

# Colchester Fire & EMS

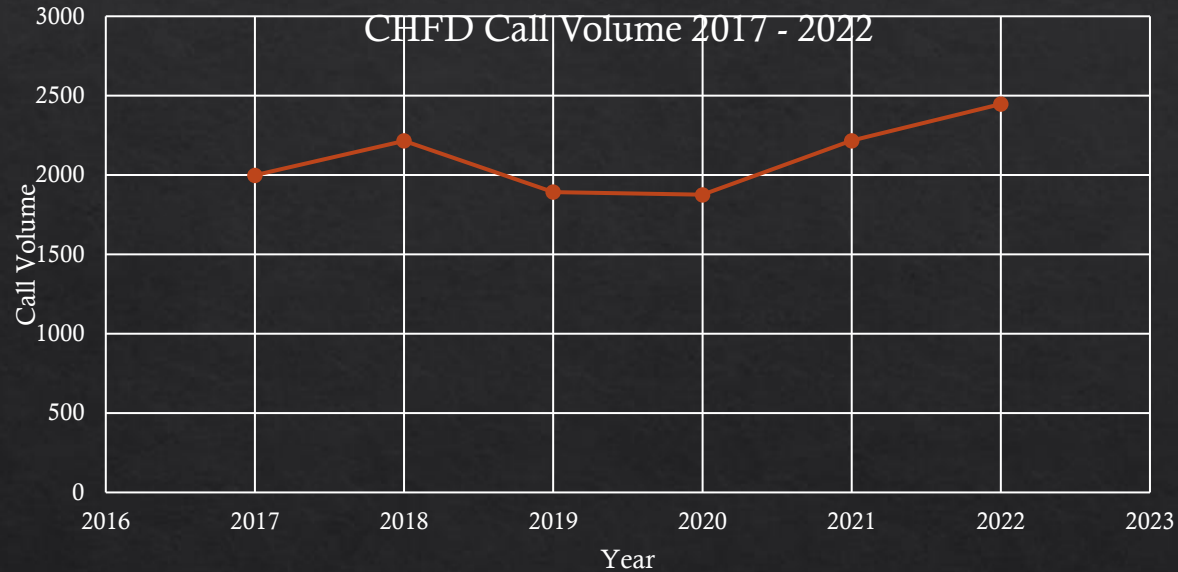
Budget FY 2023- 2024



# Department Overview - 2022

- ◇ The mission of Colchester Fire & EMS is to provide quality fire, rescue and medical services for the Colchester community with pride, dedication & excellence
- ◇ The department is a combination fire & EMS department comprised of both career and volunteer personnel
- ◇ **2022 Total Calls = 2,448 (10.42% increase from 2021)**
  - ◇ 570 Fire related responses
  - ◇ 1,878 EMS related responses
- ◇ Total Personnel Hours – Calls/Emergency = 13,466
- ◇ Training Drills - 160
  - ◇ Training Personnel Hours = 2,287

# Call Volume



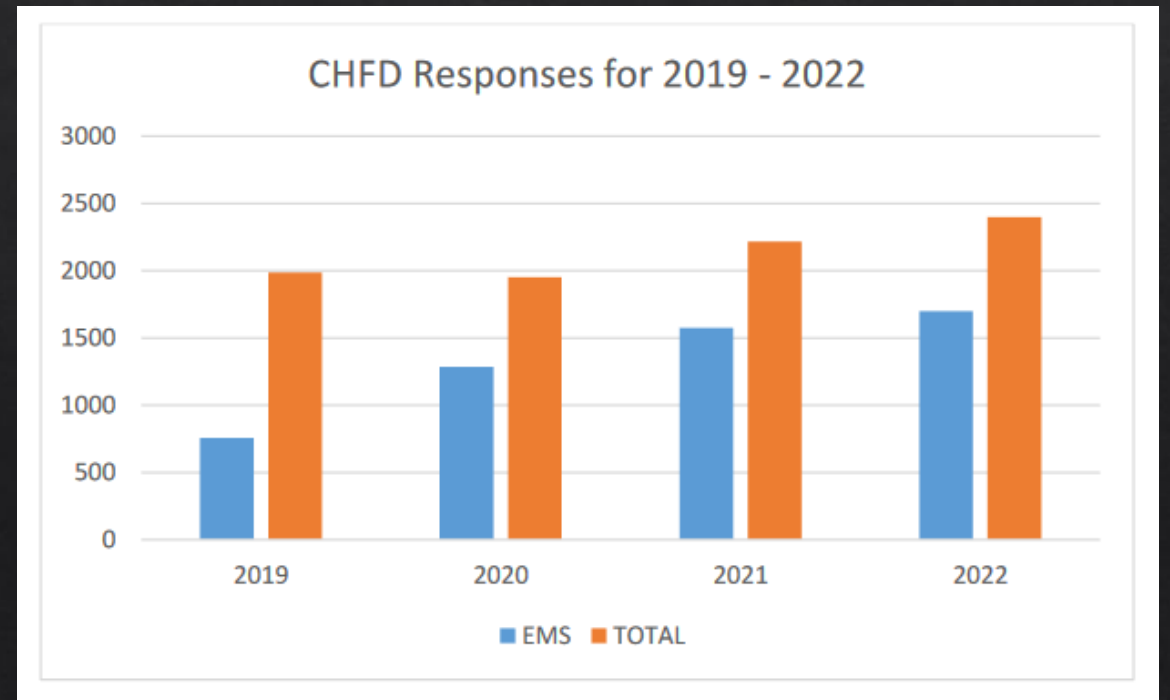
## Total Call Volume:

2019 = 1986

2020 = 1965

2021 = 2217

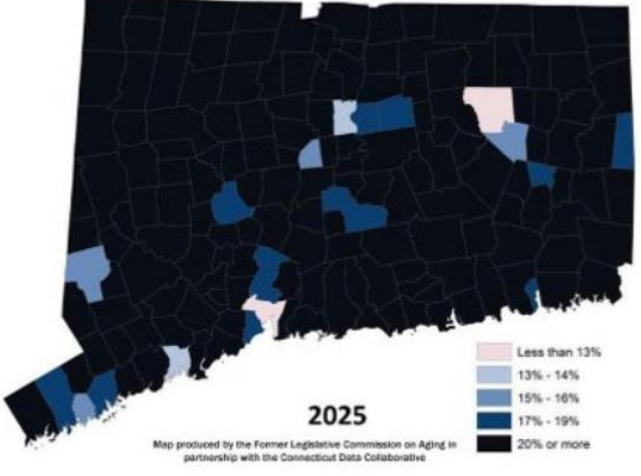
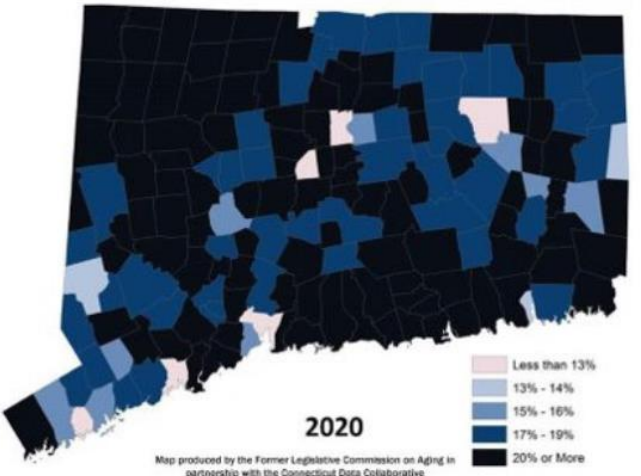
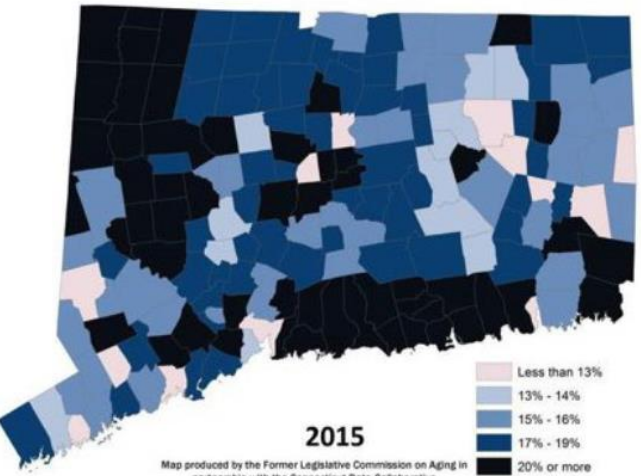
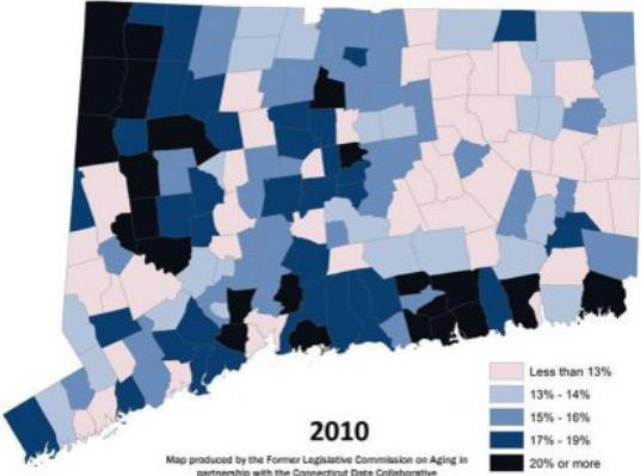
2022 = 2448





# Call Volume Increase

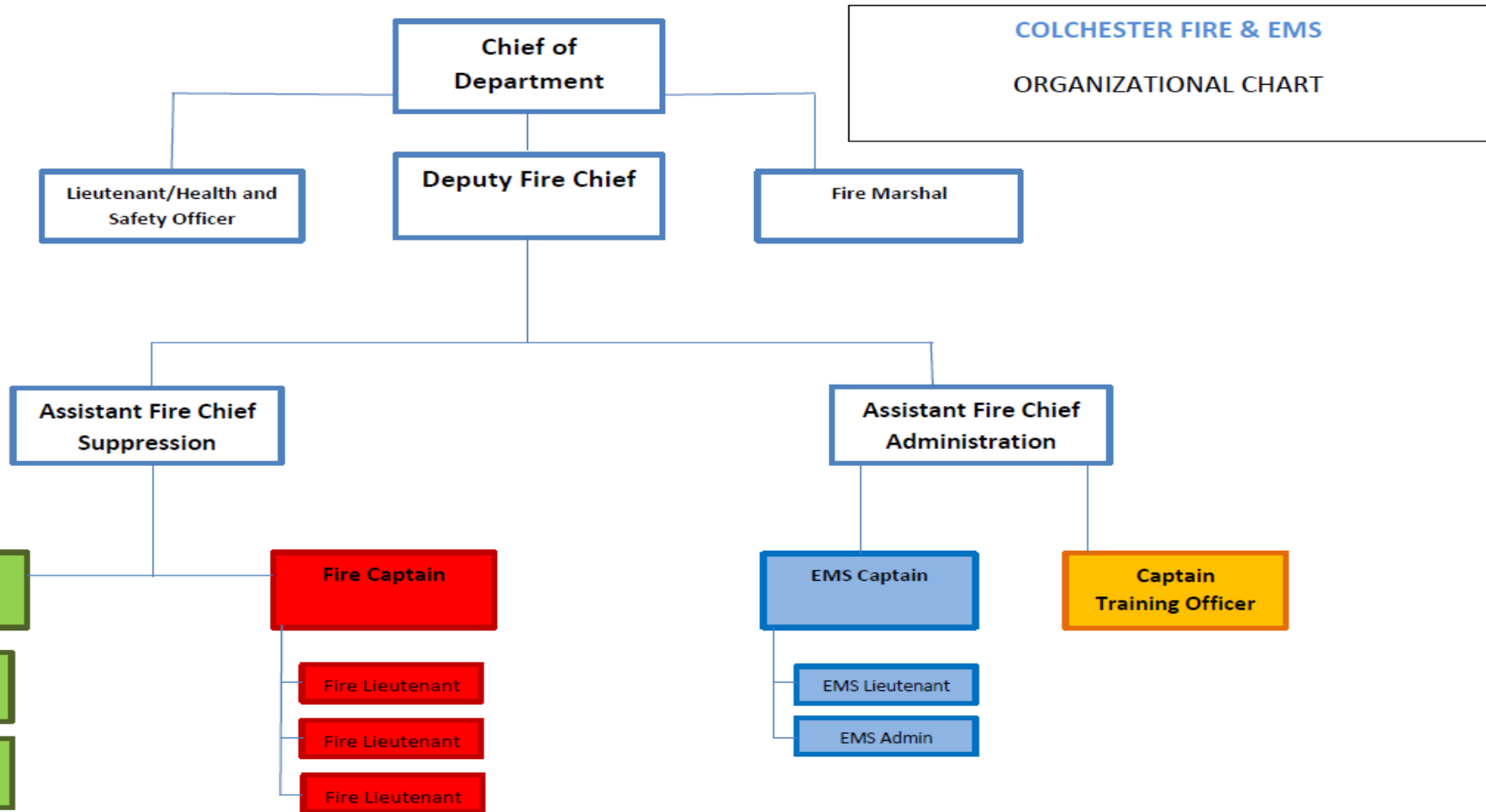
Percentage of Population Age 65 and over by Town



- 2020 Map produced by the Former Legislative Commission on Aging in Partnership with the CT Data Collaborative



# Organizational Structure



# Personnel Breakdown

## Paid Personnel

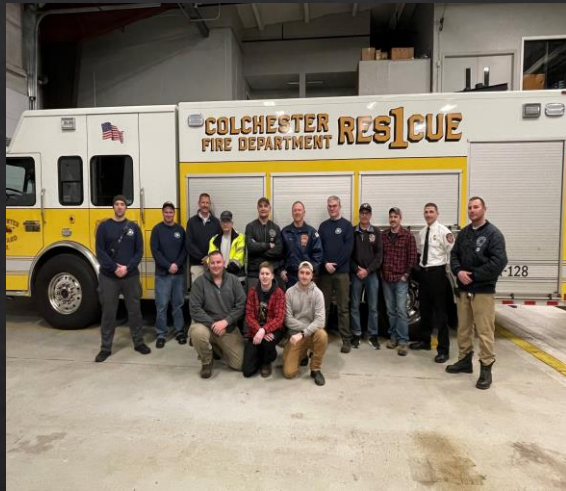
- ◇ Fire/EMS Chief (full-time)
- ◇ Deputy Chief (full-time)
- ◇ Fire Marshal (full-time)
- ◇ Administrative Assistant Fire/EMS (full-time)
- ◇ Lieutenant/Health & Safety Officer (full-time)
- ◇ Firefighter/Emergency Medical Technicians (6 full-time) Monday-Friday
- ◇ Firefighter/Emergency Medical Technicians (2 per diem) Saturday / As Needed

## Volunteer Personnel

- ◇ Volunteer Interior Firefighters – 25 (*Personnel who are trained / cleared to conduct fire suppression activities. 18 are EMR or EMT certified to provide medical care*)
- ◇ Volunteer Support Firefighters – 10 (*Personnel who are trained / cleared to provide exterior scene support. 7 are certified to provide medical care*)
- ◇ Volunteer Fire Police – 11 (*Personnel who are trained to assist with traffic control at emergency incidents. 4 are certified to provide medical care*)
- ◇ Volunteer Emergency Medical Technicians – 17 (*Personnel that can provide medical care at the basic life support level*)
- ◇ Volunteer Emergency Medical Responders – 3 (*Personnel who can provide medical care at the First Responder Level*)



# Our Personnel (It's What We Do!)





# Our Personnel (It's What We Do!)





# Accomplishments 2022 - 2023

- ◆ Provided support to Town sponsored events (*ex. Santa Ride, 5K Resolution Run, Airline Trail ghost Run, COVID supply distributions, Colchester Day*)
- ◆ Implementation of a new UTV and Marine unit for responses; Awaiting arrival of new fire apparatus, scheduled to arrive in September 2023
- ◆ Upgrade obsolete technology with much needed portable radio communications for officers and on all apparatus for personnel operating at emergency incidents.
- ◆ Updating of training requirements & policy to ensure skills & competencies are maintained while creating a quantity sufficient for a work/life balance to enhance volunteer personnel responses.
- ◆ Develop a Succession Plan to provide a roadmap for personnel interested in advancing in the department.
- ◆ Creation and adoption by the town of a Water Supply for Fire Protection Regulation providing a requirement for usable water for fire suppression in areas outside the hydrant system section of Colchester for new developments

# Accomplishments 2022 - 2023

- ◆ Provided 3 Community CPR & Stop the Bleed offerings FREE to residents at Fire HQ; 30 residents were trained
- ◆ Submission of a Assistance to Firefighter Grant (AFG) for the instillation of Vehicle Exhaust Direct Source Capture Systems at both fire stations
- ◆ Submission of a regional Assistance to Firefighters Grant (AFG) with 29 other fire departments in Connecticut for the enhancement and upgrade of communication on the state band 800 MHz radio system; includes portable and mobile radio devices.
- ◆ 15 Fire Safety & Education Events provided to the community with 631 contacts in attendance at the various offerings
- ◆ Smoke Alarm & Fire prevention CRR event held at Colchester Commons installing over 100 smoke alarms in over 50 homes.
- ◆ 11 new volunteers on probation; 3 new volunteer members going through on boarding process; 8 withdrawn/removed from the department



# Objectives 2023-2024

- ◆ Continued focus on volunteer recruitment and retention; Completion of a study for development of a Strategic Master Plan to focus on future facility, equipment and staffing needs for a Colchester; Addition of 2 career Firefighter/EMTs to provide coverage 24 hours a day, 7 days a week.
- ◆ Continue to provide quality training at a quantity that ensures skills and competencies are maintained, but not to excessively utilize personnel time creating a manageable work/life balance.
- ◆ Provide training and development on the leadership & management for the fire department utilizing outside vendors
- ◆ Develop a partnership with the Colchester School system to provide an in school program to provide exposure to fire & ems services to high school students
- ◆ Rebranding and marketing of the fire department; Communications and clarity on the volunteer fire company and the fire department; Creation of a culture that is all-inclusive and attractive for personnel to want to be a part of
- ◆ Continue development of the Community Risk Reduction Program to reduce risk and decrease calls for service

# Objectives 2023-2024

- ◆ Continually seek Federal Grant Opportunities to support Colchester Fire & EMS Mission and needs
- ◆ Offer quarterly Community CPR free to the public; Offer Fire Safety Training and education to the community
- ◆ Enhance communication capabilities by aligning with the state radio system for interoperability with town departments and mutual aid partners
- ◆ Creation and maintenance of procedures and policies that align with the department mission to ensure continuity and uniformity throughout the organization
- ◆ Quarterly and annual evaluation reviews of department statistics and services to ensure service provided are meeting the communities expectations as well as industrial standards
- ◆ Create and maintain a fiscally responsible operation budget to assist in the growing needs of the fire department; creation of a seven year capital plan that illustrates and establishes improvement needs of facilities, apparatus and equipment.
- ◆ Review and update the current agreement with the volunteer fire company to reflect the current needs of the department and town with relation to services provided, reimbursements, recruitment/retention, etc



# State of CT EMS Overview

## EMS FUNDING

In most states, the state EMS office serves as the overall EMS administrative entity with planning, coordination, and leadership responsibilities, as well as a regulatory role for EMS agencies and personnel. It is usually located in a health-related department of state government, though may also be found in a public safety division or independent board structure. The 2016 NASEMSO report *Funding Assistance Guide*<sup>6</sup> provides a detailed description of state EMS office funding sources that may be mentioned in this section.

### State Funding Sources

What is the most recent annual budget (in dollars) for the state EMS office from each of the following state sources?

- State general fund
- State dedicated fund
- Ambulance vehicle fees
- EMS agency licensure fees
- EMS professional licensing fees
- Traffic tickets/motor vehicle related fees
- Other fees
- Private grants/donations
- Other state grants/contracts
- Other special state funds



### Total Funding Amounts by State

Table 60

State	Total Amount	State	Total Amount	State	Total Amount	State	Total Amount
AK	\$4,067,600	DE	\$13,964,566	KS	\$2,350,000	MP	\$0
AL	\$3,570,879	FL	\$8,231,430	KY	\$2,444,000	MS	\$2,541,423
AR	\$153,000	GA	\$4,064,637	LA	\$868,985	MT	\$1,739,100
AS	No Response	GU	\$0	MA	\$3,940,000	NC	\$4,800,000
AZ	\$3,219,700	HI	\$105,673,929	MD	\$16,202,500	ND	\$0
CA	\$15,300,000	IA	\$1,172,565	ME	\$1,287,881	NE	\$2,710,668
CO	\$10,409,600	ID	\$2,523,000	MI	\$5,850,000	NH	\$0
CT	\$250,000	IL	\$6,491,377	MN	\$4,874,000	NJ	\$0
DC	\$220,000	IN	\$745,935	MO	\$318,216	NM	\$800,000

<sup>6</sup> <https://nasemso.org/nasemso-document/nasemso-funding-assistance-guide-for-state-ems-offices-28mar2016/>

- ❖ Per the 2020 National EMS Assessment, CT is ranked 43 out of 45 states that submitted for EMS funding
- ❖ The state is unable to financially support EMS in CT
- ❖ Connecticut's EMS system is financially reliant on volunteer labor, which has been insufficient to maintain adequate staffing levels for decades
- ❖ EMS needs to be funded locally, based on community needs and expectations
- ❖ Ambulance Fees are collected by the department and go into the General Fund
  - ❖ 2020 = \$490,914
  - ❖ 2021 = \$501,164
  - ❖ 2022 = \$648,010
  - ❖ 2023 (projected) = \$740,000



# Colchester EMS Provider Overview

## Available Personnel

Volunteer Emergency Medical  
Technicians – 34

Volunteer Emergency Medical  
Responders – 9

## Responding Personnel/ Ambulance Staffing

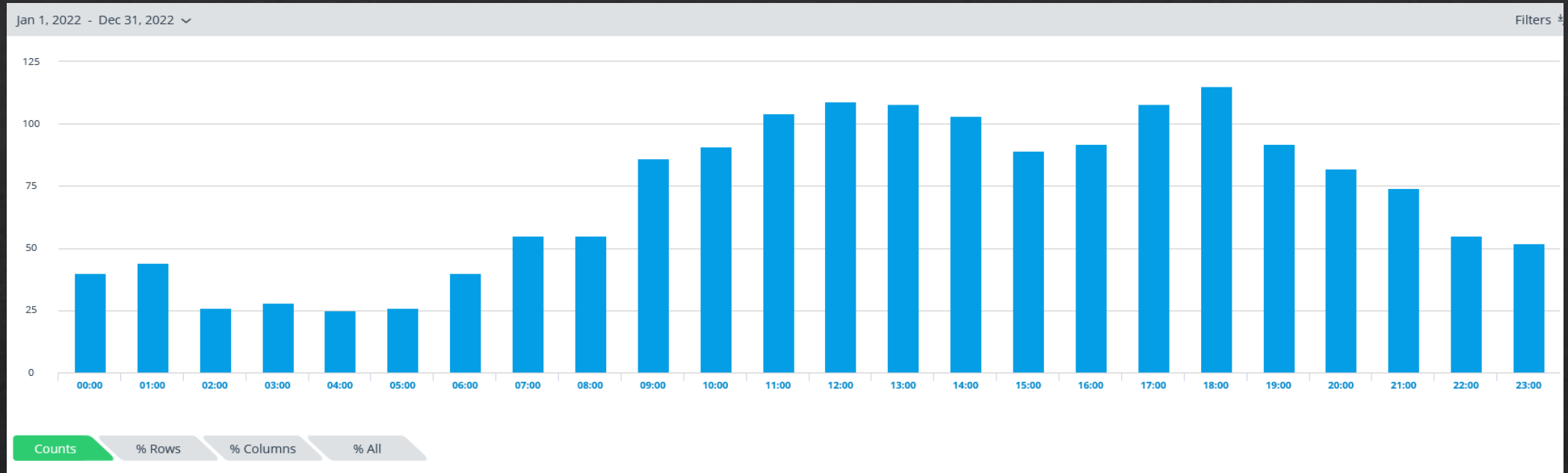
About 15 (35% of the available  
medically certified volunteers) cover  
EMS calls on the ambulance at  
various attendance levels

**1.878 EMS Calls for 2022**

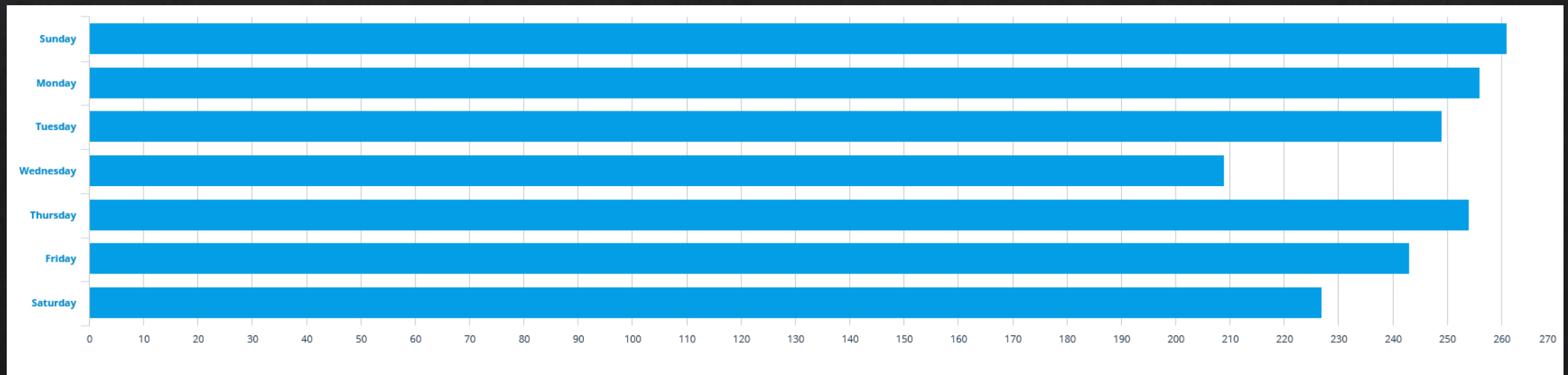


# EMS Measurable Matrix

## Time Of Day:



## Day of Week:



# EMS Measurable Metrix

Average Overall Response Times – EMS = 9:13 Minutes  
(Turnout & Travel Time)

*49% of responses were less than 8 minutes*

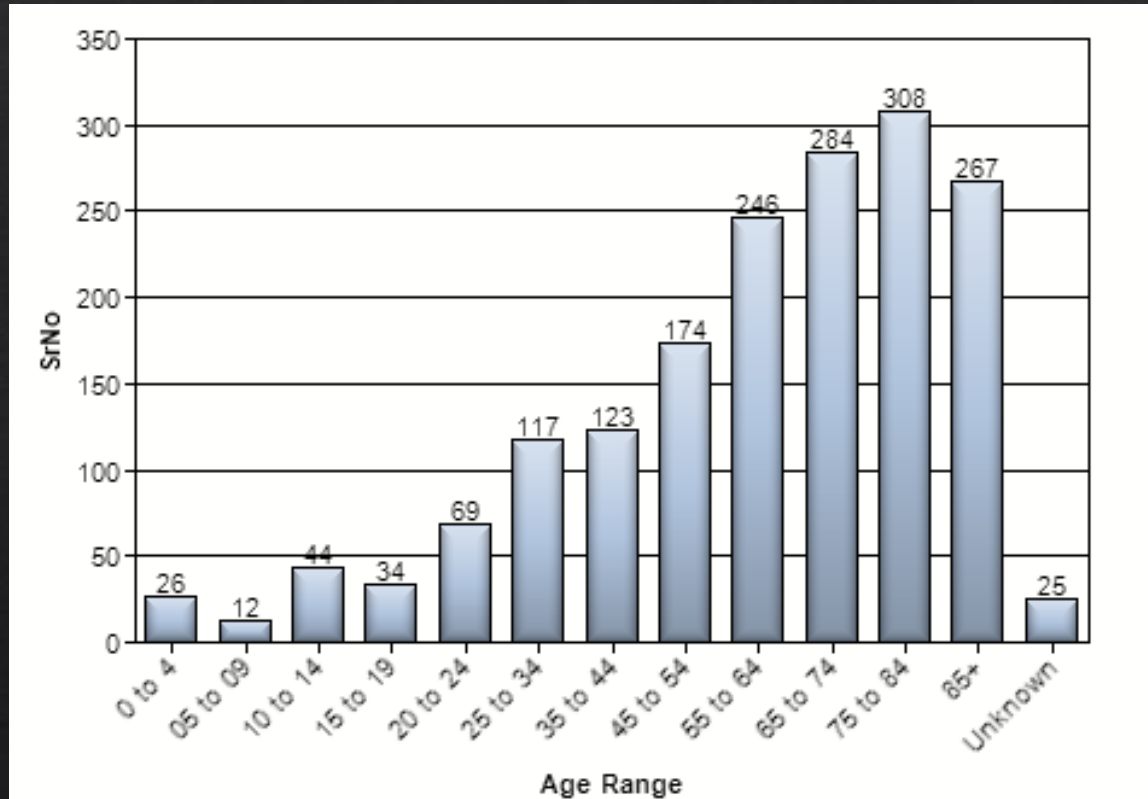
Colchester LEMSP Performance Standard = Priority 1/7 Min; Priority 2/9 Min

*Average On Scene Time = 11:58 minutes*

*Average Total Call Time = 58:23 minutes*

Average Overall Response Times – Fire = 8:18 Minutes  
(Turnout & Travel Time)

Response time meets NFPA 1720 – 2020 Edition for Rural Community (<500 per sq mile Population for rural communities)





# Colchester Fire Provider Overview

## Available Personnel

- Volunteer Interior Firefighters – 25
- Volunteer Support Firefighters – 10
- Volunteer Fire Police – 11
- Per Diem Personnel - 2
- Career Interior Firefighters – 8
- Career Support Firefighters – 2

**Average Turnout for Volunteer Interior Firefighters for Significant Incidents in 2022 = 7/8**

**ISO (Insurance Service Office) references a 1/3 factor for career personnel and volunteer personnel**

**1 Career = 3 Volunteer**

*\*Side Note, Colchester maintains a Class 4 ISO Rating\**

*Volunteer response to ALL emergencies reveal a majority of the members responding to 1-5% of the incidents, the next largest number responding to 5-20% of calls; minimal responding to 20%+*

**Table 4.3.2 Staffing and Response Time**

Demand Zone <sup>a</sup>	Demographics	Minimum Staff to Respond <sup>b</sup>	Response Time (minutes) <sup>c</sup>	Meets Objective (%)
Urban area	>1000 people/mi <sup>2</sup> (2.6 km <sup>2</sup> )	15	9	90
Suburban area	500–1000 people/mi <sup>2</sup> (2.6 km <sup>2</sup> )	10	10	80
Rural area	<500 people/mi <sup>2</sup> (2.6 km <sup>2</sup> )	6	14	80
Remote area	Travel distance ≥ 8 mi (12.87 km)	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

<sup>a</sup>A jurisdiction can have more than one demand zone.

<sup>b</sup>Minimum staffing includes members responding from the AHJ's department and automatic aid

<sup>c</sup>Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.

2020 Edition

### 4.3 Staffing and Deployment.

4.3.1 The fire department shall identify minimum staffing requirements to ensure that the number of members that are available to operate are able to meet the needs of the department.

4.3.2\* Table 4.3.2 shall be used by the AHJ to determine staffing and response time objectives for structural firefighting, based on a low-hazard occupancy such as a 2000 ft<sup>2</sup> (186 m<sup>2</sup>), two-story, single-family home without basement and exposures and the percentage accomplishment of those objectives for reporting purposes as required in 4.4.2.

# NFPA 1710 Response Staffing Model



**Occupancy Type:** Single-Family Dwelling  
**Deployment:** Minimum of 16 members or 17 if aerial device is used

The initial full alarm assignment to a structure fire in a typical 2000 ft<sup>2</sup> (186 m<sup>2</sup>), two-story, single-family dwelling without a basement and with no exposures must provide for a minimum of 16 members (17 if an aerial device is used).



**Occupancy Type:** Open-Air Strip Mall  
**Deployment:** Minimum of 27 members or 28 if aerial device is used

The initial full alarm assignment to a structure fire in a typical open-air strip shopping center ranging from 13,000 ft<sup>2</sup> to 196,000 ft<sup>2</sup> (1203 m<sup>2</sup> to 18,209 m<sup>2</sup>) in size must provide for a minimum of 27 members (28 if an aerial device is used).



**Occupancy Type:** Garden-Style Apartment  
**Deployment:** Minimum of 27 members or 28 if aerial device is used

The initial full alarm assignment to a structure fire in a typical 1200 ft<sup>2</sup> (111 m<sup>2</sup>) apartment within a three-story, garden-style apartment building must provide for a minimum of 27 members (28 if an aerial device is used).



**Occupancy Type:** High-Rise  
**Deployment:** Minimum of 42 members or 43 if building is equipped with fire pump

The initial full alarm assignment to a fire in a building with the highest floor greater than 75 ft (23 m) above the lowest level of fire department vehicle access must provide for a minimum of 42 members (43 if the building is equipped with a fire pump).

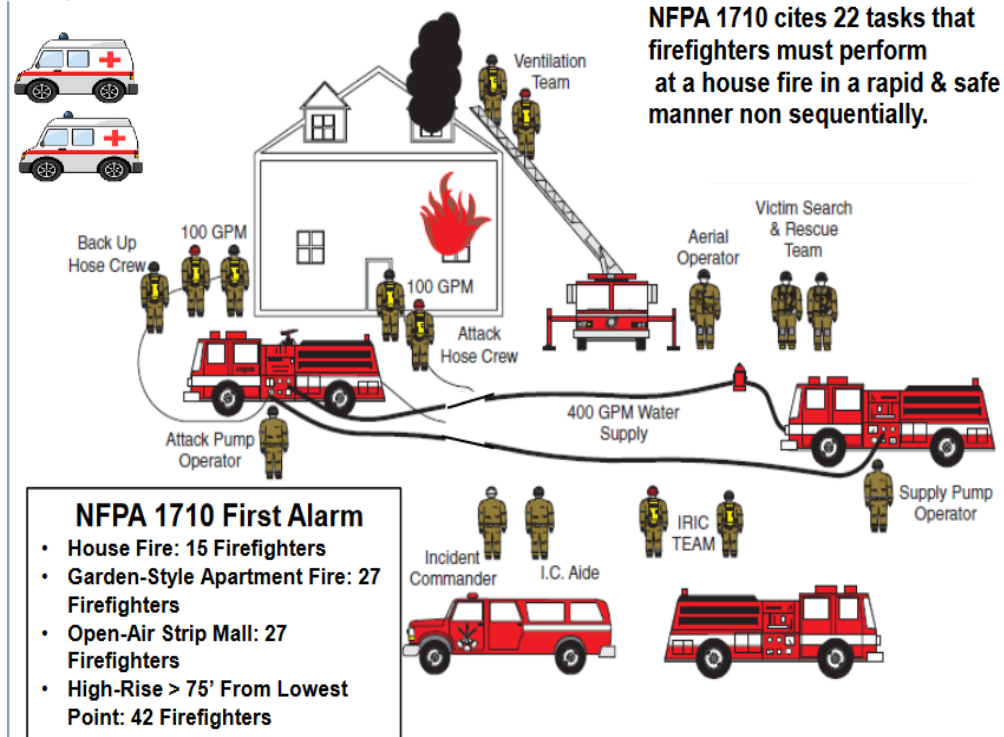


FIGURE 1-1. INITIAL FULL-ALARM ASSIGNMENT CAPABILITY DEPLOYED WITHIN EIGHT MINUTES (480 SECONDS)

# Structure Fire Personnel Recommendations

## SOP 100-320

### Recommended Minimum Staffing Levels **One Story Structure Responses**

NO FIRE GROUND SUPPORT PERSONAL ARE REPRESENTED IN THE MINIMUM STAFFING REQUIREMENT. THEY ARE A SIGNIFICANT FACTOR IN THE DEPLOYMENT AND OPERATION OF EQUIPMENT.

<u>Single Story Residential (No Basement)</u> HYDRANT DISTRICT		<u>Single Story Residential (No Basement)</u> NON HYDRANT DISTRICT	
Incident Command	1	Incident Command	1
Operations Officer	1	Operations Officer	1
Safety Officer	1	Safety Officer	1
Accountability Officer	1	Accountability Officer	1
1 <sup>st</sup> Engine Pump Operator	1	1 <sup>st</sup> Engine Pump Operator	1
Initial Fire Attack (1 ¾")	2	Initial Fire Attack (1 ¾")	2
Water Supply Hydrant person	1		
2 <sup>nd</sup> Engine Pump Operator	1	2 <sup>nd</sup> Engine Pump Operator	1
Back Up Hose line (1 ¾")	2	Back Up Hose line (1 ¾")	2
Water Supply Hydrant person	1		
Ladder Company		3rd Engine Pump Operator	
Ventilation (Horizontal)	2	Drop Tank Engine	1
Ventilation (Vertical)	3	Ladder Company	
Search Crew	2	Ventilation (Horizontal)	2
		Ventilation (Vertical)	3
2in / 2 Out	2	Search Crew	2
RIT	4	Tanker Driver/Pump Operator	1
EMS / Rehab (2 units)	4	4 <sup>th</sup> Engine Water Supply (Drafting)	2
<b>Total Personnel Needed</b>	<b>25 -27</b>	Drop Tank Operations	2
		2in / 2 Out	2
		RIT	4
		EMS / Rehab (2 units)	4
		<b>Total Personnel Needed</b>	<b>30 -32</b>
		3-5 Mutual Aid Tankers / Tenders	
		<b>Additional Personnel</b>	<b>6-10</b>
		4 <sup>th</sup> and 5 <sup>th</sup> due Engine Companies	
		Rural water fill sites	
		<b>Additional Personnel</b>	<b>3-6</b>

### Recommended Minimum Staffing Levels **Two Story Structure Responses**

NO FIRE GROUND SUPPORT PERSONAL ARE REPRESENTED IN THE MINIMUM STAFFING REQUIREMENT. THEY ARE A SIGNIFICANT FACTOR IN THE DEPLOYMENT AND OPERATION OF EQUIPMENT.

<u>Two Story Residential (Fire 1<sup>st</sup> floor)</u> HYDRANT DISTRICT		<u>Two Story Residential (Fire 1<sup>st</sup> floor)</u> NON HYDRANT AREA	
Incident Command	1	Incident Command	1
Operations Officer	1	Operations Officer	1
Safety Officer	1	Safety Officer	1
Accountability Officer	1	Accountability Officer	1
1 <sup>st</sup> Engine Pump Operator	1	1 <sup>st</sup> Engine Pump Operator	1
Initial Fire Attack (1 ¾")	2	Initial Fire Attack (1 ¾")	2
2 <sup>nd</sup> Floor exposure (1 ¾")	2	2 <sup>nd</sup> Floor exposure (1 ¾")	2
Water Supply Hydrant person	1		
2 <sup>nd</sup> Engine Pump Operator	1	2 <sup>nd</sup> Engine Pump Operator	1
Back Up Hose line (1 ¾")	2	Back Up Hose line (1 ¾")	2
Water Supply Hydrant person	1	3rd Engine Pump Operator	
Ladder Company		Drop Tank Engine	1
Ventilation (Horizontal)	2	Ladder Company	
Ventilation (Vertical)	3	Ventilation (Horizontal)	2
Truck Company (fire floor)	2	Ventilation (Vertical)	3
Search Crew	2	Truck Company (fire floor)	2
2in / 2 Out	2	Search Crew	2
RIT	4	Tanker Driver/Pump Operator	1
EMS / Rehab (2 units)	4	Water Supply Engine (Drafting)	2
<b>Total Personnel Needed</b>	<b>29 -31</b>	Drop Tank Operations	2
		2in / 2 Out	2
		RIT	4
		EMS / Rehab (2 units)	4
		<b>Total Personnel Needed</b>	<b>32 -34</b>
		3-5 Mutual Aid Tankers / Tenders	
		<b>Additional Personnel</b>	<b>6-10</b>
		4 <sup>th</sup> and 5 <sup>th</sup> due Engine Companies	
		Rural water fill sites	
		<b>Additional Personnel</b>	<b>3-6</b>



Thirty years ago, you had on average about 14 to 17 minutes to escape a house fire, according to Underwriters Laboratories (UL). Today, with the prevalence of synthetic materials in the home, occupants have roughly **2 to 3 minutes** to get out.



# New Budget Initiative Highlight

- ◆ The fire department is looking to increase its headcount by two Career Firefighter/EMTs for coverage 24/7
  - ◆ Last increase in personnel was 2020
    - ◆ Needed for 24 hour coverage on the weekdays (Monday – Friday)
  - ◆ This increase in personnel of 2 career firefighters will provide 24 hours coverage weekdays and on the weekends (Saturday & Sunday)
    - ◆ One to start in July 2023 – Full Year Payroll
    - ◆ One to start in January of 2024 – Half year payroll
    - ◆ FICA, Life Insurance, LTD

# Volunteer Staffing Snapshot

- ◇ In 2010, the department reported as having 110 volunteer personnel
- ◇ In 2016, the department reported 75 volunteer personnel
- ◇ Currently, the department has 66 volunteer personnel, providing varying levels of service based on training, ability, etc
- ◇ In October 2021, career personnel were put on weekends to augment the declined responses in volunteer personnel
  - ◇ Resulted in an overtime budget of over \$205,000
- ◇ May 2022, Per Diem Staff were hired to assist in weekend coverage
  - ◇ Hired 10 per diem, currently down to 2 (1 FF/EMT & 1 EMT)

# National Statistics

- ◆ NFPA reports 29,452 fire departments in the United States
  - ◆ 2,785 are career
  - ◆ 18,873 are all-volunteer
  - ◆ 5,335 are Mostly Volunteer with Career
  - ◆ 2,459 are Mostly career with volunteer
- ◆ all-volunteer or mostly-volunteer departments decreased from 26,797 in 1986 to 24,208 in 2020, a decrease of 10 percent.
- ◆ North Carolina noted a 22% decline in volunteers in the past two years
- ◆ According to the [National Volunteer Fire Council](#), 65% of firefighters are volunteers. The council reports that over the past 30 years, the number of volunteer firefighters across the country has declined, while call volume continues to increase.



Thank you for your Time

Any Questions?