

Red	=	Implemented and no longer relevant
Blue	=	Implemented, fully or partially, and still relevant
Orange	=	Not implemented and no longer relevant
Black	=	Not implemented and still relevant
Green	=	New Language

The City of Johnson City Fire Department is in pursuit of International Fire Accreditation which further defines the Department’s goals and objectives in pursuit of industry best practices, while further establishing the elite status of the Johnson City Fire Department in the United States. The process of accreditation is not terminal, but foundational and perpetual. What this means is we will be required to comply with our established planning documents and focused goals and objectives, then we must provide annual compliance reports, and then finally every five years we must go through a full accreditation application process and Commission review. The process for the Insurance Services Office-Public Protection Classification rating is conducted every five years as well, however, no annual compliance reports are required for this process. The Johnson City Fire Department is one of very few in the United States with an Insurance Services Office-Public Protection Class rating of 1, which translates to insurance premium savings for the individual taxpayer and the business community.

A complete rewrite of the Fire Department section of the comprehensive plan is underway and will be developed to ensure smooth and thoughtful collaboration with our municipal partners and regional partners. Additionally, the plan is intended to dovetail with the recommendations contained within the Insurance Services Office-Public Protection Classification Rating System and the competencies of the Commission on Fire Accreditation International, which is a subsidiary of the Center for Public Safety Excellence, Inc.

The previously published Fire Department Plan was not adopted by the City Commission. The intent of the plan going forward is to have City Commission adopt the plan, which is a requirement in the Accreditation process.

The development and continued improvement of a cost effective and efficient Fire Department, in response to projected population growth and increasing service area, represents one facet of the city’s commitment to the attainment of a high standard of quality of life. The Fire Station Plan is a program of facility improvements and apparatus acquisitions to serve the existing and projected population for the next 15 years. Through proactive planning, the city can direct growth and budget needed funds over a period of time to develop a cost effective program of fire protection improvements.

GOALS AND OBJECTIVES

The preceding sections identified the existing level of service of fire protection provided by the city and needs associated with today’s growth pattern, as well as anticipated needs from future growth. One of the objectives of the Urban Growth & Services Element is “to provide utilities and services in a cost effective manner”.

Goal

The goal of the Fire Station Plan is a reflection of the Urban Growth & Services Element's objective and the intent of Public Act 1101 and is stated as follows:

TO PREVENT INJURY, LOSS OF LIFE, AND LOSS OF PROPERTY RESULTING FROM FIRE THROUGH THE LOCATION OF FIRE STATIONS IN A MANNER RESULTING IN AN EFFICIENT AND TIMELY RESPONSE TO FIRE AND SAFETY INCIDENTS.

Objectives

Specific objectives related to implementation of the plan's goal include:

- To obtain and maintain the highest ISO rating for the city that is economically feasible;
- To provide fire stations within an optimum response distance for pumper companies of 1.5 road distance miles, 2.5 road distance miles for ladder companies, and a maximum response distance of five (5) road distance miles from fire stations;
- To achieve a maximum response time of four (4) minutes for first-due companies and eight (8) minutes for the full-alarm assignment response;
- To achieve the NFPA staffing assignment response for a single-family structural fire of 15 and 17 and 26 respectively for medium and high-hazard occupancy structural fires;
- To develop and maintain a citywide water distribution system that meets the needs for effective fire protection;
- To ensure rapid dispatch and response of the Fire Department through: (1) maintenance of an effective operation of the E-911 system; (2) emergency preemption of all signalized intersections; and (3) continued improvement to the city's street network;
- To acquire and replace apparatus within National Fire Protection Association recommendations;
- To effectively educate and increase public awareness concerning fire prevention practices;
- To reduce the incidence and spread of fire through the adoption and enforcement of fire prevention codes and sound site planning practices; and

- To maintain the Fire Station Plan as an effective guide in the location of new and relocated fire station facilities.

STATION NEEDS

The need for new or alternative station locations was considered in two phases: (1) the minimum changes necessary to serve the areas of annexation within the ISO standardized five (5) road distance miles; and (2) changes to improve response times and station coverage within the ISO optimum of 1.5 road distance miles.

The changes recommended are primarily intended to meet the needs for maintaining coverage and improving response times as the city's area expands with annexation within the Urban Service Area. The changes recommended represent a review of several station options developed from maps provided by the city's GIS Division. The proposed changes appear to be the most cost-effective among the options considered.

As the city has expanded, development patterns have not always coincided with the location of existing fire stations. Also, older facilities are limited in size and ability to accommodate modern fire apparatus. As a result of these and other circumstances, adjustments in the location of resources can result in improved service.

In the development of the following recommendations, future population and development patterns and existing calls for service were used to identify potential areas where existing stations could be moved to achieve better coverage, especially first due response times. After these changes are made, the balance of needs must be satisfied by the construction of new facilities within the fiscal limitations of the city.

Using Map 6 as a baseline, the five mile road distance service areas from the city's eight existing engine companies were identified. The only area of the corporate limits and Urban Service Area that is not within the ISO recommended five mile area is the Bristol Highway corridor extending from the Washington/Sullivan County line to the signalized intersection in Piney Flats at Allison Road. Noteworthy of mention is the considerable amount of overlap in the city's more densely developed areas. A degree of overlapping is desirable in order to provide coverage when companies are on call. The overlap also means that second-in response times will be better than in areas with little overlap. However, when numerous stations overlap in an area, it may indicate that one or more could be better used elsewhere.

The station location changes (Map 7) should be considered in the approximate chronological order of their recommended construction dates. As the construction schedule extends further into the future, the timing and location of stations becomes less certain, owing to the pace and precise location of new development. In considering station moves, special attention was given to stations that were going to require reconstruction or major renovation due to current conditions and needs. The logic is that if they have to be rebuilt, why not do so in a more favorable location?

FIRST PRIORITY (2005-2010)

First priority improvements are intended to provide coverage where coverage does not exist within the ISO recommended standard, or where significant overlap exists and relocation of existing facilities can improve response time and provide expanded coverage.

Station 9 (Bristol Highway) – The only portion of the city limits presently outside the five mile road distance miles from an existing engine company is the Bristol Highway corridor extending from the Washington/Sullivan county line to the signalized intersection in Piney Flats. The construction of a new station at the intersection of Carroll Creek Road and Bristol Highway on property owned by the city (Winged Deer Park) will provide coverage to the area included in the Urban Service Area as well as the majority of the city’s Urban Growth Boundary in Sullivan County. The station will also provide coverage to the rapidly developing residential area along Carroll Creek Road as well as providing coverage towards the central area of the city. Station 9 will provide relief to Station 5 (Broyles Drive), the second busiest in the city and also the largest response zone representing approximately 26.5 percent of the city limits. Station 9 will require the acquisition of new apparatus and the employment of fire fighters to man the station.

ESTIMATED COST OF NEW STATION: \$ 1,400,000 (no land cost involved)

ESTIMATED COST OF NEW APPARATUS: \$500,000

IMPLEMENTATION SCHEDULE: 2007-2008 (construction underway)

Station 4 (West Main Street) – The relocation of Station 4 to a site further west in the vicinity along North State of Franklin Road and Indian Ridge Road will reduce overlap with Station 3 and also provide improved coverage and response time to the areas along West Market Street, Indian Ridge Road, and State of Franklin Road. This relocation would provide improved coverage to a rapidly expanding commercial corridor along West Market Street and North State of Franklin Road.

ESTIMATED COST OF NEW STATION: \$1,500,000 (does not include the cost of land)

ESTIMATED COST OF NEW APPARATUS: Replace existing apparatus, as needed.

IMPLEMENTATION SCHEDULE: 2009-2010

SECOND PRIORITY (2011-2015)

Second priority improvements are intended to upgrade existing facilities through either renovation or relocation and new construction.

Station 3 (Central Fire Hall) – Station 3, constructed in 1929 is substandard in terms of site size and facilities. The plan recommends relocation of the station or major renovation in order to accommodate future apparatus and administration needs. A site in the same general vicinity is recommended, if the station is relocated since the majority of structural fires occur in the central area of the city. A new or expanded facility could consolidate administration, prevention, and training operations.

ESTIMATED COST OF NEW STATION: \$2,000,000 (does not include the cost of land)

ESTIMATED COST OF NEW APPARATUS: Replace existing apparatus, as needed.

IMPLEMENTATION SCHEDULE: 2012-2013

Station 2 (Cherokee Road) – The existing station is substandard regarding construction materials, and facilities. A new station located further south on Cherokee Road would reduce overlap with Station 3 and provide improved coverage and response time to the southwest area of the city.

ESTIMATED COST OF NEW STATION: \$1,700,000 (does not include the cost of land)

ESTIMATED COST OF NEW APPARATUS: Replace apparatus, as needed

IMPLEMENTATION SCHEDULE: 2015-2020

THIRD PRIORITY (2020-2025)

Third priority improvements are intended to provide improved coverage in areas where substantial development has occurred or is occurring.

Station 10 (Northwest) – Residential growth is expected to continue in the northwest portion of the Urban Service Area. The need for a new station should be evaluated in order to provide service within the recommended 1.5 mile road distance of a developed area. The need for this station will be dependent upon the extent of growth in the area.

ESTIMATED COST OF NEW STATION: \$2,000,000 (does not include the cost of land)

ESTIMATED COST OF NEW APPARATUS: Acquire apparatus, as needed

ESTIMATED SCHEDULE: 2020-2025

APPARATUS REPLACEMENT

At the present time, the primary response apparatus at the city's fire stations, with the exception of Station 8, is a 1,500 gallons per minute (GPM) pumper. Station 8's apparatus is a 1,500 GPM Quint. The plan recommends an approach to apparatus replacement at the time existing apparatus requires replacement. NFPA recommends replacing apparatus after a maximum of 25 years of service or sooner, depending on the condition of the equipment.

POLICIES

The following policies are intended to guide the actions of the Board of Commissioners in providing a cost effective and efficient system of fire protection facilities.

- 1. Policy: It is the policy of the city to use principles and standards adopted by National Fire Protection Association and the Insurance Services Offices in the planning of fire protection facilities.**
- 2. Policy: It is the policy of the city to review plans for new or relocated facilities for consistency with the Urban Service Area and Land Use Plan.**
- 3. Policy: It is the policy of the city to maintain a standard of high quality design for new fire stations through increased attention to architectural and site design, landscaping, maintenance, and energy efficiency.**
- 4. Policy: It is the policy of the city to develop and maintain a water supply and distribution system adequate to provide fire protection.**
- 5. Policy: It is the policy of the city to implement a program to rehabilitate or remove buildings determined to be a fire hazard.**
- 6. Policy: It is the policy of the city to implement a code enforcement program designed to reduce loss resulting from fire.**