



FINANCE COMMITTEE MEETING
Meeting Virtually via ZOOM
Webinar ID 890 4848 3566
Thursday, April 9th 2026 – 1:00 PM

Finance Committee Members Present: Chair – Bud Robertson, Kristina Lengyel, Gary Green, Scott Whitefield, Mary Linskey

Also Present: Town Manager – Mark Haddad, Town Accountant – Patricia A. DuFresne, Fire Department Consultant – Jack Parow

The meeting was opened at 1:00 PM.

Discussion of Fire Department Staffing Study

Mr. Haddad explained that Mr. Jack Parow, a fire department consultant with 17 years of experience with the Chelmsford Fire Department will conduct a comprehensive staffing study for Groton. He noted that the scope of work had previously been sent to all the FinCom members.

Mr. Parow explained that he has done similar studies for other municipalities. He will focus on the previous 5 years of operational data, and the changes that have occurred over those 5 years. He has requested between 36 and 38 separate data points (such as organizational structure, staff levels, staff costs, call volume, response times, available operational review, perceived staffing needs, etc.) and hopes to receive most of this. This information will be used to put together alternative staffing models (including an assessment of building accommodations if necessary) and transitional recommendations. He plans to work with the PR firm John Guilfoil Public Relations as well. They will be conducting written surveys as well as in person interviews (some of them anonymous). Mr. Parow will look at broad experience across the region, analyzing mutual aid activity as well. The final report is expected by the end of summer, in order to be able to inform FY28 budget planning, with an emphasis on getting the analysis right rather than rushing the timeline. A draft will be made available for review prior to going public with the final report. Presentations for the community can be scheduled as needed.

Ms. Linskey asked how effective these types of studies are in terms of initiating actual changes in local fire departments. Mr. Parow said that he has had different experiences with previous studies. Many studies are meant to promote longer term changes; in which case the departments pick away at specific points to eventually implement most of the recommended changes. He noted that participation of the PR firm will be helpful in this regard and with translating technical findings into a coherent message to the community

about the needs in the department. Mr. Parow said that the unbiased report that he will provide will present a goal, even if it takes several years to implement.

Ms. Lengyel asked whether the study will address the potential impact of the satellite emergency department that is currently under construction. Mr. Parow replied that this will be addressed in the report. He feels that some burdens will be alleviated by the SEF, but there are many variables to consider. For instance, some medical calls require transport to a specific hospital, not an emergency room. Also, the SEF will impact mutual aid responses that will need to be looked at locally and regionally.

Ms. Lengyel then asked for information regarding potential trade-offs to staffing recommendations. Mr. Parow said that multiple staffing models will be provided. He noted that peak hour staffing can be a bridge solution if the data shows concentrated call volume (an approach adopted by Ipswich). The difficulty of engaging call officers during the day was discussed and will be factored in. Enhanced use of per diem officers may be recommended if data shows a need during specific timeframes, while traditional 24/7 staffing increases may be the solution if data supports across-the-board need. Depending on the data analysis, an operational model recommendation may include assigning a dedicated inspection staff to preserve response capacity.

Mr. Whitefield requested information regarding the granularity of the data analysis proposed (especially as regards response times and over-lapping calls). How will it be determined whether adding another team on a shift will lead to reduced response times, or increased capacity to handle over-lapping calls? He felt that it may be necessary to map this out call by call in order to accurately assess the impact over different shifts. Mr. Parow agreed saying each over-lapping call will be analyzed to determine how it was handled and what time of day it was received. He noted that the Fire Chief has been filling additional shifts; this will be looked at to see if there is justification to continue this practice (Is response time trending lower? Is mutual aid trending lower?). Software logs will be examined as well and evaluated to national standards (for instance: is an ambulance on scene within four minutes 95% of the time? Also, two in/two out: four fire fighters must be on scene before anyone can enter the building). Mr. Green said that NFPA standards will be difficult to meet, and he is concerned that the study analysis will be predisposed to expanding the department to meet these standards. Mr. Parow replied that while they will evaluate the percentage of time that Groton is meeting national standards, NFPA standards are goals to be worked toward incrementally, and not something to be achieved overnight. He stressed that most departments end up meeting these standards gradually, over time. Mutual aid also does contribute to meeting NFPA standards. Any hard recommendations offered in the final report will have firm justifications to back them up. Mr. Whitefield reiterated that increased support for the Fire Department cannot be sold to the community without providing data on a very granular level.

Mr. Green mentioned that he had read the Norwood report and wants to better understand the relationship between current operations and demands. Also, is Groton's situation unique? What can be done to leverage the on-call department? Mr. Parow said that all fire departments are unique in their own way. Norwood used several different funding approaches over several years. In Groton, the per diem participation is relatively

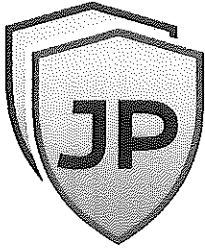
unique and forward-thinking. It is also useful in holding down benefit costs. The Town of Sterling does well with using per diem officers to help alleviate on-call gaps (on-call continues to be hard to recruit and retain). Mr. Parow assured him that while there are a lot of different models out there, he will create a unique model for Groton. Mr. Green asked how to analyze demand on a department versus the capacity of the same department. Mr. Parow replied that it is all data-driven; proper staffing levels are based on “every day” kinds of calls, understanding that some events are anomalous. He added that the Groton Fire Department is still working on collecting data for the study, but once all the data is collected and reviewed, the interview process will begin as well as neighboring community surveys. Initial results should be available in two or three months. The Fire Chief and Town Manager both agreed that having results by the end of the summer would be optimal and will put the department in a good position for FY28 budget planning. Mr. Haddad will post the study information and relevant updates to the town website as they become available.

The Finance Committee indicated that this meeting had been helpful in terms of understanding the process going forward. Mr. Haddad thanked everyone who attended.

Adjournment

- The Finance Committee adjourned their meeting at 1:40 pm
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Respectfully submitted by Patricia Dufresne, Assistant Finance Director



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March 20, 2026

Please find the following proposal to provide a staffing study of the Groton Fire Department.

Scope of Work

The scope of work will include analysis, discussion and recommendations to improve efficiency and effectiveness of the fire department with a focus on the following:

- Organizational structure
- Staffing levels and chain of command
- Personnel staffing costs, including overtime
- Call volume and response times
- Operational review
- Short and long-term staffing needs
- Will work with JGPR to provide any information or data they may need for their media campaign.

Deliverables

We will provide the following deliverables:

1. Report. The primary deliverable of this engagement will be a Report and addenda that documents the work described above in the scope of work.
2. Presentation. The project team will present their findings by conducting up to 2 formal presentations of the assessment to stakeholder groups. Groups may include internal staff or public, elected/appointed representatives.

Proposed Steps/Tasks

We will provide the following steps/tasks in order to effectuate the scope of work as described above:

- Task One: We will meet with the Fire Chief, Town Manager, Staffing Study Group and other key personnel to discuss and map out the specific scope of work and modify the scope of work if warranted.
- Task Two: Collection and Review of Documents. After receiving the requested documents and information, a thorough review and analysis of information will begin. The requested information may include emergency call volume by type, time, frequency, etc.; annual report, Town Bylaws, organizational chart, staffing, policies, procedures, budgets and financial reports, collective bargaining agreements, and other documents as needed. Additionally, information will be requested for capital items, equipment, and facilities, as well as any mutual aid, shared or contracted service agreements.
- Task Three: Visit the physical locations of the fire department.
- Task Four: Conduct Survey of Similarly Situated Fire Departments. We will work with the Town to determine up to five municipalities to survey and obtain operational and staffing information for analysis and comparison on discreet, relevant indicators. The review will not be total operations or costs. Items to be included will be organizational structure, staffing levels, call volume and responses, and budgets.
- Task Five: Analysis. After collecting all the relevant information, analysis of the data will be conducted and coalesced into useful form.
- Task Six: Draft Report. A confidential draft report will be submitted to the Town for review. We will meet with the Town to discuss the draft report.
- Task Seven: Report will be finalized and submitted to the Town.
- Task Eight: Presentation of Final Report. Up to two formal presentations of the Final Report will be conducted to an audience of the Town's choice.

Responsibilities

Responsibilities of Parow Consulting & Associates

We will act at all times in an attentive, ethical, and responsible manner. Jack Parow will be the project manager, who will serve as the primary point of contact for the duration of the project. The project manager will be available to the Town to discuss any issues or challenges via cell phone, email and or text.

Throughout the course of the project, the project manager shall facilitate completion of work according to the agreed upon timeline and communicate with the client's project liaison to discuss and resolve an issue with the timeline and to consider proposed modifications to the timeline.

Responsibilities of the Town of Groton

The Town will identify a project liaison for the Firm work with. The project liaison will have

responsibility for communicating the nature and value of the project to employees and managers and for managing logistics throughout the project (e.g., scheduling meetings, identifying meeting space, etc.).

The Town shall agree to provide necessary agreed-upon data, and to respond to requests for information, comment, and scheduling promptly. The Town will stand behind the accuracy and completeness of data provided to the Firm for work on the project. If there are questions or concerns about data accuracy or completeness, these will be made known to the project team when the data is provided.

Project Timeline

The project timeline will be determined between the Town and Parow Consulting & Associates. To facilitate completion of work according to the timeline, the Town will provide a timely response to requests as detailed in the Scope of Work.

For all steps in the workplan, delays in the schedule, requests for modification of scope, or other significant unforeseen developments may lead to a renegotiation of scope, timeline, cost, or all three.

Fee for Services

Parow Consulting & Associates will provide the scope of services outlined in this proposal for an all-inclusive fee of \$14,000.00. Any additional work beyond the scope of this agreement will be billed at an hourly rate of \$150.00/hr. and must be agreed to by the Town before this work is conducted.

Our Project Team

Jack Parow will be the project manager for this project. He will also be fully involved in the study from start to finish and the main contact person.

Jack Parow – Founder/Principal

Jack Parow has over 40 years of distinguished experience in the fire service, culminating in serving as President and Chairman of the Board of the International Association of Fire Chiefs (IAFC), after serving as Chief of the Chelmsford Fire Department for 17 years. He is known as a leader, educator, strategist, and innovator and always up for a challenge.

Since his retirement he has served as the Interim Fire Chief in the Town of Ipswich (twice), the City of Haverhill and the Town of Ashburnham. Chief Parow was hired to fill these positions and turn around departments that were either stagnant or heading in the wrong direction. Through his leadership positive change was accomplished, strategic plans were developed and a clear direction for the department's new leadership and administration was put in place before he left.

Chief Parow has worked as a consultant in the Public Safety arena doing promotional assessment centers, executive searches, developing strategic plans, conducting fire department studies/evaluations and various consulting work over the last 30 years. He also lectures nationally and internationally on Fire and EMS issues. In 2012 he was appointed, by past Homeland Security Secretary Janet Napolitano, to serve on the Homeland Security Science and Technology Advisory Committee.

Chief Parow holds his MBA from State University of New York, Empire State College and a Bachelor of Science in Fire Engineering Technology and Safety from the University of Cincinnati. He is also a

graduate of the Executive Fire Officer Program of the U.S. Fire Administration/National Fire Academy and the Homeland Security Executive Leaders Program of the Naval Post Graduate School. Additionally, Chief Parow served as a Professor at Anna Maria College in Paxton, MA in the MPA program for 27 years.

Richard Rochon may also work on this project as an industry expert.

Richard Rochon – Senior Associate

Richard Rochon served as the Fire Chief in Westford, MA for 18 years while serving for 37 years. Richard currently serves as the manager of the Massachusetts Association of Fire Chiefs' "Chiefs" mentoring program.

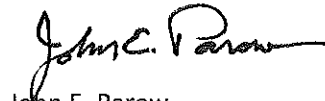
Chief Rochon (Ret.) spearheaded various initiatives during his career at Westford Fire Department, such as increasing manning and staffing multiple stations 24/7, implementing 24-hour staffing at the town's three fire stations and establishing an Advanced Life Support (ALS) paramedic transport system.

Chief Rochon served on the Hazardous Materials Policy board appointed by the Governor of Massachusetts and remained on the board for 5 years. Chief Rochon also served as the President of Fire District 6 representing 18 communities in the district for several years and served as a Board of Director for the Fire District with the Fire Chiefs Association of Massachusetts.

Timeline

We would be able to start work on the project as soon as we are notified that we have been selected to conduct the Staffing Study project. In order to meet any projected timelines, we will be relying heavily on the Town to supply us with any and all requested information and meetings in a timely manner.

Sincerely,



John E. Parow

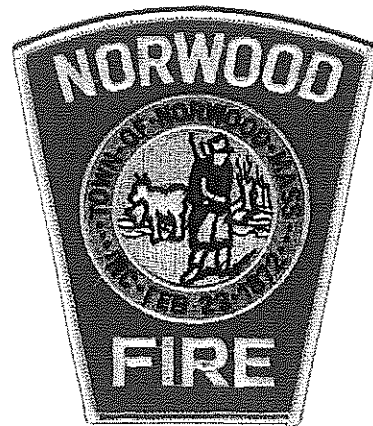
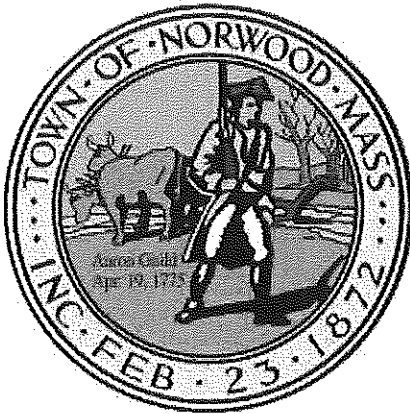
Communities we have done work for:

Amesbury, MA	Hamilton, MA	Pawtucket, RI
Arlington, MA	Hanson, MA	Pembroke, MA
Belmont, MA	Hopkinton, MA	Pepperell, MA
Berkley, MA	Hull, MA	Reading, MA
Beverly, MA	Leominster, MA	Rockland, MA
Boxborough, MA	Lincoln, MA	Salisbury, MA
Burlington, MA	Littleton, MA	Salem, MA
City of Haverhill, MA	Manchester by the Sea	Shrewsbury, MA
Clinton, MA	Mansfield, MA	Southborough, MA
Cohasset, MA	Marlborough, MA	Stoughton, MA
Danvers, MA	Marshfield, MA	Sudbury, MA
Devens, MA	Maynard, MA	Swampscott, MA
Dover, MA	Melrose, MA	Swansea, MA
Dracut, MA	Merrimack, NH	TF Green Airport, RI
East Bridgewater, MA	Middleborough, MA	Tewksbury, MA
Easton, MA	Milford, MA	Topsfield, MA
Essex, MA	Nantucket, MA	Tyngsborough, MA
Everett, MA	Natick, MA	Wakefield, MA
Falmouth, MA	Needham, MA	Walpole, MA
Fitchburg, MA	Newbury	Watertown, MA
Foxborough, MA	Norfolk, MA	Wayland, MA
Framingham, MA	Northborough, MA	West Bridgewater, MA
Franklin, MA	North Andover, MA	Weston, MA
Gardner, MA	North Attleboro, MA	Westwood, MA
Grafton, MA	Northborough, MA	Whitman, MA
Groton, MA	Norton, MA	Wilbraham, MA
Halifax, MA	Norwood, MA	Winchester, MA

Town of Norwood, Massachusetts

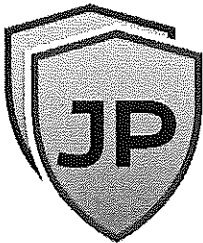
STAFFING STUDY OF THE NORWOOD FIRE DEPARTMENT

October 2025



Conducted by:

John Parow Consulting & Associates



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Staffing Study of the Norwood Fire Department

October 2025

Scope of Services

Scope of Work

The scope of work included an analysis, discussion and recommendations to improve the efficiency and effectiveness of the Fire Department with a focus on the following:

- Organizational structure
- Staffing levels and Chain of Command
- Budget and expenditures
- Personnel staffing costs (including overtime)
- Cost of vacancies
- Selected practices, policies and collective bargaining provisions
- Call volume and response times
- Operational review
- Short and long-term staffing needs

Staffing Study of the Norwood Fire Department

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Methodology

Parow Consulting & Associates was retained to review several key issues related to the current staffing and future needs of the Norwood Fire Department. Our initial meeting was held on August 28, 2025. In attendance were Anthony Mazzucco, General Manager, Timothy Bailey, Fire Chief, Jack Parow and Associate Richard Rochon. The discussion included the Town's expectations for the study and what information we would need from the Town and the Fire Department in order to meet those expectations. On September 11, 2025, Jack Parow met with the Fire Chief, the Deputy Chief and the Union Vice President to gather information, request documents and data, and to hear their opinions on the current state of the Department and its future needs. At this time, we also toured the fire station. The purpose of the visit was to gather information and become more familiar with the current operations of the Department. Additional information was requested from the Fire Chief and received via email.

On September 23, 2025, Jack Parow spoke via telephone with Lisa Uglialoro, HR Director, regarding the study and on September 25, 2025, held a similar conversation with the General Manager to gather his input.

A "Staffing Study" survey was sent out to all department members via email. The survey information was collected through Survey Monkey and analyzed. All the survey responses were submitted anonymously in an effort to receive unbiased answers to the questions. Any inappropriate responses were redacted.

Historical data related to emergency calls, staffing, budgets, etc. were collected for the previous five years - 2020 through 2024. Some data was limited to just calendar year 2025; however, the sample size was deemed large enough to be utilized for the study.

All data for the study was provided to Parow Consulting from either the Fire Department or the Town. Therefore, the accuracy of the study is dependent on the data and opinions that were received.

Executive Summary

John Parow Consulting & Associates was contracted by the Town of Norwood to conduct a staffing study for the Norwood Fire Department. The study addresses the following areas:

- Call volume and response times Operational review
- Short- and long-term staffing needs
- Staffing levels and Chain of Command
- Organizational structure
- Budget and expenditures
- Personnel staffing costs (including overtime)
- Cost of vacancies
- Selected practices, policies and collective bargaining provisions

The Fire Department operates and responds from a single location -the Public Safety Building they share with the Police Department, located at 135 Nahatan Street. The department is staffed with 65 uniformed personnel (the Fire Chief, 2 Deputy Chiefs, 5 Captains, 9 Lieutenants and 48 Firefighters). In addition, they have 2 support staff (a Business Manager and a Principal Office Assistant), and a full-time Mechanic.

The line personnel (emergency response) are divided into four work “groups”. Fifteen members are assigned to each group which consists of 1 Captain, 2 Lieutenants and 12 firefighters. The line personal staff a Command Vehicle, 2 Engines, 1 Ladder Truck and 2 ALS Ambulances. The minimum staffing on a group is fourteen, below which the Department will hire to fill the position(s).

Calls volumes for Fire, Non-Fire and EMS were reviewed for the 5-year period from 2020-2024. Total calls increased from 5,393 in 2020 to 7,154 in 2024, a 33 percent increase. EMS calls increased from 3,922 in 2020 to 5,538 in 2024, a 41 percent increase. Non-Fire calls over this same period increased from 1,471 to 1,616, a 10 percent increase. The increases in both fire and EMS calls over this time period are considered significant.

Response times for all calls averaged 5 minutes and 40 seconds. Ambulance response times averaged 5 minutes and 37 seconds which complied with NFPA 1710 Standard of being on scene in less than 8 minutes, 94 percent of the time. The time for which an ambulance responded to an emergency call and then cleared the hospital increased from 41 minutes and 45 seconds in 2020 to 53 minutes and 18 seconds in 2024. This is an increase of 11 minutes and 33 seconds for which the ambulance is unavailable to respond to another call.

Concurrent calls are estimated to be 1,511 in 2025. This is an average of 4.1 concurrent calls every day. Concurrent call activity is a call that starts prior to a previously dispatched call ending. Responding to concurrent (or multiple simultaneous) calls is a significant concern because it strains available resources and may lead to slower response times.

The Norwood Fire Department provides and receives mutual aid to and from surrounding communities for both Fire and EMS calls. The current data over the past 5 years shows an increase in both mutual aid received, as well as mutual aid provided. Mutual aid received from outside communities increased from 2020 to 2024 by 250 percent. Mutual aid provided to outside communities also increased from 2020 to 2024 by 133 percent. These numbers reflect a substantial increase in the need for resources not only for the Town of Norwood, but also for the surrounding communities.

The study also looked at OSHA 29 CFR 1910.134 (the “2 in/2 out” law) as well as the NFPA Standard 1710 for Career Fire Departments. It was found that the Norwood Fire Department generally complies with the OSHA “2 in/2 out” law under normal response conditions. However, the department fails to meet NFPA Standard 1710 with respect to manning all apparatus with an officer and 3 firefighters and being able to assemble 17 firefighters on the fire ground in 8 minutes on a consistent basis.

Recommendation 1

For the short term, in an effort to comply with NFPA Standard 1710 and because of the substantial increase in EMS, fire and non-fire responses (33%) it is recommended that staffing on each Group be increased from 15 to 18 positions.

Recommendation 2

If staffing is increased to 18 members per Group we recommend a change to Article 15, Section 1, EMT Certifications under Class 1 – Mainstream EMS and increase the Mainstream EMS members from 32 members to 44 members. Currently, the 32 least senior Firefighters are assigned to the ambulance on a rotating basis, 8 Firefighters per Group. The increase to 44 members would now have 11 Firefighters per Group assigned to the ambulance on a rotating basis.

These recommendations do come with a cost and would require adding 12 Firefighter/Medics (3 per Group) to the fire department’s current staff and promoting 4 firefighters to the rank of Lieutenant.

Recommendation 3

Hiring one “floating firefighter/Medic”. Replacing and hiring a new firefighter/Medic can be very time consuming. You must first advertise, interview, conduct thorough background checks and then apply for and secure a spot in the mandatory MA Firefighter Recruit

Training Academy, followed by 10 weeks in the academy. The entire process from advertising to academy graduation typically takes 12 months. This "floating firefighter/Medic" will be a flexible position designed to fill staffing gaps caused by unexpected retirements and absences such as extended injury and sick leave. This will help ensure minimum on-duty staffing levels, thereby maintaining operational effectiveness and coverage.

Recommendation 4

In the survey, many department members repeatedly stated that on-duty Department training is hindered because of the call volume the Norwood Fire Department is experiencing. Training is very often interrupted by the need to respond to an emergency call, resulting in the training being cancelled or, if resumed, disjointed at best. It is recommended that 32 hours of paid off duty training be afforded to each department member. This would be similar to the off duty training the Norwood police officers receive each year.

Recommendation 5

Hire a full-time Training Officer. Currently, a Deputy Fire Chief oversees Department fire training. For the majority of the time, the training is scheduled by the Deputy Chief and then handed off to the Shift Officers who conduct the training. Training done in this manner by four different Shift Officers, may lead to inconsistent training, record keeping and accountability across the entire Department. It is recommended that the Department hire a full-time Training Officer with the rank of Fire Captain.

Recommendation 6

The Norwood Fire Department received EMS mutual aid from surrounding fire departments 471 time in 2024 and this need for is trending upward. Average response time for a mutual aid ALS ambulance can be 15 minutes or more. The NFPA 1710 standard advocates that ALS care be provided within 8 minutes of the emergency medical call.

Norwood Fire Department sends a Fire Engine or Ladder Truck on all EMS calls to assist the Norwood ambulance or any mutual aid ambulances coming into town. Although the Fire Engines and Ladder Truck are staffed with firefighter/Medics neither the engines or ladder carry ALS equipment and are not classified as Class 5 Ambulances (a Class 5 Ambulance is licensed as a non-transport ambulance).

It is recommended that the Norwood Fire Department provides ALS capabilities on both engines and the ladder truck to enable the department to rapidly deliver ALS care in medical emergencies, improve patient outcomes by starting treatment sooner and provide extra medical and physical support for complex incidents.

Key takeaways:

- Norwood is a growing, economically strong town with rising emergency service demands.
- Fire Department call volume has surged 33% in 5 years, driven mainly by EMS.
- Staffing has not increased in 20+ years, creating strain and reliance on mutual aid.
- Recommendations focus on staff expansion, EMS support, training, and risk assessment to sustain service quality.

The Town of Norwood, Massachusetts

Norwood, Massachusetts, located 13 miles southwest of Boston, stands as a dynamic mid-sized town within the Boston Metropolitan Area. As of the 2020 census, the population of the town was 31,611. According to the United States Census Bureau, the town has a total area of 10.5 square miles of which 10.4 square miles is land and 0.1 square miles is water, with 11,623 households, and 7,380 families residing in the town. The population density was 3,023 inhabitants per square mile. There were 11,945 housing units at an average density of 1,140 per square mile. Norwood also hosts 3 MBTA Commuter Rail stations and Norwood Municipal Airport (Wikipedia.org.)

Norwood is recognized for its diverse economic base, highly educated workforce, and strategic location along major transit routes.

Norwood's resilience and adaptability have allowed it to maintain its relevance as both a manufacturing hub and an innovation corridor, boasting robust activity in traditional industries and substantial growth in emerging sectors. The presence of global leaders such as Moderna and Analog Devices, the town's ongoing investments in biotech and engineering, an expanding healthcare sector, and a vibrant mix of retail and service businesses, collectively highlight Norwood's role as a significant economic contributor in Metro Boston (2023 Norwood Annual Report).

Norwood's location, demography, and infrastructure have fostered a business-friendly environment, benefiting enterprises from established multinationals to startups. As of 2025, the town hosts approximately 17,800 employees, representing a labor force participation rate of over 70% of the total population. The median household income is \$97,110, notably higher than the U.S. average, and educational attainment rates are impressive, with 53% of adults holding a bachelor's degree or higher, and 21.6% having graduate or professional degrees (Data USA).

Diversity of Sectors: The economic landscape spans manufacturing, advanced engineering, biotechnology, healthcare, finance, professional services, retail, technology, logistics, and construction. Healthcare and social assistance are the largest sources of

employment, but Norwood maintains strong clusters in advanced manufacturing, life sciences, and technology.

Key Economic Highlights:

2025 Estimated Population: 31,380

Median Age: 39.4

Median Household Income: \$97,110

Educational Attainment (Bachelor's+): 53%

Top three employment sectors: health care & social assistance, educational services, and retail trade (Data USA).

This prosperity is reflected in Norwood's commercial real estate market, investment in industrial parks, and the development of business clusters supported by regional innovation initiatives and incentives (propertyshark.com).

Norwood Fire Department

The Norwood Fire Department operates from one station. It is a Public Safety building, shared with the Norwood Police Department, located at 135 Nahatan Street. The Fire Department is staffed with full-time career firefighters, 24 hours per day/7 days a week. The Department is an all-hazards department which focuses on a wide range of services that extend well beyond fire and emergency medical services. These include preparing for natural disasters, responding to hazardous materials incidents, technical rescue operations, educating the community on fire safety, etc.

The Norwood Fire Department provides a range of responses to hazards including:

- Fire suppression
- Advanced and Basic life support response to medical emergencies and ambulance transportation of patients to the nearest medical facility
- First response to technical rescue
- First response to hazardous materials incidents.
- Fire prevention, plan review, inspections
- Fire prevention education to the community through the SAFE Program

The Norwood Fire Department employs 65 full-time uniformed personnel (a Fire Chief, two Deputy Fire Chiefs, five Captains, nine Lieutenants and 48 Firefighters). Of the career personnel, 23 are certified EMTs and 42 are certified at the Paramedic level. In addition to the uniformed members, the department has a full-time Mechanic, a Business Manager and a Principal Office Assistant.

The Line Personnel (emergency response) are divided into four work "Groups". Fifteen personnel are assigned to each group and consist of a Captain, 2 Lieutenants and 12

Firefighters. Minimum staffing on each group is 14. If the use of vacation time, sick leave, etc. causes the manning to go below 14, the Department hires to ensure the minimum is maintained.

Each group works a schedule that consists of a 24-hour shift on, 48-hours off, a 24-hour shift on, followed by 96-hours off. This schedule repeats every 8 weeks and results in an average of 42 hours worked per week.

Staff Personnel consists of the Fire Chief, the Deputy Chief of Operations, the Deputy Chief of Administration and Training, a Fire Prevention Captain, and a Fire Prevention Lieutenant. Staff personal work weekdays and in addition to their day-to-day duties they are available to respond to any type of emergency for which they may be needed.

The full-time Department Mechanic also works weekdays and is responsible for the general maintenance and repair of all fire and EMS apparatus. The Business Manager works directly for the Fire Chief, and the Principal Office Assistant works in support of the Fire Prevention Office.

As noted above, all Administrative, Fire, EMS and Fire Prevention operate out of the Public Safety Building located at 135 Nahatan Street. The Public Safety Building houses the following apparatus:

Vehicle	Year	Model
• Engine 3	2004	E-One
• Engine 4	2011	E-One
• Engine 5	2020	E-One
• Engine 6	2024	E-One
• Ladder 1	2013	E-One
• NA 1	2017	F550 AMBULANCE
• NA 2	2015	F550 AMBULANCE
• NA 4	2022	F550 AMBULANCE
• NA 5	2022	F550 AMBULANCE
• NA 3	2020	F550 AMBULANCE
• NC 1	2025	TAHOE
• NC 2	2021	EXPEDITION
• NC 3	2021	EXPEDITION
• NC 4	2021	EXPEDITION
• NC 5	2023	EXPLORER
• NC6	2016	TAHOE
• MARV	2020	TAHOE
• SPARE	2022	EXPLORER

- SQ 1 2019 F550 SUPER DUTY
- SQ 2 2007 WORKSTAR 7400
- FIREBOAT TRAILER 2004 BOAT
- BOAT 2019 ZODIAC 13' 9"
- LIGHTING TRAILER 2015 TEREX/LIGHTING
- M1 2024 X3FU-F350 4x4 Super Cab

Call Volume and Emergency Response

The study examined the call volume and emergency responses of the Norwood Fire Department for the past five years (2020-2024). The call volume numbers were obtained from the Fire Department and were consistent with the numbers provided in the Town’s Annual Reports.

The following data and chart are for the Total Call Volume for the years 2020-2024. This includes both EMS calls, Fire Calls and Non-Fire Calls.

Year	2020	2021	2022	2023	2024
Total Calls	5393	6152	6678	6764	7154

Figure 1

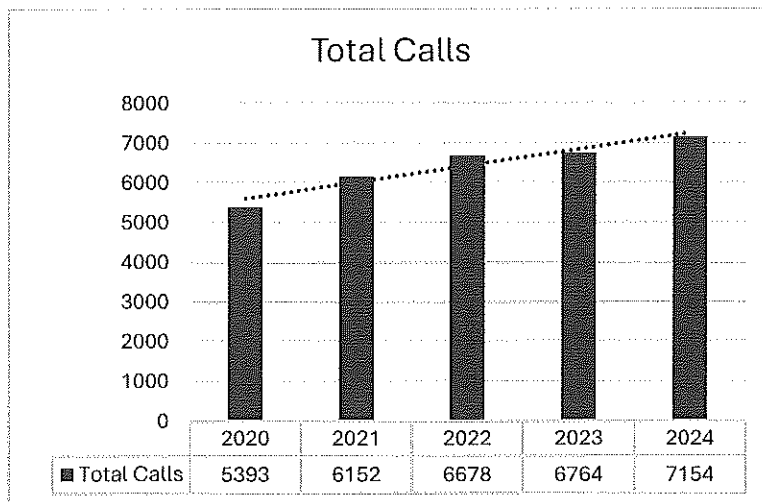


Chart 1

The following data and chart are for EMS Calls for the years 2020-2024. This includes all medical responses.

Year	2020	2021	2022	2023	2024
Total Calls	3922	4865	5205	5182	5538

Figure 2

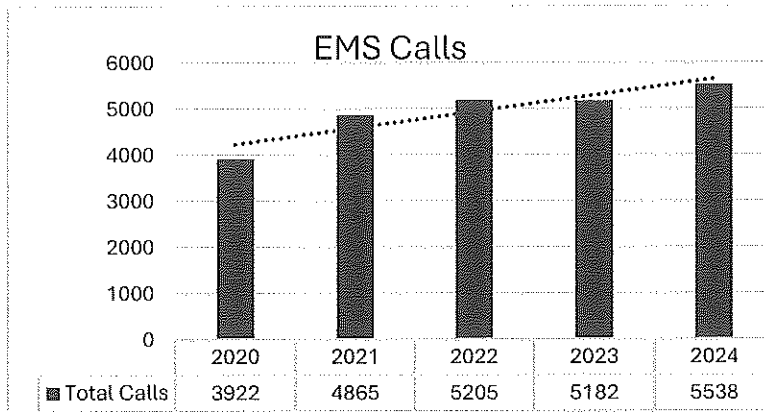


Chart 2

The following data and chart are Fire and Non-Fire Calls for the years 2020-2024. This includes Fire Responses, Non-Fire Responses, False Alarms and Unintended Alarms.

Year	2020	2021	2022	2023	2024
Total Calls	1471	1287	1473	1582	1616

Figure 3

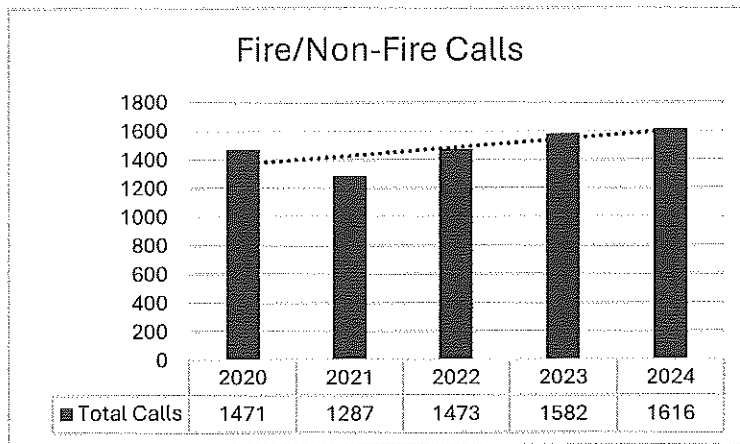


Chart 3

Analysis of the data in the three areas indicates there is a steady increase in EMS, Fire and Non-Fire calls between 2020 and 2024. Total calls increased from 5393 calls in 2020 to 7154 calls in 2024 and an increase of 1761 calls (Chart 1). This is an increase of 33 percent over the five years. In 2024 the department averaged 20 emergency calls per day.

EMS calls increased from 3951 calls in 2020 to 5538 calls in 2024, an increase of 1587 calls (Chart 2). This is an increase of 40 percent.

Fire/Non-Fire calls also increased over this same time period with 1471 calls in 2020 to 1616 calls in 2024 an increase of 145 calls (Chart 3). This accounts for a 10 percent increase over this time period.

Fire/Non-Fire Calls versus EMS Calls

The chart below shows the relationship between Fire/Non-Fire calls and EMS calls. The Fire and Non-Fire calls are in blue, and the EMS calls are in orange. The chart clearly indicates that EMS calls account for the majority of the emergency calls by a ratio of approximately 3 to 1.

Year	2020	2021	2022	2023	2024
Fire/Non-Fire	1471	1287	1473	1582	1616
EMS	3922	4865	5205	5182	5538

Figure 4

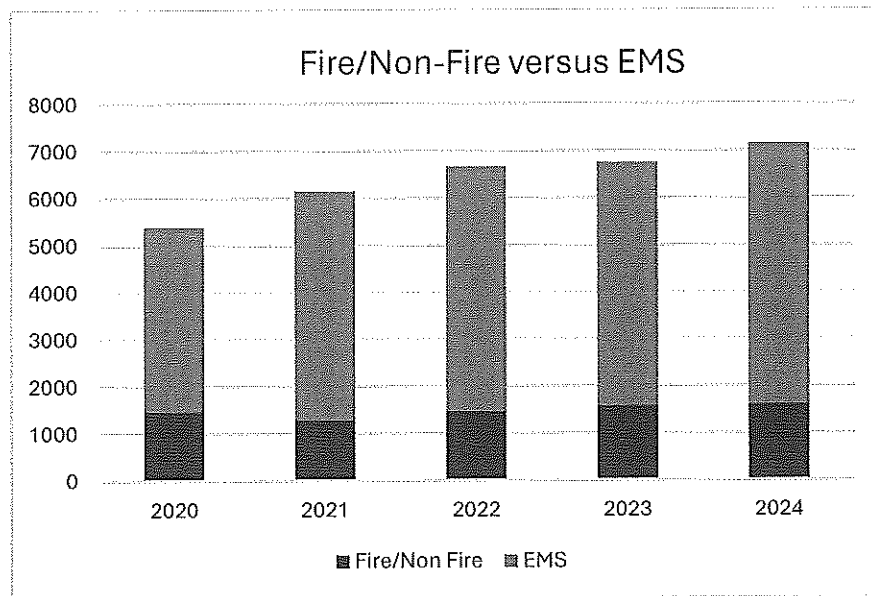


Chart 4

During our interviews with the Department’s Fire Chief and Command Staff, they stated that the staffing of the Norwood Fire Department has not changed in the last twenty years, or longer.

A review of the data clearly indicates that responses for the Norwood Fire Department to both Fire and EMS calls, over the last five years, have increased substantially. The Fire Chief, Command Staff and Firefighters’ Union all expressed their concern that this increase in emergency responses has caused a greater demand for resources and is limiting their ability to provide uninterrupted service to the town.

This concern is further supported by the increase in the number of times the Norwood Fire Department has been forced to depend on mutual aid to handle both fire and EMS calls

within the Town because the Norwood Fire Department does not have the manpower and/or apparatus available to handle the calls for service themselves (Figure 9).

Review of the current department staffing model versus industry standards; and 5 comparison departments in and around the Route 95 area

Fire Departments across the Commonwealth vary greatly in size and scope due to economics, incident volume, traditions and the needs of the communities they serve. No matter the size or community served, all successful fire departments share certain principles of organization for effective and safe function. These performance principles include:

- Chain of Command. An established command hierarchy from the lowest to the highest department level, ensuring that each subordinate reports to one supervisor. The Chain of Command not only establishes accountability, it lays out a company's lines of authority and decision-making power. This Chain of Command is used for organizational day-to-day functions and for emergency incidents.
- Supervisory limits or Span of Control. This refers to the number of individuals or resources that one supervisor can manage effectively in emergency and non-emergency situations. Although the number can vary according to circumstances, the Fire Chief's Handbook, 7th ed. uses a general guideline for fire service company supervision of up to five or six firefighters per one supervisor.
- Division of Labor. Ensures that all responsibilities are assigned and prevents duplication of effort. Additionally, the process divides large jobs into smaller jobs to make them more manageable, equalize workloads, and increase efficiency.
- Discipline and regulations. Written policies, procedures, and guidelines to set boundaries and enforcement for expected individual and departmental performance.

To meet these expectations and achieve these principles, fire departments must be structured, organized, and staffed properly.

Comparison of Fire Departments and their Operations

The Study compared 5 fire departments in the Commonwealth that were similar in population, were located in a similar geographical area and operated an Advanced Life Support EMS ambulance transport system. Those communities were Burlington, Natick, Randolph, Stoughton and Watertown.

Each department was requested to provide information relative to square miles covered, population, call volume, day staffing, shift staffing, apparatus staffing, call volume (both total volume and EMS), and operating budget.

Community	Norwood	Burlington	Natick	Randolph	Stoughton	Watertown	Average
Area Sq. Miles	10.6	11.9	16.1	10.5	16	4	12
Population	31,764	26,977	37,316	35,114	29,457	35,270	32,650
Day-Time Staffing	5	6	4	5	6	6	5
Duty Shift Staffing	15	15	21	15	15	21	17
Duty Max	15	15	21	15	15	21	17
Duty Min	14	13	18	12	11	17	14
Staffing/Engine	4	4	3	3	4	3	4
Staffing/Engine	2	4	3	3	4	3	3
Staffing/Engine			3			3	1
Staffing/Engine			2				0
Staffing/Ladder	4	4	2	2	4	3	3
Staffing/Ladder						3	1
Staffing Ambulance	2	2	2	2	2	2	2
Staffing Ambulance	2	cross staff tower	2	2	2	2	2
3rd Ambulance	spare		spare				0
Command Vehicle Staffing	1	1	1	1	1	2	1
Max staffing/Apparatus	4	4	3	3	4	3	4
Min Staffing/Apparatus	2	3	2	2	3	2	2
Total Calls/Year	7154	5424	6124	6534	6822	7004	6,510
EMS Calls/year	5538	3963	4012	5628	4460	3634	4,539
Total Operating Budget	\$9,213,846.00	\$9,374,986.00	\$10,872,664.00	\$8,374,726.00	\$8,054,064.00	\$12,309,228.00	\$9,699,919.00

Figure 5

In Figure 5, a comparison was made of the responses from the five comparison communities, including Norwood, for maximum staffing, minimum staffing and staffing per piece of apparatus. Also included square miles covered, population, call volume, day staffing, call volume and operating budgets. The average of all the categories was then calculated for the five comparison communities and Norwood.

Norwood had the most Total Calls/Year with 7154. The average total number of calls for the communities was 6,510. Randolph had the largest number of EMS calls for the year with 5628 while Norwood was a close second with 5538 calls. Average EMS calls across all the communities was 4,539. These numbers indicate that the Norwood Fire Department is experiencing the largest emergency call volume when compared to the other comparison communities.

The maximum staffing line shows Norwood at 15 members in each Group which is comparable to 3 of the other comparison communities. However, the staffing of 15 is 2 less than the average staffing of 17 of the combined comparison communities.

Engine manning is fairly consistent across the communities. Three communities maintain a manning of 4 on their Engines and 3 communities maintain a manning of 3 on their Engines. The manning for the Ladder Trucks was a little more varied with 3 communities manning 4 members, 1 community manning 3, and 2 communities manning just 2 members.

When these communities are at minimum staffing they routinely drop apparatus staffing down to either 3 or 2 members.

All the communities run a Command Vehicle staffed with the duty shift officer.

Norwood Fire Department Response Times

The Norwood Fire Department was unable to provide response data for the years 2020-2024. However, response data was available for calendar 2025 (January 1, 2025, through August 28, 2025). It is deemed that the 8 months of data is a sufficient sample to show the current response times to EMS, Fire and Non-Fire calls throughout the town. The sample times include both turnout time (the time the call is received until personal get on the apparatus) and road response time.

EMS/Rescue calls accounted for the largest number of calls and had an average response time of 5 minutes and 37 seconds. Fire Calls, which represented the least number of calls, had an average response time of 5 minutes and 54 seconds, Non-Fire calls, which accounted for 1083 of the overall calls had an average response time of 5 minutes and 29 seconds.

	# of Calls	Ave. Response Time
EMS	3699	5:37 minutes
Fire	47	5:54 Minutes
Non-Fire	1083	5:29 minutes

Figure 6

Additional response time data was available for ambulance transport for the years 2020-2024 using the fire department's ESO software. This is road response time and does not include turnout time.

The data shows that the average response time has increased 50 seconds over the last 5 years, from 3 minutes and 37 seconds in 2020 to 4 minutes and 27 seconds in 2024. The average response times over the last 5 years does meet NFPA Standard's requirement of having an ALS ambulance on scene in less than 8 minutes, 90% of the time. The

department is actually exceeding this requirement and meets the standard 94% of the time.

Year	2020	2021	2022	2023	2024
Average	3:57	4:04	4:16	4:22	4:27
<8:00	95%	94%	94%	94%	94%
1710 - ALS on scene within 8 minutes 90% of the time					

Figure 7

This data was also used to capture the time that an ambulance was tied up on a call - from the time of dispatch until the time it clears from the hospital and is available to respond to the next call. The data shows that the average “tied up” time on an ambulance transport has increased from 41 minutes and 45 seconds in 2020 to 53 minutes and 18 seconds in 2024. This is an increase of 11 minutes and 33 seconds.

Year	2020	2021	2022	2023	2024
	41:45	46:17	46:43	52:02	53:18

Figure 8

Concurrent/Simultaneous Calls

Concurrent call activity is a call that starts before a previously dispatched call ends. Responding to concurrent (or multiple simultaneous) calls is a significant concern because they strain available resources and can lead to slower response times. This challenge is compounded by the fact that Norwood Fire Department responds to a high volume of emergency medical calls, which can divert resources away from traditional fire-related incidents. A typical response to an emergency medical call in Norwood is 1 ambulance and 1 fire apparatus, either an engine or the ladder truck. Also note, this EMS response is considered 1 emergency call and not a concurrent call.

Data was unavailable for the last 5 years of concurrent calls for the Department. However, data was available for the first eight months of calendar year 2025 (January 1 – August 31). It is deemed that this sample is significant enough to gauge the number of concurrent calls with which the Department is faced.

From January 1, 2025, to August 31, 2025, the department experienced 1007 concurrent calls. We have categorized these calls into 4 categories:

- 2 concurrent calls – 548
- 3 concurrent calls – 207
- 4 concurrent calls - 94
- 5 or more concurrent calls – 158

If these calls were to be annualized to coincide with the other data in the study, it is expected there would be a total of 1511 concurrent calls for 2025. It is assumed the 4 categories of calls would look similar to the following:

- 2 concurrent calls – 822
- 3 concurrent calls – 311
- 4 concurrent calls - 141
- 5 or more concurrent calls – 237

The data indicates that the Norwood Fire Department experiences approximately 4.1 concurrent calls per day out of the 20 calls the department responds to each day.

Fire Mutual Aid and Fire Dispatch

Massachusetts Fire Mutual Aid is divided into 15 Fire Districts statewide. The Norwood Fire Department is a member of Fire District 4, Norfolk County and recently, also became a member of the Metro Fire District. The Fire Department dispatch is handled through Norfolk County Control, a regional dispatch center located in Holbrook, Massachusetts.

Having a strong mutual aid relationship with surrounding communities is essential because no single fire department can independently handle all the simultaneous calls or every large or complex emergency. Mutual aid agreements allow fire departments and emergency services to share personnel, equipment, and resources across jurisdictional boundaries. This ensures adequate staffing, access to specialized units like hazardous materials teams, and robust support for incidents that exceed a department's inherent capabilities. This collaboration provides critical backup and enhances overall emergency response efficiency.

The following is the current Norwood Fire Department 10 Alarm Running Card:

METROFIRE RUNNING CARD									
NORWOOD					MUTUAL AID BOX 8253				
FIREGROUND CHANNEL Primary Norwood Fire 453.8500					Alternate FG As Assigned by NCC				
COVERING COMPANY CHANNEL As Assigned by NCC					Alternate As Assigned by NCC				
ALARM	TO FIRE					COVER			
	ENGINES		LADDERS	SPECIAL	CHIEFS	ENGINES		LADDER	
1ST						HEADQUARTERS			
WF	WALP*	WESWD				DED			
2ND	(DED)	SHA*	NORWD	CAN		STOT*	NEE		FOX*
3RD	(STOT*)	(NEE)		(FOX*)		MIL	MDFLD*		MANS*
4TH	(MIL)	(MDFLD*)	NORFK*	(MANS*)		FRKLN*			BRKTN*
5TH	(FRKLN*)	RAN	BRA	(BRKTN*)		QUI			WALP*
6TH	(QUI)	MEDWY*	MILLS*	(WALP*)		NEW			AVO*
7TH	(NEW)	WEL	BOS	(AVO*)		BOS	BRK		WREN*
8TH	(BRK)	WEST	WEY	(WREN*)		LEX			QUI
9TH	(LEX)	DOV*	WAL	(QUI)		WAT			NEW
10TH	(WAT)	BOS	CAM	(NEW)		BEL			NATB*
ADDITIONAL						Rev. Date	Issue Date		
() Responding from Coverage Assignment. All Blank Companies above Heavy Line are per Local Runcards						7/1/2025	2025-2		
* AVO (Aven), BRKTN (Brockton), DOV (Dover) FRKLN (Franklin), FOX (Foxborough), MANS (Mansfield), MDFLD (Medfield), MILLS (Mills), MEDWY (Medway), NATB (North Attleboro), NORFK (Norfolk), SHA (Sharon), STOT (Stoughton), WALP (Walpole), CONTACT THRU Norfolk County Control									

Norwood Fire Department provides and receives mutual aid to and from surrounding communities for both Fire and EMS calls. Data indicates that, over the past 5 years, Norwood Fire Department has experienced an increase in both mutual aid received, and mutual aid provided. Mutual aid received from outside communities increased from 2020 to 2024 by 250 percent.

Mutual Aid Received

Year	2020	2021	2022	2023	2024
Per year	211		408	374	534
EMS	186		376	335	471
Fire	25		32	39	63

Figure 9

(Note: Data was unavailable for year 2021)

Mutual aid provided by Norwood Fire Department to outside communities also increased from 2020 to 2024 by 74 percent.

Mutual Aid Given

Year	2020	2021	2022	2023	2024
Per year	151		202	187	299
EMS	95		151	136	222
Fire	56		51	51	77

Figure 10

(Note: data was unavailable for year 2021)

For both mutual aid received and provided the numbers reflect a substantial increase in the need for resources, not only for the Town of Norwood but also for the surrounding communities.

Fire mutual aid received by Norwood as well as mutual provided to surrounding communities appears reasonable and sustainable. However, EMS mutual aid received and provided by Norwood is consistently high. Norwood Fire EMS provides mutual aid to the surrounding communities more than once every other day. Conversely, the Norwood Fire Department requires surrounding communities to provide EMS mutual aid into the Town of Norwood 1.3 times every day.

Department Survey (Appendix B)

We sent out a survey to all department members with the following 10 questions:

1. What are the untapped opportunities for the Norwood Fire Department?
2. What challenges are, or will, the Norwood Fire Department be facing?
3. If you could improve three things with department operations, what would they be?
4. How can the current EMS transport system be improved?
5. Why should the Norwood Fire Department increase shift staffing?
6. Can the current facilities accommodate additional shift staffing?
7. Are there additional staff positions you feel should be added to the department?
What are they?
8. Is department training satisfactory?
9. Is your structural gear and other protective gear adequate?
10. Please add any additional comment that you think would be helpful.

42 department members took the time to answer the survey and did so in a very professional manner. We have attached the answers to the survey in Appendix C, which offers great insight from the firefighters and officers on the 10 questions in the survey on how they believe the department is currently operating and what they feel are the future needs of the department. The key takeaways from the survey were:

- The Department has great potential and could be one of the premier fire departments in the area if given the needed resources.
- Call volume has increased dramatically, and staffing has not kept pace with that demand. Staffing has remained the same for over the last 30 years.
- Staffing of apparatus to NFPA standards.
- Need a third ambulance put into service and into the daily rotation system.
- EMT and Paramedic burnout from the demand and frequency of medical calls placed on the 32 Class 1 EMTs and Paramedics.
- Very limited or poor in-house training because training is always interrupted to respond to an emergency. Training money should be made available to hire off duty members for the purpose of staffing apparatus to help decrease these interruptions.
- Need for a second station. Space in the current station is limited, and response times could be improved with a second station. The current station will not be able to accommodate the increase in staffing that will be needed in the future.
- Members still have concerns with the PFAS (cancer causing chemical) in their turnout gear.
- Need for a dedicated full-time EMS Officer.
- The Chief should have Officer meetings and meet with all the Groups.
- Equip Engine 5, Engine 6 and Ladder 1 to the Class 5 ALS level.

Applicable National Standards Related to Staffing Levels

OSHA 2in/2out law and NFPA Standard 1710 for Career Fire Departments

The study would be incomplete if it did not address the current OSHA 29 CFR 1910.134 “2in/2out” law and the NFPA Standard 1710 for Career Fire Departments.

OSHA 2in/2out Law

Definition of a law: the system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties (Definition from Oxford Languages).

The “2 in/2 out” law was designed for the safety of firefighters engaged in interior structural firefighting and is the major focus of paragraph (g) (4) of the OSHA Respiratory Protection standard. This provision first requires that at least two firefighters enter the Immediately Dangerous to Life or Health (IDLH) atmosphere and remain in visual or voice contact with each other at all times. Second, it then requires that at least two others be located outside the IDLH atmosphere, thus the term, “2 in/2 out”. This ensures that the “two in” can monitor each other and assist with equipment failure or entrapment or other hazards, and the “two out” can monitor those in the building, initiate rescue, or call for back-up. One of the “two out” can be assigned another role such as incident commander. The study found that the Norwood Fire Department complies with the “2 in/2 out” law under normal response conditions.

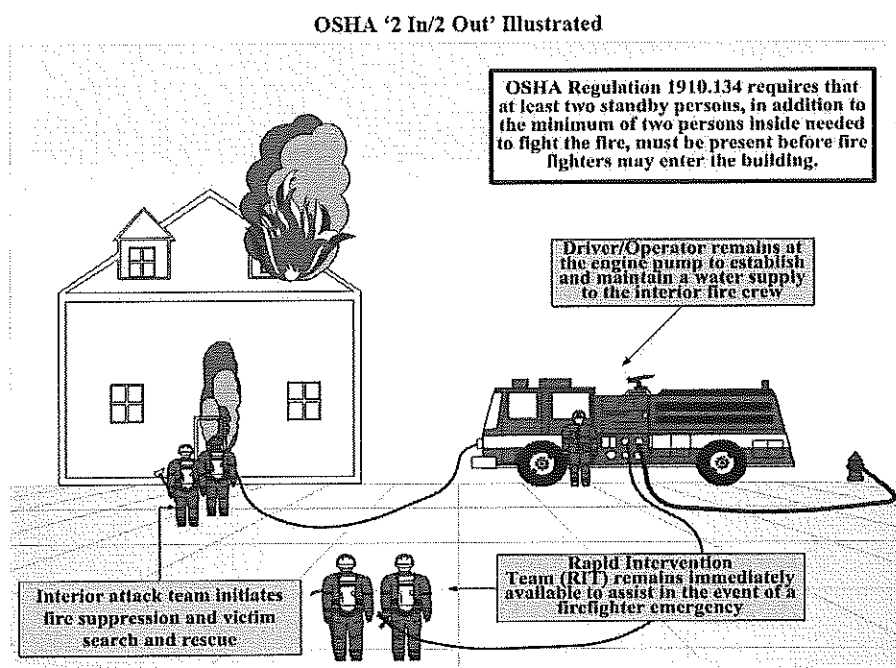


Figure 11 Credit: Fairview Fire District

NFPA Standard 1710

NFPA Standard 1710, 2020 Edition for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (see appendix A).

Definition of a Standard: A level of quality or attainment. An idea or thing used as a measure, norm, or model in comparative evaluations. Used or accepted as normal or average (Definition from Oxford Languages).

Appropriate staffing levels deliver effective and efficient deployment for fire suppression operations, emergency medical operations, and special operations to the public. NFPA 1710 is a standard/guideline for an all-career fire department to help protect citizens and provide for the occupational safety and health of its fire department employees. Provisions of 1710 cover functions and objectives of fire department emergency service delivery, response capabilities, and resources, including staffing levels, response times, and levels of service. General criteria for managing resources and systems, such as health and safety, incident management, training, communications, and pre-incident planning are also provided in NFPA 1710.

NFPA guidelines are based on research performed by trained members of the association. Scientific research, such as fire behavior in different environments and how different synthetic materials affect the burn process are used in part to establish these guidelines.

NFPA 1710 addresses the structure and operation of organizations providing such services, which include fire suppression and other assigned emergency response responsibilities such as EMS and special operations.

The requirements are intended to provide effective, efficient, and safe protective services to help prevent fires, reduce risk to lives and property, deal with incidents that occur, and help prepare for anticipated incidents.

The requirements are listed in NFPA 1710 for fire department service deployment based on the type of occupancy, along with the appropriate response staffing levels for each. The minimum staffing level for a single-family dwelling according to the standard is a minimum of 16 members or 17 if aerial device is used.

Furthermore, NFPA 1710 requires a minimum staffing on both Fire Engines and Ladder Truck companies to be a minimum of 4, 1 Officer and 3 Firefighters (NFPA 1710, 5.2.3.11 and 5.2.4.1.1).

The initial full alarm assignment to a structure fire in a typical 2000 sq/ft 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) (See Appendix for an overview of NFPA 1710).

Staffing for a typical single-family dwelling

Assignment/Position	Required for the Function
Incident Commander	1 Officer
Uninterrupted Water Supply	1 Pump Operator
Water Flow from Two Handlines	4 Firefighters (2FFs for each handline)
Support for Handlines	2 Firefighters (1 FF for each handline)
Victim Search and Rescue Team	2 Firefighters
Ventilation Team	2 Firefighters
Rapid Intervention Crew	4 Firefighters
**Aerial Operator	**1 Firefighter
Minimum Personnel Required	16 Firefighters** and 1 Incident Commander

Figure 12

The illustration below shows the positions and apparatus required under NFPA Standard 1710 for a 2000 square foot, single family structure fire.

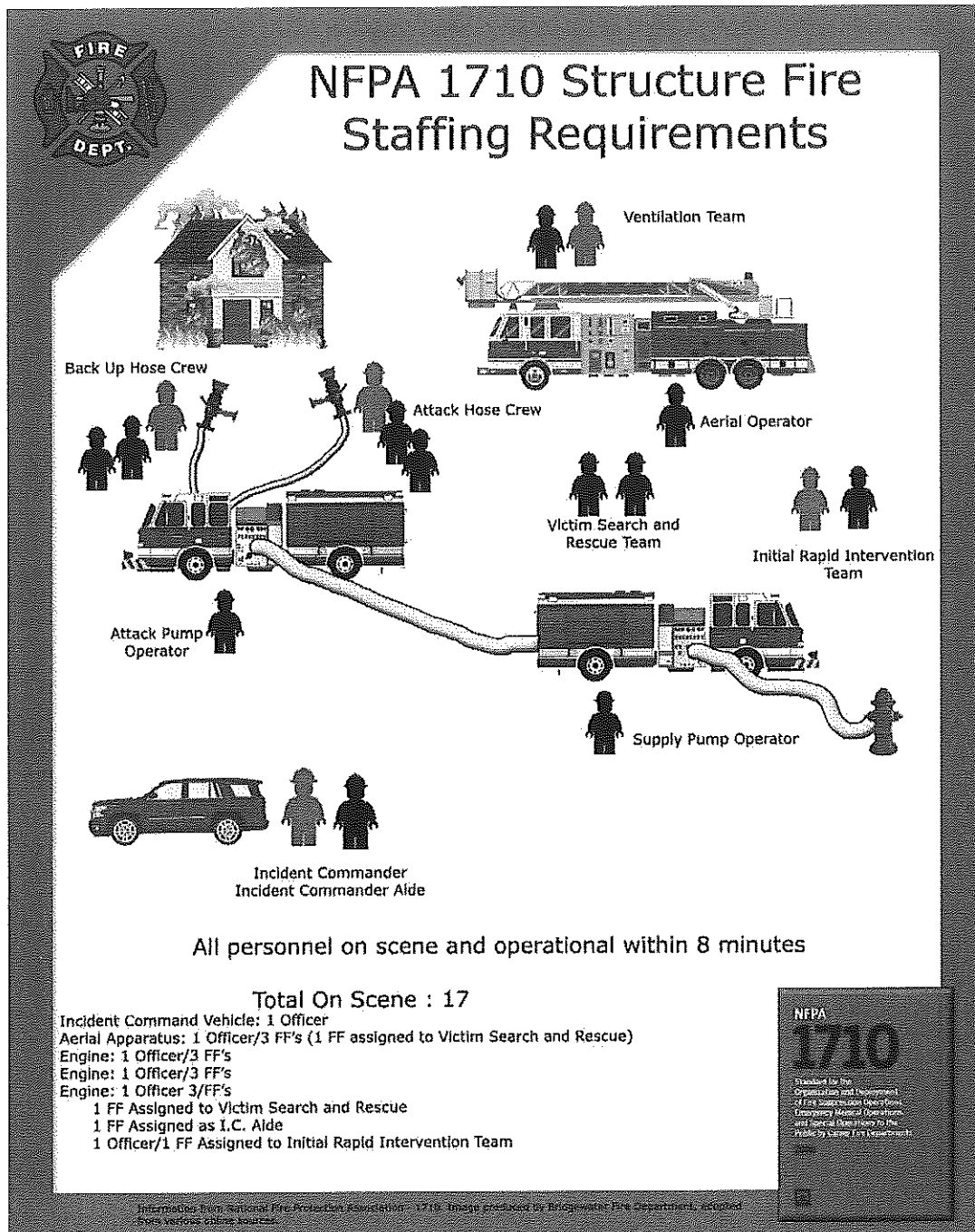


Figure 13 Credit Bridgewater Fire Department

Additionally, NFPA 1710 provides essential benchmarks. Fire departments often measure baseline performance in terms of total response time, which is the time it takes from the call to be received at the Public Safety Answering Point (PSAP) until the first unit arrives on the scene of the emergency incident. Total response time should be measured and reported for all first-due units *and* the effective response force (ERF) assembly. Total response time is composed of call-processing time, turnout time and travel time:

- Alarm Answering Time: 15 seconds for 95% of calls; 40 seconds for 99% of calls
- Alarm Processing Time: 64 seconds for 90% of calls; 106 seconds for 95% of calls
- Turnout Time: 60 seconds for EMS responses; 80 seconds for fire responses
- First Engine Arrive on Scene Time: 240 sec (4 minutes) for 90% of responses with a minimum staffing of 4 personnel
- Second Company Arrive on Scene Time: 360 seconds (6 minutes) for 90% of responses with a minimum staffing of 4 personnel
- Initial Full Alarm – Low and Medium Hazard Assembly Time: 480 seconds (8 minutes) on 90% of responses
- Initial Full Alarm – High Hazard/High-Rise Assembly Time: 610 seconds (10 minutes 10 seconds) on 90% of responses
(See Appendix A)

Norwood Fire Department Organizational Structure

As stated earlier, NFPA Standards are guidelines for fire departments to be aware of and hopefully work towards full implementation. There are many ways to achieve compliance with NFPA 1710 such as automatic aid, mutual aid with neighboring communities, pre-fire plans, etc. It is recommended that Norwood Fire Department continuously strives to comply with the guidelines of NFPA 1710.

The Norwood Fire Department consists of 65 uniformed positions. The uniformed Staff positions include the Fire Chief, 2-Deputy Fire Chiefs and a Fire Prevention Fire Lieutenant and Fire Captain. A staff position provides administrative and/or technical support from a non-operational role.

The department has 60 uniformed line positions that provide for the emergency fire and EMS response and field operations. The 60line positions are divided into 4 Groups of 15 to provide coverage 24 hour per day/7 days a week. Each Group staffs 2 Fire Engines, 1 Ladder Truck and 2 Ambulances on a daily basis. Minimum staffing on each Group is 14 personnel, below which the Department will hire to fill the vacancies created by vacation, personal day, sick day, on-the-job injury, etc.

When Groups are staffed at 15 members the Shift Captain runs out of a Command Vehicle NC3, Engine 6 is staffed with a Fire Lieutenant and 3 Firefighters, Ladder 1 is staffed with a

Lieutenant and 3 Firefighters, Engine 5 is staffed with 2 Firefighters, and Ambulance 4 and Ambulance 5 are staffed with 2 Firefighters each.

NC3	Engine 6	Ladder 1	Engine 5	Ambulance 4	Ambulance 5
Captain	Lieutenant	Lieutenant	2 Firefighters	2 Firefighters	2 Firefighters
	3 Firefighters	3 Firefighters			

Figure 14

Below is the current Organizational Chart for the Norwood Fire Department with each Group staffed with 15 members:

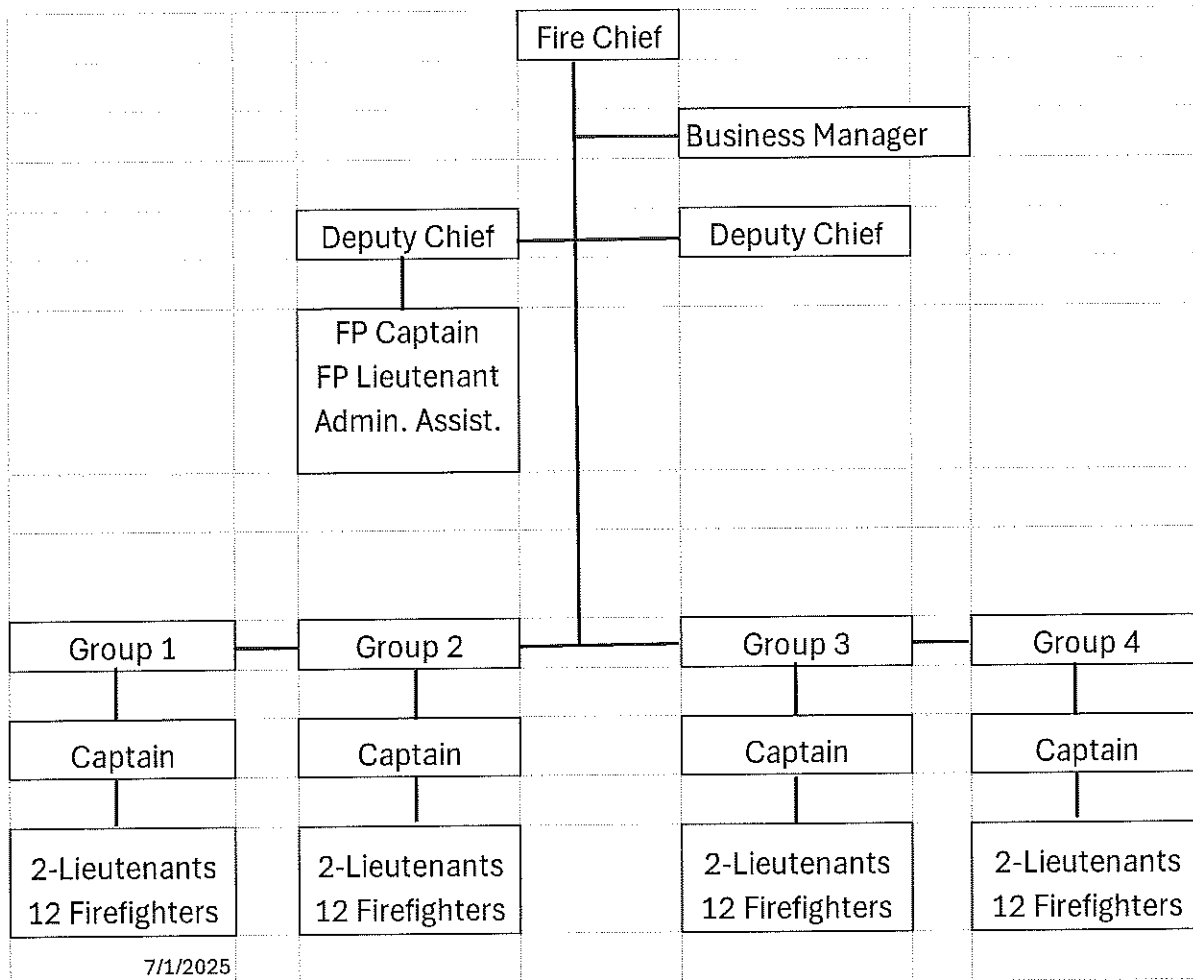


Figure 15

Recommendations

Recommendation 1

In the short term, in an effort to comply with NFPA Standard 1710 and in consideration of the substantial increase in EMS, fire and non-fire responses of 33%, it is recommended that the current staffing of 15 positions be increased to 18 positions. When all 18 positions are on duty both Fire Engines are staffed with 4 members each and the Ladder Truck will be staffed with 5 members, which meets NFPA 1710's apparatus staffing standard. It is further recommended that, within the 18 positions, an additional Fire Lieutenant position is created to serve as the Officer on Engine 5 when staffed at 4 (1 Officer and 3 Firefighters). This would properly staff all apparatus with a Fire Officer.

Apparatus staffing at 18 members:

NC3	Engine 6	Ladder 1	Engine 5	Ambulance 4	Ambulance 5
Captain	Lieutenant	Lieutenant	2 Firefighters	2 Firefighters	2 Firefighters
	3 Firefighters	4 Firefighters			

Figure 16

Below is the current Organizational Chart for the Norwood Fire Department with each Group staffed with 18 members:

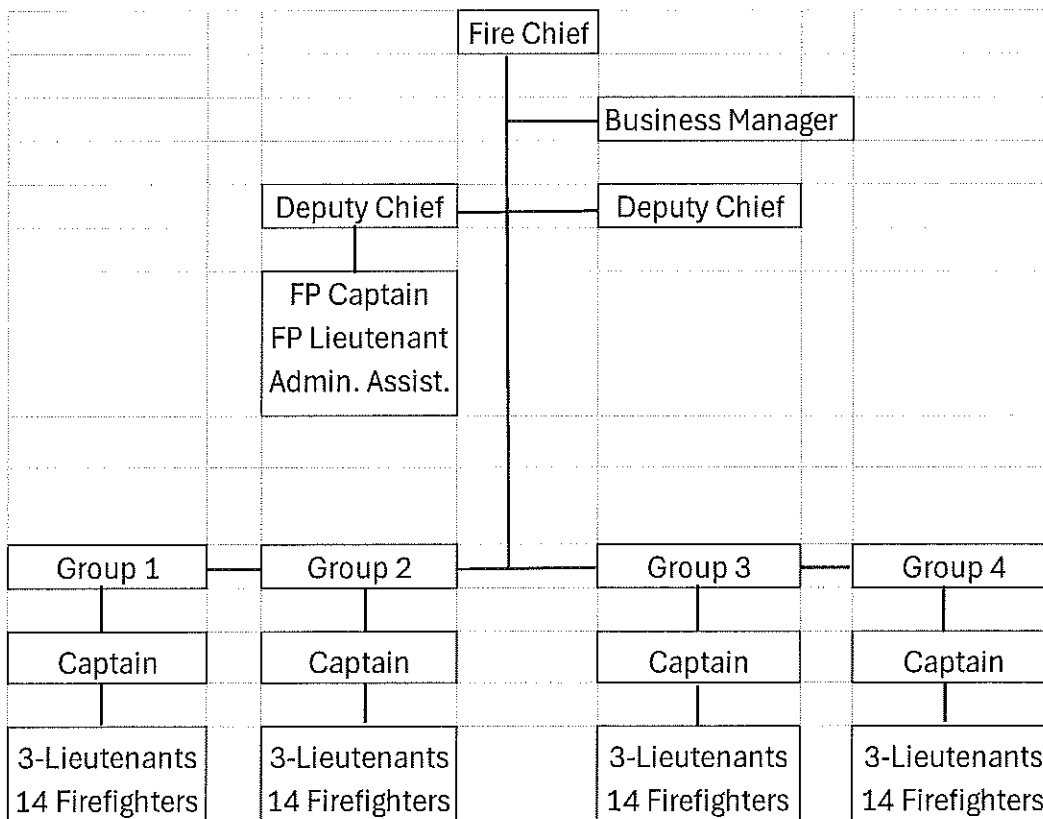


Figure 17

If calls continue to increase as they have over the past 5 years, in the long term the Department will need to review the need for additional resources and consider an increase in both minimum staffing and response apparatus to meet these needs.

Recommendation 2

If staffing is increased to 18 members per Group we recommend a change to Article 15, Section 1, EMT Certifications under Class 1 – Mainstream EMS and increase the Mainstream EMS members from 32 members to 44 members. Currently, the 32 least senior Firefighters are assigned to the ambulance on a rotating basis, 8 Firefighters per Group. The increase to 44 members would now have 11 Firefighters per Group assigned to the ambulance on a rotating basis. This increase would allow the Class 1 EMTs and Paramedics more time away from the ambulance and help to reduce EMS burnout caused from frequent exposure to traumatic events, severe injuries, fatalities, and other emotionally draining incidents.

These first 2 recommendations do come with a cost and would require adding 12 Firefighter/Medics (3 per Group) to the Fire Department's current staff and promoting 4 firefighters to the rank of Lieutenant.

Each additional Firefighter/Medic base cost is approximately \$110,000.00 to the Department budget with a total cost for 12 Firefighter/Medics of approximately \$1,320,000.00.

An estimate of what each Firefighter/Medic could cost:

- Step 2 Firefighter/Medic
- Annual salary = \$83,000.00
- Holiday pay = \$4,321.00
- Bachelor's degree = \$12,500
- Turnout gear, uniforms etc. = \$7000.00

Promoting 4 mid-step Firefighter/Medics to a Step 1 Fire Lieutenant/Medic would be a cost of approximately \$28,000.00 (\$7,000.00 for each Lieutenant).

- Step 4 Firefighter/Medic = \$88,014.00
- Step 1 Lieutenant/Medic = \$94,804.00

The Department will realize a savings in the Substitution line item because with the 18 members per shift, the Department will be running down 3 members before they fill a vacancy as opposed to running down 1 member per shift before filling a vacancy with the current model. These savings could be 1/2 of the current FY/2026 Substitution line or \$470,250.00.

Recommendation 3

Hiring one “floating firefighter/Medic”. Replacing and hiring a new firefighter/Medic can be very time consuming. You must first advertise, interview, conduct thorough background checks and then apply for and secure a spot in the mandatory MA Firefighter Recruit Training Academy, followed by 10 weeks in the academy. The entire process from advertising to academy graduation typically takes 12 months. This “floating firefighter/Medic” will be a flexible position designed to fill staffing gaps caused by unexpected retirements and absences such as extended injury and sick leave. This will help ensure minimum on-duty staffing levels, thereby maintaining operational effectiveness and coverage.

This “floating firefighter/Medic will be assigned to one of the Groups, giving that Group a complement of 19 members, and will be reassigned to another Group when they drop below 18 members to fill for an extended leave situation.

The additional “floater firefighter/Medic” would cost is approximately \$110,000.00.

The estimate cost of a Firefighter/Medic is:

- Step 2 Firefighter/Medic
- Annual salary = \$83,000.00
- Holiday pay = \$4,321.00
- Bachelor’s degree = \$12,500
- Turnout gear, uniforms etc. = \$7000.00

Recommendation 4

In the survey, many department members repeatedly stated that on-duty Department training is hindered because of the call volume the Norwood Fire Department is experiencing. Training is very often interrupted by the need to respond to an emergency call, resulting in the training being cancelled or, if resumed, disjointed at best. It is recommended that 32 hours of paid off duty training be afforded to each department member. This would be similar to the off duty training the Norwood police officers receive each year.

The estimate cost to the department is:

72 members X 32 hours X an average O.T rate of \$70.00 = \$161,280.00

Recommendation 5

Full-time Training Officer. Currently, a Deputy Fire Chief oversees Department fire training. For the majority of the time, the training is scheduled by the Deputy Chief and then handed off to the Shift Officers who conduct the training. Training done in this manner by four

different Shift Officers may lead to inconsistent training, record keeping and accountability across the entire Department.

It is recommended that the Department hire a full-time Training Officer with the rank of Fire Captain. He or she would be responsible to ensure firefighters have the skills, knowledge, and physical readiness to respond effectively to emergencies. The training officer will develop and deliver ongoing training, create and schedule drills, and conduct assessments to ensure compliance with State and national standards -ultimately protecting firefighters, the public, and property.

Key Responsibilities of a Training Officer

- Develop and Deliver Training:
 - Creates and presents technical training programs for new recruits and existing firefighters to maintain competency and introduce new technologies or tactics.
- Ensure Standards Compliance:
 - Develops and administers training in accordance with state and national standards, ensuring the department meets legal and professional requirements.
- Assess Firefighter Performance:
 - Conducts evaluations to assess firefighters' skills, knowledge, and readiness, and provides performance evaluations.
- Record Keeping:
 - Maintains firefighter training records to ensure compliance with NFPA standards and public records laws, and improves accountability by providing clear documentation of personnel competency
- Manage Training Schedules:
 - Develops and maintains training schedules to ensure consistent practice and continuous education for all department members.
- Promote Safety:
 - Inspects training equipment and grounds to ensure safety, fostering a safe and effective learning environment during drills and exercises.
- Foster Professionalism and Culture:
 - Instills a commitment to excellence and professionalism, influencing a firefighter's abilities under pressure and fostering teamwork.
- Mentor and Lead:

- Serves as a mentor for recruits, guiding them to meet departmental standards for skills, knowledge, and safety, which is essential for maintaining the integrity of the fire service.

Why the Role is Essential

- Maintains Skills:
 - Fires are infrequent, so regular and structured training is crucial to keep firefighters prepared for diverse and demanding situations.
- Protects Lives and Property:
 - Competent firefighters are better equipped to protect themselves, their colleagues, and the public.
- Ensures Consistency:
 - A dedicated training officer ensures that everyone in the department operates with the same high-level standards and practices.
- Drives Professional Growth:
 - Training Officers provide opportunities for continuous learning and skill development, which is vital for a firefighter's professional journey and for adapting to new challenges.

Estimated cost for a Full-time Training Captain/Medic with a bachelor's degree is approximately \$114,500.00.

Recommendation 6

The Norwood Fire Department received EMS mutual aid from surrounding fire departments 471 time in 2024, and this need is trending upward. Average response time for a mutual aid ALS ambulance can be 15 minutes or more. The NFPA 1710 standard advocates that ALS care be provided within 8 minutes of the emergency medical call.

Norwood Fire Department sends a Fire Engine or Ladder Truck on all EMS calls to assist the Norwood ambulance or any mutual aid ambulances coming into town. Although the Fire Engines and Ladder Truck are staffed with firefighter/Medics neither the engines or ladder carry ALS equipment and are not classified as Class 5 Ambulances (a Class 5 Ambulance is licensed as a non-transport ambulance).

It is recommended that Norwood Fire Department provides ALS capabilities on both engines and the ladder truck to enable the department to rapidly deliver ALS care in medical emergencies, improve patient outcomes by starting treatment sooner and provide extra medical and physical support for complex incidents. Additionally, it will greatly improve the gap between the initial response and the arrival of mutual aid ALS ambulances.

The estimated cost for equipping both fire engines and the ladder truck to the ALS level is \$000,000. (waiting for cost figures)

If all the recommendations are implemented the staffing of uniform members would increase from 65 to 79. The organizational chart below would reflect this increase in staffing:

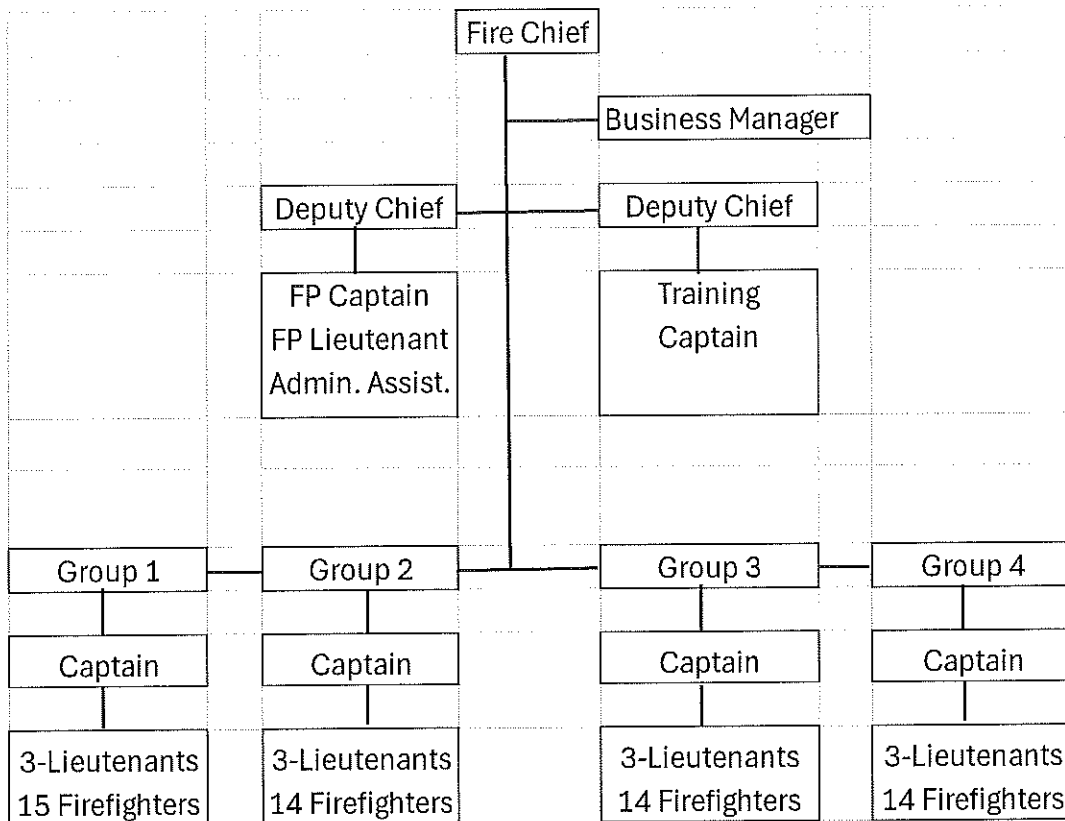


Figure 18

Review of the FY/2025 Budget and Expenditures

A review of the FY/2025 budget revealed nothing extraordinary. The total budget appropriated was \$9,168,080.00 and revised to \$9,213,846.00. The actual budget expended was \$8,733,786.52 and \$75,779.56 was encumbered. This left a positive balance of \$404,280.00 at the end of FY/2025. Additionally, ambulance revenues were expected to be \$2,400,000.00 but were actually \$2,996,499.05 - an increase of \$596,499.05 in anticipated revenues. This is due largely to the increase in the number of EMS transports.

Revenues for Fire Prevention permitting were anticipated at \$50,000.00 and were actually \$67,585.00 - a \$17,585.00 increase over what was anticipated.

Personnel salaries finished in the black with \$237,259.83 left available, indicating that 2.5 to 3 positions went unfilled during the year. This is not uncommon with unanticipated retirement and the current job market of hiring Firefighter/EMTs and Paramedics. However, operating with these vacancies creates an increased use of the Substitute Budget (overtime), which was well managed and ended the year with a \$60,042.73 surplus.

Incentive pay finished a negative \$51,667.57. This can be attributed to 3 or 4 firefighters attaining their college degrees, which was not anticipated. The ambulance equipment line also ran a negative of \$36,254.82 but this is related directly to the increase in ambulance transports. The final line item that was examined was Operations, which showed a negative balance of \$53,198.81. This was for the purchase of needed equipment, such as stream lights, foam, chainsaws, hand tools, Jaw of Life, rope, etc. There was a surplus in the overall Expense accounts, so this cost was correctly charged to the proper account (Operations), rather than taking it from another line item that had extra funds, such as Postage or Printing.

Both the incentive pay and ambulance equipment lines have been adjusted in FY/2026 to account for the anticipated change/increase.

On a positive note, at the end of FY/2025 there was a surplus of \$404,280.15 or 4% of the budget.

Cost of Vacancies

In FY/2025 the Department spent \$889,957.00 to fill vacancies and maintain a minimum staffing level of 14 members per Group. Records for this type of time off and filling of shifts are maintained by paper, so data was limited. In order to get the average shifts being filled on a daily basis the Substitute line item was divided by the average overtime rate for the department (at step 1) to find the total number of hours filled for the year. That number was then divided by 24 to get the total number of 24-hour shifts filled in FY/2025. Finally, the number of 24-hour shifts was divided by the number of days in a year to get the average number of shifts filled each day with overtime (Figure 19).

Hours filled	24 hr shift/yr	24 hr shifts/day
14762	615	1.7

Figure 19

After examining the data, it is estimated that two 24-hour shifts are filled with overtime every day of the year. Additionally, each shift is allowed to run down 1 member per shift that is not filled. This leaves an estimated 3 members off per 24-hour day, 365 days of the year.

Long-term vacancies were also examined. These result from extended injury leave, extended sick leave, retirements and the time it takes to hire new Firefighter/Medics and put them through recruit training, etc. Retirements in a 65-person fire department average 2 to 3 retirements per year. This is based on a firefighter reaching his or her maximum retirement with 32 years of service and an age of 55.

Long-term line of duty injuries and sick leave (3 consecutive months or more) averaged 300 24-hour shifts per year between 2021 and 2024.

	2021	2022	2023	2024
IOD	184	169	192	261
Sick	54	106	200	33
Total	238	275	392	294
Shifts/day	0.65	0.75	1.07	0.81
	average /year			
	300			

Figure 20

Future Concerns

Total Call Volume

If the overall call volume continues to increase at the same rate that it has over the last 5 years, the Department could be looking at a total call volume in 2029 of an estimated 9,250. This would be an increase of 2,100 calls or a 29% increase.

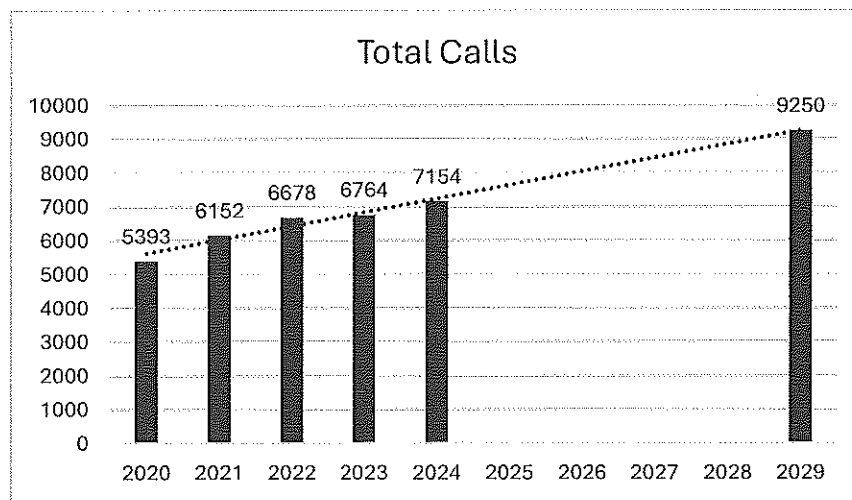


Chart 5

EMS Call Volume

If EMS calls continue to increase at the same rate over the next 5 years, the Department could be responding to 7,500 medical calls by 2029. This is an increase of approximately 1,950 calls (35%). The ambulance transport system is approaching a critical breaking point. According to the ESO report, in 2024 Norwood Fire Department transported 3713 patients to local hospitals. When viewed over 365 days, the 2 currently staffed ambulances are each making an average of 5 transports to the hospital during a 24-hour shift. In 2024, there were 471 incidents (see Figure 9) for which the Norwood Fire Department was forced to request mutual aid for an EMS call because they did not have a Norwood Fire Ambulance available.

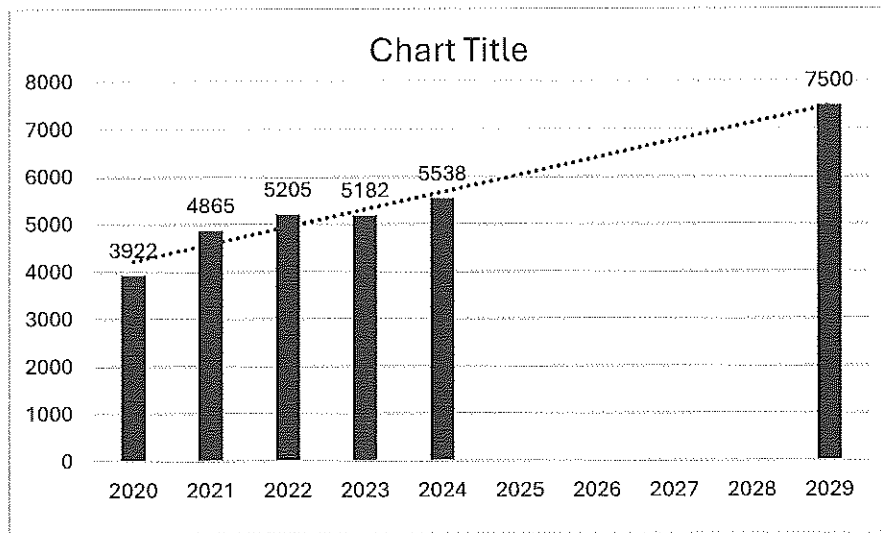


Chart 6

Currently, the Department is managing to provide sufficient EMS service to the community but, if the call rate continues the recent upward trend, additional resources will be needed. This would most likely require the staffing of a third ambulance.

The Town of Franklin was experiencing a very similar situation of having to call for mutual aid to handle 450 EMS calls over a twelve-month period. They put a third ambulance in service 4 days per week from 7AM to 5PM. The result was that they were able to capture 150 of these calls that would have required mutual aid. The Fire Chief estimated the town collected \$150,000.00 from these calls (conversation with Franklin Fire Chief James McLaughlin).

Community Fire and EMS Risk Assessment

It is apparent from the data collected that the Town of Norwood is experiencing a higher than average number of responses to fire, non-fire and EMS calls. Accordingly, it is recommended that the Department conduct a Fire and EMS risk assessment.

The U.S. Fire Administration (USFA) and Vision 20/20 provide a Community Risk Assessment Guide to help fire departments and communities develop strategies and plans for reducing fire and EMS-related risks. It is suggested that to conduct a fire and EMS risk assessment the Department follow a six-step process: identify hazards, assess who is at risk, evaluate existing safety measures, determine the risks, document your findings, and develop a Community Risk Reduction (CRR) plan.

Listed below are the key steps for conducting a Fire and EMS Risk Assessment:

1. Identify Hazards:
 - Look for potential fuel, ignition, and oxygen sources that could lead to fires.
 - Consider structural components like vacant attics or flammable materials that could help a fire spread.
 - Identify EMS hazards, difficult patient access, and the need for specialized equipment.
 - Response to unintentional and false alarms or calls
2. Identify People at Risk:
 - Determine who might be injured or harmed by the identified hazards.
 - Consider vulnerable populations and specific demographic groups within the community.
3. Evaluate Existing Safety Measures:
 - Assess the effectiveness of any fire safety measures and personal protective equipment (PPE) already in place.
 - Ensure that the measures in place are appropriate and sufficient to mitigate the identified risks.
4. Assess Risks:
 - For fires, consider the risk posed by different types of fires (Class A, B, C, D) and their potential spread.
 - For EMS, assess the potential loss of life, personal injury, areas and facilities with high demand, and aging population and or population with a large demand.
5. Document Findings:
 - Record all identified hazards, people at risk, existing safety measures, and risk assessments.

- The assessment document should provide insight into when, where, and why a fire or EMS event might occur and which community members could be affected.
6. Develop a CRR Plan:
- Use the findings from the risk assessment to create a Community Risk Reduction plan.
 - Develop evidence-based strategies to reduce the identified fire and EMS risks within the community

Appendix A – NFPA Standard 1710 Fact Sheet

NFPA® Standard 1710, 2020 Edition



Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments

Fire Suppression and Special Operations Provisions

■ **Career fire department** is defined as a department that uses full-time or full-time-equivalent (FTE) station-based personnel immediately available to comprise at least 50% of an initial full alarm assignment

■ **Company** is defined as:

- A group of members under direct supervision
- Trained and equipped to perform assigned tasks
- Organized and identified as engine, ladder, rescue, squad or multi-functional companies
- Arrive on the scene in an apparatus

■ **EXCEPTION** to company arriving on one apparatus:

- Multiple apparatuses are assigned, dispatched and arrive together
- Continuously operate together
- Managed by a single company officer

■ An initial alarm is personnel, equipment and resources originally dispatched upon notification of a structure fire

■ **Company Staffing (Crew Size)**

- Engine = minimum four on duty
 - High volume/geographic restrictions = five minimum on duty
 - Tactical hazards/dense urban area = six minimum on duty
- Truck = minimum four on duty
 - High volume/geographic restrictions = five minimum on duty
 - Tactical hazards/dense urban area = six minimum on duty

■ **Initial Alarm Deployment (number of fire fighters, including officers)**

- Low hazard = 17 fire fighters
- Medium hazard = 28 fire fighters
- High hazard = 43 fire fighters

■ **Initial Alarm Deployment (number of fire fighters, including officers)**

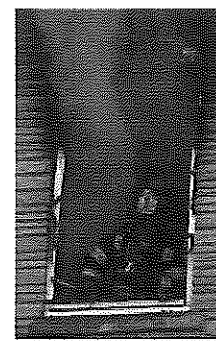
- Low hazard = 17 fire fighters
- Medium hazard = 28 fire fighters
- High hazard = 43 fire fighters

■ **Key Performance Objectives for Fire Response**

- Turnout time ≤ 80 seconds
- First engine arrive on scene ≤ 240 seconds (four minutes)
- Second company arrive on scene ≤ 360 seconds (six minutes)
- Low and medium hazard: Initial full alarm on scene ≤ 480 sec (eight minutes)
- High hazard/high-rise: Initial full alarm ≤ 610 sec (10 minutes, 10 seconds)

■ Fire departments shall set forth criteria for various types of incidents to which they are required/expected to respond. These types of incidents should include the following:

- Natural disaster
- Airport rescue and firefighting
- Acts of terrorism
- Marine rescue and firefighting
- Weapons of Mass Destruction
- Wildland fire suppression services
- Large-scale mass casualty
- Mutual and auto-aid



EMS Provisions

■ The Authority Having Jurisdiction (AHJ) shall determine if the fire department will provide BLS and/or ALS first response and/or transport.

■ Patient treatment associated with each level of EMS should be determined by the AHJ based on requirements and licensing within each state/province

■ **Staffing (Crew Size)**

- On-duty EMS units shall be staffed with the minimum members necessary for emergency medical care relative to the level of EMS provided by the fire department
- Personnel deployed to ALS emergency responses include:
 - A minimum of two members trained at the paramedic level
 - **AND** two members trained at the Basic level arriving on scene within the established travel time.

■ **Key Performance Objectives for EMS Response**

- Turnout time ≤ 60 seconds
- First responder arrives with an AED or higher capability ≤ 240 seconds (four minutes)
- ALS unit arrives ≤ 480 sec (eight minutes)
 - The eight-minute benchmark for ALS units assumes that a first responder, minimally equipped with an AED, arrived in four minutes

■ The fire department shall clearly document its role, responsibilities, functions and objectives for the delivery of EMS. EMS operations shall be organized to ensure the fire department's capability and includes members, equipment and resources to deploy the initial arriving company and additional alarm assignments

Appendix B – Department Survey