

# End of the Fiscal Year 2022 Report

February 2023

Dr. George Fleming



## Introduction

# Charlotte Fire Department Overview

## Mission Statement

The Charlotte Fire Department is called to serve all people by minimizing the risk to life and property through professional response, mitigation, prevention, education, planning and community partnerships.

## Values:

- |                     |  |
|---------------------|--|
| <b>ACCOUNTABLE</b>  | We are responsible to each other, our community, and ourselves to act at the highest level of professionalism. |
| <b>PROFESSIONAL</b> | We are dedicated to service excellence, respect to all, and inclusion in our community.                        |
| <b>PERSEVERANCE</b> | Despite difficulty or delay in achieving success, we are steadfast in accomplishing our mission.               |

## Motto:

**You Will Always Get My Best**

## Introduction

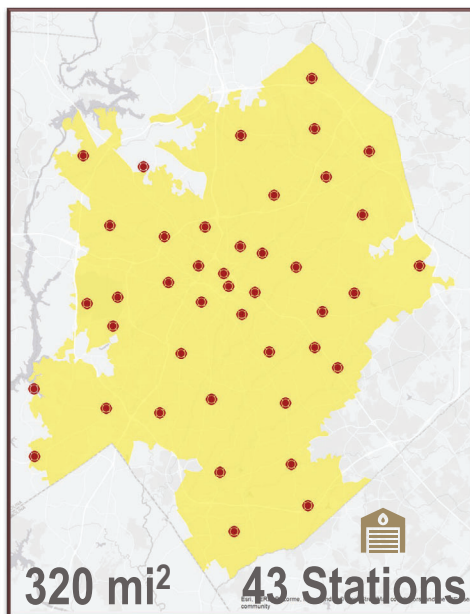
## Charlotte Fire Department Overview





Center for  
Public Safety  
Excellence

CFD is both internationally accredited by CPSE and holds an ISO Class 1 rating; this combination is achieved by less than 1% of US fire departments.

- 17 divisions
- 1,240 FTEs
  - 1,104 Operations
  - 136 Non-Operations



43	Engines	
16	Ladders	
2	Rescues	
3	HazMat (cross-staffed)	
8	Battalions	
1	Division Chief	
1	Safety Officer	

Minimum Daily  
Ops Staffing = **270**

3

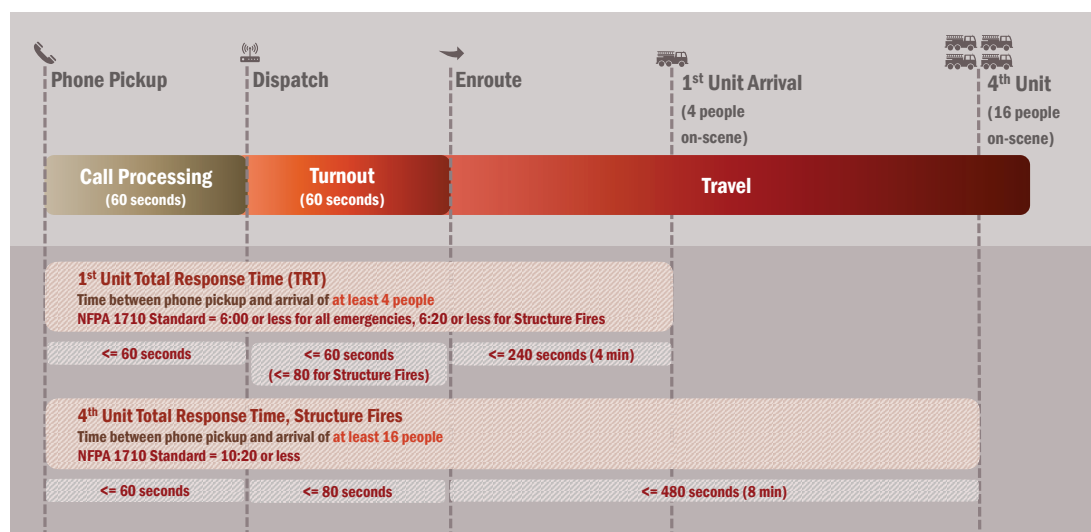
## Introduction

## How does CFD evaluate response time performance?

CFD evaluates response times at the 90<sup>th</sup> percentile.

This is based on industry-wide standards from the National Fire Protection Association (NFPA) that are backed by decades of research on the best ways to prevent loss of life and property.

The seconds shown for each time segment to the right indicate the 90<sup>th</sup> percentile benchmark. Another way to say this is that no more than 10% of emergencies should exceed the times specified for any category.



4

## FY22 Fast Facts

## CFD Operations



143,147  
incidents



2,578 | 668  
Fires | Structure Fires



91,442  
total EMS incidents

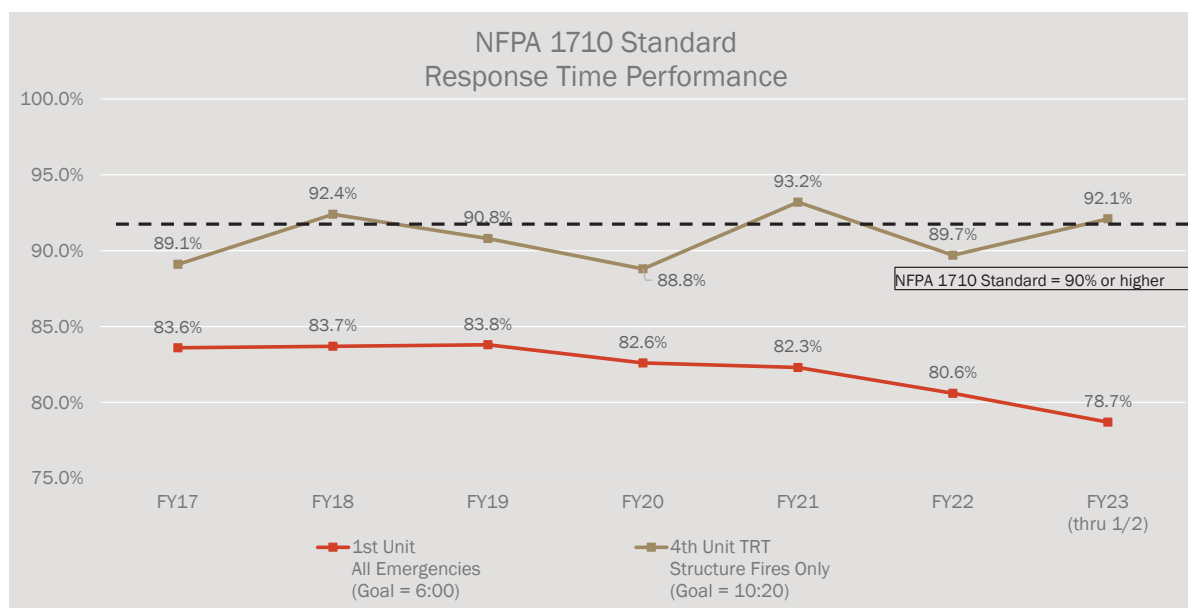


5

## FY22 Fast Facts

## CFD Operations

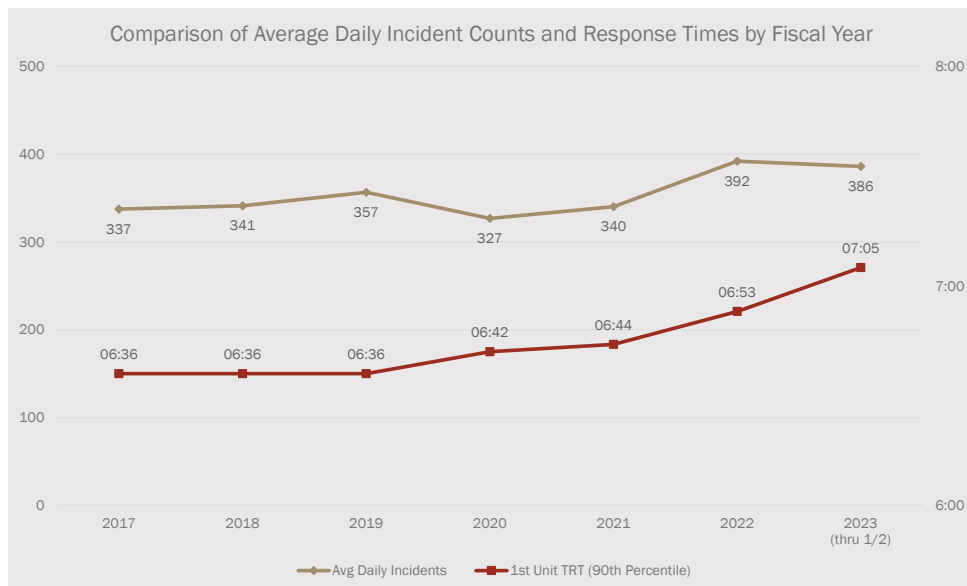
Per the NFPA 1710 Standard, all percentages in the chart below should be at least 90%



6

## Incident and Performance Trends

### Average Daily Incidents and Response Times by Fiscal Year (Most Current Data)



CFD 1<sup>st</sup>-unit TRT has increased annually since FY19, with the sharpest increases from FY21-FY23.

Although NFPA 1710 says TRT should remain at or below 6 minutes, CFD currently exceeds 7 minutes.

## FYI

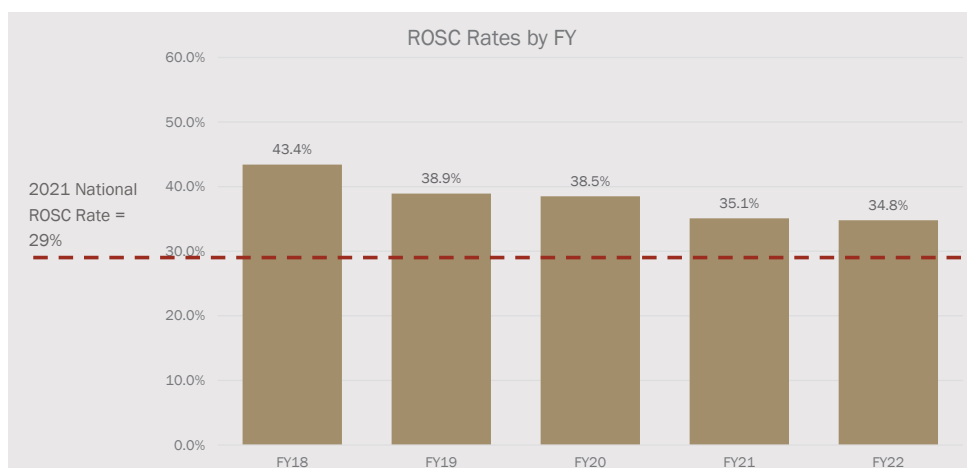
**FY20-FY21 incident volume dropped because of COVID-related shutdowns during 3 months of each FY.**

Response times reported here only include emergency incidents within CFD's jurisdiction and only include responses from engine, ladder, and rescue companies. FY17-22 times were updated 12/01/2022 to use the same methodology that CFD uses for department accreditation, which was implemented in 2021.

7

## Incident and Performance Trends

### Return of Spontaneous Circulation (ROSC) Success Rates



ROSC is most simply described as the CPR success rate, where a steady pulse is regained after cardiac arrest.

CFD's ROSC success rate has fallen annually since FY18. According to the 2021 CARES Report, the national ROSC rate was 29%.

Timely arrival of first responders (i.e., arrival within 6 minutes) is correlated to higher ROSC success rates.

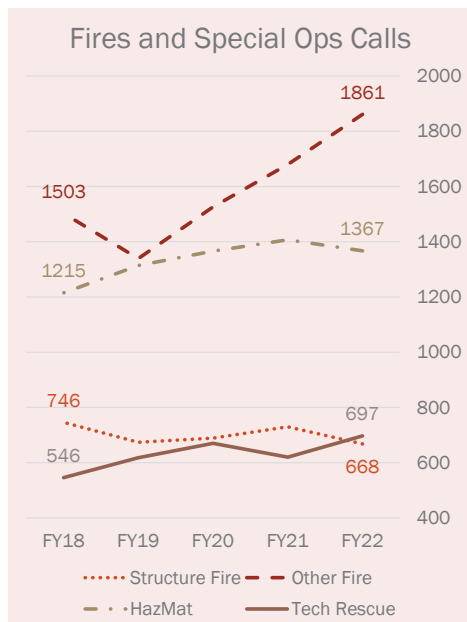
	FY18	FY19	FY20	FY21	FY22
Cardiac Arrests	751	668	806	936	810
ROSC	326	260	310	329	282
No ROSC	425	408	496	607	528

8



## Incident and Performance Trends

## Incident Volume by Type

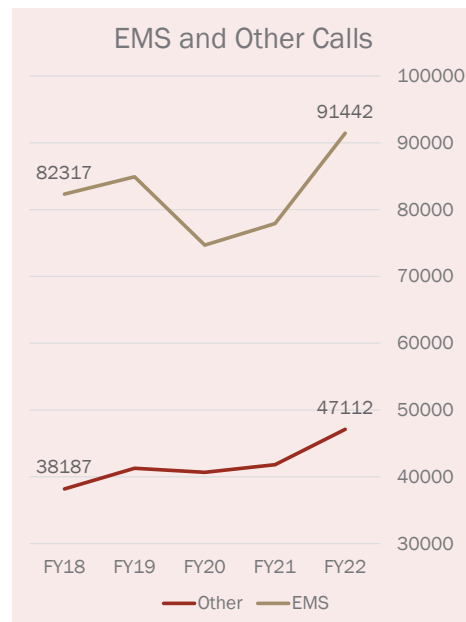


Since FY18, call volume trended upwards by 11 to 28% for all call types except structure fires, which fluctuate around 700 calls/year.

Fires and Special Operations calls (left) are less common but require more companies and more time per call.

EMS and Other Calls\* (right) are more common and usually require one company per call.

Call Types	5-Year Change
Structure Fires (fluctuates year-to-year)	-10%
Other Fires	+24%
Tech Rescue	+28%
HazMat	+13%
EMS	+11%
Other	+23%
<b>Overall</b>	<b>+15%</b>

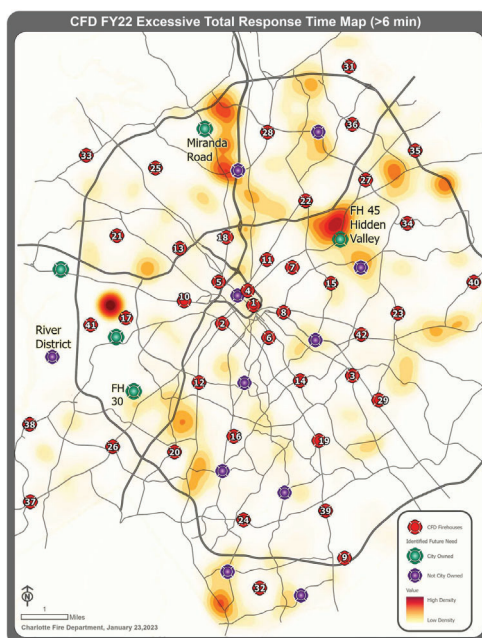


\*\*Other Calls\* Include service calls, false alarms, good intent calls, and all other call types not included elsewhere

9

## Incident and Performance Trends

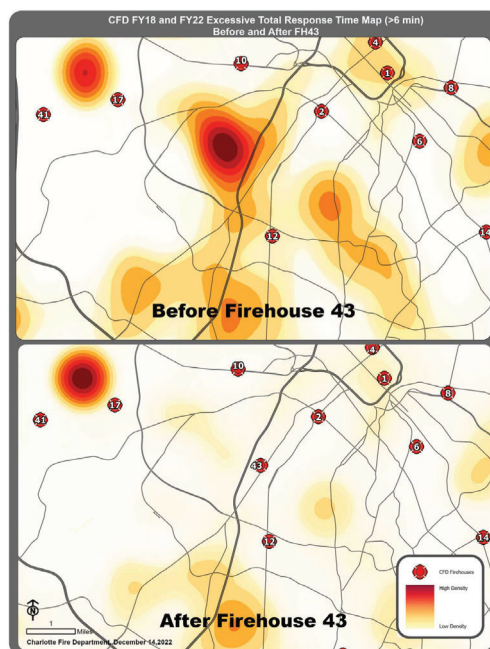
## Jurisdiction-Wide Excessive Response Heat Map



The left map indicates areas where CFD 1<sup>st</sup> due apparatus did not reach an emergency incident within the total response time standard of 6 minutes (described on slide 3).

Included on this map are all current firehouses as well as planned future firehouses.

On the right, two maps show the impact on excessive response density on an area following the placement of a new firehouse.



10

## FY22 Fast Facts

## Training Division



400,000+

training hours completed

CFD firefighters completed 400,505 hours of incident training in FY22.

Together, ISO and NC require at least 236-260 training hours per year, per firefighter (varies by rank and specialty assignments)



11

## FY22 Fast Facts

## Fire and Life Safety Education (FLSE)



100%

3<sup>rd</sup> grade classrooms visited

92 3<sup>rd</sup>-grade classrooms visited

450 additional fire safety outreach education programs

13 community canvasses, where CFD installed:

- 136 smoke alarms
- 103 carbon monoxide detectors
- 46 batteries
- 1 deaf and hard-of-hearing alarm

12



## FY22 Fast Facts

## Fire Marshal's Office | Fire Investigations



40,000+  
building inspections

## Fire Marshal's Office

Completed 40,706 building inspections

Completed 11,938 plan reviews and

4,599 construction inspections

42,499 inspectable properties total

## Fire Investigations

631 fires investigated

Achieved a 40.4% clearance rate for arson offenses. The national clearance rate is typically between 15-20%.

45 cases cleared by arrest

14 cases exceptionally cleared



13

## FY22 Fast Facts

## Fire Communications



180,108  
total phone calls

Dispatched 93.70% of all calls within 60 seconds or less AND 79.11% in 40 seconds or less.

December 24, 2022 was the busiest day on record for Fire Communications.

1,426 calls for help by phone

1,350 unique calls for service in CAD

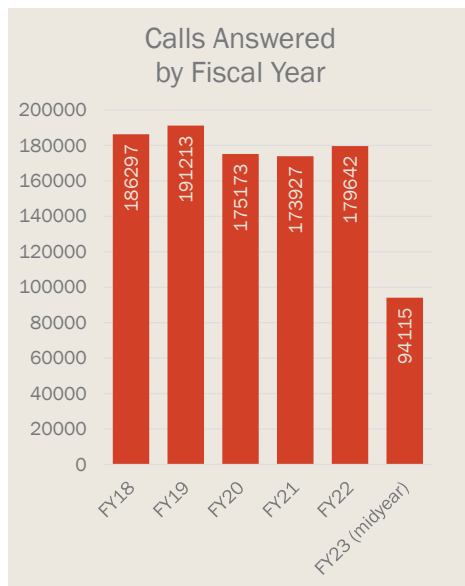
APCO (Association of Public-Safety Communications Officials) International  
2022 Team of the Year



14

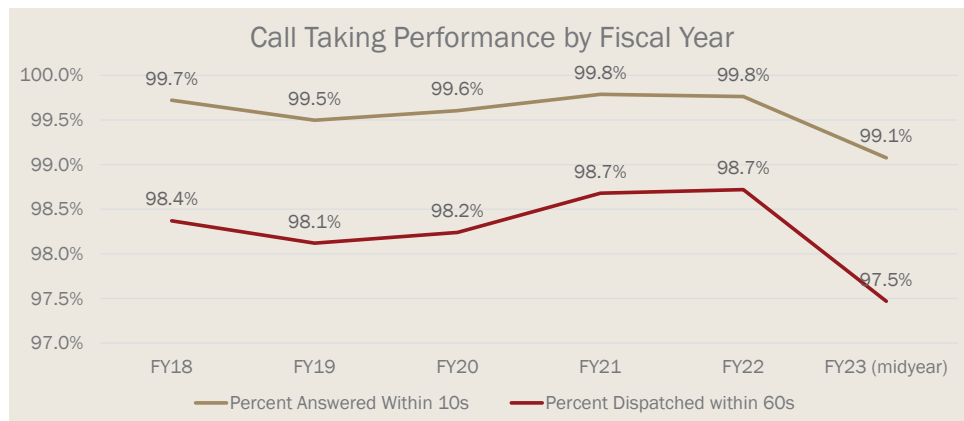
## Incident and Performance Trends

## CFD Alarm Call Taking Performance



If the last half of FY23 is similar to the first half, CFD Alarm can expect to answer over 188,000 calls in FY23.

Although call taking performance improved from FY18 to FY22, it fell in the first half of FY23. This also does not account for changes in call transfer time between agencies.



15

## FY22 Fast Facts

## Special Operations

## HazMat

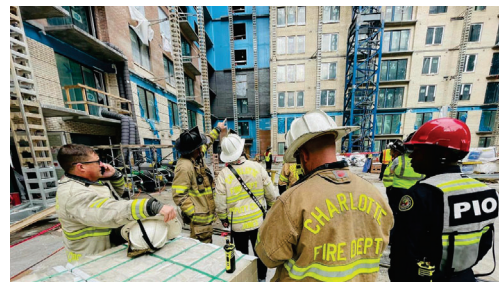
CFD's HazMat program focuses on protecting external and internal stakeholders from injury or death associated with fires and uncontrolled releases of hazardous and toxic material.

## Rescue

CFD's Rescue program is directed toward rescuing trapped or endangered persons from any life endangering cause (i.e. entrapment or pin-ins, structural collapse, water-based emergencies, confined space, trench collapse, and high angle rope rescue)

## PAC

The CFD PAC (Police Assist Company) also falls within our Rescue program.



16



## FY22 Fast Facts

# Charlotte-Mecklenburg Emergency Management (CMEMO)

The mission of the Charlotte-Mecklenburg Emergency Management Office (CMEMO) is to provide a comprehensive and integrated program that focuses on an all-hazard's approach to emergency management for the City of Charlotte and Mecklenburg County.

Hazards that CMEMO focuses on:

- Fire
- Explosions
- Natural Hazards
- Terrorism
- Workplace Violence
- Pandemic
- Cyber Attacks
- Civil Unrest
- Radiological Emergencies
- Mass Casualty Incidents



CMEMO also houses the Emergency Operations Center (EOC) which may be activated to support any event in Mecklenburg County and provides a location for coordination, communication, and the connection of resources.



17

## Community Engagement

## Camp Hornet's Nest & Camp Ignite



18



## Community Engagement

## Citizens' Fire Academy



19

## Community Engagement

## Donation Drives

Each year, CFD partners with community organizations and charities, such as Steve's Coats for Kids, School Tools, and the CMPD Explorers Toy Drive. We utilize 41 fire stations and CFD headquarters to serve as donation locations.



20



## Community Engagement

## Other Community Engagement Efforts



CFD participates in various other community events throughout the year, such as Halloween candy drops, parades, and fulfills various visit requests throughout the City.

In December, companies from Battalion 3 coordinated a full day of repelling at Levine Children's Hospital. By the end of the day, our members touched every window in the hospital, bringing smiles to the faces of patients, family members, and staff.

21



# Questions?