

SCARBOROUGH FIRE DEPARTMENT



STAFFING PLAN OVERVIEW

March 2019

In 2006 the department issued its first Executive Analysis of Staffing Needs for the Scarborough Fire Department. That document was updated in 2008, 2013, and again this year. This is a much abbreviated overview of the plan. The full version of staffing plan is available on the Fire Department's webpage at:

www.scarboroughmaine.org/fire-rescue

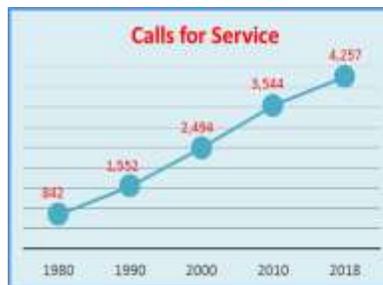
As we pause and look toward the future there are a number of challenges that the department must face including:

- Rapid increases in annual calls for service (averaging 4.0% over the past 25-years).
- Fewer citizens able and/or willing to become call members.
- The need to expand on-duty coverage in the stations beyond the current schedule of the Per-diem Firefighter program.
- Meeting the national response standards due to the size of, and geographical obstacles, within our community.
- The continuation of rapid residential growth including hundreds of multi-tenant housing units proposed, already approved, or under construction.
- Commercial growth town-wide including the growth of assisted living, nursing homes and other health care related facilities that are driving much of the increase in EMS calls.
- In addition to the normal growth pressures our community has experienced historically, the Scarborough Downs project alone is forecast to significantly increase population, housing units, and commercial/industrial growth over the next twenty plus years.

The department's goal in developing this staffing plan is to be proactive rather than reactive when staffing becomes a crisis placing our firefighters and the public we serve at risk.

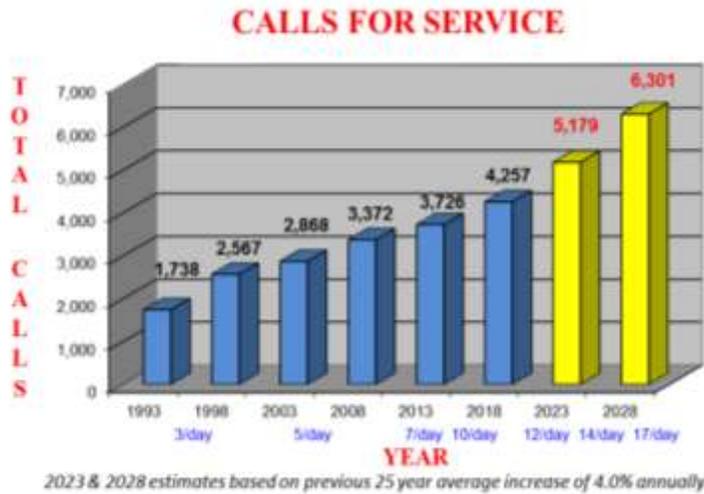
One of the most significant challenges or changes is the availability of our call force. Call members are volunteers who live and work in our community, and whom are paid an hourly rate to respond from home or work when needed for a call. For decades these members made up the vast majority of our workforce, and they were able to meet the needs of our community. Over the past 40 years there has been a dramatic change in the number of call members able to contribute to the organization. At the same time our calls for service volume has increased to a level where the call force can no longer play the vital role that it once did.

These graphs clearly illustrate the scope of this challenge. Over the past nearly 40 years, calls for service have rapidly risen, while during that same period of time the total number of call members available to meet those demands has fallen dramatically.



As emergency medical calls continued to increase due to our aging population and the addition of numerous health care and assisted living facilities, the community understood the need, and supported a multi-year plan, to staff a second ambulance in Dunstan. My predecessor, Chief Carson, developed a very cost effective solution to the department's day staffing problems. He started the Per-diem Firefighter program in 1989 and over a period of years he worked with the Town Manager and previous Town Councils to phase in

minimum coverage by staffing the stations with enough per-diem, on-duty personnel to assure the front-line apparatus responded during the day to augment the call company members that were available to help.



This chart graphically illustrates the demand on our department as represented by total calls for service. The numbers represented by the blue bars are the actual total fire and rescue emergency calls for the years noted. The yellow bars represent the projected calls for service volumes over the next 10 years based upon an average annual increase of 4.0% which was the actual average increase over the past 25 fiscal years. As you can see, last year we averaged over 11 calls/day. Ten years from now, in 2028, we estimate the demand will be approximately 17 calls/day. That volume will undoubtedly become impossible to maintain without additional staffing. It is important to note that the projections above are strictly

based on the normal historical growth we have experienced, and does not include the major new development of the Scarborough Downs property which has already been approved and is currently under construction. The projected impacts from that single project, above and beyond the projections above, are summarized below:

Forecasted Growth From Scarborough Downs Development Alone				
	Currently 2018	Downs Buildout	New Total by 2038	% of Town
Population	20,023	3,634	23,657	15%
Housing Units	8,508	1,986	10,494	19%
Commercial/Industrial SF	7,632,796	1,931,500	9,564,296	20%

Source: The Downs presentation to the Town Council 10/3/18

All of this growth equates to more calls for fire and EMS as well as increased demands for all municipal services. It is unrealistic to think that we can handle all this change with the call company participation we are currently experiencing. We must accept the changes that are already here and are on the horizon, and start preparing now so we continue to provide the services our citizens expect and deserve.

Meeting national standards is another challenge facing our department. The National Fire Protection Association (NFPA) 1710 - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments is the national standard that establishes best practices. NFPA 1710 also recognizes that it takes significant human resources to safely and effectively extinguish a structure fire. The standard requires a minimum of 15 firefighters arrive at a full alarm assignment within nine minutes, 90% of the time. This is just the absolute minimal initial crew needed to commence operations, additional personnel are required to supplement this crew as the operation continues. Meeting these standards with diminishing call membership, particularly at night when current per-diem staffing is at a minimum, is becoming a significant challenge.

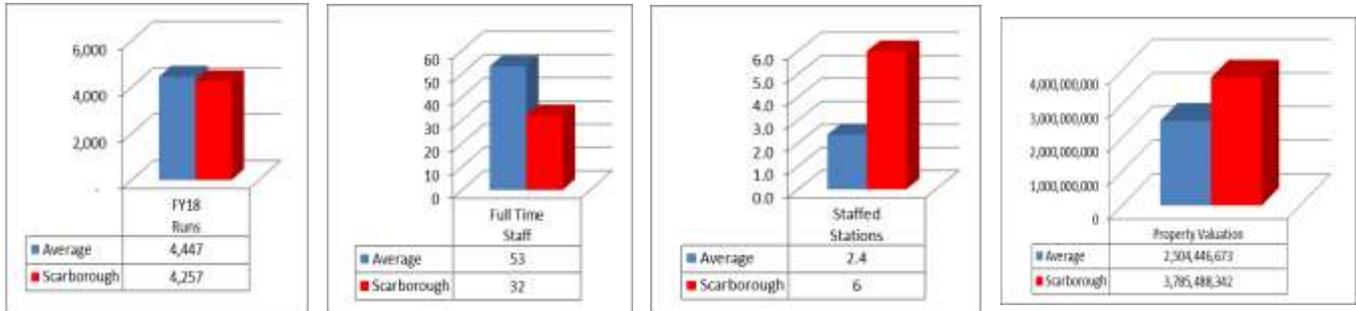
**NFPA 1710 Standard Requires
15 Firefighters arrive at a Full Alarm Assignment
within 9 minutes, 90% of the time**

1 - Incident Commander	1 - Fire fighter for backup line support
1 - Pump operator	2 - Fire fighters for search and rescue
2 - Fire fighters on attack lines	2 - Fire fighters for ventilation
2 - Fire fighters on backup lines	2 - Fire fighters to serve as IRIC
1 - Fire fighter for attack line support	1 - Aerial device operator

**Minimum Total of 15 Personnel Required
upon initial arrival to safely begin suppression operations**

Per NFPA 1410 - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments

As we developed a long range plan for the future we thought it would be helpful to see how other cohort departments are structured in departments with similar demographics and populations. The full report contains data from 13 communities. The graphics developed from that data illustrate that Scarborough is in the mid-range in population. Our call for service run volume is also very close to the average as you might expect since that is primarily driven by population. The data also clearly illustrates that our full time staffing is significantly (40%) lower than the average, while we are responsible for staffing more than double the average number of stations due to our geographic size. We are also protecting the second highest property valuation in the cohort study group.



These comparative statistics yield two conclusions. First, it is very evident that the combination of our dedicated call force and the proactive institution of the Per-diem Firefighter program have historically been able to keep up with the increasing demands while saving the town millions of dollars over the years. This is particularly telling when you recall that Scarborough is geographically larger than any of the other communities in the study group, and must respond from six stations to meet insurance and federal response standards. Second, it is very clear that we cannot continue to provide the same level of service without a plan for the future that includes the gradual implementation of more full time firefighter/EMT's.

The full report contains a section, in a brief Q & A format, to summarize a number of important points including those listed below:

- ? **What is driving the need to make this investment now?**
 Since 1980 call membership has fallen by 73% while over the same period the volume of calls for service has increased by over 400%. The average number of call members responding to an incident is now less than 3 and less than 10 for actual structure fires.
- ? **What is the status of the six neighborhood call companies?**
 We are fortunate to have a small core group of well-trained, seasoned, call members that provide a valuable service, but the number of them available is no longer able to sustain the department's growing needs without the support of per-diem personnel, and additional full-time staff.
- ? **How has growth impacted calls for service and the need for additional staffing?**
 Over the past 25 years the increase in call volume has been 4% annually. Applying that same rate of growth, the calls for service will increase by 48% in 10 years to over 6,300 calls annually.
- ? **Is the Scarborough Downs project included in the calls for service estimates above?**
 No, that projection only looks at town-wide historical growth. The approved Scarborough Downs project will increase the town's population by 15% or 3,634 people; increase housing units by 19% or 1,986 units; and add nearly 2,000,000 sf. of commercial/industrial space over the next 20+ years.
- ? **How many firefighters are required at a structure fire to meet national standards?**
 NFPA 1710 requires a minimum of 15 personnel to start fire suppression operations. Remember that we are currently responding to an average of over 10 calls/day, many of which are concurrent EMS calls that pull many of our full-time personnel out of town to the hospital for more than an hour each call. This reduces the available staffing below the minimum requirement for fire suppression operations.
- ? **Is closing neighborhood stations an option?**
 The proposed plan maintains all current stations and apparatus to ensure residents in each neighborhood receive a base level of high quality first response, specifically targeted towards time sensitive serious medical calls. This plan ensures our excellent ISO 3 rating is maintained.

? **How have fires changed with modern construction techniques?**

Historically homes and furnishings were made of natural woods and fibers referred to as legacy construction and materials. Fires in those homes took longer to grow and produced much lower heat than modern construction which uses plastics and petroleum products that burn much hotter & faster. This has resulted in creating untenable and unsafe conditions for residents & firefighters much sooner.

? **Is there an alternative to hiring four new personnel per year?**

Yes, a mid-year implementation followed by simply picking up the additional full-year cost of those positions in year 2 will accomplish the same goal over 2 fiscal years.

? **When does this staffing plan end?**

As proposed the conclusion of year 5 of the plan will have added sufficient personnel to implement the 3-tiered station staffing solution described in the full report. This concentrates full-time personnel at the two busiest stations, a mid-level of staffing at the tier-2 stations in No. Scarborough and Black Point, and a minimum level of staffing, primarily for rapid EMS response, at Pleasant Hill and Pine Point.

? **Why is FY20's plan so critical to implement?**

With a new public safety building coming on line in the spring of 2020, we now have the opportunity to house more of our on-duty personnel in the district where the majority of our calls originate. To be more efficient and effective our plan calls for re-locating some of our current staff from other stations to the new facility along with our third ambulance to reduce response times. The key need in FY20 is to create a new supervisor's position at the rank of lieutenant to provide effective management for the on-duty crews and new live-in students that will now be housed in our busiest fire station.

? **How do EMS billing revenues support the Fire Department operating budget?**

Each taxpayer in Scarborough supports a portion of the fire department's cost through property taxes. In the 80's we started billing patient's health and auto insurance for the cost of providing EMS service. The philosophy is that those that use the system (particularly those that aren't local taxpayers) also contribute towards the costs. In FY20 we project increased revenues of \$250,000 over last year which results in a net fire department operating budget reduction of \$22,016 or -0.42%.

In conclusion, the staffing challenges outlined in the report are not new. They were first documented in the 1950's. When Chief Thurlow took over as fire chief in 2001, developing a proactive staffing plan that positioned our department to meet the growth in our community was a high priority. The initial plan was produced in 2006 and has been revised several times. The goal has been to add four full time personnel/year which is what is required to fill a single new shift or position 24/7. Over the past 13 years there have been years when we have made great progress, as well as years, like the past two, when no progress was made. The hiring of full-time employees is never easy or popular, but this must be balanced with our community's ever increasing need for a well-trained, efficient, and effective fire and EMS department ready and able to meet the needs of our town.

The projections clearly show that we can't stand still and expect to be successful with the population and dramatic calls for service increases looming on the horizon. We believe the 3-tiered station staffing model outlined, along with the incremental addition of full time staff to augment the outstanding dedication and commitment of our call force is a prudent and cost effective solution.

The plan provides a historical review of where we came from and what has been accomplished to meet the needs. We illustrated that when compared to other similar communities our department is providing an excellent level of service with significantly less full-time personnel than almost all of the other towns or cities in the cohort group. The per-diem program which started in 1989 is extremely cost effective and was the first of its kind anywhere in the state. It is a program that has worked well and has been widely copied by numerous departments. We are very proud of that fact, and of the employees that provide that service to our citizens on a daily basis.

Our current combination system of full-time, per-diem, and call personnel has saved the Town of Scarborough millions of dollars over the years. This has been accomplished by being creative and proactive in our approach to using per-diem employees alongside our dedicated call members to fill in coverage gaps as needed. The combination approach we have outlined in this report will continue to work and save taxpayer money, but it requires the gradual addition of full-time personnel to remain successful. We look forward to the opportunity to discuss these issues with you and work together to implement them with the sole goal of providing an exceptional public safety service to our citizens at a reasonable cost.