,669    | 20,000         |
| Equipment Maintenance                | 10,533    | 31,691    | 12,604  | 19,638    | 30,000         |
| Auto Expense                         | 85,507    | 140,430   | 197,706 | 251,497   | 250,000        |
| Supplies                             | 25,299    | 31,734    | 32,156  | 71,096    | 70,000         |
| Office Supplies                      | 4,736     | 3,319     | 2,540   | 3,295     | 4,000          |
| Fuel                                 | 72,667    | 112,310   | 99,871  | 103,515   | 110,000        |
| Dues & Subscriptions                 | 3,144     | 3,632     | 5,305   | 3,470     | 8,000          |
| Fixed Assets                         | 1,447,874 | 763,066   | 51,068  | 181,479   | 226,000        |
| Minor Equipment &<br>Furniture       | 23,126    | 91,040    | 124,994 | 114,247   | 105,475        |
| Rentals/Contracts                    | 1,910     | 2,234     | 886     | 1,215     | 2,500          |
| Computer Software                    | -         | -         | 35      | 140       | 150            |
| Mobile & Data Services               | 7,366     | 8,130     | 9,727   | 14,594    | 16,500         |
| Maintenance Contracts                | 28,512    | 29,084    | 46,257  | 91,811    | 120,000        |
| CWL Fire Hydrant<br>Maintenance      | 1,214     | 1,012     | 1,835   | 1,383     | 1,500          |
| O&M Operations<br>Accounts Sub-Total | 1,853,823 | 1,326,864 | 734,470 | 1,027,413 | 1,208,625      |



## **Staffing and Positions**

JFD's staffing levels have grown steadily to meet increased service demand. Positions expanded from 122 in 2021 to a planned 141 in 2025, representing a 16% increase. The following figure shows the exact positions by classification.

Figure 5. Staffing & Positions by Year

| Position                        | 2021 | 2022 | 2023 | 2024 | 2025 |
|---------------------------------|------|------|------|------|------|
| Fire Chief                      | 1    | 1    | 1    | 1    | 1    |
| Assistant Fire Chief            | 1    | 1    | 1    | 1    | 1    |
| Division Chief/Fire Marshal     | 1    | 1    | 1    | 1    | 1    |
| Division Chief/Training Officer | 1    | 1    | 1    | 1    | 1    |
| Battalion Chief                 | 6    | 6    | 6    | 6    | 6    |
| Captain                         | 33   | 33   | 33   | 33   | 36   |
| Driver/Engineer                 | 30   | 30   | 30   | 30   | 30   |
| Firefighter                     | 48   | 51   | 51   | 63   | 63   |
| Mechanic/Emergency              | 0    | 0    | 0    | 0    | 1    |
| Vehicle Technician              |      |      |      |      |      |
| Administrative Secretary        | 1    | 1    | 1    | 1    | 1    |
| Total                           | 122  | 125  | 125  | 137  | 141  |

It should be noted that a part-time administrative secretary role exists, although it is not reflected in the current budget documents.

## **Salary Structure**

JFD's compensation structure demonstrates competitive pay aligned with increasing responsibilities at each rank. Firefighters earn between \$46,771.08 and \$61,713.45 annually, while the Fire Chief earns \$126,250.

Figure 6. Minimum, Median, & Maximum Annual Salary per Position

| Position             | Minimum | Median  | Maximum |
|----------------------|---------|---------|---------|
| Fire Chief           | N/A     | N/A     | 126,250 |
| Assistant Fire Chief | 96,942  | 102,875 | 109,172 |
| Division Chief       | 83,961  | 89,982  | 96,426  |
| Battalion Chief      | 83,961  | 89,982  | 96,426  |
| Captain              | 72,114  | 78,043  | 84,476  |
| Driver/Engineer      | 61,812  | 66,894  | 72,409  |
| Firefighter          | 46,771  | 53,725  | 61,713  |
| Recruit              | N/A     | N/A     | 45,122  |



#### **Employee Benefits**

Employee benefits are a significant driver of personnel costs, accounting for more than 30% of total compensation. The largest benefit cost is the LOPFI pension system, which requires a 24% employer contribution per salary. Other key benefit costs include health and dental coverage averaging \$7,946.24 annually per employee, Medicare (1.45% of salary), life insurance, and MASA emergency transport coverage. These benefits are essential for retention but represent an increasing long-term financial obligation for the city.

Figure 7. Benefits Costs

| Benefit                 | Average Annual Cost<br>per Employee |
|-------------------------|-------------------------------------|
| LOPFI Pension (24%)     | 24% of Salary                       |
| Medicare (1.45%)        | 1.45% of Salary                     |
| Health/Dental (average) | \$7,946.24                          |
| Life Insurance          | \$29                                |
| MASA                    | \$48                                |

The City of Jonesboro offers both preferred provider organization (PPO) and high-deductible (HD) plans to meet the needs of single employees and families.

As shown in the following figure, the single PPO plan costs approximately \$4,873 annually, while the family PPO plan is more than double at \$10,470, reflecting the higher expense of dependent coverage. High-deductible plans range from \$4,989 for single employees to \$11,501 for family coverage. Mid-range options, such as employee plus dependents (\$5,835) and employee plus spouse HD (\$7,775) plans, provide flexibility for partial family coverage.

The average annual cost of health insurance across all six medical plans is \$7,573.76, and when adding dental coverage of \$372.48 per employee, the total average annual benefits cost rises to \$7,946.24 per employee. This level of investment in health benefits plays a key role in recruiting and retaining qualified fire service professionals, but also represents a significant and growing portion of JFD's personnel budget, particularly as family coverage continues to exceed \$10,000 annually.



Figure 8. Health Insurance Options

| Health Plan         | Cost      |
|---------------------|-----------|
| Single PPO          | 4,873.20  |
| Family PPO          | 10,469.52 |
| Single HD           | 4,988.64  |
| Employee/Dependents | 5,835.12  |
| Employee/Spouse HD  | 7,775.04  |
| Family HD           | 11,501.04 |
| Dental              | 372.48    |

## Partnership with City Water & Light

The City of Jonesboro has partnered with local utilities to help offset capital costs associated with purchasing new fire apparatus.

In June 2022, the Jonesboro City Council approved Resolution RES-22:064, requesting that City Water & Light (CWL) contribute \$500,000 from its surplus funds to assist with the purchase of a new fire truck. The estimated cost of the apparatus was \$665,248, and the CWL contribution was intended to significantly reduce the financial impact on the city's General Fund.

A subsequent resolution, RES-23:143, adopted in August 2023, reaffirmed this request to CWL, demonstrating the ongoing collaboration between the City of Jonesboro and its public utility providers to support public safety infrastructure.

In 2024, Resolution RES-24:037 confirmed that City Water & Light would provide \$500,000, further strengthening this partnership and directly contributing to the acquisition of critical fire apparatus.

This partnership approach provides an effective method for funding essential public safety equipment by using surplus utility revenues. It helps reduce the burden on taxpayers while ensuring that first responders have access to reliable and modern equipment.

## **Financial Summary**

The Jonesboro Fire Department's 2025 budget totals \$14.8 million, reflecting the growing financial demands of maintaining a modern, full-service fire protection and emergency response organization. The largest portion of this budget is driven by personnel-related costs, which account for more than 85% of all expenditures. Salaries



remain the dominant cost factor at \$8.98 million, underscoring JFD's labor-intensive nature. This investment supports 24-hour staffing across multiple fire stations and ensures adequate response times to a growing community.

Pension obligations are another significant financial pressure. The city's mandatory contributions to the Local Police and Fire Retirement System total \$2.19 million in 2025, while the Local and Volunteer Plan adds an additional \$1.32 million. Combined, these pension-related costs represent nearly a quarter of all personnel expenditures and reflect both the long-term commitment to retired firefighters and the increasing costs of sustaining the current workforce. Group insurance is the fourth-largest cost driver at \$1.23 million, driven by rising health insurance premiums and a workforce with high family coverage enrollment.

Additional personnel-related expenses, such as unemployment and workers' compensation insurance (\$270,816), overtime salaries (\$200,000), and earned benefits payouts (\$200,000), provide operational flexibility to cover extended shifts, special assignments, and retirement or sick leave payouts. These expenses are essential to maintain staffing reliability but add to the financial strain during years with higher-than-expected leave usage or retirements.

Operational costs also exert increasing pressure on the budget. Auto expenses are projected at \$250,000 in 2025, driven by repairs and ongoing maintenance of the fire apparatus fleet. Fixed asset expenditures, budgeted at \$226,000, fund critical equipment necessary to maintain response readiness and meet national fire service standards.

The Jonesboro Fire Department's reliance on General Fund revenues, with minimal outside grants, limits its ability to offset these cost increases. The conclusion of American Rescue Plan Act (ARPA) funding in 2024 has further shifted the full burden of staffing and equipment costs back to the city's operating budget.

Looking forward, financial pressures are expected to continue rising. Inflation will drive up salaries, benefits, and equipment costs, while staffing expansion will be required to meet the needs of a growing population. Additionally, discussions around the potential construction of a new fire station represent a major future capital investment. Without careful long-term financial planning, these cost drivers may strain the city's General Fund. However, the investments being made today ensure that the Fire Department



remains fully staffed, well-equipped, and capable of delivering high-quality emergency response services to the community.



# **Physical Resources**

The Jonesboro Fire Department relies on a wide range of physical resources to carry out emergency response, fire suppression, rescue operations, and daily administrative functions. These resources include facilities, vehicles, and specialized equipment designed to protect both firefighters and the community.

The fire stations are the most important physical resources. They serve as central hubs where firefighters live, train, and maintain equipment. Each station includes living quarters with bedrooms, kitchens, and restrooms, as well as administrative offices, training rooms, and large apparatus bays where fire trucks and other vehicles are stored and maintained. JFD also uses a dedicated training facility equipped with a burn building and other props. These facilities allow firefighters to practice fire suppression, rescue techniques, and hazardous materials response in realistic conditions.

Firefighting vehicles, known as apparatus, are essential for emergency response. The most common include:

- Fire Engines Equipped with pumps, hoses, nozzles, and tools for fire suppression. Engines also carry water tanks that typically hold 500 to 1,000 gallons, along with ladders and forcible-entry tools.
- **Aerial Apparatus (Ladder Trucks)** Designed for high-angle rescues and elevated firefighting, equipped with extendable ladders or platforms.
- Rescue Vehicles Specialized units for technical rescues such as vehicle extrications or confined-space rescues.
- Brush Trucks Smaller, off-road vehicles used for grass and wildland fires.
- Command Vehicles Outfitted with advanced communication systems for incident command operations.
- Hazardous Materials (Hazmat) Vehicles Used to contain and clean up dangerous chemical or material spills.
- Water Tenders Large-capacity trucks that transport water to areas without hydrants.
- Ambulances Although ambulances are a key part of emergency medical response, the Jonesboro Fire Department currently does not own or operate any. Emergency medical transport is provided by outside agencies, but JFD personnel often assist on medical calls as a basic life support agency.



Firefighters rely on personal protective equipment (PPE) to stay safe during emergencies. Standard PPE includes fire-resistant turnout gear (coats, pants, gloves, boots, and helmets), self-contained breathing apparatus (SCBA), Nomex hoods, eye protection, and hearing protection. Firefighting tools and equipment include hoses, nozzles, fire extinguishers, thermal imaging cameras to detect heat sources, forcible entry tools, and ventilation fans to clear smoke.

For technical rescues, firefighters use hydraulic tools such as spreaders, cutters, and rams, along with ropes, harnesses, and pulleys for high-angle or confined-space rescues. JFD also uses equipment that supports its daily mission, including medical kits, trauma supplies, backboards, and portable radios for communication. Hazmat tools and salvage equipment such as tarps and squeegees help protect property during and after firefighting operations.

### **Facilities**

Fire stations play a critical role in the delivery of emergency services for several reasons. The location and design of fire stations can greatly impact response times to emergencies, and poorly located fire stations can result in significant delays, which can have adverse consequences such as the loss of property or even lives. Therefore, it is essential to research needs based on service demand, response times, types of emergencies, and projected population growth prior to making a station placement commitment.

In addition to location, it is important to ensure that fire stations are designed to meet the needs of the organization and its personnel and can effectively support a fire department's mission as it exists currently and into the future. ESCI utilizes the criteria in Figure 9 to rate the condition of fixed facilities. The following are key considerations when assessing fire stations:

- Apparatus and equipment storage, including decontamination and disposal of biohazards
- Residential living space and sleeping quarters for on-duty personnel of all genders
- Kitchen facilities, appliances, and storage
- Bathrooms and showers for all genders



- Administrative and management offices, computer stations, and office facilities for personnel
- Training, classroom, and library areas
- Firefighter fitness area
- Public meeting space



Figure 9. Fire Station Criteria

|           | Like-new condition.   |
|-----------|---|
|           |   |
|           | No visible structural defects.  The facility is a larger of the structure of the struc |
|           | The facility is clean and well-maintained.  The interior level is a second circumstance of the control of  |
| Excellent | 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.   |
|           | The exterior has a good appearance with minor or no defects.  |
|           | Clean lines, good workflow design, and only minor wear on the building  |
|           | interior.   |
| Good      | The roof and apparatus apron are in good working order, absent any significant  |
| Good      | full-thickness cracks or crumbling of the apron surface or visible roof patches   |
|           | or leaks.   |
|           | <ul> <li>Building design and construction match the building's purposes.</li> </ul>   |
|           | Age is typically less than 20 years.  |
|           | 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  |
| Fair      | apparatus bay or offices.   |
| Fall      | 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.  |
|           | 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.   |
| Marginal  | The interior is poorly maintained or showing signs of deterioration with  |
|           | moderate non-structural defects.  |
|           | <ul> <li>Problematic age-related maintenance and/or defects are evident.</li> </ul>   |
|           | It may not be well suited to its intended purpose.  |
|           | Age is typically greater than 40 years.   |
|           | 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.   |
| Poor      | The interior is poorly maintained or showing 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.   |
|           | - Age is typically greater trial 30 years.  |



## **Locations of Facilities**

The Jonesboro Fire Department currently operates from seven stations, shown in the following figures, at these locations:

- Station 1: 3215 E. Johnson Ave.
- Station 2: 1413 W. Nettleton Ave.
- Station 3: 2212 Brazos St.
- Station 4: 3909 Harrisburg Rd.
- Station 5: 2525 Neely Rd.
- Station 6: 206 N. Patrick
- Station 7: 8461 C.W. Post
- Training Center: 3105 Fire Academy Dr.



Figure 10. Fire Station 1

Address/Physical Location: 3215 E. Johnson Ave., Jonesboro, AR 72405



### General Description:

Station 1 was built in 2000 and is the headquarters for JFD. The administrative, prevention, and maintenance staff are all located here. An engine, a truck, and a Battalion Chief operate daily from this station.

|                                     | _    |                                  |         |            |                |
|-------------------------------------|------|----------------------------------|---------|------------|----------------|
| Structure                           |      |                                  |         |            |                |
| Construction Type                   | Ма   | sonry                            |         |            |                |
| Date of Construction                | 200  | 2000                             |         |            |                |
| Tornado Protection                  | No   |                                  |         |            |                |
| Auxiliary Power                     | Yes  | •                                |         |            |                |
| General Condition                   | Go   | od                               |         |            |                |
| Number of Apparatus Bays            | 5    | 5 Drive–through 0 Back–i<br>Bays |         | ck-in Bays |                |
| Special Considerations              | Is a | llso an emergency o              | peratio | ns ce      | enter          |
| Square Footage                      | 28,  | 28,997                           |         |            |                |
| Facilities Available                |      |                                  |         |            |                |
| Separate Rooms/Dormitory/Other      | 9    | Bedrooms                         |         | 20         | Beds           |
| Maximum Station Staffing Capability | 9    | 9 Normal                         |         | 20         | Emergency Ops. |
| Exercise/Workout Facilities         | Yes  | j                                |         |            |                |
| Kitchen Facilities                  | Yes  | •                                |         |            |                |
| Individual Lockers/Storage Assigned | Yes  | •                                |         |            |                |
| Training/Meeting Rooms              | Yes  | •                                |         |            |                |
| Washer/Dryer                        | Yes  | Station Wear/Li                  | nen     | Yes        | PPE            |
| Safety & Security                   |      |                                  |         |            |                |
| Sprinklers                          | Yes  |                                  |         |            |                |
| Smoke Detection                     | Yes  | Yes                              |         |            |                |
| Decontamination Area                | Yes  | Yes                              |         |            |                |
| Security                            | Key  | Keypad Entry/Key                 |         |            |                |
| Apparatus Exhaust System            | Yes  |                                  |         |            |                |



Figure 11. Fire Station 2

Address/Physical Location: 1413 W. Nettleton Ave., Jonesboro, AR 72405



## **General Description:**

Station 2 was built in 2009 and houses an engine and truck along with a Battalion Chief. with a typical daily staffing of six (6).

| Structure                           |        |                    |    |                   |  |
|-------------------------------------|--------|--------------------|----|-------------------|--|
| Construction Type                   | Maso   | nry                |    |                   |  |
| Date of Construction                | 2009   | 2009               |    |                   |  |
| Tornado Protection                  | Yes    | Yes                |    |                   |  |
| Auxiliary Power                     | Yes    |                    |    |                   |  |
| General Condition                   | Good   |                    |    |                   |  |
| Number of Apparatus Bays            | 3      | Drive-through Bays | 0  | Back-in Bays      |  |
| Special Considerations              | N/A    |                    |    |                   |  |
| Square Footage                      | 14,889 |                    |    |                   |  |
| Facilities Available                |        |                    |    |                   |  |
| Separate Rooms/Dormitory/Other      | 9      | Bedrooms           | 9  | Beds              |  |
| Maximum Station Staffing Capability | 9      | Normal             | 9  | Emergency<br>Ops. |  |
| Exercise/Workout Facilities         | Yes    |                    |    |                   |  |
| Kitchen Facilities                  | Yes    |                    |    |                   |  |
| Individual Lockers/Storage Assigned | Yes    |                    |    |                   |  |
| Training/Meeting Rooms              | Yes    |                    |    |                   |  |
| Washer/Dryer                        | Yes    | Station wear/Linen | No | PPE               |  |
| Safety & Security                   |        |                    |    |                   |  |
| Sprinklers                          | Yes    |                    |    |                   |  |
| Smoke Detection                     | Yes    |                    |    |                   |  |
| Decontamination Area                | Yes    |                    |    |                   |  |
| Security                            | Кеур   | Keypad Entry/Key   |    |                   |  |
| Apparatus Exhaust System            | Yes    |                    |    |                   |  |



Figure 12. Fire Station 3

Address/Physical Location: 2212 Brazos St., Jonesboro, AR 72405



### **General Description:**

Station 3 was built in 2008 and houses a frontline and a reserve engine, and a typical daily staffing of three (3). It is also the only station that has a Safe Haven baby box.

| Structure                           |      |  |    |     |                 |
|-------------------------------------|------|--|----|-----|-----------------|
| Construction Type                   | Mas  | onry                                   |    |     |                 |
| Date of Construction                | 200  | 8                                      |    |     |                 |
| Tornado Protection                  | Yes  | Yes                                    |    |     |                 |
| Auxiliary Power                     | Yes  |  |    |     |                 |
| General Condition                   | Goo  | od                                     |    |     |                 |
| Number of Apparatus Bays            | 3    | 3 Drive-through Bays 0 Back-in<br>Bays |    |     | Back-in<br>Bays |
| Special Considerations              | Safe | Haven Box                              |    |     |                 |
| Square Footage                      | 15,4 | 15,439                                 |    |     |                 |
| Facilities Available                | •    |  |    |     |                 |
| Separate Rooms/Dormitory/Other      | 8    | Bedrooms                               | 8  | Bed | S               |
| Maximum Station Staffing Capability | 4    | Normal                                 | 8  | Eme | ergency Ops.    |
| Exercise/Workout Facilities         | Yes  |  |    |     |                 |
| Kitchen Facilities                  | Yes  |  |    |     |                 |
| Individual Lockers/Storage Assigned | Yes  |  |    |     |                 |
| Training/Meeting Rooms              | Yes  |  |    |     |                 |
| Washer/Dryer                        | Yes  | Station wear/Linen                     | No | PPE |                 |
| Safety & Security                   | •    |  |    |     |                 |
| Sprinklers                          | Yes  |  |    |     |                 |
| Smoke Detection                     | Yes  | Yes                                    |    |     |                 |
| Decontamination Area                | Yes  | Yes                                    |    |     |                 |
| Security                            | Key  | Keypad Entry/Key                       |    |     |                 |
| Apparatus Exhaust System            | Yes  |  |    |     |                 |
| •                                   |      |  |    |     |                 |



Figure 13. Fire Station 4

# Address/Physical Location: 3900 Harrisburg Rd., Jonesboro, AR 72405



## **General Description:**

Station 4 was built in 2012 and houses an engine and truck, with a typical daily staffing of five (5).

| Structure                           |         |                         |     |              |              |
|-------------------------------------|---------|-------------------------|-----|--------------|--------------|
| Construction Type                   | Masonry |                         |     |              |              |
| Date of Construction                | 2012    |                         |     |              |              |
| Tornado Protection                  | Yes     |                         |     |              |              |
| Auxiliary Power                     | Yes     |                         |     |              |              |
| General Condition                   | God     | od                      |     |              |              |
| Number of Apparatus Bays            | 3       | Drive-through Bays      |     | 0            | Back-in Bays |
| Special Considerations              | N/      | A                       |     |              |              |
| Square Footage                      | 10,107  |                         |     |              |              |
| Facilities Available                |         |                         |     |              |              |
| Separate Rooms/Dormitory/Other      | 8       | Bedrooms                | 8   | Bed          | ls           |
| Maximum Station Staffing Capability | 4       | 4 Normal 8 Emergency Op |     | ergency Ops. |              |
| Exercise/Workout Facilities         | Yes     |                         |     |              |              |
| Kitchen Facilities                  | Yes     |                         |     |              |              |
| Individual Lockers/Storage Assigned | Yes     |                         |     |              |              |
| Training/Meeting Rooms              | No      |                         |     |              |              |
| Washer/Dryer                        | Yes     | Station wear/Linen      | Yes | PPE          | <u>:</u>     |
| Safety & Security                   |         |                         |     |              |              |
| Sprinklers                          | Yes     |                         |     |              |              |
| Smoke Detection                     | Yes     |                         |     |              |              |
| Decontamination Area                | Yes     |                         |     |              |              |
| Security                            | Key     | pad Entry/Key           |     |              |              |
| Apparatus Exhaust System            | Yes     |                         |     |              |              |



Figure 14. Fire Station 5

Address/Physical Location: 2525 Neely Rd., Jonesboro, AR 72405



## **General Description:**

Station 5 was built in 2014 and houses an engine and truck, with a typical daily staffing of five (5).

| Structure                           |        |      |                    |    |                   |
|-------------------------------------|--------|------|--------------------|----|-------------------|
| Construction Type                   | Ma     | ısor | nry                |    |                   |
| Date of Construction                | 20     | 14   |                    |    |                   |
| Tornado Protection                  | Yes    |      |                    |    |                   |
| Auxiliary Power                     | Ye     | S    |                    |    |                   |
| General Condition                   | Go     | od   |                    |    |                   |
| Number of Apparatus Bays            | 3      |      | Orive-through Bays | 0  | Back-in Bays      |
| Special Considerations              | N/     | Α    |                    |    |                   |
| Square Footage                      | 11,487 |      |                    |    |                   |
| Facilities Available                |        |      |                    |    |                   |
| Separate Rooms/Dormitory/Other      | 8      | Be   | edrooms            | 8  | Beds              |
| Maximum Station Staffing Capability | 4      | No   | ormal              | 8  | Emergency<br>Ops. |
| Exercise/Workout Facilities         | Ye     | S    |                    |    | •                 |
| Kitchen Facilities                  | Ye     | S    |                    |    |                   |
| Individual Lockers/Storage Assigned | Ye     | S    |                    |    |                   |
| Training/Meeting Rooms              | Ye     | S    |                    |    |                   |
| Washer/Dryer                        | Ye     | S    | Station wear/Linen | No | PPE               |
| Safety & Security                   |        |      |                    |    |                   |
| Sprinklers                          | Ye     | Yes  |                    |    |                   |
| Smoke Detection                     | Ye     | S    |                    |    |                   |
| Decontamination Area                | Ye     | Yes  |                    |    |                   |
| Security                            | Ke     | ура  | d Entry            |    |                   |
| Apparatus Exhaust System            | Ye     | s    |                    | _  |                   |



Figure 15. Fire Station 6

Address/Physical Location: 206 N. Patrick St., Jonesboro, AR 72405



### **General Description:**

Station 6 was built in 2009 and houses a frontline and a reserve engine as well as a hazmat truck, and has a typical daily staffing of three (3).

|                                     | 100 |                    |    |    |               |
|-------------------------------------|-----|--------------------|----|----|---------------|
| Structure                           |     |                    |    |    |               |
| Construction Type                   | Ma  | Masonry            |    |    |               |
| Date of Construction                | 200 | 2009               |    |    |               |
| Tornado Protection                  | Yes | i                  |    |    |               |
| Auxiliary Power                     | Yes | ;                  |    |    |               |
| General Condition                   | God | od                 |    |    |               |
| Number of Apparatus Bays            | 3   | Drive-through Bays |    | 0  | Back-in Bays  |
| Special Considerations              | N/A | 4                  |    |    |               |
| Square Footage                      | 11, | 452                |    |    |               |
| Facilities Available                |     |                    |    |    |               |
| Separate Rooms/Dormitory/Other      | 8   | 8 Bedrooms 8 Beds  |    | ds |               |
| Maximum Station Staffing Capability | 4   | Normal             | 8  | En | nergency Ops. |
| Exercise/Workout Facilities         | Yes | ;                  |    |    |               |
| Kitchen Facilities                  | Yes | ;                  |    |    |               |
| Individual Lockers/Storage Assigned | Yes |                    |    |    |               |
| Training/Meeting Rooms              | No  |                    |    |    |               |
| Washer/Dryer                        | Yes | Station wear/Linen | No | PP | E             |
| Safety & Security                   |     |                    |    |    |               |
| Sprinklers                          | Yes | Yes                |    |    |               |
| Smoke Detection                     | Yes | Yes                |    |    |               |
| Decontamination Area                | Yes | Yes                |    |    |               |
| Security                            | Key | pad Entry          |    |    |               |
| Apparatus Exhaust System            | Yes |                    |    |    |               |



Figure 16. Fire Station 7

Address/Physical Location: 8455 C.W. Post Rd., Jonesboro, AR 72405



## **General Description:**

Station 7 was built in 2008 and houses an engine and a tanker with a typical daily staffing of three (3).

|                                     | 1000 |                    |    |                |  |
|-------------------------------------|------|--------------------|----|----------------|--|
| Structure                           |      |                    |    |                |  |
| Construction Type                   | Ма   | Masonry            |    |                |  |
| Date of Construction                | 20   | 2008               |    |                |  |
| Tornado Protection                  | Yes  | 5                  |    |                |  |
| Auxiliary Power                     | Yes  | 5                  |    |                |  |
| General Condition                   | Go   | od                 |    |                |  |
| Number of Apparatus Bays            | 3    | Drive-through Bays | 0  | Back-in Bays   |  |
| Special Considerations              | N/A  | Ą                  | •  |                |  |
| Square Footage                      | 10,  | ,103               |    |                |  |
| Facilities Available                |      |                    |    |                |  |
| Separate Rooms/Dormitory/Other      | 8    | Bedrooms           | 8  | Beds           |  |
| Maximum Station Staffing Capability | 4    | Normal             | 8  | Emergency Ops. |  |
| Exercise/Workout Facilities         | Yes  | 5                  |    |                |  |
| Kitchen Facilities                  | Yes  | 5                  |    |                |  |
| Individual Lockers/Storage Assigned | Yes  | 5                  |    |                |  |
| Training/Meeting Rooms              | No   |                    |    |                |  |
| Washer/Dryer                        | Yes  | Station wear/Linen | No | PPE            |  |
| Safety & Security                   |      |                    |    |                |  |
| Sprinklers                          | Yes  | Yes                |    |                |  |
| Smoke Detection                     | Yes  | Yes                |    |                |  |
| Decontamination Area                | Yes  | Yes                |    |                |  |
| Security                            | Key  | pad Entry          |    |                |  |
| Apparatus Exhaust System            | Yes  | 5                  |    |                |  |
|                                     |      |                    |    |                |  |



Figure 17. Training Facility

Address/Physical Location: 3105 Fire Academy Dr., Jonesboro, AR 72405



### **General Description:**

This facility is known as the Arkansas State Fire Training Facility Northeast and is leased to the JFD for use. The property is centered around a concrete training building, with additional props on site to train for vehicle extrication, and confined space. There is also a dedicated smoke building and a building that has a garage, office, classroom, and storage space for new hire academies.

| Structure                           |     |                    |     |                |  |
|-------------------------------------|-----|--------------------|-----|----------------|--|
| Construction Type                   | Cor | Concrete           |     |                |  |
| Date of Construction                | 200 | 08                 |     |                |  |
| Tornado Protection                  | N/A | 4                  |     |                |  |
| Auxiliary Power                     | No  |                    |     |                |  |
| General Condition                   | Ma  | rginal/Poor        |     |                |  |
| Number of Apparatus Bays            | 0   | Drive-through Bays | 1   | Back-in Bays   |  |
| Special Considerations              | Sha | red Property       |     |                |  |
| Square Footage/Acreage              | 7.8 | Acres              |     |                |  |
| Facilities Available                |     |                    |     |                |  |
| Separate Rooms/Dormitory/Other      | 0   | 0 Bedrooms 0       |     | Beds           |  |
| Maximum Station Staffing Capability | 0   | 0 Normal N/A       |     | Emergency Ops. |  |
| Exercise/Workout Facilities         | No  |                    |     |                |  |
| Kitchen Facilities                  | No  |                    |     |                |  |
| Individual Lockers/Storage Assigned | No  |                    |     |                |  |
| Training/Meeting Rooms              | Yes | j                  |     |                |  |
| Washer/Dryer                        | No  | Station wear/Linen | Yes | PPE Dryer      |  |
| Safety & Security                   |     |                    |     |                |  |
| Sprinklers                          | No  |                    |     |                |  |
| Smoke Detection                     | No  | No                 |     |                |  |
| Decontamination Area                | No  | No                 |     |                |  |
| Security                            | Gat | :e                 |     |                |  |
| Apparatus Exhaust System            | No  |                    |     |                |  |



## **Fire Station Summary**

After touring and analyzing the JFD stations, ESCI noted that the general condition of all the stations was good. The Jonesboro Fire Department has done an excellent job with standardizing the general layout and operational capacity of the stations. There are a handful of deviations from station to station where not all have a PPE extractor, a larger dedicated fitness space, or a training/meeting room. All in all, JFD has done well to provide members with basic needs such as appliances, station furniture, and workout equipment. All stations have more sleeping rooms and bay space than what is utilized daily, providing for future expansion in staffing and response apparatus.

JFD understands the risk of cancer in the fire service. Although none of the stations have dedicated source capture apparatus exhaust systems, the International Agency for Research on Cancer rates diesel engine exhaust as a Group 1 carcinogen, which means it is known to cause cancer in humans.

All stations utilize the full capacity of the Mach Alerting system from Motorola. The system alerts staff appropriately at all times of the day and assigns a response frequency.

## **Apparatus & Vehicles**

Fire stations need to have apparatus assigned to the station for them to be functional to provide emergency services to the citizens and visitors of Jonesboro. ESCI and JFD evaluated the condition of all JFD apparatus and vehicles. The condition listed is a baseline for JFD to use and does not necessarily indicate a need for replacement. The scoring of all apparatus is featured in Figure 19: Age, Condition, Serviceability.



Figure 18. Apparatus Scoring

| Evaluation Components                                   | Р  | oints Assignment Criteria  |  |  |
|---|--|--|--|--|
| Age:  | One point is assigned for every year of chronological age, based on in-service date.   |  |  |  |
| Miles/Hours:  | One point is assigned for every 10,000 miles or 1,000 hours.   |  |  |  |
| Service:  | One, three, or five points are assigned based on service-type received: routine preventive, minor, or major. The more severe the service need, the higher the number of points.  |  |  |  |
| Condition:  | One, three, or five points are assigned based on body condition, rust, interior condition, accident history, anticipated major repairs or upgrades, and similar items. The worse the condition, the higher the number of points. |  |  |  |
| Reliability:  | One, three, or five points are assigned based on the frequency a vehicle is out of service for repair. The lower the reliability, the higher the number of points.   |  |  |  |
| Point Ranges  | Condition Rating   | Condition Description  |  |  |
| Under 18 points   | Very Good  | 0-5 years of service; low mileage; no defects; performing as intended                            |  |  |
| 18-22 points  | Good   | 6-10 years of service; moderate mileage; minor defects; performing as intended                   |  |  |
| 23-27 points  | Fair   | 11–15 years of service; high mileage;<br>moderate defects; functioning but worn                  |  |  |
| 28 points or higher                                     | Poor   | 16+ years of service; high mileage; minor or major defects; not functioning as desired           |  |  |
| 28 points or higher plus a risk to safety and/or health | Critical   | 16+ years of service; high mileage; major defects; not functioning; risk to safety and/or health |  |  |



Figure 19. Age, Condition, & Serviceability

| Apparatus     | Manufacture | Year | Location      | Mileage | Total<br>Score | Condition<br>Rating |
|---------------|-------------|------|---------------|---------|----------------|---------------------|
| Engines       |             |      |               |         |                |                     |
| Engine 1      | Pierce      | 2020 | Station 1     | 45,784  | 13.6           | Very Good           |
| Engine 2      | Pierce      | 2016 | Station 2     | 56,687  | 20.7           | Good                |
| Engine 3      | Pierce      | 2023 | Station 3     | 10,178  | 6.0            | Very Good           |
| Engine 4      | Pierce      | 2018 | Station 4     | 45,039  | 16.5           | Very Good           |
| Engine 5      | Pierce      | 2019 | Station 5     | 35,935  | 14.6           | Very Good           |
| Engine 6      | Pierce      | 2021 | Station 6     | 43,578  | 13.4           | Very Good           |
| Engine 7      | Pierce      | 2009 | Station 7     | 92,982  | 31.3           | Poor                |
| Ladder/Aeria  | als         |      |               |         |                |                     |
| Truck 1       | Pierce      | 2022 | Station 1     | 15,044  | 7.5            | Very Good           |
| Truck 2       | Pierce      | 2017 | Station 2     | 42,189  | 16.2           | Very Good           |
| Truck 4       | Pierce      | 2005 | Station 4     | 81,100  | 28.0           | Poor                |
| Reserve App   | aratus      |      |               |         |                |                     |
| Engine 10     | Pierce      | 2013 | Training Site | 80,516  | 26.1           | Fair                |
| Engine 11     | Pierce      | 2006 | Station 3     | 76,242  | 32.6           | Poor                |
| Engine 12     | Pierce      | 2011 | Station 6     | 82,046  | 29.2           | Poor                |
| Truck 5       | Pierce      | 2003 | Station 5     | 84,113  | 36.4           | Poor                |
| Specialty App | paratus     |      |               |         |                |                     |
| HazMat 2      | Kenworth    | 2004 | Station 6     | 7,449   | 26.7           | Fair                |
| Rescue 1      | Pierce      | 2004 | Station 1     | 66,606  | 34.7           | Poor                |
| Tanker 1      | Kenworth    | 2004 | Station 7     | 9,136   | 28.9           | Poor                |

## Distribution & Deployment

JFD is intentional about its deployment strategy, with consistent staffing of apparatus at all locations. It utilizes a single manufacturer for its firefighting apparatus, an approach that helps with continuity of training and consistency when staff move to different fire stations. Additionally, having the same manufacturer helps to improve maintenance costs and efficiency by having specific fluids, filters, and parts on hand. All but one of the frontline engines has a condition rating of "very good" or "good," with Engine 7 receiving a "poor" rating. This engine is up for replacement currently. Two of the three frontline ladder trucks have a condition rating of "very good," with Truck 4 having a rating of "poor" as the oldest frontline apparatus.



JFD is very fortunate to receive \$500,000 annually from Jonesboro City Water and Light (CWL), a municipal improvement district providing water, sewer, and electricity to Jonesboro. This money is used to make regular purchases to update firefighting apparatus.

Each of the seven fire stations has an engine with a minimum staffing of three (3). At Stations 1, 2 and 4 have a co-located ladder truck with a minimum staffing of two (2). When staffing is above minimums, additional staff are assigned to the ladder trucks. Reserve apparatus is located at fire stations as backups to frontline apparatus except for Engine 10, which is located at the training facility.

#### Maintenance

Apparatus maintenance has been noted as a concern by the Fire Chief. Station 1 currently is equipped with the necessary tools and equipment to perform basic maintenance on all fire apparatus. Due to the nature of emergency services and the need to have an operational apparatus in service, there is often more time–sensitive work or more work in general to be done than staff to accomplish it. JFD has recognized that more dedicated staff are needed and has been approved to hire a mechanic.

It should be a priority to ensure that apparatus maintenance staff get the appropriate certifications from the Emergency Vehicle Certification Commission (EVCC). EVCC is a not-for-profit organization dedicated to improving the quality of emergency vehicle service and repair throughout the United States and Canada by means of a certification program that provides technicians recognition for the education, training, and experience acquired in the service and repair of emergency vehicles. The organization sponsors classes and certification testing across the United States and Canada through local, regional, and state conferences.

National Fire Protection Association 1901: *Standard for Automotive Fire Apparatus*, recommends that fire apparatus 15 years of age or older be placed into reserve status, and apparatus 25 years or older should be replaced. This is a general guideline, and the standard recommends using the following objective criteria in evaluating fire apparatus lifespan:

- Vehicle road mileage.
- Engine operating hours.
- The quality of the preventative maintenance program.
- The quality of the driver training program.



- Whether the fire apparatus was used within its design parameters.
- Whether the fire apparatus was manufactured on a custom or commercial chassis.
- The quality of workmanship by the original manufacturer.
- The quality of the components used in the manufacturing process.
- The availability of replacement parts.

#### **Future Needs**

A conceptual model utilized by some fire departments is the Economic Theory of Vehicle Replacement. The theory states that, as a vehicle ages, the cost of capital diminishes, and its operating cost increases. The model suggests the optimal time to replace any piece of apparatus is when the operating cost begins to exceed the capital costs. This optimal time may not be a fixed point, but rather a range of time.

Shortening the replacement cycle to this window allows an apparatus to be replaced at optimal savings to the fire department. If an agency does not routinely replace equipment in a timely manner, the overall reduction in replacement spending can result in a quick increase in maintenance and repair expenditures.

Fortunately, due to an annual infusion of \$500,000 from Jonesboro City Water and Light, JFD is well positioned to replace apparatus at regular intervals. It is typical for JFD to put a significant amount of mileage and associated wear and tear on apparatus due to their response model, fire station locations, and overall footprint of the City of Jonesboro. Currently, there are two Type I fire engines on order, with one being delivered in 2025 and the other in 2026. JFD is also working toward purchasing a replacement 100–foot aerial ladder truck in 2025.

## **Equipment**

JFD capital equipment planning focuses on systematic replacement and maintenance to ensure operational readiness. For instance, 20 sets of bunker gear are replaced and staggered to keep primary sets under five years of age and reserve sets between five and 10 years of age. Similarly, ten SCBA bottles are replaced each year to ensure compliance is maintained. Other equipment, such as radios, SCBA, hazmat, and tech rescue gear, is replaced or added as needed, with JFD personnel tracking requirements and proposing updates through the annual budget process. An additional resource is a restricted state fund, ACT 833, which provides approximately \$200,000 annually, based on population, exclusively for training and equipment.



## **Future Needs**

Along with the internal strategic planning process, a "wish list" is maintained and helps prioritize discretionary items. JFD is currently developing a replacement plan for thermal imagers to maintain effective fire suppression capabilities. All in all, evaluating and prioritizing future needs is an ongoing and fluid process that takes into account the budget or current priority.



# **Workforce Development & Training**

The goal of staffing and managing personnel in any organization is to maximize the human resources of sufficient numbers and capabilities to achieve the mission of the organization. To be effective in personnel management, there must be quality leadership, well-communicated strategic direction, comprehensive policies and procedures, and a culture in which cooperation to achieve the day-to-day objectives is optimistic. Consistency, fairness, safety, and opportunities for personal and professional growth are key values for the healthy management of an organization. Additionally, a contemporary fire department must have enough administrative resources to adequately provide logistical support for the various services provided to the citizens.

Several national organizations recommend standards to address staffing issues. The Occupational Health and Safety Administration (OSHA) Respiratory Protection Standard and the National Fire Protection Association (NFPA) Standard 1710 are frequently cited as authoritative documents. In addition, the Center for Public Safety Excellence (CPSE) publishes benchmarks for the number of personnel recommended on an emergency scene for various levels of risk (known as the effective response force).

# Review & Evaluate Administration and Support Staffing Levels

Much like any fire department, the successful operation and administration of the wide range of services provided by the Jonesboro Fire Department requires the appropriate number of dedicated resources. Achieving the right balance between administrative/support staff and operational resources is critical to fulfilling JFD's mission and responsibilities. The following figure outlines the administrative and support structure of JFD.

Figure 20. JFD Administrative Staff

| Position/Rank             | No. of Positions         |
|---------------------------|--------------------------|
| Fire Chief                | 1                        |
| Assistant Fire Chief      | 1                        |
| Division Chief (Training) | 1                        |
| Captains (Training)       | 2                        |
| Administrative Assistant  | 1 full time, 1 part time |
| Total                     | 6.5                      |



JFD has two Division Chiefs. One is responsible for the Training Division and has two (2) Captains assigned to them. The other is responsible for Community Risk Reduction and also serves as the Fire Marshal. The Community Risk Reduction Division Chief supervises four Captains who work as fire inspectors and investigators. The Community Risk Reduction staff is not included in administrative staffing calculations because they have specific responsibilities that serve external customers through fire inspections, investigations, and enforcement of the fire code. Their duties are not intended to support internal JFD personnel, which distinguishes them from true administrative or support staff.

The Division Chief of Community Risk Reduction has a specifically defined role in administering and enforcing the fire code throughout Jonesboro. With the assigned staff and additional support from operational personnel, this division performs annual fire inspections for all commercial occupancies. Because of their externally focused responsibilities, the primary internal administrative duties, such as fleet management, personal protective equipment, uniforms, training, and staffing, are handled by the Fire Chief, Assistant Fire Chief, and the Division Chief of Training.

Administrative staffing currently represents approximately 5% of the total JFD workforce. Based on ESCI's experience, effective administrative staffing levels typically range between 12 and 15% of total personnel. After reviewing the functions and responsibilities assigned to administration, ESCI concludes that the number of full-time equivalents currently assigned to administrative duties is below what is needed to adequately support JFD's internal operational and organizational needs.

## **Review & Evaluate Operational Staffing Levels**

When developing an effective response force to address the needs of a community, several factors must be considered. NFPA 1710 addresses the recommended resources for different types of emergency incidents.

Tasks performed at the scene of a fire can be broken down into two key components: life safety and fire control, and extinguishment. Responders base life safety tasks on the number of building occupants and their location, status, and ability to take self-preservation action. Life safety-related tasks involve searching for, rescuing, and evacuation of victims. The fire control component involves delivering sufficient water to extinguish the fire and creating an environment within the building that allows safe entry by firefighters.



The number and types of tasks needing simultaneous action will dictate the minimum number of firefighters required to combat different types and magnitudes of fire. In the absence of adequate personnel to perform concurrent action, the commanding officer must prioritize the tasks and complete some in sequential order, rather than concurrently.

#### These tasks include:

- Command
- Water Supply
- · Handline Operation
- Backup Hose Lines
- Search and Rescue
- Ground Ladders
- Ventilation
- Initial Rapid Intervention Crew

The first 15 minutes are the most crucial period in the suppression of a fire. The timing of this 15-minute period does not start when the firefighters arrive at the scene but begins when the fire initially starts. How effectively and efficiently firefighters perform during this period has a significant impact on the overall outcome of the event. This general concept is applicable to fire, rescue, and medical situations. Responders must perform critical tasks in a timely manner to control a fire or treat a patient. The Jonesboro Fire Department is responsible for ensuring that responding companies can perform all the tasks described in a prompt, efficient, and safe manner.

Considerable ongoing local, regional, and national discussion and debate draws a strong focus and attention to the matter of firefighter staffing. Frequently, this discussion is set in the context of firefighter safety. The jurisdiction may choose to establish response demand zones and use criteria outlined in NFPA standards. NFPA 1710, 2020 edition, specifies the number of firefighters assigned to an engine company to be a "minimum of four on–duty members per engine company." ESCI notes that the more critical issue is the number of firefighters assembled at the scene of an incident in conjunction with the scope and magnitude of the tasks expected of them, regardless of the type or number of vehicles upon which they arrive. NFPA 1710 recommends that the number of on–duty fire suppression members should be sufficient to perform the necessary firefighting operations given the expected firefighting conditions. The standard further



recommends that the numbers shall be determined through task analyses that take the following factors into consideration:

- Life hazard to the City of Jonesboro, including both the resident and visitor populations
- Safe and effective firefighting performance
- Potential property loss
- Nature, configuration of protected properties
- The presence and application of standard procedures at all fire scenes

Some terms are interchangeable, such as "assembly of firefighters on an incident," which may also be referred to as the "initial full alarm assignment," "effective firefighting force" (EFF), or "effective response force" (ERF). For example, in the following figure, ESCI describes the NFPA 1710 level of staffing needed to safely and effectively mitigate a single-family, 2,000-square-foot, two-story residential structure without a basement and with no exposures.

Figure 21. Full Alarm Assignment for Structure Fire, Initial

| Initial Full Alarm Assignment – 2,000 Sq. Ft. Residential Structure Fire |    |  |  |  |
|--|----|--|--|--|
| Incident Commander   | 1  |  |  |  |
| Water Supply Operator  | 1  |  |  |  |
| 2 Application Hose Lines   | 4  |  |  |  |
| 1 Support Member per Line  | 2  |  |  |  |
| Victim Search and Rescue Team  | 2  |  |  |  |
| Ground Ladder Deployment   | 2  |  |  |  |
| Aerial Device Operator   | 1  |  |  |  |
| Incident Rapid Intervention Crew (4 FF)                                  | 4  |  |  |  |
| Total  | 17 |  |  |  |

Additional crews are necessary when a fire escalates beyond the initial assignment's capability, or has unusual characteristics such as a wind-driven fire, or when involving an accelerant with a highly flammable compound. There are also types of non-fire scenarios, such as mass casualty incidents, explosions, tornadoes, etc., that may need additional staffing. It is difficult or impossible to staff for these worst-case incidents.



These incidents may require a robust mutual aid or automatic aid plan for assistance and call-back policies.

## **Staff Scheduling Methodology**

Operations personnel are assigned to three shifts, and work a rotating 48-hours-on, 96-hours-off work schedule and are also given 10 Kelly Hours off per cycle. This averages out to a 53-hour workweek and 2,756 average annual hours. The maximum hours allowed by the FLSA for firefighters at JFD is 182 hours in a 24-day period. Any hours worked over the established 24-day threshold is paid at 1.5 times the hourly rate.

Administrative staff, including Chief Officers, Community Risk Reduction staff, and the full-time Administrative Coordinator, generally work on a daytime/weekday schedule totaling a 40-hour workweek.

Figure 22. Daily Apparatus Staffing

| Station                      | Engine   | Staff | Truck   | Staff | Battalion   | Staff | Minimum Daily<br>Staffing |
|------------------------------|----------|-------|---------|-------|-------------|-------|---------------------------|
| Station 1                    | Engine 1 | 3     | Truck 1 | 2     | Battalion 1 | 1     | 6                         |
| Station 2                    | Engine 2 | 3     | Truck 2 | 2     | Battalion 2 | 1     | 6                         |
| Station 3                    | Engine 3 | 3     |         |       |             |       | 3                         |
| Station 4                    | Engine 4 | 3     | Truck 4 | 2     |             |       | 5                         |
| Station 5                    | Engine 5 | 3     |         |       |             |       | 3                         |
| Station 6                    | Engine 6 | 3     |         |       |             |       | 3                         |
| Station 7                    | Engine 7 | 3     |         |       |             |       | 3                         |
| Total Daily Minimum Staffing |          |       |         |       |             | 29    |                           |

## **Current Deployment Methods & Staffing Performance**

There are three operational shifts that operate out of seven fire stations. Each shift has 40 firefighters assigned to it with a daily minimum staffing of 29 as illustrated in Figure 22. The 11 positions that are often not staffed daily are due to normal issues for JFD. These are vacations, sick leave, workers' compensation, military leaves, vacancies, and Kelly Day hours. JFD predominately staffs fire engines with three (3) personnel and ladder



trucks with two (2) personnel. When there is additional staffing above 29 minimum, those personnel are typically assigned to a ladder to better support staffing for that apparatus. JFD is looking into the implications of increasing daily minimum staffing to include three (3) personnel on each ladder truck.

## Policies, Rules, Regulations, Manuals, & Handbooks

Policies, rules, regulations, manuals, and handbooks are essential documents that establish the framework for operational, administrative, and behavioral standards within JFD. The policies at JFD outline broad guidelines for decision–making, covering areas like emergency response protocols, safety procedures, and personnel conduct, while rules and regulations provide specific, enforceable directives to ensure compliance with local, state, and federal laws. Manuals, such as the standard operating guidelines (SOGs), offer detailed instructions on daily operations, equipment use, incident management, and workplace expectations. The SOGs are designed to promote consistency, accountability, and safety, ensuring firefighters and staff operate efficiently and professionally while aligning with JFD's mission and legal requirements. Along with SOGs, other foundational documents are the Medical Protocols for providing medical care in the field and "The Playbook," which provides a framework for fire ground operations. Regular updates and training on these materials are critical to adapting to evolving standards and maintaining effective service delivery.

## Compensation

The Jonesboro Fire Department's ability to attract, hire, and retain employees directly impacts its ability to provide the desired services effectively and efficiently. JFD should provide periodic reviews of current compensation structures, market competitiveness, and City of Jonesboro compensation philosophies. These internal and external comparisons of equitable positions and workloads ensure JFD can attract and maintain an effective workforce. The pay scales for JFD as compared to surrounding jurisdictions show that they are very competitive with pay and benefit packages. Raises are part of the annual budgetary process with the City of Jonesboro, and JFD personnel are given pay increases at the rate of other City of Jonesboro employees.

## Labor-Management Relationships & Issues

The labor-management relationships at JFD involve the dynamic between Jonesboro Fire Department leadership and its workforce. At JFD the labor force is represented by the International Association of Firefighters (IAFF), which often negotiates working



conditions, wages, benefits, and certain operational policies into a Collective Bargaining Agreement. The labor union and the City of Jonesboro do not currently have a Collective Bargaining Agreement in place. Nonetheless, these relationships are critical for maintaining morale, ensuring effective service delivery, and addressing issues such as staffing shortages, overtime demands, and safety concerns. Effective labor management requires open communication, mutual respect, and collaborative problem–solving to align fire department goals with employee needs, fostering a productive environment while ensuring the community receives high–quality emergency services. The labor union and management meet regularly to address issues and concerns in an open forum.

## **Certifications & Licensing**

JFD has a robust internal training program for EMS and basic firefighting, led by the Division Chief of Training and supported by two Captains. Certifications are earned through the Arkansas State Fire Training Academy, which is affiliated with Southern Arkansas University Tech. They are accredited by the International Fire Service Accreditation Congress (IFSAC), the National Board on Fire Service Professional Qualifications (Pro–Board), and the Arkansas Department of Health to provide numerous certifications to emergency and community responders. Through the Arkansas State Fire Training Academy, JFD has access to certifications and the associated levels for basic Firefighting, Fire Officer, Driver/Operator, Fire Instructor, Fire Inspector, Fire Investigator, Technical Rescue, and Hazardous Materials. Most EMS training is provided through internal staff at JFD. Currently, approximately two–thirds of the operational staff are certified to the EMT–Basic level with no Advanced Life Support–certified personnel.

## **Disciplinary Process**

Standard Operating Guideline 101.00 addresses disciplinary action at JFD. Whereas disciplinary action is used by supervisors to address unacceptable performance or conduct, it aims to improve departmental efficiency. Any action must respect employees' legal rights and be based on objective, non-discriminatory factors, disregarding age, color, disability, ethnicity, national origin, political affiliation, race, religion, gender, or sexual orientation. The potential actions include verbal warnings, written reprimands, suspension, demotion, or termination. The City of Jonesboro Employee Handbook can be used for assistance and provides more detail. This SOG, along with the process outlined by the City of Jonesboro's Civil Service, encapsulates discipline for JFD. The City of Jonesboro's Civil Service and its associated manual specifically outline the disciplinary process as follows:



Any employee who has completed his or her probationary periods with the Fire Department shall not be terminated, demoted, suspended or reduced in compensation, except for violation of the rules and regulations of their respective departments or for other good cause.

Any employee who is terminated, demoted, suspended or reduced in compensation shall be given a written statement setting forth the factual reasons for the action taken, signed by his or her supervisor and the department head. Any employee who is terminated, demoted, suspended or reduced in compensation may request a hearing with the department head regarding the reasons for the action taken by submitting a written request for a hearing to the department head within five (5) working days from receipt of the written statement from the department.

The department head shall, after the hearing is concluded, prepare a written summary of the facts and conclusions and deliver one (1) copy to the employee. If the action is upheld by the department head, then the employee shall be terminated, demoted, suspended or reduced in compensation, unless within ten (10) days (the ten-day notice begins the first day the employee is served notice), from the receipt of the written findings of facts and conclusions, the employee files an Appeal with the Commission requesting a trial and setting forth the issues to be determined by the Commission.

The Commission shall set a trial date not more than fifteen (15) days from the receipt of the appeal and shall notify the employee or his or her representative of the time, place, and date of the hearing. The employee may be represented by Counsel at the hearing. The parties shall exchange lists of witnesses at least five (5) days prior to the trial. All witnesses shall testify under oath. The parties shall have the right to cross-examine the witness.

Each party shall have the right to one (1) continuance. Any request for continuance shall be made at least forty-eight (48) hours prior to the trial date. All other continuances may only be for good cause shown. The quorum of the Commission shall sit as jury in the trial and the Chairman of the Commission or Acting Chairman shall preside over the trial and shall rule on the questions of evidence and pleadings. A majority vote of the members of the Commission shall be necessary to decide the case. All votes of the Commission must be made in an open meeting and the yea's and the no's of the Commission shall



decide if the reasons for discharge or reduction were well founded or proper, and if so, the said discharge or reductions shall be effective as of the date of notice.

If an employee is dissatisfied with the decision of the Commission, the employee shall appeal to the Circuit Court of Craighead County by filing with the Commission a Notice of Appeal within thirty (30) days after the Commission's decision. The Commission shall send a complete transcript to the Circuit Court Clerk's office. An employee who desires a copy of a transcript must purchase it from the court reporter who transcribed the proceedings.

A record shall be prepared of all hearings and other precedents before the Jonesboro Civil Service Commission, and all hearings before the Commission shall be steno-graphically recorded.

No person in the department affected hereby shall be appointed, reduced, suspended, discharged or otherwise discriminated against because of his political opinion or affiliation, or because of his race, religion, sex or national origin. Members of the fire departments shall be expected to comply with all laws of the State of Arkansas, the Federal Government, and the City of Jonesboro, and violations of any of the same may result in disciplinary action being taken against said individual up to and including dismissal from the department. Conviction of any felony shall result in dismissal from the department.

In the event a member shall be found guilty, the member shall be immediately discharged from the roles of said department and shall receive all wages previously withheld during the suspension, less any remuneration which such officer may have received from other sources and pending the final determination of this case.

## **Application & Recruitment Processes**

The City of Jonesboro and specifically the Jonesboro Fire Department utilize civil service testing for recruitment. Civil service testing is a structured, merit-based process used by many municipalities and government agencies in the United States to evaluate and hire candidates for firefighter positions. The goal is to ensure that hiring is fair, transparent, and based on qualifications, skills, and abilities, rather than favoritism or political influence.



The typical process is that a job opening or job openings for firefighter position(s) are posted through the City of Jonesboro's human resources department. The announcement includes eligibility requirements, such as education (high school diploma or GED), a valid driver's license, and not being convicted of an imprisonable crime. Additionally, applicants will have to pass a written examination with a minimum score of 75%, as well as a physical fitness test.

The written examination is designed to evaluate cognitive abilities and job-related knowledge. It includes topics such as reading comprehension, basic mathematics, mechanical reasoning, spatial orientation, situational judgment, firefighting terminology and procedures, and memory and observation skills. The test is administered in a proctored setting and consists of multiple-choice questions.

The physical fitness assessment is scored on a pass or fail basis and includes the following components:

- · Stair climb with a weighted vest
- Hose drag
- Equipment carry
- Ladder raise
- Rescue drag (pulling a manneguin)
- Ventilation simulator

Once an applicant passes these minimum requirements, they are ranked from highest to lowest with their written score and put on the eligibility list. The applicant will be interviewed by the Fire Chief or their representative(s). Per the Jonesboro Civil Service Commission, the Fire Chief is required to hire one of the top five applicants on the list.

## Testing, Measuring, & Promotion Processes

Civil service testing for promotions within the Jonesboro Fire Department is governed by the City of Jonesboro's Civil Service Commission and follows a structured, meritbased process to ensure fairness and transparency. The process is designed to evaluate firefighters' qualifications, skills, and readiness for higher ranks, such as Driver/Engineer, Captain, or Battalion Chief.

The City of Jonesboro's Civil Service manual states that:



The Commission shall give notice of all fire promotional examinations by posting notice thereof on the bulletin board or front doors of Jonesboro City Hall, in conspicuous places at the respective departments, and by written notification to the chiefs of the respective departments, at least thirty (30) days prior to the examination date. The notice shall state the time, manner and place of making application for admission to such test, and any other information which the Commission considers pertinent. All applications must be submitted to the Jonesboro Civil Service Commission office at least fourteen (14) days prior to the time set for the examination. The promotional process for JFD typically involves multiple stages, including eligibility verification, written exams, practical assessments, interviews, and seniority considerations.

To be eligible for promotion and to compete in the promotional cycle, a firefighter must have completed five (5) years from their current hire date for the position of driver. An individual must complete the probationary period of their new rank and hold that rank for a total of one (1) year before being eligible to compete in the promotional cycle for the next higher rank.

Promotion examinations are held on the first Saturday in March, with additional processes occurring as needed under the rule of the Civil Service Commission. Each rank will have a specific test that may include written or oral questions; trial of the performance of work; inquiries into facts relating to education, experience, or accomplishments; investigations of the records and success attained; personal characteristics; or any combination of these tests.

The practical test for Driver/Engineer is based on NFPA 1002: *Standards for Fire Apparatus Driver/Operator Qualifications*, and to pass the candidate will require a minimum score of 30% or, at the election of the Commission with a score determined by computing 75% of the highest score made on the examination. To pass the written examination, the candidate must have a score of 70% or, at the election of the commission with a score determined by computing 75% of the highest score made on the examination during each cycle of examination for each rank.

For the oral examination, the Fire Chief or his/her authorized representative appoints a committee of individuals with supervisory/leadership skills and background. The oral promotional interview candidates shall be evaluated on the answering of appropriate questions and pass the examination with a score of 30% or at the election of the



Commission with a score determined by computing 75% of the highest score made on the examination during each cycle of examination for each rank.

The composite score for promotion applicants for the positions of Captain, Battalion/Division Chief, and Assistant Chief is composed of a weighted percentage of 62.5% of the written examination and 37.5% of the oral examination. The candidate must obtain a score of 70% on the written examination and a score of 30% on the oral examination to be placed on the eligibility list. The composite score for promotion applicants for the positions of Driver/Engineer is composed of a weighted percentage of 40% of the written examination, 40% of the practical examination, and 20% of the oral examination. The candidate must obtain a score of 70% on the written examination, a score of 30% on the practical examination, and a score of 30% on the oral examination to be placed on the eligibility list.

The promotion eligibility list shall be certified by the Commission. The highest composite score attained will be assigned eligibility rank #1, the second highest composite score will be assigned eligibility rank #2, etc., with all candidates being ranked who have passed all promotional exams. All lists shall remain in effect for a period of one (1) year from the certification date, or a period set by the Commission. No list shall remain in effect for more than two (2) years.



## **Training Program**

Training is the foundation of all aspects of emergency services. An individual's ability to effectively utilize resources and equipment is dependent on the level of training an organization provides. The following section provides an overview of the equipment, facilities, execution, and efficacy of the current training program.

## **General Training Competencies**

The Jonesboro Fire Department puts a focus on the physical and technical skills for fire suppression activities that encompass a comprehensive set of abilities to ensure firefighters can effectively and safely combat fires. Physically, firefighters must develop strength, endurance, and agility through rigorous fitness training, including cardiovascular exercises, weightlifting, and simulations like ladder climbs or hose drags, to handle the demands of heavy gear and intense environments. Technically, they must master skills such as fire behavior analysis, ventilation techniques, hose management, and forcible entry, often practiced through live-fire training and scenario-based drills. Proficiency in operating equipment like pumps, nozzles, and thermal imaging cameras, along with knowledge of building construction and fire dynamics, is critical as well. These competencies are created for new recruits in a training academy setting and reinforced through regular training, certifications, and adherence to standards like those set by the National Fire Protection Association (NFPA), ensuring firefighters are prepared for diverse fire suppression scenarios while prioritizing safety and teamwork.

## **Training Administration**

The JFD Training Division is led by a Division Chief with two assigned Captains that assist with the facilitation of training programs. The Division Chief primarily works out of headquarters and has additional responsibilities. The Training Captains have an office at the training facility and are tasked with creating lesson plans and facilitating recruit training, along with monthly training associated with Insurance Services Organization (ISO) requirements.

## Training Schedule

The training schedule is managed by the Division Chief of Training with the utilization of the TargetSolutions software platform.



### **Training Facilities**

JFD has a use agreement with Craighead County to use the local fire training asset located at 3105 Fire Academy Dr., Jonesboro, Arkansas. This facility is centered around a multi-story concrete training structure that can be utilized for search and rescue, live fire activities, and many other structural firefighting drills. The property consists of 7.8 acres that also house props for confined space training, propane fires, pump testing, and vehicle extrication. The property is most heavily utilized for training academies to prepare new staff for shift work. There are two additional buildings, one serving as a "smoke" building to simulate a low-visibility residential environment. The other building is where the office of the two Training Captains is located, along with a classroom, garage, and storage facility for bunker gear and other associated equipment. Although these facilities are functional, they are in need of updating and repair. Since the facility is a training school asset and JFD utilizes the property through a use agreement, they have little to no ability to improve the property.

### Training Program Goals & Objectives

The main tenet of the JFD training program is to prepare and improve the firefighting staff to do their jobs at the highest and safest level. The goal would be to have enough staff and the type of training facility to move beyond just providing the basic and required annual training. It is becoming more common that the Training Division is tasked with providing multiple training academies each year. Having only three (3) dedicated staff to manage logistics, building the schedule and providing training is becoming more challenging. Additionally, the growing number of JFD personnel who are certified as emergency medical technicians (EMTs) has also increased the demand for training. Continuing education units (CEUs) required to maintain EMT certification add to the workload of the Training Division, requiring additional scheduling, instruction, and coordination.

## Training Procedures & Manuals

JFD solely utilizes the organization's SOGs as well as the training hours defined in the Fire Suppression Rating Schedule (FSRS) from Insurance Services Organization. Although only accounting for nine points, the training guidelines and associated scoring provide adequate direction for the Training Division. The specific areas and their descriptions are as follows in the following figure.



Figure 23. Fire Suppression Rating Schedule Training Hours

| Category              | Description   |
|-----------------------|---|
| Facilities & Use      | For maximum credit, each firefighter should receive 18 hours per    |
|                       | year in structure fire-related subjects as outlined in NFPA 1001.   |
| Company Training      | For maximum credit, each firefighter should receive 16 hours per    |
|                       | month in structure fire-related subjects as outlined in NFPA 1001.  |
| Classes for Officers  | For maximum credit, each officer should be certified in accordance  |
|                       | with the general criteria of NFPA 1021. Additionally, each officer  |
|                       | should receive 12 hours of continuing education on- or off-site.    |
| New Driver & Operator | For maximum credit, each new driver and operator should receive     |
| Training              | 60 hours of driver/operator training per year in accordance with    |
|                       | NFPA 1002 and NFPA 1451.  |
| Existing Driver &     | For maximum credit, each existing driver and operator should        |
| Operator Training     | receive 12 hours of driver/operator training per year in accordance |
|                       | with NFPA 1002 and NFPA 1451.                                       |
| Training On Hazardous | For maximum credit, each firefighter should receive 6 hours of      |
| Materials             | training for incidents involving hazardous materials in accordance  |
|                       | with NFPA 472.  |
| Recruit Training      | For maximum credit, each firefighter should receive 240 hours of    |
|                       | structure fire-related training in accordance with NFPA 1001 within |
|                       | the first year of employment or tenure.                             |

### Recordkeeping

JFD solely utilizes the software platform TargetSolutions, now part of Vector Solutions, as their online training and tracking platform. TargetSolutions is designed specifically for fire departments to assist with firefighter training, compliance, and operational efficiency. It offers many and varied hours of fire and EMS training courses, including NFPA-compliant modules (e.g., NFPA 1001, 1021, 1500), wildland firefighting, and EMS continuing education. The platform features a Learning Management System for scheduling, delivering, and tracking training. TargetSolutions has customizable content and ISO training tracking, and streamlines recordkeeping and helps to ensure compliance.

## **Clerical Support**

The Training Division receives some clerical support from the administrative staff but is typically self-reliant. Additional staff are often requested to assist with academies when needed, but this is dependent on the overtime budget and staff availability.



# Health, Safety, & Wellness

A comprehensive approach to health, safety, and wellness is essential to maintaining an effective and resilient fire department. For the Jonesboro Fire Department, supporting the well-being of its personnel is a critical component of operational readiness and workforce sustainability. As the demands of fire and emergency services continue to evolve, so too must the strategies that protect and promote the physical and mental health of department members.

This section will include an analysis of existing policies, procedures, and programs aimed at reducing occupational risk, improving overall wellness, and supporting mental and physical health across the organization. ESCI will examine a variety of key areas, including employee assistance programs, fitness and injury prevention efforts, behavioral health resources, and safety practices.

## **Counseling Services**

The Jonesboro Fire Department currently provides access to several counseling and mental health resources intended to support the emotional and psychological well-being of its personnel. Under Arkansas state law, all fire service members are entitled to 12 fully covered visits with a licensed mental health professional. This benefit is a valuable resource, offering firefighters and staff confidential access to care without financial barriers. It serves as a key component of JFD's mental health support framework.

In addition to the state-provided counseling benefit, the City of Jonesboro offers an Employee Assistance Program (EAP) to all municipal employees, including JFD personnel. This program provides short-term counseling services, crisis support, and referrals for more specialized care as needed. The EAP is designed to assist employees in managing a variety of personal and work-related challenges, including stress, family issues, substance use, and other behavioral health concerns.

The City of Jonesboro also employs a Wellness Coordinator under the Jonesboro Police Department who is available to assist all city departments. Although this position is not embedded within JFD, the Wellness Coordinator contributes to the overall support system available to fire personnel. This role can serve as a bridge between JFD members and the various wellness resources offered throughout the City of Jonesboro, including counseling services, mental health awareness initiatives, and general wellness programs.



During site visit interviews, it was noted that there is limited engagement between the Wellness Coordinator and the Jonesboro Fire Department staff. Although the Wellness Coordinator is technically available to all city employees, firefighters expressed a need for more consistent and meaningful interaction. Increased visibility and relationshipbuilding between the Wellness Coordinator and JFD personnel could significantly improve the accessibility and effectiveness of mental health support.

One of the most effective ways to strengthen this connection is through proactive outreach efforts, such as station visits, participating in crew dinners, and conducting ride-alongs. These informal interactions create opportunities for the Wellness Coordinator to develop trust and familiarity with JFD members outside of crisis situations. Building these relationships ahead of time can reduce the stigma surrounding mental health and make it more likely that personnel will seek support when challenges arise.

This approach aligns with industry best practices, which emphasize the importance of proactive mental health strategies, confidentiality, and cultural competency. Leading fire departments often integrate behavioral health professionals into their daily operations to ensure timely, trusted access to care. When firefighters have a pre-existing connection with a wellness professional who understands their work environment and stressors, they are more likely to reach out for help. Increasing the Wellness Coordinator's presence within the Jonesboro Fire Department can serve as a practical step toward building a more supportive and responsive mental health infrastructure.

## **Peer Support**

The Jonesboro Fire Department has established a foundation for peer support services, recognizing the importance of providing internal resources to help personnel manage stress, trauma, and other challenges associated with emergency response work. Currently, JFD has 10 members who have received some form of peer support training. These individuals serve in a voluntary capacity and offer support to their colleagues, providing a trusted option for those who may not feel comfortable seeking professional assistance immediately.

In addition to the peer support team, JFD has two chaplains who are available to offer spiritual guidance and emotional support to personnel. This added resource plays a valuable role, particularly in times of crisis or after traumatic incidents. Furthermore, Jonesboro Fire Department personnel can access support services through Arkansas



State University. For example, members in need of financial counseling or assistance can be referred to ASU staff with expertise in budgeting and financial planning.

Although these resources represent a meaningful commitment to peer-based support, there are areas for growth. Currently, there is no centralized hotline or contact system in place to connect personnel directly with peer support team members. This lack of streamlined access may delay support in urgent situations. Additionally, the peer support program operates entirely on a volunteer basis, which may limit the program's capacity and sustainability over time, particularly as JFD grows or demand for support increases.

#### Wellness Activities

The Jonesboro Fire Department currently implements several wellness activities aimed at maintaining the physical readiness of its personnel. One key component is the annual physical fitness test, known as the Firefighter Employment and Training System (FEATS), which all members are required to pass each October within a 10-minute time frame. The department has established a clear progressive discipline process for those who fail the test: members have 90 days to retake it after a first failure, are assigned to a mandatory workout during shifts after a second failure, and face a career review if they fail a third time. This structured approach reinforces accountability while providing opportunities for improvement.

In addition to the fitness testing program, Jonesboro Fire Department supports physical fitness through well-equipped facilities. Fitness equipment is available in every fire station, with larger gyms located at Stations 2 and 3. Personnel are permitted to use these resources both during duty hours and on their own time, which encourages regular exercise and helps foster a culture of fitness throughout JFD.

JFD's annual medical physicals are currently paused except for those on the Hazmat Team. These exams typically serve as a critical component of overall wellness by identifying health issues early and ensuring members are medically fit for duty. It is recommended that these comprehensive medical evaluations continue on either an annual or biennial basis as part of JFD's ongoing commitment to employee health and wellness.



#### Cancer Risk Reduction Initiatives

Cancer prevention has become a critical focus in the fire service, with increasing awareness of the occupational risks associated with firefighting. The Jonesboro Fire Department has taken several proactive steps to reduce cancer risk among its personnel, in line with many of the 11 best practices outlined in the updated *Lavender Ribbon Report* by the International Association of Fire Chiefs' Volunteer and Combination Officers Section (VCOS) and the National Volunteer Fire Council (NVFC). Following is a side-by-side comparison of the recommendations and current practices at JFD:

1. Full PPE and SCBA must be worn throughout the incident, including during salvage and overhaul.

Compliant. Required by SOPs; enforced on all incidents.

2. Provide a second hood to all entry-certified personnel.

Compliant. Exceeds standard by issuing a full second set of turnout gear, including hood.

3. Perform gross decontamination on scene using soap, water, and brushes while still on air.

Partially compliant. Gross decontamination is not done on scene; decontamination occurs after returning to the station.

4. Wipe down exposed skin (neck, face, arms, hands) immediately on scene. Compliant. Encourages use of wipes post-incident; wipes are available on apparatus.

5. Change and wash clothes immediately after exposure.

Compliant. Stations are equipped with washers and dryers; gear is laundered at the station.

6. Shower as soon as possible after exposure ("shower within the hour").

Compliant. Crews are allowed to remain out of service to shower immediately after fire incidents.

7. Prohibit PPE, especially turnout pants, from entering living areas or the household.

Compliant. Signage is posted prohibiting turnout gear in kitchens, sleeping areas, and other living spaces.



8. Use wipes or soap and water to clean apparatus seats, SCBA, and cab interiors after exposure.

Compliant. Standard practice after fire incidents.

9. Receive annual physicals to support early detection.

Not currently compliant. Annual medical physicals are paused; reinstatement is recommended.

10. Prohibit use of all tobacco products, including dip and e-cigarettes.

Partially compliant. Tobacco use is discouraged but not prohibited on- or off-duty.

11. Fully document all fire and chemical exposures in incident and personal exposure reports.

Compliant. Members are responsible for documenting exposures in reports.

Furthermore, although fitness equipment is available in all Jonesboro Fire Department stations to support firefighter health and wellness, a significant portion of it is located within the apparatus bays. These bays, while spacious and conveniently accessible, are also high-risk environments for airborne contaminants such as diesel exhaust, soot, and other hazardous particulates generated during vehicle operations. Fire apparatus is frequently started, idled, or returned to the bay with hot exhaust systems emitting fumes directly into the area, often in close proximity to the workout equipment and personnel using it.

The absence of a source capture exhaust system in these stations exacerbates the issue. Without a dedicated system to directly remove exhaust emissions at the tailpipe, these harmful fumes can accumulate in the air and settle on surfaces, including the fitness equipment itself. This creates a situation where firefighters may unknowingly inhale or come into contact with carcinogenic particles while engaging in health-promoting activities. Long-term exposure to diesel exhaust has been linked to increased risks of respiratory illnesses, cardiovascular disease, and certain types of cancer, making this an urgent occupational health concern.

To address this issue, it is recommended that JFD install a source capture exhaust system in each station to significantly reduce airborne exposure to diesel particulates, improving overall air quality and creating a safer environment for both physical fitness and daily operations. Also, for future station designs it is recommended that fitness



equipment be located in a clean, ventilated space separate from the apparatus bays. These improvements would not only enhance firefighter safety but also align with national standards and best practices for cancer prevention in the fire service.

### **Incident Safety**

The Jonesboro Fire Department has implemented foundational practices to support firefighter safety during emergency incidents. One of the key assignments is the designation of the second Battalion Chief as the Incident Safety Officer on significant incidents. This individual is responsible for monitoring conditions, identifying hazards, and ensuring that operational safety procedures are followed throughout the duration of the event. By assigning this role to a senior command officer, JFD ensures a dedicated focus on scene safety during high-risk operations.

Additionally, JFD assigns the third-arriving engine company as the Rapid Intervention Team (RIT) on multi-company incidents. This proactive measure ensures that a team is available and equipped to perform firefighter rescue operations in the event a crew member becomes lost, trapped, or incapacitated. Having a designated RIT is a recognized standard across the fire service and reflects Jonesboro Fire Department's commitment to ensuring firefighter survivability on complex scenes.

However, one notable gap in JFD's incident safety structure is the absence of a designated Infection Control Officer (ICO). In today's operating environment, where firefighters routinely face biological and environmental hazards including bloodborne pathogens, contaminated materials, and pandemic-related exposures, this role is increasingly essential. Without a dedicated ICO, consistent tracking, reporting, decontamination procedures, and post-exposure protocols may lack the coordination needed to protect members from long-term health impacts.

Another significant incident safety issue identified during ESCI's site visit was the lack of radio interoperability between the Jonesboro Fire Department and the private EMS providers operating in the area. Currently, JFD personnel are unable to communicate directly with EMS units via radio. To relay a message, fire personnel must first contact the 911 communications center. A dispatcher there must then call the private EMS company's dispatch center, where a dispatcher there must relay the message to the EMS crew. This multi-step communication process introduces critical delays, especially in time-sensitive safety situations where seconds matter. For example, if an EMS crew needs to be warned of a rapidly changing hazard on scene or provided with immediate



patient information, the lack of direct communication can compromise both responder and patient safety. This gap in interoperability can hinder coordinated operations and efficient scene management during high-acuity incidents. Improving radio interoperability between JFD and EMS units is essential to ensuring timely, effective communication during emergency responses. Addressing this issue would significantly enhance situational awareness, coordination, and overall safety for all personnel operating at the scene.



## **Community Service Delivery**

A fire department's community service delivery encompasses a comprehensive range of critical functions designed to protect and enhance public safety. Fire suppression involves rapid response to extinguish fires, minimizing property damage and saving lives. Emergency medical services (EMS) provide immediate medical care and transportation for individuals experiencing health crises, ensuring timely intervention. Public education initiatives engage the community through outreach programs, teaching fire safety practices and emergency preparedness. Fire prevention inspections proactively identify and mitigate hazards by conducting thorough assessments of buildings and enforcing safety codes, reducing the risk of fires and enhancing overall community resilience.

## **Fire Suppression**

The Jonesboro Fire Department has seven stations and operates two battalions daily. They provide fire suppression activities to the City of Jonesboro through a structured, coordinated approach that ensures rapid response, effective resource allocation, and comprehensive coverage. The seven fire stations are strategically located across the community to provide the best coverage of different geographic areas, minimizing response times. Each station houses a fire apparatus (e.g., engines, ladder trucks, or specialized equipment) and personnel trained in fire suppression, emergency medical services (EMS), and other emergency responses. Stations 1, 2 and 4 also house ladder trucks as well as engines, for optimal response to those geographic areas.

The two battalions are administrative and operational units that oversee the stations and one of two districts in the city. Each battalion is led by a Battalion Chief who coordinates activities across a subset of stations; one battalion oversees four stations and the other oversees three. Battalion Chiefs ensure unified command during incidents, manage resources, and maintain readiness.

JFD employs a structured approach to fire suppression, as outlined in a document titled "The Playbook," for residential and commercial fires. The first arriving Battalion Chief, as the incident commander, initiates a rapid 360-degree assessment of the structure, evaluating risks, life safety, and fire conditions to develop an Incident Action Plan (IAP). This plan prioritizes rescue, exposure protection, confinement, extinguishment, overhaul, ventilation, and salvage (RECEO-VS). The Battalion Chief communicates critical details via an initial radio report, including the incident's nature, building description,



and strategy (offensive or defensive), while coordinating resources and ensuring accountability. Risk management principles guide decisions, limiting responder risks to situations with potential to save lives or property, and shifting to defensive operations when risks are excessive. The second arriving Battalion Chief fills the role of safety officer as the incident commander continuously revises the IAP, coordinates with other agencies, and often conducts an After–Action Review (AAR) to improve future responses.

Fire suppression tasks are distributed among engine and truck companies. The first engine company focuses on fire attack, with the officer conducting a size-up, selecting the appropriate hose line (e.g., 1.75" or 2.5" speedlay), and leading the interior attack with tools like thermal imagers and irons for forcible entry. The second engine secures a water supply via forward or reverse hose lays and deploys a backup line. The third engine establishes a Rapid Intervention Team (RIT) for firefighter safety, setting up tools and ladders for potential rescues. The first truck company prioritizes primary search and rescue, using methods like right/left hand or oriented searches, while the second truck handles ventilation (e.g., positive pressure or vertical) and ground ladders. Specialized operations, such as standpipe use in high-rises, involve tailored hose loads and pressure calculations. This coordinated effort, supported by clear communication and standard operating guidelines, ensures effective fire suppression across the community.

## **Emergency Medical Services**

The Jonesboro Fire Department does not directly provide ambulance transport services. Instead, emergency medical services (EMS) response is integrated into JFD's operations, with firefighters trained to at least the emergency medical responder (EMR) or emergency medical technician (EMT) level to deliver pre-hospital care.

JFD's Operations Division, staffed with 120 full-time personnel across three shifts, responds to medical emergencies from seven fire stations covering over 80 square miles, including Arkansas State University. Firefighters are cross-trained, with many certified as EMRs or EMT-Basics, with no ALS providers currently, enabling them to provide basic life support (BLS) at the scene. This includes initial patient assessment, stabilization, and treatment (e.g., CPR, bleeding control, or defibrillation using AEDs).

JFD units are dispatched to life-threatening calls, often arriving within minutes to begin care before an ambulance arrives. JFD's 911 dispatch center, part of the City of Jonesboro's emergency communications, uses trained dispatchers to provide pre-arrival



instructions to callers, such as CPR guidance, to stabilize patients until responders arrive.

The City of Jonesboro has two private EMS transport providers that serve the community. They are Emerson Ambulance Service and Medic One Ambulance who operate 24/7, 365 days a year, using advanced equipment and trained crews (EMTs and paramedics) to provide BLS and ALS transport.

Both providers handle emergency (911) and non-emergency transports, ensuring ambulances are available for critical calls while non-emergency calls (e.g., hospital transfers) are managed separately to maintain response capacity.

When a 911 call is received, the City of Jonesboro's dispatch center prioritizes it based on the nature of the emergency. For life-threatening situations, JFD units are dispatched alongside a private ambulance. JFD firefighters provide initial care, such as airway management, defibrillation, or hemorrhage control, until the ambulance arrives.

The ambulances, staffed with EMTs and/or paramedics, take over for advanced treatment and transport to hospitals, such as NEA Baptist Memorial Hospital or St. Bernards Medical Center in Jonesboro. Dispatchers may guide callers through critical interventions (e.g., CPR, childbirth assistance) until responders arrive.

JFD units are equipped with BLS equipment, including automatic external defibrillators (AEDs), oxygen, and basic trauma supplies. Private ambulances (Emerson and Medic One) typically provide ALS capabilities, including 12-lead EKG monitors, advanced airway management, and medications for cardiac, respiratory, or trauma emergencies.

EMS protocols are in alignment with Northeast Arkansas Regional Protocols, which are progressive and used by other regional EMS providers, ensuring standardized, evidence-based care.

#### **Public Education**

A fire department's public education program is designed to inform and educate the community about fire safety, prevention, and emergency preparedness to reduce fire-related injuries, deaths, and property damage. These programs are typically tailored to the community's needs and delivered through various methods to reach diverse audiences, including children, adults, seniors, and businesses.



JFD takes a proactive approach to public education with the annual delivery of targeted education to the local schools, focusing on kindergarten through the third grade. They utilize an assembly-type approach to provide specific fire prevention education messaging that includes tours of the firefighting apparatus.

Additionally, there are ongoing requests for JFD to do community outreach with both suppression and prevention staff. In these instances, an educational message is typically included. JFD also has a Juvenile Fire Setter program, which is also known as the Youth Firesetter Intervention Program. These programs are a specialized initiative run by fire departments to address and prevent fire–setting behaviors in children and adolescents, typically aged 2 to 17. These programs aim to reduce the frequency and severity of fires caused by youth through education, intervention, and counseling, focusing on fire safety and the consequences of fire misuse. JFD has a Captain who is the assigned lead when these concerns are brought to the attention of the organization. They organize and deliver the programs' curriculum to the youth or youths.

### **Fire Prevention Inspections**

JFD has an ISO Class I rating and strives to complete annual inspections of all occupancies that the public can or will occupy. The vast majority of inspections are done at the company level with support from fire prevention staff. A singular divergence is that prevention staff are specifically mandated to perform daycare inspections. The staff assigned to prevention duties spend most of their time on new construction and the many associated tasks. Prevention personnel support company personnel by providing two annual training opportunities regarding fire prevention inspections as well as assisting when major fire code violations are found. The Fire Marshal and the four Captains assigned to prevention are commissioned law enforcement officers, which allows them to fully fulfill all their duties. Company officers, as part of their preparation for promotion, must complete an 80-hour fire inspection course. This is the minimum requirement; many suppression personnel have gone above and beyond and hold certifications as fire inspectors.



# **External Relationships**

Strong and strategic external partnerships are essential to the Jonesboro Fire Department's ability to provide effective emergency services to the community. JFD has established working relationships with a variety of partners, including Craighead County Emergency Management, Arkansas State University (ASU), local law enforcement, EMS providers, and regional emergency response teams. These relationships enhance coordination, expand access to shared resources, and improve overall service delivery. They also help ensure preparedness for large-scale or multi-jurisdictional incidents.

The City of Jonesboro does not have a designated City Emergency Manager, which presents a notable gap in municipal emergency preparedness leadership. In the absence of this role, JFD maintains a collaborative relationship with the Craighead County Director of Emergency Management and participates in activities coordinated through the County Emergency Operations Center (EOC). This connection helps bridge the city's emergency planning needs but adding a dedicated City Emergency Manager would significantly enhance coordination, streamline communication, and better align emergency planning with city–specific needs.

The Jonesboro Fire Department also works closely with Arkansas State University, which has its own Emergency Manager. JFD has conducted joint drills with ASU, reinforcing readiness for campus-related emergencies and strengthening the university's integration with citywide response protocols. These collaborative drills reflect a proactive approach and serve as a model for engagement with other institutions and stakeholders in the community.

On the regional level, JFD contributes to regional response teams and Arkansas Task Force 1, providing highly trained personnel to regional operations such as hazardous materials (HazMat) response. Notably, members serving on these teams do so voluntarily and without additional pay, demonstrating strong professional commitment. Although these regional collaborations are effective in augmenting resources during large-scale events, continued investment in training, equipment, and compensation would improve long-term sustainability.

The Jonesboro Fire Department meets regularly with the Craighead County Fire Coordinator and Chiefs of Craighead County's Emergency Services Districts (ESDs) through quarterly Fire Chief meetings and generally maintains a positive dialogue. However, there is limited joint training conducted with surrounding Craighead County



fire departments. Although JFD makes its open training days available to these departments, participation is typically low. To improve mutual aid readiness and tactical coordination, greater emphasis should be placed on joint training exercises and shared standard operating procedures.

Internally within the city, the Jonesboro Fire Department reports a good working relationship with the Jonesboro Police Department and EMS providers. These relationships are critical for coordinated responses to major incidents and ensure seamless patient handoff during EMS transports. Communication with the City of Jonesboro's 911 dispatch center and its director is also positive; however, the increasing call volume handled by JFD highlights the need for additional radio operators to maintain effective dispatch performance.

Although many of Jonesboro Fire Department's current external partnerships are strong and productive, there are areas requiring development to better align with JFD's mission of delivering timely, professional, and effective emergency services. Closing existing gaps, such as the absence of a City Emergency Manager and limited joint training with neighboring departments, will strengthen regional collaboration and enhance JFD's operational readiness and service to the community.



# **Service Delivery & Performance**

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

## **Service Demand Analysis**

When assistance is requested, a demand for service from the fire department is requested. 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.

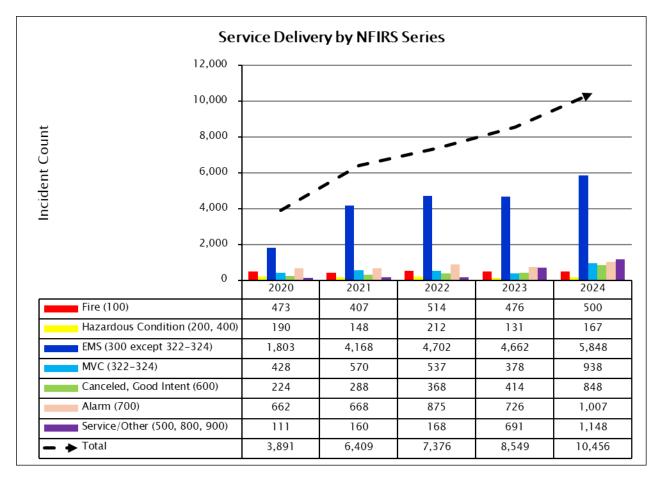
Figure 24. NFIRS Incident Series

| 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 JFD has responded to over the past five years. The 2023 total includes 1,071 incidents with no incident type documented.

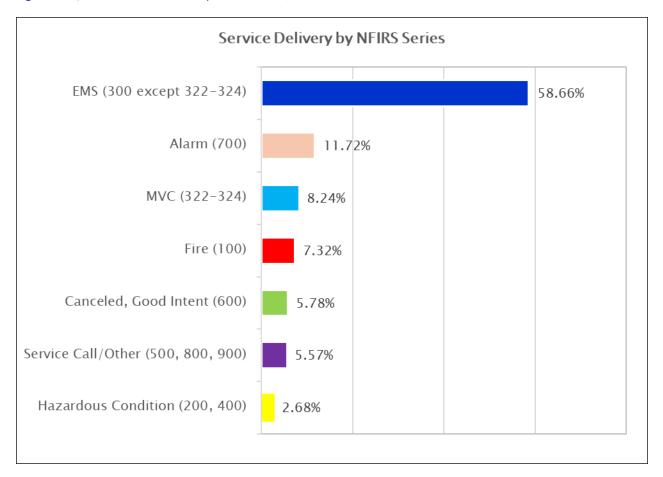
Figure 25. JFD Service Demand by NFIRS Series, 2020–2024





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

Figure 26. JFD 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—month, day, and hour—as illustrated in the following figures.

Figure 27. JFD Service Demand by Month, 2020-2024

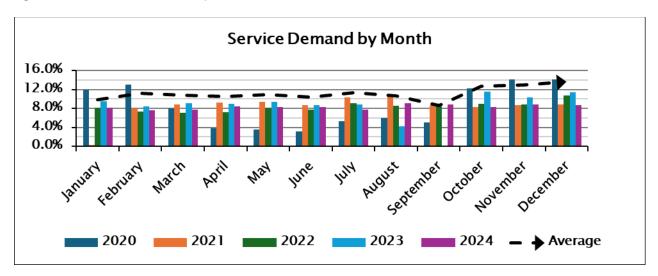
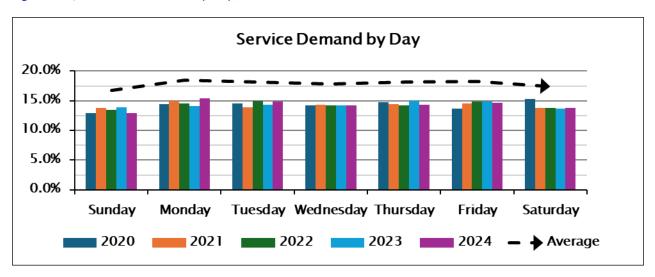


Figure 28. JFD Service Demand by Day, 2020-2024





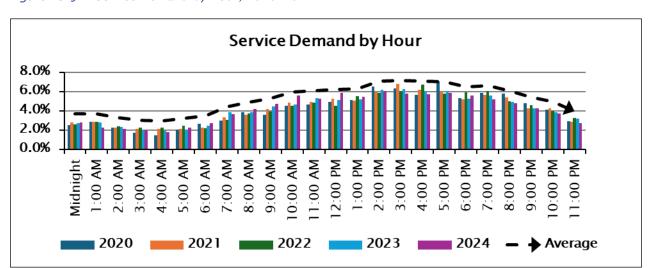


Figure 29. JFD Service Demand by Hour, 2020-2024

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<sup>1</sup>.

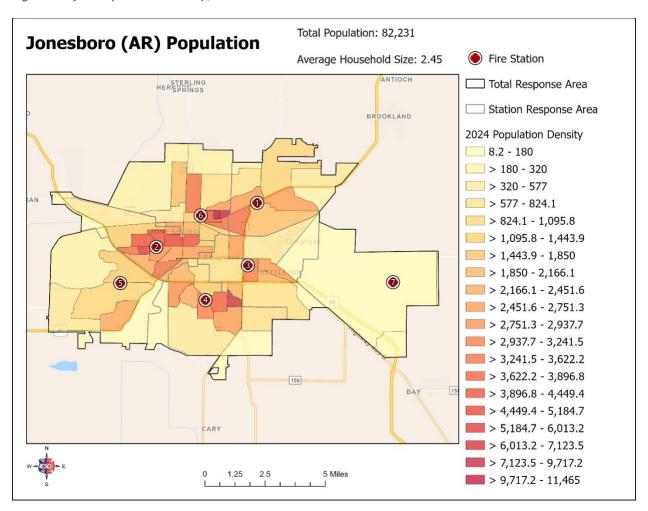
<sup>&</sup>lt;sup>1</sup> Fatal Fires in Residential Buildings (2018–2020), Topical Fire Report Series Volume 22, Issue 2 /June 2022, U.S. Department of Homeland Security, U.S. Fire Administration, National Fire Data Center.



#### 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.

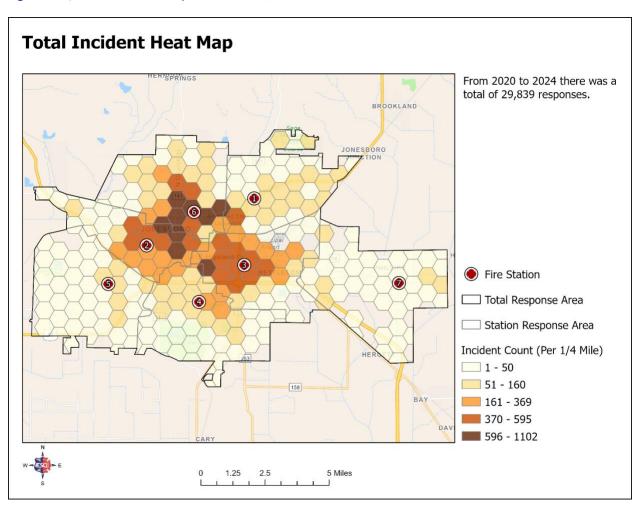
Figure 30. JFD Population Density, 2024





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 figure. It should be noted that the incident counts on incident density figures will vary from those in the incident type analysis figures. Incident type analysis includes all incidents regardless of location and whether there is a valid latitude/longitude, whereas incident density only includes those incidents within the service area with a valid latitude/longitude.

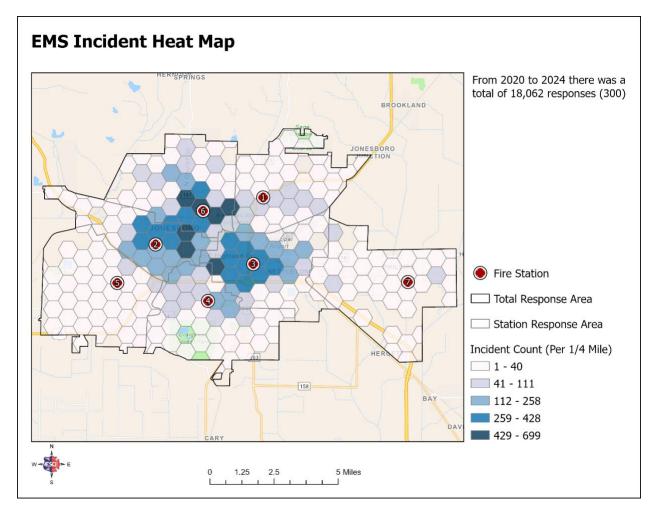
Figure 31. JFD Incident Density (All Incidents), 2020-2024





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

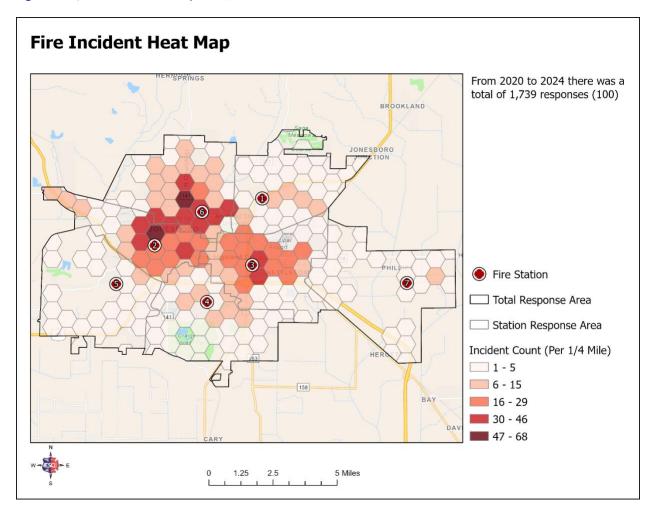
Figure 32. JFD Incident Density (EMS), 2020-2024





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

Figure 33. JFD Incident Density (Fire), 2020-2024





### **Resource Distribution Analysis**

The placement of emergency services resources within the community should be compared to the location of incident density as well as being 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 (homeowners') insurance for residents and businesses.

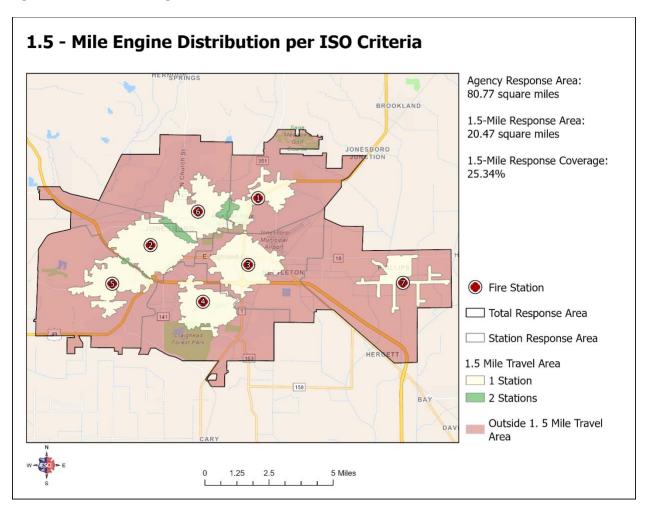
To receive maximum credit for station and apparatus distribution, ISO evaluates the percentage of the community (contiguously built-upon area) that is within specific distances of fire stations, central water supply access (fire hydrants), engine/pumper companies, and aerial/ladder apparatus.



### 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 34. JFD 1.5-Mile Engine Distribution

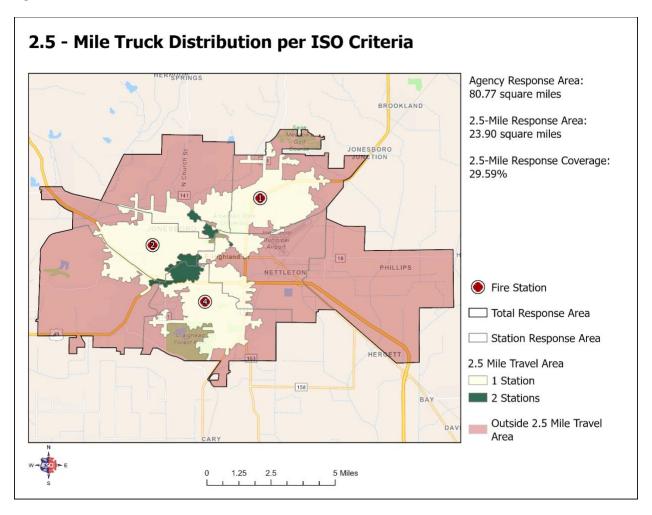




#### 2.5-Mile Aerial Distribution

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.

Figure 35. JFD 2.5-Mile Aerial Distribution

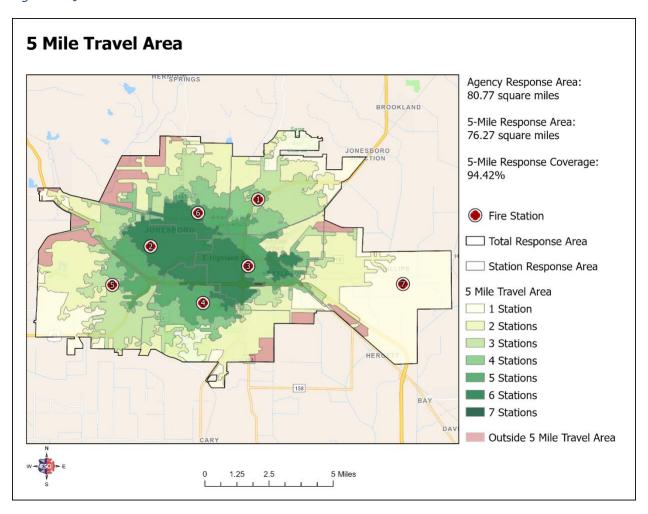




#### 5-Mile Distribution

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 36. JFD 5-Mile Station Distribution

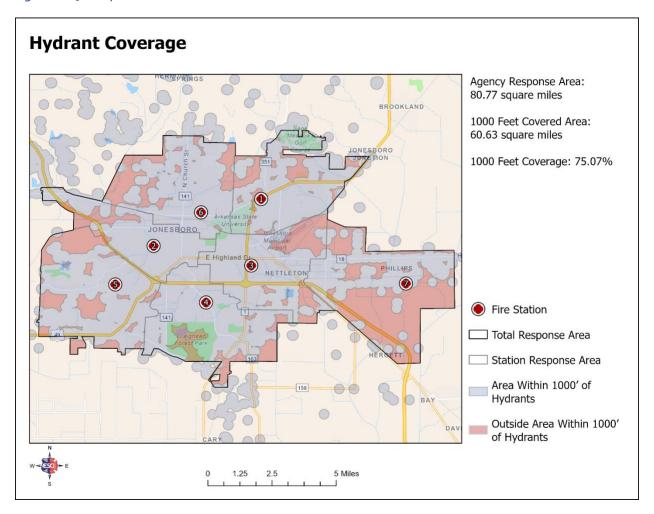




### Water Supply

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 37. JFD Hydrant Distribution





#### NFPA Distribution

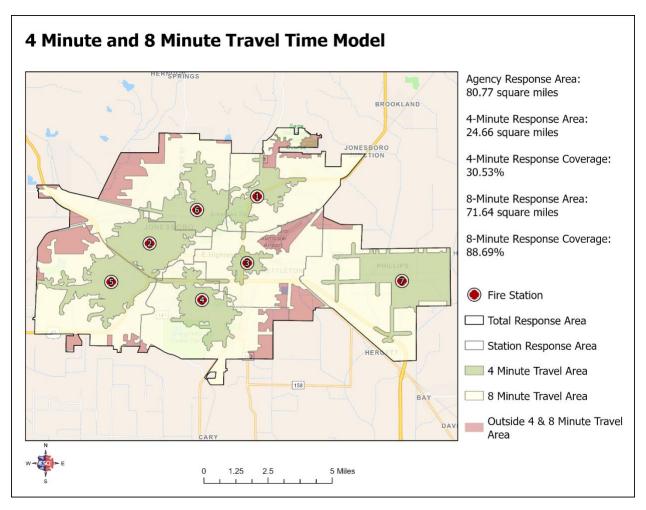
The National Fire Protection Association (NFPA) is an industry trade association that develops and provides standards and codes for fire departments and emergency medical services for use by local governments.

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 JFD service area that falls within the 4-minute and 8-minute travel times of a fire station.

Figure 38. JFD 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 by calendar year, grouped into 4-minute increments.

Figure 39. JFD Travel Time Analysis, 2020-2024

| Travel Time Category    | 2020   | 2021   | 2022   | 2023   | 2024   |
|-------------------------|--------|--------|--------|--------|--------|
| 4 Minutes or Less       | 74.27% | 73.51% | 72.96% | 76.64% | 77.49% |
| 4-8 Minutes             | 24.15% | 24.52% | 25.39% | 21.81% | 20.85% |
| 8-12 Minutes            | 1.27%  | 1.62%  | 1.39%  | 1.31%  | 1.36%  |
| Greater than 12 Minutes | 0.31%  | 0.35%  | 0.26%  | 0.24%  | 0.30%  |



### **Resource Concentration Analysis**

Each of the prior measures provided a view specifically associated with the arrival of the first unit to an incident scene. Although 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 40. NFPA 1710 ERF Recommendations Based on Risk

| Function/Task                   | Single–Family<br>Residence<br>(2,000 ft²) | Open-Air Strip<br>Shopping Center<br>(13,000-196,000 ft <sup>2</sup> ) | 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          | (1)                                       | (1)  | (1)                                  |
| (If ladder used)                |   |  |                                      |
| 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 8-minute travel time. Where responses from more than one station overlap, the number of firefighters arriving increases.

Effective Response Force, 8-Minute Travel

ANTIOCH

BROOKLAND

Fire Station

Total Response Area

Station Response Area

Effective Response Force, 8-Minute Travel Capacity

3 Firefighters: 88.69%

17 Firefighters: 58.60%

26 Firefighters: 2.47%

Outside ERF

Figure 41. JFD 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.

5 Miles

1.25

2.5



#### **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. Although 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.<sup>2</sup> 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 that may be utilized by JFD's 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).

Figure 42. Commitment Factors as Developed by the Henrico County (VA) Division of Fire, 2016

| Factor    | Indication            | Description  |
|-----------|-----------------------|--|
|           |                       | Personnel can maintain training requirements and physical    |
| 16%-24%   | Ideal Commitment      | fitness and can consistently achieve response time           |
| 10/0 24/0 | Range                 | benchmarks. Units are available to the community more        |
|           |                       | than 75% of the time.  |
|           |                       | Community availability and unit sustainability are not       |
| 25%       | Systam Strass         | questioned. First due units are responding to their assigned |
| 23%       | System Stress         | community 75% of the time, and response benchmarks are       |
|           |                       | rarely missed.   |
|           |                       | The community served will experience delayed incident        |
| 200/ 200/ | 5 L .: 5              | responses. Just under 30% of the day, first due ambulances   |
| 26%–29%   | Evaluation Range      | are unavailable; thus, neighboring responders will likely    |
|           |                       | exceed goals.  |
|           |                       | Not Sustainable: Commitment Threshold—The community          |
|           |                       | has a less than 70% chance of timely emergency service and   |
| 2.00/     | "I in a in the Canal" | immediate relief is vital. Personnel assigned to units at or |
| 30%       | "Line in the Sand"    | exceeding 0.3 may show signs of fatigue and burnout and      |
|           |                       | may be at increased risk of errors. Required training and    |
|           |                       | physical fitness sessions are not consistently completed.    |

<sup>&</sup>lt;sup>2</sup> How Busy Is Busy? Retrieved from https://www.fireengineering.com/articles/print/volume-169/issue-5/departments/fireems/how-busy-is-busy.html



### The following figures illustrate the commitment factors by unit.

Figure 43. JFD Commitment Times (Administration), 2020-2024

| Unit    | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|---------|-------|-------|-------|-------|-------|--------------------------|
| BC01    | 0.00% | 0.02% | 2.73% | 2.36% | 2.45% | 2.45%                    |
| BC02    | 0.00% | 0.04% | 3.10% | 2.14% | 2.28% | 2.28%                    |
| C01     | 0.04% | 0.22% | 0.39% | 0.01% | 0.14% | 0.10%                    |
| FireMar | 0.00% | 0.00% | 0.00% | 0.00% | 0.10% | 0.10%                    |
| BR01    | 0.09% | 0.02% | 0.11% | 0.01% | 0.00% | -0.09%                   |
| C02     | 2.14% | 2.24% | 0.40% | 0.05% | 0.00% | -2.14%                   |
| C03     | 2.34% | 2.61% | 0.48% | 0.02% | 0.00% | -2.34%                   |
| C04     | 0.35% | 0.39% | 0.57% | 0.09% | 0.00% | -0.35%                   |
| C06     | 0.00% | 0.03% | 0.03% | 0.01% | 0.00% | 0.00%                    |
| C07     | 0.10% | 0.06% | 0.02% | 0.05% | 0.00% | -0.10%                   |
| C09     | 0.16% | 0.09% | 0.05% | 0.09% | 0.00% | -0.16%                   |
| C10     | 0.23% | 0.17% | 0.17% | 0.04% | 0.00% | -0.23%                   |

Figure 44. JFD Commitment Times (Station 1), 2020–2024

| Unit  | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|-------|-------|-------|-------|-------|-------|--------------------------|
| E01   | 2.31% | 4.08% | 4.41% | 4.45% | 6.23% | 3.92%                    |
| TRK01 | 0.00% | 0.00% | 1.09% | 1.61% | 2.75% | 2.75%                    |
| TNK01 | 0.00% | 0.00% | 0.08% | 0.15% | 0.03% | 0.03%                    |
| R01   | 0.03% | 0.10% | 0.04% | 0.01% | 0.00% | -0.03%                   |
| WAV01 | 0.10% | 0.00% | 0.11% | 0.03% | 0.00% | -0.10%                   |

Figure 45. JFD Commitment Times (Station 2), 2020–2024

| Unit  | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|-------|-------|-------|-------|-------|-------|--------------------------|
| E02   | 3.25% | 4.32% | 5.22% | 6.19% | 7.28% | 4.03%                    |
| TRK02 | 1.74% | 2.31% | 3.01% | 1.99% | 2.51% | 0.77%                    |
| SQ02  | 0.07% | 0.03% | 0.08% | 0.00% | 0.00% | -0.07%                   |
| WAV02 | 0.05% | 0.00% | 0.10% | 0.04% | 0.00% | -0.05%                   |

Figure 46. JFD Commitment Times (Station 3), 2020–2024

| Unit | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|------|-------|-------|-------|-------|-------|--------------------------|
| E03  | 3.49% | 6.57% | 6.51% | 5.68% | 6.23% | 2.74%                    |
| E11  | 0.30% | 0.48% | 0.03% | 0.04% | 0.13% | -0.17%                   |
| SQ03 | 0.00% | 0.00% | 0.00% | 0.00% | 0.01% | 0.01%                    |



Figure 47. JFD Commitment Times (Station 4), 2020-2024

| Unit  | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|-------|-------|-------|-------|-------|-------|--------------------------|
| E04   | 2.44% | 3.75% | 4.66% | 4.79% | 5.07% | 2.64%                    |
| TRK04 | 1.81% | 2.09% | 1.85% | 1.39% | 1.39% | -0.42%                   |

Figure 48. JFD Commitment Times (Station 5), 2020-2024

|   | Unit  | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|---|-------|-------|-------|-------|-------|-------|--------------------------|
| - | E05   | 1.33% | 1.85% | 2.21% | 2.71% | 3.14% | 1.81%                    |
|   | TRK05 | 0.11% | 0.51% | 1.07% | 0.00% | 0.00% | -0.11%                   |

Figure 49. JFD Commitment Times (Station 6), 2020-2024

| Unit   | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|--------|-------|-------|-------|-------|-------|--------------------------|
| E06    | 0.34% | 5.50% | 6.42% | 6.87% | 8.13% | 7.79%                    |
| SQ06   | 0.00% | 0.00% | 0.00% | 0.00% | 0.01% | 0.01%                    |
| E12    | 3.47% | 1.58% | 0.02% | 0.06% | 0.00% | -3.47%                   |
| HazMat | 0.03% | 0.00% | 0.26% | 0.01% | 0.00% | -0.03%                   |

Figure 50. JFD Commitment Times (Station 7), 2020-2024

|   | Unit | 2020  | 2021  | 2022  | 2023  | 2024  | Change Over Study Period |
|---|------|-------|-------|-------|-------|-------|--------------------------|
| _ | E07  | 0.96% | 1.42% | 1.66% | 1.56% | 1.68% | 0.72%                    |

### 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 that of the commitment factor and although no formal standard exists, this should occur for greater than 75% of incidents—allowing for units that may be committed already on other calls, or the first arriving unit was a unit that is not normally the closest unit. Although this is not a specific standard, it is a starting point for JFD's leadership to consider when evaluating the reliability of units and 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 51. JFD Zone Unit First Arrival, 2020-2024

| Zone       | 2020   | 2021  | 2022  | 2023  | 2024  |
|------------|--------|-------|-------|-------|-------|
| Station 01 | 100.0% | 99.7% | 99.6% | 98.0% | 96.3% |
| Station 02 | 95.8%  | 98.1% | 99.7% | 98.5% | 97.4% |
| Station 03 | 97.2%  | 98.4% | 98.3% | 98.3% | 97.1% |
| Station 04 | 97.8%  | 98.4% | 98.0% | 96.2% | 95.0% |
| Station 05 | 97.0%  | 98.4% | 96.8% | 92.0% | 90.5% |
| Station 06 | 97.5%  | 98.7% | 97.8% | 97.8% | 96.3% |
| Station 07 | 96.3%  | 98.0% | 99.5% | 98.4% | 95.5% |

### **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 of 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 aligns with national standards and best practices and 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.



#### **Alarm Handling Time**

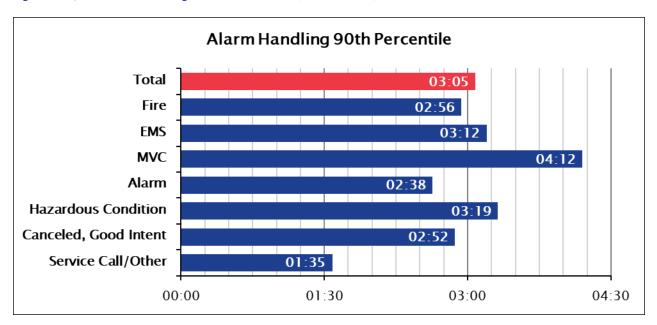
The measure of time between answering the 911 call and dispatch of resources is known as alarm handling time. For this measure there is one applicable standard as illustrated in the following figure.

Figure 52. NFPA 1225 Standard

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

The following figure illustrates JFD's alarm handling time performance. The years 2022 and 2023 were excluded from the analysis due to data issues.

Figure 53. JFD Alarm Handling Time Performance, 2020-2021, 2024





#### **Turnout Time**

The measure of time between notifying the fire department (dispatching) and the time that the first unit goes en route is known as the turnout time. For this measure the applicable standard is illustrated below.

Figure 54. NFPA 1710 Turnout Standard

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

As this is the first measure under direct control of the Jonesboro Fire Department, JFD 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 adherence to departmental 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.

The following figure illustrates the turnout times for the first responding units.



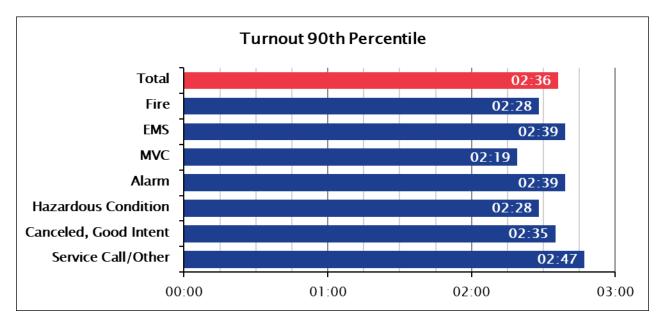


Figure 55. JFD Turnout Time Performance, 2020-2024

#### **Travel Time**

The measure of time between apparatus moving toward 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 below.

Figure 56. NFPA 1710 Travel Time Standard

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



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

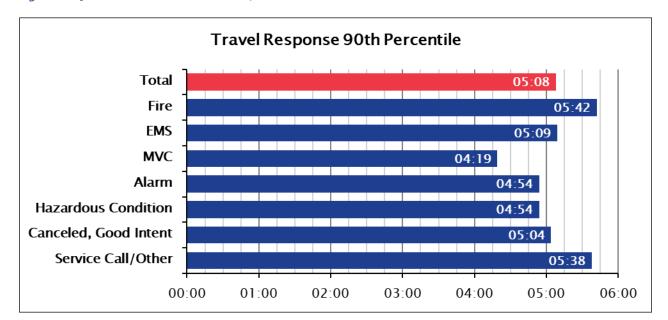


Figure 57. JFD Travel Time Performance, 2020-2024

#### 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 58. Response Time Calculation

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



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

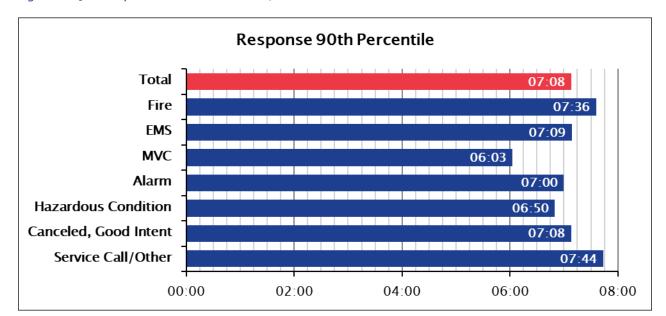


Figure 59. JFD Response Time Performance, 2020–2024

## **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 60. Response Time Calculation

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



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

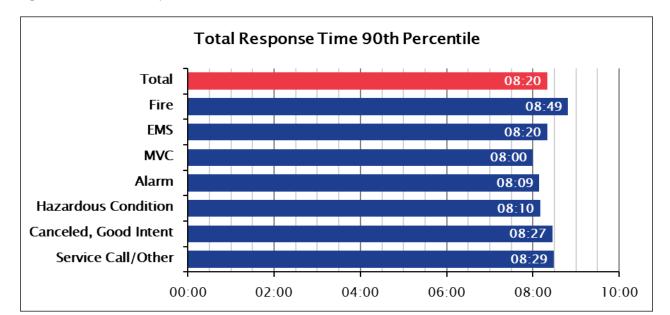


Figure 61. JFD Total Response Time Performance, 2020–2024

## **Mutual and 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 JFD.

Figure 62. Automatic & Mutual Aid Agencies

| Agency                       | Agreement Type |
|------------------------------|----------------|
| Bay Fire Department          | Mutual         |
| Bono Fire Department         | Mutual         |
| Brookland Fire Department    | Mutual         |
| Caraway Fire Department      | Mutual         |
| Cash Fire Department         | Mutual         |
| Lake City Fire Department    | Mutual         |
| Monette Fire Department      | Mutual         |
| Philadelphia Fire Department | Mutual         |
| Southridge Fire Department   | Mutual         |
| Valley View Fire Department  | Mutual         |



## **Support Services**

A fire department's support services are critical functions that ensure operational readiness, efficiency, and effectiveness in delivering emergency response and public safety. Support services for the Jonesboro Fire Department include Emergency Communications, which manages the receipt, processing, and dispatch of emergency calls. Administrative Support provides clerical, financial, and human resources functions, such as budgeting, payroll, record-keeping, policy development, and compliance with regulations. Information Technologies (IT) maintains and secures computer systems, networks, software, and data management tools. Logistics and Resource Systems oversee the procurement, inventory, and distribution of equipment, supplies, and resources (e.g., PPE, medical supplies, firefighting tools). Fleet Maintenance manages the repair, maintenance, and replacement of JFD vehicles, including fire engines, ambulances, and support vehicles, and ensures vehicles are operational, safe, and compliant with regulations. Facility Maintenance maintains fire stations and training facilities, including repairs, upgrades, and routine upkeep of buildings, utilities, and grounds. These support services collectively enable JFD to focus on its core mission of protecting lives and property by providing the necessary infrastructure, resources, and operational support.

## **Emergency Communications**

The Jonesboro E-911 Dispatch Center serves as the vital communication hub for the Jonesboro Fire Department and other public safety agencies throughout Craighead County. Operating 24/7, the center is staffed by 22 full-time dispatch operators, four shift supervisors, a training coordinator, a deputy director, and the E-911 department head, ensuring continuous coverage and efficient emergency response coordination. Each dispatcher undergoes rigorous on-the-job training and specialized courses in areas such as suicide intervention, mobile command, and tactical dispatch, enabling them to handle both emergency and non-emergency calls with precision and empathy. The center employs advanced technologies, including TDD/TTY for communication-impaired callers and the CodeRED system for automated alerts like weather warnings and evacuations, enhancing its ability to serve the diverse needs of the community while prioritizing rapid response to protect lives and property.

The Jonesboro Fire Department, supported by the E-911 Dispatch Center, responds to a significant volume of emergency calls across its jurisdiction, which spans over 80 square



miles, including the Arkansas State University campus. In 2024, the center handled approximately 40,000 emergency calls for service countywide. These calls encompass a range of incidents, from structural fires and medical emergencies to hazardous materials incidents, reflecting JFD's all-hazards approach. Despite challenges with cellular call routing due to Craighead County's multiple jurisdictional boundaries, the dispatch center's collaboration with other agencies and its use of systems like Smart911, which provides preloaded medical and location data, ensures effective and timely responses to emergencies, reinforcing its critical role in public safety.

## **Administrative Support**

Clerical support is mostly provided by the full- and part-time administrative staff at JFD. The City of Jonesboro's administrative or clerk's office also handles specific clerical tasks for JFD and ensures proper documentation of building permits, inspections, and additional public safety records. City clerks may assist with public inquiries related to JFD services, such as fire code questions, community outreach programs, and general inquiries, often utilizing a third-party software vendor.

The City of Jonesboro's finance department allocates funds to JFD through the municipal budget, covering salaries, equipment, training, and facility maintenance. This is based on tax revenues, grants, or special assessments as directed. During the annual budget cycle, the finance department meets with JFD leadership to create a budget for the upcoming fiscal year. The city's Finance Division processes firefighter salaries, overtime, pensions, and benefits (e.g., health insurance, retirement plans), ensuring accurate and timely compensation.

The human resources (HR) department assists with recruitment, promotions, discipline, and hiring through compliance with civil service regulations. At the request of the Fire Chief, they may also assist with labor relations, addressing grievances and ensuring compliance with labor laws. It is the responsibility of the City of Jonesboro's HR team to administer health insurance, workers compensation, and any other associated benefits to JFD. The human resources department will also ensure that JFD adheres to city policies on diversity, workplace safety, and anti-discrimination, while managing personnel records and performance evaluations.

## **Information Technologies**

The information technology (IT) department for the City of Jonesboro supports JFD by providing and maintaining critical technological infrastructure, systems, and services to



enhance operational efficiency, safety, and emergency response capabilities. This specifically pertains to ensuring reliable network connectivity for fire stations, vehicles, and mobile devices, enabling real-time communication and data sharing. The IT department manages and maintains computers, servers, tablets, and other devices used by JFD personnel, and provides secure cloud storage and computing solutions for data management and backup as needed. Another major component is the protection of sensitive data (e.g., incident reports, personnel records) through firewalls, encryption, and antivirus software. The IT department manages access control to the network for all JFD users with user authentication and role-based access to ensure only authorized personnel access critical systems.

## **Logistics & Resources Systems**

JFD's logistics and resource management is a collaborative effort overseen by multiple personnel with specific roles to ensure operational efficiency. Currently, a Captain is assigned to manage all EMS supplies, while the Training Chief oversees personal protective equipment (PPE) and all Training Division needs, including new-hire and promotion testing, books, props, and external training requests. The Assistant Chief handles fixed asset purchases, leads apparatus acquisitions, manages small tools and equipment, and supervises fleet maintenance. Large purchases and professional services are managed by the administrative lead, with all items requiring a purchase order (\$2,000 or more) needing approval from both JFD's administration and city finance. Two firefighters serve as SCBA Technicians, maintaining breathing air compressors, while another firefighter manages radios and the station alerting system. A Captain is assigned to oversee the hazmat program, and another Captain manages the technical rescue program. The Administrative Secretary handles routine station supplies and uniforms, while Battalion Chiefs address minor day-to-day crew needs not available at Station 1. Most assets and resources are tracked using the First Due software asset module, ensuring streamlined oversight and accountability.

## Fleet Maintenance

JFD has designated equipment and staff to perform basic fleet maintenance at Station 1. Currently, the volume of maintenance needed is outpacing the assigned staff. A dedicated and certified fleet maintenance position has been approved and funded and will be filled. Even with this additional position, JFD administration still believes they will not be able to keep up with demand. For more major repairs due to wear and tear or



physical damage, or that are motor- or manufacturer-specific, outside repair shops are accessed depending on the type and severity of the issue.

## **Facility Maintenance**

A city facility department manages a fire department's needs by overseeing the maintenance, repair, and operational readiness of fire stations. This involves addressing infrastructure issues like HVAC, plumbing, and electrical systems, and ensuring compliance with fire codes and accessibility regulations. Minor issues are often handled by the staff at JFD; bigger issues require the submittal of a work order to the Facility Department. Repairs and issues within the scope of the Facility Department are handled by them. Those issues that are out of the scope and expertise of the facility staff are outsourced. This practice is important in maintaining a proactive maintenance schedule and having a swift response to emergency repair requests.



## **Future Projections**

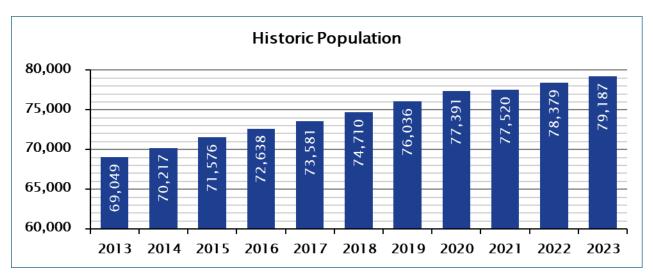
The project moves forward with an assessment of the future community conditions, service demand, and fire protection risks that the Jonesboro Fire Department can be expected to experience. ESCI will analyze potential growth projections and interpret their impact on emergency service planning and delivery.

## **Population Growth Projections**

### **Population History**

Based on population trend data from the American Community Survey, there was an increase of population within the JFD service area of 16.26% from 2013 to 2023, as illustrated in the following figure. This results in a compounded annual growth rate of 1.38%.



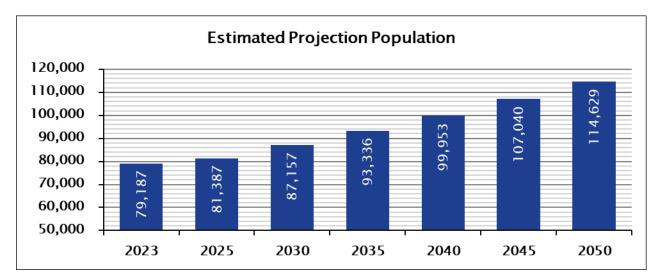




## **Population Projection**

Using the compounded annual growth rate of 1.38%, future population growth may be theorized, as illustrated in the following figure.

Figure 64. JFD Estimated Population, 2023-2050





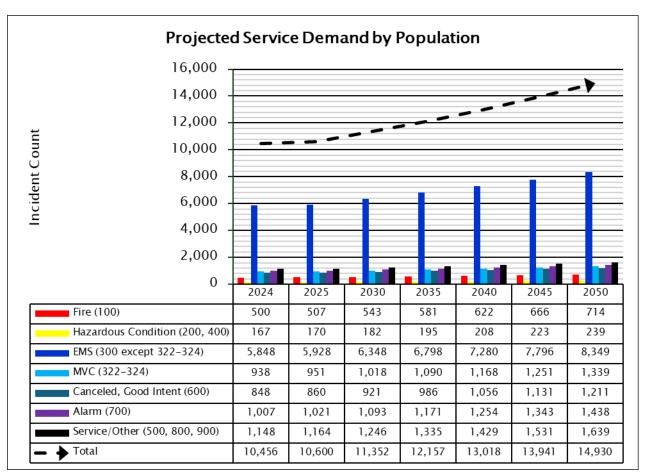
### Service Demand Projections

ESCI uses two formulas to compute future service projections, historical incident trends, and population trends. These two trends provide upper and lower boundaries for forecasting call volumes.

## Future Service Demand by Population

By evaluating the current number of incidents per 1,000 in population and applying that to the projected population growth from the preceding figure, it is possible to forecast a lower future service demand boundary within the community, as illustrated in the following figure. The figure shows 2024 actual numbers as well.

Figure 65. JFD Projected Service Demand by Population Change, 2025–2050





#### Future Service Demand by Historical Change

By applying the compounded annual growth rate (7.28%) derived from the incident type analysis (using only the change from 2021 to 2022 due to data issues in other years), it is possible to forecast an upper future service demand boundary within the community, as illustrated in the following figure. The figure shows 2024 actual numbers as well.

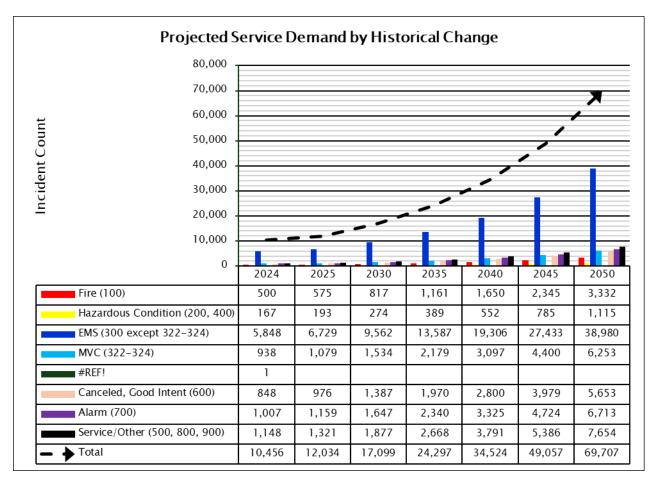


Figure 66. JFD Projected Service Demand by Historical Change, 2025–2050

## **Staffing Impacts**

Population growth projections, along with historical and forecast incident rates, directly influence future staffing requirements for the Jonesboro Fire Department). As the City of Jonesboro continues to expand both geographically and demographically, the demand for emergency services will increase proportionally.

Over the past five years, JFD's total annual incident volume has shown a steady upward trend, consistent with the city's population growth rate. The city's daytime population frequently swells to approximately 125,000 due to Arkansas State University and



regional employment activity, placing additional strain on emergency response resources, particularly during peak business hours and university events. Historical data suggests that medical emergencies—already representing the majority of call volume—will continue to grow faster than fire-related incidents, following national fire service trends.

To maintain compliance with NFPA 1710 and JFD's ISO Class 1 rating, staffing levels must expand to keep pace with this increasing service demand. Current projections estimate that Jonesboro's population will exceed 100,000 residents within the next decade, with proportional increases in emergency service demand. For every 10% growth in population, incident demand is expected to increase by an estimated 8–12%, depending on community risk factors and demographic shifts.

The Jonesboro Fire Department has already increased its operational staffing from 122 personnel in 2021 to a planned 141 personnel in 2025, reflecting a 16% increase. However, as population density increases in developing suburban and commercial areas, additional staffing will be required to ensure that effective response force (ERF) standards can be consistently met across all risk levels.

Failure to expand staffing proportionally with population and incident growth will negatively impact response times, increase firefighter workload, and could eventually threaten JFD's ISO Class 1 designation. Strategic planning should therefore include workforce projections tied directly to population and incident rate forecasts to ensure sustainable, high-quality service delivery.

## **Work Schedule Options**

Population growth projections, along with historical and forecast incident rates, will be utilized to develop projections for future service demand. As Jonesboro's population approaches the projected 100,000-resident milestone over the next decade, the increased service demand will have direct implications on firefighter scheduling and overall workforce management.

The Jonesboro Fire Department currently operates on a 24/48 shift schedule. However, JFD is transitioning to a 48/96 schedule (48 hours on duty followed by 96 hours off). This change is expected to reduce shift changes, improve crew continuity, and provide longer recovery periods, which can help mitigate fatigue and improve overall firefighter wellness.



As JFD gains operational experience with the 48/96 schedule, future considerations should include evaluating alternative schedules that not only maintain service reliability but also address responder burnout, a growing concern in the fire service nationwide as call volumes increase. Reducing total weekly work hours where feasible is one strategy that some departments have used to combat chronic fatigue, improve mental health, and enhance long-term retention. However, as service demand grows, work schedule options should remain flexible and adaptable to balance operational performance, firefighter wellness, and budgetary considerations.

Many fire service organizations have successfully implemented alternative shift schedules to better align staffing with workload demands. These schedules can be further modified through Kelly Days (regularly scheduled time off to reduce weekly hours) or debt days (additional shifts added periodically to maintain required annual work hours). This flexibility allows departments to target a weekly hour standard that is both operationally sustainable and financially feasible.

Following is a summary of potential schedule options JFD may consider in the future.

#### 1. 1-3-2-3 Schedule

- Pattern: 24 hours on, 72 hours off, 48 hours on, 72 hours off.
- Average Workweek: ~56 hours (before Kelly Day adjustments).
- **Benefits:** Provides long off-duty recovery periods; may reduce cumulative fatigue and burnout.
- Considerations: Requires additional staffing to cover longer off-duty intervals; may increase overtime if not offset with debt days. This schedule is common for fire departments when transitioning from a 24/48 or 48/96 to a 24/72.

#### 2. 24/72 Schedule

- Pattern: 24 hours on, 72 hours off.
- Average Workweek: Adjustable to ~42-56 hours with debt days.
- **Benefits**: Significantly increases recovery time between shifts, potentially reducing burnout and improving long-term retention.
- Considerations: Higher staffing levels required to maintain daily minimums; may increase costs unless paired with debt days or careful overtime management.



## 3. 24 On/24 Off, 24 On/5 Days Off (With Debt Days)

- Pattern: Two 24-hour shifts separated by 24 hours off, followed by 5 consecutive days off. A debt day is worked periodically to balance annual hours.
- Average Workweek: Adjustable to ~42-56 hours with debt days.
- **Benefits**: Provides extended recovery time after two consecutive shifts; can be budget-neutral when balanced with debt days.
- Considerations: May complicate scheduling due to irregular debt days; requires careful planning to ensure adequate coverage.

## 4. 24 On/48 Off, 24 On/96 Off (With Debt Days)

- **Pattern**: 24 hours on, 48 hours off, 24 hours on, 96 hours off, with periodic debt days added to meet required work hours.
- Average Workweek: Adjustable to ~42-56 hours with debt days.
- Benefits: Similar to 24/72, but provides more frequent work intervals while still
  offering extended recovery time; can be tailored to meet budgetary and staffing
  needs.
- **Considerations:** Slightly more complex rotation for scheduling; requires adequate staffing to maintain minimum daily coverage.



## **Conclusions & Recommendations**

The following conclusions and recommendations are intended to provide strategic guidance for the future development and operation of the Jonesboro Fire Department. They are organized into three planning horizons: short-term, mid-term, and long-term. The short-term recommendations address immediate needs and are intended for implementation within the next three years. Mid-term recommendations, projected for three to seven years, involve initiatives that require additional planning, budgeting, and resource allocation to improve service delivery and prepare for anticipated growth. Long-term recommendations, projected for seven to fifteen years, focus on strategic initiatives that will support sustained community growth, enhance service capabilities, and ensure that JFD continues to meet high performance standards well into the future.

Cost projections associated with these recommendations are based on the best available forecasting methods and data at the time of this report. These projections are intended to provide a reasonable estimate of financial impact; however, future costs may vary due to a number of factors. Changes in economic conditions, inflation, labor and benefits expenses, equipment availability, construction and material costs, supply chain disruptions, and shifts in city growth or service demand may all affect final costs. These estimates should therefore be viewed as planning tools rather than fixed amounts.

It is important to emphasize that these recommendations are advisory in nature. The City of Jonesboro and the Jonesboro Fire Department maintain full discretion regarding whether, when, or how to implement them. Each recommendation has been developed through a combination of direct observations, stakeholder interviews, and data collection. The analysis was conducted in comparison with established industry best practices and applicable standards, as well as the professional experience of ESCI consultants.

## Short-Term Strategies

The following short-term strategies are intended to address immediate operational needs and enhance overall service delivery and efficiency within the next three years. These recommendations focus on practical, achievable improvements that can be implemented with minimal disruption to current operations. They are designed to strengthen JFD's existing capabilities, address identified gaps, and lay the groundwork for future mid- and long-term initiatives.



#### Recommendation 1-A: Add a Second Assistant Chief Position

It is recommended that the Jonesboro Fire Department establish a second Assistant Chief position to improve executive-level oversight and organizational effectiveness. Currently, JFD operates with one Assistant Chief responsible for a broad scope of responsibilities. By adding a second Assistant Chief, duties can be more effectively divided, one position dedicated to Operations and the other to Administration. This dual-Assistant Chief model is a widely adopted structure in fire departments of comparable size and call volume, offering enhanced focus, accountability, and strategic leadership across core departmental functions.

At present, the Division Chief of Training is tasked with managing many administrative responsibilities that would traditionally fall under the purview of a second Assistant Chief. This limits the Division Chief's capacity to fully focus on developing and executing training initiatives critical to JFD's mission. Establishing a second Assistant Chief would relieve this burden.

Implementing this change would allow for clearer separation and specialization of executive responsibilities within JFD. The Assistant Chief of Administration would be dedicated to managing high-level administrative functions such as budget development, policy oversight, personnel management, and interagency coordination. Meanwhile, the Assistant Chief of Operations would focus exclusively on ensuring operational readiness, overseeing daily emergency response coordination, managing incident command procedures, and supporting the effectiveness of front-line personnel.

Additionally, establishing a second Assistant Chief position strengthens JFD's succession planning and leadership continuity. With two high-ranking officers overseeing distinct operational and administrative domains, JFD gains greater flexibility and resilience in leadership coverage. Either Assistant Chief would be well-positioned to step in and fulfill the duties of the Fire Chief during periods of absence, ensuring consistent executive oversight and decision-making. This structure not only supports smoother transitions during leadership changes or temporary vacancies but also provides a clearer pathway for leadership development within JFD, helping to prepare the next generation of senior leaders.

The total annual cost of adding an Assistant Chief position is estimated at \$144,979 when factoring in salary and full benefit obligations. The base salary is \$109,172, with an additional \$26,201 for LOPFI pension contributions (24% of salary) and \$1,583 for



Medicare (1.45% of salary). Average health and dental coverage adds \$7,946 annually, while life insurance and MASA emergency transport coverage add \$29 and \$48, respectively, as shown in the following figure.

Figure 67. Assistant Chief Add-On

| ltem                    | Costs     |
|-------------------------|-----------|
| Salary (Max)            | \$109,172 |
| LOPFI Pension (24%)     | \$26,201  |
| Medicare (1.45%)        | \$1,583   |
| Health/Dental (average) | \$7,946   |
| Life Insurance          | \$29      |
| MASA                    | \$48      |
| Total                   | \$144,979 |

# Recommendation 1-B: Increase Wellness Coordinator Engagement with Fire Department

It is recommended that the City of Jonesboro and the Jonesboro Fire Department take steps to increase the involvement of the city's Wellness Coordinator with JFD personnel. This can be achieved through intentional outreach efforts such as regular station visits, attending shift meals, and participating in ride-alongs with crews. These informal interactions provide a valuable opportunity to build trust and familiarity between staff and the Wellness Coordinator, which is essential for creating a supportive environment where firefighters feel comfortable seeking mental health assistance. Establishing relationships before services are needed aligns with industry best practices and can lead to earlier intervention and better outcomes.

If the current workload of the Wellness Coordinator limits their capacity to regularly engage with all city departments, the City of Jonesboro should evaluate the feasibility of adding an additional Wellness Coordinator. This added capacity would allow for a more focused and consistent presence within JFD, enabling the proactive development of relationships and ensuring fire personnel have accessible and trusted mental health support. A dedicated or shared-position approach tailored to public safety employees could significantly enhance the overall wellness strategy and demonstrate a strong organizational commitment to the health and resilience of the fire service workforce.



#### Recommendation 1-C: Establish a Peer Support Hotline

It is recommended that the Jonesboro Fire Department establish a dedicated peer support hotline to enhance accessibility and improve the effectiveness of its peer support program. This hotline would serve as a central point of contact, allowing personnel in need of support to quickly and confidentially connect with one of JFD's trained peer support team members. Implementing a single, easy-to-remember number that routes calls to available peer support team members will streamline the process, reduce barriers to access, and ensure timely assistance, particularly during high-stress or crisis situations.

Creating a peer support hotline aligns with industry best practices and demonstrates JFD's commitment to strengthening its internal mental health support infrastructure. It also supports early intervention by providing firefighters with a reliable, trusted resource when they may be hesitant to seek professional counseling. As the peer support team currently operates on a volunteer basis, establishing a hotline will also help distribute the workload more evenly and ensure coverage across shifts and timeframes.

## Recommendation 1-D: Consider Providing a Stipend for Peer Support Team Members

It is recommended that the Jonesboro Fire Department consider offering a stipend to members of the peer support team in recognition of their time and commitment and the emotional demands associated with the role. Currently, the program operates entirely on a volunteer basis, which is commendable but may limit future growth, availability, and sustainability of the service. Providing a modest financial incentive can help acknowledge the importance of peer support, encourage continued participation, and attract additional qualified members.

Offering a stipend also aligns with practices in other departments that have successfully formalized their peer support programs. As peer support team members are often called upon outside of regular duties and may handle sensitive, high-stress situations, compensating them for this added responsibility reflects the value placed on mental health and wellness within the organization. This investment would support the long-term viability of the program and reinforce JFD's commitment to building a strong, resilient workforce.



## Recommendation 1-E: Implement Regular, Comprehensive Medical Evaluations

It is recommended that the Jonesboro Fire Department implement regular, comprehensive medical evaluations for all personnel, integrated into an annual or biennial physical exam. These evaluations should align with NFPA 1582 standards, which provide guidelines for medical requirements for firefighters, including cardiovascular screening, cancer risk assessments, and mental health screenings. Adhering to NFPA 1582 ensures that medical evaluations are thorough, consistent, and tailored to the unique risks faced by fire service members.

Regular medical screenings offer significant benefits beyond immediate health monitoring. Early detection and management of cardiovascular disease, cancer, and musculoskeletal conditions can substantially reduce long-term medical costs and improve quality of life for firefighters. It is important to note that many existing cost analyses underestimate the true financial benefits of these programs, as they often exclude non-occupational injuries and the extended costs related to premature morbidity and mortality. Preventing chronic diseases and reducing early disability can result in substantial long-term cost savings for JFD and the City of Jonesboro.

To balance thoroughness with budget considerations, many fire departments conduct these comprehensive medical evaluations every two years instead of annually. This biennial schedule maintains effective health oversight while managing program costs. Implementing a structured medical evaluation program in accordance with NFPA 1582, whether annually or biennially, will reinforce JFD's commitment to employee wellness and operational readiness.

Although the cost of an annual NFPA 1582 physical can be significant, often ranging from \$500 to \$1,000 per firefighter depending on the scope of testing and regional healthcare pricing, it is important to view this expense as an investment in both personnel health and long-term cost savings.

## Recommendation 1-F: Install a Source Capture Exhaust Systems in All Stations

It is recommended that the City of Jonesboro and the Jonesboro Fire Department prioritize the installation of source capture exhaust systems in all fire stations. These systems are essential for removing hazardous diesel exhaust directly from the tailpipes of fire apparatus before it can contaminate the air in apparatus bays and adjacent living or working spaces. Diesel exhaust is a known carcinogen, and prolonged exposure



increases the risk of respiratory illness, cardiovascular disease, and certain cancers among firefighters.

Currently, Jonesboro stations do not have any form of source capture ventilation, and much of JFD's fitness equipment is located in the apparatus bays. This creates a compounding risk, as personnel engaging in physical training may be exposed to harmful airborne particulates while exercising. Implementing source capture systems would significantly reduce this risk by improving indoor air quality and aligning JFD with national health and safety best practices.

Although the upfront costs of system installation can vary depending on station design and system specifications, grant funding and cost-sharing opportunities may be available through state and federal occupational safety grants programs. The long-term benefits, such as improved firefighter health and longevity, can make this a financially and operationally sound investment in JFD's future.

The estimated cost to install source capture exhaust systems can range from approximately \$25,000 to \$40,000 per station, depending on the size of the apparatus bays, the number of vehicles served, and the complexity of the installation. For all seven stations, the total projected cost is estimated at approximately \$175,000 to \$280,000. These projections are based on current industry averages and may vary due to changes in equipment pricing, labor costs, material availability, or other economic factors.

## Recommendation 1-G: Designate an Infection Control Officer

It is recommended that the Jonesboro Fire Department formally designate an Infection Control Officer (ICO) in alignment with NFPA 1581: *Standard on Fire Department Infection Control Program.* NFPA 1581 outlines the minimum requirements for an infection control program, including the assignment of a qualified individual to oversee the development, implementation, and management of policies and procedures aimed at reducing occupational exposure to infectious diseases.

Designating an ICO will ensure JFD has a dedicated individual responsible for coordinating infection control measures, training personnel on appropriate protective practices, and ensuring compliance with federal, state, and local health regulations. This role is particularly important in today's operational landscape, where firefighters are increasingly exposed to biological hazards during emergency medical responses, fireground operations, and public health crises. An ICO would also serve as the primary



point of contact for managing exposure incidents and ensuring proper documentation, reporting, and follow-up procedures are in place.

## Recommendation 1-H: Increase Minimum Daily Staffing from 29 to 33 Personnel

It is recommended that the Jonesboro Fire Department increase its minimum daily staffing from 29 to 33 personnel. To support this increase and maintain the appropriate staffing factor to cover vacation, sick leave, Kelly Days, and other time off, JFD should hire 15 additional firefighters (five per shift.) The four additional on-duty personnel per day would be assigned as follows:

- 1. One (1) firefighter added to each of JFD's three ladder trucks, increasing their staffing from two (2) to three (3).
- 2. One (1) firefighter added to Engine 7, increasing its staffing from three (3) to four (4).

Increasing the staffing on ladder trucks from two (2) to three (3) personnel significantly enhances operational effectiveness and firefighter safety. With only two (2) personnel, ladder companies are limited in their ability to perform critical tasks such as search and rescue, ventilation, and forcible entry upon arrival. Adding a third (3<sup>rd</sup>) firefighter ensures that these units can immediately begin independent operations without waiting for engine company support, improving the speed and coordination of fireground tasks and better supporting the rescue and protection of both civilians and fellow firefighters.

The staffing increase on Engine 7 is also a strategic improvement. Engine 7 is located on the outskirts of the city where backup from other units often faces delays. By staffing four (4) personnel, the engine crew will be able to comply with the "two-in, two-out" OSHA requirement for interior structural firefighting, enabling a safer and more immediate interior attack without waiting for additional units. Additionally, Station 7 houses a water tanker that is often needed in non-hydranted areas. Currently, this unit responds with a single firefighter when dispatched. With four (4) personnel, the station can deploy two (2) members on the engine and two (2) on the tanker, greatly improving operational safety and efficiency.

The latest Insurance Services Office (ISO) rating for JFD showed deployment scores of 8 out of 15, indicating room for improvement in staffing and response capabilities. Increasing minimum staffing as recommended will strengthen JFD's ability to meet staffing and response standards, which can boost these deployment scores. Improving



this metric is critical to helping Jonesboro maintain its ISO Class 1 rating, ensuring the highest level of fire protection and potentially lowering insurance costs for the community.

The total annual cost of adding a firefighter at top pay is estimated at \$85,442 when including salary and full benefit obligations. This amount consists of a base salary of \$61,713, with an additional \$14,811 for LOPFI pension contributions (24% of salary) and \$895 for Medicare (1.45% of salary). Health and dental coverage add \$7,946 annually, while life insurance and MASA emergency transport coverage add \$29 and \$48, respectively. When projected across 15 firefighters, the total annual cost rises to approximately \$1,281,630, as shown in the following figure.

Figure 68. 15 Firefighters Add On

| ltem                      | Costs       |
|---------------------------|-------------|
| Salary (Max)              | \$61,713    |
| LOPFI Pension (24%)       | \$14,811    |
| Medicare (1.45%)          | \$895       |
| Health/Dental (average)   | \$7,946     |
| Life Insurance            | \$29        |
| MASA                      | \$48        |
| Total per Firefighter     | \$85,442    |
| Total for 15 Firefighters | \$1,281,630 |

# Recommendation 1-I: Purchase Training Academy Grounds from Craighead County

It is recommended that the City of Jonesboro pursue the purchase of the current training academy grounds, which are presently leased from Craighead County for a nominal fee. Although the cost of the lease, \$10 annually, is not a financial burden, the lack of ownership presents a significant limitation. Specifically, the Jonesboro Fire Department is restricted in its ability to make long-term capital investments or permanent improvements to the site, including the addition of new training props or infrastructure necessary to enhance firefighter preparedness and safety.

Ownership of the property would provide JFD with the stability and authority needed to fully develop the site into a modern, comprehensive training facility. This includes the potential for permanent live fire training structures, technical rescue training areas, specialized props for hazardous materials and EMS training, and classroom or support



facilities. With full control over the property, JFD could seek grant funding or capital improvement resources to support these enhancements—opportunities that are currently difficult to pursue on leased land. Additionally, the training grounds are ideally situated within city limits, allowing Jonesboro Fire Department personnel to conduct regular, on-duty training without leaving their primary response districts.

## Recommendation 1-J: Improve Radio Interoperability with Private EMS Providers

It is recommended that the Jonesboro Fire Department work with local private EMS providers and the 911 communications center to establish direct radio interoperability between JFD personnel and responding EMS units. The current process, which requires messages to be relayed through two separate dispatch centers, creates unnecessary delays that can jeopardize responder and patient safety during emergency incidents.

Implementing a system that allows for real-time, direct communication between JFD units and EMS providers will enhance coordination on critical scenes, improve patient care handoffs, and reduce the risk of miscommunication. This can be achieved through shared radio channels, cross-patching systems, or by issuing interoperable radios to EMS providers. Exploring state or federal grant opportunities, such as those available through the Department of Homeland Security or the Assistance to Firefighters Grant (AFG) program, may help offset implementation costs.

## Recommendation 1-K: Establish and Empower a Fire Department Safety Committee

It is recommended that the Jonesboro Fire Department establish a safety committee aligned with best practices consistent with Chapter 4 of the National Fire Protection Association's Standard on Fire Department Occupational Safety, Health, and Wellness Program. Creating a dedicated safety committee and giving it the authority to actively address firefighter safety can be one of the most effective ways to reduce risks and promote a culture of safety within JFD.

The safety committee should meet monthly with a clear mission to raise awareness and encourage behavior changes that foster a safer work environment. Its responsibilities should include reviewing all accidents, injuries, near-miss events, and safety-related suggestions submitted by members. By carefully analyzing this information, the committee can identify trends, hazards, and opportunities for improvement, then report their findings directly to the Fire Chief.



Rather than only responding to incidents with new rules, the committee should proactively focus on safety education and promoting individual accountability for safety among members. Meetings should be held regularly in accessible locations with minutes recorded and shared department—wide to maintain transparency and encourage engagement. The committee should include members representing all ranks to ensure diverse perspectives and buy—in across JFD. ESCI emphasizes that sustaining an active, empowered safety committee is critical to enhancing firefighter safety and wellness over the long term.

# Recommendation 1-L: Evaluate Fire Service Mechanic Compensation and Contracting Options

To ensure the operational readiness and longevity of its fire apparatus fleet, the Jonesboro Fire Department has appropriately posted a position for a certified Fire Service Mechanic with Emergency Vehicle Technician (EVT) credentials. ESCI commends the City of Jonesboro for recognizing the critical need for this role and for proactively initiating the hiring process. The currently advertised salary range is \$50,293 to \$54,654.

However, based on national and regional compensation data, this salary range is below average for certified EVT diesel mechanics. According to data from PayScale, certified EVTs earn an average salary of approximately \$66,000 annually and the U.S. Bureau of Labor Statistics lists the median salary for diesel service technicians at \$60,640. These figures suggest that the current range may limit the City of Jonesboro's ability to attract experienced and qualified candidates.

It is recommended that the City of Jonesboro consider reposting the EVT position with a more competitive salary range, ideally between \$60,000 and \$70,000 annually. Increasing the salary offer will help align with market expectations, improve recruitment efforts, and minimize potential delays in apparatus maintenance due to the prolonged vacancy.

In addition to adjusting compensation, it is also recommended that the City of Jonesboro conduct a cost-benefit analysis to compare the financial implications of hiring a full-time, in-house, EVT-certified fire service mechanic versus contracting these services to a third-party vendor. Factors to be analyzed should include wages, benefits, tool allowances, training, long-term retention, service turnaround time, and vendor reliability. Having a certified EVT Mechanic either internally or through contract is critical for ensuring the safety, performance, and uptime of fire department apparatus.



## Recommendation 1-M: Evaluate the 48/96 Work Schedule After Implementation

The Jonesboro Fire Department is currently transitioning from a traditional 24/48 schedule to a 48/96 work schedule. ESCI recommends that the City of Jonesboro conduct a comprehensive evaluation of this change 18 to 24 months after full implementation. The purpose of this assessment should be to determine the impacts of the new schedule on critical operational and personnel outcomes.

Key areas of evaluation should include:

- Responder burnout and fatigue
- · Employee retention and recruitment trends
- · Operational readiness and effectiveness
- Overtime expenditures
- Reported injuries, sick leave utilization, and accidents

It is important to monitor whether the change in shift schedule contributes negatively to any of these factors. This data-driven review will help inform whether the 48/96 schedule continues to meet the operational and workforce needs of JFD or if further adjustments are warranted.

Additionally, the City of Jonesboro should remain aware of national trends and evolving standards related to firefighter work hours. A growing number of fire departments across the country are actively working to reduce their average workweeks to 48 hours or less in order to improve workforce sustainability and safety. Most notably, the State of Florida recently passed House Bill 929, which reduces the standard firefighter workweek to 42 hours.

As part of long-term workforce planning, the City of Jonesboro should remain open to reevaluating its schedule structure in the future and consider strategies that align with national best practices and legislative shifts aimed at improving firefighter wellness and retention.

# Recommendation 1-N: Develop Leadership and Administrative Training Tracks in Partnership with Arkansas State University

Through stakeholder interviews, ESCI identified succession planning as a key area of concern within the Jonesboro Fire Department, particularly in relation to preparing personnel for leadership and administrative roles. These roles require knowledge and



skills beyond emergency operations, including personnel management, human resources, budgeting, and strategic planning.

To address this need, it is recommended that JFD collaborate with Arkansas State University to develop a structured leadership development program tailored to the fire service. This program can provide firefighters with the academic and professional foundation needed to assume greater leadership responsibility as they progress through their careers.

One approach is to create three distinct development tracks:

- 1. **Company Officer Track** Focused on preparing firefighters for initial supervisory roles, such as Lieutenant or Captain.
- 2. **Battalion/Division Chief Track** Designed to support mid-level management and operational leadership readiness.
- 3. **Executive Track** Intended for Assistant Chief and Fire Chief-level roles, emphasizing strategic leadership and executive decision-making.

ASU offers several academic programs and courses that align well with these development goals, including:

- Communication Studies (e.g., interpersonal and organizational communication)
- Organizational Leadership
- Organizational Supervision
- Financial Management
- Public Health
- Public Administration

By leveraging local higher education resources, JFD can establish a sustainable pipeline of future leaders with the skills needed to manage increasingly complex organizational demands. Additionally, this initiative demonstrates a strong commitment to career development and workforce investment, further supporting recruitment and retention objectives.

#### Recommendation 1–O: Consider Additional Revenue Sources

ESCI recommends that the City of Jonesboro and the Jonesboro Fire Department actively pursue additional sources of revenue to support the implementation of the recommendations outlined in this report. These enhancements are aimed at improving



service delivery, maintaining operational readiness, and ensuring long-term sustainability of JFD. Although some recommendations may require significant investment, there are a number of potential funding mechanisms that can help offset these costs without placing the entire burden on existing general funds, as described:

## Establish a Fire Service Fee on Hotel Occupancy to Support Fire and Emergency Services

ESCI recommends the City of Jonesboro explore the implementation of a fire service fee on hotel occupancy. This nominal fee—\$1 or \$2 per night per occupied room—would be added to guests' nightly hotel bills, similar to tourism or convention fees used in other municipalities.

With 2,380 hotel rooms currently in Jonesboro, this initiative could generate meaningful revenue to support fire department equipment replacement, public safety programs, and other needs tied to visitor-related service demands.

Visitors to Jonesboro benefit from fire protection and emergency services during their stays, and implementing a modest fire fee aligns with industry practices in other cities that recognize the impact of tourism on public safety systems. The following figure illustrates the projected annual revenue that could be generated by implementing a fire service fee of \$1 or \$2 per night, based on varying hotel occupancy rates using the estimated 2,380 hotel rooms.

| Figure 69. Projected | l Annuai | l Revenue Base | d on Fire Fee | e & Occupano | v Rate |
|----------------------|----------|----------------|---------------|--------------|--------|
|                      |          |                |               |              |        |

| Occupancy Rate | \$1/Night Fee | \$2/Night Fee |
|----------------|---------------|---------------|
| 25% Occupancy  | \$217,375     | \$434,750     |
| 50% Occupancy  | \$434,350     | \$869,500     |
| 75% Occupancy  | \$652,125     | \$1,304,250   |
| 100% Occupancy | \$869,500     | \$1,739,000   |

#### Cost Recovery for Vehicle Extrications

One viable and increasingly common source of revenue among fire departments across the country is cost recovery for vehicle extrication services. These services often require the use of specialized tools and highly trained personnel and can result in significant wear on equipment. Fire departments are not traditionally reimbursed for these resource–intensive operations unless specific billing mechanisms are in place.



The Jonesboro Fire Department should consider implementing a cost recovery program for vehicle extrications. This could be done in one of two ways:

- 1. **Comprehensive Billing** Recovering costs for *all* vehicle extrications, regardless of residency.
- 2. **Targeted Billing** Focusing solely on *non-resident* vehicle extrications, which allows the City of Jonesboro to recoup costs from individuals who are not contributing to the local tax base but still utilize emergency services.

The latter option is a commonly used approach that balances the need for cost recovery while minimizing the financial impact on local taxpayers. This policy is already in place in several municipalities throughout the United States and is often viewed as a fair method to recover the true costs of service provision.

Cost recovery amounts can vary depending on time, personnel, and equipment used, but typically range from \$500 to \$1,500 per incident. Implementation can be managed through third-party billing services, minimizing administrative burden and ensuring compliance with legal and insurance guidelines.

## Consider a Dedicated Sales Tax Increase for Public Safety

Currently, the City of Jonesboro has a sales tax rate of 1%, one of the lowest municipal sales tax rates in the state of Arkansas. Although this has historically been a point of pride for the city, it also limits available revenue needed to support a growing population and the increasing demands placed on critical public services, including fire, EMS, and police.

ESCI recommends the City of Jonesboro consider a sales tax increase specifically dedicated to public safety. A dedicated public safety tax ensures transparency and accountability, with all revenue directly earmarked for staffing, equipment, facility improvements, and other operational needs within the Jonesboro Fire Department and other public safety agencies.

Sales tax increases for public safety have been successfully implemented in numerous cities across Arkansas and the broader U.S. and often receive strong community support when the funding is tied to essential services. Even a small increase could generate significant recurring revenue, helping offset the costs of the recommendations in this report, such as station expansions, minimum staffing, vehicle replacements, and critical administrative support, without placing the full burden on property taxpayers.



Additionally, a portion of sales tax revenue is generated from non-residents who shop, dine, and conduct business in the city, creating a fairer and more diversified revenue base.

#### Implement a Per-Semester Fire Fee for Arkansas State University Students

The Jonesboro Fire Department provides comprehensive fire protection and emergency medical services to Arkansas State University, including all academic, residential, and athletic facilities, as well as the student population. This coverage is delivered with no direct contribution from the university or its students toward the operational costs required to maintain this essential service.

To help support and sustain the level of service provided, ESCI recommends that the City of Jonesboro and Arkansas State University collaborate to implement a nominal fire protection fee per student, per semester. Nominal fees of this kind are common practice at universities nationwide, especially when city fire departments provide direct emergency response to campus properties. The funds generated can help support service levels without impacting local taxpayers and ensure continued safety for students, faculty, and visitors.

The following figure shows projected revenue based on semester fees of \$5, \$10, and \$20, using an enrollment of 14,000 students.

|   | Semester Fee | Enrollment | Semesters per<br>Year | Annual Revenue |
|---|--------------|------------|-----------------------|----------------|
|   | \$5          | 14,000     | 2                     | \$140,000      |
|   | \$10         | 14,000     | 2                     | \$280,000      |
| _ | \$20         | 14,000     | 2                     | \$560,000      |

Figure 70. Projected Annual Revenue from Student Fire Fees at ASU

#### Pursue Grant Opportunities to Supplement Funding

Jonesboro Fire Department should actively pursue federal grant programs. Grants can provide critical funding support for staffing, equipment, training, and other operational needs that align with JFD's goals and recommendations as outlined in this report. Two common fire service grants are:

1. Staffing for Adequate Fire and Emergency Response (SAFER) program is a federal grant administered by the Federal Emergency Management Agency (FEMA) that provides funding to help fire departments increase or maintain the number of



- trained, front-line firefighters available in their communities. SAFER grants primarily support hiring new personnel, rehiring laid-off firefighters, or retaining firefighters who might otherwise be laid off.
- 2. **Assistance to Firefighters Grant (AFG)** program, also administered by FEMA, provides funding for a wider range of needs, including firefighter training, equipment acquisition, personal protective gear, health and safety programs, and vehicle and facility improvements. The AFG program is designed to help fire departments enhance their operational capabilities and improve overall firefighter and public safety.

Although the City of Jonesboro has applied for these grants in the past, success has been limited, largely due to the city's substantial reserve funds. Granting agencies often consider local funding reserves when evaluating applications, which can impact competitiveness. Nonetheless, continued strategic grant applications, possibly emphasizing specific needs or gaps that cannot be funded locally, may increase chances of success. ESCI recommends that the City of Jonesboro maintains dedicated personnel or contract expertise to manage grant writing and tracking, ensuring timely and competitive submissions. Securing grant funding can help offset costs associated with the recommended improvements, reduce the burden on local revenues, and accelerate the implementation of critical initiatives.

## Implementation of Fire Inspection Fees

ESCI recommends that the Jonesboro Fire Department consider implementing fire inspection fees as an additional revenue source. Fire inspection fees are charged to businesses, institutions, and certain occupancies that require periodic fire and life safety inspections. These fees help offset the costs, including personnel time, administrative support, and related resources, associated with conducting these inspections.

Implementing a structured inspection fee schedule is a common practice among fire departments nationwide and aligns with the principle that those who benefit directly from fire prevention services contribute to their costs. Such fees can also incentivize compliance and enhance fire safety within commercial and public buildings.

The City of Jonesboro should carefully evaluate current inspection processes, staffing capacity, and local economic conditions to develop a fair and sustainable fee structure. This could include tiered fees based on the type or size of occupancy, frequency of inspections, or complexity of the inspection required. Revenue generated from



inspection fees can support critical fire prevention programs, training, and equipment, ultimately helping to reduce the frequency and severity of fire incidents.

## Implementation of Lift Assist Fees for Commercial Assisted Living Facilities

ESCI recommends that the Jonesboro Fire Department consider implementing lift assist fees for emergency responses to commercial assisted living facilities that have trained staff capable of providing resident support. Lift assist incidents occur when emergency responders are called to help individuals who have fallen but do not require medical transport or urgent care.

Charging a nominal fee for these non-emergency lift assists at assisted living facilities with trained personnel helps offset the operational costs associated with such responses and encourages facilities to enhance their internal care capabilities.

This fee structure is common among fire departments nationwide and supports the principle that non-emergency calls that can be managed by the facility's trained staff should carry an associated cost. Implementing lift assist fees can help reduce unnecessary resource deployment and improve overall departmental efficiency. The City of Jonesboro should develop clear guidelines defining eligible facilities, fee amounts, and billing procedures to ensure fairness and transparency.

## Implementation of Impact Fees

ESCI recommends that the City of Jonesboro consider implementing impact fees for new residential and commercial developments. Impact fees are one-time charges imposed on developers to help offset the costs associated with the increased demand for fire and emergency services generated by new growth.

As the community expands, new developments create additional call volume, infrastructure needs, and strain on existing fire department resources. Impact fees provide a fair and equitable method for ensuring that new growth contributes its share toward funding facilities, apparatus, personnel, and other critical resources necessary to maintain appropriate levels of service.

These fees are widely used by fire departments and municipalities across the nation as a proactive way to support public safety infrastructure in growing communities. Impact fees are typically calculated based on factors such as the size and type of development, projected population increase, and expected impact on emergency services.



### Implementation of Standby Fees for Major Events

The Jonesboro Fire Department frequently provides standby or upstaffing services for major events within the City of Jonesboro, including Arkansas State University football games and other large gatherings. These events often require additional personnel and resources beyond normal staffing levels, resulting in significant overtime and operational costs for JFD.

ESCI recommends that JFD and the City of Jonesboro implement standby fees to recover costs associated with providing these enhanced emergency services during major events. Charging event organizers a standby fee ensures that the financial burden of additional staffing is fairly allocated to those who benefit directly from the service. The fee structure should be clearly defined, transparent, and based on actual staffing and resource needs, including overtime wages, equipment usage, and related expenses.

# Recommendation 1-P: Increase Training Budget Per Member to Support Conferences and Outside Training

ESCI recommends that the Jonesboro Fire Department increase its annual training budget allocation per member to allow for greater participation in professional conferences, seminars, and outside training opportunities. Although in-house training is critical to maintaining core competencies, exposure to national and regional training events offers additional benefits that directly enhance operational effectiveness and organizational growth.

Attending conferences and specialized training provides firefighters and officers with access to the latest best practices, emerging technologies, and innovative operational strategies. Equally important, these events create networking opportunities with peers from other fire departments, allowing attendees to learn from the successes and challenges of comparable agencies. This exchange of ideas can be invaluable, as members can return with new concepts, policies, or training approaches that have been proven effective elsewhere, adapting them to meet JFD's specific needs.

Many comparable departments allocate \$750 to \$1,500 per firefighter annually for professional development, depending on size and resources. Although increasing the training budget represents an added annual expense, the benefits often far outweigh the cost. Lessons learned through networking and exposure to innovative programs can result in operational efficiencies, reduced injuries, improved retention, and better risk management, which could potentially save JFD significant amounts in overtime, workers'



compensation, and equipment losses. Additionally, investment in professional development supports succession planning by preparing future leaders with the knowledge and relationships needed to guide JFD effectively.

# Recommendation 1-Q: Enhance Internal Communications and Information Sharing

ESCI recommends that the Jonesboro Fire Department implement structured internal communication strategies to improve information sharing, consistency, and transparency across all ranks. Effective communication ensures that critical updates, policy changes, and organizational priorities are clearly understood by all personnel, reducing the risk of miscommunication and promoting a stronger sense of engagement within JFD.

Several strategies are recommended to strengthen internal communications:

- Daily Virtual Briefings Conduct short daily Microsoft Teams meetings with all on-duty personnel to provide operational updates, review staffing or apparatus status, and relay time-sensitive information. These briefings should be concise but consistent, establishing a clear and reliable flow of information.
- Monthly Fire Chief Podcasts or Video Updates The Fire Chief should record a monthly podcast or video briefing to share department—wide updates, upcoming initiatives, accomplishments, and other important information. This format provides a direct line of communication from leadership to all members, helping build trust and alignment with departmental goals.
- Written Documentation of Orders and Directives All verbal orders, directives, or important information passed through the chain of command should also be documented in writing. This information should be stored in a centralized, easily accessible digital platform so that all members can retrieve and review it at any time, ensuring consistency and accountability.
- Weekly or Bi-Weekly Email/Newsletter Updates Create a concise weekly or biweekly internal email or digital newsletter summarizing key updates, upcoming
  training opportunities, policy changes, and notable achievements. This provides
  another written record of updates for members who may miss verbal
  communications or meetings.
- Anonymous Feedback or Suggestion Platform Implement an online anonymous feedback form or suggestion box to allow personnel to submit ideas, concerns, or questions directly to leadership. This can help leadership identify and address issues that might otherwise go unreported.



- Standardized Shift-Change Briefing Templates Develop a standardized written or digital shift-change briefing template for company officers to ensure critical information is consistently passed between shifts (e.g., apparatus status, ongoing incidents, special assignments, or administrative reminders).
- Internal SharePoint or Intranet Portal If not already in use, establish a centralized intranet or SharePoint portal where all directives, SOPs, training materials, and important updates are archived. Personnel should have easy access from any station, ensuring consistency and reducing dependency on word-of-mouth communication.

# Recommendation 1-R: Allow Kelly Days to Be Worked as Overtime to Maintain Consistent Staffing

With the transition to the 48/96 schedule and the implementation of ten-hour Kelly days, maintaining consistent minimum staffing levels will become increasingly important. ESCI recommends that the Jonesboro Fire Department allows members to voluntarily work their Kelly Days as overtime when needed.

Allowing this option will provide greater flexibility in filling staffing gaps created by Kelly Days and will help ensure that minimum staffing requirements are consistently met. This approach is a common practice in departments operating under extended shift schedules and can reduce the need for forced holdovers or other disruptive scheduling measures.

Although overtime does carry an additional financial cost, the operational benefit of maintaining proper staffing levels, improving response capability, enhancing firefighter safety, and ensuring compliance with best practices provides significant value. Properly managed, this system also gives personnel more control over their schedules while supporting JFD's goal of maintaining reliable service delivery.

# Recommendation 1-S: Expand Social Media Presence and Integration for Information Sharing and Recruitment

The Jonesboro Fire Department currently manages a Facebook page with over 9,200 followers that is used to share information about events and departmental activities. ESCI recommends expanding JFD's social media presence to include additional platforms such as Instagram and X (formerly Twitter). These platforms can be valuable tools for improving information sharing with the community, promoting fire and life safety



education, and enhancing recruitment efforts by showcasing JFD's culture, training, and community involvement.

It is further recommended that JFD incorporate links to all active social media accounts directly on the homepage of its website. Providing clear access to these platforms will increase public engagement and encourage residents to follow and share departmental updates.

Expanding JFD's use of multiple social media platforms also creates opportunities to reach different audiences. Instagram is particularly effective for sharing photos and videos of training, community outreach, and day-to-day operations, which can help build community trust and attract new recruits. X can be used for quick, real-time updates, such as emergency notifications, road closures, and fire safety tips. A broader and more coordinated social media strategy will strengthen community relationships and support both operational transparency and recruitment initiatives.

### Recommendation 1-T: Develop Strategic Plans

It is recommended that the Jonesboro Fire Department develop a formal strategic plan to guide organizational priorities and track progress toward key goals. Traditionally, fire service strategic plans have been designed as five-year documents; however, many agencies are now moving toward three-year plans. A shorter planning horizon allows for greater flexibility, more frequent evaluation, and the ability to adjust to changing community needs and operational demands.

The strategic plan should include goals derived from this Master Plan as well as other departmental initiatives that may emerge over time. These goals should serve as a clear roadmap for what JFD intends to accomplish within the next three years. By breaking down the broader recommendations of the Master Plan into focused, manageable objectives, the strategic plan will allow JFD to address priorities in a deliberate and achievable manner.

For improved accountability, each goal or objective in the strategic plan should be assigned to a specific individual within JFD. That person would be responsible for overseeing the progress of the assigned goal, reporting on milestones, and ensuring that timelines are met. This approach distributes responsibility across the organization, encourages ownership of outcomes, and provides leadership with a clearer view of progress toward strategic objectives.



### Recommendation 1-U: Develop Annual Reports

It is recommended that the Jonesboro Fire Department produce an annual report to review and communicate JFD's progress on strategic goals and key initiatives. The annual report should serve as a checkpoint to evaluate accomplishments from the previous year, identify areas where additional work is needed, and ensure continued alignment with JFD's strategic plan and overall mission.

In addition to tracking progress, the annual report provides an opportunity to highlight and celebrate departmental achievements. This may include recognizing significant milestones, improvements in service delivery, or successful completion of major projects. The report should also honor the contributions of JFD members by acknowledging promotions, commendations, and exemplary performance. Recognizing individual and team accomplishments not only boosts morale but also reinforces JFD's commitment to professionalism and excellence.

By documenting progress and celebrating successes each year, the annual report will improve transparency with City of Jonesboro leadership and the community while strengthening accountability and pride within JFD.

# Mid-Term Strategies

The mid-term strategies focus on initiatives that should be considered within the next three to seven years to enhance the Jonesboro Fire Department's overall effectiveness and prepare for anticipated community growth. These strategies typically involve a higher level of planning, budgeting, and resource allocation than short-term actions, and may include capital improvements, staffing adjustments, or program development. Although some of these strategies may not be immediately necessary, as current demand may not yet justify their implementation; however, they address areas where there is a high likelihood of increased demand within the next three to seven years. The recommendations in this section are intended to address projected service needs, improve operational efficiency, and position JFD to meet evolving industry standards. Implementing these strategies during this timeframe will help ensure that JFD keeps pace with population changes, incident trends, and technological advancements while maintaining high-quality emergency services.



# Recommendation 2-A: Increase Minimum Daily Staffing from 33 to 36 Personnel

It is recommended that the Jonesboro Fire Department increase staffing on each of its three ladder trucks from three (3) to four (4) firefighters. To support this change, JFD's minimum daily staffing would need to increase from 33 to 36 personnel. To maintain appropriate coverage for leave such as vacation, sick days, and Kelly Days, JFD should hire an additional 12 firefighters, four (4) per shift.

Increasing ladder truck crews to four (4) personnel will enhance operational capabilities by providing the necessary manpower to manage complex and evolving fireground tasks more effectively. With four (4) firefighters, ladder companies gain additional flexibility to assign specialized roles without sacrificing other critical functions. This staffing level improves coordination and allows crews to operate more safely and efficiently, particularly on large or multi-story structures where workload and hazards are increased.

This recommendation also aligns with national standards like NFPA 1710, which emphasize the importance of adequate staffing for firefighter safety and effective incident management. By adopting four-person ladder crews, JFD will improve its ability to execute tactical operations swiftly and safely, reduce firefighter fatigue, and strengthen overall response capacity, resulting in better protection for both firefighters and the community.

As mentioned, the most recent Insurance Services Office evaluation assigned the Jonesboro Fire Department a deployment score of 8 out of 15, highlighting opportunities to improve operational readiness. By increasing minimum staffing as proposed, JFD will enhance its capacity to respond quickly and effectively, which should lead to higher deployment scores in future assessments. Strengthening these scores is important for JFD to retain its prestigious ISO Class 1 rating, reflecting superior fire protection services and benefiting the community through potentially reduced insurance premiums.

The total annual cost of adding a firefighter at top pay is estimated at \$85,442 when including salary and full benefit obligations. This amount consists of a base salary of \$61,713, with an additional \$14,811 for LOPFI pension contributions (24% of salary) and \$895 for Medicare (1.45% of salary). Health and dental coverage adds \$7,946 annually, while life insurance and MASA emergency transport coverage add \$29 and \$48,



respectively. When projected across 12 firefighters, the total annual cost rises to approximately \$1,025,308.

Figure 71. Add On of 12 Firefighters

| Item                      | Costs       |
|---------------------------|-------------|
| Salary (Max.)             | \$61,713    |
| LOPFI Pension (24%)       | \$14,811    |
| Medicare (1.45%)          | \$895       |
| Health/Dental (average)   | \$7,946     |
| Life Insurance            | \$29        |
| MASA                      | \$48        |
| Total per Firefighter     | \$85,442    |
| Total for 12 Firefighters | \$1,025,308 |

### Recommendation 2-B: Equip Engines and Ladder Trucks with ALS Capabilities

It is recommended that the Jonesboro Fire Department initiate a phased implementation of advanced life support (ALS) capabilities across all ten front-line apparatus, which includes seven engines and three ladder trucks. This initiative addresses a critical public safety need stemming from a growing shortage of paramedics, particularly within private ambulance services. These shortages can lead to delayed ALS response times, which directly impact patient care during life-threatening emergencies such as cardiac arrest, respiratory failure, and major trauma. By equipping JFD units with ALS capabilities, the City of Jonesboro can enhance its ability to deliver timely, high-level medical care to residents and visitors alike.

To achieve this, JFD must invest both in personnel development and ALS medical equipment. Supporting firefighters in obtaining their paramedic certification is essential. The following financial assistance programs are recommended to promote participation and reduce personal financial barriers:

- **Tuition reimbursement**: \$5,000-\$7,500 per paramedic student
- **Upfront education sponsorships:** Approximately \$7,500 per member (as an alternative to reimbursement)
- Annual stipend: \$2,500-\$4,000 for certified paramedics

Assuming JFD sponsors 10 paramedics per year, the annual cost for education support and stipends would range from \$75,000 to \$120,000, depending on the incentive model adopted.



Each ALS-equipped apparatus will require a standard set of equipment, including:

- Cardiac monitor/defibrillator (e.g., LifePak 15 or Zoll X Series): \$30,000-\$35,000
- Advanced airway equipment and bag-valve masks: \$1,500
- ALS medication box with lockable storage: \$2,000
- IV kits, suction devices, and miscellaneous supplies: \$1,000
- Monthly restocking and maintenance: approximately \$3,000 per year per unit

For all ten front-line apparatus, the initial capital investment for equipment would total approximately \$350,000-\$400,000, with recurring annual maintenance and restocking costs of \$30,000.

With EMS calls making up a high percentage of JFD's total call volume, this investment will provide a direct and measurable benefit to the public. Equipping fire apparatus with ALS capability ensures faster access to advanced care, improves patient outcomes, and reduces reliance on overextended private ambulance services. It also positions the Jonesboro Fire Department to better meet the evolving emergency needs of the community.

# Recommendation 2-C: Add One FTE Position to the Training Division

It is recommended that the Jonesboro Fire Department add one full-time equivalent (FTE) position to the Training Division, increasing the training staff from three (3) to four (4) personnel. The current structure includes a Division Chief and two Captains. Expanding the team will support JFD's growing operational demands, particularly as more personnel obtain EMT certifications and JFD prepares to implement advanced life support (ALS) capabilities across front-line apparatus.

With the addition of this position, the three (3) FTEs under the Division Chief should be assigned distinct areas of responsibility to increase efficiency and expertise, while maintaining flexibility to support each other during major training initiatives. The proposed areas of focus are:

- 1. **Recruit Training**: Responsible for the design, delivery, and evaluation of recruit academies and initial onboarding.
- 2. **Field Training and Officer Development**: Oversees ongoing training for incumbent personnel, including hands-on drills, simulations, and leadership development for aspiring officers.



3. **EMS Training and Coordination**: Dedicated to ensuring all EMS-certified members receive required continuing education, maintain licensure, and stay current with medical protocols and procedures.

The growing number of EMT-certified firefighters, combined with the recommendation to equip engines and ladder trucks with ALS capabilities, has created a clear need for a full-time EMS Training and Coordination role. This position would oversee scheduling and documentation of continuing education credits, liaise with the Arkansas Department of Health EMS Section and the local Medical Director, and ensure compliance with all recertification requirements. Additionally, as more personnel are added to JFD through other staffing recommendations, the demand for ongoing training across all disciplines will increase significantly. This additional training officer will be essential to maintaining high standards of readiness, consistency, and professional development for a larger workforce.

The estimated annual cost of adding a new full-time equivalent (FTE) position for training varies depending on the rank selected for the position. At top pay, a Driver/Engineer costs approximately \$98,860 and a Captain costs \$113,998 annually when factoring in salary and full benefit obligations. These totals include base salary, LOPFI pension contributions (24% of salary), Medicare (1.45% of salary), and average health, dental, life insurance, and MASA emergency transport coverage.

The City of Jonesboro could staff the position as a Driver/Engineer to reduce costs or as a Captain to provide higher-level administrative oversight and leadership within the training program. Decision-makers must weigh the additional cost of higher-ranking officers against the operational benefits of enhanced training oversight

Figure 72. Training FTE Add-On Costs

| ltem                    | Driver/Engineer | Captain   |
|-------------------------|-----------------|-----------|
| Salary (Max.)           | \$72,409        | \$84,476  |
| LOPFI Pension (24%)     | \$17,378        | \$20,274  |
| Medicare (1.45%)        | \$1,050         | \$1,1225  |
| Health/Dental (average) | \$7,946         | \$7,946   |
| Life Insurance          | \$29            | \$29      |
| MASA                    | \$48            | \$48      |
| Total                   | \$98,860        | \$113,998 |



# Recommendation 2-D: Add Additional Radio Operators to the 911 Communications Center

It is recommended that the City of Jonesboro add additional radio operators to the 911 Communications Center to address the increasing call volume of the Jonesboro Fire Department and ensure the safe and efficient management of emergency communications. As emergency call volumes continue to grow, the workload placed on existing dispatch personnel has reached a point where it may compromise operational effectiveness and responder safety.

Currently, it is not uncommon for a single dispatcher to be responsible for monitoring multiple radio channels while simultaneously handling call-taking duties. This practice creates a significant risk of missed or delayed radio transmissions, particularly during high-tempo incidents where seconds can mean the difference between a successful outcome and a critical failure. Fireground communications require constant vigilance and clear, timely information exchange between field units and the communications center. Overburdened dispatchers may unintentionally miss critical updates such as mayday calls, changes in incident conditions, or urgent resource requests.

Adding dedicated radio operators would significantly reduce these risks by ensuring focused monitoring of JFD channels and improving the overall situational awareness of dispatchers during active incidents. This investment would enhance firefighter safety, improve response coordination, and increase the resilience of the City of Jonesboro's emergency communication infrastructure as a whole. As the city grows and public safety demands rise, staffing the 911 center to meet operational needs is essential to supporting a modern, responsive fire service.

# Recommendation 2–E: Conduct Regular Reviews of Compensation Structures and Market Competitiveness with a Regional Focus

Attracting and retaining skilled personnel is essential for the Jonesboro Fire Department to maintain effective and reliable service delivery. To support this, it is recommended that the City of Jonesboro and JFD conduct regular reviews of current compensation structures, market competitiveness, and overall compensation philosophies. These reviews should include both internal assessments and comparisons to regional peer departments, not just statewide averages, since neighboring and nearby fire departments often represent more realistic competitors for recruitment and retention.



Focusing on regional comparables allows JFD to better understand local market conditions and ensure compensation packages remain competitive with departments in close proximity. This approach is crucial because employees often consider neighboring agencies with similar community sizes and cost of living when making career decisions. Addressing these factors can help reduce turnover and support long-term workforce stability.

The City of Jonesboro should also explore incentive and pay progression programs that reward skill development and career advancement outside of formal promotional tracks. Such programs have proven effective in improving employee morale, retention, and professional growth opportunities, especially in departments where promotional positions are limited. Regularly updating and communicating compensation philosophies will help ensure JFD remains an attractive employer and can sustain a qualified, motivated workforce.

#### Recommendation 2-F: Construct Fire Station 8

The City of Jonesboro should move forward with the development and construction of Fire Station 8 to improve fire and emergency medical service (EMS) delivery, address existing service gaps, and meet future demands driven by population growth and development patterns. ESCI has reviewed system performance metrics, incident density, population distribution, and geographic response coverage.

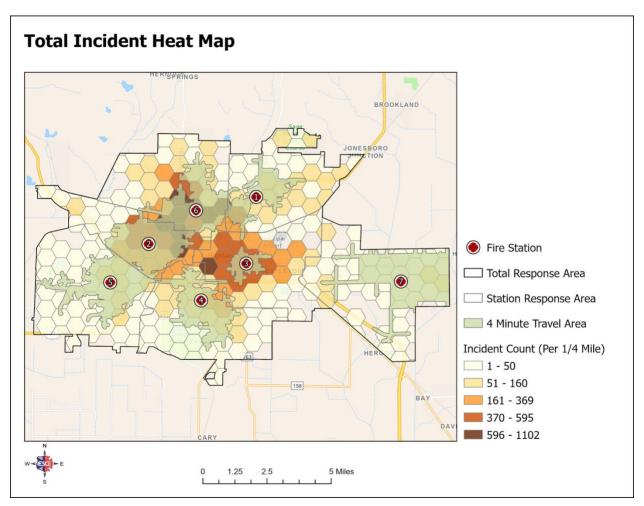
Fire departments must balance the cost of expanding services with the expectations and safety needs of the community. Although there is no universal threshold to trigger the need for a new station, ESCI recommends applying a combination of incident volume, population growth, and geographic response gap criteria to determine appropriate fire station placement.

ESCI's analysis shows that a central portion of the City of Jonesboro exhibits high call demand and increasing development density but lacks sufficient response coverage within recommended time benchmarks. The location of Fire Station 8 should be centered within this underserved region to optimize travel times and reduce the burden on existing units, especially those already experiencing high call volumes and concurrency issues. In evaluating service coverage, ESCI considered nationally recognized standards including a four–minute response time for initial arrival of emergency resources. This standard is used to assess equity in protection, especially for higher–risk occupancies such as residential neighborhoods, commercial districts, and institutional facilities.



The following figure illustrates the current four-minute travel time polygon overlaid on the total incident heat map. This visualization highlights the relationship between incident demand and existing station coverage. Areas with a high concentration of incidents that fall outside the four-minute travel time polygon indicate locations where response times may be extended due to the lack of a nearby station. These gaps in coverage suggest that the current station distribution does not fully align with the highest areas of service demand. Identifying and addressing these areas is important for improving overall response performance, particularly for time-sensitive emergencies such as cardiac arrests and structure fires where rapid intervention is critical to saving lives and limiting property damage.

Figure 73. Four-Minute Travel Time with Heat Map



The following figure presents the four-minute travel time polygon overlaid on the population density map. Because population distribution is the primary driver of emergency service demand, this visualization is an important tool for evaluating



coverage. Areas with higher population densities that fall outside the four-minute travel time polygon represent locations where a significant number of residents may experience longer response times during emergencies. Identifying these gaps helps prioritize future resource allocation and station placement to ensure that growing or densely populated areas receive timely emergency services.

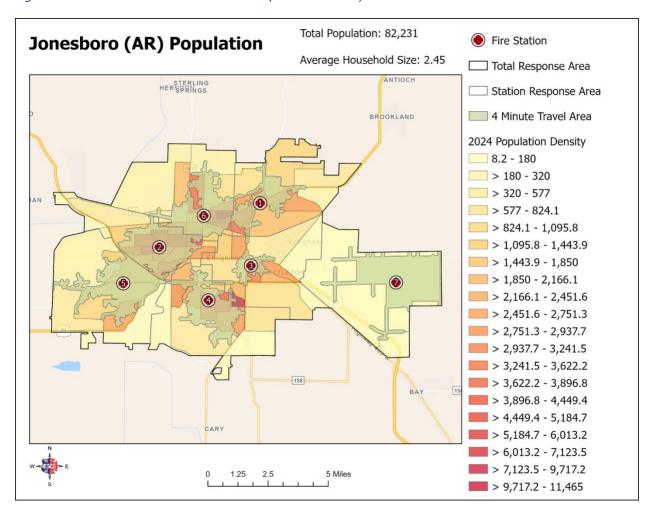


Figure 74. Four-Minute Travel Time with Population Density

### Key Factors Supporting Fire Station 8

- Population Growth and Urban Expansion: The City of Jonesboro's central core and surrounding neighborhoods continue to grow in both residential and commercial development, increasing service demands on JFD.
- **Incident Volume**: Incident heat mapping reveals that this area accounts for a significant portion of the City of Jonesboro's emergency calls, indicating an immediate need for localized resources to reduce response times.



- **Response Time Gaps**: Current coverage modeling shows that portions of the City of Jonesboro fall outside the desired four-minute response area from existing stations, presenting a challenge to meeting operational benchmarks.
- Call Concurrency and Unit Workload: Rising incident numbers can lead to multiple overlapping calls, stressing the available resources and delaying response to subsequent emergencies.
- **Risk Reduction and Equity**: The new fire station would provide timely service to previously underserved areas, improving overall system effectiveness and promoting community equity in emergency protection.

# Strategic Planning Considerations

- **Location**: The station should be strategically located based on incident density, road networks, and anticipated development patterns to maximize impact.
- Staffing: Although adding a fully staffed new unit presents a cost challenge, ESCI recommends a cost-conscious strategy by initially staffing Fire Station 8 through the reallocation of an existing unit. One potential option would be to relocate the ladder truck from Station 2 or Station 4, which currently house multiple units. This approach would provide immediate response capability from Station 8 without requiring the hiring of new personnel, helping to reduce initial operating costs. Over time, as call volume and development continue to increase, JFD could reevaluate and expand staffing at Station 8 through additional hiring, ensuring long-term sustainability and effectiveness. The initial unit assignment should be determined based on community risk analysis and operational need (e.g., whether an engine, ladder, or combination unit is best suited for the area).
- **Revenue and Cost Planning**: The City of Jonesboro should monitor revenues from development (e.g., assessed valuation, impact fees) and consider long-term funding mechanisms to support capital and operational costs.

#### Cost Estimates

Some important considerations will impact the ultimate cost and timing of constructing a new fire station in Jonesboro:

- It is possible to construct a fire station for more or less than these estimates; however, engaging a qualified architect with demonstrated expertise in fire station design will be essential to develop accurate cost estimates and ensure the facility meets operational needs.
- These estimates assume a 12,000-square-foot station based on typical modern fire station design. ESCI was not contracted to conduct space programming, and final square footage should be validated during the design phase.



 These figures include soft costs and contingencies but do not include the cost of purchasing fire apparatus or hiring, training, and employing personnel to staff the new station.

Figure 75. Estimated Fire Station Construction Costs (12,000–Sq.–Ft. Station with 25% Soft Cost and 15% Contingency)

| Fire Station Construction Costs  |                     |
|----------------------------------|---------------------|
| Projected Size - Square Feet     | 12,000              |
| Site Size                        | Three Acres         |
| Square Foot Cost Range           | \$500.00 - \$750.00 |
| Land Costs (Three Acres)         | \$1.5 million       |
| 2025 Total Project (No Land)     | \$6.00 - \$9.00M    |
| Bid 2026 (No Land)*              | \$6.3M - \$9.45M    |
| Bid 2027 (No Land)*              | \$6.62M - \$9.92M   |
| Bid 2028 (No Land)*              | \$6.95M - \$10.42M  |
| Bid 2029 (No Land)*              | \$7.29M - \$10.94M  |
| Bid 2030 (No Land)*              | \$7.65M - \$11.48M  |
| Foundation                       | Concrete            |
| Exterior Wall                    | Masonry             |
| Interior Wall                    | Wood frame/masonry  |
| Roof Type                        | Metal clad          |
| Floor Type                       | Concrete            |
| *5% inflation used for each year |                     |

The projected cost to construct a 12,000-square-foot fire station in Jonesboro in 2025 ranges from \$6.0 million to \$9.0 million, excluding land acquisition. Land costs for a three-acre site are estimated at \$1.5 million. With an assumed 5% annual construction inflation rate, the total project cost could rise to between \$7.65 million and \$11.48 million by 2030 if delayed.

This investment reflects a modern fire station design capable of supporting multiple apparatus bays, living quarters, training and support spaces, and administrative functions. Although significant, this capital investment is necessary to meet the growing service demands of the City of Jonesboro and to maintain nationally recommended response times in high–growth areas. Early site selection, architectural programming, and funding commitments will be critical to control costs and avoid additional inflationary impacts.



# Recommendation 2–G: Establish a Structured Internal Development Framework for Succession Planning

To further support succession planning efforts within the Jonesboro Fire Department, it is recommended that JFD develop a formal internal development framework that aligns career progression with years of service, certifications, and educational achievements.

Such a framework provides a clear and objective roadmap for professional growth and promotion readiness. By recognizing and rewarding accomplishments in training, experience, and education, JFD can more effectively prepare personnel for leadership roles while promoting transparency and consistency in advancement opportunities.

The following figure shows an example framework, although JFD should tailor specific criteria and requirements to fit the needs and structure of the organization.

Figure 76. Example Career Development and Succession Planning Matrix

| Level                        | Years of Service<br>at Prior Rank | Certifications           | College<br>Credits/<br>Degree |
|------------------------------|-----------------------------------|--------------------------|-------------------------------|
| Driver/ Engineer             | 4                                 | Driver/Operator - Pumper | N/A                           |
|                              | т                                 | Driver/Operator - Aerial | N/A                           |
|                              |                                   | Fire Officer I and II    |                               |
| Captain                      | 2                                 | Fire Inspector I         | 30                            |
|                              |                                   | • ICS 300                |                               |
| Pattalian /                  |                                   | Fire Officer III         | 60 or                         |
| Battalion/<br>Division Chief | 2                                 | Fire Instructor I        | Associate's                   |
|                              |                                   | • ICS 400                | Degree                        |
| Assistant Chief              | 2                                 | - Fire Officer IV        | Bachelor's                    |
| Assistant Chief 2            |                                   | tall Ciller 2            | Fire Officer IV               |
| Chief                        | 2                                 |                          | Master's                      |
| Critei                       | 2                                 |                          | Degree                        |

This development model encourages continual learning, enhances organizational preparedness, and creates a succession pipeline by aligning leadership readiness with structured achievement benchmarks. The process should be reviewed regularly and adjusted based on evolving departmental goals, workforce trends, and regional best practices.



### Recommendation 2-H: Hire a Fire Services Data Analyst

To support operational planning, performance evaluation, and informed decision-making, it is recommended that the Jonesboro Fire Department hire a dedicated Fire Services Data Analyst. This position will enhance JFD's ability to analyze and interpret response data, track key performance indicators, and ensure alignment with recommendations provided in this report.

The selected candidate should meet the qualifications outlined in NFPA 1022: *Standard for Fire and Emergency Services Analyst Professional Qualifications*. This ensures that the Fire Services Data Analyst is proficient in areas such as incident data analysis, performance metric evaluation, geographic information systems (GIS) mapping, and predictive modeling—all critical capabilities in a modern fire and emergency services organization.

This role will be instrumental in monitoring metrics tied to recommendations made throughout this report, including response time trends, staffing needs, unit hour utilization (UHU), and resource allocation. Additionally, the Fire Services Data Analyst will support JFD's efforts to maintain its Insurance Services Office (ISO) Class 1 rating by ensuring JFD continues to meet the required documentation and reporting standards across all grading components.

The position can be structured as a civilian administrative role. Based on current industry benchmarks, a recommended salary range for a qualified Fire Services Data Analyst is \$65,000 to \$85,000 annually, depending on experience, credentials, and regional market conditions.

#### Recommendation 2-I: Establish a Public Information Officer

During ESCI's assessment, it was noted that the Jonesboro Fire Department currently lacks a designated Public Information Officer (PIO). Although the department's current size may not necessitate a full-time, stand-alone PIO position, the growing need for effective internal and external communications, media coordination, and community outreach supports the creation of this role.

A designated PIO is vital for managing incident-related media inquiries, disseminating timely and accurate public safety information, coordinating social media, and supporting recruitment, education, and engagement initiatives. In today's information-driven environment, this position also strengthens transparency and trust between a fire department and the community it serves.



To ensure cost-effectiveness and operational flexibility, it is recommended that this position be combined with other administrative support functions, such as:

- Social media management and digital content creation
- Grant writing and reporting
- Records management
- IFD newsletter or internal communication coordination
- Community risk reduction and education support

The position may be filled by either a sworn member with relevant experience and communication skills or by a civilian professional. For a civilian hire, the typical salary range for a PIO with public safety experience is approximately \$55,000 to \$70,000 annually, depending on qualifications and regional salary trends.

Designating a PIO, either full-time or as a hybrid role, will help JFD maintain a proactive communication strategy, improve public perception, and support key operational functions in line with modern fire service best practices.

# Recommendation 2–J: Long-Term Planning for Potential Fire Department-Based EMS Transport

As the primary mission of emergency medical services continues to grow within the fire service, ESCI recommends that the Jonesboro Fire Department begin long-term strategic planning for the potential addition of fire department-based EMS transport services. Although the City of Jonesboro is currently served by two private ambulance providers, there are ongoing concerns regarding their ability to maintain consistent and reliable service delivery over time.

As EMS now accounts for the majority of call volume in most departments, JFD has already taken proactive steps to enhance its EMS capability by increasing the number of certified personnel, with approximately two-thirds of suppression staff now holding EMT certifications. These efforts demonstrate JFD's commitment to improving prehospital care and providing high-quality service to the community.

Although immediate transition to fire-based transport is not being recommended at this time, ESCI strongly advises that JFD begin evaluating what would be required should long-term service issues arise with current third-party providers. This planning process should include:



- Assessing the community's EMS transport needs and identifying service gaps.
- Evaluating costs associated with apparatus, equipment, and personnel for firebased EMS transport.
- Reviewing potential funding sources, including billing models, grants, and dedicated public safety taxes.
- Considering incremental approaches, such as limited transport capability or specialized interfacility transport, as a first phase.

Developing a contingency plan now will ensure JFD is prepared to act quickly if private EMS providers reduce service levels or are unable to meet future demand. A fire department-based transport service, if implemented, would provide the City of Jonesboro with greater control over EMS quality and reliability, ensuring consistent emergency medical care for its residents and visitors.

#### Cost-Benefit Considerations

#### Benefits of Fire-Based EMS Transport

- Greater local control over EMS service quality and response reliability.
- Ability to ensure seamless integration between fire suppression and EMS response.
- Potential revenue generation through transport billing to help offset operational costs.
- Improved continuity of care by keeping EMS within the same responding agency.
- Enhanced ability to meet community expectations if private providers reduce services.

#### Challenges & Costs to Consider

- High initial capital investment for ambulances, medical equipment, and station modifications.
- Additional personnel costs for paramedics and EMTs.
- Administrative requirements for EMS billing and compliance with Medicare and insurance regulations.
- Ongoing training and continuing education requirements for advanced life support (ALS) personnel.

Despite these costs, many fire departments across the country have successfully implemented EMS transport services by leveraging billing revenue, public safety taxes, and grants (such as the Assistance to Firefighters Grant for EMS equipment).

The following table provides a general estimate of potential EMS transport revenue based on call volume and an average reimbursement rate of \$450 per transport (a conservative



figure based on national averages for BLS/ALS transport billing). Note: These figures are gross revenue estimates and do not account for billing collection rates, which typically range between 60% and 80% depending on payer mix.

Figure 77. Projected EMS Transport Revenue

| Number of Transports      | Average Revenue | Projected Annual |
|---------------------------|-----------------|------------------|
| Trainiber of Trainiper is | Per Transport   | Revenue          |
| 2,500                     | \$450           | \$1,125,000      |
| 3,500                     | \$450           | \$1,575,000      |
| 5,000                     | \$450           | \$2,250,000      |

It is also important to note that, although EMS transport is listed as a revenue source, fire departments rarely see a true net profit from transport operations. The revenue generated typically serves to offset a portion of the added costs associated with providing the service, such as personnel, equipment, and administrative expenses. The primary goal of fire-based EMS transport is to ensure reliable emergency medical care for the community, with financial recovery viewed as a means to reduce the overall burden on the City of Jonesboro's General Fund rather than as a profit-generating endeavor.

### Recommendation 2–K: Consider Specialty Incentive Pay

It is recommended that the Jonesboro Fire Department consider implementing specialty incentive pay for personnel who obtain and maintain advanced certifications in specialized areas such as Rescue Technician, Hazardous Materials Technician, and other technical disciplines critical to emergency response. Providing additional compensation for these specialized skills encourages personnel to pursue and maintain certifications that enhance JFD's operational capabilities and improve the level of service provided to the community.

Specialty incentive pay also serves as an effective recruitment and retention tool. Offering financial recognition for advanced skills can help attract qualified candidates who are seeking professional growth opportunities while motivating current members to remain with JFD. Retaining experienced personnel with specialized training reduces turnover, preserves institutional knowledge, and ensures that JFD maintains a highly skilled workforce capable of handling complex incidents.



# Cost Considerations & Examples

The cost of implementing specialty incentive pay will vary depending on the number of personnel certified and the incentive amount selected by JFD. Many fire departments provide stipends ranging from \$500 to \$2,000 annually per specialty certification, with some offering higher amounts for advanced technical skills or multiple certifications, such as:

- Hazardous Materials Technician Pay Departments commonly provide \$1,000 to \$1,500 per year for technicians who maintain active certification and participate in team assignments.
- Rescue Technician or Technical Rescue Team Pay Incentives typically range from \$750 to \$1,500 annually depending on the level of training and call-out responsibilities.
- **Multiple Certification Incentives** Some agencies cap incentive pay at a maximum (for example, \$3,000 per year) regardless of how many certifications an employee holds, while others provide a set stipend for each certification.

Assuming between 25 and 50 firefighters hold or pursue these advanced certifications, the total annual cost could range from approximately \$25,000 to \$100,000, depending on the number of certifications recognized and the stipend amount chosen. These costs are relatively modest when compared to the benefits of retaining skilled personnel and improving specialized response capabilities.

By supporting the professional development of its members through targeted incentives, the Jonesboro Fire Department can enhance its technical response capabilities, increase retention of highly trained personnel, and continue providing high-quality service to the residents it protects.

# Long-Term Strategies

The long-term strategies are focused on initiatives projected for consideration within the next seven to fifteen years. These recommendations are primarily strategic in nature and are intended to support sustained community growth, maintain high levels of service, and ensure the Jonesboro Fire Department remains well-positioned to meet future challenges. Many of these strategies may not be necessary under current conditions; however, they address areas where there is a strong possibility of increased demand as the City of Jonesboro continues to grow and develop over time. By identifying these potential needs in advance, JFD and the City of Jonesboro can better prepare for



future service demands and continue providing effective and reliable emergency services well into the future.

## Recommendation 3-A: Establish a City Emergency Manager Position

It is recommended that the City of Jonesboro create a full-time Emergency Manager position dedicated to overseeing and coordinating citywide emergency preparedness, planning, and response operations. At present, emergency management responsibilities within the city fall under the broader umbrella of Craighead County. Although collaboration with the county has been positive, the absence of a dedicated city-level emergency manager limits the City of Jonesboro's ability to focus on its own preparedness and response needs with the continuity and specificity required.

This new position may be either a civilian or sworn role and would fall under the organizational structure of the Jonesboro Fire Department, an approach that is commonly used by fire departments across the United States. Housing the role within JFD leverages its existing experience in incident command, training, and interagency coordination. Alternatively, the City of Jonesboro may choose to establish a standalone Office of Emergency Management to provide citywide leadership and strategic direction on emergency preparedness and resilience. Either structure would allow for a focused approach tailored to Jonesboro's unique risks and operational landscape.

The Emergency Manager would be responsible for maintaining and updating the City of Jonesboro's emergency operations plan, coordinating response activities during major incidents, organizing citywide training exercises, applying for and managing emergency management grant funding, and serving as the primary liaison with state and federal emergency agencies. This role would also strengthen collaboration with key community stakeholders such as Arkansas State University, local healthcare providers, and private industry. Establishing this position would enhance the City of Jonesboro's preparedness, improve response coordination, and significantly bolster the city's overall emergency management capability.

# Recommendation 3-B: Develop a Community Paramedicine Program

The Jonesboro Fire Department should pursue the development of a community paramedicine program to address the growing and complex healthcare needs of residents and visitors. Community paramedicine uses trained EMS personnel to deliver in-home care and follow-up visits to individuals with chronic health conditions, recent hospital discharges, or those who frequently use emergency services. This approach



helps stabilize patients before their conditions escalate into emergencies, ultimately reducing unnecessary 911 calls, emergency transports, and emergency department visits.

Much like fire prevention programs reduce fire incidents, a community paramedicine program improves public health while easing the operational strain on a fire department's EMS resources. National studies suggest that approximately 15% of emergency room transports could be safely treated in non-urgent settings. Implementing this program would help JFD operate more efficiently, improve patient outcomes, and redirect emergency resources where they are most needed.

Key to the program's success will be strong partnerships with Arkansas State University and local hospitals. ASU can provide valuable academic support, including program development, data analysis, and student involvement from nursing, public health, and emergency management programs. Faculty and students may also assist with patient outreach and wellness checks, providing educational benefits while supporting public health. Local hospitals can contribute by identifying high-risk patients, coordinating post-discharge care, and sharing patient outcome data to improve care continuity.

These partnerships can also help offset the costs of the program. ASU may be able to provide grant-writing support or secure academic grants related to public health innovation. Hospitals that benefit from reduced re-admissions may also contribute financially or provide in-kind resources such as medical supplies, training support, or shared staffing. By leveraging these partnerships, the Jonesboro Fire Department can reduce startup and operational costs while building a sustainable and impactful community paramedicine program that enhances care delivery across the city.

# Recommendation 3-C: Add a Logistics Manager Position

It is recommended that the Jonesboro Fire Department create a dedicated Logistics Manager position to oversee the management of critical supplies and assets, including uniforms, personal protective equipment, firefighting gear, and other departmental property. This role would ensure that inventory is accurately tracked, maintained, and replenished in a timely and efficient manner, reducing delays and improving operational readiness.

The Logistics Manager position could be staffed as either a sworn firefighter or a civilian employee, depending on departmental needs and available resources. Having a focused employee managing logistics will streamline supply chain processes, support daily



operations, and free up other personnel to focus on emergency response and training activities. This investment will enhance overall departmental efficiency and ensure that firefighters consistently have access to the equipment and resources they need to perform safely and effectively.

Staffing the Logistics Manager as a sworn firefighter would cost approximately \$98,860 annually if filled by a Driver/Engineer and \$113,998 annually if filled by a Captain. These figures represent the full annual compensation package, including salary and benefits, required to maintain a sworn position.

Although using a sworn firefighter ensures operational experience and familiarity with departmental logistics, it also represents a significant ongoing financial commitment. A civilian hire, by contrast, would likely reduce long-term costs, although it may require initial training to gain familiarity with specialized firefighting equipment and PPE standards. The decision will depend on balancing financial sustainability with the operational benefits of having a sworn member with fire department experience in this critical support role.

Figure 78. Logistics Manager Add-On Costs

| ltem                    | Driver/Engineer | Captain   |
|-------------------------|-----------------|-----------|
| Salary (Max)            | \$72,409        | \$84,476  |
| LOPFI Pension (24%)     | \$17,378        | \$20,274  |
| Medicare (1.45%)        | \$1,050         | \$1,1225  |
| Health/Dental (average) | \$7,946         | \$7,946   |
| Life Insurance          | \$29            | \$29      |
| MASA                    | \$48            | \$48      |
| Total                   | \$98,860        | \$113,998 |

# Recommendation 3-D: Consider Minimum Staffing of Four Personnel on All Fire Department Units

It is recommended that the Jonesboro Fire Department work toward staffing all frontline apparatus with a minimum of four (4) firefighters per unit. This staffing level enhances firefighter safety, improves operational effectiveness, and aligns with the best practices outlined in 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*. Additionally, the Insurance Services Office (ISO) evaluates deployment and staffing as part of its fire department scoring system, and



meeting the four-person minimum can positively impact future ISO evaluations and help maintain Jonesboro's ISO Class 1 rating.

ESCI acknowledges that implementing this recommendation in full would carry a significant cost. To meet this standard department-wide, Jonesboro would need to hire approximately 21 to 24 additional firefighters, or seven (7) to eight (8) per shift, accounting for standard staffing factors such as time off, leave, and training. As a phased approach, Jonesboro Fire Department could begin by staffing units located in single-company fire stations (stations housing only one apparatus) with a minimum of four (4) firefighters. These stations often respond alone to emergencies in their first-due areas, and increased staffing at these locations would offer the most immediate safety and operational benefits.

The total annual cost of adding one firefighter at top pay is estimated at \$85,442. This amount consists of a base salary of \$61,713, LOPFI pension contributions at 24% (\$14,811), Medicare at 1.45% (\$895), health and dental coverage averaging \$7,946, and life insurance and MASA emergency transport coverage totaling \$77 annually.

When projected across the estimated staffing need, the total annual cost would range from approximately \$1,794,282 for 21 firefighters to \$2,050,608 for 24 firefighters. These projections are based on current pay and benefit structures and may vary in the future due to economic conditions, labor costs, or changes in benefit rates.

Figure 79. Add-On of 21-24 Firefighters

| ltem                      | Costs       |
|---------------------------|-------------|
| Salary (Max)              | \$61,713    |
| LOPFI Pension (24%)       | \$14,811    |
| Medicare (1.45%)          | \$895       |
| Health/Dental (average)   | \$7,946     |
| Life Insurance            | \$29        |
| MASA                      | \$48        |
| Total per Firefighter     | \$85,442    |
| Total for 21 Firefighters | \$1,794,282 |
| Total for 24 Firefighters | \$2,050,608 |

#### Recommendation 3-E: Fire Station 9

The City of Jonesboro should continue to evaluate citywide growth patterns, incident demand, and response time performance as part of a long-term strategic approach to



emergency service planning. Although ESCI's current analysis does not identify an immediate operational need or a clearly defined location for Fire Station 9, future conditions may warrant the addition of another facility as the city continues to expand.

As population density increases and development spreads into new areas, changes in service demand and response performance can create emerging gaps in coverage. It is essential that decisions regarding the construction and placement of future fire stations be grounded in real-time performance data, call volume trends, and geographic response modeling.

ESCI recommends that the City of Jonesboro regularly conduct system-wide reviews of incident locations, response time compliance, and call concurrency to identify when and where additional resources may be needed. Based on current growth trends, three potential long-term locations for a future Fire Station 9 include:

- 1. The northeast area of the city, which may see residential and commercial expansion.
- 2. **The northwest area** of the city, as new developments continue to stretch response capacity.
- 3. A central location between Fire Stations 3 and 7, which may improve overall balance and reduce overlapping service demands in that corridor.

It is important to emphasize that the placement of any new station should be a data-driven decision supported by comprehensive analysis. Factors such as road infrastructure, traffic conditions, land use, population density, incident types, and anticipated development should all be considered. In conclusion, although the need for Fire Station 9 is not immediate, proactive planning and regular evaluation will allow the City of Jonesboro to respond efficiently and effectively to future service demands as the city evolves.

# Recommendation 3-F: Monitor Unit Workload and Consider Future Unit Expansion

At the time of this evaluation, ESCI did not identify any immediate concerns with unit workload, as measured by unit hour utilization (UHU), across the Jonesboro Fire Department. However, with steady increases in call volume anticipated over time, overall UHU is expected to rise as well.



Maintaining appropriate UHU levels is critical to ensuring that response units remain available for emergency calls and that response times remain within acceptable ranges. As UHU levels increase, the risk of delayed responses and resource strain also increases.

It is recommended that the Jonesboro Fire Department continually monitor the UHU of all frontline units. For example, if units such as Engine 3 experience sustained increases in UHU, it may become necessary to evaluate the need for an additional unit to be staffed at Fire Station 3. This proactive step would help balance workload, improve operational reliability, and maintain high service levels within that response area.

### Recommendation 3-G: Establish a Chief of Staff Position

To support the increasing administrative demands on the Fire Chief and Assistant Chief(s), ESCI recommends the creation of a Chief of Staff position within the Jonesboro Fire Department. This role would serve as a key advisor and coordinator, managing high-level projects, interdepartmental communications, and strategic initiatives to ensure JFD operates efficiently and remains focused on its long-term goals.

The Chief of Staff position could be structured as either a sworn or civilian role, offering flexibility based on internal capacity and candidate qualifications. If designated as a sworn position, this role could be assigned at the Captain rank, which would not only align with operational command structure but also contribute to JFD's succession planning efforts by offering a pathway for personnel preparing for executive–level leadership. Adding this position will help offload routine and strategic administrative tasks from the Fire Chief and executive team, allowing them to focus more directly on leadership, policy, and community engagement.



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