



**Commission on  
Fire Accreditation  
International**

# **Accreditation Report**

**Fayetteville Fire/Emergency Management Department  
433 Hay Street  
Fayetteville, NC 28301  
USA**

**This report was prepared on August 8, 2011  
by the  
Commission on Fire Accreditation International  
for the  
Fayetteville Fire/Emergency Management Department**

**This report represents the findings  
of the peer assessment team that visited the  
Fayetteville Fire/Emergency Management Department  
on June 11-16, 2011**

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# **EXECUTIVE REVIEW**

## **PREFACE**

The Fayetteville Fire/Emergency Management Department recently received candidate status. On April 6, 2011 the department asked the Commission on Fire Accreditation International (CFAI) for a site visit to determine if it could be recommended for accreditation. On April 19, 2011, the CFAI appointed a peer assessment team. The peer team leader approved the department's documents for site visit on June 1, 2011. The peer assessment team conducted an onsite visit of the Fayetteville Fire/Emergency Management Department on June 11-16, 2011.

In preparation for the onsite visit, each team member was provided access and reviewed the self assessment manual, standards of cover, community risk analysis and strategic plan posted by the Fayetteville Fire/Emergency Management Department on the Center for Public Safety Excellence (CPSE) SharePoint site. This documentation represented a significant effort by the staff of the department and other community agencies. The department did not use a consultant to assist it with completing the documents required for accreditation.

## **SUMMARY**

The CFAI has completed a comprehensive review and appraisal of the Fayetteville Fire/Emergency Management Department based upon the eighth edition of the Fire and Emergency Services 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 Fayetteville Fire/Emergency Management Department demonstrated that its self study accreditation manual, community risk analysis, standards of cover (SOC) and strategic plan met all core competencies and criteria. The peer assessment team recommends accredited agency status for the Fayetteville Fire/Emergency Management Department from the Commission on Fire Accreditation International.

Fayetteville has had a significant increase in size and population in the last decade. Due to the ability to annex into the city, the population has increased from 121,015 in 2000 to 183,367 in 2010. The city has grown from 60 to 94 square miles in the past 10 years. The department's SOC response was tailored around the urban density population found throughout most of the city.

Fayetteville, located in the seat of Cumberland County, also has a significant military presence and it is often known as the home to Fort Bragg. Due to the Department of Defense's Base Realignment and Closure Commission, Fort Bragg will continue to see population increases as more military commands move into the region. Although the department provides emergency service to a portion of the Fort Bragg region, it still has its own police, fire, and emergency medical services within the military complex.

Fayetteville is located in the Sand hills in the western part of the Coastal Plain region, on the Cape Fear River. With a population of 341,363, the Fayetteville metropolitan area is the largest in

southeastern North Carolina and the fifth-largest in the state. Suburban areas of metro Fayetteville include Hope Mills, Spring Lake, Raeford, Stedman and Eastover. Transportation is typically handled through interstate 95 and via the Fayetteville regional airport.

The fire chief reports directly to the city manager who reports to city council. There are three assistant chiefs who report to the fire chief that are responsible for the various programs with the department.

The department's funding mechanism is predominately based on ad valorem taxes (property taxes); there are additional revenues from other taxes, funds and investments to make up the entire operating budget.

The department's success is closely integrated with its strategic plan and the efforts are channeled towards the success of the plan. The fire chief recognizes the challenge for monitoring plan progress. Quarterly planning meetings with the executive staff are scheduled and input is required for the entire command staff. The department demonstrated commitment to the process as its mission statement was revised and clear direction for progress is a priority. The city council has formally adopted the department's strategic plan and has given full support to it.

The department has recently put in new geographic information system (GIS) mapping capability and a fire analysis tool package to enable it to further evaluate response capabilities and limitations. The department demonstrated a focus to improve its baseline performance and continues to make efforts to closely monitor all aspects of its response time. The self assessment process has already allowed the department to realize areas for improvement. It closely monitors all elements of its baseline response for total response time against the city established benchmarks to identify and implement opportunities for improvement.

The Fayetteville Fire/Emergency Management Department is a full service fire department and provides essential public safety and emergency responses to a large growing population and region commensurate to the associated risks of the community. The department presently staffs 3 battalions, 16 engine companies, 5 trucks (aerials), 5 squads, 2 heavy rescues and 2 aircraft rescue and fire fighting (ARFF) units from 16 fire stations. The department also staffs and maintains one of the regional hazardous materials team for the state of North Carolina.

The department has placed significant emphasis on fire prevention and understands how safer building will prevent future emergencies. Since 2009, the prevention division members have been engaged in building site and sprinkler plan reviews in their assigned districts.

The department presently delivers medical first responder services and each responder is North Carolina Emergency Medical Technician Basic (EMTB) certified. Cape Fear Valley Emergency Medical Services of Cumberland County is the primary provider of pre-hospital emergency care for the city of Fayetteville. The department supplements Cape Fear Valley's service through its basic life support (BLS) response. All protocols and infection control procedures are part of the Cumberland County EMS plan and are approved through its medical director.

The department presently maintains 16 fire stations and a training facility. Fire stations are distributed to meet the service level objectives and through recently obtained GIS mapping capability the department determined that two of the older fire stations, Stations 4 and 12, can be re-located and rebuilt in a more optimal site to ensure a more effective response. Station 19 is a temporary building

used by the department while permanent construction is being completed for this new station. Within the capital improvement plan of the department, three additional fire stations are to be constructed to enhance an effective and efficient response time and improve fire protection services. All department facilities are very well maintained and extremely clean.

The department has assigned the administrative battalion commander the job function of safety officer to: oversee its overall functions, as they pertain to safety and risk management; and serve as a liaison to the City of Fayetteville Risk Management Department. The peer team recommends the department continue its efforts to implement regular medical evaluations for incumbent members through a department sanctioned process. The department is progressive on issues of employee safety and is strongly committed on addressing this issue.

Training needs are met through current personnel, facility and materials resources by a thorough and comprehensive training program, from entry level probationary firefighter through the position of battalion commander. The department utilizes performance-based training with objective skill, task sheets and newly developed benchmarking drills designed for all stages of employee training within the organization.

With the development and implementation of benchmarking drills, a need has been identified to increase instructional personnel assigned to the training facility. The department is currently working towards funding two additional positions to meet increasing departmental demands.

The department has an Insurance Services Office (ISO) rating of 2; virtually all built up areas of the city are served by the domestic water supply, which includes 5,871 hydrants. The distribution system and hydrant distances are spaced at 500 feet for commercial areas and 1,000 feet for single family residential areas.

The department is presently upgrading base radio stations at all fire stations to be compatible with the statewide radio communications network and is on track to be completed by 2012. The city is also presently implementing mobile repeaters to assist with communications at medium and high density building incidents. The department did receive the maximum points for communications in its 2008 ISO inspection.

The administrative branch is dedicated to provide the administrative support necessary to meet the department's overall goals through communication, coordination and cooperation. It also supports the operational needs of the each division through planning and research.

Reciprocal agreements are in place with neighboring departments such as Cumberland County, Hoke County, Fort Bragg Emergency Services and North Carolina's Urban Search and Rescue Task Force 9 to establish a statewide network. Participants can utilize the system to request and or provide aid and assistance to other participant members during disasters or a state of emergency. All agreements are based on an analysis of service needs. Furthermore, all of these reciprocal agreements are essential in maintaining organizational service and performance objectives in accordance to the standards of cover.

Most of the agreements are specific and clearly define the roles and responsibilities of the participants. The peer team recommends a formal agreement be entered into among the emergency partners involved in the fire investigation team to ensure that all parties have a thorough and transparent understanding of the events through the monitoring, documentation and appraisal of the

investigations that have occurred. In the examination of the documents it was discovered that a conflict resolution policy was not in place within the various agreements.

The peer assessment team observed a strong commitment by the department to the CFAI accreditation process and, in particular, to ensuring appropriate succession training for other staff who can assume the accreditation manager duties and responsibilities. The current accreditation manager has a strong support team and is anxious to get involved with the CFAI process as a peer assessor for other agencies. These approaches ensure both continuity and more direct access to best practices with other similar organizations and engagement of a broader spectrum of the department.

## **Composition**

The City of Fayetteville is located in the western most portion of the coastal region of North Carolina. The city was established in 1762 and has experienced growth over the years. The city is chartered by the state of North Carolina as a local municipality. Fayetteville is located along the Cape Fear River, which once served as a major trade route. In the early years the city was comprised of two smaller settlements that eventually merged and were renamed after American Revolutionary War General Marquis de Lafayette. The two settlements, Cross Creek and Campbellton, still remain prominent today.

Fayetteville spans a land area covering 94 square miles and has a concentration of 2,134 people per square mile. Fayetteville is the sixth largest city in North Carolina and is the largest metropolitan area in the southeast region of North Carolina. Fort Bragg, which is the largest military installation in the world, also connects with Fayetteville. Fort Bragg has a population of over 50,000 people who travel into the city on a daily basis.

While Fayetteville's sheer size and population has doubled in recent years other infrastructure has not kept up. Areas such as the industrial field, businesses and shopping centers have not kept pace with the city's growth. The current economic downturn has affected the local economy significantly. Increases in fuel prices, as well as other commodities, have caused strains on local businesses and the economy.

Fayetteville is one of the oldest cities in the state and through its development in construction over the past 200 years has a diverse mixture in building stock. Some of the oldest buildings are in the downtown and Haymont areas. Fayetteville is one of the most diverse communities in the state. With its heavy military presence, it is considered the most military friendly city in the nation, as was recently presented in Time Magazine. Despite the economic hardships and recent limited growth Fayetteville stands poised for future growth and development.

The department has managed to evolve with the growth of building stock and related population; it is a career service staffed by 330 personnel working out of 16 fire stations.

## **Government**

City Manager- Council form of government  
Mayor and nine Councilors  
City Manager  
Fire Chief

## **Fire Department**

16 fire stations  
322 uniform and 8 civilian personnel  
3 shift system  
16 engine companies  
5 truck companies  
5 squads  
2 heavy rescues

- 2 commercial vehicles (hazardous materials)
- 2 enclosed trailers (trench-technical rescue)
- 2 aviation rescue fire fighting (ARFF)

## **CONCLUSIONS**

The self-study manual produced by the Fayetteville Fire/Emergency Management Department was of high quality. The manual represented a significant effort by the staff of the department to produce and present a quality document.

- The Fayetteville Fire/Emergency Management Department demonstrated that all core competencies were met and received a credible rating.
- The Fayetteville Fire/Emergency Management Department demonstrated that all applicable criteria were met and received a credible rating.
- The peer assessment team recommends accredited agency status for the Fayetteville Fire/Emergency Management Department from the Commission on Fire Accreditation International.

## RECOMMENDATIONS

The peer assessment team conducted an exit interview with the agency consisting of the fire chief, accreditation manager and most of the staff that participated in the self-assessment study. The purpose of the meeting was to review the team's findings and recommendations. The department was given an opportunity to respond to any errors in findings of fact.

### Strategic Recommendations

Strategic recommendations were developed from information gathered from the onsite assessment visit and the evaluation of the criteria and core competencies.

1. Create and sign a formal agreement among the emergency partners involved in the fire investigation team to ensure that all parties are cognizant of a thorough and transparent understanding of the events through the monitoring, documentation and appraisal of the investigations that had occurred.
2. Utilize the temporary fire station as Station 16 once Station 19 is completed and construct the four planned fire stations (16, 18, 20 and 21) in accordance to the time lines found in the current FFEM Capital Improvement Plan.
3. The department is encouraged to continue its efforts to implement regular medical evaluations for incumbent members through a department sanctioned and funded process.
4. The department should continue to monitor all aspects of response time including call processing so as to make efforts in achieving benchmark times for all incidents, including aviation rescue and fire fighting (ARFF) call data.

### Specific Recommendations

Specific recommendations were developed from the appraisal of performance indicators in each of the ten categories.

## Category II – Assessment and Planning

### Criterion 2D: Strategic Planning

Performance Indicator

2D.2 The strategic plan is approved within the agency and submitted to the governing body or administrative officer with responsibility over the fire agency and to whom the chief fire officer/chief executive officer reports.

The strategic plan has evolved over this past year without updates or analysis. The department should investigate best practices in other departments in order to document, update and monitor the advancement of the goals and objectives within the strategic plan.

## **Category V – Programs**

### **Criterion 5B: Fire Prevention/Life Safety Program**

Performance Indicator

5B.4 A plan review process is in place to ensure that buildings and infrastructure (e.g., hydrants, access, street width, etc.) are constructed in accordance with adopted codes and ordinances.

The City of Fayetteville Policy 111 – Site Plan Review should be revised to include the functions, responsibilities and duties of the fire prevention division.

### **Criterion 5C: – Public Education Program**

Performance Indicator

5C.2 The program has staffing with specific expertise to accomplish the program goals and objectives.

The department should evaluate the benefits of a dedicated, full-time and trained public educator.

### **Criterion 5D: Fire Investigation Program**

Performance Indicator

5D.7 The agency's information system allows for documentation and analysis of the fire investigation program.

The department should modify reporting procedures to ensure that record information is kept in one location to ensure propriety of the evidence and remove any room for errors, omissions or conflicts within the recorded information.

### **Criterion 5H: Domestic Preparedness**

Performance Indicator

5H.7 The agency periodically conducts operational tests of and evaluates the all-hazards plan and the domestic preparedness program.

It is recommended staff from the department continue to work with the city manager and other city officials to conduct annual operational testing and exercises involving all city departments and focus on areas other than severe weather.

## **Category VI – Physical Resources**

### **Criterion 6B: Fixed Facilities**

Performance Indicator

6B.1 Each facility has adequate space for agency functions (e.g., operations, fire prevention, training, support services, administration, etc.)

The department is encouraged to relocate and rebuild Stations 4 and 12 in accordance to the projected time lines of its capital improvement plan to ensure adequate space and functionality of the staff.

## **Category VII — Human Resources**

### **Criterion 7B: Recruitment, Selection, Retention and Promotion**

Performance Indicators

7B.4 The agency’s workforce composition is reflective of the service area demographics or the agency has a recruitment plan to achieve the desired workforce composition.

After a thorough assessment of current practices and outreach programs within the current recruitment plan, administration should explore other options for recruiting minorities and females.

7B.7 An employee/member recognition program is in place.

The department should reinstate its employee recognition program and look at an expansion to include other deserving employees so they too could be considered for awards such as medals, pins, plaques, bars or certificates.

### **Criterion 7D: Use of Human Resources**

Performance Indicator

7D.2 Current written job descriptions exist for all positions and incumbent personnel have input into revisions.

Job descriptions should be developed for the assistant training officer, the public fire educator, the public information officer and any other missing positions.

### **Criterion 7F: Occupational Health and Safety and Risk Management**

Performance Indicator

7F.2 Procedures are established for reporting, evaluating, addressing, and communicating workplace hazards as well as unsafe/unhealthy conditions and work practices.

It is recommended that an internal occupational health and safety committee be established

within the fire department.

## **Category VIII — Training and Competency**

### **Criterion 8A: Occupational Health and Safety and Risk Management**

Performance Indicator

8A.5 A command and staff development program is in place.

It is recommended that the department research and implement a command and staff development program as part of the regularly scheduled training program.

## **Category X – External Systems Relationships**

### **Criterion 10A: External Agency Relationships**

Performance Indicator

10A.4 A conflict resolution process exists between the organization and external agencies with whom it has a defined relationship.

The department should work with the city attorney's office to incorporate a conflict resolution process into the agreements with external agencies.

## **OBSERVATIONS**

### **Category I — Governance and Administration**

The Fayetteville Fire/Emergency Management Department operates under a council-manager form of municipal government. The fire chief reports directly to the city manager. There are also two other department heads (police chief and finance director) who report directly to the city manager. The other department directors report to an assistant city manager. The city council is the authority having jurisdiction over the city of Fayetteville and its various departments.

The department is legally established under the appropriate state and municipal legislation to provide general policies to guide the department's approved programs and services and appropriated financial resources. The department is legally established within the city code of ordinances in accordance with North Carolina general statutes. The department was officially organized in 1791 and presently adheres to all local, state and federal mandated guidelines.

The established administrative structure provides an environment for achievement of the agency's mission, purposes, goals, strategies, and objectives. The administrative structure of the department consists of three assistant chiefs responsible for administration, support services and operations; they report directly to the fire chief. The department receives legal and financial services through city staff. The fire chief submits a strategic plan for the department each year for approval by the city manager and council and the plan is subsequently reviewed by senior staff on a quarterly basis.

Human resources staff maintains job descriptions for all positions and these are available for all employees on the city's intranet. The department's focus is on fire and life safety and its title is consistent with its mission. The mission of the department was redefined as a result of the strategic planning process associated with the accreditation process.

### **Category II — Assessment and Planning**

The Fayetteville Fire/Emergency Management Department has established a commendable assessment and planning process that aligns the results of the self-assessment process, the community risk hazard analysis, the standards of cover (SOC) and the strategic plan. The process culminates in a proposal that is appropriate, acceptable and affordable as it relates to the identified needs of the community.

The department collects and analyzes data specific to the distinct characteristics of the community served and applies the findings to organizational planning. The service area for the department is an urban density. Geographical boundaries for the city of Fayetteville are well identified. Department responses are clearly defined and divided into 16 areas. The computer aided dispatch (CAD) system further divides the response areas into 407 smaller internal response areas (IRA). The IRAs create geographic areas that are analyzed for the purposes of providing fire and EMS services, fire inspection data and other services offered by the department.

Unlike many other larger cities, where the populace is decreasing and the city is land-locked, Fayetteville has had a dramatic increase in size and population in the last two decades. Due to the ability to annex into the city, the population has increased from 121,015 in 2000 to 183,367 in 2010.

In 2000, the city consisted of 60 square miles, while in 2010 the area was 94 square miles. Due to the Department of Defense's Base Realignment and Closure Commission, the city's population is expected to continually increase. It has been estimated that over the next 15 years there will be a demand for over 15,000 new homes.

The benchmark service level objectives incorporated into the standards of cover are based on local needs and circumstances and industry standards and best practices adopted from: *National Fire Protection Association (NFPA) 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*; *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*; the Fire Protection Research Foundation; and the National Institute of Standards and Technology (NIST).

The department assesses the nature and magnitude of the hazards within its jurisdiction and develops appropriate response coverage strategies. Each significant fire and non-fire risk is categorized and listed to permit future analysis and study in determining standards of cover and related services. The non-fire risks include hazardous materials, emergency medical services, technical rescue and aviation rescue and fire fighting. Special attention is paid to identify, analyze and develop strategies for non-fire or limited fire risks that gain importance due to cultural, economic, environmental or historical value.

The department collects and analyzes data specific to the distinct characteristics of the community served and applies the findings to organizational planning. The department has evaluated typical planning zones for assessment and analysis purposes. An on-going assessment and identification of new occupancies is done through pre-fire surveys and plans review. The department has an established standard operating procedure for conducting pre-fire surveys. Each fire company is required to enter selected businesses each month and perform assessments on the layout and potential hazards involved. All pertinent information relating to the business is listed and stored on the apparatus as a quick reference for operational purposes. Included in a pre-fire survey are business and building owner contact information, a sketch of the building and floor plan, recommendations for staging and available water sources.

The department utilizes a formal process periodically to assess the balance between fire suppression capabilities and fire risk in the service area. The department has also initiated a risk assessment survey program that is similar to the pre-fire plans conducted. However, this program is being utilized so as to make information readily available through the Firehouse records management system (RMS) and the mobile computer terminals installed on each apparatus. With this program, the information gathered is more condensed than the pre-plans. Due to the number of businesses within the city, combined with an issue with outdated pre-plans, the department made the decision to perform an assessment on each business. This allows the department to have an accurate assessment of the identified hazards within the department's jurisdictions. Under this risk assessment program, the businesses are classified as either moderate or high risk. The identified risks help the department in determining the appropriate response coverage needed in the event of a fire.

The City of Fayetteville is divided into 407 geo-proximity zones with assigned unit responses for each. The zones have each been analyzed based on responses for weather related responses, fire responses, EMS responses, and areas with other high risk classifications. The analysis is an ongoing process due to things such as new construction, annexations, and other demographic changes. The department has also completed a comprehensive analysis of the risk within the 407 IRA planning

districts. The analysis is an ongoing process due to things such as new construction, annexations, and other demographic changes. The results of the risk analysis, and the associated identified needs, are integrated into the standards of cover.

The establishment of the geo-proximity sectors has enabled the department to more closely analyze the risk factors within each sector and to monitor the effectiveness of the apparatus response schedule related to response time and service level. The collection of the described information has facilitated the establishment of a service level goal in the form of a response coverage standard for the department. The methods utilized for analyzing risk factors in the planning zones is adequate for the department. Sufficient data has been collected and analyzed to determine risks and the subsequent allocation of resources.

The department has established baseline and benchmark response objectives that are delineated between risk category and significance. A detailed explanation of the total reflex time and other components of the department's response coverage is found in the SOC.

The department established original baseline performance standards in September 2010 that were subsequently adopted by Fayetteville City Council on October 4, 2010. Historical response data from the FireHouse RMS, six months of new CAD data and manual map calculations were used to establish these standards.

The department implemented a CAD from OSSI Sungard in February 2010 to eliminate many issues, such as the inability to record alarm handling times and the unreliability of data entered into FireHouse RMS. While the historical data prior to February 2010 is quantitatively accurate for reaction and travel times, the validity of the quality was significantly compromised due to the fact that alarm handling was not included. The previous CAD required that the alarm handling times be entered manually by the responding personnel upon returning from emergency incidents. Evidently, prior to February 2010, there was minimal quality control of response times. Another factor that must be considered is that the department's response plans were modified in February 2010 to implement a differential response based on associated risk. Priority dispatch protocols were used to delineate the severity of the call and to recommend adequate resources for dispatch, based on pre-programmed response plans. In summary, there were inconsistencies when comparing responses before and after February 2010 due to these two factors.

Therefore, all reports generated to verify baseline performance compliance utilized only 15 months of call data. A combination of FireHouse RMS and Crystal reporting software was used to obtain total distribution and concentration response times in fractal format with the baseline set at 90 percent. These reports also show the number of responders that arrive on scene. Only calls where the effective response force, as defined in the standards of cover document, responded and arrived as emergent traffic were included.

The current CAD affords the agency the ability to accurately record total response time beginning with the initial contact with the public safety answering point (PSAP) and terminating when the emergency unit(s) arrive on scene. These times are electronically interfaced from the CAD into FireHouse RMS. This process maintains the integrity of the data and eliminates the possibility of manual time manipulation. There is a third party review of incident reports included in the quality control program applied to incident reports.

Another significant change in 2010 was the assumption of responsibility for providing fire and EMS

coverage to the unincorporated area on the northern peripheral of the city that formally belonged to the Westarea Fire Department. Cumberland County contracted with the Fayetteville Fire/Emergency Management Department to provide services. This results in extended travel distances for Engines 3 and 19 when responding to calls for service in these areas. There were 617 responses in 2010 in the contracted area. Of these calls, 19 were structure fires.

The significant differences in travel times between years 2009 and 2010 are attributed to the acquired ability to more accurately capture response data, as well as, the increased travel distance to calls in the contract area.

Following a detailed assessment and analysis, the peer assessment team believes by consensus that the alarm handling time, turnout time, travel time for first due and travel time for effective response force components of the total response time continuum, as set out in the eighth edition of the Fire and Emergency Services Self-Assessment Manual (FESSAM) by CFAI, does not constitute a gross deviation. It was clearly demonstrated to the peer assessment team that the department is committed to taking steps to meet FESSAM expectations.

There is no simple solution to reducing these times; however, consistent with the continuous improvement principles inherent within CFAI, the department has implemented both short and long-term actions to address this issue. Those steps include such actions as:

- The department recently implemented a plan to fast track fire and medical emergency alarm handling procedures resulting in the commencement of the dispatch process while the evaluation phase is still ongoing.
- The city is actively considering an automatic vehicle locator (AVL) system, along with mobile data terminals (MDT), to improve on the accuracy of real time information and response times for emergency vehicles. This system will also improve routing to emergency scenes so as to ensure the fastest route is utilized.
- The department is working on consolidating its CAD with the county; as a result, all call transfers should be eliminated. This is scheduled to be completed in the fall of 2011.
- The department has implement reporting procedures when gross deviations to expected timelines are realized to discover any cultural or operational obstacles to providing efficient and effective response times.

A strategic plan for five years in the future is in place and, along with the budget, is guiding the activities of the agency. The plan is submitted to the appropriate authority having jurisdiction. This accreditation process expedited the evolution of the department's first strategic plan.

In March 2009, the fire chief appointed a diverse strategic planning team. All command staff members attended two days of training in strategic plan development. A value audit survey was given to all department members and a citizen expectation survey was completed. The department planning team completed a challenges, opportunities, weaknesses and strength assessment. Also, the planning team met frequently, beginning in 2009, and completed the first strategic plan with general goals and specific objectives in June 2010. The department team developed eight strategic goals and outlined specific objectives required to meet the goals. The department did a good job of ensuring

that people throughout the organization were engaged and involved in the development process.

Goals and objectives are appropriate and were presented and adopted by Fayetteville City Council and Mayor on October 4, 2010. The strategic plan is published on the department's website and shared "R" drive. Printed copies are distributed to all company officers and a copy is kept for each station and maintained in the monthly book inventory. The strategic plan has evolved over this past year without updates or analysis. The department should investigate best practices in other departments in order to document, update and monitor the advancement of the goals and objectives within the strategic plan.

### **Category III — Goals and Objectives**

Annually, Fayetteville City Council distributes its goals, vision, mission and core values. When council changes its focus areas and related goals and objectives, the department will re-evaluate the plan's goals and objectives to ensure that they are consistent with council priorities. In the department's strategic plan document, there is a strategic goal correlation map that shows the relationship of all fire department goals with the city council's strategic goals.

The Fayetteville Fire/Emergency Management Department has established general goals and specific objectives that direct its priorities in a manner consistent with its mission. The goals and objectives are appropriate for the community served. They were presented and adopted by Fayetteville City Council and Mayor on October 4, 2010. The strategic plan is published to department members and the citizens of Fayetteville. Bound copies were sent to all fire stations. The strategic plan is published on the city of Fayetteville's internet site and the department's shared drive. Annually, members of the department spend three hours training on the strategic plan.

The department uses a defined management process to implement the goals and objectives. Divisional work plans are to be developed and become mandatory January 1st, 2012.

Processes are in place to measure and evaluate progress towards the completion of specific objectives and overall system performance. The goals and objectives are re-examined and modified periodically. Starting in June 2011, quarterly meetings with the executive staff commenced to evaluate the achievement of goals and objectives. Goals and objectives that are no longer useful or relevant, are modified when the strategic plan is updated for the next fiscal year. The team identifies progress towards completion of the goals and objectives; their successful completion is a key component of the relationship between department and elected officials. Annually, the strategic plan is presented and adopted by Fayetteville City Council and Mayor.

The department plans to repeat the entire planning process in five years to determine if the existing mission, vision and values of the organization are appropriate at that time. Annual plan revisions will be submitted to the city manager and council.

### **Category IV — Financial Resources**

Fayetteville's financial policies establish general guidelines for the fiscal management of the city. The fire department utilizes its assistant chiefs and other staff to develop the needs for the operating and capital budget for the following year. All levels of management have input into the budget process. Budget submissions are developed based on various considerations, but primarily around specific organizational goals. Under North Carolina general statutes, the city manager serves as the

budget officer and the final budget is formalized by city council. Once approved, the fire chief is responsible for implementing and monitoring it.

The department's financial planning and resource allocation processes are based on agency planning involving broad staff participation. Department goals are shared with all employees and all provided an opportunity for input into the budget process. The department has a five-year capital improvement plan (CIP) for large capital purchases; this is reviewed during the budget process and during the year to ensure department needs are met. Going through the accreditation process has allowed the department to align its strategic plan with the budget process.

The department's financial management practices exhibit sound budgeting and control, proper recording, reporting and auditing. External audits are routinely completed to ensure proper procedures are followed and clearly defined and no deficiencies have been found for at least the last five years. The city does have a current Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association and has maintained this for many years. The department has submitted its certificate and Comprehensive Annual Financial Report, as prima facie compliance with this criterion.

Financial resources are appropriately allocated to support the established organizational mission, the stated long-term plan, goals and objectives and maintain the quality of programs and services. Financial stability is a fundamental aspect of an agency's integrity. The department ensures that programs and services provided can be supported by the necessary fiscal resources using sound budgetary practices. The city has a balanced budget requirement and anticipated revenues are reviewed each year. These revenues include various taxes, fees, inter-government funds, service permits, fees and investment income among other sources. Both existing and new programs are evaluated every year for adequate funding and revisions are based on strategic goals and the adopted level of service. The city has maintained a bond rating of Aa3 and AA by Moody's and Standard and Poor's respectively.

Department services resources are continually being monitored. Planned capital lease agreements currently include funding for public safety technology improvements, which includes the upgrade of the computer aided dispatch system, the records management system and the purchase of digital radios.

## **Category V — Programs**

### **Criterion 5A – Fire Suppression**

The Fayetteville Fire/Emergency Management Department is a full service fire department and provides essential public safety and emergency response to a large growing population and region. The department presently staffs 3 battalions, 16 engine companies, 5 trucks (aerials), 5 squads, 2 heavy rescues and 2 aviation rescue and fire fighting (ARFF) units from 16 fire stations. The pump capacity on suppression units is 1,250 gallons per minute.

The department operates a 3 shift system with 24.25 hour shifts consisting of a 56 hour work week. The department has a minimum staffing of 85 firefighters per shift plus 2 battalion chiefs. Sixteen engine-suppression and five truck companies have a minimum of three firefighters and several have four firefighters. Heavy rescues and the first response squads are staffed with two firefighters. The two ARFF trucks at the Fayetteville Regional Airport are staffed with one person on each unit.

The department operates an adequate, effective, and efficient fire suppression program directed toward controlling and/or extinguishing fires for the purposes of protecting people from injury or death, and reducing property loss. The department relies on priority dispatch protocols and use of computer aided dispatch (CAD) to recommend the correct complement of equipment necessary for the risk associated with each incident.

The department has maintained an Insurance Services Office (ISO) rating of 2 since 2000 and the most recent assessment was completed in 2008. Appropriate policies and procedures are in place to meet operational needs and all policies are reviewed and revised if necessary on an annual basis. The department utilizes the incident management system and all chief level officers are trained at a minimum to the National Incident Management System (NIMS) 400 level. The department is in the process of providing this training for all company level officers.

Presently the department utilizes a FireHouse records management system (RMS) and has custom built reports to extrapolate data from its computer aided dispatch (CAD) to continually measure performance standards. The department conducts informal incident reviews on all fire incidents at the company level and formal reviews for all major and significant incidents. Additionally, monthly and annual reports are reviewed to evaluate the effectiveness of the fire suppression program.

The department's response and deployment standards are based upon the population density and fire demand of the community. Sixteen fire stations provide citywide coverage; department staffing is based upon station location, incident type and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices, as identified earlier in this report in Category II – Assessment and Planning. The objectives have been approved and adopted by fire department management and the city council. The department's benchmark service level objectives are as follows:

For 90 percent of responses to low, medium and high risk structure fires, the total arrival time for the first due unit, staffed with a minimum of 3 personnel, shall be within 6 minutes and 20 seconds in the urban area. The first due unit shall be capable of: establishing command; completing a scene size up; flowing a minimum of 250 gallons per minute; providing 1,250 gallons per minute pump capacity; and providing fire suppression and rescue tactics while utilizing safe operational procedures.

For 90 percent of all structure fires, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 15 firefighters and officers, for all moderate risk structure fires and a minimum of 24 firefighters and officers for all high risk structure fires, shall be 10 minutes and 20 seconds in urban areas. The ERF shall be capable of: establishing command; providing an uninterrupted water supply; staffing an attack line and back up line; initiating search and rescue; conducting ventilation; and providing rapid intervention and exposure control, as outlined in the critical task analysis, utilizing safe operational procedures.

The department's baseline statements reflect actual performance during 2006-2010. The department does rely on the use of both automatic aid and mutual aid from neighboring fire departments to provide its effective response force complement of personnel. The department's baseline service level

objectives are as follows:

For 90 percent of responses to low, medium and high risk structure fires, the total arrival time for the first due unit, staffed with a minimum of 3 personnel, is 7 minutes and 15 seconds in the urban area. The first due unit is capable of: establishing command; completing a scene size up; flowing a minimum of 250 gallons per minute; providing 1,250 gallons per minute pump capacity; and providing fire suppression and rescue tactics while utilizing safe operational procedures.

For 90 percent of all structure fires, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 15 firefighters and officers, for all moderate risk structure fires and a minimum of 24 firefighters and officers for all high risk structure fires, is 13 minutes in urban areas. The ERF is capable of: establishing command; providing an uninterrupted water supply; staffing an attack line and back up line; initiating search and rescue; conducting ventilation; and providing rapid intervention and exposure control, as outlined in the critical task analysis, utilizing safe operational procedures.

It was verified and validated by the peer assessment team that FFD met all baseline service level objectives for 2006-2010.

<b>Structure Fires - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Alarm Handling</b>	Pick-up to Dispatch	2:19	n/a	n/a	n/a	n/a
<b>Turnout Time</b>	Turnout Time 1st Unit	1:46	1:43	1:42	1:39	1:54
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	6:09	5:51	6:10	6:00	5:55
	Travel Time ERF <b>Concentration</b>	10:33	8:12	8:48	8:22	8:27
<b>Total Response Time</b>	Total Response Time 1st Unit On Scene <b>Distribution</b>	6:58	*5:51 <sup>1</sup>	*5:42	*5:39	6:00
	Total Response Time ERF <b>Concentration</b>	12:33	*10:46	*12:33	*11:36	*11:51

**Criterion 5B – Fire Prevention / Life Safety Program**

The Fayetteville Fire/Emergency Management Department relies on its fire prevention division to administer the fire inspection and life safety program. With the addition of one fire inspector in 2009, the total complement of the division consists of one fire marshal, one deputy fire marshal and

<sup>1</sup>\* Alarm handling time was not tracked. The chart above is the 90 percent performance for all structure fires (low, moderate and high).

seven fire inspectors. The fire suppression crews support the fire prevention division with pre-plans, risk assessment and public education.

The department operates an adequate, effective, and efficient program directed toward fire prevention, life safety, hazard risk reduction, the detection, reporting, and control of fires and other emergencies, the provision of occupant safety and exiting, and the provisions for first aid firefighting equipment. The department utilizes the North Carolina Fire Prevention Code, National Fire Protection Association (NFPA) standards and guides and the Fayetteville City Code for all enforcement activities.

All members of the division are assigned to carry out maintenance inspections, fire code enforcement and to ensure code compliance on all new construction. In addition, since 2009, the prevention members are engaged in building site and sprinkler plan reviews in their assigned districts. Moreover, the fire prevention division participates in several life safety initiatives aimed at promoting life safety, including a comprehensive fire education program to the community. The peer assessor site team recommends that the City of Fayetteville Policy 111 – Site Plan Review should be revised to include the functions, responsibilities and duties of the fire prevention division.

All the members of the fire prevention division have state fire inspector certification based on their tenure in the division. With this specific expertise, and the addition of one new member within the prevention division, the department provides adequate staff to meet the program goals and objectives.

The Firehouse records management system captures all fire prevention information including inspections, permits, activities, citations, revenue collected and public education involvement. With the utilization of 250 standard and custom reports, the prevention personnel can create data information readily in order to analyze quantitatively, and qualitatively, its existing programs. Annually, personnel are assigned by the fire marshal to perform an appraisal of the programs assigned to the prevention division. Through the appraisal, a determination is made of the existing workload; a projection of any extended workload through additional programs or annexation is also made.

#### **Criterion 5C – Public Education Program**

The Fayetteville Fire/Emergency Management Department has a long history of fire and life safety education and advocacy within the community. The fire prevention division supports the overall mission of the department through coordination of programs and efforts. The division is committed to public fire and life safety through preventing and reducing incidents of fire and life safety risks throughout the community by providing; effective fire prevention and life safety programs and effective public education programs.

The department has a public education program in place and directed towards identifying and reducing specific risks in a manner consistent with its mission. The public education program involves and includes input from a number of individual experts working in the fields of the five target groups: school aged children, seniors, persons with disabilities, diverse groups and lower socio-economic groups. Additionally, the department is targeting college kids on dorm safety. The department focuses its resources on these programs based on a comprehensive analysis of the emergency response experience and historical runs. The department is in partnerships with many community groups and businesses in respect to sponsorship and participation in several of its public

education programs. Partnerships include Safe Kids, the Department of Insurance and local colleges.

The department does not have a full-time, dedicated public educator, but utilizes the fire prevention inspectors and suppression companies. The department has 36 personnel with a North Carolina Fire and Life Safety Educator (FLSE) certification. The fire prevention division has personnel with certifications ranging from level one up to level three as fire life safety educators. The FLSE certification is based upon the performance found in *National Fire Protection Association (NFPA) 1035: Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist*.

Through a combination of fire suppression and prevention personnel, the fire education efforts have been properly and professionally delivered to a vast target audience in the community. The department has focused its attention on these high risk groups for education purposes. The smoke detector program targets two of these high risk groups to include the elderly and low income groups. Conducting fire safety talks at elderly civic groups, such as the senior center in Fayetteville, also addresses the elderly population.

A best practice can be seen in the department's Child Safety Seat Program that is available to all Fayetteville citizens. The department has nine permanent checkpoint stations available to the public. As of May 2010, there were 56 certified child passenger safety technicians with the department to help administer the program. The department hosts a quarterly car seat clinic in conjunction with Safe Kids and local businesses to promote the program further. The installations of these seats are checked by departmental personnel and defective or recalled seats are replaced, as needed, during the checks. The car safety seat checking stations have increased the safety of children in automobiles.

Another unique program is the fire safety puppet shows that are conducted by the fire prevention division at local daycares, schools and events. The department has a free smoke detector and battery giveaway program that addresses fire and life safety in residential occupancies. The public education program is working as intended but the department should also consider studying the possibility and benefits of a dedicated public educator.

The division's standard operating guidelines were recently updated in 2011. The Smoke Alarm Installation Program also has a current standard operating procedures in place to direct members in the free smoke detector give-away program for citizens in need, and how to install the detectors. The procedure was effective in 2005 and last updated in 2011.

The department reviews the strategic plan on an annual basis to ensure that the measurable goals and objectives for public fire education are in line with the needs of the community. The public fire education goals and objectives are developed by the fire marshal and public fire educator based on statistics compiled from the previous year in the Firehouse records management system.

Fire prevention staff conducts meetings every three months to track trends in respect to emergency responses and to discuss program effectiveness and program requirements within the community. Resources are typically realigned annually, based on the recommendations flowing from the quarterly meetings.

#### **Criterion 5D – Fire Investigation Program**

Fayetteville has an established fire investigation team (FIT) that utilizes members from the

Fayetteville Fire Emergency/Management Department, Fayetteville Police Department, the State Bureau of Investigation and the Bureau of Alcohol, Tobacco and Firearms. Although the fire department does not have a dedicated fire investigation branch, it is the duty and responsibility of the members from the fire service to determine the cause and origin of all fires within the jurisdiction of the city.

The department operates an adequate, effective and efficient program directed toward origin and cause investigation and determination for fires, explosions, and other emergency situations that endanger life or property. All suppression officers, and some other on-shift personnel, have the appropriate specialized training to determine cause and origin. In the event that a cause and origin has not been determined by a FIT representative within the fire service, or a criminal act is suspected, the other division partners from the fire investigation team are contacted to report to the emergency scene for investigative purposes and evidence collection. Under the state statutes and through city policy, the Fayetteville Fire Emergency/Management Department operates an adequate program directed toward the scientific method to obtain the origin and cause investigation and determination for fires, explosions, and other emergency situations that endanger life and property. Once the origin and cause of the event has been determined, the fire department relinquishes the remainder of the investigation to the law enforcement agency.

Prior to 2001, fire prevention personnel had responded to the fires at the request of the Incident commander to initiate an investigation. Since that time, the only involvement of the fire prevention division is to archive additional investigation notes outside the Firehouse records management system. The department should modify reporting procedures to ensure that record information is kept in one location to ensure propriety of the evidence and remove any room for errors, omissions or conflicts within the recorded information. It has been determined by the administrative division that having trained company officers on the scene has proved to be a more efficient way of initiating investigations.

At this time, the department meets with these partner agencies to discuss operations and resolve procedural problems, as necessary. An appraisal is conducted annually but the department is now starting more frequent and formal appraisal's in an effort to continually improve its fire investigation program.

### **Criterion 5E – Technical Rescue**

The Fayetteville Fire/Emergency Management Department provides a range of rescue programs to its residents. Technical rescue specialties include but are not limited to: urban search and rescue, confined space rescue, trench rescue, land search rescue, building collapse, swift water rescue and auto-extrication. The department currently has 5 squads, 2 heavy rescues, 4 flat bottom boats, larger utility (24 foot – 200HP) boat, a Zodiac boat, 2 commercial vehicles equipped with structural collapse and heavy rescue equipment and 2 enclosed trailers, also equipped with rescue equipment specific to confined space and trench rescue incidents.

Although only two persons are assigned to the squad and heavy rescue, policies are in place to ensure efficient and effective operations. For example, in respect to the heavy rescue, the vehicle is utilized similar to a squad with the exception that the five members within the station would staff the heavy rescue if the dispatch code calls for its use.

The department operates an adequate, effective, and efficient program directed toward rescuing

trapped or endangered persons from any life-endangering cause. The emergency responders have the training certification, the certification standards and departmental standard operating policies to provide an efficient response to the different technical rescue disciplines. The training program is based on the broad program of Firefighter Level II, which includes a section dedicated to rescue and basic knowledge of the operations at a rescue incident. More importantly, additional advanced training that pertains to technical rescue takes place to certify the members to acquire operational standards and perform different rescue operations such as trench, confined space, structural collapse and heavy rescue. The department utilizes the North Carolina Association of Rescue and Emergency Medical Services to certify its heavy rescue, trench rescue and structural collapse rescue provider programs. Furthermore, the department meets the *National Fire Protection Association (NFPA) 1670: Standard on Operations and Training for Technical Search and Rescue Incidents*.

The department currently utilizes the National Fire Incident Reporting System (NFIRS) to document all responses and records all incidents using the Firehouse records management system. The training division coordinates an extensive exercise with the Military Civilian Task Force for Emergency Response in Fort Bragg annually. Currently, critiques of drills, multi-company drills and reports of actual technical rescue incidents are being conducted to provide analysis for performance improvement.

The department has been using the Firehouse software, and all related data, reports and statistical information, to evaluate the effectiveness of the technical rescue program. In an effort to continually improve its program, the department has recently assigned a dedicated coordinator for the technical rescue program. With this dedicated coordinator the department will be improving its comprehensive appraisals; they will become more formalized and detailed to continually assist in determining the effectiveness of this program.

The department's response and deployment standards are based upon the population density and fire demand of the community. The department determined that there were three levels of technical response based on critical tasks:

- Level I Response consists of one engine company (e.g., child locked in a vehicle and other minor events.)
- Level II Response consists of one engine company, one heavy rescue unit, one squad and one battalion commander (e.g., roll over, pin-up and other entrapments.)
- Level III Response consists of one engine company, one aerial apparatus, two heavy rescue units and one battalion commander (e.g., confined space, trench rescue, structural collapse and other major events.)

The department's response and deployment standards are based upon the population density and technical rescue response demands of the urban density community. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices, as identified earlier in this report in Category II – Assessment and Planning. The objectives have been approved and adopted by fire department management and the city council. The department's benchmark service level objectives are as follows:

For 90 percent of responses to rescue incidents, the total response time for the first due unit, staffed with a minimum of 3 personnel, shall be: 6 minutes and 20 seconds total response time

for Level 1 and II and III incidents. The first due unit shall be capable of: establishing command; performing scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and utilizing tools and equipment to remove patients from harm while following safe operational procedures.

For 90 percent of responses to Level II rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 10 personnel, shall be 10 minutes and 20 seconds in urban areas. The ERF shall be capable of: establishing command; performing scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and utilizing tools and equipment to remove patients from harm while following safe operational procedures.

For 90 percent of responses to Level III rescue incidents, the total response time for the arrival of the ERF, staffed with a minimum of 24 personnel, shall be 15 minutes and 20 seconds in urban areas. The ERF shall be capable of: establishing command; performing scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and utilizing tools and equipment to remove patients from harm while following safe operational procedures.

The department’s baseline statements reflect actual performance during 2006-2010. The department relies on the use of both automatic aid and mutual aid from neighboring fire departments to provide its effective response force complement of personnel. The department’s baseline service level objectives are as follows:

For 90 percent of responses to rescue incidents, the total response time for the first due unit, staffed with a minimum of 3 personnel, is: 7 minutes 15 seconds total response time for Level 1,II and III incidents The first due unit is capable of: establishing command; performing scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and utilizing tools and equipment to remove patients from harm while following safe operational procedures.

For 90 percent of responses to Level II rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 10 personnel, is 10 minutes and 20 seconds in urban areas. The ERF is capable of: establishing command; performing scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and utilizing tools and equipment to remove patients from harm while following safe operational procedures.

It was verified and validated by the peer assessment team that the Fayetteville Fire/Emergency Management Department had no Level III rescue incidents for 2006-2010 that required the assembly of an ERF. There are therefore no baseline service level objectives provided for that risk in this report.

It was verified and validated by the peer assessment team that the Fayetteville Fire/Emergency Management Department met all baseline service level objectives for 2006-2010.

<b>Technical Rescue - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Alarm</b>	Pick-up to Dispatch	2:25	n/a	n/a	n/a	n/a

<b>Technical Rescue - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Handling</b>						
<b>Turnout Time</b>	Turnout Time 1st Unit	1:02	1:55	1:37	1:51	2:04
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	5:36	6:07	5:27	5:28	5:13
	Travel Time ERF <b>Concentration</b>	7:17	6:10	5:56	5:26	5:26
<b>Total Response Time</b>	Total Response Time 1st Unit On Scene <b>Distribution</b>	6:46	*6:07 <sup>2</sup>	*5:27	*5:31	*5:22
	Total Response Time ERF <b>Concentration</b>	9:07	*7:10	*6:46	*6:17	*7:21

**Criterion 5F – Hazardous Materials**

The Fayetteville Fire/Emergency Management Department operates two primary hazardous materials (hazmat) units from station one. All department personnel are trained to respond to hazardous material calls as first responders. The department has a Type 1 operational team, as classified by the state of North Carolina. The department also operates one of the seven regional response teams for the state.

The department operates an adequate, effective, and efficient hazardous materials program directed toward protecting the community from the hazards associated with fires and uncontrolled releases of hazardous and toxic materials. The department has a comprehensive approach to hazardous materials emergencies and all personnel are trained to the operations level. The department maintains a well-equipped, dedicated hazardous materials response team that provides support at the technician level.

The department presently utilizes the National Fire Incident Reporting System (NFIRS) to document all responses and the Firehouse records management system to record all incidents. The hazardous materials team also has more specific hazmat reports to closely monitor each incident. All incidents are reviewed by the hazmat team coordinator and bills are assessed, as warranted. An evaluation of the hazmat team is conducted on a routine basis through quarterly supervisors’ meetings where reports, goals and objectives are reviewed. In addition, quarterly training is held for all team members.

The department has extensive policies, procedures and guidelines for its hazardous material program and is continually evaluating them. Current operating procedures are in place to direct the hazardous materials program. Hazardous materials calls range from minor fuel spills to that of significant release requiring evacuations.

The department has three levels of response for hazardous materials incidents:

<sup>2</sup> \* -Alarm handling time not tracked in 2006-2009.

Level I – Responses such as carbon monoxide alarms or small spills.

Level II – Responses such as larger spills and residential gas leaks.

Level III – Responses such as commercial-high risk gas leaks and uncontained products.

The department's response and deployment standards are based upon the population density and hazardous materials response demands of the urban density community. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices, as identified earlier in this report in Category II – Assessment and Planning. The objectives have been approved and adopted by fire department management and the city council. The department's benchmark service level objectives are as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters, shall be 6 minutes and 20 seconds in urban areas. The first due unit shall be capable of: establishing command; completing a scene size up; identifying product(s) involved; identifying isolation zones; providing defensive operations; and notifying additional resources when necessary while utilizing safe operational procedures.

For 90 percent of all Level II hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with 8 firefighters and officers shall be 15 minutes and 20 seconds in urban areas. The ERF shall be capable of: establishing command; completing a scene size up; identifying product(s) involved; providing rescue procedures; controlling product release; providing air monitoring; and performing decontamination activities while utilizing safe operational procedures.

For 90 percent of all Level III hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 18 firefighters and officers shall be 20 minutes and 20 seconds in urban areas. The ERF shall be capable of: establishing command; completing a scene size up; identifying product(s) involved; providing rescue procedures; controlling product release; providing air monitoring; and performing decontamination activities while utilizing safe operational procedures.

The department's baseline statements reflect actual performance during 2006-2010. The department relies on the use of both automatic aid and mutual aid from neighboring fire departments to provide its effective response force complement of personnel. The department's baseline service level objectives are as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters, is 7 minutes 15 seconds in urban areas. The first due unit is capable of: establishing command; completing a scene size up; identifying product(s) involved; identifying isolation zones; providing defensive operations; and notifying additional resources when necessary while utilizing safe operational procedures.

For 90 percent of all Level II hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with 8 firefighters and officers is 10 minutes and 30 seconds in urban areas. The ERF is capable of: establishing command; completing a scene size up; identifying product(s) involved; providing rescue procedures;

controlling product release; providing air monitoring; and performing decontamination activities while utilizing safe operational procedures.

It was verified and validated by the peer assessment team that the Fayetteville Fire/Emergency Management Department had no Level III Hazardous materials incidents for 2006-2010 that required the assembly of an ERF. There are therefore no baseline service level objectives provided for that risk in this report.

It was verified and validated by the peer assessment team that the Fayetteville Fire/Emergency Management Department met all baseline service level objectives for 2006-2010.

<b>Hazardous Materials - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Alarm Handling</b>	Pick-up to Dispatch	2:28	n/a	n/a	n/a	n/a
<b>Turnout Time</b>	Turnout Time 1st Unit	1:28	1:40	1:36	1:28	1:34
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	5:35	5:46	5:31	5:19	5:14
	Travel Time ERF <b>Concentration</b>	7:32	6:22	7:03	7:09	6:49
<b>Total Response Time</b>	Total Response Time 1st Unit On Scene <b>Distribution</b>	6:33	*5:59 <sup>3</sup>	*5:40	*5:39	*5:34
	Total Response Time ERF <b>Concentration</b>	10:15	*7:52	*9:25	*9:02	*8:54

**Criterion 5G – Emergency Medical Services**

The Fayetteville Fire/Emergency Management Department provides basic life support (BLS) response to medical incidents within the city limits of Fayetteville through its emergency medical services (EMS) program. Each firefighter assigned to medical first responder duties is a North Carolina Emergency Medical Technician Basic (EMTB) certified. Cape Fear Valley Emergency Medical Services of Cumberland County is the primary provider of pre-hospital emergency care for the city of Fayetteville. The fire department supplements Cape Fear Valley’s service through its BLS response. All protocols and infection control procedures are part of the Cumberland County EMS plan.

The department operates an EMS program that provides the community with a designated level of out-of-hospital emergency medical care. All personnel from firefighter to captain are required to maintain an EMT-B certification. The department’s front line EMS apparatus consists of 5 squads, 2 rescues, 16 engines and 5 trucks. All units are equipped with automated external defibrillators and all necessary supplies to render BLS care. EMS equipment carried is all

<sup>3</sup>\* - Alarm handling time not included for 2006-2009

approved by the county medical director. Medical control is available via radio if needed but with joint response with Cumberland County EMS it is very rarely utilized.

The department utilizes the Firehouse records management system to maintain records for each incident it responds to and records patient information, history, medications, vitals and any procedures performed. Health Insurance Portability and Accountability Act (HIPAA) compliance is followed by the medical director of the Cape Fear Valley Medical Center; the department has updated its operating procedures for HIPAA compliance and personnel have been trained accordingly. The department does have a quality assurance program and reports are reviewed by each company officer who then submits them to the quality assurance committee for additional review. The quality assurance committee reviews patient care records under the authority of the Cumberland County EMS.

The department relies on priority dispatch protocols to recommend the correct compliment of equipment to meet the risk and needs of each EMS incident. The standard operating guidelines and protocols are current and meet the requirements for its EMS response. The department has three EMS levels for response. EMS level one consists of one to two patients, level two consists of three to five patients and level three is for calls involving over five patients. EMS responses account for approximately 70 percent of the department's call volume. It has utilized statistical data to evaluate the effectiveness of its response and resources in its standards of cover.

The department's response and deployment standards are based upon the population density and medical support demand of the urban density community. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices as identified earlier in this report in Category II- Assessment and Planning. The objectives have been approved and adopted by the fire department management and the city council. The department's benchmark service level objectives are as follows:

For 90 percent of responses to all medical incidents, the total response time for the first due unit, staffed with a minimum of 2 personnel, shall be 6 minutes in urban areas. The first due unit shall be capable of: establishing command; completing a scene size up; providing basic life support with automated external defibrillator (AED) capabilities; and assisting the county EMS units with patient care while utilizing safe operational procedures.

For 90 percent of all medical incidents, the total response time for the arrival of the effective response force (ERF), staffed with 8 personnel, shall be 8 minutes in urban areas. The ERF shall be capable of: establishing command; completing a scene size up; providing basic life support with AED capabilities; and assisting the county EMS units with patient care while utilizing safe operational procedures.

The department's baseline statements reflect actual performance during 2006-2010. The department relies on the use of both automatic and mutual aid from neighboring fire departments to provide its effective response force complement of personnel. The department's baseline service level objectives are as follows:

For 90 percent of responses to all medical incidents, the total response time for the first due unit, staffed with a minimum of 2 personnel, is 7 minutes and 45 seconds in urban areas. The first due unit is capable of: establishing command; completing a scene size up;

providing basic life support with automated external defibrillator (AED) capabilities; and assisting the county EMS units with patient care while utilizing safe operational procedures.

For 90 percent of all medical incidents, the total response time for the arrival of the effective response force (ERF), staffed with 8 personnel, is 10 minutes and 30 seconds in urban areas. The ERF is capable of: establishing command; completing a scene size up; providing basic life support with AED capabilities; and assisting the county EMS units with patient care while utilizing safe operational procedures.

It was verified and validated by the Peer Assessment team that the Fayetteville Fire/Emergency Management Department met all baseline service level objectives for 2006-2010.

<b>Emergency Medical Services - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Alarm Handling</b>	Pick-up to Dispatch	3:12	n/a	n/a	n/a	n/a
<b>Turnout Time</b>	Turnout Time 1st Unit	1:12	1:17	1:21	1:19	1:19
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	5:01	5:06	5:04	5:01	4:55
	Travel Time ERF <b>Concentration</b>	5:57	5:45	5:38	5:29	5:18
<b>Total Response Time</b>	Total Response Time 1st Unit On Scene <b>Distribution</b>	7:25	*6:01 <sup>4</sup>	*6:00	*5:54	*5:48
	Total Response Time ERF <b>Concentration</b>	9:48	*6:50	*6:41	*6:26	*6:16

**Criterion 5H – Domestic Preparedness Planning and Response**

The City of Fayetteville is responsible for the development of its emergency operations plan (EOP) that serves as an all-hazards plan, as provided in North Carolina general statutes. The EOP is based on the jurisdictional authority of the local government and includes requirements listed in the city’s code of ordinances. It coincides with the tenants of the National Response Framework, the North Carolina Emergency Operations Plan and the Cumberland County Emergency Operations Plan.

The department operates an all-hazards preparedness program that includes a coordinated multi-agency response plan, designed to protect the community from terrorist threats or attacks, major disasters and other large-scale emergencies occurring at or in the immediate area. The city’s EOP covers all emergency support functions and all phases of emergency operations. This comprehensive plan provides an appropriate multi-departmental organizational structure and authorizes those departments to carry out predetermined functions and duties. The purpose of this planning document

<sup>4</sup> \* - Alarm handling time not included for 2006-2010.

is to provide guidance and specific procedures for responding to a broad spectrum of hazards, emergencies or disasters such as terroristic threats, earth quakes, hurricanes, tornadoes, severe weather, aircraft crashes (military and civilian), dam failures and nuclear and radiological emergencies.

The EOP was last reviewed and adopted in 2007 and recently activated on April 16, 2011 during the tornado disaster that impacted three separate locations of the city. The city has overall responsibility for the review and maintenance of the standard operating guidelines for the program with input from the fire department.

The fire department conducts an annual multi-jurisdictional exercise and drills with surrounding communities, the Cumberland County emergency operations center and the Fort Bragg Military Base. All participants train and operate under the National Incident Management System (NIMS). In a major emergency, the city manager maintains his role as the municipal director, but the city's emergency management coordinator and the county's emergency management director provide support and advice, under the direction of the fire chief. The last tri-annual airport drills were held in 2007 and 2010, however, tabletop exercises related to Federal Aviation Administration (FAA) requirements are held yearly. A city-wide full scale terrorism drill was held in 2006 and the last city management team table top hurricane exercise was held in 2008. It is recommended staff from the department continue to work with the city manager and other city officials to conduct annual operational testing and exercises involving all city departments and focus on areas other than severe weather.

Processes are in place to provide for interoperability with other public safety agencies in the filed including portable, mobile, and fixed communications systems, tools and equipment. The fire department has also developed a standard operating procedure for hurricane operations and has initiated operational planning for pandemic influenza operations. In addition, the city participates in the planning and development of other plans for disaster response and recovery including the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan, the Fayetteville Regional Airport Emergency Disaster Plan, the City of Fayetteville Continuity of Operations Plan and plans developed by the public works commission to support incidents at high hazard dams located within city limits.

Fire personnel are include on the Disaster Preparedness Readiness Regions (DPPR) committee that coordinates communications standards throughout the region for both communications and equipment interoperability. Emergency responders and mutual aid entities operate on the city owned 800 MHz trunked radio systems that allows communications operators to establish links with other radio systems to allow communications into the departments radio system. The fire department has access to the State of North Carolina Voice Interoperability Plan for Emergency Responders (VIPER) radio system that allows for interoperable communications throughout the state for response agencies.

### **Criterion 5I – Aviation Rescue and Fire Fighting Services**

The Fayetteville Fire/Emergency Management Department provides aviation rescue firefighters at the Fayetteville Regional Airport. The firefighters respond to all fire, medical and aircraft emergencies on the air-side of the airport and provide limited structural response in and around the airport. There are a minimum of two Federal Aviation Administration (FAA) and airport qualified firefighter-emergency medical technicians on duty at all times. Emergency aircraft calls are received through the airport control tower directly into the fire station.

The department operates an adequate, effective and efficient program directed toward an aviation accident or incident occurring at, or in the immediate area. In addition to the aviation rescue and fire fighting (ARFF)-crash trucks that response on-site, the department also sends units from the neighboring stations, based on the nature of the incident, to provide adequate resources. Fayetteville Regional Airport is a B index airport and thus only has a requirement from the FAA to have one ARFF unit in operation. The FAA has had no deficiencies noted with the fire department's ARFF services in the recent five years. The fire department maintains adequate firefighting supplies on hand as required by the FAA.

Fayetteville Regional Airport has policies and procedures specified in its Airport Certification Manual that outlines areas of Fayetteville Fire/Emergency Management Department responsibility during daily operations and for disasters and emergency operations. The crews at Station 10 utilize the same Firehouse records management system. Information in this system related to past incidents is used to evaluate response plans. There is a table top drill every year along with a full scale disaster drill every third year.

The department's response and deployment standards are based upon FAA mandated requirements. The team recommends ARFF response time data should be captured in the same manner as the other programs. Presently it is being kept by the Fayetteville Regional Airport.

The department's benchmark service level objectives are as follows:

For 90 percent of all aviation rescue and fire fighting response incidents on airport property, the total response time for the arrival of the first-due unit, staffed with 2 firefighters, shall be 3 minutes. The unit shall be capable providing fire protection to the escape route the event of evacuation following an accident.

For 90 percent of all aviation rescue and fire fighting response incidents on airport property, the total response time for the arrival of the effective response force, staffed with 23 firefighters, shall be 20 minutes. The ERF shall be capable of providing fire protection to the escape route the event of evacuation following an accident.

The department's baseline statements reflect actual performance during 2006 to 2010. The department relies on the use of both automatic aid and mutual aid from neighboring fire departments to provide its effective response force complement of personnel.

It was verified and validated by the peer assessment team that the Fayetteville Fire/Emergency Management Department did not respond to any aviation related emergencies for 2006-2010. The team verified through a manual review of logs that the department met the FAA response time expectations for the 11 unannounced drills during this time period.

<b>ARFF - 90th Percentile Times – Baseline Performance</b>		<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>Alarm Handling</b>	Pick-up to Dispatch	n/a	n/a	n/a	n/a	n/a
<b>Turnout Time</b>	Turnout Time 1st Unit	n/a	n/a	n/a	n/a	n/a
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	n/a	n/a	n/a	n/a	n/a
	Travel Time ERF <b>Concentration</b>	n/a	n/a	n/a	n/a	n/a
<b>Total Response Time</b>	Total Response Time 1st Unit On Scene <b>Distribution</b>	2:57	3:00	2:45	2:32	2:20
	Total Response Time ERF <b>Concentration</b>	3:30	3:30	3:10	3:15	2:28

### **Category VI — Physical Resources**

The Fayetteville Fire/Emergency Management Department maintains 16 fire stations and the training facility. The airport fire station is maintained by the personnel but the building and apparatus are owned by the Fayetteville Airport Authority.

The department ensures the development and use of physical resources is consistent with its established plans. A systematic and planned approach to the future development of facilities is in place. Departments such as Planning, Information Technologies, Real Estate and Legal continuously work with the fire department when designing and building new fire stations. The governing body and members of the department are also actively involved in the planning of physical facilities.

The department's fixed facility resources are designed, maintained, managed, and adequate to meet its goals and objectives. The fire stations are distributed to meet the service level objectives. The use of modern and up-to-date technology such as the Firehouse records management system, Tele-Staff, computer aided dispatch and geographic information system (GIS) software has been a major step to analyze the station locations and operational needs. Through the recently added GIS mapping capability, the department has determined that two of the older fire stations, Stations 4 and 12, can be re-located and rebuilt in a more optimal site to ensure a more effective response. The department is encouraged to relocate and rebuild Stations 4 and 12 in accordance to the projected time lines of its capital improvement plan to ensure adequate space and functionality of the staff.

Station 19 is housed in a temporary building while construction is being completed on this new station. The next station to be built will be Station 16; the temporary building will be moved with the staffed apparatus to that location until that construction is completed. Within the capital improvement plan of the department, three additional fire stations are to be constructed to enhance an effective and efficient response time and improve fire protection services.

Generally, it is the responsibility of the station members to maintain their respective fire stations.

However, when the repairs or maintenance are outside of the scope of the firefighters, the building and maintenance department, or outside private contractors, provide the service. The members of the department have demonstrated a pride in their fire stations and are maintaining them impeccably, inside and out.

The fire department has a separate site location for its training facility. This facility has three classroom settings to conduct training sessions for new recruits, current personnel and other classes that are assigned through the Fayetteville Technical Community College Continuing Education Coordinator. Outside of the facility are simulation sites for driver operations, firefighting, aviation rescue firefighting, trench and confined space rescue and pump operations. The fire department recently built a four story training tower to facilitate training in self contained breathing apparatus, operations, rapid intervention, ventilation and several more firefighting tactics.

The department's apparatus resources are designed and purchased to be adequate to meet its goals and objectives. The department pays close attention to maintaining the appropriate distribution and concentration of the apparatus so as to ensure a continuous capability to meet its standards of cover objectives. The department has established 1.5 and 2.5 mile response zones from the location of each station and utilized this in the process for establishing its baseline performance objectives. The purchase of new apparatus and equipment, such as the mobile computer terminals, has allowed the department to deliver a service to the public that is beneficial in terms of enhancing the current response and having readily accessible information for making important decisions when performing operational procedures.

The logistics officer and an apparatus committee, comprised of a cross-section of department members, have the responsibility to determine the needs of the department, to design and write specifications to fulfill departmental goals, and meet service level objectives. The committee submits apparatus specifications to the fire chief for approval.

The department has a scheduled replacement program in place, which is evaluated annually with criteria established for each class of vehicle and equipment. Under the supervision of the assistant chief of support services, the logistics officer and the public works commission fleet repair office, service records on all apparatus are maintained. Specialized tools and related equipment that meet the replacement criteria are replaced through a submission from the assistant chief of operations.

The inspection, testing, preventive maintenance, replacement schedule and emergency repair of all apparatus is well established and meets the emergency apparatus service and reliability needs. The Public Works Commission maintains the fire apparatus at the fleet maintenance facility; it has adequate space to service the fire department. In the event of repairs that are out of the scope of the mechanics, or beyond the capabilities of the facility, the fire department has third party contractors within the city that will provide that professional service. The maintenance section staff consists of the fleet maintenance supervisor supplemented by operations personnel. Two emergency vehicle technician certified mechanics from the Public Works Commission are dedicated to the fire service. Recently, the fire department initiated a service change by having one mechanic remain at the facility at all times while the other mechanic services the apparatus on the road, providing minor mechanical assistance to the fire department without taking apparatus out of service for lengthy periods.

Both the commission and the department have well established standard operating procedures that are reviewed annually to ensure harmonious relations and a consistent approach to maintaining the fire

department fleet. The practices and procedures help to ensure apparatus are maintained in a state of readiness and contributes to an extended service life. The logistics officer within the fire department liaises with the supervisors in the Public Works Commission and is responsible for the department's maintenance program including repairs to all apparatus, the maintenance budget and the purchasing of replacement repair equipment.

The tools and small equipment resources are adequate and designed and maintained to meet the agency's goals and objectives. The logistics officer coordinates division orders and stocks, maintains and distributes the tools and small equipment for all stations and divisions in the department. All safety equipment and small engine equipment is maintained by qualified in-house personnel. The fire department is currently conducting an efficiency study of the current maintenance programs based on future demand as well as anticipated growth. The fire department and the Public Works Commission utilize FASTER and Firehouse as the primary data collection system regarding the maintenance of apparatus.

Safety equipment is adequate and designed to meet the agency's goals and objectives. The department has a comprehensive safety program and provides a high quality supply of safety equipment for its employees. There is a certified protective gear maintenance section; this provides a cost effective way to extend the service life of protective gear. This section also has staff certified to maintain self-contained breathing apparatus and complete annual fit testing. Personal protective equipment, including ear protection, eye protection, and medical exposure equipment, is provided as personal issue. Company officers are charged with the regular inspection of this equipment; internal cleaning and repair facilities are utilized.

### **Category VII — Human Resources**

The human resources functions for the Fayetteville Fire/Emergency Management Department are provided through the city's centralized human resources development department. It is headed by a personnel director, who reports to the city manager. The personnel director is responsible for overseeing the provision of human resources services for all departments in the city. Presently, the department has 16 people, which includes a variety of professional, technical and clerical support staff. Positions include: human resources specialists, office assistants, personnel technician, training and development specialist and a training analyst.

General human resources administration practices are in place and are consistent with local, state and federal statutory and regulatory requirements. The human resources development department operates under the authority of the city's code of ordinances. It provides overall administration of personnel policy development, records management, job evaluation, performance evaluation, classification and pay administration, employee benefits, Equal Employment Opportunity Commission (EEOC) and affirmative action requirements, training and employee development, recruitment and selection, employee assistance program and employee relations.

The fire department has four clerical, non-uniform positions in the administration branch. They work with the city's human resources development department on many of the fire department's internal human resource requirements.

Systems are established to attract, select, retain, and promote qualified personnel in accordance with applicable local, state and federal statutory requirements. From 2004 to the end of 2010, the

department has added 197 full-time positions. Nine new firefighters have been hired in 2011.

The department has a comprehensive program for hiring, training and testing new employees; however, the department has experienced problems attracting diversified candidates. The department has a recruitment plan that is targeted at the minority population; however, the department does not reflect the service area demographics. Approximately 11 percent of the department personnel are non-white males; there are only 7 females. In Fayetteville, the non-white population accounts for 51 percent of the population. After a thorough assessment of current practices and outreach programs within the current recruitment plan, administration should explore other options for recruiting minorities and females.

The department has an employee recognition program that has been in place since 1991, but it is not currently utilized. This current plan recognizes an employee of the quarter and for the year. The department should reinstate this program and look at an expansion to include other deserving employees so they too could be considered for awards such as medals, pins, plaques, bars or certificates.

The department has a defined, supervised probationary process to evaluate new members. Recruit firefighters are considered probationary for one-year and are evaluated by their company officer. Promotions through the ranks are based on city and department defined competitive processes for both operational personnel and management staff.

Personnel policies and procedures are in place, documented and used to guide both administrative and personnel behavior. All members of the fire department can view city or fire department policies. City policies are located on the city's Intranet site. Fire department policies and procedures are located on its shared computer drive. New employees have city and departmental policies, and procedures reviewed with them. The fire department's shared computer drive is somewhat cumbersome and could better be developed on an Internet or Intranet site.

Human resources development and utilization is consistent with the agency's established mission, goals, and objectives. The department has a process whereby, on an on-going basis, assessments of job functions and job descriptions are accomplished. Members of the management team work with human resources to make sure existing practices meet the needs of the department.

Current written job descriptions do not exist for some positions e.g., assistant training officer, the public fire educator and the public information officer. Job descriptions should be developed for these and any other missing positions. The current personnel appraisal system is ineffective. A consulting firm study has made recommendations. The city decided that the current process would remain in effect until the 2011-2012 fiscal year. This would allow the human resources department and others involved time to properly make adjustments, where deemed necessary.

Occupational health and safety and risk management programs are established and designed to protect the organization and personnel from unnecessary injuries or losses from accidents or liability. The department has assigned the administrative battalion commander the job function of safety

officer to oversee the overall functions of the department as they pertain to safety and risk management. This person also serves as a liaison to the city's Risk Management Department. This city department is headed by a human resources manager that also employs a full time safety officer who is responsible for overseeing the provision of employee health and safety services for all departments in the city. The city has a safety committee but the fire department does not. It is recommended that an internal occupational health and safety committee be established within the fire department.

There is a health and safety risk management program designed and implemented to reduce workplace health and safety incidents and to promote health and wellness in the workplace. The administrative battalion commander is currently the designated individual responsible for the program in the department, although the fire chief has the ultimate responsibility.

All members of the department have designated responsibilities in this program to ensure compliance with program guidelines, to report accidents and injuries and to prevent them wherever possible. Recruit classes follow the safety training as outlined in the North Carolina Fire and Rescue Commission firefighter certification classes for level I and level II. Safety instruction is arranged to inform all employees who will be exposed to new equipment or procedures. Supervisors are responsible for translating safety principles into accident prevention on the job. All members of the department receive annual formal instructions and training in infectious disease control, self contained breathing apparatus and hazardous materials.

The department has a wellness and fitness program for recruit and incumbent personnel and provisions for non-compliance by employees and members are written and communicated. The department has current standard operating guidelines to provide a central core of directives to guide and direct the health and wellness program.

The department takes a proactive approach to physical fitness standards and all members have access to physical fitness equipment. Probationary employees must pass a physical fitness test. The department utilizes 22 peer fitness trainers to provide wellness and fitness education to personnel. Operational personnel are required to participate in the departmental wellness program. Since 2009, all shift members are required to participate in one hour of physical activity each shift and administrative personnel are required a minimum of three hours per week. Annually all members are tested in a non punitive physical fitness examination or a job related physical ability test.

The department offers initial medical evaluations for its members. In 2010, all members were provided annual physicals utilizing the recommendations from *National Fire Protection Association (NFPA) 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments*. This was made possible through a grant award. Rehabilitative medical care for work related injuries is provided through workers compensation coverage. Personal cases are handled through the city's Risk Management Department and the city nurse.

### **Category VIII — Training and Competency**

The Fayetteville Fire/Emergency Management Department provides an on-going training and education program that supports its current needs. Minimum levels of training and certification meet or exceed guidelines established by North Carolina Fire and Rescue Commission. Minimum training requirements for promotion are identified in job descriptions and the Fayetteville Department Career

## Development Program (CDP).

The administrative branch coordinates the department's training program and has an authorized staff of one assistant chief, one battalion commander, one captain (training officer) and two lieutenants (assistant training officers). In addition, approximately 125 members of the department are certified as level II fire instructors, several are qualified to instruct firefighter I and II, live burn, emergency rescue technician, driver-operator instructor, emergency medical technician, fire life safety educator and fire officer training.

A training and education program is established to support the agency's needs. Program areas and required training needs are identified based upon federal, state, and local laws, as well as administrative requirements. The department's training needs are met through current personnel, facility, and materials resources by a thorough and comprehensive training program from entry level probationary firefighter through the position of battalion commander. It is recommended that the department research and implement a command and staff development program as part of the regularly scheduled training program.

The training program is used to: conduct basic training courses for the in-service training of all companies and officers; deliver officer development programs; provide specialty training courses; and address certification program requirements. The training committee meets with the city's human resources department and legal counsel to maintain consistency with job descriptions and mandatory training and credentialing requirements. A progressive and comprehensive staff development program exists; the department is to be commended for its requirements for continuing education as well as state and local certifications.

Training and education programs are provided to support the agency's needs. The training program is well organized and meets the needs of the department and its members. The department's programs also meet the state certification requirements. All members of the department meet *National Fire Protection Association (NFPA) 1001: Standard for Fire Fighter Professional Qualifications* for firefighter level I and II, hazardous materials, level 1 (operations), emergency vehicle driver and the City of Fayetteville DDC-4 defensive driving courses, and the National Incident Management 100 and 700 training requirements during a 15 week recruit program. If not already certified, new hires must obtain the emergency medical technician-basic certification through the North Carolina Office of Emergency Medical Services.

The department utilizes performance-based training with objective skill, task sheets and newly developed benchmarking drills developed for all stages of employee training within the organization. The department also utilizes a performance based evaluation to ensure the members and companies are competent and confident to perform the job. The department schedules monthly a combination of written and skill-based testing to evaluate individual performance through company in-service and officer in-service training in order to evaluate individual, company, crew, and multi-company performance during the year.

One of the main strengths of the department's training program is its comprehensive set of promotional requirements that focus on technical competencies, career advancement, and officer development for driver-operator, company officer, and battalion chief positions. Supplemental training programs are also ongoing with mandatory recertification of various disciplines, specialized training, fire suppression training, and the newly introduced benchmarking drills concentrating on the needs of the department and meeting national standards. Mandatory training and certification levels

for personnel in all divisions are monitored and audited by the training division and updates are provided to identify the training needs for department personnel.

With the development and implementation of benchmarking drills a need has been identified to increase instructional personnel assigned to the training facility. The department is currently working towards funding two additional positions for personnel in order to meet increasing departmental demands.

The department has available training facilities and apparatus to support the training needs of the agency. The training division currently operates out of the airport's 14 acre training facility. The facility contains all of the resources and structures expected to be found in modern training facilities including three classrooms, showers, liquid petroleum gas (LPG) airplane fire simulator, downed 737 aircraft simulator, confined space and trench rescue area, pumping pit, driving courses and a brand new four story certified burn building. This facility also operates as a regional training center in conjunction with the State of North Carolina Fire Rescue Services Division and hosts courses from the National Fire Academy and the North Carolina Institute of Government.

Training and education resources, printed and non-printed library materials, media equipment, facilities and staff are available in sufficient quantity, relevancy, diversity and they are current. Nationally recognized training materials are being used and all training is evaluated annually by the training division to make sure it is meeting the needs of the department. Current departmental operating policies, procedures and guidelines are identified and continually reviewed to ensure that personnel can carry out their duties and responsibilities effectively, efficiently and safely.

## **Category IX — Essential Resources**

### **Criterion 9A – Water Supply**

Fayetteville Fire/Emergency Management Department water supply, pressure demands and fire flow requirements are provided through two water treatment facilities and six reserve above ground storage tanks. The department relies on the Fayetteville Public Works Commission (PWC) and Aqua America Company to ensure the provision of a well-maintained, reliable and adequate water system. Aqua America Company came into the city as result of recent annexations.

The water supply resources available to the department are reliable and capable of distributing adequate volumes of water and pressures to all areas of agency responsibility. All areas meet fire flow requirements for emergencies. All areas meet fire flow requirements for emergencies. Virtually, all built up areas of the city are served by the domestic water supply, which includes 5,871 hydrants. The distribution system and hydrant distances are spaced at 500 feet for commercial areas and 1,000 feet for single family residential areas. Fire department members inspect and evaluate the condition of all fire hydrants twice a year. In addition, all hydrants are painted yearly. In 2008, the Insurance Services Office (ISO) rated the water system, giving it 37.53 points of a possible 40.

The hydrant locations, operating pressure and available flow are maintained in both hard-copy and electronic format. Responding crews have on-board mobile data computers to access the information through the department's records management system. The same information is available on the computers in the stations.

The department determines the required fire flow for all structures using the National Fire Academy

formula. To ensure an adequate and reliable water supply for firefighting purposes, the department equips all of its front-line engines with a minimum of 1,000 feet of five inch high-volume supply lines.

A solid working relationship exists between the two water companies and the fire department. There is an appropriate system in place for the sharing of information between the fire department and the water department related to any problems that develop with the pressurized water system. The regular exchange of information includes identifying areas where the water supply system can be improved. The fire department has assigned a member of the fire prevention division to serve as liaison officer with the city's water department for coordination purposes to review and approve the required fire flow for all significant new construction developments. This ensures the department will be able to conduct effective fire suppression efforts. The fire department must approve alternate methods proposed by the developer where the fire flow requirements are not being met.

Should the domestic water supply be rendered inoperable, the fire department is prepared to draft from available water supplies or use tanker shuttles. Within the standards of cover, a water supply analysis is given for each station. This analysis shows the number of hydrants, water supply concerns and alternate water sources are identified. Four first-due engines are outfitted with hard suction hoses for drafting if needed.

In 2005, the city of Fayetteville annexed approximately 27 square miles, including residential and commercial occupancies, which did not have hydrants; however, consistent with the code, hydrants have been installed throughout the area. To financially help, the fire department purchased 60 hydrants from its budget for this annexed area to meet water supply requirements.

### **Criterion 9B – Communication Systems**

The emergency communications capability for the Fayetteville Fire/Emergency Management Department is managed by the police department. Its communication center has adequate provisions for meeting the incoming call volume associated with emergencies.

The public and the department have an adequate, effective and efficient emergency communications system. The system is reliable and able to meet the demands of major operations, including command and control within fire and rescue services during emergency operations, and meets the requirements of other public safety agencies having a need for the distribution of information. All staff in the center are cross-trained and able to assume call taker or dispatch functions should the need arise during times of high call volume.

The radio network is set up to allow easy communication between the dispatch center, the fire department and the police department. A Motorola Smartzone 4.1 trunked 800 MHz radio system is used. A repeated non-trunked system is in place in case of a failure. There are eight 9-1-1 emergency lines and a non emergency number to receive overflow 9-1-1 calls. The communications center has ten radio console positions equipped with computer aided dispatch (CAD) access, a radio console and telephones; there are an additional five call taker positions with no radio console. The department received the maximum points for communications in its 2008 Insurance Services Office (ISO) inspection.

The communications center recently implemented a practice to fast track alarm handling and pre-alert responders for certain medical calls to improve alarm handling times and to reduce the overall total

response time. This was as a direct result of the self assessment process.

The department is presently upgrading base stations at all fire stations to be compatible with the statewide radio communications network (VIPER) and is on track to be completed by 2012. The city is also presently implementing mobile repeaters to assist with communications at medium and high density building incidents.

The center operates under comprehensive standard operating procedures (SOP) that cover how both emergency and non-emergency calls are handled. Additionally, the department has its own communication policy in place to direct personnel on the proper way to communicate through the radio and dispatch system. The county's communication center SOP differs from the city's SOP. The city SOP is currently being revised to mirror the county's to facilitate emergency procedures.

The radio system is monitored on a routine basis and is tested daily and logged into the CAD. Additionally, both the communications center and the fire department have personnel trained in the repair and maintenance of the radio system.

### **Criterion 9C – Administrative Support Services and Office Systems**

The Fayetteville Fire/Emergency Management Department administrative structure and activities are designed to support the department's goals and objectives. It is empowered to define and enforce its own policies and internal guidelines, which are then reviewed by the city manager to ensure that they meet overall goals of the city of Fayetteville.

The administrative branch is broken down into four divisions: fire prevention division, planning and research division, training division and office systems division. All divisions report to the chief of administration. The administrative branch is dedicated to provide the administrative support necessary to meet the department's overall goals through communication, coordination and cooperation.

Administrative support services and general office systems are in place with adequate staff to efficiently and effectively conduct and manage the department's administrative functions, such as organizational planning and assessment, resource coordination, data analysis, research, records keeping, reporting, business communications, public interaction and purchasing. The department's administrative support processes are adequate and appropriate for the current size, function, complexity and mission of the organization.

The department utilizes and has contracted through the year 2012 with two main sources for office supplies, equipment, maintenance and other resources. The staff members are a strong resource to the various functions and divisions of the fire department and play a large part in the process of continuous improvement.

The department utilizes its intranet website as a central repository for documents and forms. The city's information technology (IT) department administers all computers, computer software, internet and intranet access, mobile computer terminals and the phone systems.

The department has a comprehensive records management program, which uses Firehouse version 7.3. The technical support that the department receives does not meet the department needs as

evidenced with the process and handling times experienced in regard to work orders.

If future growth is anticipated, the current administrative support services staff of 21 positions to support an organization of 330 personnel would require an increase of administrative support staff. The department's Strategic Plan 2010-2015 addresses this need for analysis and additions to staff to meet the increasing demands of its growing community.

The valuable contributions made by the fire department staff to support the city's relief efforts during the tornado that struck in three different areas of the city on April 16, 2011 was recently acknowledged in the local newspaper. The related article provides solid testament to the selfless commitment of the administration staff to provide valuable support to the public in a time of extreme need.

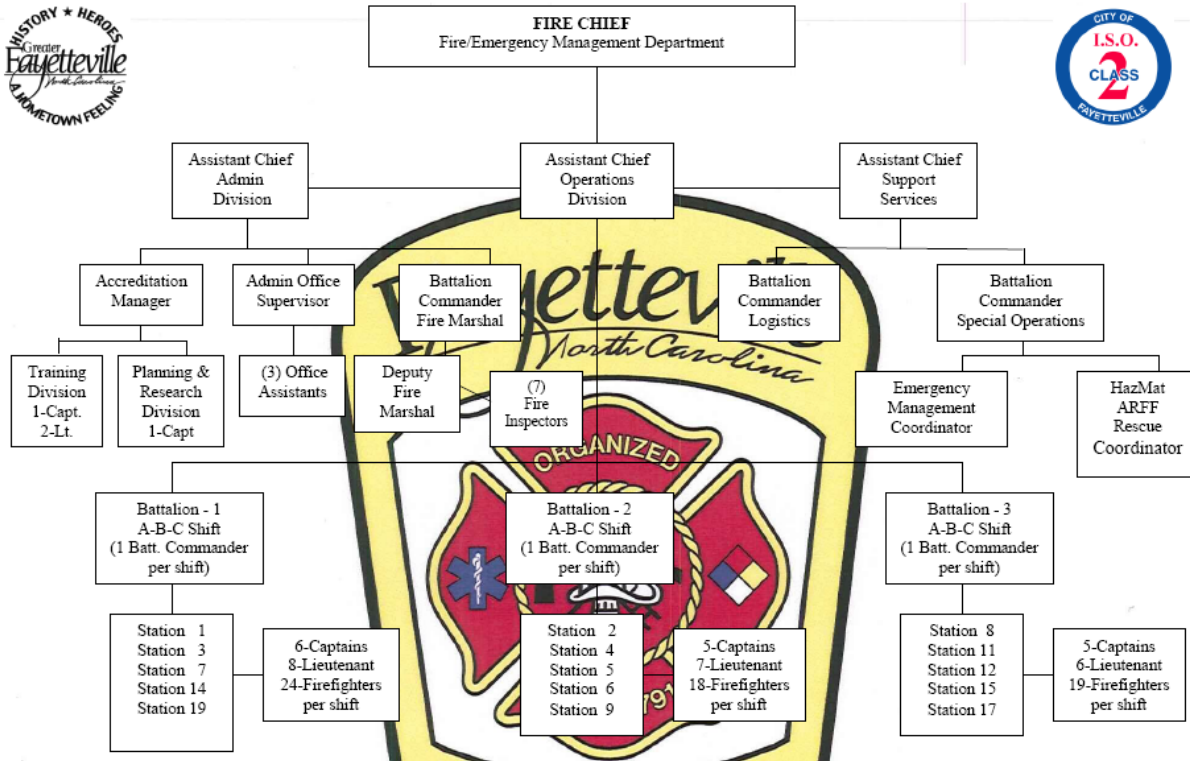
### **Category X — External Systems Relationships**

The Fayetteville Fire/Emergency Management Department has entered into current and practicing service contracts (fire and emergency medical services), memorandums of agreement (hazardous materials and collapse search and rescue) and automatic and mutual aid agreements.

The department's operations and planning efforts include relationships with external agencies and operational systems that affect or may influence its mission, operations or cost effectiveness. In review, the purpose of these agreements is to support the mission, operations and cost effectiveness of this organization and its neighboring communities. Utilizing these agreements the fire department has been able to maintain and meet service level objectives as indicated in the standards of cover.

The department has well-developed and functioning external agency agreements. The system is synergistic and is taking advantage of all operational and cost effective benefits that may be derived from external agency agreements. These reciprocal agreements establish a statewide network that participants can utilize to request and or provide aid and assistance to other participant members during disasters or a state of emergency. All agreements are based on an analysis of service needs, they are specific and they clearly define the roles and responsibilities of the participants. Furthermore, all of these reciprocal agreements are essential in maintaining organizational service and performance objectives in accordance to the standards of cover.

In the examination of the documents it was discovered that a conflict resolution policy was not in place within the various agreements. Each year, the department reviews the contracts for external agencies and develops new contract and aid agreements to provide services for designated areas with neighboring agencies. These contracts are developed through the efforts of the department and the city attorney's office. The department should work with the city attorney's office to incorporate a conflict resolution process into the agreements with external agencies.



Budgeted Positions FY 10-11 – 330 Personnel	
Fire Chief – 1	Office Supervisor - 1
Assistant Chief's – 3	Office Assistants - 3
Battalion Commander's – 13	Fire Inspectors - 7
Captain's – 54	
Lieutenant's – 65	
Firefighters – 183	

December 8<sup>th</sup>, 2010