



Rye Fire Rescue Staffing Needs Assessment and Strategic Plan

OUR PRIMARY RESEARCH QUESTIONS

1. Does Rye Fire Rescue have adequate resources to provide effective, responsive, high-quality fire and EMS delivery to all residents and customers within the town of Rye?
2. What are the benefits and liabilities contained within our current fire and EMS service delivery model?
3. What are the benefits and liabilities contained within our current call force? What can be done to increase recruitment and retention of our call members?
4. What is the current status of our ALS system relative to providing top – notch ALS delivery now and in the future?
5. Is our current fire and EMS service delivery model adequate? If not, what should our fire and EMS service delivery model look like?

I. OUR METHODOLOGY AND RESEARCH

- Examined historical data back to 1954.
- Reviewed our independent patient survey results.
- Reviewed our system data and trends.
- Literature research
- We compared our department to those comparable from a demographic and Fire/EMS service delivery perspective. There are several communities that are close comparisons however. Close comparatives are always a challenge.
- We also surveyed area towns on their use of per-diem positions and Deputy Chief positions.
- Fire Chief Joe Landry, EFO of the Stow MA fire department gave the call-force an independent review. Interviews of all Full-time personnel.
 - Interviews of all Call Force members
 - Site visits to several area departments with varying organizational structures. Chiefs of these departments were interviewed. What are their challenges? What is working? Etc.
 - Findings and recommendations were issued.
- Performed an extensive SWOT analysis of our operational operations and capability as well as our administrative capacity

The sixteen identified communities are as follows:

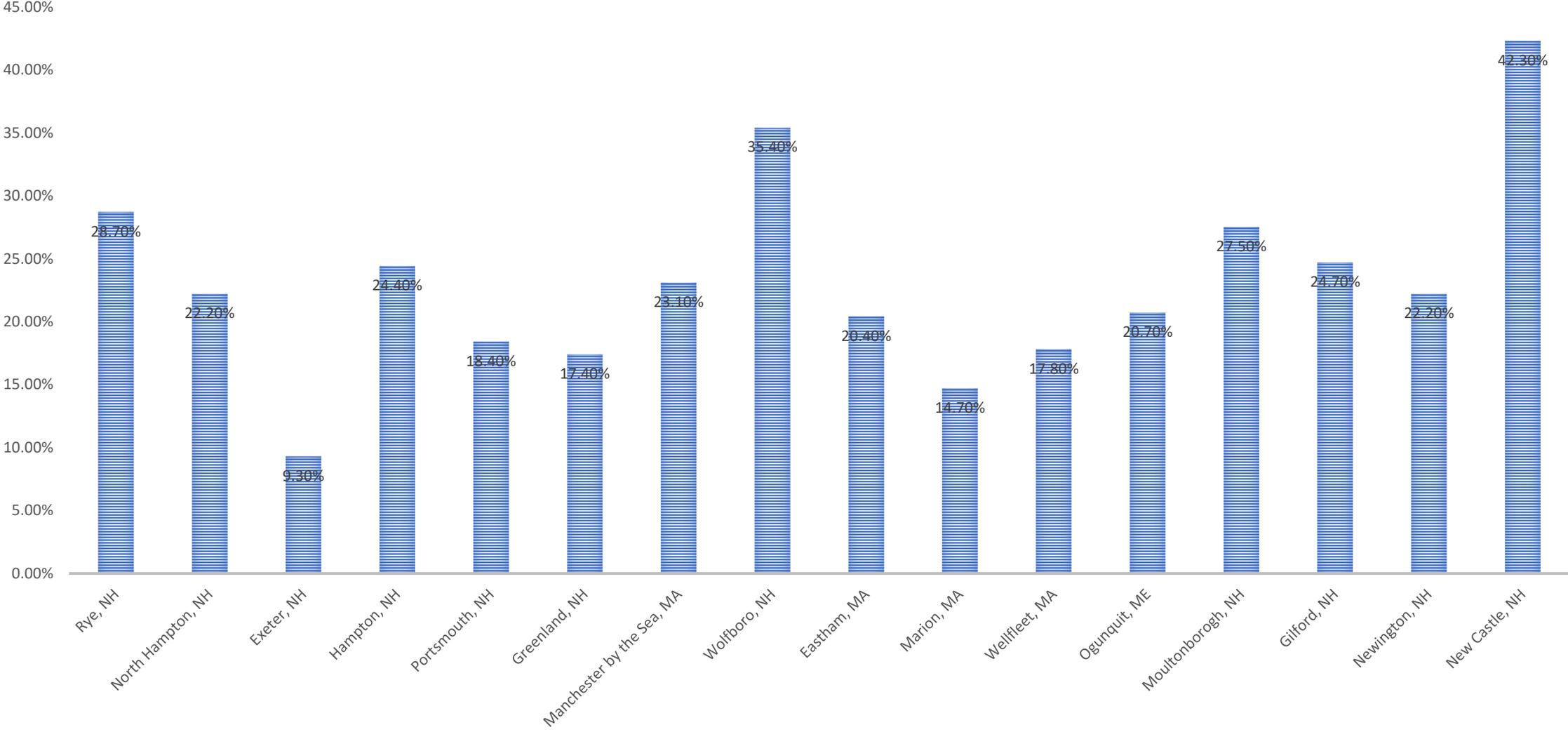
- Rye
- North Hampton
- Exeter
- Hampton
- Portsmouth
- Greenland
- Manchester by The Sea, MA
- Wolfeboro
- Eastham, MA
- Marion, MA
- Wellfleet, MA
- Ogunquit, ME
- Moultonborough, NH
- Gilford, NH
- New Castle
- Newington

Comparable Demographics for 65 and Over

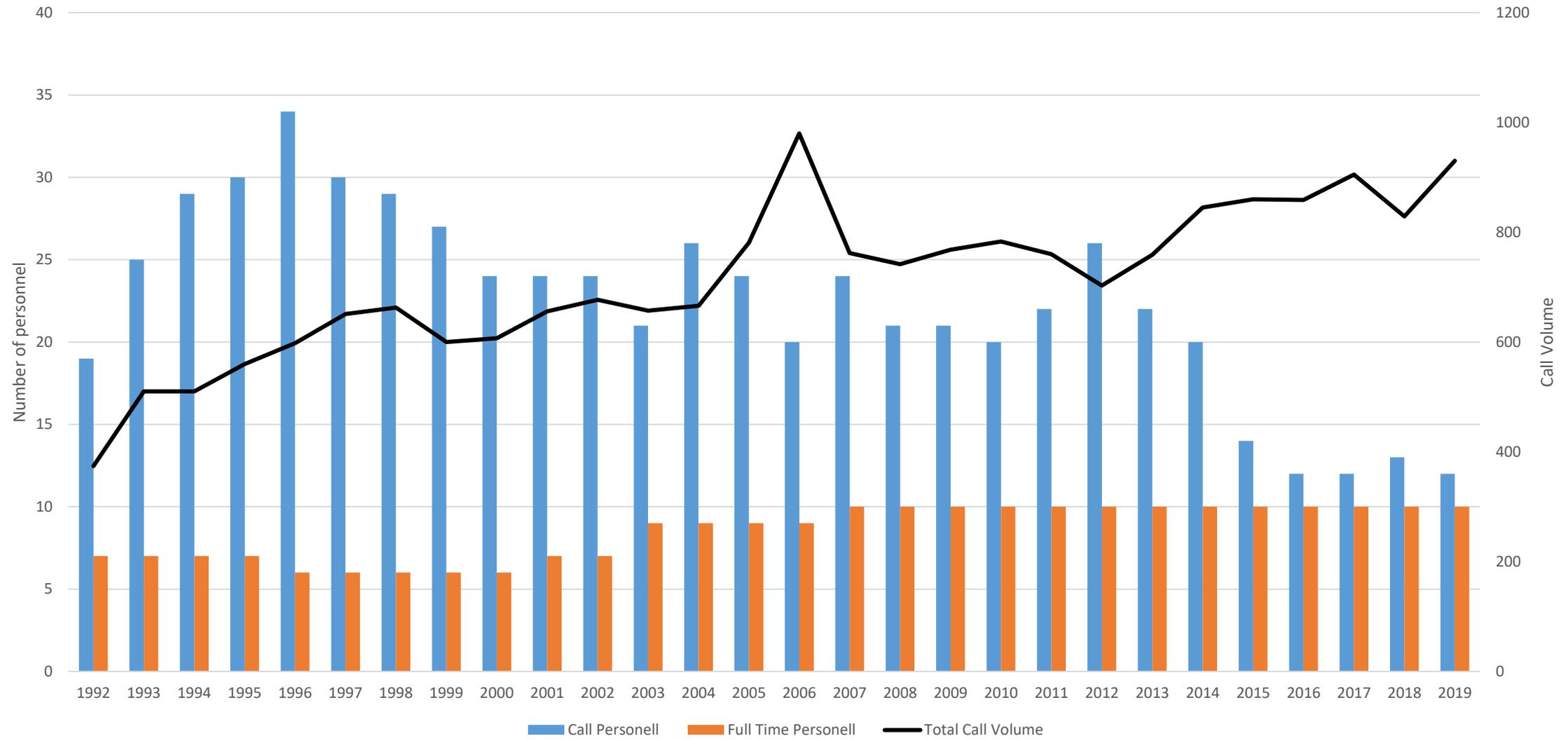
(All Data Obtained from 2018 US Census)

Town	Total Population	Over 65y/o Population	Over 65y/o Percentage	Over 65y/o Living Alone Percentage	Median Age
Rye, NH	5319	1526	28.70%	19.10%	54.6
North Hampton, NH	4465	991	22.20%	9.10%	50.6
Exeter, NH	22086	4328	9.30%	16.10%	46.4
Hampton, NH	15412	3767	24.40%	13.80%	51.2
Portsmouth, NH	22576	4144	18.40%	11.60%	40.9
Greenland, NH	3941	684	17.40%	17.40%	44.2
Manchester by the Sea, MA	5370	1243	23.10%	9%	49.9
Wolfboro, NH	6212	2207	35.40%	13.80%	56.7
Eastham, MA	4893	999	20.40%	22.70%	59.4
Marion, MA	5100	749	14.70%	15.60%	50.8
Wellfleet, MA	3387	602	17.80%	18.60%	57
Ogunquit, ME	1163	241	20.70%	21.50%	59.5
Moultonborough, NH	4095	1114	27.50%	11.90%	52.9
Gilford, NH	7157	1771	24.70%	16.80%	49.5
Newington, NH	864	192	22.20%	nearly 11%	54.4
New Castle, NH	780	330	42.30%	17.70%	61.7
Average	7051	1556	23.08%	15.36%	52.5

OVER 65Y/O PERCENTAGE



Call Volume Vs Call/Full-Time Members



Strengths

- Rye Fire Rescue enjoys good community support
- Paramedic level EMS provider on each shift. PRH EMS agency of the year award in 2017!
- Robust mutual aid system
 - Not designed to take place of an adequate initial response!
 - We have agreements in place with our surrounding communities to start into reported fires in Rye. This does not replace first due response but does start the needed back-up towards Rye early in the event.
 - We have access to the districts SWAT Team, HazMat Team, regional Air supply trailers, command truck.
 - As of last year, Rye, Greenland and North Hampton are training together at Bethany Church twice monthly. This allows more training participants which is needed for certain types of training. This also allows firefighters who respond together to early phases of incidents to train together before hand.

Question: Does Rye Fire Rescue have adequate resources to provide effective, responsive, high-quality fire and EMS delivery to all residents and customers within the town of Rye?

- Finding: Yes and no. Our apparatus and equipment are in good shape. We cannot, however, provide first due adequate minimum staffing at many incident scenes. First the good news:
 - Rye fire Rescue's apparatus now follow a 20-year replacement plan. The plan is well thought out and, except for 2 purchase leases, will be self-funding (given existing funding sources). Our newly acquired pumper-ladder has modernized our response from an apparatus perspective. It is now very important to follow the replacement plan as laid out.
 - Rye Fire rescue equipment has the quality modern equipment a smaller fire EMS agency like Rye's should have.
 - Rye Fire rescue employs talented, community-oriented members in both our regular and call force rosters. The over-all satisfaction noted in our patient surveys attest to this.
 - **SERVICE GAP:** Rye fire rescue does not have the ability to fully handle all the tasks required of a first due response agency. These tasks are outlined below in finding#2.
 - **SERVICE GAP:** Rye Fire rescue can not maintain quick initial response to overlapping calls when out on an emergency response. Our turn around time for a typical medical call transporting to the hospital is 60-90 minutes. Nearly 11% of our emergency calls overlap another call.

Question: What are the benefits and liabilities contained within our current fire and EMS service delivery model?

Benefits:

- Third Party 100% Patient Satisfaction Surveys: Each transported patient is asked to fill out a satisfaction survey (appendix A). Rye Fire Rescue consistently outperforms the national benchmark of participating agencies.
- Dedicated Rye Fire Rescue members
- Paramedic level EMS provider on each shift, providing the community with rapid response top notch medical care. Rye won the PRH EMS agency of the year award in 2017!
- Robust mutual aid system: Rye is one of 42 communities actively participating in Seacoast Chief Fire Officers mutual aid system. This allows us to augment our resources when we have a significant event.

Liabilities/Service Gaps: following pages...

Basic Medical Emergencies

Current Response (two members)

- No additional clinical help at the scene.
- Challenging stairways etc. often must be navigated without additional help
- 2 off duty or qualified call members are required to staff the second ambulance.
- Operational Readiness suffers. Nearly 11% of our emergency calls overlap an ongoing incident.

Proposed Response (three members)

- One member can remain in town after helping at the scene. This will allow the remaining member to provide quick response to a simultaneous emergency call. Nearly 11% of our emergency calls overlap with another emergency.
- Only 1 recall member would be needed to staff the second ambulance.

Critical ALS Level Medical Emergencies

Current Response (two members)

- These challenging medical emergencies often require an additional attendant in the ambulance with the patient.
- The ambulance crew of 2 typically is required to wait until off-duty members arrive at the scene for help with a multitude of urgent procedures such as:
 - Providing medications
 - Managing patients airway
 - IV access issues

Proposed Response (three members)

- The third shift member is critical to speeding up the on-boarding of medications, establishing and maintaining an airway, IV access and other needed procedures. These procedures often need to be done simultaneously.
- This will enable a quicker transport to the hospital.

From: Harry Wallus <hjwallus@gmail.com>
Date: October 16, 2020 at 1:55:05 PM EDT
To: Jacob MacGlashing <JMacGlashing@town.rye.nh.us>
Subject: Re: Staffing memo

Hi Jake,

The staffing numbers you quote here are accurate for the ED. Our prehospital providers also have to concern themselves with family, any medical history/meds they can identify, extrication and transport. If feasible, I would without question recommend and support at minimum 3 prehospital providers on these calls. Please feel free to reach out to me if I may be of further assistance to you or the department.

Sincerely,

Harry J. Wallus DO, MPH, FACEP

Motor Vehicle Accidents

Current Response (two members)

- We typically are lacking first due Engine response to MVA's:
 - Nobody available to start initial patient treatment on that second or third patient.
 - Delays use of extrication tools such a Jaws of Life and air bags.
 - Delays fuel spill control
 - Delays vehicle fire precautions such as disconnecting batteries and hoseline placement.

Proposed Response (three members)

- The third shift member can begin the evaluation of second or third patient quickly.
- Environmental preventative measures such as fuel spill protective measures begin quickly
- With the third member we can have rescue tools such as jaws and airbags on scene quickly.

Fire Alarms/Fire responses

Current Response (two members)

- No pump operator:
 - Water supply that is interrupted while the two firefighters are in the fire building is a life threatening event for the firefighters.
 - We know of zero national benchmarks that allow our current practice.
 - Most mutual aid departments in our system do not call for our fire trucks due to our staffing of less than 3.
 - Huge safety issue
 - Liability issue for firefighters, residents and town.

Proposed Response (three members)

- Dramatically increases the effectiveness and safety of the first due fire truck at the scene.
- A three-person shift allows the first arriving fire truck to have someone pumping water through the hoselines while the other 2 members advance lines into the building.
- 3 person staffing for structure fires are not a luxury but rather the minimum national standard possible.

Jet Ski/Water Rescue Operations

Current Response (two members)

- We can staff the jet ski but lack someone to initiate the initial land based coordination needed to:
 - Coordinate with Coast Guard, Marine Patrol, and rescue boats such as Portsmouth and Hampton.
 - Coordinate with land based mutual aid such as ambulances, Ocean rescue swimmers heading into the scene.
 - Coordinate search of shore for a victim.
 - Keep in touch with Jet ski 1 crew to provide additional needed resources and as a safety should the crew need help.

Proposed Response (three members)

- Allows the capability to establish coordination on land.
- Quick coordination of incoming land mutual aid such as ambulances, additional rescue swimmers etc. and the water based agencies such as the Coast Guard, Marine Patrol, and fire rescue boats.
- Perhaps most importantly, a three-person shift allows a person on land to keep in touch with Jetski 1 crew to provide additional needed resources and as a safety should the crew need help.

Ambulance vs Engine Availability

Current Response (two members)

- On-duty firefighters are required to take the ambulance out on routine errands such as inspections, burning site inspections, district familiarization etc. This means that if a call comes in for a fire of some sort, the ambulance must return to the station to respond with the appropriate vehicle. This is not a rare occurrence and creates a substantial delay in response.
 - For example: Ambulance is out at Wentworth Road doing an inspection when a fire alarm came in for one of our assisted Living Communities. The ambulance had to respond back to the fire station and switch to staffing the fire engine, then respond in the engine to the scene.

Proposed Response (three members)

- Dramatically reduces the occasions when the on-duty shift must return to the station for the correct apparatus when the call comes in while they are not in quarters.

Excessive Wear And Tear On Ambulance

Current Response (two members)

- Wear and Tear on the ambulance: Because the ambulance must be used for virtually all inspections and other routine travel there is additional maintenance costs. This impacts long-term serviceability of the vehicle.
 - Our ambulance has a replacement cost of approx. \$240,000. It was placed in service July 2017 and already has over 54,000 miles.
 - Additional miles require more fuel cost, more tires, more brake replacements etc.

Proposed Response (three members)

- A three-person shift allows most non-emergent travel to be done with our pickup truck instead of an expensive ambulance. This improves long-term serviceability of the vehicle and limits wear and tear on the more expensive ambulance

Question: What are the benefits and liabilities contained within our current call force? What can be done to increase recruitment and retention of our call members?

Finding:

- Recruitment and retention of call force members is a well-documented national problem. The call force is an important component of a small fire department. Quality dedicated call force members are to be valued. The evidence suggests recruitment and retention will continue to be an issue for Rye Fire Rescue in the future.
- The number of call firefighters coming back on recall for emergencies is not predictable. Additionally, the qualifications of the call members on recall vary.
- **SERVICE GAP:** Talented Call force members are being trained by Rye Fire rescue only to leave active service in Rye. Expenses include costly baseline medical examinations, firefighting certification and EMT licensing. The reason given is often to work per-diem shifts in one or more nearby communities.
- **SERVICE GAP:** Talented call force members do not have adequate organizational support such as policies, procedures and training. This is at least partially due to lack of administrative capacity to address these important issues on an on-going basis.

Call Force retention And recruitment

Current Response (two members)

- A troubling trend we are seeing here in Rye are call force members who leave active status in Rye for part-time shift work commonly called ‘per-diems’ in other towns.
- Rye does not currently offer ‘per-diem’ shifts. We have had 3 members recently go inactive for this reason.

Proposed Response (three members)

- Allowing qualified Call force members to work part-time ‘per-diem’ shifts would eliminate the need for call force members to transfer to shift work at other area fire departments. This could also count towards three- member shift operational improvements.
- Members who recently went elsewhere for per-diem shifts all noted that they would have stayed in Rye if there was an opportunity for shift work.

Question: What is the current status of our ALS system relative to providing top – notch ALS delivery now and in the future?

- **Finding:** Rye fire rescue clearly delivers high quality Advanced Life support, but the system is at risk.
- The benefits of our system include the ability to place highly trained Advanced Emergency Medical Technicians (EMTA's) as well as Paramedics on the scene of most medical emergencies received and appropriately dispatched in the Town of Rye.
- Rye Fire Rescue members are community oriented. Members are also regarded by our patients as compassionate and capable. Evidence of this is contained within our independent 100% patient satisfaction survey results.
- **SERVICE RISK:** Rye Fire rescue currently has 4 paramedic level members. There is one on each of 4 shifts. Paramedics are also hard to recruit in this area and nationally. It will be important to maintain an optimum level of 6 paramedic level providers. This will allow us to provide a minimum of one per shift even after a retirement or resignation.
- **SERVICE GAP:** Critical procedures for our sickest patients often take longer than necessary due to 2-person shift staffing. A third clinical person quickly on scene would greatly speed up this process and benefit the patient. This was confirmed by our medical director Dr. Wallus.
- **SERVICE GAP:** There is often no members left in town to respond to a second medical emergency. nearly 11% of Rye's calls for emergency response overlap with existing calls. A third clinical person would often be available for quick initial response to the second emergency call. This fast initial response is critical for very sick patients and important whether we can staff our second ambulance for the call or need mutual aid.

Question: Is our current fire and EMS service delivery model adequate? If not, what should our fire and EMS service delivery model look like?

- **Finding:** No. Our response model needs to change. Our INITIAL response to most emergencies is inadequate. Critical medical and rescue responses need a minimum of 3 qualified members. Rye Fire rescues future model should ensure a three-person shift and adequate administrative capacity to provide the needed operational, training and organization support. This is a customer driven change that will enhance the long-term survivability, treatment and overall delivery of care to our patients. The future model should look like this:
 - One station
 - Operational staffing of 3 members per shift (the additional member could be full-time or per-diem)
 - Administrative staffing of 1 Fire chief and 1 Deputy Chief
 - Call force of maximum 15 authorized positions
- Arriving at any fire response without being able to fill out all 3 engine company positions keeps us from performing critical evolutions needed to mitigate the emergency and is an unacceptable safety risk.

RECOMMENDATION #1: Minimum of Three Members on each shift

The goal here is to raise the staffing level of the department to a **minimum of three members per shift**. This will have a major positive impact on our documented operational weaknesses and service gaps.

5 Options:

1. Hire **three new fulltime Firefighter/EMT's** and place one on each two-person shift raising the staffing level from the current complement of two members to three members per shift.
 - Annual cost \$383,916
 - Total 2021 Budget impact (July –December): \$195,558
 - Best operational choice but most expensive
2. Hire enough **part-time 'per-diem' Firefighter/EMT's** all in one year.
 - Annual per-diem cost \$169,828
 - Total 2021 budget impact (July-December): \$99,314
3. **Hire enough new part-time 'per-diem' Firefighter/EMT's over 2 years**
 - Annual per-diem cost \$169,828
 - Total 2021 budget impact (July-December): \$33,104
 - Two remaining shifts filled in year 2022.
4. **Hire enough new part-time 'per-diem' Firefighter/EMT's over 3 years**
 - Annual per-diem cost \$169,828
 - Total 2021 budget impact (July-December): \$33,104
 - One remaining shift filled each of years 2022 and 2023.
5. Do not fund this recommendation. This is the least favorable option. All service gaps remain in place. Environmental trending continues to influence service gaps.

RECOMMENDATION #2: Improvements in the Call Force

Positive, practical changes that can be reasonably made to better the call force should be pursued. The challenge we will have is the documented lack of administrative capacity in Rye Fire Rescue.

1. Per-Diem coverage: This recommendation noted above will help call member retainage by giving qualified call force members the opportunity to work per-diem shifts here in Rye instead of taking their talent and Rye's training efforts (and monies) to other communities.
2. Rank Structure within the call force needs more direction. We propose:
 - a. One Fire LT position. New job description will be developed for this position. (7/1/21)
 - b. One EMS LT position reporting to the EMS Coordinator. This would be a new position within the call department and would recognize the portion of the call force who are EMS only. Job description would be developed for this position. (7/1/21)
3. Update call force policies and procedures. This would be an on-going participatory process. Have basic policies updated by EOY 2021. Establish an on-going policy training and review process.
4. Training: Pursue new ways to incorporate the call force training into Rye Fire rescues overall training system.

RECOMMENDATION #3: Maintain Paramedic Coverage

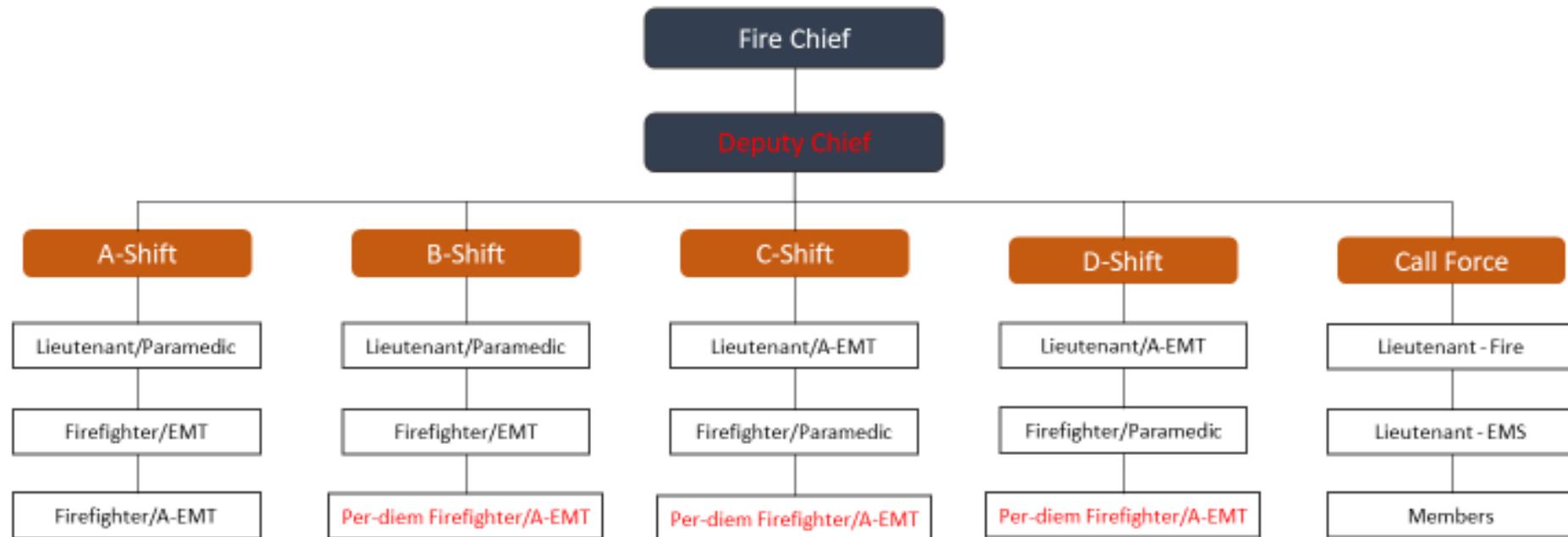
1. Maintain a roster of 6 paramedic level providers with the goal of ensuring one provider per shift throughout personnel changes and injuries.
 - It is important that we continue to recruit and train paramedic level providers wherever possible.
 - The goal here is to ensure we can maintain at least one paramedic on each shift.

RECOMMENDATION #4: Deputy Fire Chief

1. We are recommending filling the long-vacant (1992) Rye Deputy Chief position.
2. This position should not be filled until each Rye shift is staffed at three members (recommendation 1).



Proposed Organizational Chart – 3 per shift with Deputy Chief



**Red fields indicate new positions*