

CHAPTER 17: FIRE AND EMERGENCY SERVICES

The mission of the City's Fire Department is to serve and protect our community through education, prevention, preparedness and response. The service area covers over 348 square miles and over 686,850 people. The Fire Department's five-year vision is to become a nationally accredited fire service organization.

A separate entity under the City Manager's Office, the Office of Emergency Management (OEM) was established to develop plans and procedures to preserve life and property during disasters for the citizens of Fort Worth and Tarrant County.

EXISTING CONDITIONS AND TRENDS

The Fire Department provides fire suppression and rescue, first responder emergency medical services, hazardous materials emergency mitigation, fire code enforcement, fire safety education, and explosive containment and disposal as detailed in the Fire Department business plan.

OEM strives to keep Fort Worth and Tarrant County prepared for all types of disasters, both technical and natural. Partial funding for this office is provided by a matching grant from the Federal Emergency Management Agency (FEMA).

Fire Services

The Fire Department is divided into four divisions: (1) Administrative Services, (2) Operations, (3) Educational and Support Services, and (4) Executive Services.

The Fort Worth Fire Department has an Insurance Service Office (ISO) Public Protection Classification (PPC) of two (2). A fire department's PPC is assigned by the ISO based on a number of factors including training, staffing, number of fire stations, equipment dispatched to fires, equipment on trucks, fire prevention, investigation, fire safety education, construction code enforcement, hydrant maintenance, water supply, and the ability of the 911 center to answer and dispatch calls. PPCs help determine the fire insurance rates for homeowners within a city. A lower rating may result in savings to homeowners in the city. The Fire Department was last rated in 2000, resulting in an improvement over the previous rating in 1990.

The Fire Department is constantly vigilant of new residential and commercial development. With growth and annexation comes the need for new fire stations located strategically in newly developed areas. Managing the necessary expansion of fire services is currently the Department's greatest challenge. Fire Station No. 38 in the Alliance Corridor, for which funding was approved in the 1998 Capital Improvements Program, was completed in January 2007. Station 38 is the prototype for a new design of fire station that can be duplicated for several years. The ability to duplicate this plan will reduce engineering and construction costs. Fire Station No. 8, at West Rosedale and 5th Avenue, was recently relocated to property at 12th and Rosedale due to the widening of West Rosedale Street. Two new stations north of

**Insurance Service Organization (ISO) Rating
of the Ten Largest Cities in Texas, 2007**

City	2007 Population Estimate	ISO Rating
Houston	2,198,883	1
Dallas	1,335,599	2
San Antonio	1,306,900	3
Austin	718,912	2
Fort Worth	686,850	2
El Paso	624,364	1
Arlington	363,050	3
Corpus Christi	293,122	4
Plano	258,071	1
Garland	222,558	2

The Fort Worth Fire Department's ISO rating improved from 3 to 2 in 2007. (Source: Fire Department Survey, 2007.)

the I-820 loop are in the planning stage. The City has acquired land for Station 11 in Council District 2 on Highway 114 and Harriet Creek Drive on the Northwest Independent School District central campus. Land has also been acquired for Station 41 in Council District 7 on Willow Springs Road, north of West Bonds Ranch Road near Highway 287. The fire stations are expected to open in the summer of 2008.

Deployment of fire fighting equipment and trucks with the appropriate number of firefighters will continue to be a demanding and expensive challenge, particularly as the City continues to grow geographically. Future annexations will challenge the Fire Department to provide fire/rescue and emergency medical services as stated in the Department's business plan. National and state fire standards, such as ISO, have recommended staffing levels in order to achieve certain ratings and standards of safety. Staffing levels of the Fort Worth Fire Department may be affected by these standards. In April 2005, the Department completed its upgrade from three-person to four-person staffing on every apparatus, a change designed to improve effectiveness and safety at fires and other incidents. Due to the long distance between northern stations, the Department is also proposing to eventually staff each new northern station with two fire companies.

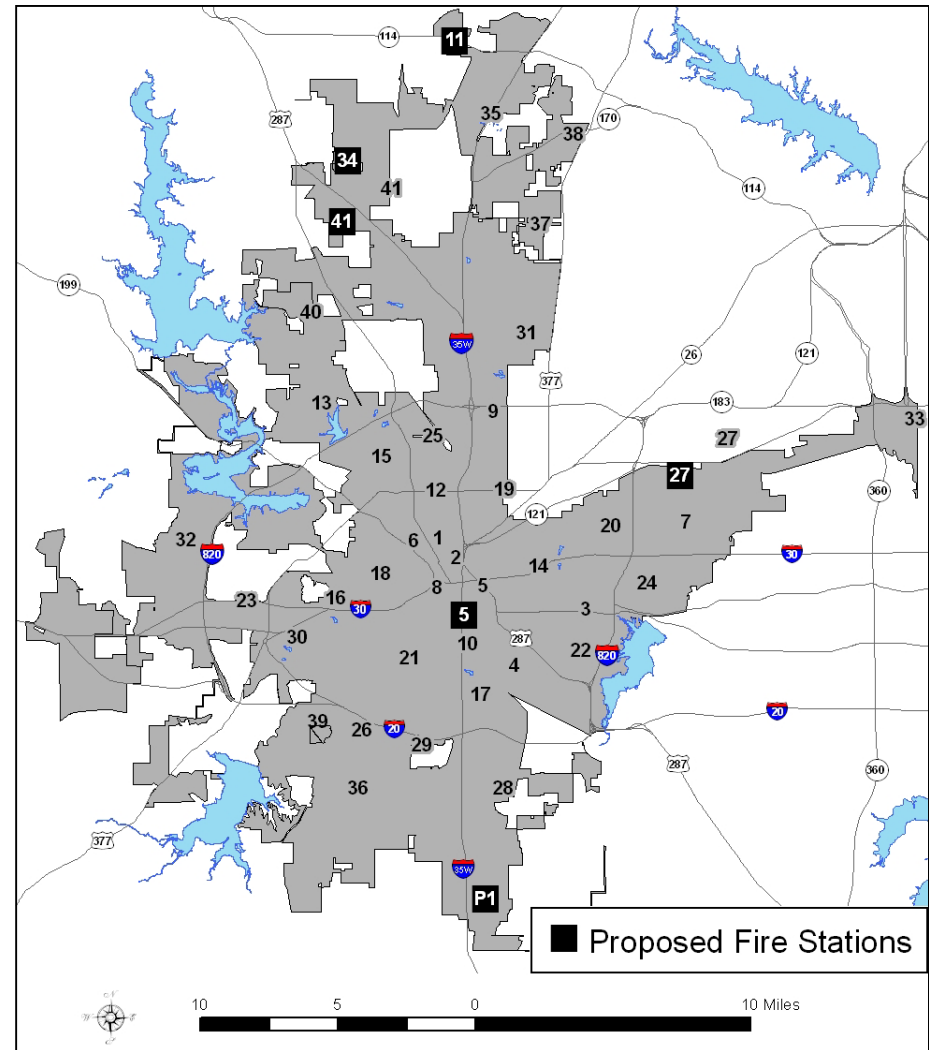
Although the addition of these personnel is an important accomplishment, it is also important to support the expanding fire fighting force and the growing city with technical and logistical personnel and resources. There will be a need for additional staff, including instructors, public educators, inspectors, fire investigators, mechanics, battalion technicians, and data analysts. The continuing expansion of the workforce will also require additional supervision in the form of an additional battalion (which would raise the total to seven).

The Fire Department plays an important role in Emergency Medical Service (EMS), working with the Area Metropolitan Ambulance Authority to provide first-responder emergency medical response services. All firefighters are trained, State-certified emergency medical technicians. All fire trucks carry automatic external defibrillators (AEDs) and other state of the art EMS equipment and supplies to stabilize patients until advanced life support (ALS) personnel and equipment arrives.

Other emergency services provided by the Fire Department include a Water Emergency Response Team that is equipped and trained to handle surface rescues, swift water rescues, and underwater search and recovery; Aircraft Rescue and Fire Fighting (AARF) responsibilities for the City's three municipal airports; a Hazardous Materials (HazMat) Team that is trained and equipped to respond to the spill or leak of dangerous chemical, radiological, or biological products; and a Technical Rescue Team (TRT) that is trained and equipped to deal with large transportation accidents (train, bus, aircraft), structurally collapsed buildings, rope rescue for aboveground emergencies, confined space rescues, and cave-in or trench rescues.

Response time to an incident (dispatch to on-scene) is one of the Department's primary measures of effectiveness. The current goal for emergency calls is five minutes, 75 percent of the time. As the bottom chart on page 168 shows, the

Fort Worth Existing and Proposed Fire Stations



The City of Fort Worth has 39 fire stations within its city limits. This map shows all current stations, as well as proposed station sites. Stations 5, 27, and 41 are proposed to be relocated to new sites. (Source: Fire Department, 2007.)

department typically struggles to reach this goal across the entire City. As station construction is unable to keep pace with growth on the edges of the City, this trend is likely to continue.

FIRE SERVICES GOALS

Administration:

- Provide accurate and timely financial support to the department and external customers.
- Provide effective and timely technical support to the department.
- Provide accurate and timely information to the department and external parties.

Operations:

- Respond to and mitigate emergency and service calls in a timely and competent manner with adequate resources.
- Provide accurate information to the appropriate audience in a timely manner.

Educational and Support Services:

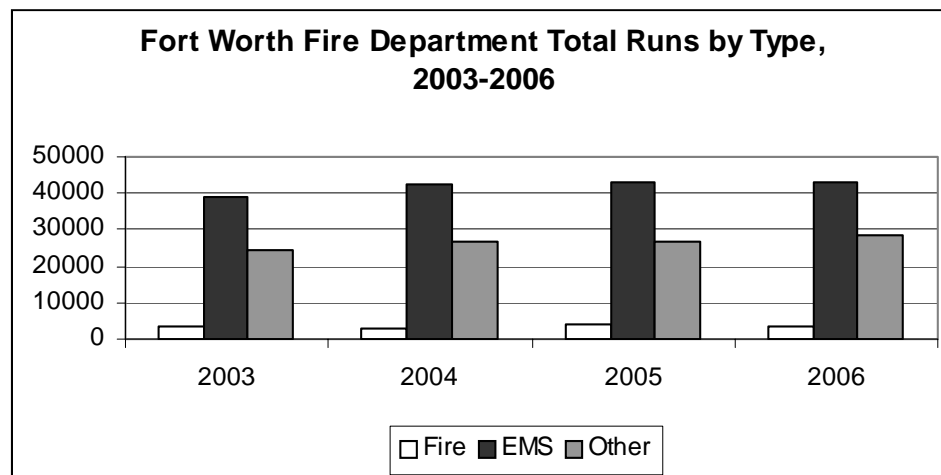
- Recruit a qualified workforce that reflects the diversity of the city.
- Develop a competent workforce through education and training.
- Provide effective medical training to the public and fire personnel.
- Provide for a highly trained workforce that is adequately furnished with well-maintained equipment and facilities.

Executive Services:

- Dispatch appropriate resources and respond to needs of on-scene personnel in a timely manner.
- Efficiently procure leading-edge communication equipment and keep it well maintained and well-organized.
- Provide professional, timely, and thorough inspections and plan review.
- Thoroughly investigate the cause of all fires of unknown origin and accurately identify incendiary fires and their perpetrators.
- Completely, accurately, and impartially investigate complaints involving Fort Worth Fire Department members.
- Prevent or mitigate the destructive effects of explosives and explosive devices.
- Effectively educate the public in fire and life safety strategy and skills.

FIRE SERVICES STRATEGIES

- Increase the number of minority and female applicants through an aggressive recruiting program.
- Attempt to increase public participation in education programs such as Learn Not to Burn, Youth Fire Academy, and Citizens Fire Academy.
- Educate the public on appropriate reactions to bombs and bomb threats through lectures and presentations.



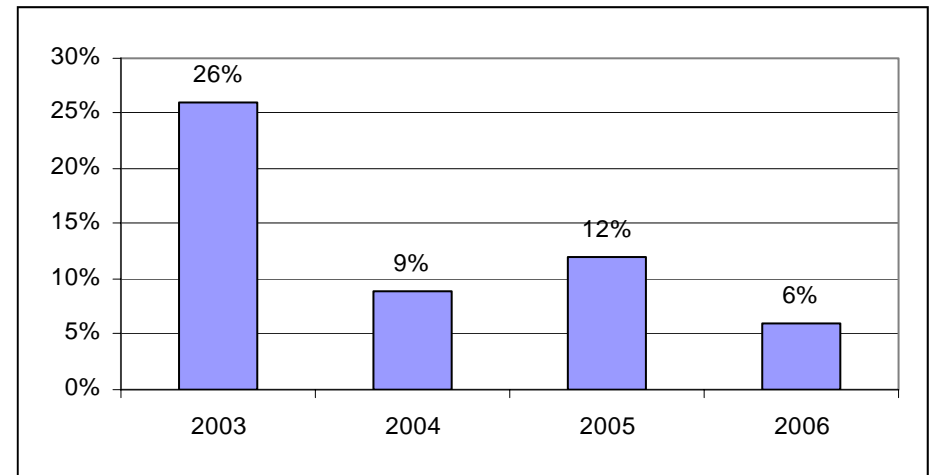
In 2006, the Fire Department responded to 3,652 fires and 43,123 Emergency Medical Service (EMS) calls. The Fire Department also responded to 28,520 other emergencies. (Source: Fire Department, 2007)

- Apply for FEMA and other grants in order to expand and improve the Department's Public Safety programs and supplement other Department initiatives.
- Improve internal and external communication through focus groups, meetings, replacing paper based processes with electronic ones, etc.
- Strengthen sprinkler and fire alarm requirements in the Fire Code for new and existing construction.
- Implement National Incident Management System (NIMS).
- Coordinate the expenditure of Homeland Security grant funds with the Emergency Management Office.

FIRE SERVICES PROGRAMS AND PROJECTS

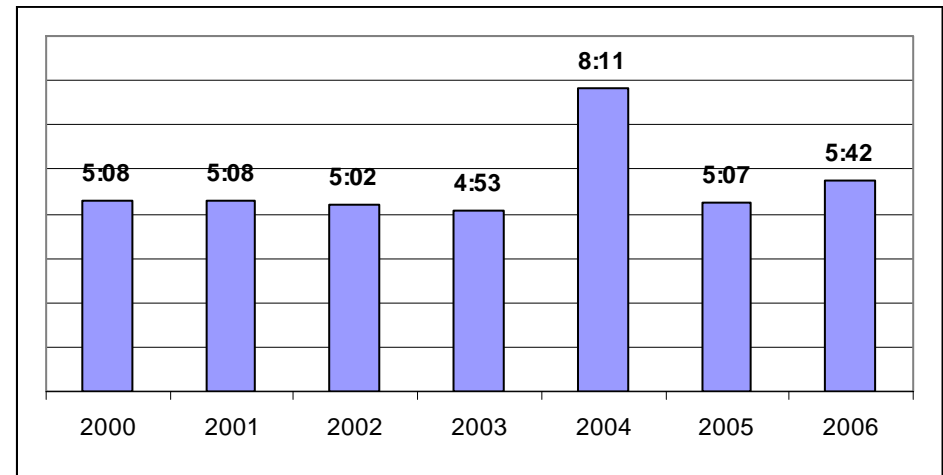
- **Learn Not to Burn®** is a program designed to provide instruction in fire safety behavior to elementary school students. This program has proven to be one of the most effective ever used by the community and Fort Worth schools. It is a structured curriculum taught by firefighters and reinforced by other resources, such as clowns, puppets, the Fire Safety House, and fire truck visits. This program is designed for children pre-kindergarten through the fifth grade.
- **Youth Fire Academy** is a new program used to reach youth grades 8-12 with informative information concerning the services offered by the Fire Department. This is a one-week version of the Citizen's Fire Academy that is designed to recruit new volunteers and expose youth to a possible career as a Fort Worth firefighter.
- **The Citizen's Fire Academy** program teaches up to 60 citizens annually about Department activities, fire safety, CPR, and first aid techniques. This education also enables graduates to assist the Department with fire safety training and other special projects.
- **The Juvenile Fire Setter Intervention Program** is designed to help families with children who are involved in fire play or fire setting. Approximately 50-100 children are referred to the program each year. More than 90% of program graduates never relapse into firesetting behavior. The FWFD JFS program is part of the Tarrant County Juvenile Firesetter Coalition, which is comprised of all the municipal and county entities that have JFS programs and all their referral sources. In addition, the Department partners with several private charitable entities to make sure that juveniles in the program receive counseling and other services.
- **High School CPR Training** is provided by the Fort Worth Fire Department in partnership with the Area Metropolitan Ambulance Authority, the Fort Worth Independent School District (FWISD), and the American Heart Association. The objective is to provide CPR training to every high school sophomore in the FWISD. Five thousand high school students are trained every year by high school teachers, nurses, and Fort Worth firefighters through this collaboration.
- **Fire Safety Inspections** of the nearly 15,000 commercial businesses and approximately 900 target hazards are completed by fire company inspectors.
- **Underground Gasoline Storage Tank Inspections** ensure compliance with the

Fire Loss as Percentage of Total City Property Value, 1999-2005



Property losses due to fires have decreased in recent years. (Constant 2000 dollars) (Source: Fire Department, 2006.)

Fort Worth Fire Department Average Response Time, 2000-2006



Average response times were above the Fire Department goal of five minutes for six of the past seven years. The jump since 2004 is a result of more accurate reporting. (Source: Fire Department, 2007)

Environmental Protection Agency (EPA) laws and regulations that provide for public safety and environmental protection.

- **Inspection and Review of Construction Plans and New Structures** involves several functions, including review for fire code compliance, inspection of fire protection systems such as sprinklers and alarms, and addressing. Ensuring compliance with all codes and regulations has a tremendous impact in reducing the number and severity of future fires.
- **Standpipe System Inspection** is provided by an inspector who examines and tests fire department emergency delivery systems. The dependability of these systems is crucial to both public and firefighter safety.

Fire Services Capital Improvement Projects

The approval of the 2004 bond program has resulted in the Fire Department obtaining money to construct two new fire stations, buy land for one more, relocate or replace two others, and provide enhancements to existing stations. Placement of these stations is determined based on response time studies that tie into legal requirements for the provision of public safety services to newly annexed areas. Details of all currently funded and unfunded CIP projects can be found in Appendices D and E.

Emergency Management

Emergency Management focuses on increasing the capacity of organizations to plan for, respond to, and coordinate emergency activities. Emergency Management is tasked with maintaining the community-wide emergency operations plan, monitoring of emergency conditions, establishing relations with partner agencies, fostering disaster preparedness efforts and disseminating warning information through different systems. This warning system includes an aggressive public education campaign, testing of the outdoor siren system and operation of the telephone ring-down system. Additionally, the OEM activates the Emergency Operations Center and/or the Emergency Management Plan as deemed necessary. Several other City departments take an active role in the Emergency Preparedness Program, offering expertise and facilities as needed.

EMERGENCY MANAGEMENT GOALS

- Facilitate educational activities to produce a greater understanding of emergency preparedness amongst governmental agencies and the public.
- Coordinate an integrated emergency management system with internal and external agents in a timely manner.
- Reduce the impact from emergencies and disasters through all hazard preparedness programs and initiatives.
- Strengthen our ability to plan for and provide assistance to special needs citizens.

EMERGENCY MANAGEMENT STRATEGIES

- Enhance the Office's relationship with the National Weather Service Office in Fort Worth to coordinate severe weather monitoring and response activities.

Fort Worth Fire Fighters in Action



Firefighters keep hand lines engaged during a commercial building fire. (Source: Fire Department, 2007.)



Warehouse fire seen from above at the Tarrant County College Fire Training Center. (Source: Fire Department, 2007.)

- Recertify the City and Tarrant County as a Storm Ready Community.
- Provide weapons of mass destruction (WMD) and Chemical Biological Radiological Nuclear and Explosive (CBRNE) training and exercises to prepare local organizations for emergency and disaster situation response and recovery.
- Implement National Incident Management System (NIMS).
- Participate in the Tarrant County Local Emergency Planning Committee (LEPC) in order to enhance planning for chemical emergencies.
- Encourage qualified citizens to register in the Special Needs Assistance Program (SNAP) in order to improve our planning ability in the event of a community disaster.
- Coordinate the expenditure of Homeland Security grant funds for the training and equipment necessary to combat and respond to CBRNE and WMD terrorism events.
- Improve our community warning systems by accessing telephone ring-down systems and expanding the outdoor warning system.
- Strengthen requirements for NOAA weather radio in the Fire Code for commercial and rental properties.
- Seek funding to prepare a Hazard Mitigation Plan that satisfies the requirements of the Disaster Mitigation Act of 2000 and improves the City's ability to obtain grants for needed hazard mitigation projects.

EMERGENCY MANAGEMENT PROGRAMS

- **Early Warning Alert** for all types of disasters is provided through OEM, Weather Spotters Net, and the Medical Operation Center during mass casualty incidents through outdoor warning sirens, email notifications, and telephone ring-down system.
- **Association Networks** are continuously built by the Office of Emergency Management with groups, organizations, agencies, and individuals at the local, state, and federal levels. These associations help to establish the resources needed in times of disaster.
- **Homeland Security Grant Program (HSGP)** is a federal initiative to coordinate several different local grants aimed at improving our ability to prepare and respond to a terrorist incident. The HSGP funds the Urban Area Security Initiative (UASI), Metropolitan Medical Response System (MMRS) and other local programs. This is a program directly supporting local capabilities to manage all-hazards, mass casualty incident, and terrorist events until significant external resources arrive by systematically enhancing and integrating first responders, medical providers, emergency management, business, and volunteers.
- **Local Emergency Planning Committee (LEPC)** is a federal requirement to prepare first responders, develop emergency plans, and educate the community on the threats of hazardous materials via transportation routes, or fixed facilities. The LEPC is also required to maintain records of hazardous material accidents and of storage of reportable quantities of hazardous chemicals.

Fort Worth Fire Fighters in Action



Engine 29 Firefighters break windows for access points during a structure fire on Foxhound Lane. (Source: Fire Department, 2007.)