



# CHAPTER 17

# FIRE & 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 359 square miles and over 935,000 residents. The Fire Department is organized in four divisions: Operations, Executive Services, Educational & Logistical Services, and Administration. In addition to fire prevention and response, the department responds to calls for emergency medical services, coordinates with the city's contracted ambulance provider (MedStar), and oversees Fort Worth's Office of Emergency Management.

On March 1, 2017 Fort Worth Fire Department achieved an ISO Class 1 rating. Residents in ISO 1 rated cities can benefit from lower insurance costs.



## 43

Fire Stations

## 7

Battalions

## 100,000+

Incidents Responded to Annually

## 101

Frontline Vehicles

## 29

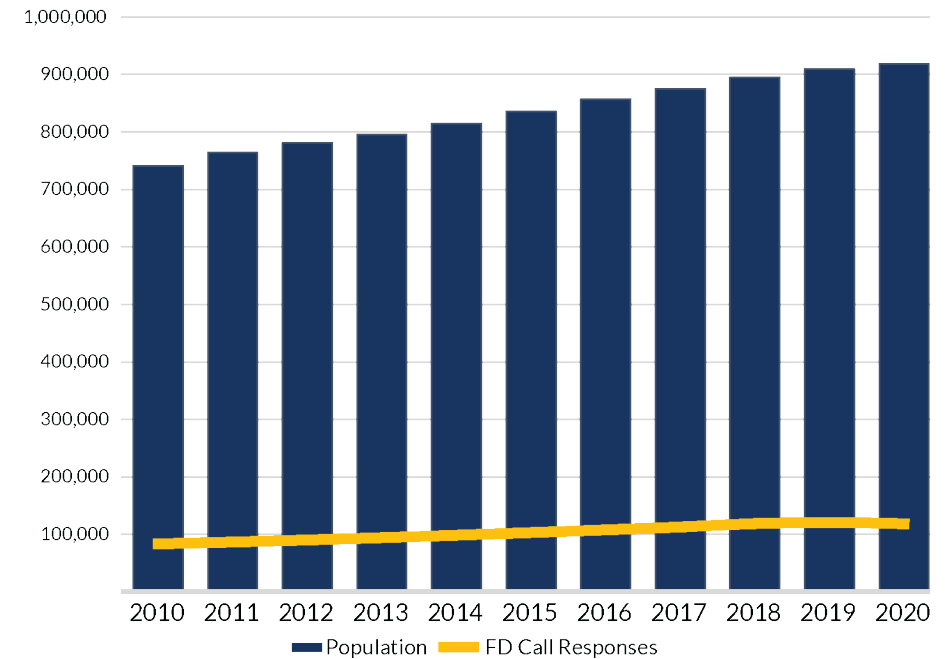
Reserve Vehicles

### FIRE LOSS, 2020

TYPE OF LOSS	2019	2020	DIFFERENCE
Property Loss	\$9 M	\$13 M	\$4 M
Content Loss	\$4 M	\$6 M	\$2 M
Property and Content Saved	\$747 M	\$375 M	-\$373 M
Vegetation Fires (Acres)	86	88	2
1 and 2 Family Dwellings	\$8 M	\$7 M	-\$1 M
Multifamily Dwellings	\$3 M	\$5 M	\$2 M

Source: City of Fort Worth, Fire Department, 2021.

### OVERALL FIRE CALLS AND POPULATION, 2010 - 2020



**Population UP 24% SINCE 2010**

**Overall Fire Calls UP 42% SINCE 2010**

CALL TYPE	2010	2020	% CHANGE
OVERALL CALLS	83,514	118,269	↑ 42%
FIRE CALLS	2,465	2,737	↑ 10%
EMS CALLS	54,141	72,199	↑ 33%
OTHER CALLS	26,908	43,333	↑ 61%

The Bureau of Fire Prevention (BFP) effectively and efficiently addresses community risks by:

- Preventing incidents from occurring;
- Reducing the overall impact of incidents when they do occur; and
- Aligning prevention services with what customers value and want.

Fire inspections are conducted to positively impact:

- Public safety
- Firefighter safety
- Property conservation

Per the City of Fort Worth Fire Code, all commercial businesses operating in the City of Fort Worth are to be inspected for fire code and life-safety issues. The Fire Department has over 18,500 assigned commercial inspections to conduct annually.

Approximately 16,000 of these are assigned to fire companies at the 43 fire stations across the city.

Additionally, there are about 2,500 special occupancies assigned to inspectors from the Bureau of Fire Prevention. These facilities are greater than four stories in height or have a footprint that exceeds 200,000 SF. Sensitive facilities such as hospitals, daycares, and nursing homes with a capacity greater than 100, public assembly places with an occupancy greater than 200, or facilities storing or processing hazardous materials are also inspected by the Bureau of Fire Prevention.

## 2,748

Special Occupancies Assigned to the Bureau in 2020

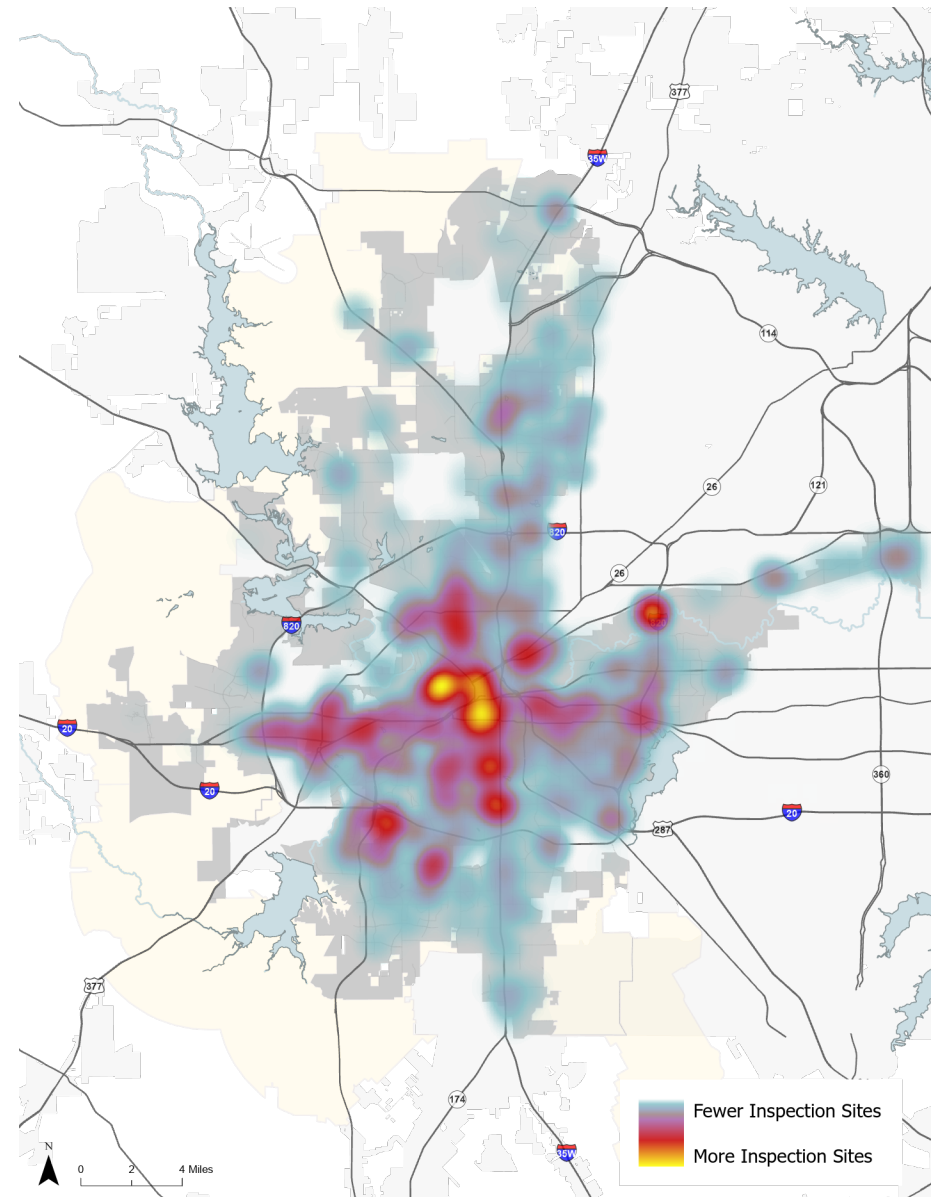
## 19,085

Total Commercial Inspections in 2020

## 16,337

Commercial Inspections Conducted by Fire Companies in 2020

## COMMERCIAL INSPECTIONS



Source: City of Fort Worth, Fire Department, 2021.

Arson/Bomb Investigators with the Fort Worth Fire Department are professional firefighters who have completed additional training to become Texas commissioned peace officers and certified arson investigators. These individuals examine fires that may have been intentionally set and investigate threats of explosive devices or suspicious items. Their mission is to prevent fires and explosions through effective investigation, and by prosecution of those responsible, in order to serve as a strong deterrent to others who might commit arson or incendiary acts in the future.

Fire Investigators respond to determine the origin and cause of a fire and whether a crime has been committed. This section is responsible for on-scene investigation, collection and processing of evidence, case development, interviews, issuance of warrants, arrest, filing criminal charges, and expert testimony. Administratively, this section approves all firework permits, provides stand-by at pyrotechnic shows to ensure proper codes are followed and performs background investigations on all new fire department applicants.

Bomb Technicians respond regionally to hazardous device incidents for assessment, render safe procedures and disposal operations. They frequently partner with federal, state and local resources in both criminal investigations and deployment to special events in the city as part of a Joint Hazard Intervention Team. As part of their Homeland Security and Intelligence function, members ensure relevant and timely information is made available to Fire Operations and frequently train first responders and citizens for response to Active Threat Incidents. The Bomb Squad is also responsible for the management, deployment, and training of the city's bomb detection K-9 program. The program recently added two specialized vapor wake canines to the group.

**Arson Fires**  
 **UP 28.7%**  
**SINCE 2015**

**34.5%**

Arson Prosecution Rate for 2020

Investigations Activity	2015	2016	2017	2018	2019	2020
Fires Investigated	561	518	579	595	469	569
Arson Fires	108	120	145	129	107	139
Fire Fatalities	10	2	3	6	11	11
Fire Injuries	24	19	42	53	57	78
Citations Issued	12	8	16	4	12	5
Total Cases Filed	29	32	44	38	39	59
Arson Cases Filed	Unk	20	42	33	37	48
Arson Prosecution Rate	26.9%	16.7%	29.0%	25.6%	34.6%	34.5%
Juvenile Fire-Setter Referrals	18	11	14	10	11	7



Fort Worth Fire Department Arson/Bomb K9s conducting detection training on scene.



Fort Worth Fire Department Arson/Bomb K9s conducting detection training with the help of volunteers at local events and venues.

Source: City of Fort Worth, Fire Department, 2021.

The Community Risk Reduction section offers a wide array of programs throughout our community, from pre-kindergarten to senior citizens. Classes offered to the general public focus on a variety of fire and life safety topics. The Community Risk Reduction programs focus on fire prevention, life safety issues, and hazards in the home and workplace. Programs and materials are tailored according to the audiences.

The FWFD will check smoke detectors, change batteries, or even install a smoke detector in your residence if you cannot afford one. We also have smoke detectors specially designed for people who are hearing impaired. Other risk-reduction offerings include:

- Fire extinguisher training with state-of-the-art technology
- Compression-only CPR training with MedStar and Safe Communities Coalition
- Swimming pool safety classes and drowning prevention
- Assisting with evacuation planning of high occupancy locations (e.g. high rise)
- Citizens Fire Academy
- Youth Fire Prevention and Intervention program
- Learn Not to Burn programs for elementary students in Fort Worth
- Fire Clowns to educate the young and young at heart
- Fire Safety House
- Fire and Life Safety presentations with local neighborhood associations
- Fire prevention seminars for multi-occupancy property owners

## COMMUNITY RISK REDUCTION MISSION

*“To minimize the loss of life and property resulting from fires, medical emergencies, environmental, and other disasters through education and proactive engagement.”*

## COMMUNITY RISK REDUCTION INITIATIVES

### 1. Fire Explorer Program

It is our organization’s intent to enable young people to become responsible individuals by teaching positive character traits, leadership, career development and life skills, so they make ethical choices and achieve their full potential. The program allows youth to gain insight and interest in becoming long-term members of the emergency services.

### 2. Peaks and Ladders

A collaboration between Cook Children’s Healthcare System, Fort Worth Firefighter Charities, and Fort Worth Fire Department.



Community Risk Reduction Volunteers distribute fire & life safety info and goodies to families at local events.



FWFD Clowns entertain and teach children about fire safety.



Community Risk Reduction staff and volunteers get ready to walk in the Parade of Lights in Downtown Fort Worth.

Source: City of Fort Worth, Fire Department, 2021.

The Fort Worth Fire Department actively seeks to hire qualified applicants to become firefighters for the City of Fort Worth. The requirements follow the standards issued by the Texas Commission on Fire Prevention. The goal of the Fort Worth Police Department is to recruit, hire, promote, and retain the best candidates to serve the community.

## RECRUITMENT STRATEGIES

The mission of Hiring/Recruiting is to attract a diverse qualified applicant pool that is a representation of the city of Fort Worth. Our recruiting efforts target various community groups, faith-based organizations, sports and athletic programs, schools/colleges, and the military to help identify qualified applicants. We inform and educate potential candidates on the skills, knowledge and abilities necessary to become a firefighter in the City of Fort Worth.

The FWFD offers a civil service exam for those interested in testing for the fire recruit position.

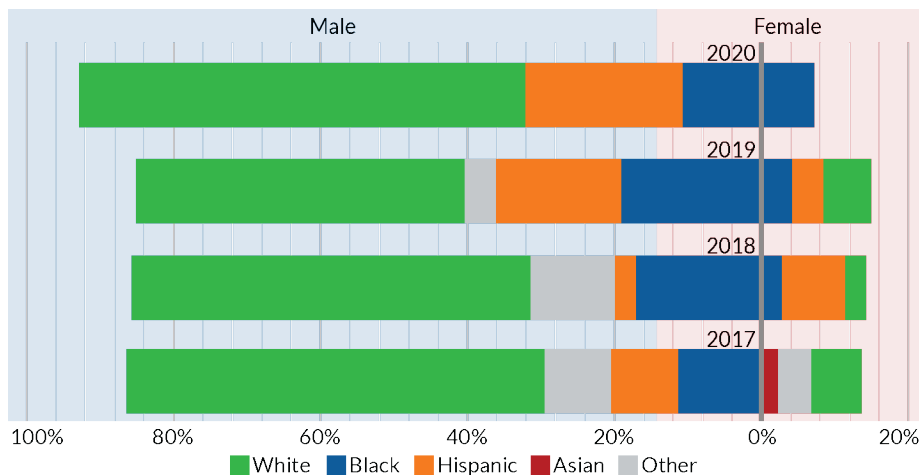
## FIRE & EMS TRAINING

The Training Division is responsible for all aspects of firefighter training including initial recruit training, apprenticeship program, continuing education for professional firefighters, professional development training, and training with numerous mutual aid partners.

Training of firefighters is governed by the Texas Commission on Fire Protection, as authorized by Texas Government Code, Chapter 419. EMS training is governed by the Texas Department of State Health Services, as authorized by Texas Health and Safety Code, Title 9, Chapter 773. Both of these governing bodies set standards for initial training, testing, and certification, as well as continuing education requirements, and additional training for specialized functional areas.

The move to the state-of-the-art Bob Bolen Public Safety Complex (BBPSC) has enhanced Training's mission of helping people by supporting the Operations Division with the training, tools, and services they need. The BBPSC has also made it possible to extend training beyond the FWFD to other outside agencies and regional partners. In 2019, 80 FWFD Instructors provided over 30,248 hours of training.

## GRADUATING RECRUITS BY RACE AND GENDER (2016-2020)



Source: City of Fort Worth, Fire Department, 2021.

**80**

FWFD Instructors Provided Training in 2019

**30,250+**

Hours of Training in 2019



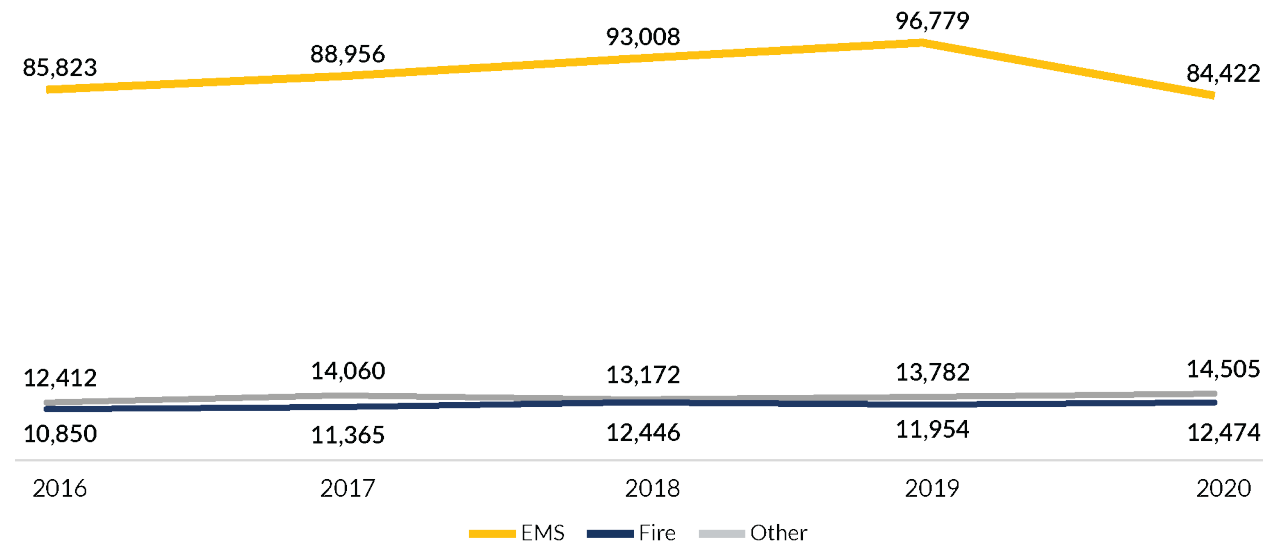
FWFD recruits training for physical endurance.

The Fire Alarm Office receives all emergency calls related to fire incidents, fire alarms, or other non-police related emergency incidents.

All medical calls are sent to the Fire Department directly through the computer aided dispatch system.

The Fire Alarm Office is staffed with firefighters who answer all calls, provide information to the caller, dispatch operations personnel, and coordinate communications with firefighters both en route and at the scene.

### CALL HISTORY



### TOP 5 INCIDENTS IN EACH CALL CATEGORY, 2020

EMS Calls	Count
Major Accident	12,424
Breathing Problems	6,889
Chest Pain/Heart Problems	6,811
Psychiatric/Attempt Suicide	7,220
Fainting/Unconscious	6,543
% of All EMS Calls	47%

Fire Calls	Count
Auto Alarm - Commercial	4,532
Auto Alarm - Residential	3,053
Outside Fire	1,080
Grass/Brush Fire	866
Vehicle Fire	830
% of All Fire Calls	71%

Other Calls	Count
Non-emergency Lift Help	5,162
Investigate	2,860
Assist Citizen	1,355
Lockout	1,239
Vapor Gas Leak	954
% of All Other Calls	79%

Source: City of Fort Worth, Fire Department, 2021.

### OFFICE OF EMERGENCY MANAGEMENT (OEM)

The Office of Emergency Management (OEM) is funded primarily by the Emergency Management Program Grant (EMPG) and the Urban Area Security Initiative (UASI) grant programs. The organization is responsible for educating citizens on natural disasters, terrorism, and other hazards, preparing and implementing the CFW Emergency Operations Plan, conducting training, drills and exercises for first responders and EOC personnel for response readiness, implementing public warning notifications, activating the Joint Emergency Operations Center during special events and disasters, coordinating resources and distributing situational awareness reports, and managing grants provided by the Department of Homeland Security.

OEM plays a major role in City of Fort Worth Special Event planning. This includes scheduling and hosting coordination meetings, developing and hosting tabletop exercises with responders and event organizers, IAP/EAP development and distribution, integration of OEM staff in unified command, and JEOC activation for monitoring of these events.

130

Special Events Held

48

Special Events with JEOC Coordinations

3.4M

People in Attendance of Special Events

2

State of Texas Resource Requests Submitted for Special Events



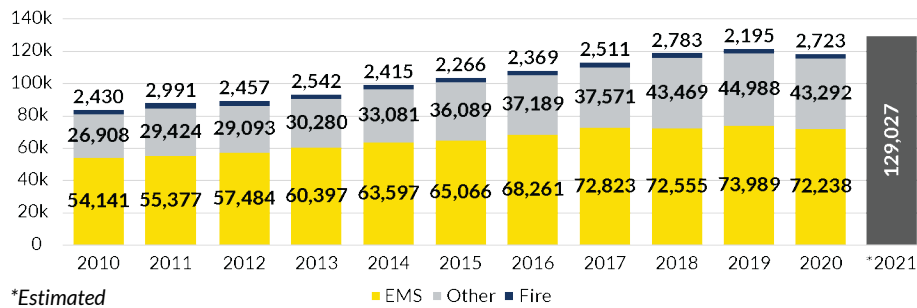
Active shooter training organized by the Office of Emergency Management.

Source: City of Fort Worth, Fire Department, 2021.

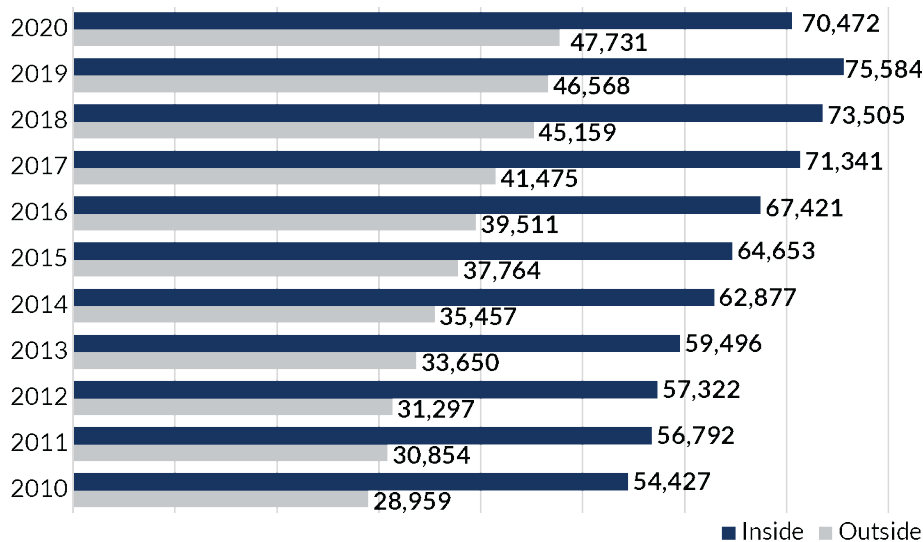


The Operations Division employs the majority of the Department’s personnel, conducts daily emergency response activities, as well as nonemergency, and specialized responses. Firefighters are also responsible for commercial inspections, training, hydrant inspections, public education, as well as truck and fire station maintenance/inspections.

## CALL VOLUME

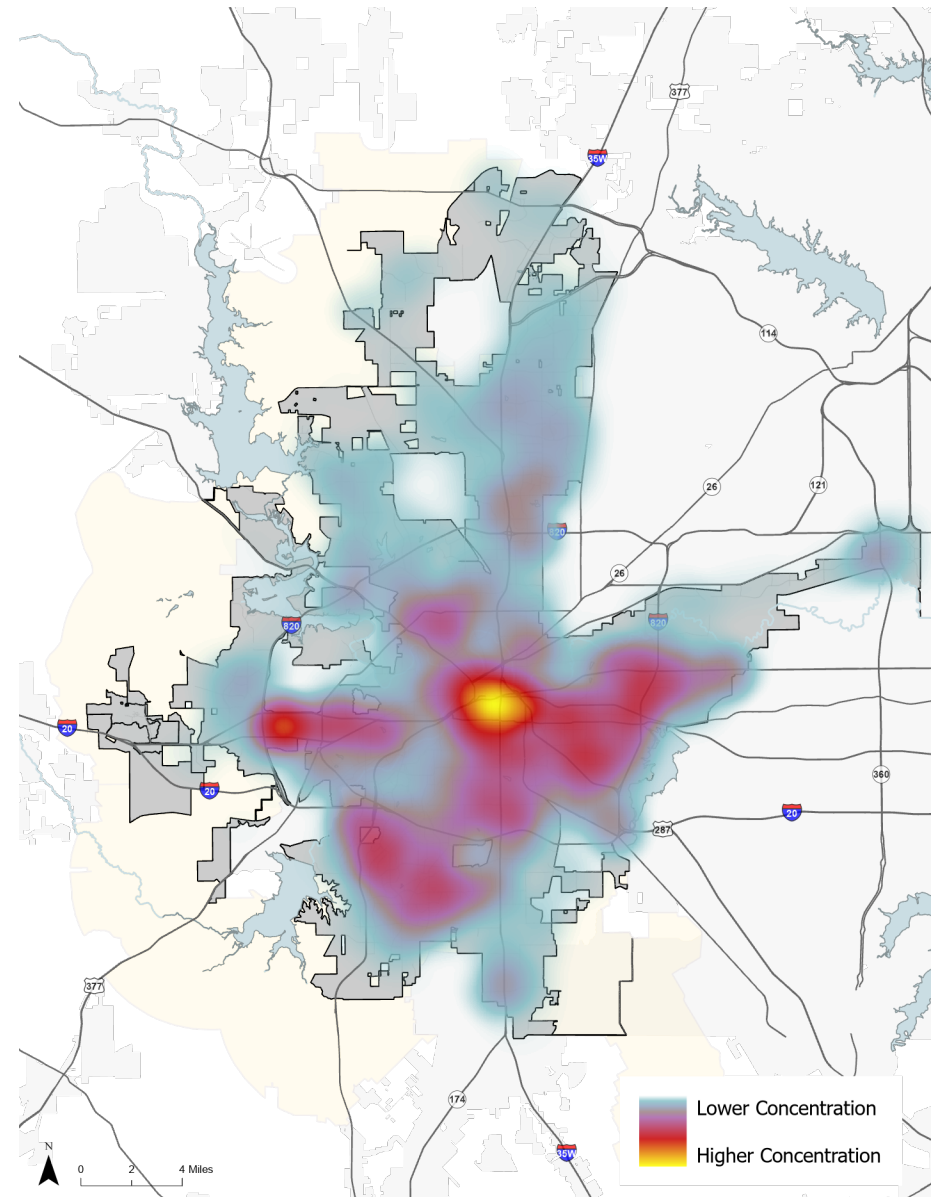


Call volumes inside Loop 820 have increased by 29% since 2010 – while volumes outside Loop 820 have increased by 65% during the same timeframe. This increase in call volume is indicative of continued development and population growth across the city.



Source: City of Fort Worth, Fire Department, 2021.

## FIRE, EMS, & OTHER CALL TYPES, 2020



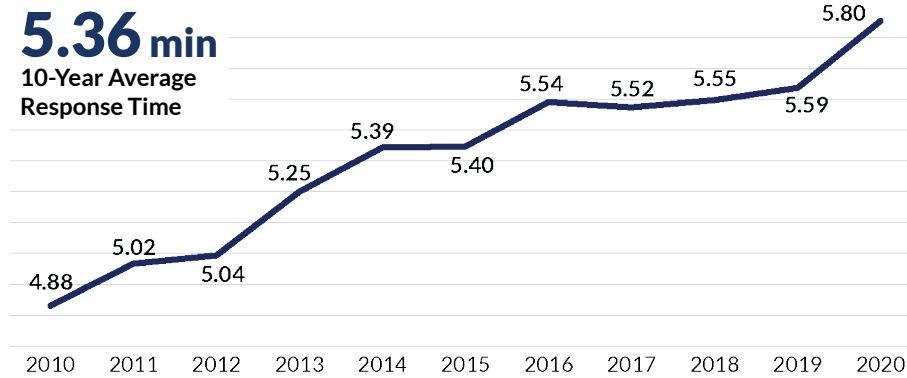
## RESPONSE TIMES

**UP 20% SINCE 2010**

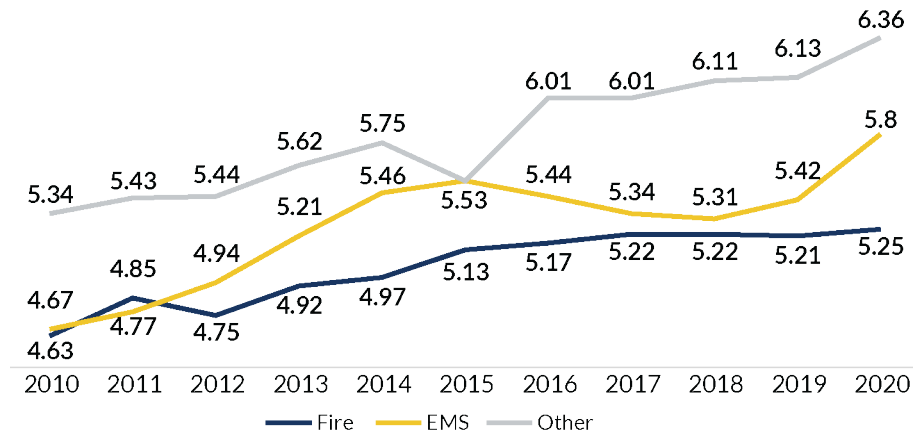
Average Response Time for Calls

The increase is a result of growing congestion related to construction and population growth as well as increasing travel distance due to urban sprawl.

### AVERAGE RESPONSE TIME IN MINUTES

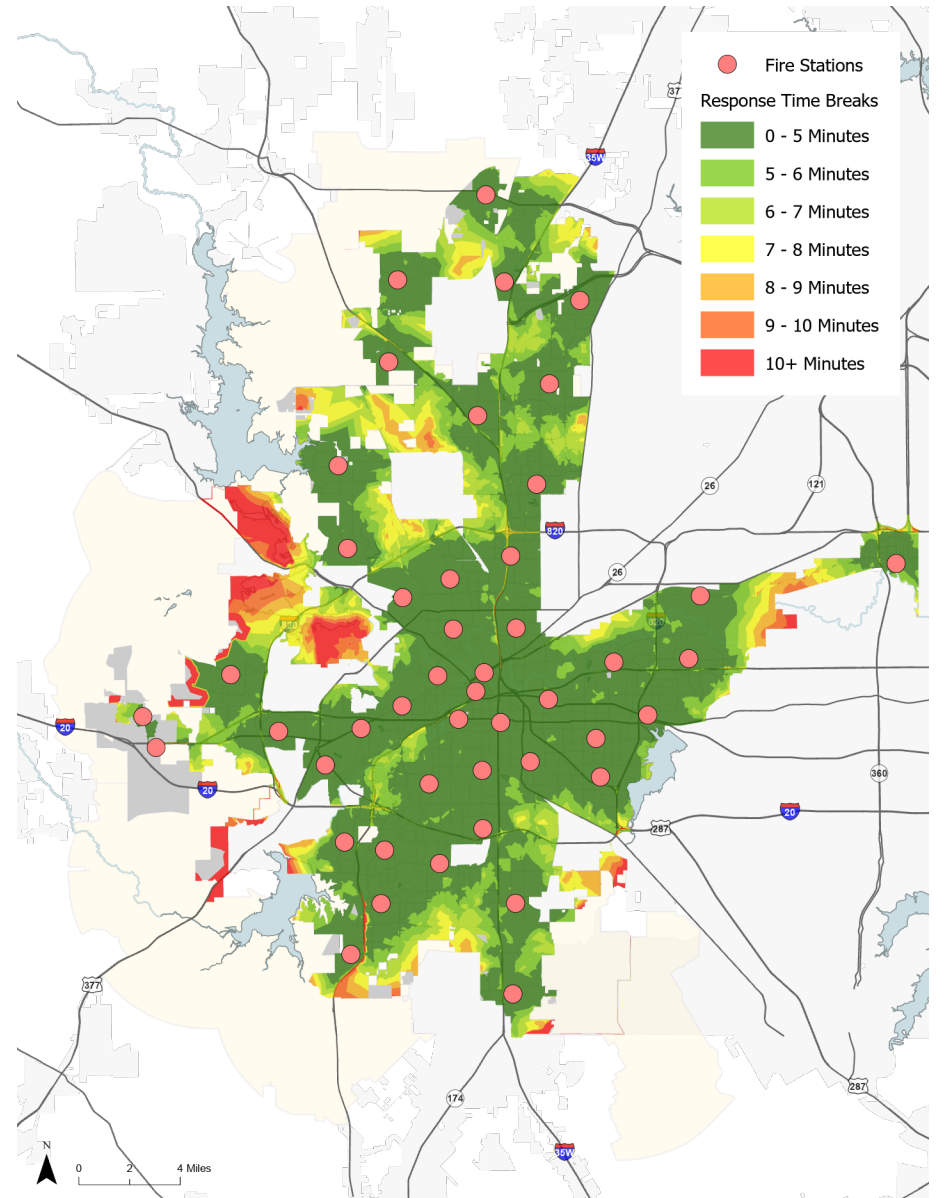


### AVERAGE RESPONSE TIME IN MINUTES PER CALL TYPE



Source: City of Fort Worth, Fire Department, 2021.

## ESTIMATED RESPONSE TIMES FOR EXISTING FIRE STATIONS



## AIRCRAFT RESCUE & FIREFIGHTING (ARFF)

Currently, there are two stations that are 24-hour Aircraft Rescue & ARFF certified response stations, Station 35 at Alliance Airport and Station 44 at Meacham Airport.

**45**

Active Members in ARFF Program

Both stations are tasked with responding to aircraft incidents on and off the airport they service. They also respond to any fire and EMS related incidents on airport grounds.

	Station 35	Station 44
ARFF Certified Personnell	8	2
# of ARFF Vehicles	3	2
Gallons of Water (Total)	7,500	1,750
Gallons of Foam (Total)	1,000	400
Pounds of Auxiliary Agent (Total)	1,000	650
Index Rating	E <sup>1</sup>	B <sup>2</sup>

1. An index rating of E is the highest index and it applies to cases where aircraft longer than 200 feet will be operating.
2. An index rating of B applies to cases where aircraft between 90 and 125 feet operate.



Station 35's ARFF attack and rescue trucks standing ready to respond.

Source: City of Fort Worth, Fire Department, 2021.

## HAZARDOUS MATERIALS RESPONSE TEAM

The FWFD maintains a primary Hazardous Materials Response (Haz Mat) Team located downtown along with four satellite stations strategically located on the north, south, east, and west sides of the city.

Fire Station 2 is the centrally located primary Haz-Mat Response Team. Station 2 houses Battalion 2, Engine 2, Truck 2, Squad 2, Support 2, the decontamination trailer and the shower trailer. The station also serves as front line fire suppression, EMS, and personnell are trained as part of the Technical Rescue Team.

All Battalion Chiefs are trained to the Technician level. The daily minimum staffing is 20 Hazardous Materials Technicians plus 4 Battalion Chiefs.

**13**

Trained Personnell per Shift for Entire City

**120**

Active Hazardous Materials Technicians at the Station Level in at this time



Haz Mat team performing decon after a call.

## TECHNICAL RESCUE TEAM (TRT)

FWFD maintains four stations that serve as the primary high angle, confined space, structural collapse, and heavy rescue resources within the city.

The FWFD maintains a close working relationship with the Texas A&M Engineering Extension Service (TEEX), the Texas A&M Task Force 1 team (TxTF1), the North Central Texas Council of Governments (NCTCOG), as well as the cities that have mutual aid and automatic aid contracts with like disciplines. The FWFD Technical Rescue Team (TRT) has been involved with the Council of Governments efforts to simulate regional disaster drills that involve many other cities as well.

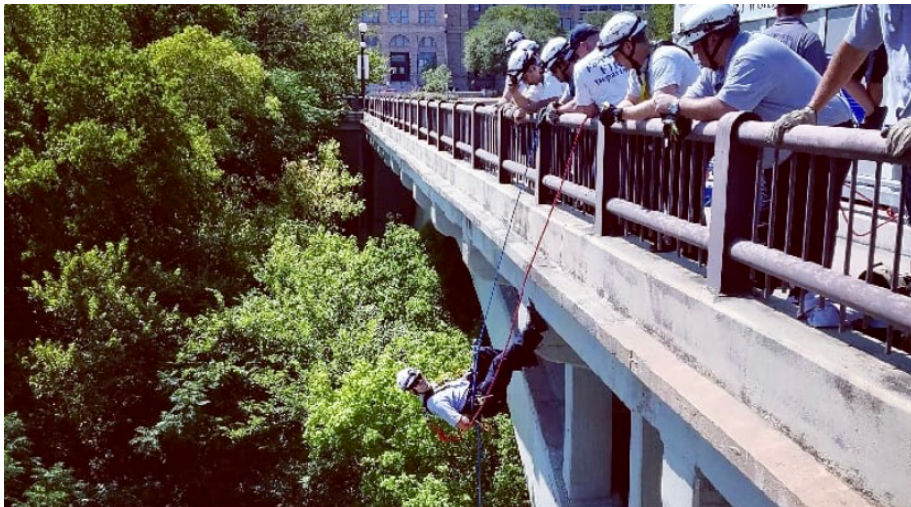
The FWFD team has many of the original founding members of Texas Task Force 1 and many more members currently on the Task Force Team. As a result, the TRT discipline has maintained this relationship with TxTF1 since its inception and regularly deploys with the team.

**111**

Active Members

**12**

TRT Trained Personnell per Day for Entire City



Squad 2 conducting rope training off the Main Street bridge.

Source: City of Fort Worth, Fire Department, 2021.

## SWIFT WATER & UNDERWATER SEARCH & RESCUE (SWUSAR)

The Swift-Water Attack Team concept was fully implemented in 2019, with the contingent ability of adding 1-4 additional Swift Water/Underwater Search and Rescue (SWUSAR) companies on an overtime basis. Each Swift-Water Attack Team has the ability to recall additional personnel to increase response capabilities for severe weather events or large-scale incidents.

Each of the two SWUSAR stations serve as front line fire suppression and EMS response companies as their primary responsibility. The SWUSAR teams are tasked with providing all technician-level water related search, rescue, and recovery capabilities in the City of Fort Worth. These capabilities are divided into two disciplines, swift-water or surface rescue and underwater or scuba diving rescue and recovery. The team also assists the FWPD with evidence search and recovery as requested.

The FWFD SWUSAR Team maintains a close working relationship with the State of Texas, Department of Homeland Security, and Texas A&M Task Force 1, rostering 18 swift-water technicians from the SWUSAR team that respond on a statewide and regional basis at their request. The FWFD team deploys with the Texas A&M Task Force 1 Water Strike Team (TxA&MTF1) on a regular basis.

The FWFD SWUSAR team also maintains a close relationship with the Fort Worth Drowning Prevention Coalition. FWFD Divers again took an active role in partnering with the Fort Worth Safe Communities Initiative. Team members partnered with Safe Kids Tarrant County / Cook Children's, Firefighters Charities, FWFD Fire Safety Education, Fort Worth Drowning Prevention Coalition, and Tarrant County YMCA.

**2**

Response Stations/SWUSAR Teams

**4**

Swift-Water Technicians per Team to Respond to High Water Rescues Citywide

## CAPITAL PLANS

FWFD currently provides emergency response services from 43 fire stations with two more stations expected to open in 2021 in far west and far north Fort Worth. FWFD also has 13 facilities from which it operates the following support functions: Training (2), Vehicle Services & Supply (4), Arson & Bomb Investigations, Bomb Range, Communications, Air/Self-Contained Breathing Apparatus Shop, and Administration. Additionally, three FWFD units are housed in shared City facilities – Joint Emergency Operations Center (JEOC) in the Zipper building downtown; Backup emergency communications underneath W. 10th Street downtown, and the Bureau of Fire Prevention Inspections unit in City Hall, Lower Level.

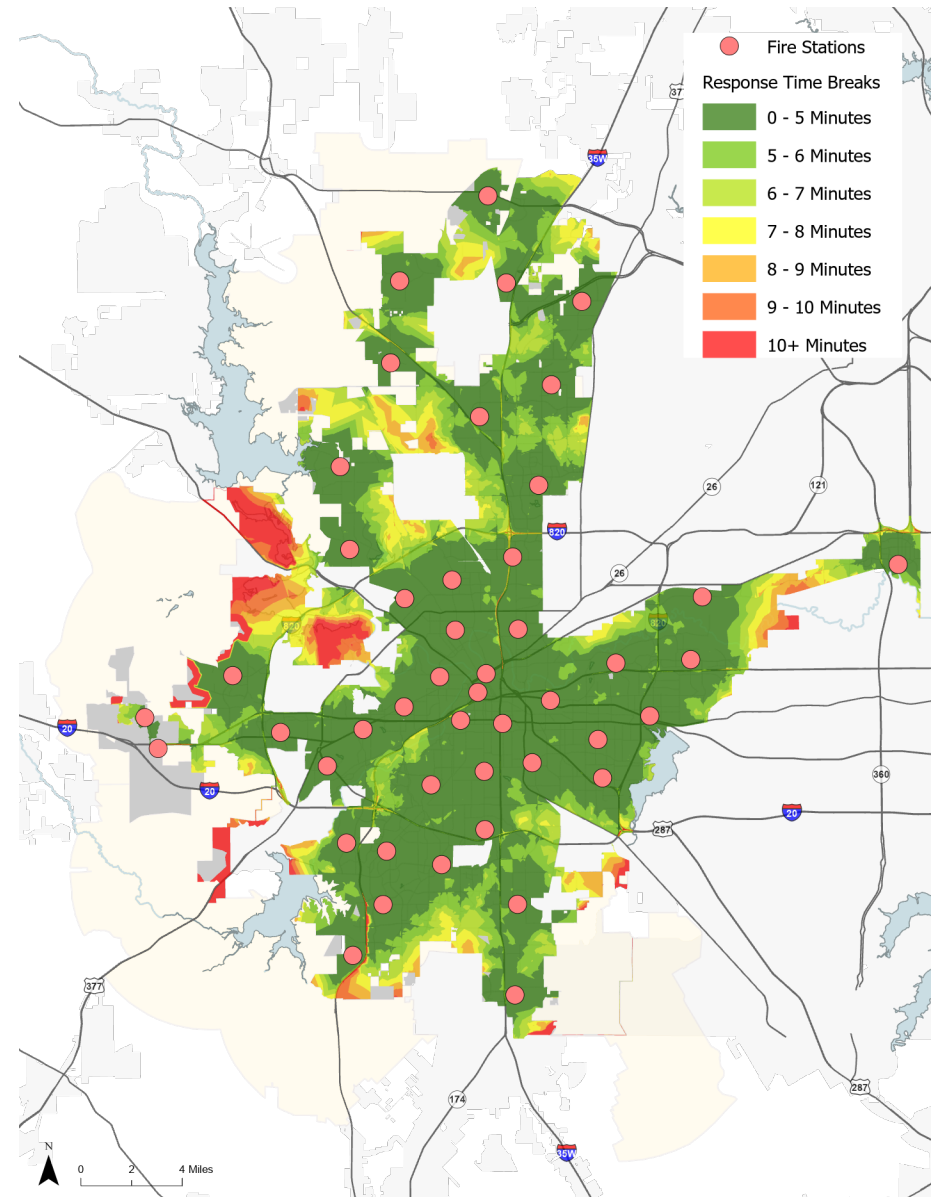
Driving the need for new or expanded FWFD facility projects in the future are the following factors:

- The continued geographic and population growth of the city.
- The need to begin replacing or expanding older, smaller fire stations built in the 1960s and early-1970s that are becoming functionally inadequate as well as a maintenance burden after 40-50 years in operation.
- The opportunity to “build-out” shell space available at the new Public Safety Training Center Complex to further expand training capabilities and to relocate other FWFD units to create operational efficiencies.
- The need to relocate and expand the Joint Emergency Operations Center (JEOC) and Fire Dispatch Center.

The following summarizes the department’s facility-related recommendations over the course of the next five years, as capital funding is identified:

- Construct a new fire station along the Chisolm Trail Parkway corridor in southwest Fort Worth;
- Renovate older stations due to significant structural issues and other age-related maintenance challenges;
- Build-out Fire Training facility shell space to include additional training capacity and the relocation of other Fire Department activities;
- Replace Fire Station 37, which was built in 1998 as a temporary facility;
- Purchase vacant property located adjacent to Fire Station 16 and construct a larger facility;
- Purchase property (if necessary) and replace the aging and functionally obsolete Fire Station 40 which the city inherited when Lake Country was annexed.

## EXISTING & FUTURE FACILITIES RESPONSE TIMES



Source: City of Fort Worth, Planning and Data Analytics Department, 2021.

The City of Fort Worth employed the following goals and strategies to serve and protect through education, prevention, preparedness, and response, as well as providing emergency medical services.

## GOALS

### 1 Operations

- Respond to and mitigate emergency and service calls in a timely and competent manner with adequate resources.
- Provide for a highly trained workforce that is adequately furnished with well-maintained equipment and facilities.

### 2 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.
- 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.

### 3 Executive Services

- Provide professional, timely, and thorough inspections and plans 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 strategies and skills.

### 4 Emergency Management

- Reduce the adverse impacts of emergencies and disasters through all-hazard preparedness programs and initiatives.
- Facilitate educational activities that 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.
- Strengthen our ability to plan for and provide assistance to special needs citizens.

## STRATEGIES

### *Fire Services Strategies*

- Increase the number of minority and female applicants through an aggressive recruiting program.
- 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.
- 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 Office of Emergency Management.

### *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.
- 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 the National Incident Management System (NIMS).