



**Commission on
Fire Accreditation
International**

Accreditation Report

**Kingsport Fire Department
130 Island Street
Kingsport, Tennessee, 37660
USA**

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by the
Commission on Fire Accreditation International**

**This report represents the findings
of the peer assessment team that visited the
Kingsport Fire Department
on May 9-13, 2020**

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PREFACE

To the citizens and the governing body of the agency: This report represents a thorough review of the organization to verify and validate how this agency is executing its stated mission in accordance with universally accepted practices for a contemporary fire and emergency services organization. Quality improvement can only be initiated and realized by those agencies that challenge themselves through a comprehensive self-assessment. This report documents that this agency is seeking organizational improvements and discovering elements of excellence. Please note that the recommendations by the peer assessment team are opportunities for improvement provided from professionals in the fire and emergency service industry.

To the agency: This report communicates the outputs and outcomes of your dedication and commitment to quality improvement. Your self-assessment, community risk assessment: standards of cover, and strategic plan amount to years of work to understand your community, establish accountable goals, institute transparency, and factually comprehend what you did not know about your organization. The verification and validation of your agency by a team of peers represents a major accomplishment. The recommendations in this report are opportunities to become better and stronger in your community. Finally, take this report and communicate to your community the areas you identified during your self-assessment that were outstanding and those that represent improvement opportunities.

EXECUTIVE SUMMARY

The Kingsport Fire Department consists of 122 full-time paid employees that work out of eight fire stations. The agency has 114 line firefighters assigned to nine engine companies staffed with three firefighters with six additional firefighters assigned as floaters to fill vacant shifts. Each engine company is comprised of one captain, one engineer, and one firefighter. Two ladders are staffed with a minimum of one engineer. The total number of personnel assigned to a shift is 37 with a minimum staffing level of 31 with one firefight assigned to the Kingsport Life Saving Crew (volunteer) to provide a rescue truck response for vehicle accidents. The varying staffing levels are dependent on vacation and sick leaves.

The agency is divided into 4 divisions comprising of, administrative, training, fire marshal's office, and operations. The administrative division includes the fire chief, assistant fire chief, executive secretary and an office assistant. The training division is staffed with a senior captain/ safety officer and one assistant training officer. The prevention division is staffed with a fire marshal, three assistant fire marshals, and a public education officer.

The agency provides Advanced Life Support first response for emergency medical calls within the city of Kingsport, but does not respond to non-emergent calls unless requested by county Emergency Medical Services (EMS). The agency staffs one paramedic per unit with all other personnel required to be at minimum, emergency medical technicians. Sullivan County Emergency Medical Services provides EMS transport for the city.

The City of Kingsport is located in the northeast corner of the state of Tennessee and encompasses approximately 53 square miles. With a population of 54,076 as recorded by the United States census

in 2019, the city is approximately 90 miles east of Knoxville and the Great Smoky Mountains National Park. Kingsport, along with Bristol and Johnson City, make up the Tri-Cities area with a combined population of approximately 147,735.

The Commission on Fire Accreditation International (CFAI) has completed a comprehensive review and appraisal of the Kingsport Fire Department based upon the ninth edition of the *Fire & Emergency Service Self-Assessment Manual (FESSAM)*. The commission's goals are to promote organizational self-improvement and to award accreditation status in recognition of good performance. The peer assessment team's objectives were to validate the department's self-assessment study, identify and make recommendations for improvement, issue a report of findings, and conclude if the department is eligible for an award of accreditation.

The peer assessment team followed CFAI processes and the Kingsport Fire Department demonstrated that its self-study accreditation manual, community risk assessment/standards of cover (CRA/SOC), and strategic plan met all core competencies and criteria. The peer assessment team recommends accredited agency status for the Kingsport Fire Department from the Commission on Fire Accreditation International.

The peer assessment team observed a strong commitment by the agency to the CFAI accreditation process and, in particular, the agency has sent 12 personnel to the Quality Improvement Through Accreditation (QITA) class and currently has two peer assessors. At this time there is one former accreditation manager with the agency and one current one assigned to accreditation manager duties. At least one other person has been identified as a potential successor for the position. The current accreditation manager has a support team and actively utilized additional personnel in many aspects of the accrediting process. The agency has also expressed a commitment to providing additional personnel to act as peer assessors in the future. These approaches ensure continuity, more direct access to quality improvement with similar organizations, and the engagement of a broader spectrum of the agency.

The peer assessment team had meetings with the mayor and city manager. Individually and collectively, they expressed a long-standing interest in the process, having been engaged and involved from the outset of the agency's journey towards accreditation. Along with this, the city has other departments within the city that are accredited through other process or are seeking accreditation in the future. There is clearly a commitment to continue to follow and support the implementation of identified opportunities for improvement. It can be anticipated that all representatives will be strong supporters and network participants as the full benefits of going through the self-assessment process are realized and built on in the future.

The peer assessment team identified opportunities for improvement that are provided below. These recommendations flowed from discussions, interviews, and a review of agency supplied documentation to support its self-assessment conclusions. The agency addressed several possible recommendations while the peer assessment team was on site and was currently working on several other recommendation made by the peer team. It is expected that many of the recommendations made by the team will be either started or completed by the time of the accreditation hearing.

The following represents a synopsis of the recommendations that were made by the peer assessment team during the on-site visit. Additional details for each of these recommendations can be found in the Observations Section of this report. For each of the recommendations, the performance indicator from the model is provided, including notating if it is a core competency (CC).

Recommendations

Recommendations were developed from the evaluation of criterion, core competencies, and performance indicators.

1. It is recommended that the agency clearly define planning zones to accurately map risks within the response zone.; ([2A.6](#))
2. It is recommended that the agency develop an outlier policy that defines when response data is to be removed from the collected data set.; ([CC 2C.2](#)).
3. It is recommended that the agency formalize a process to include external citizen feedback in the next update to the strategic plan; ([3B.3](#)).
4. It is recommended that the agency conduct a workforce study to assess the current fire marshal office structure to ensure it can effectively meet the expectations of the community.; ([CC 5A.3](#))
5. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.; (This recommendation applies to the following: [CC5A.5](#), [CC5B.3](#), [CC5C.5](#), [CC5E.3](#), [CC5F.7](#), [CC5G.3](#), [CC5H.3](#), [7G.5](#)).
6. It is recommended that the agency establish annual loss reduction benchmarks for fire incidents and fire casualties to better measure outcomes.; ([5A.8](#))
7. It is recommended that agency developed and publish a formalized Continuity of Operations Plan.; ([5D.7](#)).
8. It is recommended the agency finalize policies that define the ICS training required for each position in the agency.; ([5E.2](#))
9. It is recommended that the agency work with the city and county EMS to evaluate the total ALS ambulance response time in the city for emergency responses.; ([5F.1](#))
10. It is recommended that the agency work with the city to evaluate the community AED program in order to monitor AED usage.; ([5F.8](#))
11. It is recommended that the agency evaluate existing facilities and spaces for compliance with occupancy type and permitted load.; ([CC6B.3](#))
12. It is recommended that the agency evaluate accepted national standards for annual structural firefighting turnout gear inspection and testing for implementation in their policy.; ([CC6E.3](#))
13. It is recommended that the agency evaluate an identification tracking system for ground ladders.; ([CC6E.3](#))
14. It is recommended that the agency evaluate and implement an inventory system and process to track issued safety equipment.; ([6F.5](#))

15. It is recommended that the agency explore options to re-establish annual fitness evaluations.; ([CC 7G.1](#))
16. It is recommended that the agency evaluate a process to ensure that the training division is involved in the delivery of annual performance measurements and codify these measures in policy.; ([CC8B.3](#))
17. It is recommended the agency develop and document procedures for buildings or areas that are not capable of adequate emergency scene communications.; ([9B.1](#))
18. It is recommended the agency establish a process with the emergency communications center to document areas for improvement in meeting the standard for call processing time.; ([9B.7](#))
19. It is recommended the agency establish a process to include the agency's annual appraisal into the communications center annual review process so that to evaluate elements that support agency improvement goals.; ([9B.10](#))
20. It is recommended that the agency evaluate the possibility to establish an automatic aid agreement for this specific area where a highway crosses municipal boundaries.; ([10B.2](#))
21. It is recommended that the agency evaluate the possibility to establish automatic aid agreements to provide closest unit response across the state line.; ([10B.2](#))

The agency demonstrated its keen desire to immediately implement plans to address opportunities for improvement. The best example is the agency developed and implemented two policies and created a more robust goals and objective tracker while the team was on site.

The agency responded to a total of 7,674 emergencies in 2020 including: 207 fire calls (2.7 percent); 5613 emergency medical service (EMS) calls (73.1 percent); and 1,854 miscellaneous calls (24.2 percent). Servicing these calls in 2020 resulted in a total of 10,698 unit movements.

In 2019, the Insurance Services Office (ISO) visited the city to rate its public protection classification. The outcome of the visit was the maintaining of the public protection classification of Class 2/ 2Y.

OBSERVATIONS

Category 1 — Governance and Administration

The City of Kingsport, legally chartered by the State of Tennessee and is established as a local municipality. The fire department has been legally established and organized within the City's Charter. Additionally, the agency, on the state level, is a *Duly Recognized Fire Department - Certificate Number 18-176* by the Tennessee State Fire Marshal's Office by virtue of *TCA. 68-102-Part 3*.

The city provides clear guidance through policies, a strategic plan, and regular communications with the fire chief. The fire chief has a good working relationship with the city's legal department and communicates at least four times a month. During these meetings, legal changes at the local, state, and federal levels are discussed and addressed if required. In addition to this, the fire chief is a member of the Tennessee Fire Chief's Association and receives updates regarding legal issues via email and in person from this organization. The agency's strategic plan is in line with the city's strategic plan and its mission is adequately financially supported by the city. This is evident by the support given by the elected officials and the city manager for the remodel/ expansion of fire station two.

The fire chief is responsible for the overall administration of the Kingsport Fire Department. The agency is organized into four divisions: Emergency Services, Fire Marshal's Office, Training, and Administration.

The agency has a published mission statement that aligns with the mission of the city's and is posted in each fire station and in the agency's supporting documents. The current mission statement was developed with input from agency personnel and city leadership. The agency maintains a current organizational chart and job descriptions that adequately support the mission of the organization and provide the needed human resources to accomplish the established goals and objectives.

Category 2 — Assessment and Planning

The Kingsport Fire Department has its legally defined service area divided into 8 fire response districts. These response districts are further divided into planning zones that represent local neighborhoods and communities within the response zone. The city provides to the agency geographic information systems (GIS) data permitting the agency to collect and track demographic information in each of the identified planning zones. The agency monitors response data, fire loss, and economic factors within each of these planning zones. This information has provided the agency the needed data to support the expansion/re-build of station two and is used as an intricate part of the planning process for the additional fire stations planned for the future. It is recommended that the agency clearly define planning zones to accurately map risks within the response zone.

The agency has a methodology in place to assess and identify the risks and hazards within the community served. A risk assessment for each response zone and subsequent planning zones has been completed and documented in the agency's standard of cover document.

The nature and magnitude of these risks are rated and well documented in the standard of cover document. Each planning zone has identified major or critical properties and those properties are

given a fire hazard analysis rating from low to high. Based on these ratings the agency has developed the appropriate response to these occupancies. A process is in place to monitor these risks and update them as need. Information regarding social economic, and growth factors within the planning zones is provided by the GIS department within the city.

The Kingsport Fire Department implemented new software programs intended to help better collect, tack, and analyze response data in a more effective way. The agency, at the first of the year, switched from the Fire House Records Management System (RMS) to Emergency Reporting RMS. This change has provided the agency a variety of data analysis tools in which the agency has already implemented to provide monthly response data reports. These reports are submitted to the operations division to monitor performance in real time. Past response data was collected, analyzed and utilized to develop long range plans that have led to the building of two fire station in the past ten years. More recently data has been collected and analyzed by the agency to identify a future fire station based on projected growth in the area.

Both the past and current reporting systems allowed the agency to collect and monitor response data that is reported monthly and annually to the Authority Having Jurisdiction (AHJ). Currently the agency's performance is in line with the AHJ and community's expectations. During the site visit, it was observed that the agency was collecting and reporting all response data including times that were far outside the norms. It was noted that the agency does not have an outlier policy to allow for the consistent removal of outlier data sets. [It is recommended that the agency develop an outlier policy that defines when response data is to be removed from the collected data set.](#)

The Kingsport Fire Department uses Emergency Reporting as its records management system (RMS). Formally, the agency used Fire House as their RMS and has since moved all response dating back to 2010 to Emergency Reporting. It was verified and validated that the agency receives dispatch data directly from the dispatch Computer Aided Dispatch system. This data is then managed and analyzed using reports generated in the Emergency Reporting software. Past data was exported from Fire House into an excel spreadsheet for analysis and distribution to the operations chief.

The agency, through its strategic planning, community risk assessment, and standards of cover has a well-established deployment practice that meets the expectations of the community and Authority Having Jurisdiction (AHJ). Performance and outcomes are tracked using the RMS and response performance data is reported weekly to the operations chief as well as monthly and annually to the AHJ. As growth has occurred within the city, resources have been allocated or redeployed to meet the deficiencies identified through the process.

Category 3 — Goals and Objectives

The Kingsport Fire Department has a published strategic plan that includes general goals and specific objectives that direct the agency's priorities in a manner consistent with its mission. The plan is approved by the fire chief and submitted to the mayor and city council. Elements of the agency's strategic plan are included in the City of Kingsport's strategic plan and the city's budget. The plan is available to all members on the agency's SharePoint site and printed copies are available each fire station and fire administration.

The agency adopted the current strategic plan in 2019 and the plan is updated annually. The plan is utilized to guide the agency in taking initiatives that supports organizational improvement and the agency mission. A strengths, weaknesses, opportunities and threats (SWOT) analysis was completed

as part of the process and the plan identifies objectives, tasks, and timelines to guide the implementation. The agency utilized feedback from internal members and some feedback from external customers but it was not standardized. It is recommended that the agency formalize a process to include external citizen feedback in the next update to the strategic plan.

The agency tracks completion of goals and objectives through a standardized form that identifies the division responsible, dates, and status of the initiatives. Milestones of the plan are also captured in the annual report and other documents. The fire chief is the overall leader ensuring the strategic plan objectives are implemented to support the management of agency and meets with members of the command staff to discuss ongoing progress, changes, and updates.

The strategic plan's goals and objectives are reviewed annually by the fire chief and updated in conjunction with the annual report and approved budget. During the year goals and objectives are modified as needed and in preparation of the budget preparation process. The agency evaluates administrative and operational processes in regards to improvements in efficiency at the senior staff meetings and planning sessions. These discussions ensure the agency is working to continually improve their overall system performance through a planning process.

Category 4 — Financial Resources

The Kingsport Fire Department utilizes the budget process defined by the published City of Kingsport budget guide book. The process begins with the strategic planning process and ends with the budget approval by the board of Alderman (city council). The budget for the agency is developed using input from division chiefs and are in line with the agency's mission, objectives and goals as specified in the strategic plan. The fire chief meets with the city manager and budget staff to ensure the agency's budget is in line with the goals in the city's strategic plan and goals and objectives.

During the site visit the team was able to attend a budget hearing and witnessed the discussion of a proposed re-build of station two. The need to re-build a larger station with additional room to relocate administration and fire prevention was identified during the strategic planning process. This project is supported by the city manager and elected officials and funding for the architectural design and engineering is likely to be approved in June. The agency's existing and purposed budget is adequate to meet the goals and objectives outlined in the strategic plan and supports the personnel needed to accomplish the stated mission.

The peer assessment team confirmed that the City of Kingsport is in receipt of the most currently available Certificate of Achievement for Excellence in Financial Reporting (certificate) from the Government Finance Officers Association of the United States and Canada (GFOA) for its Comprehensive Annual Financial Report (CAFR). The finance department has submitted its most recent GFOA certificate and CAFR as prima facie compliance with this criterion.

The Kingsport Fire Department receives adequate financial support from the City of Kingsport to meet its stated mission and to accomplish this through its stated goals and objectives. The strategic planning process is used to identify long-term financial needs, and when is appropriate is incorporated into the purposed budget or identified for long term financial planning by the city.

The City of Kingsport operates on a fiscally conservative basis with a dept limit well below the self-imposed debt limit ceiling. The city operates on a balanced budget platform and all department budgets are funded based on anticipated revenues. Short range financial forecasts show moderate increases in revenue and are predicted to keep pace with anticipated growth. Through the planning process, areas of impact have been identified, including impacts on the fire department, and will be addressed in future strategic planning and budget processes.

Category 5 — Programs

Criterion 5A – Community Risk Reduction Program

Kingsport Fire Department has a comprehensive program that manages community risk through widespread efforts of the fire marshal's office. The agency follows guidance in the 2018 *International Fire Code (IFC)*, *National Fire Protection Association (NFPA)* and local *City of Kingsport Code of Ordinances*. Onsite it was found that the city is effective in implementing the current 2018 IFC edition well prior to the seven-year state mandate. The agency completes internal and external training to meet state directives. Fire marshal office personnel are certified according to the current governing guidance. Plan reviews are received and reviewed by two certified plans examiners. Inspections are scheduled and tracked by the agency fire marshal.

It was identified while on site that the agency currently lacks the ability to complete inspections for all identified inspectable facilities. It is recommended that the agency conduct a workforce study to assess the current fire marshal office structure to ensure it can effectively meet the expectations of the community. Furthermore, it was identified on site that the agency does not set specific annual loss reduction benchmarks. It is recommended that the agency establish annual loss reduction benchmarks for fire incidents and fire casualties to better measure outcomes.

The agency completes an annual review of the community risk reduction program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program appraisal policy was not fully implemented per policy. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Criterion 5B – Public Education Program

The Kingsport Fire Department has public fire and life safety education programs that address many issues pertaining to fire and life safety in Kingsport. The National Fire Protection Association (NFPA) Learn Not to Burn program, NFPA Remembering When, and fire extinguisher training are available with respect to a particular group's needs and interests. Delivery of fire education programs are recorded in the monthly activity reports; the team validated the activity in those reports.

The public education officer is certified Fire and Life Safety Educator Level I. The agency has standard operating guidelines that address the delivery of public education programs. The agency through the public education program provides smoke alarms and child passenger safety seat checks to those that request assistance.

The public education officer maintains a busy schedule with the public education program. The program manager is committed to the success of addressing the risk in the community. He is

enthusiastic and his passion for public education is apparent. Other jurisdictions have sought out public education delivery from the agency based solely on this enthusiasm and expertise.

The agency completes an annual review of the Public Education Program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Criterion 5C – Fire Investigation, Origin and Cause Program

The Kingsport Fire Department is authorized to investigate the origin and cause of all fires. The agency has a fire marshal division that investigates all fires that occur during normal business hours. The assistant fire marshal staff rotate being on call and available to be called back for fire investigations that occur after business hours. The fire marshal staff are required to investigate fires that include loss of life, suspicious in nature, commercial fires, and fires that the origin and cause cannot be determined by shift personnel. The agency further maintains personnel in the fire marshal's division that are certified fire investigators and that use the scientific method to investigate all fires while referring to *NFPA 921 Guide for Fire and Explosion Investigations* as a guide.

The fire marshal office participates in a career ladder program. Each step in the program, which includes 4 steps, adds 1.5% to the individual's base pay. Once established at a given step, the employee must maintain benchmarks to retain the status. The program is evaluated annually and information is included in the agency's annual report for city management.

The agency maintains a good relationship with Tennessee State Bureau of Investigations (SBI), which is available to assist with fire investigations. State law authorizes mutual aid for this function. The Tennessee SBI laboratory is available to coordinate evidence testing. The fire investigator is authorized to drop evidence directly to the lab for testing.

The agency completes an annual review of the Fire Investigation, Origin, and Cause Program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Criterion 5D – Domestic Preparedness, Planning and Response

The Kingsport Fire Department and the City of Kingsport have a well-developed and published Emergency Operations Plan (EOP) in place. This plan was developed with the collaboration and input of all the city departments. Each department head or designee has a copy on the plan and regularly trains on their role in the plan. The fire chief sits on the local emergency preparedness council (LEPC) which serves Sullivan County. The city's emergency management plan was developed to work with the Sullivan County EOP in the event of a large scale, county wide event. The Kingsport EOP utilizes the National Incident Management System (NIMS) and uses this systems during table top and full-scale exercises as well as during smaller local events in which the EOC has been utilized.

The team visited the city's Emergency Operations Center (EOC) and found a well-supplied and equipped EOC. The current technology being used is four years old and is scheduled to be updated next year. The older equipment will be repurposed to a secondary city EOC. The city's EOC is

capable of accessing cameras installed in city schools in the event of an emergency or active shooter to establish real time information. The city EOC is the secondary site for the Sullivan County EOC, which is staffed with a full-time emergency manager. The Sullivan County EOC is well equipped and has back up and redundancies in place. The city works closely with the Sullivan County EOC and Emergency Manager and participates in monthly meetings and exercises.

The agency performs semi-annual inspections on all of the agency's facilities per the Standard Operation Guidelines (SOG) to determine vulnerability. The agency has installed security codes locks on entrance doors that are changed as needed and follow a strict policy of keeping all doors closed and secured at all times unless personnel are in utilizing the area.

During the review of the city's EOP it was noted that the city's EOP had many components of a Continuity of Operations Plan (COOP), however a stand-alone COOP was not in place. Sullivan County's EOP also does not have a COOP in place, but it was verified that one is being developed and is part of a goals and objective plan. It is recommended that agency develop and publish a formalized Continuity of Operations Plan.

The agency completes an annual review of the Domestic Preparedness, Planning and Response Program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Criterion 5E – Fire Suppression

The Kingsport Fire Department provides a fire suppression program for the residents, businesses, and visitors in its response area using fixed facilities, mobile assets, and appropriately trained responders to mitigate fire incidents. The agency has eight fire stations with eight engines assigned, two trucks and one rescue engine staffed daily. The fire stations are under the direction of the assistant fire chief of operations with a deputy chief performing as the shift supervisor for the 24 hour shift. There are 114 sworn firefighters, 37 per shift, with minimum staffing per shift of 31 firefighters. Each suppression company is comprised of at least one firefighter, engineer and one company officer.

The city of Kingsport is a city with a large industrial base that includes a chemical plant and paper mill, supported by a growing residential community. The city has the typical commercial areas, restaurants and shops that support the residents. Older areas of the city are being redeveloped and there is new development of residential neighborhoods in various areas of the city.

The agency has an adopted incident management system and accountability procedures that utilizes standard terminology and elements consistent with recognized standards. Emergency suppression procedures are documented and published in the agency procedures and policy. It was noted the agency is training all members in ICS, but has not defined the required training by position. It is recommended the agency finalize policies that define the ICS training required for each position in the agency. The agency has a preplan program and building inspections are completed and support suppression efforts by providing firefighters with familiarization of various buildings in the community.

The agency completes an annual review of the Fire Suppression Program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program

appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Performance Gap Analysis

The following table represent the agency’s actual performance (baseline) versus the goal (benchmark). The gaps are provided in red (representing improvement opportunities), and green (when actual performance exceeds the goal).

2016-2020 Moderate Risk Fire Suppression Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	10:59	8:57	02:02
		n=165		
ERF	Urban	16:36	14:45	01:51
		n=110		

2016-2020 High Risk Fire Suppression Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	11:05	9:12	01:53
		n=86		
ERF	Urban	21:42	16:23	05:19
		n=50		

Criterion 5F – Emergency Medical Services (EMS)

The Kingsport Fire Department operates an Emergency Medical Services (EMS) program that provides, Advanced Life Support (ALS) first responder level capabilities to the community. The agency provides ALS paramedic engine response from each of the eight fire stations and only responds to emergency calls for service unless requested by the transport agency. All front-line engines are staffed with at least one firefighter/paramedic, so ALS trained personnel always arrive on the engine. It was noted the agency has not evaluated the total response time for the ALS ambulance service serving the City of Kingsport and the level of service being provide to the citizens. It is recommended that the agency work with the city and county EMS to evaluate the total ALS ambulance response time in the city for emergency responses.

The agency has adopted protocols and agency policies which provide guidance to all EMS providers and operates under medical direction from a local physician. The agency paramedics operate under standing orders with on-line medical direction being available when required via radio or cell phone. The agency has a medical committee that coordinates protocol updates and provide evaluation and recommendations on EMS equipment and operations on a periodic basis. A quality improvement/quality assurance program (QI/QA) process is in place to review patient care reports and evaluate medical care to improve service delivery and identifies areas for improvement in patient care or training needs for paramedics.

The agency has policies in place to create, maintain and document patient care reports and the city has a public records and retention policy that the agency follows related to the release of documents and patient privacy. The agency is Health Insurance Portability and Accountability Act

(HIPAA) compliant and the peer assessment team verified the agency has policies in place to ensure compliance.

The agency completes an annual review of the emergency medical services program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency’s annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

The city manages the Automatic External Defibrillator (AED) program for the city and AEDs are in placed in city facilities and throughout the community. The agency has limited involvement in the program, however to better ensure the program is being utilized to its fullest, it is recommended that the agency work with the city to evaluate the community AED program in order to monitor AED usage.

Performance Gap Analysis

The following table represent the agency’s actual performance (baseline) versus the goal (benchmark). The gaps are provided in red (representing improvement opportunities), and green (when actual performance exceeds the goal).

2017-2019 All Risk Risk EMS Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	11:49	10:26	01:23
		n=26,191		

Criterion 5G – Technical Rescue

Kingsport Fire Department has an adequate technical rescue program. The agency provides technical rescue services based on the needs of the community. The agency provides rescue services for vehicle extrication, confined space, trench, swift water, search and rescue, structural collapse, high angle and dive operations based on a need’s assessment and review of historical data. The agency’s apparatus and equipment are well funded with the help of state and county assistance. Apparatus and equipment meet the requirements of the agency and support the need of the community.

The agency completes an annual review of the technical rescue program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency’s annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

Performance Gap Analysis

The following table represent the agency’s actual performance (baseline) versus the goal (benchmark). The gaps are provided in red (representing improvement opportunities), and green (when actual performance exceeds the goal).

2017-2019 Moderate Risk Tech Rescue Response Times				
1st/ERF	Urban/Rural	Baseline	Benchmark	Gap
1st Due	Urban	19:28	10:59	08:29
		n=36		
ERF	Urban	31:29	30:30	00:59
		n=28		

Criterion 5H – Hazardous Materials (Hazmat)

The Kingsport Fire Department operates a robust, effective, and safe hazardous materials program. The agency provides operational level response by the focusing on the initial response, isolation, and assessment of hazardous materials incidents in the city. All personnel are trained to the hazardous materials first responder operations level as a minimum. The agency also has 82 hazardous materials technicians that staff and operates a Level Two Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) that is accredited through the Tennessee’s Emergency Management (TEMA). The hazmat team provides response to the city and county. In addition, the agency has 19 members that meet criteria for TEMA hazmat specialist certification. The agency’s hazardous material team is equipped and able to identify an unknown substance and fill technician level positions within the hazardous materials incident command system.

The agency conducts monthly and annual hazmat refresher training to comply with the TEMA guidelines. Initial technician level training is now required of all new members as part of the initial firefighter training prior to being assigned to duty. The training is developed by the training chief and hazmat team leader program flowing Occupational Safety and Health Administration and National Fire Protection Association guidance.

The agency completes an annual review of the Hazardous Materials Program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency’s annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

It was verified and validated by the peer assessment team that the Kingsport Fire Department had a statistically insignificant number of hazardous materials incidents for 2016-2020, to provide a sufficient data set to study. Therefore, no performance gap analysis is provided in this report.

Category 6 — Physical Resources

The city has a Capital Improvement Program (CIP) that provides a long-range plan for fire department growth and the financing of proposed capital improvement projects. The agency has input in the city’s CIP, which is updated annually during the budget process. These projects are prioritized and expected to be carried out over a five-year period. The Board of Mayor and Alderman (BMA) review and approve the CIP annually.

The agency looks at in-house needs on an annual basis and updates agency goals and objectives accordingly. The agency’s goals and objectives are in one year, two to five years, and five to ten years increments. These goals and objectives are presented to the city manager. The city manager implements the items into the city budget for funding approved by the BMA. Funding to support goals and objectives is made available based on priority and necessity during the annual budget

process. Funding for these items is received as funds become available and may not be funded in the period that they are initially defined in the goals and objectives.

The management and staff of the agency are involved in the strategic plan, risk assessment and standard of coverage to help plan facility needs. The management and staff make recommendations on location for new stations based on Insurance Services Office (ISO) standards, response times and accessibility. This is coordinated with the geographical information services of the city as well as City of Kingsport managerial staff.

The agency has developed a plan to replace station two due to age, size and structural issues. The city owns a parcel of land adjacent to the current station that would serve the need well. The chief has presented his plan and requested funding to the city manager. Current station location and configuration supports the agency mission, plans, and goals.

Facilities in the City of Kingsport are designed to meet the functions associated with the agency that occupies the facility. Repairs and up-keep of the facilities are the responsibility of the city maintenance division while the on-duty personnel of the fire department can perform routine maintenance. The city has a safety program that provides the employees with safe working conditions, promotes safety awareness, and meets the criteria established by the Tennessee Department of Labor Occupational Safety and Health Administration (TOSHA). Space allocations are adequate at all fire stations for apparatus, personnel, and storage. New facilities are designed and built to current building code requirement. Station five uses a former storage area in an upstairs location for its physical exercise room. Access to the space is by using a narrow spiral staircase. [It is recommended that the agency evaluate existing facilities and spaces for compliance with occupancy type and permitted load.](#)

Kingsport city government is committed to providing each agency the resources needed which will enable the agency to reach its commitment to excellence as reflected in the City of Kingsport mission statement. Therefore, the city purchases appropriate equipment for the needed functions and makes sure that it is assigned appropriately without unnecessary duplication of equipment. The Kingsport Fire Department has an ongoing program to monitor the need for replacement of apparatus and vehicles.

Fleet maintenance keeps accurate records on all apparatus and vehicles. The chief, with staff input, writes the specifications for purchase of new apparatus. The City of Kingsport maintains a fleet depreciation fund through which all vehicles are replaced at specified intervals. Specifications are submitted to the purchasing division that will start the bid process. All purchases of apparatus must go out for bid process as required by statutory law. When the purchase is made, funds are available to pay for the apparatus entirely from the depreciation fund. The team validated adequate maintenance facility and staff.

The agency's vehicles are maintained through the department of fleet maintenance. Fleet maintenance, which consists of trained and qualified personnel one department head, one supervisor, twelve repair technicians, and four service technicians, is responsible for the inspection, testing, preventive maintenance and emergency repairs for all fire apparatus and vehicles assigned to the department. Fleet maintenance has five fully automotive service excellence (ASE) certified repair technicians. Greater than 58% of all of the repair technicians at fleet maintenance are fully ASE certified. The department has sufficient space allotted for repairs and is equipped with appropriate tools. An adequate information system supports the maintenance program.

The fleet manager maintains relationships with local vendors to call upon for work that is beyond the scope of internal staff, or emergent in nature. They are capable of turning work around quickly to return units to service. The manager prioritizes the in house work based on agency need and status of equipment.

The Kingsport Fire Department authorizes the purchase of appropriate tools and equipment for the needed functions. The agency makes sure that equipment is assigned appropriately without unnecessary duplication. Tools and equipment are inventoried and inspected on a three-day rotation and after use of the equipment before being placed back in service. All equipment is tested and inspected per manufacturer recommendations. The agency has an inventory control system in place to meet the goals and objectives.

The agency contracts with a vendor to conduct annual hose testing, ground ladder testing, and pump testing. The team validated historical records for testing of these items. SCBA testing and repair are conducted internally by a certified technician. The team validated certification of the repair technician and historical records for SCBA maintenance and testing. The agency has a policy that outlines specific turnout gear cleaning instructions; however, it appears that the policy is not consistently followed. The agency does not appear to adhere to any national standard for structural firefighting turnout gear inspection and testing. It is recommended that the agency evaluate accepted national standards for annual structural firefighting turnout gear inspection and testing for implementation in their policy. The agency contracts with a vendor to conduct annual testing of ground ladders and provide documentation. There is not a systematic identification process in place for each ground ladder. It is recommended that the agency evaluate an identification tracking system for ground ladders.

The agency has a safety program that provides the employees with safe working conditions, promotes safety awareness, and meets the criteria established by TOSHA. The city authorizes the purchases of appropriate safety equipment for the needed function and makes sure that it is assigned appropriately. The agency has begun to use their RMS to track issued safety equipment, yet it has not brought this process to full implementation. It is recommended that the agency evaluate and implement an inventory system and process to track issued safety equipment.

Category 7 — Human Resources

Personnel administration of Kingsport Fire Department is managed by the fire chief with human resource support provided by the Human Resources (HR) Director. The City of Kingsport Charter/Code of Ordinances establishes mandated personnel policies and procedures along with assigning responsibilities concerning personnel management. Furthermore, the HR department is comprised of an administrator, specialist, executive secretary, and a health benefits administrator. The city manager is designated as the overall personnel program manager. This authority is delegated to the Human Resources Director who then implements the requirements of The City of Kingsport Charter/Code of Ordinances, ensuring compliance with all applicable laws and standards.

Kingsport Fire Department works collectively with the City of Kingsport human resources department to establish qualification standards, required certifications, and certifications for promotion eligibility. All new employees and those promoted to a supervisory position must successfully complete a probationary period. The probationary period for new employees is 12 months and promotions are 30 days. It was identified on site that the agency recently established a

diversity committee to assist in the recruitment of a diverse workforce. As a result, the agency received the most diverse candidate list the city has seen in several years.

The agency's personnel policies and procedures are current and communicated to all personnel through various means. The City of Kingsport Charter/Code of Ordinances Manual, provides information specific to firefighters and implements policy, establishes procedures, and delegates authority. HR provides annual training for all employees on policies that relate to benefits, discrimination, harassment and bias. Performance improvement plans are used in the event a deficiency is recognized during the rating period.

The Kingsport Fire Department positions are classified based on the essential function, knowledge, skills and abilities, experience, certifications and are aligned with mission objectives. The HR director, in conjunction with the fire chief, conduct job description audits and modification requests that are routed through the City of Kingsport's Board of Mayor and Alderman for final approval. The agency complies with the City of Kingsport policies and procedures manual, which provides guidance on equal opportunity, including prevention of unlawful discrimination and sexual harassment. It was identified on site that member feedback is embraced by the agency. Survey Monkey is utilized to provide statistical feedback for the purchase of new equipment and various technological upgrades throughout the agency.

The Kingsport Fire Department's rates of pay and compensation are established, published and made available to all personnel and are posted on the city's website and agency share drive. Kingsport HR provides each member of the agency with an annual compensation breakdown of their benefits. Recently the city and the agency have identified areas of weakness in employee retention based on compensation. The city manager is working with the fire chief to establish and maintain compensation packages that will attract and retain qualified employees for both the agency and city.

The fire chief is assigned by the City of Kingsport risk manager to implement a health and safety program within the agency. The agency utilizes a safety training program that implements guidelines set forth by the Occupational Safety and Health Administration (OSHA) instruction 1910.134, *Respiratory Protection* and National Fire Protection Association instruction 1500, *Standard on Fire Department Occupational Safety, Health, and Wellness Program*. The risk manager collects and analyzes workplace hazard data that is presented to the agency Safety/Near Miss Committee which is then disseminated to agency personnel.

The Kingsport Fire Department provides both hiring and annual medical assessments to all assigned personnel. The agency provides the opportunity for each member to assist in a City of Kingsport wellness and fitness program and offer fitness instruction by six American Council on Exercise (ACE) certified Peer Fitness Trainers (PFT). Agency personnel have access to fitness facilities in each fire station and are allotted time each shift to partake in physical fitness.

The agency completes an annual review of the wellness and fitness program that is submitted to the fire chief in the annual report, the peer assessment team noted the agency's annual program appraisal policy was not fully implemented. It is recommended that the agency fully implement the appraisal policy into the existing appraisal process.

It was identified onsite that the City of Kingsport risk manager ordered the agency to cease all annual fitness evaluations due to the potential for injury. It is recommended that the agency explore options to re-establish annual fitness evaluations.

Category 8 — Training and Competency

The Kingsport Fire Department (KFD) has training programs that support the needs of the organization. A twelve-week recruit training program ensures the availability of qualified firefighters at the entry level. Upon completion, recruit firefighters that attend the Northeast Tennessee Regional Fire Training Association (NTRFTA) are trained to a minimum of Firefighter II, Hazardous Material Operations Level with the Tennessee Commission on Firefighting (TCFF) and to the Tennessee Emergency Management Agency (TEMA) Hazardous Materials Technician Level. The agency also has an active and on-going in-service training program to ensure personnel receive mandated training and maintain an awareness of current techniques.

The use of the TCFF Guidelines based upon the corresponding National Fire Protection Association (NFPA) Standards; provide certification programs for all operational positions. This program has been used extensively throughout the agency and is well documented. The agency has in place a career development program for individuals desiring to move up through the ranks from firefighter, engineer, captain, senior captain, deputy chief, assistant chief, and chief. The Tennessee Fire and Codes Academy (TFACA), National Fire Academy (NFA), and TEMA provide the basic framework for career development. This training is supplemented through in-house career development to ensure proper training and competency for each position in the agency.

The agency continues to expand their officer development program. They have primarily focused on using external agencies such as NFA pathways and associated courses. The state of Tennessee offers an educational incentive, which the agency participates in. Company officers and higher are encouraged to apply to NFA to attend on campus courses. By meeting specific guidelines and submitting proper documentation, each member receives an annual stipend from the state. Fire marshal staff as well as suppression personnel qualify to receive the stipend.

Special teams such as the hazardous materials team and the technical rescue team meet monthly for either a classroom or drill session. Medical continuing education classes are offered throughout the year to ensure that all personnel remain current in their knowledge, skill, and licensure. At the end of a license period, the training captain submits all required continuing education documentation for each member to receive their respective re-licensure.

The agency has training and education programs that support the needs of the agency to ensure members are appropriately trained. SOG B. 1.30 training program and SOG B. 1.31 training and certification requirements, outline recommended education, training, and certification requirements for each position in the agency. The training division works with the training committee to provide a training schedule to assist line officers in planning. The collection and management of reported training hours is evidence of a measurable program. The NTRFTA recruit class is the basis for all entry-level firefighters and provides a solid foundation for further employee development. A minimum of 40-hour in-service program is conducted annually to cover mandated training and meet TCFF Guidelines. Career development programs for each position ensure continued proactive development of employees. Relevancy in the training program is ensured through utilization of nationally recognized NFPA performance-based standards or job performance requirements and mandated local, state, or federal requirements.

Special teams meet monthly for training relevant to their discipline and the agency offers medical training at various times through the year. Company and multi-company evolutions are held throughout the year to identify and correct any deficiencies in the performance of any critical tasks. Individual training records are entered into the agency records management system by company officers and are maintained by the training officer. While on site, the team was able to validate annual performance measurement, however the execution of this process did not involve the training division. It is recommended that the agency evaluate a process to ensure that the training division is involved in the delivery of annual performance measurements and codify these measures in policy.

The training division maintains an inventory of all training and educational resources relative to the mission of the Kingsport Fire Department. Materials are available in the training office and in each fire station. The agency takes a progressive approach to the use of audio/visual and printed materials by purchasing current and relevant programs.

Fire stations are designed with training in mind having designated areas for classroom instruction as well as areas for exterior exercises at station two, seven, and eight. The agency added a training/burn building in 2016 and a new classroom has broken ground to further expand the training capabilities. Required drills and special training are conducted at KFD fire stations, the KFD training ground, and the Eastman fire ground. The training division consists of a training officer and an assistant training officer. The training division utilizes a training committee to assist in training program administration. Training delivery is overseen by the training division and delivered through the use of ninety-seven certified instructors within the agency. The training division maintains and documents all training conducted within the agency. From time to time, the city mandates supervisory training, diversity training, and other training relevant to the specific job responsibilities of personnel.

The agency works well with other organizations and agencies, which provides diversity and assists in meeting the needs of a well-trained fire agency. The agency works very closely with the TCFF, NTRFTA, TFACA, TEMA, local Emergency Management Agency (EMA), and Eastman. This allows the ability to share resources with neighboring organizations therefore supplementing the agency's capability.

The agency training captain is kept abreast of changes in training requirements, and he incorporates those into lesson plans. The training assistant position is currently vacant, and plans are in process to conduct an internal recruitment. The agency participates in a regional partnership with eleven fire departments. Each agency is a stakeholder in a regional recruit training academy. Each agency is able to send newly hired employees through this training to receive their initial certifications for employment. The training captain spends more than half of his time dedicated to this regional recruit academy that is conducted twice per year. Training materials are kept current and meet the needs of the agency.

Category 9 — Essential Resources

Criterion 9A – Water Supply

The peer assessment team confirmed that the Kingsport Fire Department is in receipt of a most recent Insurance Services Office (ISO) grading of 38.46 out of 40 points. The agency has submitted its most recent ISO report as prima facie compliance with this criterion.

Criterion 9B – Communication Systems

The Kingsport Fire Department has an effective, and efficient emergency communications system. The system is reliable and able to meet the demands of the city during daily operations and major events. The communications center is under the direction supervision of the City of Kingsport police department and was opened in a new modern facility in 2015. The fire chief is a member of the Kingsport emergency communications board that meets monthly to review center operations. The center maintains and utilizes a trunked simulcasting radio system that is part of the state wide network. The 911 phone system is tied to a network that allows rollover phone calls to be answer at other county and regional centers, providing a redundant call answering system. All agency vehicles as well as appropriate staff have mobile and portable radios to support their roles. The fire stations have the new alerting systems that were installed within the last year. The city's commuter aided dispatch (CAD) is scheduled to be upgraded the new technology will that will allow the implementation of AVL on agency apparatus and will support closest unit dispatching.

The agency is identifying buildings that have limited communications capability on the inside through pre-incident planning. The agency does not have a documented operational procedure for the evaluation of communications in building that is supported by the fire code. Bi-directional amplifiers (BDA) should be installed as required by the fire code when normal communications are disrupted. It is recommended the agency develop and document procedures for buildings or areas that are not capable of adequate emergency scene communications.

The emergency communications center is well equipped with updated hardware, software and has adequate staff to handle the daily communications needs of the agency and other city agencies. Interoperability is available with other regional centers. Policies are adopted that guide the testing, maintenance and replacement of the center's equipment. Backup capability is provided to the systems and a backup emergency communications center is located in a fire station and policies are in place to execute a change of location without interruption to service. Each emergency apparatus has a cell phone provided by the city.

It was identified by the peer assessment team that the agency and emergency communications center have established alarm processing standards. The agencies can and do evaluate compliance with the standards, but a process to identify methods for improvement should be developed between the agencies. It is recommended the agency establish a process with the emergency communications center to document areas for improvement in meeting the standard for call processing time.

The city dispatch center completes an annual review of the communications center goals and objectives. The peer assessment team noted the agency's annual program appraisal was not incorporated in the annual review of the communications center operations. It is recommended the agency establish a process to include the agency's annual appraisal into the communications center annual review process so that to evaluate elements that support agency improvement goals.

Criterion 9C – Administrative Support Services and Office Systems

The Kingsport Fire Department's administrative support services are managed by a single administrative assistant. Adequate equipment, supplies, and resources are present at each fire station and records are maintained in accordance with legal requirements established by the City of Kingsport. The administrative assistant partakes in regularly scheduled training provided by the city administration. The agency annually reviews organizational documents, standard operating procedures, and general guidelines.

Category 10 — External Systems Relationships

External agency system impacts are considered in the budget process and through participation in several multi-agency, multi-jurisdictional planning groups but are not specifically identified in the strategic plan. Regular studies of needs assessment, growth, and service impact are conducted. The Tennessee Mutual Aid and Emergency and Disaster Assistance Agreement Act (TMAEDAT) of 2004 provides the process for interagency agreements within Tennessee and there is a process in place for entering into agreements with agencies not covered by the State Plan. This has proven to be beneficial to the agency for both mission accomplishment and cost effectiveness. Primary emphasis for external agreements is placed in the areas of fire suppression, hazardous materials response and technical rescue operations.

The Kingsport Fire Department is an active participant in a statewide mutual aid agreement. All agreements are operational and implemented as needed. All agreements other than statewide mutual aid are entered into as legal contracts and are approved by elected officials. They are specific and clearly define individual participant's roles and responsibilities. Interagency agreements are planned and are generally the result of an identified need. The agency views interagency agreements as a vital aspect in the accomplishment of identified goals and objectives. The agency reviews agreements periodically and as needed. The agreements are adopted and maintained by the city. The agency is working to establish a mutual aid agreement with Scott County in Virginia. This is due to the close proximity of the agency to the neighboring county. The agency recognizes that they could provide emergency response in a timely manner.

The unique nature of the TMAEDAT provides established mutual aid between jurisdictions that are available for response by region. Prior to this change, which happened in 2004, the agency had several individual mutual aid agreements. Because of this Act, the agency sees little need to expand into additional mutual or automatic aid agreements. The agency does maintain some additional agreements with a few local businesses. Coupled with the understanding that many other local fire departments are volunteer based. There is opportunity along an interstate area that borders Kingsport and Johnson City to offer automatic aid between agencies. It is recommended that the agency evaluate the possibility to establish an automatic aid agreement for this specific area where a highway crosses municipal boundaries. While it is noted that jurisdictional boundaries primarily adjoin volunteer agencies, the Kingsport Fire Department could reliably provide services as a closest unit response into the county areas. It is recommended that the agency evaluate the possibility to establish automatic aid agreements to provide closest unit response across the state line.

