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FIRE SERVICES REVIEW SPECIAL COMMITTEE

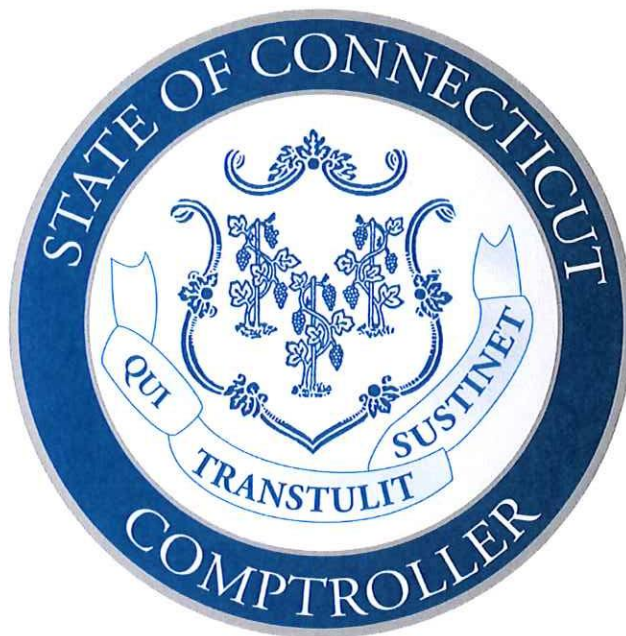
SPECIAL MEETING AGENDA

THURSDAY, MAY 29, 2025 6:00 P.M. WPD TRAINING ROOM (41 AVERY LANE)

1. Establishment of quorum; call to order; introduce new Advisory member
2. Public Comment
3. Consideration and possible action on the RTM's charge to the committee (RTC 6/7/21):
Review issues including performance, policies, and staffing and present their findings/recommendations on any changes needed to enhance public safety, creating a steering document and strategic plan.
 - a. Receive/review existing comments on second half of report
 - b. Consider and act upon releasing draft report to new Fire Services Director for review and comment
 - c. Consider and act upon releasing draft report to RTM for information and status
4. Determine remaining meeting schedule to provide adequate review time, incorporate existing comments, and address gaps.
5. Adjournment

RECEIVED FOR RECORD
WATERFORD, CT
2025 MAY 28 | A 9:36
ATTEST: *[Signature]*
TOWN CLERK

encl: research provided by FSRSC member Williams:
OSC Firefighters Report
NIST Report Summary – Travel Times



OFFICE of the STATE COMPTROLLER
Special Examination
on Firefighters

Comptroller Sean Scanlon
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Telephone: (860) 702-3300

MAY 2025

PREFACE

You may be wondering why the Comptroller's office is publishing a report on the state of Connecticut's fire service. The answer is both personal and professional.

My grandfather, Joseph LaValle, was a New Haven firefighter. In 1964, to my family's great pride, he became the first firefighter in the history of the city to win the Medal of Valor non-posthumously for saving the lives of several people in a fire on Grand Avenue. For most of my early life, I thought I would be a firefighter and was a Fire Explorer in high school. Life took a different path, but my interest in and support of the fire service never changed.

As Comptroller, I oversee two key benefits for many Connecticut firefighters: their healthcare and their pension. It's my job to serve as administrator of both the Partnership Plan (health insurance for municipal workers) and the Municipal Employees Retirement System (municipal pension), and I've worked hard to improve both since taking office in 2023.

In 2024, the legislature passed a bill creating a task force to study firefighter recruitment and retention. It never came together, yet the issue remains an urgent priority for every city and town in the state. Given the work we do on pensions and healthcare, I decided to form the task force within our office.

The first step of fixing any problem is understanding the problem. Thanks to the hard work of our team, especially Policy Analyst Brandon Young, we surveyed fire departments across the state and conducted the first meaningful census of the fire service in decades. The following report outlines what we found.

Now our real work must begin, and I am proud to be working with the Joint Council, Commissioner Ronnell Higgins from the Department of Emergency Services and Public Protection, and the legislature to take this data and actually begin to fix the problems this report draws attention to.

In honor of my grandfather and in partnership with our state's tremendous fire service leaders, I'm proud to be doing this work.

Sean Scanlon, State Comptroller



INTRODUCTION

Firefighters provide innumerable benefits to our communities. Whether it be the protection of our homes and businesses, defense against wildfires, or extricating survivors in a crash, firefighters form an integral link that shields our residents from danger when they need it most.

Unfortunately, firefighter recruitment and retention is a statewide crisis.

The data we collected shows that fewer people are pursuing firefighting as a career, and demographic shifts have led to a significant decrease in volunteers across the state.

Firefighting also comes with a host of long-term risks. A study conducted by the National Institute for Occupational Safety and Health found that firefighters have a 14%-202% higher risk for a host of cancers depending on the type. These risks, combined with the slow erosion of health and pension benefits due to budget constraints in many of our communities, may be deterring those interested in pursuing firefighting as a career.

As a result, Connecticut is facing a serious shortage of firefighters and especially in our rural communities. Pomfret, for example, has seen an over 50% drop in their volunteers.

And in the other corner of the state, the Tarringford Volunteer Fire Department in Torrington announced its closure effective April 1, 2025. This has forced departments in the area to draft new coverage plans and further stretch existing fire resources thin.

Using data collected from departments statewide, this report delves into the specifics of Connecticut's firefighting landscape. To hit at the root causes of the recruitment and retention crisis, we must establish an understanding of how the state's fire departments are laid out. This report will also touch on our official estimates on the number of firefighters, as well as data on their age and location. The report concludes with recommendations based on the survey's findings.

How was data collected?

Between August 2024 and February 2025, The Office of the State Comptroller (OSC) reached out to chief elected officials in each municipality to survey each of their fire



INTRODUCTION

departments. After an initial round of data collection, individualized follow-ups were conducted until a sufficient turnout rate was achieved (163/169 municipalities (96%) submitted at least one response to the survey). The departments that did not respond were either industrial departments or small volunteer departments located in rural areas of the state.

What is a “fire department”?

Various terms to describe a grouping of firefighters are commonly used (i.e., “department,” “company,” “brigade,” etc.). **For the purposes of this report, a fire department is a distinct entity offering its own firefighting services that possesses a unique set of bylaws and is tasked with a distinct coverage area.** A fire department can also be in control of multiple “stations,” which are facilities that belong to a particular fire department.



SPECIAL EXAMINATION ON FIREFIGHTERS

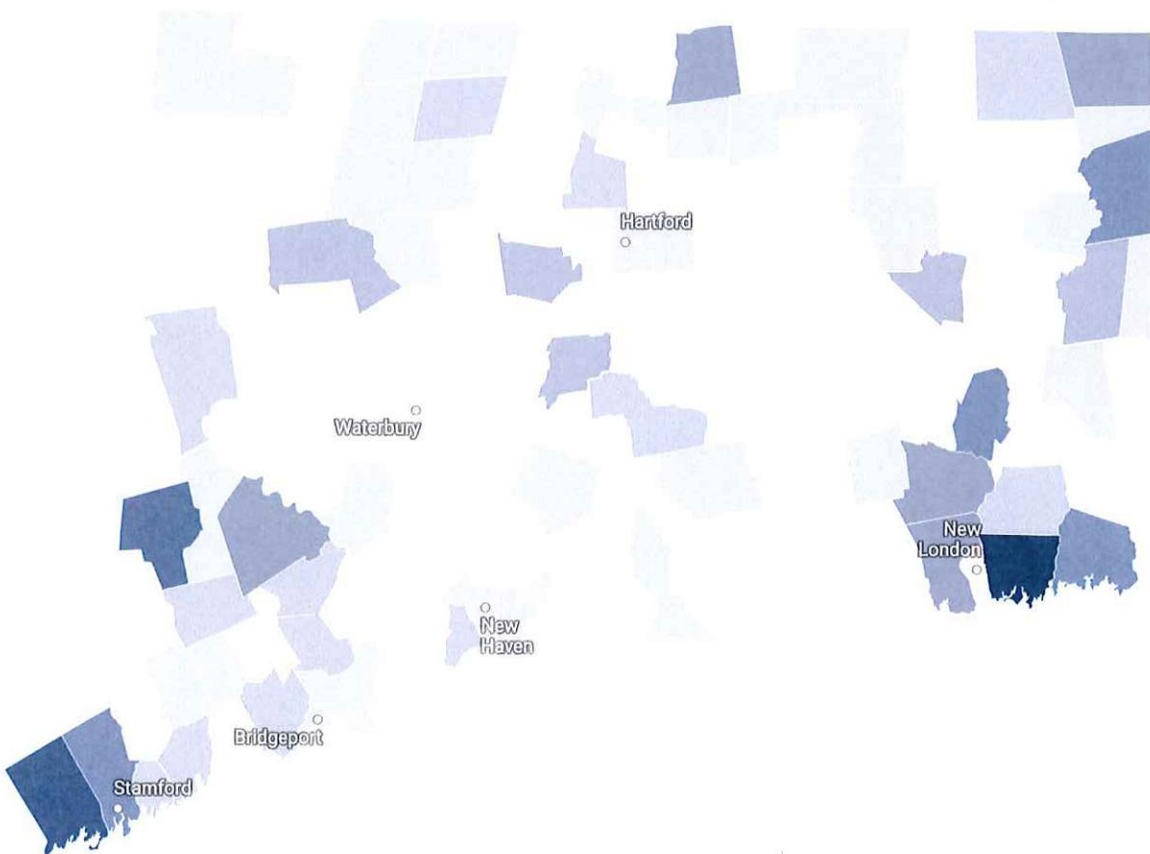
How many fire departments does Connecticut have?

Using the definition of “fire department” outlined above, Connecticut has 300 fire departments as of May 1, 2025. Groton has the most fire departments with 11, followed by Greenwich with 8, Danbury with 7, and Stamford and Killingly with 6.

The number of fire departments is expected to decrease as the state continues to struggle with volunteer recruitment and retention. Thinning volunteer ranks have accelerated this trend in recent years with departments either consolidating or shutting down entirely.

A disproportionately high number of fire departments is seen in Fairfield County, southeastern New London County and northeastern Windham County. This can be explained by the fact that municipalities in these areas contain a high number of distinct neighborhoods (e.g., Rowayton in Norwalk or Mystic in Groton/Stonington) that historically had a fire department established to serve that specific part.

Number of Fire Departments by Municipality



SPECIAL EXAMINATION ON FIREFIGHTERS

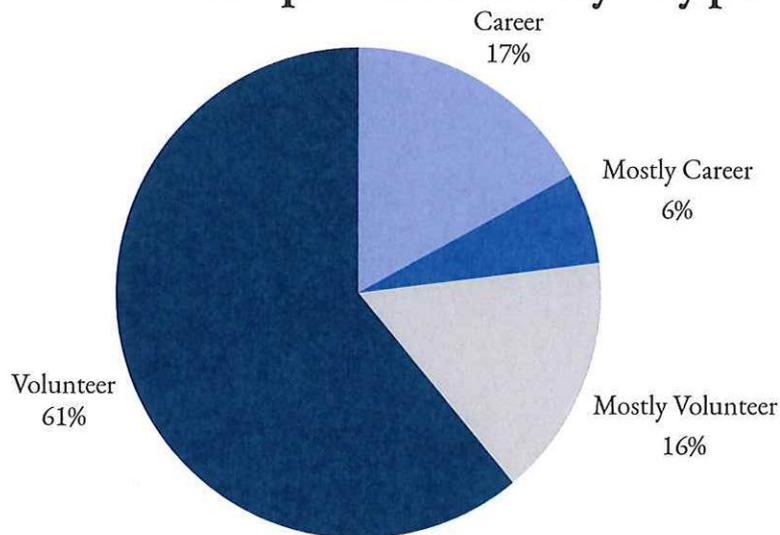
What types of fire departments does Connecticut have?

- **Municipal Volunteer Departments:** These are departments solely staffed by uncompensated members. Firefighters may, however, receive incentives such as a tax abatement, length of service or pay-per-call stipend, volunteer firefighter pension, and other such minimal reimbursement. Municipal Volunteer Departments make up 61% of fire departments in Connecticut.
- **Municipal Career Departments:** These are departments with staff that receive salaried/wage compensation for all services, including full- or part-time personnel. Career departments make up the smallest grouping at 17%.

- **Combination Departments:** These are departments that contain both volunteer and career staff. Combination departments either have a majority volunteer force that is augmented by a few full-time personnel (“Mostly Volunteer” Departments) or mainly have career firefighters with a volunteer division (“Mostly Career” Departments). These represent 22% of departments in the state.

- **State Departments:** These are departments that are operated under a state entity and not under a municipality. All state departments contain fully career staff. State Departments consist of most of the state airports, the National Guard, and UConn.
- **Federal Departments:** These are departments that are operated under a federal entity. Practically speaking, this applies to the Naval Submarine Base New London in Groton, which employs an all-career staff.
- **Private/Industrial Departments:** These are departments that are operated by a non-governmental entity. Nearly all departments in this category are fully career. Private/Industrial Departments are mainly operated by larger manufacturing/chemical processing companies.

Connecticut Fire Departments by Type



SPECIAL EXAMINATION ON FIREFIGHTERS

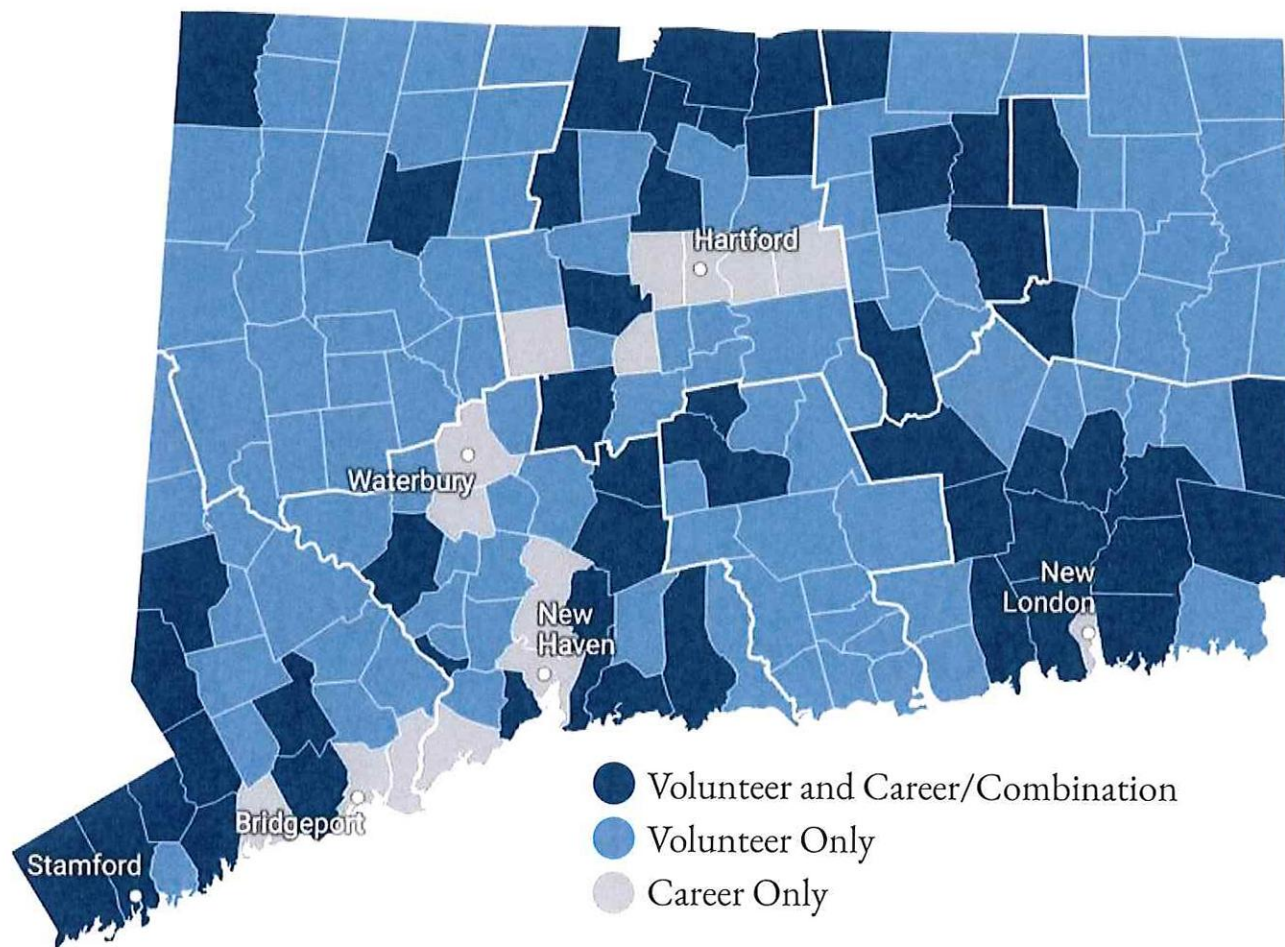
What types of fire departments are contained within each municipality?

Volunteer departments are interspersed throughout the state but are the predominant type seen in rural areas (Litchfield and Windham Counties). 88 out of the 169 municipalities in the state only contain a fully volunteer department.

Concentrated mainly in Fairfield County, northern Hartford County, and New London County (66 municipalities) are fully career departments supported by one or more smaller fully volunteer departments that cover a specific neighborhood.

Municipalities with only career departments operating within them are exclusively restricted to the state's largest cities and their immediate suburbs; only 15 out of 169 municipalities fall into this category

Connecticut Fire Department Type by Municipality

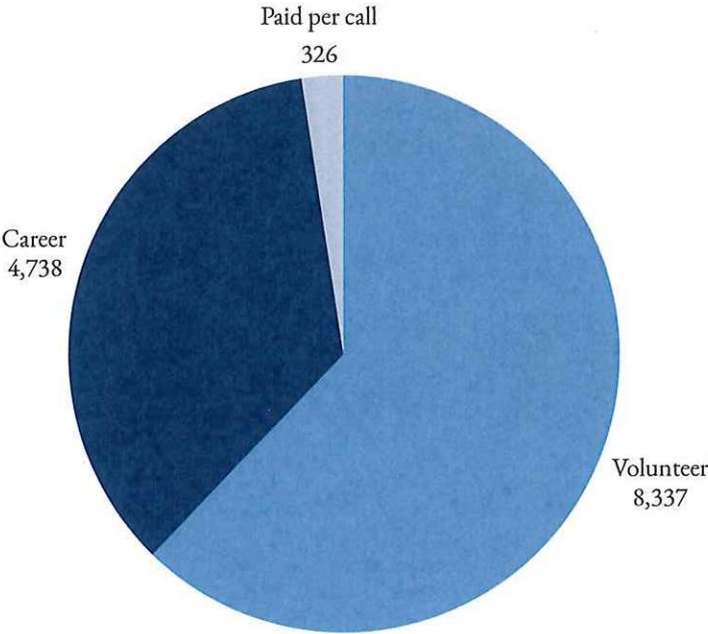


SPECIAL EXAMINATION ON FIREFIGHTERS

How many firefighters are there in Connecticut?

Our final estimates provide sobering insights into the severity of Connecticut’s dwindling firefighting forces. The last major estimate to be made on the state’s firefighting population was by the Connecticut State Firefighters Association (CSFA) during 2016-2017. CSFA had estimated the total number of firefighters to be 26,800 with a sizable volunteer force of 22,350. In just eight years since these estimates, the number of firefighters in the state has decreased by 50%, with Connecticut losing an alarming 62.7% of its volunteer force.

Number of Connecticut Firefighters by Type



Firefighter Type	2016-2017 CSFA Estimate	2025 OSC Estimate	% Change
Volunteer	22,350	8,337*	-62.7%
Paid per call	N/A (not counted)	326	N/A
Career	4,450	4,738	+6.5%
Total	26,800	13,401	-50%

*1,818 of these firefighters were designated by their departments as both volunteer and paid per call. The below row represents those who were reported as only paid per call.

Interestingly, the number of career firefighters actually increased by 6.5% in the same timeframe. This uptick in the face of precipitous declines can be attributed to two factors:

- 1. Municipal Volunteer Departments still need to provide an adequate response to calls even with depleted ranks. Along with mutual aid, these departments have



SPECIAL EXAMINATION ON FIREFIGHTERS

increasingly needed to augment their lack of volunteers with a contingent of career staff. This has also led to an increase in Combination Departments.

2. Those who are interested in firefighting could be dissuaded from joining volunteer forces due to the absence of benefits/incentives. Municipal Volunteer Departments that can offer benefits (i.e., \$7.50 per call, \$1k/year stipend, property tax abatement, etc.) often don't translate well to the needed time commitment. As a result, these recruits will often either start in a volunteer force and move to a career department or go straight to a career department where the benefits (such as healthcare and a pension) are either better or more guaranteed.

Connecticut's demand for firefighting services has not lessened since 2017. Our state has continued to grow in population, and recent increases in extreme weather have increased Connecticut's risks of wildfires and severe flooding.

How do Connecticut's firefighters compare nationwide based on average age and age distribution?

Compared to the rest of the nation, Connecticut's firefighters are slightly older on average. The state's volunteer force averages 40.5 years old, 2 years older than the national average of 38.5 years old, while career firefighters are closer to the average (only 1.29% older). If you differentiate between fully career and combination departments, though, combination departments come in slightly higher at 39.2 years old, and fully career departments are actually below the national average—just barely—at 38.2 years old.

Age Range of Firefighter	% in each age range, nationally*	% in each range, Connecticut	% difference
<30	23%	9%	-60.86%
30-49	50%	83%	+66%
50-59	17%	6%	-64.7%
>60	10%	2%	-80%

*Source: [National Fire Protection Association](#)



SPECIAL EXAMINATION ON FIREFIGHTERS

Connecticut's firefighter age distribution indicates that the state is suffering from a lack of age diversity across the board. While 23% of firefighters in the nation are under 30, only 9% of CT firefighters are in this age group. Fewer younger individuals joining could be indicative of a lower desirability to pursue firefighting right after high school. Likewise, the state's firefighting population is narrowly concentrated towards those who are between 30-49 years old with the difference being 66% higher than the nation. Age groups that are 50 and above are dramatically lower in proportion than the nation. This strongly suggests that firefighters in Connecticut become full members in their early thirties and relinquish fire suppression duties by the time they hit 60.

How many personnel are there overall, and what are their average ages?

For clarity, these are the definitions of non-firefighting personnel:

- Junior/Cadet: These are minors in training/leadership programs. While extremely common with volunteer and combination departments, only 3% of junior/cadet members are part of a fully career department.
- Probationary Members: These are new members who are in the process of completing training to become a firefighter.
- Civilian/Non-Certified Staff: These are members who accomplish maintenance or administrative tasks but do not engage in fire suppression response.

Personnel Type	Number of Personnel	Average Age
Firefighters	13,401	39.75
Junior/Cadet	852	16.2
Probationary Members	934	27.7
Civilian/Non-certified Staff	1,186	49.5
Total	15,521	

An interesting takeaway from this data is the fact that there is a “gap” between the time an individual graduates as a cadet to when they become a probationary member of roughly 11 years (since most junior/cadet programs end at 17). Much of this gap can be explained because of schooling. Individuals who are 18-22 largely enroll in post-secondary education and are likely unable to become firefighters then. Focus should be applied to target potential recruits between 23-27 years old to become probationary members. This presents a large pool of people who are currently underrepresented in Connecticut firefighting ranks compared to the nation.



RECOMMENDATIONS

The Department of Emergency Services and Public Protection (DESPP) is in the process of creating a Strategic Plan for the fire service in Connecticut. That plan, which requires additional funding to be completed, will feature comprehensive recommendations and a roadmap for the future of the fire service. The Comptroller's office is pleased to be part of this process.

In the meantime, the below recommendations will inform both the Strategic Plan process and help address the underlying issues highlighted in this report.

1. Mandate the creation and regular upkeep of chiefs' contact information:

There is currently no requirement for the state to keep track of each department's fire chief. Whenever a department appoints a new/interim chief, OPM and/or DESPP should be notified of such a change so they can regularly update the list. A possible contact list could be styled after CPCA's Police Chief List or OPM's Fire Marshal and Town Chief Executive Officer lists.

2. Require the creation of a Connecticut Fire Department Map: The exact coverage area of each fire department is not well known which potentially hampers recruitment and retention efforts. Because of this, a map showing each fire department's coverage area should be created. Such a map could also include useful information such as relevant contacts or information on a department's mutual aid agreements.

3. Regularly conduct a Firefighter Census: The fluidity and constant attrition of the firefighting profession means that data on the number of firefighters needs to be regularly updated. The state should conduct a standardized census at regular intervals to provide leaders and policymakers with the most up to date information.



NIST Report on Residential Fireground Field Experiments

Executive summary notes:

Time to water on fire: There was a 10% difference in the "water on fire" time between two and three person crews

Ground ladders and ventilation: The four person crews operating on a low hazard structure fire completed laddering and ventilation (for life safety and rescue) 30% faster than the two person crews and 25% faster than the three person crews.

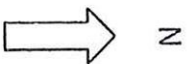
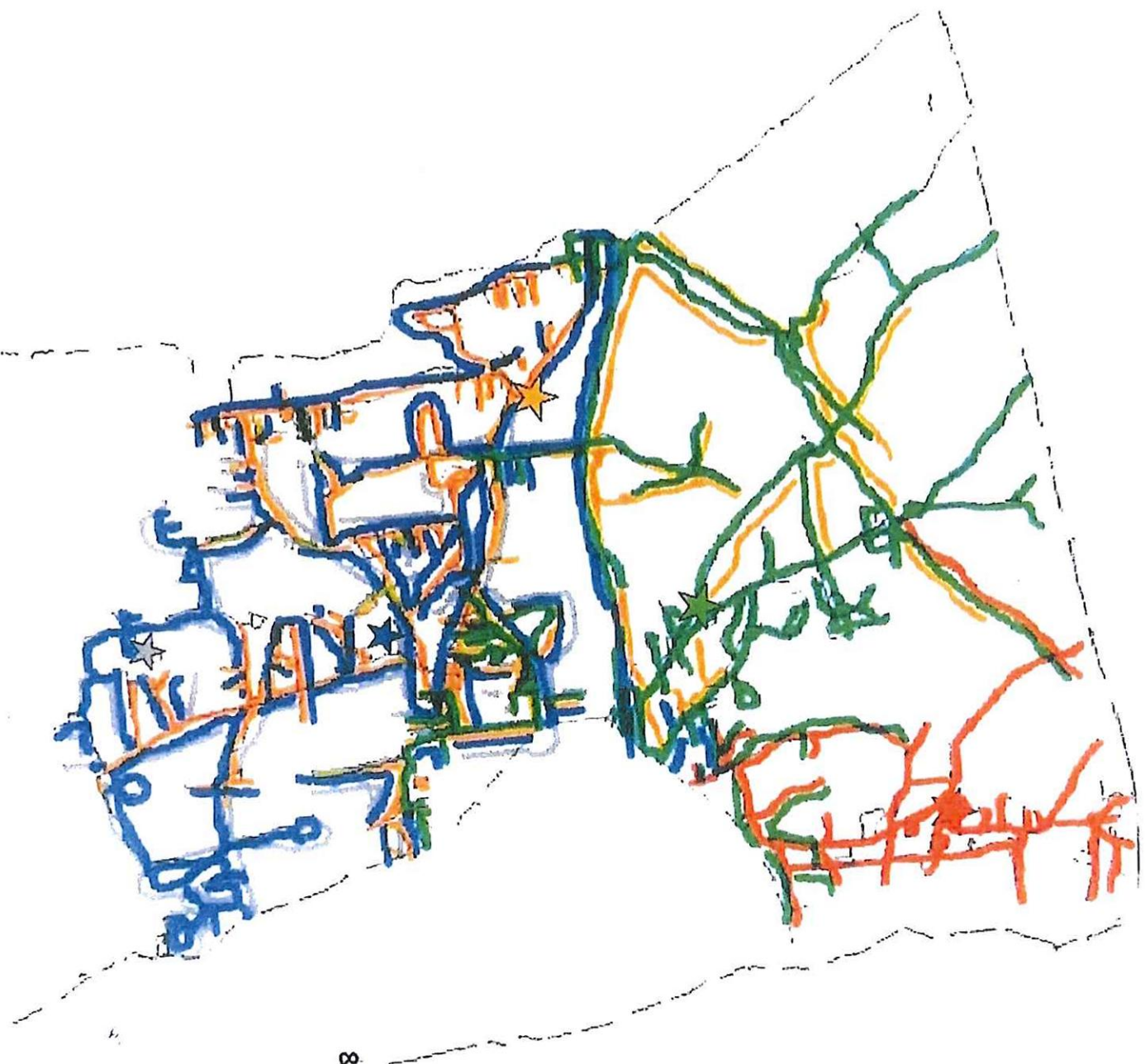
Primary Search: The three person crews started and completed a primary search and rescue 25% faster than the two person crews. (a 10% difference was equivalent to just over one minute)

Hose Stretch Time: In comparing four and five person crews to two and three person crews collectively, the time difference to stretch a line was 76 seconds. In conducting more specific analysis comparing all crew sizes to the two person crews the differences are more distinct. Two person crews took 57 seconds longer than the three person crews to stretch a line. Two person crews took 87 seconds longer than four person crews to complete the same tasks. Finally, the most notable comparison was between two and five person crews- more than two minutes (122 seconds) difference in task completion time.

Occupant Rescue: Three different "standard" fires were simulated using the Fire Dynamics Simulator (FDS) model. Characterized in the *Handbook of the Society of Fire Protection Engineers* as slow-, medium-, and fast-growth rate, the fires grew exponentially with time. The rescue scenario was based on non-ambulatory occupant in an upstairs bedroom with the bedroom door open.

Independent of fire size, there was a significant difference between the toxicity, expressed as fractional effective dose (FED), for occupants at the time of rescue depending on arrival times for all crew sizes. Occupants rescued by early arriving crews had less exposure to combustion products than occupants rescued by late arriving crews. The fire modeling showed clearly that two person crews cannot complete essential fireground tasks in time to rescue occupants without subjecting them to an increasingly toxic atmosphere. For a slow growth rate fire with two person crews, the FED was approaching the level at which sensitive populations, such as children and the elderly are threatened. For a medium growth rate fire with two person crews, the FED was far above that threshold and approached the level affecting the general population. For a fast growth rate fire with two person crews, the FED was well above the median level at which 50% of the general population would be incapacitated. Larger crews

responding to slow growth rate fires can rescue most occupants prior to incapacitation along with early arriving larger crews responding to medium growth rate fires.



8 Minute Travel Times

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