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Final Report
A Comprehensive Review of Emergency Medical Services
Northampton Ambulance Service
Prepared For the
Town of Northampton New York

Primary Town of Northampton Contact

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Project Goals

This study of Emergency Medical Services in Northampton was contracted for by the Town of Northampton in its ongoing efforts to assure effective, efficient, and safe delivery of Emergency Medical Services in the Town and greater community.

This report should serve as a starting point in community efforts to address immediate issues and to develop an Emergency Medical Services Strategic Plan

Disclaimer

The observations, recommendations and opinions presented in this report are our professional views and opinions based on available and provided information, surveys and observations. Of necessity, this consultant, as is true for all consultants, must rely on outside sources of information that cannot be totally independently verified. We do not assume any liability for any errors or inaccuracies, or for any actions taken by any party as a result of this report.

It is important to note that although this report contains references to NY State Laws, we are not attorneys and are not providing legal guidance or advice in this report. The Town and all agencies should assure that their actions are guided by attorneys with expertise in the applicable New York State and other laws.

Acknowledgements

It would have been impossible to conduct this comprehensive study without the assistance, knowledge, skills, and abilities of those who serve and lead in the Emergency Medical Services and the many individuals from many levels of government who provided information and assistance.

At a time when EMS services across the State are facing serious issues on how to continue to deliver EMS and even agency survival, the members of the Northampton Town Board are to be commended for recognizing the importance of assuring the people of this community that there will be an effective efficient and safe delivery of emergency medical services. This report is an important part of their efforts to address the strategic planning issues needed to assure the people of Northampton that Emergency Medical Services will be there when needed.

It would be impossible to thank each person separately because so many saw the need to help the community assure efficiency, effectiveness, and safety in the delivery of Emergency Medical Services to the public.

Thank you to:

- Town Board member William Gritsavage. As project coordinator he expended great efforts to help assure the success of this project in many ways.
- Northampton Ambulance Chief Jack Farquhar and Steve Collins for the information and access they provided for this study
- Keith Shults, 9-1-1 Communications Officer and his staff for providing response data and the other 9-1-1 information.
- Town Clerk Elain Mihalik and her staff, who quickly and efficiently responded to requests for information and assistance.
- Scott D. Henze Fulton County Planning Director for preparing GIS travel distance maps and for providing some other details RE EMS in the area.

Thank you to the many residents, taxpayers and business operators in Northampton, the Town and County elected and appointed officials, and members of the Emergency Medical Services who took their valuable time to take the online surveys. Their input and feedback gave us a clear view of issues as only the people in the community and those who serve it can provide.

Most of all, I want to thank all of the dedicated and caring Volunteer Emergency Responders who serve in the Northampton Ambulance Service. While this report identifies issues where emergency medical services in Northampton need improvements, **there is NO question about the fact that the EMS VOLUNTEERS in the Northampton Ambulance Service have dedicated thousands of hours to the Northampton Community. They have done so risking their own lives, health and safety for the people of this community.** Many of those dedicated volunteers are serving this community after 30 or more years of service.

Executive Summary

The Town Northampton is located in Fulton County New York. The Town commissioned this study as part of their ongoing efforts to assure Effective Efficient and Safe Emergency Medical service to the citizens of the Northampton community. The Town Board is to be commended for its leadership in recognizing the need to review services being provided to the people of Northampton and their efforts to address those issues.

We have conducted studies similar to this project in New York, Georgia, Connecticut and California. We have found many of the same issues in each study:

- Service demands are increasing;
- Taxes are raising;
- Citizens are demanding more efficient use of their tax dollars;
- Costs for equipment and operations is raising;
- The Volunteer Emergency Medical force is aging and shrinking;
- There are decreasing numbers of younger people able and/or willing to volunteer.

The Northampton community and all of Fulton County is known throughout New York State and the nation as an area with great natural beauty and four fantastic seasons of recreational activities. The Northampton community is an oasis for people who want to enjoy nature at its finest in a beautiful historic community. In addition to the families who have lived in the region for generations, many of the homes in the entire Adirondack Park region of New York State are now occupied by seniors who have retired to this beautiful area. Many homes are the second and third homes of families who want to experience and enjoy life in the Adirondacks year-round, if only for a few days at a time. One thing is positive about both groups: They will demand a higher level of public services such as Emergency Medical and fire rescue services, and they will generally not be part of the pool of volunteers willing or able to serve the community.

In addition, as new people come to enjoy the beauty of the region and all it has to offer, New York State is also experiencing a loss of businesses as companies seek lower taxes and more favorable business conditions. Young people are leaving NYS to find better employment opportunities and lower taxes. Many of those who remain in the area find their employment choices to be in service industries. Local government leaders struggle to contain costs and still provide the ever increasing level of services the public demands. Taxes are rising as elected leaders struggle to cover the tax revenue lost from businesses and families that have left the region. The ambulance companies in the Town of Northampton and the entire region are struggling to maintain the quality of service that this community has come to expect, while also struggling to contain growing costs.

The Northampton Ambulance Service, NAS, was established over 50 years ago to provide Emergency Medical Services in the community. This study absolutely found that the agency has a core group of extremely hard working and dedicated Volunteer Emergency Medical responders and leaders. Unfortunately, the reality in 2019 is that the pool of people willing and able to serve as Volunteers in the Emergency Medical Services is shrinking and aging, while demands for EMS service increase. The shrinking pool of EMS Volunteers is a reality throughout the state

and nation. This issue must be addressed promptly to assure the Northampton community of efficient, effective, and safe delivery of Emergency Medical Services.

As a consultant it is not uncommon to discover and report on negative issues regarding the delivery of emergency services. In this study we found that the people in the Northampton Ambulance Service are not only aware of many of the issues we have documented, the people within the Northampton Ambulance Service itself have been struggling to document and address the primary issue of assuring that their well-trained, caring and dedicated Emergency Medical responders will arrive at the scene within the nationally recognized response time windows for successfully initiating patient care. The people in Northampton Ambulance Service do want to assure that they can operate within response policies that will assure their arrival within the critical time window for successful utilization of their training, and skills that patient survival often requires.

We discovered that to assure ambulance response, the Fulton County Emergency Communications Office automatically dispatches a commercial ambulance company, GAVAC, to all calls for service everywhere in the County. The travel distances and arrival times for those ambulances arriving at the scene are consistently longer than nationally recognized response time windows for initiating successful patient care.

There was an excellent participation from members of the community, emergency responders and local officials in our surveys. Over 160 people took the community survey. We found direct correlations between the feedback of survey respondents and our onsite observations. The surveys, our onsite observations, and materials provided by the agency, County 9-1-1, and others provided an in-depth review of current EMS service delivery and management in Northampton. The study identified many factors that must be promptly addressed to assure every resident, visitor and member of the Emergency Medical community that the operation of Emergency Medical Services will be governed and operated Effectively, Efficiently, and Safely. Each of the issues addressed in this report are important factors in the delivery of emergency medical services. Each of the Strategic and Specific Recommendations in this report are crafted to provide the direction that will successfully attain that goal for the greater Northampton community. The Recommendations in this report are the building blocks for the improvement of the governance and operational systems for Emergency Medical Services. If acted upon, they will guide the planning and operational changes that will assure effective response staffing, control capital equipment costs, and impact the many aspects that effect delivery of Emergency Medical Service.

We strongly urge the prompt creation of a community-driven Northampton Emergency Medical service Strategic Planning Committee and the creation of several Operations Planning Committees within that Strategic Planning Committee framework. These committees must work together with members of the community to strategically plan and address all of the necessary changes and recommendations noted in this report as soon as possible. Those planning efforts will help assure prompt delivery of EMS in the Northampton community and help assure the health and safety of all EMS emergency responders. The Strategic Planning efforts should be part of the community's continued long term efforts to assure Efficiency, Effectiveness, and Safety in the delivery of their vital Emergency Medical Services.

It must be noted that while this investigation was requested by the Town of Northampton, and the recommendations in this report focus specifically on EMS services in Northampton, our local research has clearly identified that the issues regarding the delivery of EMS services are a much wider regional problem. Local press has reported that several ambulance services in the region have ceased operations either temporarily or totally. The primary ambulance agency, GAVAC, that is dispatched to all EMS calls county-wide, was formerly a volunteer staffed agency. Today, due to a scarcity of available volunteers, it is now staffed with paid personnel to assure ambulance availability 24/7. According to several local news articles, the GAVAC ambulance agency is also struggling financially to continue operations. Despite GAVAC's goal to provide the best possible patient care, 911 dispatch records show that the location of responding EMS from both GAVAC units often has ambulance units arriving later than generally accepted times for initiating EMS care that offer the best odds for patient survival.

Each of the issues in this report can, do, and will continue to affect the safety, lives, and the costs for every citizen in the greater Northampton community. Most importantly, many of the issues in this report also directly impact the health and safety of every person who risks their life and personal safety to serve the citizens of the town of Northampton as Emergency Medical Responders.

In this study, two primary questions are the driving force behind each of our recommendations:

“What is in the public’s best interest?”

&

“What is in the best interest of the Emergency Responders who serve in the Northampton Ambulance Service?”

Immediate Actions Required To Assure Efficient, Effective & Safe Emergency Medical Services in Northampton

The recommendations in this report identify both Strategic Planning issues and Specific actions needed to address EMS services in this community. During this study it became very clear that there are numerous serious life-threatening issues in the delivery of emergency medical within the community. Those issues are documented throughout this report.

This section contains a summary of the **IMMEDIATE ACTIONS** that the Town of Northampton and its Ambulance Service need to jointly take to assure effective efficient and safe Emergency Medical Services in this community.

Observation 1: Review of NAS ambulance arrival times as compared with recognized generally accepted standards of care clearly demonstrate that in the Northampton Ambulance Service's current system, conditions exist that create a climate where **a certain percentage of patients may not survive because emergency medical care failed to arrive or initiate care within the recognized time window of patient survivability.**

- **Strategic Recommendation 1:** **The primary goal** for planning for all Emergency Medical Services must be to **assure that properly trained and equipped** emergency responders arrive at the scene able to **initiate patient care within nationally recognized response time windows for successful patient survival.**
 - **Specific Recommendation 1:** The primary issue that must be resolved **immediately** for Northampton EMS is to assure the community that when people need emergency medical assistance that help will arrive promptly with trained and equipped personnel to initiate lifesaving actions within the survivability window as shown in the Generally Accepted Benchmarks, Standards, Goals and Objectives section of this report.
 - **Specific Recommendation 2:** The Town and Northampton Ambulance Service should **IMMEDIATELY INITIATE A 24/7 STAFFED ON DUTY EMS FLY CAR** for all EMS responses when there is not sufficient staffing available to staff an On Duty Ambulance. The On Duty Fly Car would respond to all EMS calls with a medic trained and equipped to initiate lifesaving efforts until such time as a properly staffed ambulance can arrive to provide enhanced treatment and transport to a medical facility.
 - **Specific Recommendation 3:** The Town should **IMMEDIATELY** provide NAS with a 4 wheel drive vehicle with proper emergency lights and markings to identify it as an EMS Fly Car. The policy for the Fly Car assigned EMT should assure that said vehicle remains within the jurisdiction at all times it is on duty. The assigned EMT should be able to utilize this vehicle as they would their own private vehicle while staying within the NAS response district and remaining immediately available to respond.

- **Specific Recommendation 4:** The Town should establish policies and procedures for regularly monitoring EMS response times, services, staffing and patient outcomes.
- **Strategic Recommendation 2:** The Town and NAS together must assure that all emergency medical services are operated under the policies and regulations established by the NYS Department of Health¹.
- **Strategic Recommendation 3:** The Town and NAS must assure that all ambulance responses comply with NYSDOH regulations for EMT Staffing Standard for Voluntary Ambulance Services and that the Fly Car staffing is part of that response staffing.
- **Strategic Recommendation 4:** The Town Board should promptly create a broad community-based Emergency Medical Services Strategic Planning Committee to address the findings and recommendations in this report.
- **Strategic Recommendation 5:** The **PRIMARY goal** of all planning efforts must be to address **safety for the people in the community and all emergency responders**.
- **Strategic Recommendation 6:** Town, Ambulance Company and Community leaders should work together to identify members of the public who are not currently members of the Emergency Medical Services but who have the knowledge, skills and abilities to assist in the review and development of a successful EMS administration.
 - **Specific Recommendation 5:** The Strategic Planning Committee shall be community driven and comprised of Nine (9) members. The committee should include: two (2) active emergency medical responders; One (1) Representative from the fire department serving Northampton; Two (2) elected members of the Town Board and the Village Board; and Four (4) citizen members who have no ties to either of the community emergency services. Those citizen members should be selected from tax payer residents, leaders of the business community, the school district and the general public. The representatives from the ambulance company and the fire Company should be elected by vote of the active emergency responders in each company. No citizen member of the Strategic Planning committee should also be a current active emergency responder.
 - **Specific Recommendation 6:** Within 1 month of the creation and organization of the Emergency Medical Strategic Planning Committee that committee should create necessary Operating Practices Review and Planning Committees. Those Operations Practices & Planning Committees should be composed of active emergency responders with experience in the specific subject matter assigned to that committee and report to the Strategic Planning Committee.

¹ https://www.health.ny.gov/professionals/ems/policies_laws_regs/

- **Specific Recommendation 7:** The total membership of the ambulance company must be encouraged to be involved in the planning and development of the new and revised administrative and operating structures of their Emergency Medical Services.
- **Specific Recommendation 8:** The Operating Practices Planning Committees should review and address all issues in this report related to: Staffing, Training, Responder certifications and capabilities, Facilities, Apparatus, Equipment, Logistics, and all other response issues that impact the safety of responders and the community.
- **Specific Recommendation 9:** The Strategic Planning Committee should assign a special committee to review current 9-1-1 protocols and call type classifications that apply to Northampton agencies to assure that each call type received has the proper units and staffing dispatched, or not dispatched, to meet the response goals and objectives established by the committee.
- **Specific Recommendation 10:** The findings and recommendations of the Operations Practices & Planning Committee(s) must be reviewed and approved by the Strategic Planning Committee and the Town Council before implementation.

Failure to address the issues in this report and the recommendations made in this report can and will have a serious negative impact on the safety of the people in the community and the safety and lives of the emergency responders who serve in the Northampton Ambulance Service.

Observation 2: This study did not include a review of any other emergency service. However, it must be noted that logically many of the findings in this report concerning service demands and volunteer staffing for emergency medical services may also apply to fire and rescue services. Certainly communities around the world both large and small have seen the benefits of merging EMS and Fire Rescue services.

- **Strategic Recommendation 7:** The Strategic Planning committee should carefully examine the impacts, both positive and negative, of merging Fire Rescue and EMS services in the community.

Consultants' View of Strategic Planning

Before proceeding it is important that readers of this report understand how this consultant views Strategic Planning:

- Strategic Planning for emergency services in every community should be an inclusive process that involves the people who live and work in the community, elected and appointed public officials and the emergency responders who serve the community
- Strategic Planning is an organizational management activity that should be used to establish policies and procedures that reflect priorities for delivery of those services of the people in the community and the governing body.
- Strategic Planning should define how the greater community will focus its energy and resources.
- Strategic Planning should define how the goals and objectives of the Strategic and Specific Recommendations in this report and in the greater mission of the community and the EMS service will be achieved.
- Strategic Planning must define what policies and procedures the Town of Northampton will develop to strengthen EMS operations and ensure that all stakeholders are working toward common goals.
- The Northampton Ambulance Service Strategic Plan must establish agreement on intended outcomes and results, and define how the Town will monitor, assess and adjust their EMS operations in response to a changing environment.
 - To be effective, the Strategic Plan must describe not only where the Town is going and the actions needed to make progress, but also how the Town and the greater community will know if it is successful.

The Strategic Recommendations in this report provide the basic broad goals for that planning process. However the issues addressed in this report certainly are not the only issues that the Town should consider in the final Strategic Planning process. The inclusion of local knowledge is vital for successful planning at all levels.

The Specific Recommendations in this report are based upon the individual issues and items that were discovered in this study. They reflect the specific issues that this consultant believes should be included and addressed within the strategic plan. Generally the review of those Specific items should be addressed by operational work teams focused on individual areas of the Strategic Planning project. It is our sincere hope that the Northampton Ambulance Service leadership and the emergency responders and members of the ambulance companies serving the Town, Elected officials and citizens of the Northampton community will carefully review this report and that they will jointly accept and act upon the recommendations that will improve Efficiency Effectiveness and Safety of the delivery of Emergency Medical Services in the Town of Northampton and the greater community.

- As part of this study we will provide separate MS EXCEL workbooks designed to guide the total Town, NAS and the greater community in their Strategic Planning efforts.
- To assist readers of this detailed report, the indexes of the Strategic and Specific recommendations and our Observations are also in the appendix of this report. Those indexes will show the page number of each recommendation so readers can readily find and review the basis for each observation and recommendation. These recommendations will also be presented in an MS Excel workbook to provide a tool for tracking progress on addressing each.

Terms and abbreviations used in this report

- The Town: The Town of Northampton
- The County: Fulton County NY
- 9-1-1: Fulton County Office of Emergency Communications operated by the Sheriff's office
- CAD: Computer Aided Dispatch
- The community: The Town of Northampton and the greater area served by the Northampton ambulance service
- The agency: Northampton Ambulance Service
- NAS and NVAS: Northampton Ambulance Service
- The ambulance company: Northampton Ambulance Service

The Study Methodology

This study of Emergency Medical Services was conducted for the Town of Northampton. The process included a review of information from the Ambulance Company and County regarding Emergency Response, Staffing, Training, Facilities, Equipment and Apparatus.

This study of Emergency Medical Services began with three (3) Online Confidential Surveys to gather wide input: An in-depth survey was conducted for all Emergency Responders, and similar but less detailed surveys were conducted for Residents, Taxpayers and business people in the community and for elected and appointed officials of the Town, Village, and County. People were made aware of their surveys via press releases, the county website, and emails sent to agency members and department heads. Residents and local business operators were also notified of the survey designed for them via the local media and a posting in the local library.

The goal of conducting the multiple surveys was to give the entire community as well as those who serve in the Northampton Ambulance Service an opportunity to express their personal views of the Strengths, Weaknesses, Challenges, Opportunities and Threats facing Emergency Medical Services in Northampton.

Participants in each of the surveys were asked to express their views on what the Priorities for their Emergency Medical Services should be, What the Core Values and Service Priorities of the Emergency Medical service should be, and what Expectations they personally had for their Emergency Medical Services. In addition, those who had received Emergency Medical Services were asked to rate the quality of the service they had received. Each member of the Emergency Medical Services was requested to provide all of the above feedback plus detailed information regarding their individual Availability, Capabilities, and Training.

The feedback from each survey group was examined, compared and evaluated to find similarities and differences between the views of each group.

Ambulance Company leadership was sent an MS Excel workbook to complete that provided detailed information about their agency. The information requested and provided included details on Staffing, Facilities, apparatus, equipment, policies, procedures, record keeping, and Budgets. The agency, as requested, provided specific call statistics for the current and past 2 years including Mutual Aid. The agency was asked to identify the other agencies that they received or provided mutual aid to/from and the average number of emergency responders to their incidents. I reviewed and validated the information I received and other information during a site visit to NAS on September 12.

Fulton County Planning Department utilized its GIS (Geographic Information System) to produce a map showing the current response area travel distances. We used map quest to produce maps showing response travel distances from the EMS stations near the Northampton Ambulance Service.

Prior to the site visit I sent a personal email to each NAS member inviting them to come and ask any questions they may have had about the study, the study process and to generally provide any input they might want to provide. That meeting was scheduled for September 12 at 19:30 hours. When I arrived at the station at 19:00 there were five members conducting inventory of the ambulance. Shortly later a 6th member arrived. Chief Farquhar, who was part of the team

conducting the inventory, introduced me to the group. We spoke briefly about the features built into the new ambulance. At 19:30 the emergency responders prepared to go home without attending the meeting about the study.

Observation 3: For the record it is not uncommon for members of an organization such as NAS to not want to meet in a group setting to personally discuss their feelings and any issues that may be sensitive to other members or agency leaders. That is the primary reason why I utilize online surveys and provide my personal email address to the members to gather member input. I did receive that member feedback in the survey and I validated what I received during my site visit.

All of the information gathered from the agency and its members, from the online surveys, and other sources was reviewed and/or observed during the official onsite visit to the community and during two additional private visits that I made to Northampton prior to the site visit. All of these findings were used to evaluate Emergency Medical Services in the Northampton Ambulance Service as compared to nationally recognized EMS patient care standards.

To guide the community in preparing a Strategic Plan to address the findings and recommendations in this report, a separate Strategic Planning workbook has been produced.

- I sent the Town Project Coordinator an email with an attached draft report in MS word for Town and agency review of facts reported prior to preparing the final report.
- The draft report provided the Town with an opportunity to review the accuracy of the data we received and provided an opportunity for the Town to provide additional relative supplemental information and/or to provide corrections prior to preparation of the final report.
- The Town Project Coordinators' and others' review of the preliminary report was completed and returned to me prior to October 14 as requested to assure that the final report met project timelines.
- I reviewed supplemental or corrected information provided by the Town and its Project Coordinator after their review, corrected any noted errors and then prepared this final report.
- Each of the MS Excel spreadsheets used to demonstrate and calculate possible staffing costs and other issues in this report will be provided to the Town with the final report for use during the Strategic Planning process and beyond.

Observation 4: I am aware that some Emergency Responders may not have responded to the Emergency Responder survey. Some responders also may have responded more than once in an attempt to assure that their concerns would be heard. I have made strong efforts to assure that any multiple responses from the same person did not cloud results. I also made strong efforts to confirm that what was reported was validated with what we personally observed on site and by comparing other gathered information. Based upon review of all the materials we received and our observations on site, I believe that I had sufficient feedback and information to provide a valid base to evaluate the many important factors that are impacting Emergency Medical service in the Town of Northampton.

Service Supply & Demand

As in any business or service industry, leaders must be constantly aware of the factors that create and impact supply and demand. In Emergency Medical Services **Demand** is created by the number of people and conditions that will require emergency response to save lives including: Heart attacks, Breathing Difficulties, Accidents, Drug over doses and Illness of all types.

That demand for EMS service always increases as the population ages and as the size of the population increases. In tourist communities, the size of the population being served also generally swells in each “tourist season”. In Northampton and the entire Adirondack region there are now multiple “tourist seasons” as New York State has increased its tourism marketing efforts.

To **Supply** Emergency Medical Services to the community, there must have been prior actions taken to assure that there are policies and procedures in place to assure adequate Staffing, Apparatus, Equipment and Facilities. Assuring timely arrival of emergency medical services to every demand for service must be a vital part of those goals and operational practices.

Success of Emergency Services

Key Rules for all who serve in emergency services

For the record, I spent over 40 years of my professional career in leadership roles in emergency services. There are four basic elements that help assure the long-term success of each member, each company and ultimately every successful emergency service agency, be they staffed by Volunteers or Career personnel.

1. **Senior Member Roles**
2. **We are a Family**
3. **Our company, unit, is the best**
4. **Training for succession**

Senior Member Roles: The senior member in every emergency response station or company must be a mentor to “their” rookie. It is the duty of the senior member of each company to take each new rookie under their wing to mentor and teach them about the company. The rookie needs to know not only how each piece of equipment operates as was taught in rookie school, but more importantly, each must understand how their company actually operates using what was taught in the class room or training area. The senior member must teach the rookie: Who does what in the company, What are the strengths and weaknesses of each member of the company, What do the company officer(s) expect from each responder and What each Officer is really like when they are under pressure. The Senior member teaches the rookie about the history of the company, what went right and what went wrong at past incidents and why. The senior member teaches the rookie how the company struggled to assure that it addressed and corrected past mistakes so those mistakes are not repeated. The senior members also listen to their rookies to learn: why they joined the department, what they learned in recruit training, what their views are on many issues, and what their strengths and fears are. Senior members also have the important task of teaching each rookie the emergency service family concept which every emergency responder must have to successfully serve.

We are a Family: Every emergency response unit is a family unit. Each company family and every agency family is part of the greater family of emergency responders around the world. The interaction and trust between family members instills the idea that each member of that family is a Peer². Family begins with conversations in the station around company meals and socialization over a cup of coffee. Every emergency responder family member understands that they risk their own safety and their very lives in service to others. Emergency responders are all part of an extended family of PEERS. Death or injury to another emergency responder anywhere in the world in any agency is felt by every emergency responder in every station.

To build that feeling of family, every emergency response station must have the facilities that foster the growth of that greater family. Every successful emergency service station must be a

² **Peer** definition: - one that is of equal standing with another: equal; especially: one belonging to the same societal group,

place for socialization among Peers: a place where members can talk about their fears, concerns and their joys about incidents that they responded to in an atmosphere where all emergency responders are part of the conversation. Just family!

Our company is the best: Every emergency responder must feel that they have the training and experience needed to get the job done efficiently, effectively and safely. Every member of each company or team must feel that every other member of their unit is the best person for that job, and that together those factors prove that their company is the best in the world. Every emergency responder in every company knows those facts are true. But emergency responders sometimes forget that the people responding from every other company and agency also feel exactly the same way about their company. And sometimes it might be possible that the members of that other company just might be right. It is vital that every emergency responder in each company gets to know the people in the companies that they will respond to emergencies with. There is no place for bad feelings to ever exist between companies or units. They each may need to work together in situations where each emergency responder is willing to risk their life and personal safety in service to others.

Training for succession: IT IS THE RESPONSIBILITY AND THE ABSOLUTE DUTY OF EVERY LEADER, at every rank, IN EVERY EMERGENCY SERVICE TO PREPARE THEIR SUBORDINATES TO SUCCESSFULLY SUCCEED THEM.

Emergency services are unlike any other type of organization. At any time, in any situation and at any incident, any leader can be injured or killed while the lives of others are still in danger. Those other lives, including those of the emergency responders, will remain in danger until the fallen leader has been successfully replaced at the scene. There is no time to hesitate or waste. The transfer of leadership roles all down the line must be instantaneous and seamless to successfully mitigate the ongoing incident and to protect the lives and safety of every emergency responder in every unit at that incident.

This same concept of training for succession also applies to successful succession of administrative functions and duties in every organization. The role of every chief and every supervisor is to prepare his or her successor to take their job.

Leadership today must also actively address PTSD, Post-Traumatic Stress Disorder. PTSD is one of the major causes of people leaving emergency services. The impact of PTSD on the families of emergency responders is a worldwide problem. It is the responsibility of every emergency service leader and member to assure that addressing the elements of PTSD is a priority.

- It is a fact of life in all emergency services that each of these roles and elements must be successfully addressed in every station and in every emergency service agency. Where any one of these elements is missing, members either leave the company, leave the agency, or become totally disgruntled and leave emergency services totally. Every person who leaves any emergency service agency does so at a great cost to the agency, the people in that agency and community they serve. Leaving emergency service is also a personal loss to those who leave the service.

Observation 5: Unfortunately in my research and observations I have found that many of these basic elements for long term success are weak or missing in the Northampton Ambulance Service.

- **Specific Recommendation 11:** The NAS family should immediately work to adopt the four basic elements of successful agencies: Senior Member Roles; We are a Family; Our company is the best; and Training for succession. Each leader and each member must work to assure the long term success of every other member, and the long term success of the Northampton Ambulance Service.

Benchmarking & Baselines

Definitions: Benchmark & Baseline

Benchmark: A Benchmark is defined as a standard by which objectives are judged. They are best practices that help define superior performance of a service.

Baseline: Is the measure of current performance based upon observations and data.

I have identified industry benchmarking for several relevant areas of Emergency Medical Services delivery to provide the Town and the agency a basis for assessing current operations. The Benchmarks were compared with the current Baseline information provided for performance as well as “best practices” seen in the industry today. This benchmarking analysis included, but was not be limited to, the following:

- Response Times to mobilize Effective Response Forces at the scene of emergencies
- Staffing
- Capital equipment employed
- Technology implementation
- Organizational Structures

Generally Accepted Benchmarks, Standards, Goals and Objectives

In Emergency Medical Services there are well established benchmarks for successful performance of efforts to mitigate medical emergencies. These standards and benchmarks have evolved over many years. Understanding these standards and benchmarks and how they affect the efficiency, effectiveness and safety of operations is an important factor in the review of existing services, and in development of policies and operational guidelines for those services.

In this report we reference recognized standards for specific factors in the provision of successful Emergency Medical Services. This section defines and summarizes those recognized standards.

Standards of Response Coverage

“Standards of Response Coverage” is a term that has been used for the fire service in the Accreditation process of the Commission on Fire Accreditation International (CFAI) of the Center for Public Safety Excellence, (CPSE) for over 20 years. While EMS in Northampton is a standalone agency, the concept of standards of response coverage applies to all EMS agencies be they operated by fire rescue agencies or independently. Today, emergency service leaders around the world have made many positive changes in the way they self-examine their service delivery.

Today, modern EMS agencies examine each of the types of service demands that their departments responds to. They determine an “effective response force” that details the types of EMS unit(s) and the staffing that will be required to successfully mitigate each type of event. They determine the total length of time that will be required for the full effective response force to arrive at their incidents to assure proper mitigation of those events. Those agencies measure call process time (call receipt to dispatch), acknowledgement time, reflex time (time from dispatch to when units are actually leaving the station) arrival time for first and subsequent units, and all of the other aspects that track operational effectiveness and efficiency. They compare

their baseline information by incident type with nationally recognized benchmarks for performance.

Observation 6: Limited information was provided to demonstrate that NAS regularly monitors Effective Response Force time and staffing data beyond the tracking of calls dispatched but not responded to by the agency. However, there is a general awareness within the agency of the seriousness of issues that arise from delay in response.

- **Strategic Recommendation 8:** The Town EMS Strategic Planning Committee should develop incident specific standards of response coverage policies and regularly monitor benchmarks and baselines for response.

Benchmarks for Standards of Response

Today's modern standards of response guidelines and benchmarks define multiple types of EMS services. As agencies analyze their response times, those times should include call processing, turnout time, travel time, and the arrival times for the effective response forces for Basic Life Support and/or Advanced Life Support services.

Event Cascade

For all emergency incidents there are factors that affect successful outcomes: The response of the required staffing, station location, and the number of available responding units to mitigate the emergency incident. The success of each factor is based upon the reaction to and timing of each of the following cascade of events.

1. Event initiation
2. Emergency event
3. Alarm
4. Notification
5. Alarm processing/unit is notified
6. Turnout time/unit leaves station
7. Travel time
8. On-scene time/unit arrives
9. Initiation of action
10. Termination of incident

Observation 7: The data we were provided with demonstrated that each of these elements is not regularly captured or monitored either in the agency records management system or in the current 9-1-1 records system.

Cascade of Events Associated with Emergency Operations

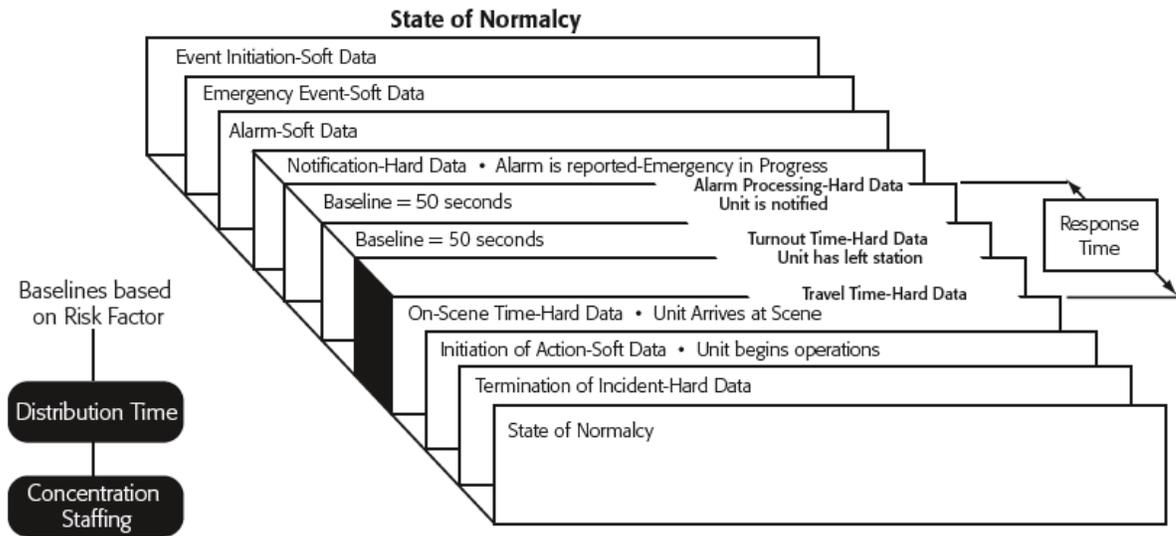


Figure 1: Cascade of events

As can be seen in the figure above, there are several uncontrollable factors in responding to emergency incidents. Those factors provide soft data that is not measurable.

- There is no measurement of the time from when an incident actually starts to when it is discovered.
- There is no way to accurately determine the time between discovery of the event and notification of the emergency communications system, although that time seems to multiply in the minds of the average person discovering and reporting an emergency incident.
- Call processing times, dispatch, turnout time and response time and arrival times can all be readily measured.

Generally Accepted Guidelines for Emergency Medical Service

Cardiac Arrest Survival: Brain Death

A patient's survival after cardiac arrest is one of the industry standards that measure emergency medical systems effectiveness. The correlation between cardiac survivability and the treatment received by patients suffering from stroke (CVA), apnea and trauma is well founded. A system maintained to ensure survival of the cardiac patient is better able to support the needs of other less severe, but no less critical patients.

- The American Heart Association has indicated that the ability for a patient to survive cardiac arrest diminishes rapidly unless definitive life support (Cardio-pulmonary resuscitation and defibrillation) occurs within four (4) minutes and that Advanced Life Support (ALS) is initiated within eight (8) minutes or less of the event.
- Findings from the Mayo clinic show that lives are saved or lost within six (6) minutes after cardiac arrest. In a study by USA TODAY "data analysis shows that, of the 250,000 Americans who die outside of hospitals from cardiac arrest each year, between 58,000 and 76,000 suffer from a treatable short circuit in the heart and therefore are highly "savable".

While the location of responders is an important factor in rapid response to these events, it is also important that early notification and intervention take place to increase the chances for survival. A patient has six (6) minutes to live from the beginning of the cardiac event and the first defibrillation shock as indicated on the following chart.

Response Time / Intervention vs. Survival

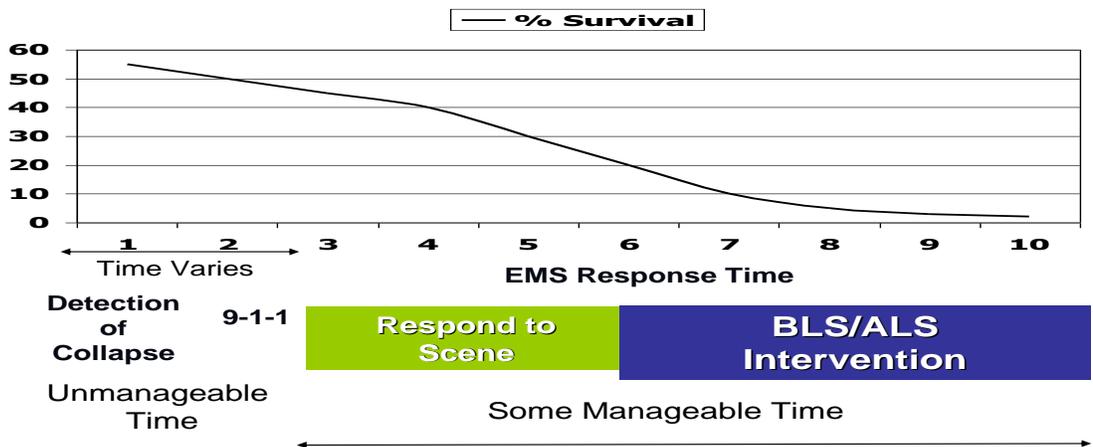


Figure 2 Response time Intervention survival chart

The typical cardiac patient in ventricular fibrillation has six (6) minutes to live

A number of organizations support early defibrillation of cardiac patients in ventricular fibrillation.

- The American Heart Association (AHA) endorses the position that "...all emergency personnel should be trained and permitted to operate an appropriately maintained defibrillator, if their professional activities require that they respond to persons experiencing cardiac arrest."
- In a position statement of the American College of Emergency Physicians (ACEP), it is stated that "the efficacy of early defibrillation with the reliable technology of current automatic external defibrillation (AEDs) is proven and widely accepted within the out-of-hospital provider community. A victim's best chance for survival is when their revival is within 4 minutes."
- American Public Health Association (APHA) has taken the position that "...AEDs need to be available, with people who know how to use them, within four minutes response time to cardiac arrest victims."
- The National Association of EMS Physicians has stated in its literature that "...rapid defibrillation is the most critical of these resuscitation interventions: strategies to enhance survival should focus on reducing the interval from collapse to defibrillation."
- An advisory statement in a 1997 article from the International Liaison Committee on Resuscitation states that "Most adults who can be saved from cardiac arrest are in ventricular fibrillation (VF) or pulse less ventricular tachycardia. Electrical defibrillation provides the single most important therapy for the treatment of these patients."
- The American College of Occupational and Environmental Medicine has stated that between thirteen (13%) percent and sixteen (16%) percent of workplace related deaths can be attributed to sudden cardiac arrest (SCA). They went on to state, "Factors contributing to out-of-hospital survival following SCA have been described primarily in terms of the time-related "chain of survival" paradigm. The four links of the chain include: early recognition and call for Emergency Medical Services; initiation of basic life support CPR; defibrillation; and advanced cardiac life support (ACLS) drug support."
- Emergency Health Services Federation has stated: "Time is a determining factor in the outcome of a patient suffering from cardiac arrest. For every minute after collapse, without adequate interventions, a person's chance of survival drops by 10 percent". They go on to state that survival rates of nearly thirty (30%) percent are not uncommon when defibrillation is applied quickly.

Universally, all groups that study survivability of cardiac arrest victims support early defibrillation by first responders within the first few minutes after discovery of cardiac arrest to insure maximum survivability of the ventricular fibrillation patient.

EMERGENCY MEDICAL - CARDIAC

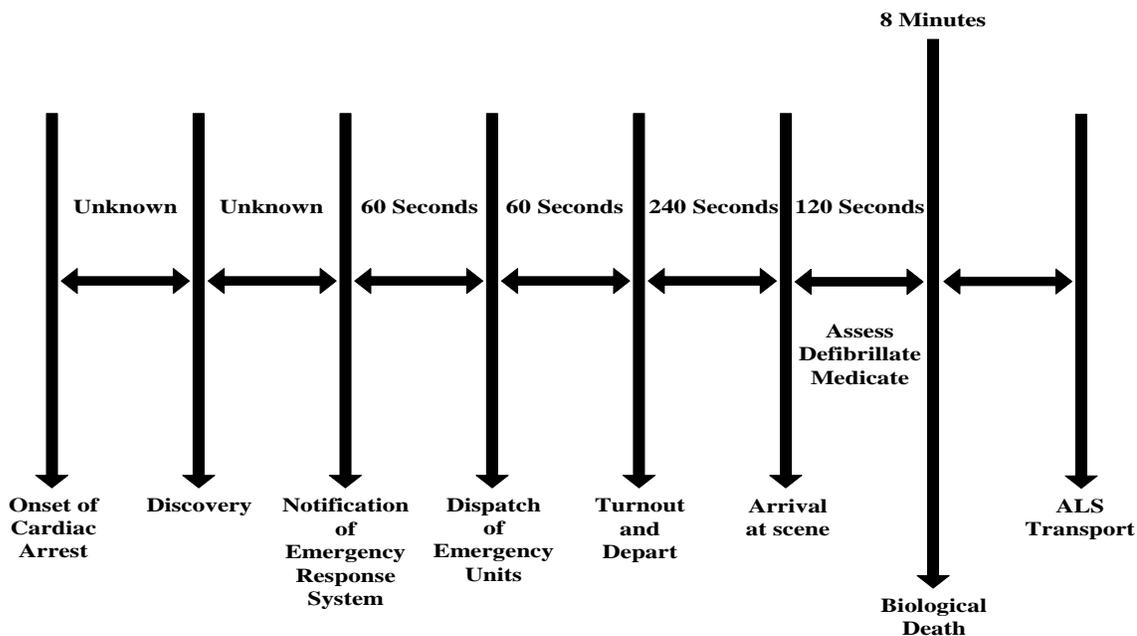


Figure 3: Emergency medical time factors for cardiac survival

- **Strategic Recommendation 9:** We urge the community to establish a program of regular communitywide CPR training for citizens and the installation of automatic defibrillation (AED) devices in areas where large congregations of people are common.

NFPA EMS Response Standards

The code standards below are set by the National Fire Protection Association for fire department ambulance services. These standards logically apply to all EMS services. In the event of failure to provide adequate service resulting in death or further injury to a patient, these same standards have been used as a basis for legal actions against EMS agencies.

NFPA³ Standard 1710 states that:

- “...shall establish the response time objectives of 8 minutes or less for the arrival of an advanced life support unit at an emergency medical incident...”⁴
- “...units that provide ALS transport shall be staffed with a minimum of two members providing patient care that are trained to emergency medical technician-Paramedic (EMT-P) level;”⁵
- “... ALS emergency response deployments “shall include a minimum of two members trained at the emergency medical technician- Paramedic (EMT-P) level, and two members trained at the emergency medical technician- basic (EMT-B) level arriving on scene within the established response time.””⁶

The Cardiac Patient Survival Rates charts demonstrate a direct correlation between the response and initiation of activities to the time required to save a cardiac arrest victim, and the time affecting the ability of a an EMS agency to mitigate the event and save victims successfully.

Initiation of CPR ♥	Time to Defibrillation ⚡	Time to Advanced Cardiac Life Support (ACLS) 🚑	Predicted Survival Rate/ All Cardiac Arrest (percentages)	Survival Rate/ All Potential Survivors (percentages)
10 minutes	11 minutes	13 minutes	4.6%	6.9%
5 minutes	11 minutes	12 minutes	18.2%	27.2%
5 minutes	6 minutes	11 minutes	25.8%	38.5%
5 minutes	6 minutes	7 minutes	34.2%	51.0%

Figure 4: Effect of Response Times on Cardiac Patient Survival Rates

³ NFPA National Fire Protection Association

⁴ NFPA 1710, Section 4.1.3.1.1(3)

⁵ NFPA 1710, Section 5.3.3.3.2.2

⁶ NFPA 1710, Section 5.3.3.4.4

The Cardiac Patient Survival Rates chart scenario requires:

- Two (2) EMS trained individuals to provide CPR:
 - one to prepare the AED and analyze the results of an electrocardiogram (ECG) report
 - one to prepare for and initiate advanced cardiac life support measures, such as advanced airway management, I.V. therapy, and the range of pharmacological interventions.

- **Strategic Recommendation 10:** Strategic Planning for the delivery of emergency medical services in the community should recognize the nationally recognized standards for delivery of emergency medical services. Survival times for patients are directly impacted by response times.

NYSDOH EMS Regulations ⁷

NYS Department of Health has established many regulations that apply to the operation of all ambulances and emergency medical services in NYS.

- Some of the primary New York State Department of Health regulations regarding operation of ambulance services can be found in the appendix section of this report and can be found on the NYSDH website.

It is vitally important for planners and decision makers to understand the laws and regulations that pertain to EMS in NYS.

- **Specific Recommendation 12:** We urge the Town of Northampton and its EMS agency to engage the Town or other attorneys qualified to interpret those NYS Department of Health regulations that apply to Emergency Medical Services before implementing actions to address EMS services.

⁷ https://www.health.ny.gov/professionals/ems/operational_authority/non-certified/docs/blsfr_application.pdf

Findings

NAS Response to incidents

The agency provide the following report of incidents responded to in the past 3 years

Calls for service	<u>2017</u>	<u>2018</u>	<u>2019 YTD</u>
EMS Emergency With Transport to medical facility	87	87	54
EMS Emergency With No Transport to medical facility	45	42	35
Assist Fire Rescue agency	3	3	4
Standby at School function	0	0	0
Haz Mat	0	0	0
Public assistance	0	2	0
Other	2	0	4
Total calls for service	137	134	97

YEAR	COVERED	NOT COVERED	TOTAL
2013	<u>141</u>	<u>66</u>	207
2014	<u>150</u>	<u>84</u>	234
2015	<u>127</u>	<u>98</u>	225
2016	<u>137</u>	<u>93</u>	230
2017	<u>137</u>	<u>102</u>	239
2018*	<u>134</u>	<u>120</u>	254
2019* YTD	<u>104</u>	<u>69</u>	173
Total	<u>930</u>	<u>632</u>	1562

* Totals Do Not include calls for service when ambulance 2891 was out of service for repairs

Figure 5: NAS Response to Incidents 2013 – YTD 2019

Each of these incidents represents a person who needed care from well-trained and equipped emergency responders in a timely fashion.

Observation 8: NAS has been tracking its own responses to emergency calls for service for several years and is well aware of the fact that it has not been able to respond to many calls for service. NAS also has developed and utilizes a report form to identify the reasons for any non-response to calls for service in its ongoing efforts to identify the problems in its efforts to correct the problem.

Northampton Responder's Report			
Please fill out this card if you respond to the station for an ambulance call but are unable to roll our ambulance for any reason. Normally this would be due to insufficient staff. Accumulating this information over time will help us determine manpower needs for now and the future. And, it will document your response in case there are any unusual circumstances.			
Most of the information requested here can be found in the text message you receive for the call.			
Date:	Day of Week:	Time: (24 Hr)	
Location of Call:		Circle one: Northville Hope	Northampton Other:
Nature of Call:			
CAD Event #:	Comments:		ASFC On Scene Time:
Responder Name:			
Responder Name:			
Responder Name:			

Figure 6: NAS Response form filled out when agency is unable to respond.

Observation 9: Review of the completed Responder's Report forms at NAS demonstrated that the primary reason why NAS has been unable to respond to some calls is that only one person responded to NAS station. NYSDOH regulations require a minimum of 2 responders on an ambulance including at least 1 EMT

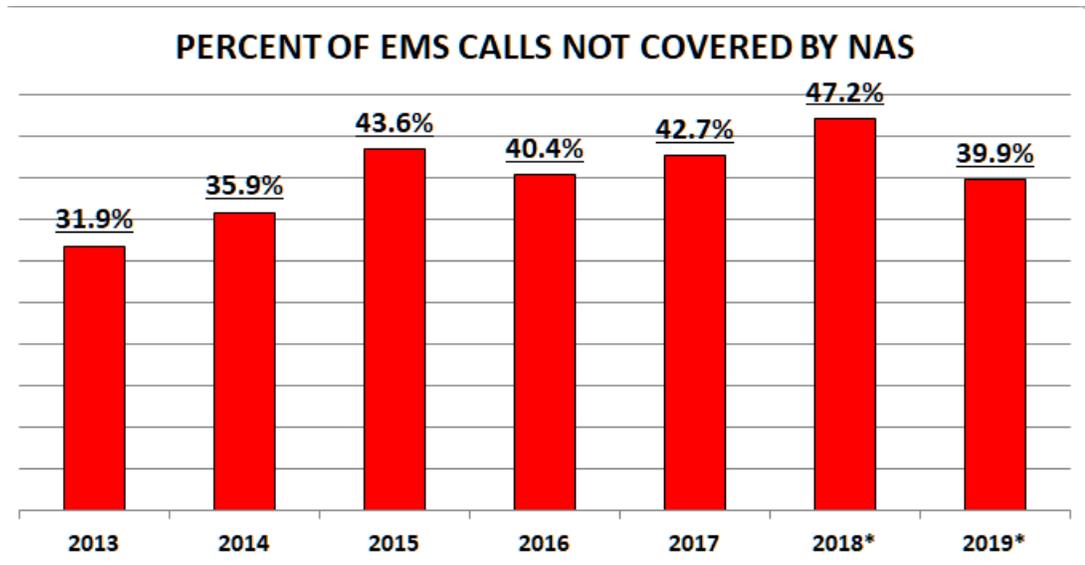


Figure 7: Percent of emergency calls that NAS was UNABLE to respond to from 2013 to year to date 2019

Observation 10: Survey responses from the people in the community and from members of NAS itself recognize the high percentage of unanswered call for service. The growing increase in the number of those unanswered calls is unacceptable. The community as a whole wants the problem solved promptly.

Observation 11: It must be noted that NO single standalone ambulance service operating a single response unit will ever be able to respond to 100% of the calls for service in their community.

- **Strategic Recommendation 11:** NAS and all other EMS agencies must assure that they operate with automatic aid agreements between the agencies and that protocols are in place for emergency dispatchers at the 9-1-1 center to automatically relocate units to assure that there is proper EMS coverage with timely response to all districts at all times.

9-1-1 Emergency Communications

Fulton County Office of Emergency Communications, 9-1-1 is a division of the Office of the County Sheriff. The Fulton County 9-1-1 office is staffed by dedicated emergency communications professionals who daily deal with the stresses of that job. While County 911 operations are not part of this study, the operations of the County 9-1-1 Emergency Communications center are a key to assuring efficient effective and safe emergency response from every emergency service agency in the county.

The County is aware of the serious issues with their current CAD⁸ system and is in the process of modernizing the 9-1-1 computer system. The new CAD system should eliminate the need to manually enter various event times, and will provide better street address information for responding units. The new system should also be able to provide an opportunity to modernize the dispatch process, where the units dispatched are the closest ones to every incident. Accomplishing that objective will still take much work and agreements between all public safety agencies.

We were informed during our site visits and in several surveys that there are questions regarding adequate on duty staffing at the 9-1-1 center.

- I did not validate that information for this study.

The County is aware of coverage issues with the current radio network and is in the process of updating the radio system to assure best possible radio coverage Countywide. As planned, the improved radio network will simulcast all radio traffic so responders will no longer need to request that the dispatch office use any specific tower to assure coverage for emergency responders.

The County Emergency Communications Division does have the I Am Responding program integrated to the emergency communications computer aided dispatch system. I have been told that currently, few agencies in Fulton County use the tools available in that program. It appears that the only users of the I Am Responding program in Fulton County are fire rescue agencies

Accuracy of Street files: We have been informed that there may be issues with the street files in the CAD system. We suggest the county do review of street name files including break numbers at every intersection.

The common place name file in the CAD system is the file of the names of businesses, schools, and other familiar landmarks where people could discover an emergency and call 9-1-1 to report an emergency. In a tourist area many people do not know street names and almost certainly do not know street addresses. When these people spot an emergency they will dial 911 to report what they see. Those people generally will not know the street address or even the street name but they will know the business name from the signs on the building. Assuring the accuracy and inclusion of all possible common place names in the CAD street file index is a project in which emergency response agencies could be requested to provide common place names information to the 911 center for input into the computer aided dispatch system.

⁸ CAD- Computer Aided Dispatch

Records Management:

The County Officer in Charge of 9-1-1 was extremely helpful in his efforts to provide the response data that was requested. However, it took an excessive amount of work by the Officer in charge and his staff to extract that information in a readily usable format for data analysis from the current computer system. There is an absolute need to assure that the computer aided dispatch system will be readily able to generate reports that provide information not only to the user agencies for their record keeping and performance analysis but even more importantly the accuracy of that data is important to the 911 center management team in their efforts to conduct regular reviews of dispatcher performance and in tracking of call processing times and other information that impact the ability of emergency responders to be promptly notified and respond to incidents.

The accuracy of recording the time of each action during an emergency begins with the need for 9-1-1 management to assure that the time of every action is properly captured as it happens directly into the CAD system. In my review of dispatch records it appeared that some event times have been manually entered to CAD rather than directly entered as each event occurred. If that observation is correct, dispatchers need to be directed to enter every action into the CAD immediately as it happens. Nothing should ever be written down on paper before it is entered into CAD.

EMD Emergency Medical Dispatch

EMD stands for Emergency Medical Dispatch. EMD is a protocol whereby 9-1-1 call takers follow an approved questioning format to obtain detailed information about the medical emergency that is being reported. As that questioning process reveals specific answers to the questions the EMD program recommends the type of units to be sent based upon protocols approved by the local medical community. The program also indicates to the dispatchers when accepted protocols do not require the dispatch of an ambulance and provides transportation alternatives to be given to the caller. The use of EMD is recommended by NYSDOH policies⁹.

Observation 12: I have been informed that currently Fulton County medical groups have not established the required guidelines that would allow the use of EMD in Fulton County. Local medical expert review is required to establish the EMD guidelines for emergency medical responses. Those efforts should eliminate situations like the example we discovered where an ambulance was dispatched to a person with a tooth ache. We urge the County and the local medical community to investigate and implement the use of EMD for all EMS calls. There will also be a need to review staffing levels at 9-1-1 to assure that EMD can be effectively utilized without creating a negative impact on other emergency dispatching.

⁹ From NYSDOH Operation of Emergency Medical Services Vehicles

NAS Time Analysis & Response Time

Benchmarks for EMS: The recognized benchmarks for the times associated with responses to various types of incidents and locations are located in the Benchmark section of this report.

In general, survival time for patients with heart attacks is much greater if action is initiated in less than 10 Minutes from the onset. Those 10 minutes would include the total time between onset of the heart attack, Time to call 911 and report the need for help, Call processing time of the call at 911, and the actual response time of the ambulance from the time it was dispatched until the patient has been located and treatment initiated.

The primary consideration in all emergency services is always based upon the travel distance and travel time in normal conditions, assuming that there is a response team ready to go at the start point. With unstaffed stations it is impossible to calculate the reflex time from dispatch until responders get from their current locations to the location of their response vehicle. Upon arrival at the incident, the reflex time to initiate efforts to mitigate the incident and render care to the patient are a reflection of training and equipment.

In discussion with the Emergency Communications Officer in Charge, we discovered that Greater Amsterdam Volunteer Ambulance Corps GAVAC is automatically dispatched as the primary EMS agency on all emergency medical calls in Fulton County.

- GAVAC is the primary EMS agency for all of Fulton County plus all of Montgomery County.
- GAVAC keeps a minimum of three or four ambulances available for Fulton County calls.
- There are no longer any volunteer responders in GAVAC. All staff and responders are either part-time or full-time paid employees.
- GAVAC bills patients for all services.
- If NAS is unable to respond, GAVAC takes the total call.
- If NAS has a sufficient crew, GAVAC is cancelled
- If NAS has only a BLS ¹⁰ crew GAVAC continues for ALS¹¹ support.

As part of our review of dispatch information we performed a number of sample time analyses to determine times from Dispatch to Enroute to Unit Arrival.

Observation 13: Review of response records indicates that NAS does not consistently meet generally accepted response time goals. The sample chart below demonstrates the serious issue of NAS not accomplishing adequate response times for patient survival for cardiac and breathing types of incidents.

¹⁰ BLS Basic Life Support

¹¹ ALS Advanced Life Support

Time Dispatch to On Scene	EVENT TYPE
00:36	TROUBLE BREATHING
00:33	ALS LINKUP DIFF BREATHING
00:26	102F DIFFICULTY BREATHING
00:21	89M UNRESPONSIVE
00:20	ALS LINKUP 74M CARDIAC
00:15	ELDERLY F COPD
00:14	BREATHING PROBLEM

Figure 8: examples 2019 NASD Time from Dispatch to units being On Scene for Life threatening events

The maps below show the response time and distance for GAVAC from their quarters and from their sub location at Berkshire Fire department in Gloversville to NASD. If GAVAC responds from those locations, there is no possible way for them to meet generally accepted response guidelines for patient survival. Local EMS responders must be trained, equipped and available to respond in the community.

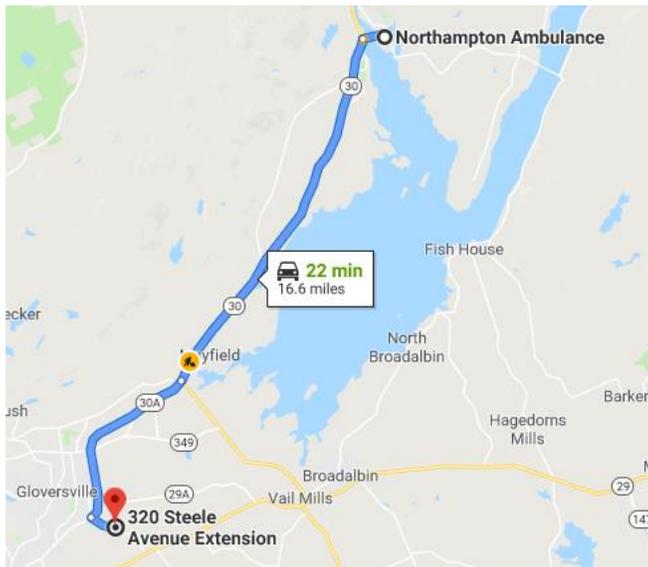


Figure 9: Map GAVAC at Berkshire Fire Station in Gloversville: 22 Miles 22 Minutes

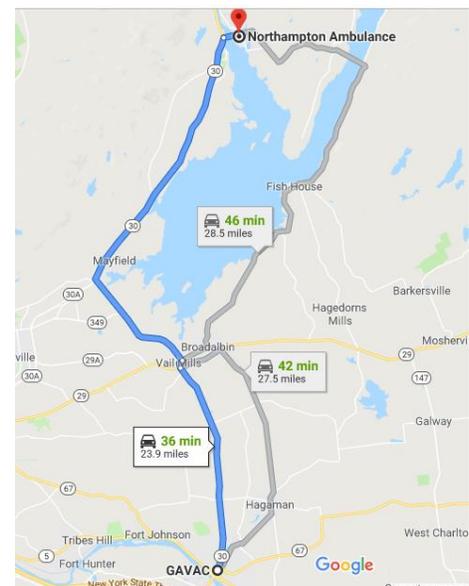


Figure 10: Map GAVAC Response GAVAC station to NAS, 36 minutes 23.9 miles

The 9-1-1 office records showed the many different types of incidents that occur in the County and demonstrated the multiple vital actions that are taking place in the 9-1-1 office to assure an effective response to every citizen's call for emergency service.

Observation 14: Current records made available by NAS do indicate that the agency does manually track the number of emergency responders who actually responded to the scene. However, those records do not accurately track or indicate when each responder arrived or if a sufficient number of emergency responders arrived on scene. That level of tracking could easily be met if the agency utilized a tool like I Am Responding or if arrival of responders was tracked by dispatchers directly into the CAD system.

- **Specific Recommendation 13:** The operations planning committee should review the type of calls that will be responded to, the type and number of EMS Units and the staffing sent to each type of incident and when that staffing actually arrives on the scene.

Observation 15: The County 9-1-1 office provided dispatch data for NVAS for the current year to date and 2017-2018. The review of those records and those provided by NAS indicated that there are serious response time issues with ambulance responses being outside of the recognized times for the best survival chances for patients with life threatening medical problems. That fact is currently recognized in County 9-1-1 office policies which direct that GAVAC ambulances be automatically dispatched to all NVAS area EMS calls. The Northampton Ambulance Service also provided us with copies of its response data which showed the same response time issues.

Service Demand by Time of Day

Although EMS events can and do occur any time of the day or night, when planning staffing for service delivery it is important to know when the highest demands for service are, to assure sufficient staffing during those times. A review of data provided by NAS for the calls for service by time of day indicated that requests for service were the highest during the day time hours when there are generally the fewest Volunteers available to respond.

00:00 to 03:00	9		5.7%
03:00 to 06:00	7		4.4%
06:00 to 09:00	19		12.0%
09:00 to 12:00	35		22.2%
12:00 to 15:00	35		22.2%
15:00 to 18:00	26		16.5%
18:00 to 21:00	17		10.8%
21:00 to 24:00	10		6.3%

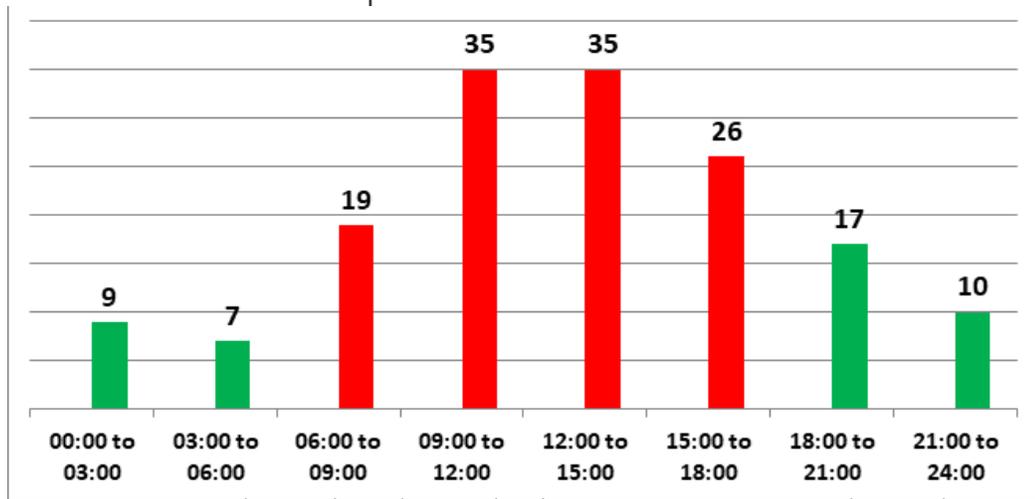


Figure 11: Time of day for calls for service, demonstrating that highest demands for service are between 06:00 to 18:00 hours when there are the fewest number of volunteers available

Staffing

There can be no service in any organization without proper staffing. The most valuable staffing that any emergency service organization can have is a group of well trained, dedicated and available people who are willing, ready and able to VOLUNTEER their time and skills to serve the people in their community. The Northampton Ambulance Service is blessed to have a cadre of such dedicated volunteers serving this community. However, the questions that must be answered in the Strategic Planning efforts are:

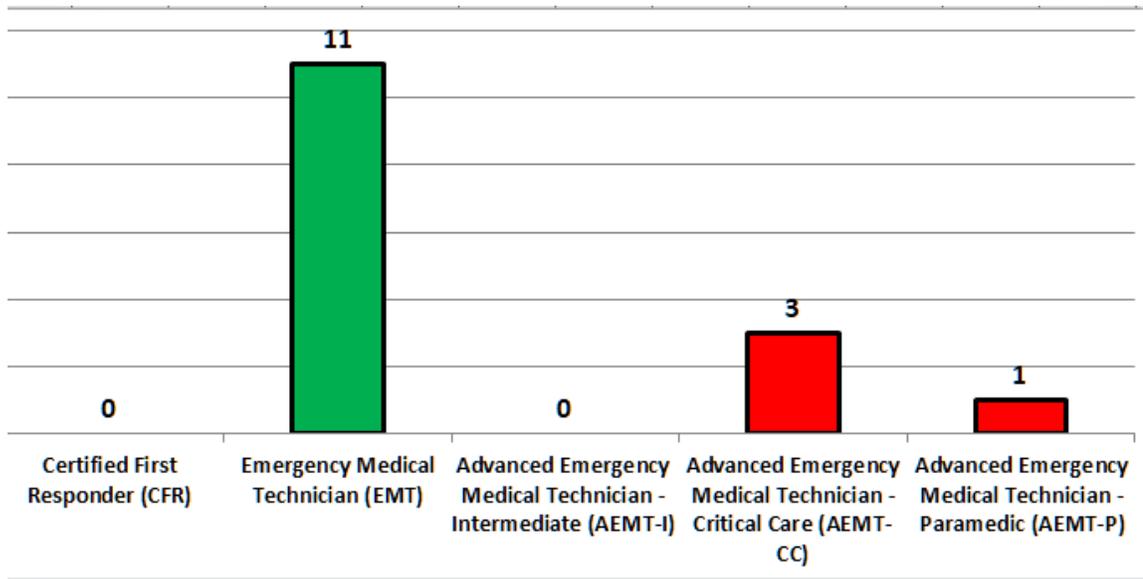
- Are there a sufficient numbers of volunteers to assure service 24/7, 365 days a year in accordance with NYS Department of Health regulations?
- Are the NAS volunteers being provided with the tools, equipment and facilities that will encourage them to continue to volunteer?
- Are there some volunteers who are approaching the point of burnout, age or physical condition that will cause them to leave EMS service?
- Are the Town and the agency doing enough to address the needs of today's volunteers?
- If there is not a sufficient number of volunteers to assure service 24/7 365 days a year, what additional staffing is needed and when?
- Most important is the fact that every emergency service in the community is facing the same issues of recruitment and retention of volunteers in a community with a limited number of prospects. Nationwide the number of EMS calls for services outnumber the calls for fire rescue services.

NAS provided data on the number of members and volunteers and their status and company training. Emergency responders were given 2 opportunities to provide information regarding their training and availability. Using IPA addresses to assure that we did not duplicate the reported data we combined the provided data to enable us to present as accurate as possible view of NAS members. The agency has established a tool for planning and tracking staffing for the hours from 18:00 to 06:00. A review of that schedule on 9/12 clearly shows there are many dates where nobody has indicated that they are available to respond.

SEPTEMBER 2019 * NAS * 18:00 TO 06:00						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	2 Labor Day DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	3 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	4 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	5 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	6 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	7 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]
8 Grandparents Day DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	9 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	10 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	11 Patriot Day DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	12 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	13 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	14 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]
15 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	16 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	17 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	18 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	19 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	20 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	21 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]
22 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	23 Autumnal equinox DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	24 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	25 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	26 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	27 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	28 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]
29 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	30 Rosh Hashanah DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	1 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	2 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	3 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	4 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]	5 DRV: [darkened] EMT: [darkened] AIDE: [darkened] MED: [darkened]

Figure 12: September Staffing Schedule. Darkened areas show the names of responders who have signed as being available.

Staffing & Current EMS Certifications Reported by NAS



<i>The Number of People in each position or category</i>			
Rank	Volunteer	Career	Total
Emergency Medical Services (EMS) NYSDH Certification			
Certified First Responder (CFR)	0		0
Emergency Medical Technician (EMT)	11		11
Advanced Emergency Medical Technician - Intermediate (AEMT-I)	0		0
Advanced Emergency Medical Technician - Critical Care (AEMT-CC)	3		3
Advanced Emergency Medical Technician - Paramedic (AEMT-P)	1		1
Total Number of EMT Certified Responders	15		

Figure 13: Number of certified EMT responders in each category reported by NAS

Observation 16: Only 4 of the responders were reported as having advanced EMT certifications. This low number seriously negatively impacts the agency's ability to provide ALS services

- **Specific Recommendation 14:** If NAS wants to provide ALS services it must significantly increase the number of responders who are certified to provide those services.

The following NAS volunteers are not EMT certified but are valued responders: 8 Driver Aides, 2 Aides & 1 Driver.

Staffing Response Availability

The number of volunteers reported by the agency at each rank does not indicate the actual availability of those volunteers. To gauge that information we conducted 2 surveys for emergency responders.

The following staffing availability was reported by emergency responders in the availability survey. While not every responder provided their availability information, the information provided reflects the results of other studies we have conducted for volunteer staffed agencies in rural areas of NYS:

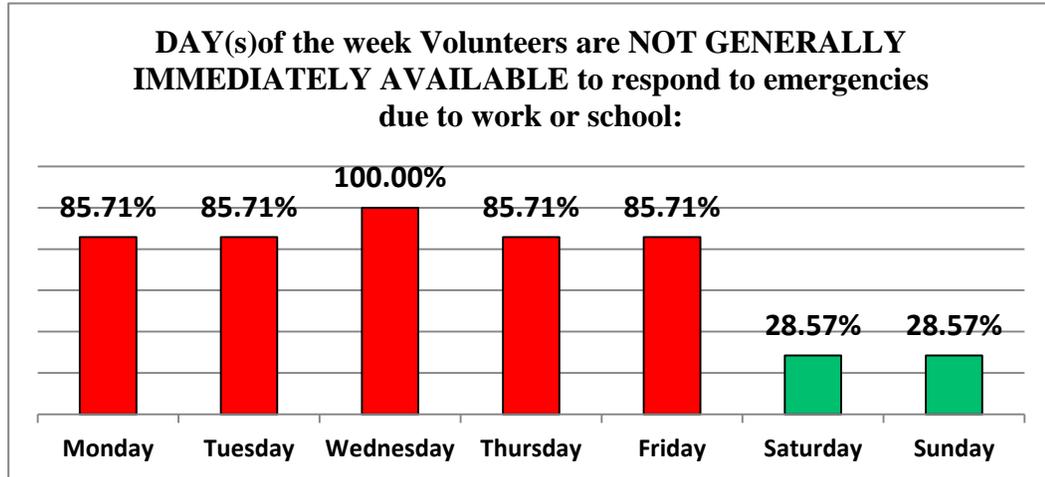


Figure 14: Day of week Volunteers reported as UNAVAILABLE. Information shown in RED is a danger sign

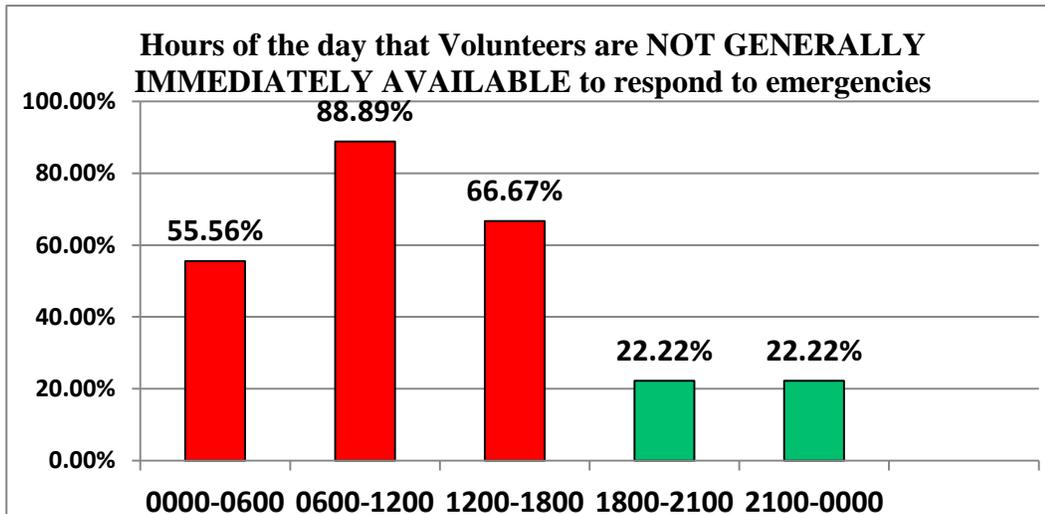


Figure 15: Time of Day Volunteers reported as NOT GENERALLY AVAILABLE.

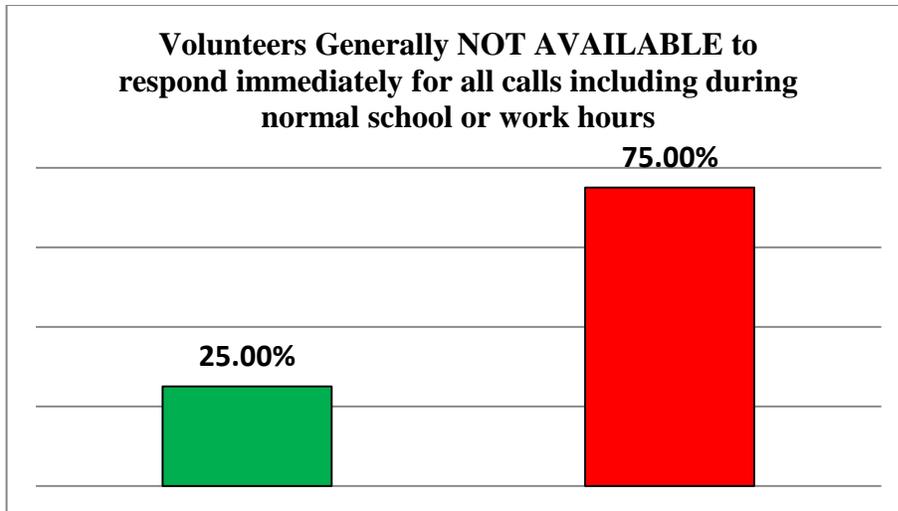


Figure 16: % of Volunteers reported as generally NOT AVAILABLE to respond during normal work hours.

Leadership

The senior leader of NAS is the EMS Chief who has served the Northampton community in many roles over many years. There should be no question about the Chief's dedication to serving this community and his value to the agency and the community.

During my site visit I reviewed many reports and documents in the agency including the "Responder Reports" that are completed after every incident that the ambulance was unable to respond. In those reviews I found that many of those responder reports were completed by the EMS chief who was the only responder to arrive at the station. The reports were filed because the ambulance was not able to respond due to a failure to have the required number of responders respond to the calls. I also repeatedly found the chiefs' signature on monthly inventory reports and other agency paperwork.

For the record I admire the Chief's dedication to serving this community. However, the fact of what the chief currently and regularly does for the agency and the community also raises serious questions about the very future viability of the agency. As noted in the success for leadership section of this report section on training for succession:

- It is the responsibility and the absolute DUTY of every leader, at every rank, in every emergency service to prepare their subordinates to successfully succeed them. It is the duty of every senior leader to mentor and teach subordinates.

While there is absolutely widespread respect and support for the chief in the organization there were also frustrations expressed in the confidential member surveys that the chief regularly handles duties at incidents that less senior members could, and should handle to gain valued experience.

- **Specific Recommendation 15:** The EMS chief and the organization need to promptly establish policies that ensure that the chief will serve primarily as a mentor and teacher, both in the field and administratively, rather than as a "doer". The agency **MUST** take advantage of the fact that the chief is a singularly valuable resource for assuring the future success of NAS.

Patient Care

The majority of survey responders in the community and from emergency responders alike rated EMS service from Very Professional to moderately professional. The services of NAS are deeply valued by the community. However, there were also reports in each of the groups' surveys acknowledging a need for improvement. The most prevalent issue reported is that patients, witnesses and even some responders feel that the length of time from ambulance arrival to patients actually being transported to medical facilities is often excessive. The validity of those comments cannot be confirmed by the consultant long after those incidents have occurred, but the wide reporting of these issues strongly support their validity.

Thankfully, the days of ambulances arriving and just scooping up the patient and swooping them off to a hospital are long gone. However, the length of time spent stabilizing and preparing patients for prompt transport to medical facilities is an important factor in patient care. This issue is just one of many that highlight the need for the agency to regularly conduct Post Incident reviews. The goal of Post Incident critiques is to get feedback from all responders to determine what each sees as positive and negative actions at the incident. The findings of Post Incident Reviews form the basis for modifying operations, policies and practices to improve future incident operations.

- **Specific Recommendation 16:** NAS should initiate a policy to regularly conduct Post Incident Reviews¹² with the responders to incidents. The findings of Post Incident Reviews should form the basis for modifying operations, policies and practices to improve future incident operations.
- **Specific Recommendation 17:** Patient care reports need to be automatically linked to online dispatch data to assure report accuracy and to reduce the time required to complete the report.

¹² This consultant does provide online Post Incident Review surveys for agencies.

Staff Capabilities

Age of Volunteers

Sex Male	12
Sex Female	16
Age Range:	
18 – 21	3
22 - 29	3
30 – 39	5
40 – 49	4
50 - 59	6
60+	7
	28

Figure 17: Current staffing ages reported by NAS

The ability of any agency to provide continuing service is dependent on assuring a pipeline of young members in the organization. In any organization staffed by Volunteers that factor is not only important, it is VITAL. The ages reported for Volunteers in NAS indicate a serious imbalance in ages for continuation of service.

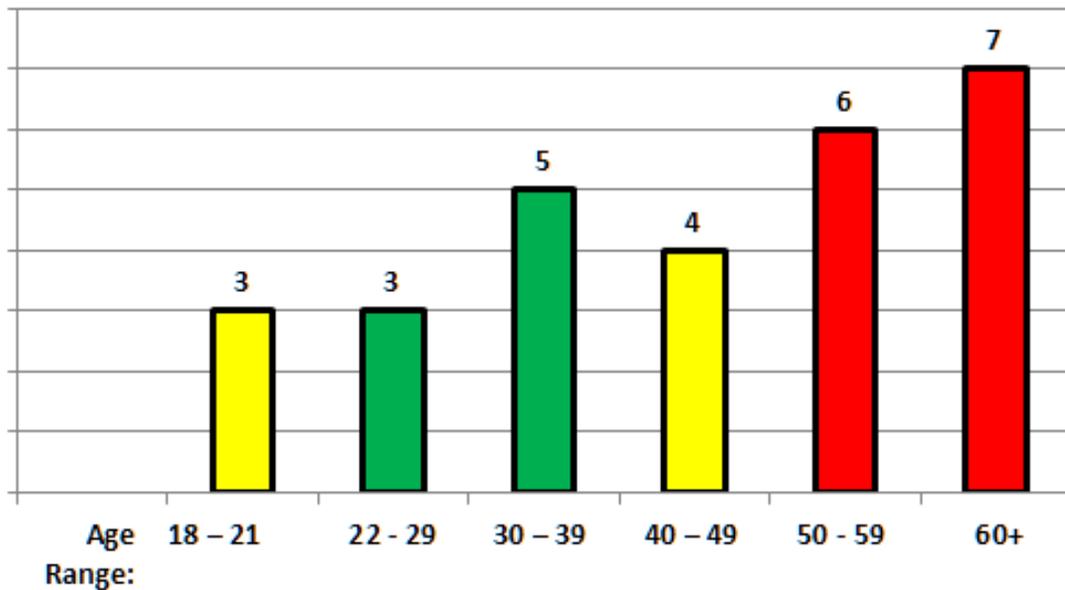


Figure 18: Age ranges reported by the agency

It is a clear fact that experience and age are generally related. However, in emergency services the stressors of the job can, and do, have serious health impacts on emergency responders. How the body, at any age, reacts to those stressors can be a factor of age and physical condition. The importance of physical fitness capabilities for job performance is vital for every emergency responder's health and safety.

- Age of emergency responders can have a positive impact on available knowledge skills and abilities.
- Age and physical condition of every responder impacts the total capabilities of the response crew.
- If responders become victims due to the physical exertion required to perform their duties, there is a negative impact on the response force capabilities.

Observation 17: The fact that 15 out of 28 emergency responders were identified by the agency as being over 50 years old demonstrates that at any time the total number of volunteers in the agency could be drastically reduced as those volunteers retire, age out or are medically unable to perform their duties safely. The agency reported only 6 members under the age of 30. That number is less than 46% of the number of responders who can reasonably be expected to leave service.

- **Specific Recommendation 18:** The Recruitment, Retention, and Training of New and younger Volunteers must be a priority for agency leadership.

Fitness For Duty

In every emergency response agency it is assumed that the emergency responders are physically fit to perform the duties that they may be required to perform. That fitness determination should/MUST include an annual medical examination of each responder.

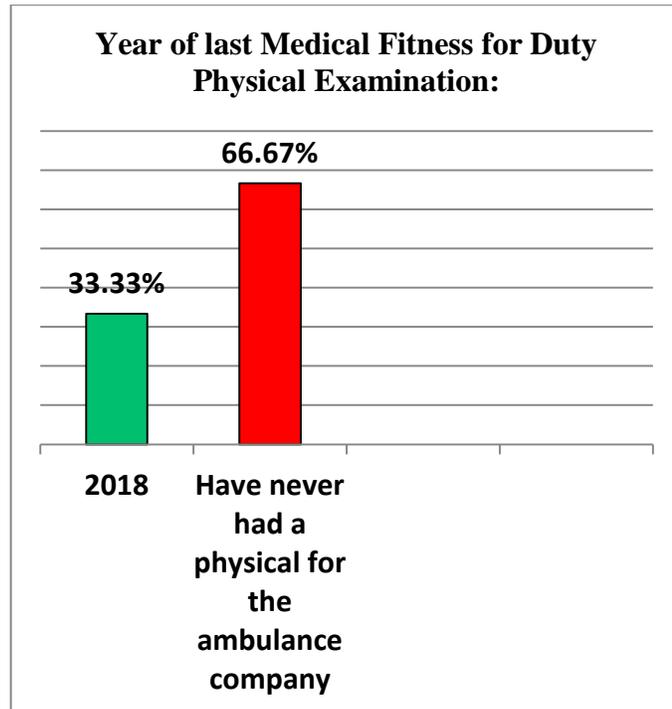


Figure 19: Fitness for duty

Observation 18: It was disturbing to see that over 66% of the emergency responders to the survey reported that they had never had a physical examination to determine their fitness for duty.

- **Specific Recommendation 19:** NAS MUST establish a policy that requires every emergency responder to have a regular annual fitness for duty physical.
- **Specific Recommendation 20:** Recruitment efforts must be focused primarily on new Volunteers under the age of 40 while also incentivizing retention of all Volunteers who are medically fit to serve including those over the age of 50.

Women in the Emergency Medical Services

Emergency Medical Services has historically had many women who have been EMTs at every rank in Volunteer and Career ambulance agencies. Emergency response agencies have proven time and again that women are not only capable of performing the job, they have excelled. There is a long history of Female Volunteers in service in the Northampton Ambulance Service.

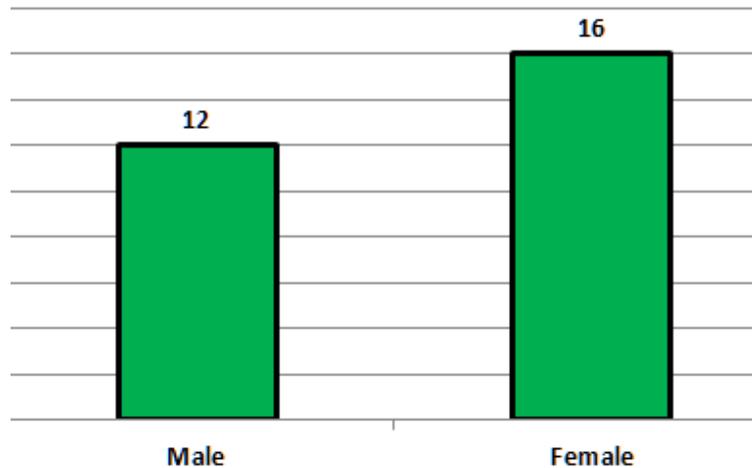


Figure 20: Number of males and females reported by NAS

- **Specific Recommendation 21:** Recruitment and retention efforts must assure that they are inclusive of women and men.

Volunteer Response to Incidents

The 9-1-1 office records did not accurately report the arrival times or number of responders to incidents. Their records also do not indicate if the Volunteers responding to incidents were qualified as First Responders, EMTs or Paramedics, or Command or Support personnel.

Generally, a large variance between the number of reported active Volunteers and the average number of responders to incidents would demonstrate a scarcity of available emergency responder Volunteers in the community. A low number of emergency responders responding to incidents would raise a red flag.

- **Specific Recommendation 22:** There must be a regular ongoing review and monitoring of Volunteer staffing Availability, Response Capabilities and Training to assure operational and emergency responder safety.
- **Specific Recommendation 23:** The use of the County-provided I Am Responding software program will provide the data needed to review both the number of Volunteers who are available to respond and those who do respond to each incident.

Time Demands on NAS Volunteers

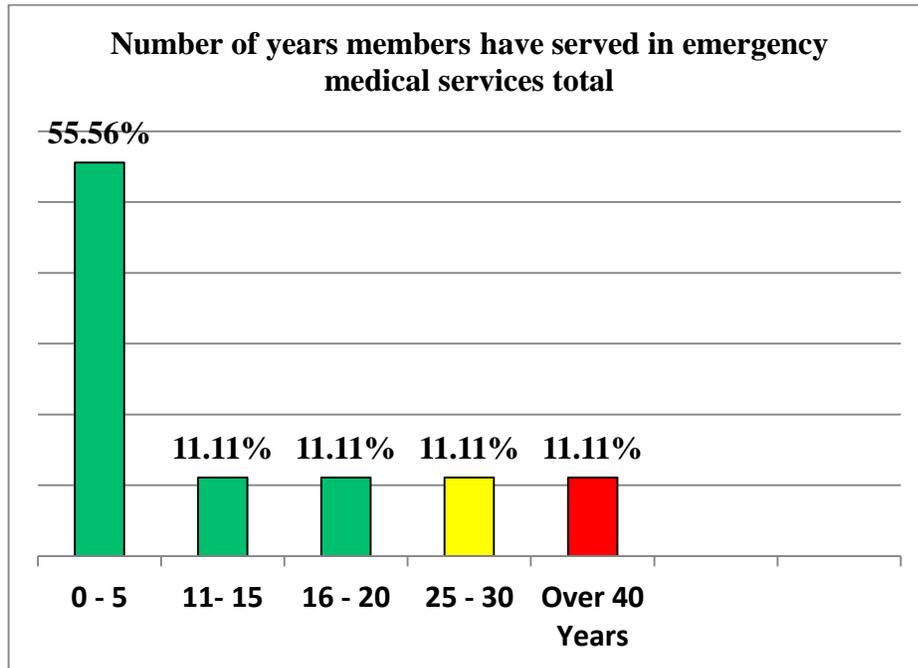


Figure 21: Length of service reported by emergency responders

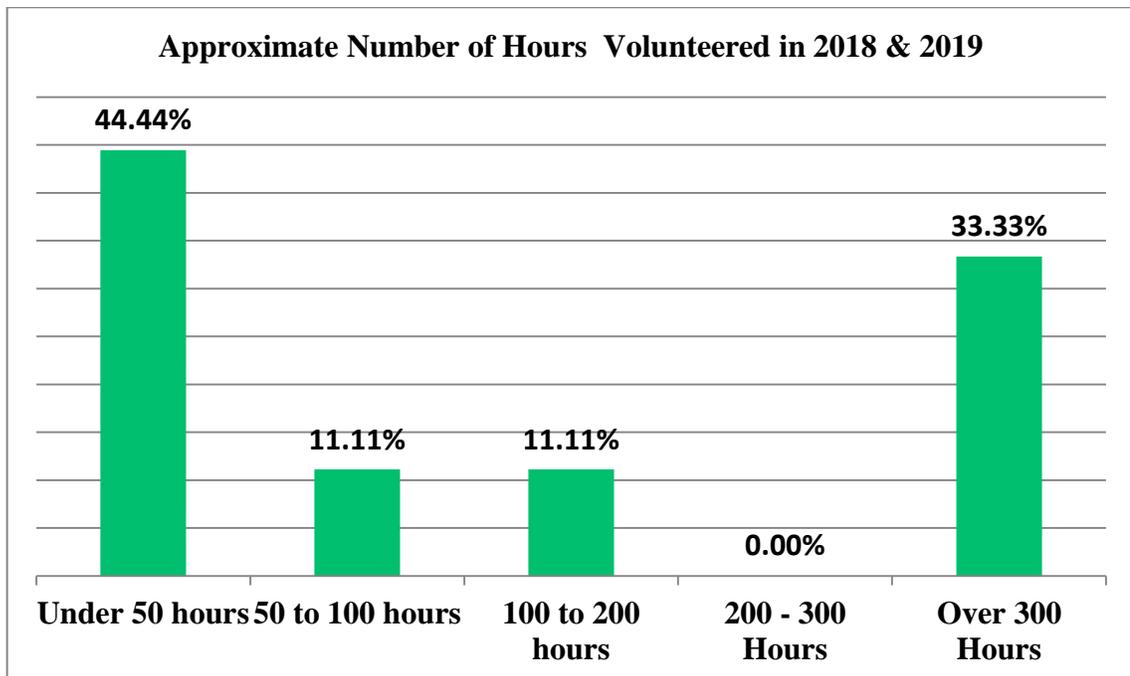


Figure 22: Number of volunteer hours that Volunteers reported serving NAS

Training

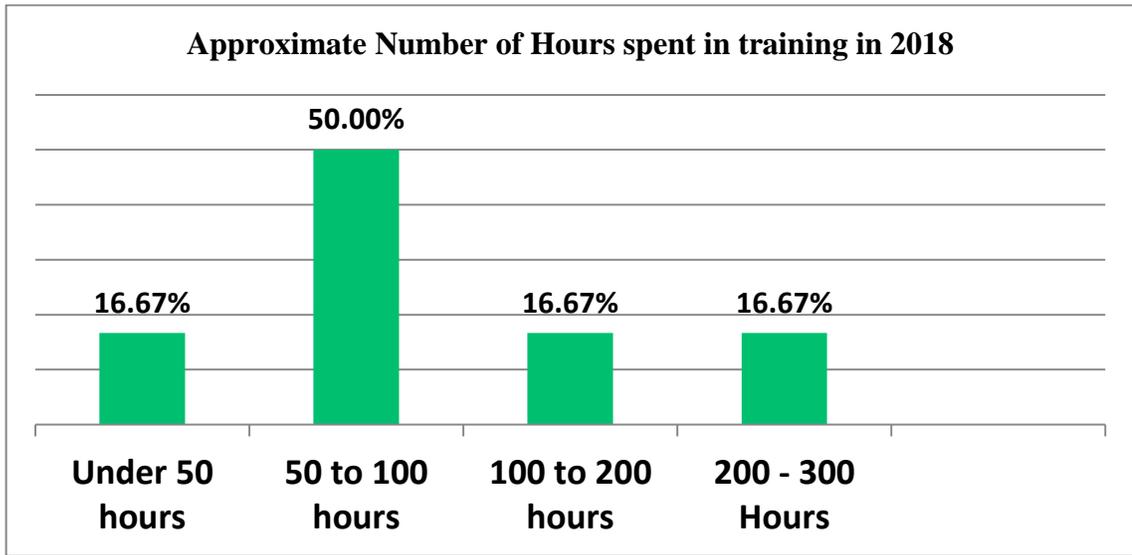


Figure 23: Approximate Number of Hours responders reported as spent in training in 2018

District Training			
	Yes	No	
Training is regularly conducted in the Agency;	Yes		
Training is conducted under the guidelines established by NYS and National Standards;	Yes		
Supervisors have been trained to perform their duties in conformance with National Incident Management System protocols		No	

Class	to	Date	Number of members in attendance
BLS MEDS - ANAPHYLACTIC	J	08/06/19	6
RADIO PROCEDURES	S	07/30/19	11
LUCAS CPR DEVICE	J	07/23/19	7
STRYKER POWER LOAD	S	07/02/19	7
DOCUMENTATION/AMB ISP	J	06/25/19	11
IV SETUP & SPLINTING	J	05/28/19	8
12 LEAD ECG & AMB INSP	J	05/21/19	6
2018 LIFELINE ORIENTATION	J		
FERNO SCOOP/STRYKER POWER	J	11/18/18	8
NY EMS BLS MEDS	J	11/06/18	5
NYS EMS PROTOCOL UPDATE	J	10/30/18	6
2018 LIFELINE ORIENTATION	J	09/25/18	6
CHECK & INJECT/AMB INSP	J	09/01/18	3
2018 LIFELINE ORIENTATION	S	07/03/18	7
VACUUM SPLINT/FERNO SCOOP	J	05/22/18	6
OXYGEN REVIEW/AMB INSP	J	04/24/18	7
ZOLL X/IV SETUP	J	04/03/18	5
STRYKER STAIR CHAIR/ZOLL X	J	03/27/18	7
EPI & CPAP & 12 LEAD	J	03/03/18	6
LUCAS CPR DEVICE	J	02/27/18	8
FOLL 90 PROTECTIVE HEADGEAR	J	10/24/17	7

Figure 24: Company Training Reported

Observation 19: The number of volunteers attending company training is generally below 50% of the number of volunteers reported by NAS. We did not see any report of company training for 2019 during January, February, March, or April. Training must be regularly scheduled and conducted at times when the majority of responders can attend.

- **Specific Recommendation 24:** NAS needs to examine and adjust its training schedules to assure that all members can attend training on each topic. That may necessitate multiple times for each class.

Final Report EMS Services Study for Town of Northampton NY
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Tracking Volunteer Availability

The most important factor in management of a Volunteer Emergency Medical Service, as in every Volunteer Emergency service agency, is to know and understand the following about each of the emergency responders:

- What is their Training/Certification
- What is their Availability to serve
- What is their Capability to serve

Observation 20: Northampton Ambulance Service generally does not have any On Duty Volunteers in their station. There is also no tracking or group knowledge of who is currently available to respond to incidents prior to the notification by the County 9-1-1 center that there is a call for service. It appears that the only time anyone knows who is going to respond to any emergency is after responders acknowledge the dispatch to 9-1-1 or when the handwritten response report is prepared after the event has been completed.

- **Specific Recommendation 25:** The Operations Planning Committee should establish a system that tracks who responded to every incident, when each responder arrived, and the qualifications of each responder, to allow for a regular analysis.

I Am Responding

Fulton County 9-1-1 has the program “**IamResponding.com**”¹³ and can provide it to any the Emergency agencies. This online program provides an excellent tool for tracking all emergency responders. The program also provides efficient and effective tools for tracking each person’s Training and their capabilities to perform tasks associated with emergency response.

- The **IamResponding.com** system also has the ability to track each emergency responder’s availability, both before an emergency occurs and when responding to an emergency.
- The **IamResponding.com** program facilitates communication with members, not only about incidents but also many other department events.
- Fulton County 9-1-1 office currently has the I Am Responding Program directly connected to its CAD (Computer Aided Dispatch system). Currently only a few agencies in the county participate in its use, and no EMS agency in Fulton County does so.

There is nothing more important in emergency response than knowing who is actually going to respond to establish an Effective Response Force.¹⁴

- There are communities where the emergency communications center will not even attempt to dispatch emergency units from any agencies where they do not have Volunteers who have signed on in the I Am Responding system as available to respond. That policy saves a great deal of time in assuring prompt response to incidents and works well in those communities.

((iamresponding.com)) ACF FIRE DEPARTMENT					
CALL (866) 702-0273 TO RESPOND		RESPONSE CODES	RESPOND NOW		
SCHEDULE	ADMINISTRATIVE FUNCTIONS	PRINT SCREEN	CLEAR 'NOW RESPONDING'	HELP	TOGGLE DASHBOARD
az	On Duty	Position	On Duty For	On Duty At	Until
	Mike Heneka	Deputy Chief	Unavailable	OOT	00:00 Jul 27
	John Doe	Chief	OIC	Station 1	00:00 Jul 27
	Nick Schlageter	Interior FF	Fire/EMS	Home	00:00 Jul 27
	Jane Doe	FF/EMT	Fire/EMS	Home	00:00 Jul 27
	Kara Judd	FF/EMT	Fire/EMS	Home	00:00 Jul 27
	Larry Doe	Driver	Fire/EMS	Home	00:00 Jul 27
az	Now Responding	Position	Responding To	Called At	ETA Before
	Adam Feck	Captain	Station 2	13:27	13:32
	Jane Doe	FF/EMT	Station 2	13:27	13:32

¹³ For the record, this consultant is not an agent for the I Am Responding program, nor do I benefit in any way from anything that I present regarding it. I reference the tools and capabilities in this product because I have witnessed the benefits of its use for many years in many agencies, and am aware of the fact that Fulton County already has this tool available.

¹⁴ Effective Response Force is the number of emergency responders that would be required to safely operate at an emergency scene to mitigate damage safely and efficiently.

Figure 25: Individual emergency responder availability tracking

The IAR system also allows responders to show where they are responding to, and can provide instant GIS information showing the current location of each responder. This aids incident commanders in their incident strategic and tactical planning:

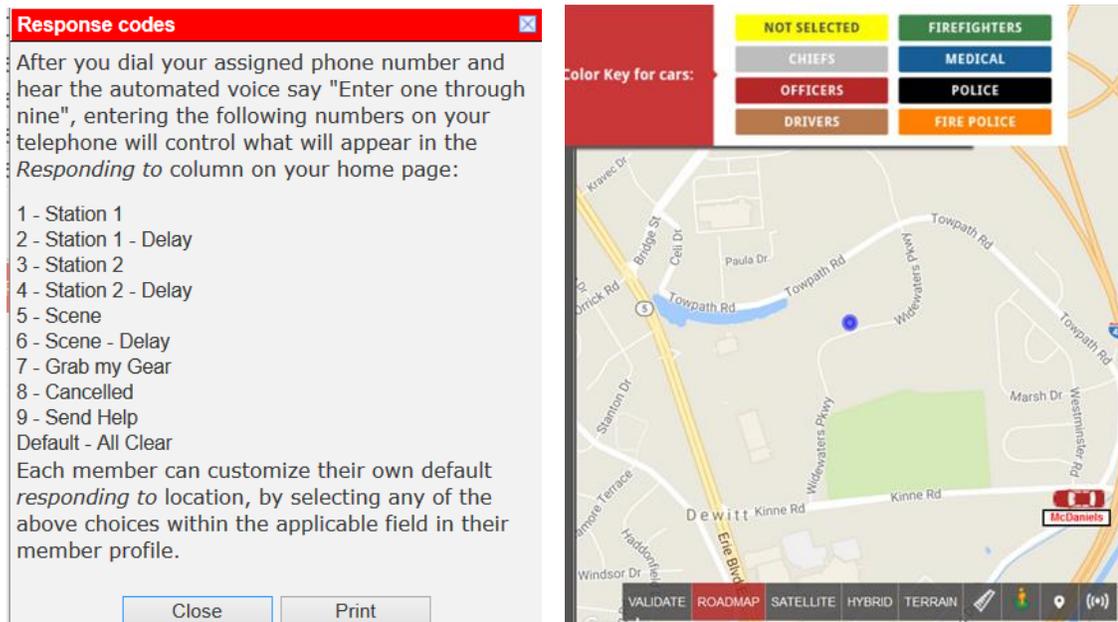


Figure 26: Sample I Am Responding screens for tracking responders: Map shows real time location of responder McDaniels and will track as the vehicle moves to the incident

- **Specific Recommendation 26:** The Town and the County should require the use of the IamResponding.com system tool that allows all Volunteers to regularly post their availability to respond prior to the report of emergencies.

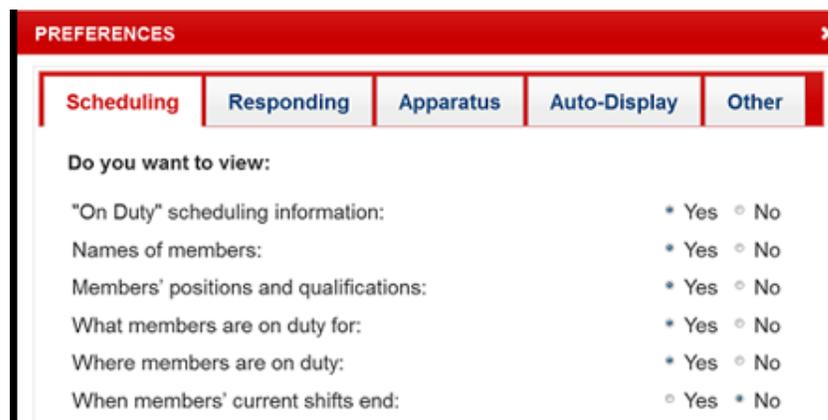


Figure 27: Some of the Scheduling options on I Am Responding

For example: if a member is at home or work and knows that they can respond to any incident during the next 7 hours, they should log in and put themselves "on duty" for the next 7 hours. Members who will be out of Town or simply unavailable can schedule themselves as "out of service" for "X" hours or days.

- This tool enables the agency to assess and track their responder's available manpower resources at any time.
- This tool provides Incident Commanders and all emergency responders at Mass Causality and any incidents with vital information they need to establish incident tactics and strategy
- **Specific Recommendation 27:** All emergency responders should use IAR to record their availability to respond AND their actual response to each incident.

Observation 21: I was informed that some current members of NAS may not currently have cell phones and that there are areas in the community where cell service is poor or nonexistent.

- **Strategic Recommendation 12:** The Town should assure that every active Volunteer has a cell phone that is able to utilize the IamResponding.com program.
- **Strategic Recommendation 13:** The Town should work with Fulton County to increase and improve cell service community wide. This would benefit the entire community but is of vital importance to Northampton's Emergency Medical Services.
 - **Specific Recommendation 28:** The ambulance company should immediately coordinate with the County 9-1-1 center to institute a policy that requires all Volunteers to log and maintain the status of their availability to respond in the IamResponding.com program.

On Duty Staffing

The survey for emergency responders indicated that some volunteers do not see a value to the agency having a policy of on duty staffing. That attitude is common among those who have not really thought about the mission objective to initiate care within the generally accepted guideline times for patient survival. As noted in the cardiac survival section in this report, the following needs repeating:

- *A patient's survival after cardiac arrest is one of the industry standards that measure emergency medical systems effectiveness. The correlation between cardiac survivability and the treatment received by patients suffering from stroke (CVA), apnea and trauma is well founded. A system that is maintained to ensure survival of the cardiac patient is better able to support the needs of other less severe, but no less critical patients.*

There are many benefits to scheduling in-station staffing in volunteer departments and those benefits have been proven in many volunteer agencies. The primary benefit is to assure immediate staffing and response to emergencies. That on duty staffing helps assure the survivability of patients according to all accepted guidelines.

Another benefit of on duty staffing by Volunteers and their agencies is that scheduling of Volunteer Duty Time is becoming more and more important to volunteers and potential volunteers who want to serve but cannot justify leaving work or family time to do so. Many fire and EMS agencies have seen a gain in college age volunteers who come to live in their stations with the understanding that if they are in, near or around the station they are obligated to respond. While this may seem like a new idea to some, this system has been successfully in practice in Rochester at the Volunteer Protectives unit continually since the mid-1800s.

The following charts demonstrate the number of hours Volunteers would be required to be on duty if Volunteer staffing was used to assure response times in accordance with accepted guidelines for patient care and survival as shown above.

Time demands for on duty staffing

Job slots to be covered	Staffing per unit	Staffing Hours Required to cover each position		
		24 Hour staffing	12 Hour staffing	10 Hour staffing
	Hours	24	12	10
Unit				
BLS Ambulance	2	48	24	20
ALS Ambulance		0	0	0
Fly car		0	0	0
Command		0	0	0
		0	0	0
		0	0	0
Total staff hours required to cover per day		48	24	20
Staff hour Days per year	364	17,472	8,736	7,280

Figure 28: On duty Staffing Hours required

		Average Time Demands on Each Volunteer for Hours to cover		
Northampton Ambulance Service	Number of Volunteers	24 Hour staffing	12 Hour staffing	10 Hour staffing
Total Number of Volunteer EMTs (all Ranks)	16	1,092	546	455
Total Number of Volunteer Driver aides	8	2,184	1,092	910
		Average # hours per week each would need to Volunteer		
Total Number of Volunteer EMTs (all Ranks)	16	21	10.50	8.75
Total Number of Volunteer Driver aides	8	42	21	17.50

Figure 29: Average Hours per Year & per Week each volunteer would need to be on duty

Observation 22: The on duty time demands of staffing solely with Volunteers speak for themselves. The community must ask itself: What volunteers can afford, or be expected to, donate an excessive amount of time in free service to their community when faced with the regular demand of family life and work?

- **Specific Recommendation 29:** To assure Volunteer coverage with or without On duty staffing the must be an ongoing recruitment and retention efforts

Service Options for Combined Volunteer & Paid Staffing

Observation 23: Currently there are not a sufficient number of qualified and available volunteers to cover the ambulance response staffing needed to assure proper timely response in accordance with recognized response times and levels.

- **Specific Recommendation 30: Planning** Volunteer Staffing Schedules must also include scheduled training for Volunteers. All schedules must be created to ease the conflicts between a Volunteer's personal life schedule and the needs of the Volunteer service.

The only feasible way to staff on duty emergency medical service 24/7 is to provide paid staffing to fill the spots unable to be covered by volunteers.

There are several general ways of accomplishing those On Duty staffing objectives:

- Change the response model from Ambulance service to Fly Car operations
- Recruit more volunteers
- Hire Paid employees of the agency or Town
 - This option greatly reduces attrition and the costs of recruiting and training new staff
- Contract employees supplied by a staffing company
 - That company assures staff that is trained
- Hire Per Diem Employees paid only for hours and days they work
 - This option greatly increase attrition and the costs of recruiting and training new staff as per diem employees seek full time jobs and benefits
- Contract EMS services to commercial companies that supply all equipment and staff under performance contracts.

Each option has pros and cons that must be carefully examined in Strategic Planning efforts. Excel Workbooks that will be provided that will allow planners to calculate actual staffing needs and costs. Examples of the cost and Tax Mil rate impacts are shown in the business section of this report.

Fly Car Response Alternative

Due to the combined factors of needing to assure the best opportunities for patient survival according to recognized standards, recognizing the impacts on volunteers currently providing service, and cost to taxpayers, we recommend a third option that keeps Volunteer service at a high level without responder burnout and assures timely response to all incidents.

- **Strategic Recommendation 14:** NAS should operate staffed, primarily as an On Duty Fly Car response agency with an On Duty Volunteer assigned to that unit for prompt timely response. The current ambulance company already dispatched to every incident, GAVAC, would continue in its current role responding for ALS and transport.

Job slots to be covered	Staffing per unit	Staffing Hours Required to cover each position		
		24 Hour staffing	12 Hour staffing	10 Hour staffing
Hours		24	12	10
Unit				
BLS Ambulance		0	0	0
ALS Ambulance		0	0	0
Fly car Command	1	24	12	10
		0	0	0
		0	0	0
		0	0	0
Total staff hours required to cover per day		24	12	10
Staff hour Days per year	364	8,736	4,368	3,640
average number of volunteer hrs per year at# volunteers	16	546	273	228
average volunteer time per week	52	11	5	4

Figure 30: Time Demand for volunteers staffing Fly Car based upon 16 Volunteer EMTs.

- **Specific Recommendation 31:** The Fly Car would operate 24/7/365. Fly Car Time slots unable to be covered by a volunteer would be covered by paid staff. Those staffing costs are demonstrated in the Business Organization section of this report and in the provided MS Excel workbook.

Vehicles

NAS reported the following information about vehicles which was validated during the site visit.

Agency		Northampton Ambulance Service					Maintenance performed by:	
Apparatus Type ALS Ambulance, BLS Ambulance, Fly Car, Squad, Supervisor Vehicle etc.	Unit Number	year	Miles	Owned, Leased, Lease purchase	Manufacturer	Status 1 Front line - 2 Reserve - 3 Historic	Dept. Mechanic,	Private Fleet Maintenance Company
ALS Ambulance	2891	2018	5900	Owned	Ford/LifeLine	1	Some EMS Gear & minor amb. items. Major items like Zoll & Stryker are by manufacturer's service techs.	Ford Dealer for vehicular issues. Ambulance dealer for major EMS items of vehicle
Enter YES or NO to								
Equipment/Materials Available in Each Vehicle								
Unit Number	Radio Fixed	# of Portable Radios	Pre Plans	Maps	GPS	Medical Supplies	Patient Transport equipment	
2891	2	1	No	Yes	Yes	NYS required	Cot & backboards & stairchair	
	ICS supplies	MCI Supplies	Portable lights	Computer	Generator	Inventory Record	Maintenance records	
	No	Yes	No	No	No	No	No	

Figure 31: Vehicle and Equipment carried information



Figure 32: Interior working space in new 2018 ambulance

Observation 24: The 2018 ambulance is a fully equipped unit with the modern tools and equipment needed to provide excellent service in the community. The placement of equipment, including monitors, is evidence of a great deal of planning efforts by the agency to assure that the unit will allow emergency responders to operate efficiently and safely while enroute to medical facilities

Specific Recommendation 32: The agency should work cooperatively with other EMS agencies in the region to assure that there are a sufficient number of Reserve Ambulances in the greater community to be placed into service anytime a primary unit needs to be out of service.

Facilities

NAS Current facilities

The following was reported by the agency and validated during the consultants' site visit.

Facility Survey		Northampton Ambulance Service	
Station details			
Apparatus room: # of bays:		1	
		Yes	No
Apparatus can enter from front and rear doors			X
Vehicle exhaust system:			X
PPE Gear storage area			X
PPE Cleaning facilities/equipment			X
Designated Equipment cleaning area:			X
Designated EMS equipment cleaning area:			X
Logistics supply area Meds and EMS equipment		X	
Logistics supply area Personnel Protective Equipment supplies			X
Logistics supply area other emergency supplies		X	
Logistics supply area non emergency supplies IE cleaning/housekeeping supplies		X	
Facilities provided in this station		Yes	No
Training room		X	
Officers' room:			X
Kitchen:			X
Recreation areas:			X
Community use room			X
Restrooms male			X
Restrooms female:			X
Restrooms Common		X	
Restrooms Public			X
Shower area Males			X
Shower area Females:			X
Shower area Joint use area		X	
Bunk Room: Male			X
Bunk Room: Female			X
Individual sleeping rooms			X

Figure 33: NAS Facilities reported

As noted in this report, a Key Element for the successful development of long term emergency responders is developing a family life atmosphere in the service. Having proper facilities for volunteers/staff is vital for building that feeling of family for members of NAS. Not having proper facilities in any emergency agency today is absolutely a factor in member recruitment and retention. When members and prospective members look at how their service is valued in the community, the agency facilities are always a factor in the choices they make regarding their service to the community. Dissatisfaction in any element often provides volunteers and career staff with a poor choice of options: leave the agency or become totally disgruntled and leave the emergency service itself. Each person who leaves any emergency service is a great cost to the company, the agency and the people the agency serves. Leaving the emergency service is also certainly a personal loss to those who leave.

There must be a comfortable facility that helps create an atmosphere where emergency responders can socialize and get to know each other, and freely express their feelings and emotions about the job they are doing. Having a comfortable facility for emergency responders to gather and talk privately with their peers is the first step in combating Post Incident Traumatic Stress or Post-Traumatic Stress Disorder (PTSD). Today PTSD is one of the most common reasons that people leave any emergency service. PTSD causes negative impacts on the families of emergency responders and is even identified as a cause of death by suicide of emergency responders worldwide.

The facility elements that are considered basic in any modern emergency medical service agency are not present in the NAS station. The only place for members to gather in the current facility is a large meeting room with tables and office style chairs. The lack of those basic facilities and the need for them was noted in survey responses by volunteer emergency responders. The current lack of modern basic facilities has a direct negative impact on recruitment and retention of volunteers. Failure to provide a place for on duty staffing to stay at the station also greatly increases response times to every incident. Lives can be lost due to this delay.

Assuring that the Ambulance and all equipment is thoroughly cleaned after each incident is a vital health and safety requirement. EMS responders also often have their clothing and bodies come into contact with body fluids and other mater that is contaminated. If responders do not wash their bodies and clothes prior to leaving the station, they spread that contamination to their private vehicle, their homes, and any people they come into contact to, including family members.



Figure 34: Current NAS station on 2nd street

Observation 25: NAS currently operates out of a former equipment garage that does not provide the facilities emergency medical services and emergency responders need today.

Observation 26: There are no designated facilities for cleaning equipment and PPE (Personal Protective Equipment) in the NAS station. There are limited facilities that would allow emergency responders to shower and clean up. These conditions create a health hazard of bringing contamination from the scene into responder's vehicles and homes and responding to subsequent incidents with equipment that is not properly cleaned.

- **Specific Recommendation 33:** The ambulance station should be equipped with facilities that allow emergency responders to wash and clean off contaminants from their bodies and their all of their equipment before leaving the station.

Observation 27: There are no facilities conducive for on duty staffing. The NAS station does not have a designated lounge area with the types of facilities that would encourage members to come to the station for duty beyond routine response work or training activities. The NAS station does not have bunk room facilities that would facilitate night time staffing or facilities for staffing the station during long term events. While there is a shower in the current station, it is located directly off the meeting room and does not really provide an area where emergency responders can shower and clean up after an incident. There are no facilities where responders can privately change clothes after an incident. There is no equipment where responders could wash their contaminated clothing before leaving the station.

- **Specific Recommendation 34:** NAS must have facilities that will permit the successful establishment of scheduled station duty time and/or in district available for duty time.
- **Specific Recommendation 35:** The Town should provide facilities and policies that encourage people to be in the station "On Duty" awaiting calls. Those facilities should include a lounge room, kitchen, male and female bathrooms with showers, and bunk rooms or other sleeping spaces.

Observation 28: Addressing each of the facility issues in this report remain the same whether the community elects to transition to a Fly Car operation or stay as an ambulance operation. If the Fly car option is selected, there must be a place to park that vehicle inside the station or in another facility that is climate controlled.

Facility Improvement Opportunities

I am aware that there are currently discussions in the community regarding improvements or replacement of the current Village of Northville Fire Station. The needs for EMS and Fire Rescue facilities are basically the same. Both agencies need designated spaces for cleaning of equipment used at incidents and for storage of supplies. Both agencies need designated space where emergency responders can personally clean up after returning from calls and where they can wash their clothes and gear after an incident. Both agencies need the spaces that will create a family atmosphere for emergency responders and both need spaces where emergency responders can bunk in while on duty.

- **Specific Recommendation 36:** If the Village of Northville does decide to replace or modernize their current fire rescue station, the Town and the Village should work together to assure that the new facility can accommodate the needs of both the Village fire rescue company and the Northampton Ambulance.

From the perspective of preserving the historic atmosphere of the village, this project should assure that any new or remodeled building fits the design character of the historic community.



Figure 35: Historic Main street buildings & Current Village fire station with aluminum siding on 2nd floor in contrast to adjacent historic building.

Observation 29: There is land available adjacent to the Current Village Fire station. This could accommodate the facility needs of both Fire Rescue and EMS services, and perhaps other public functions as well. The architectural design of a new structure could reflect either the historic homes across the street or the historic commercial structures on the same side of the street no matter what the station design might be



Figure 36: Vacant land adjacent to Current Village fire station

Because the Northville is an historic and quaint village, it is important that any new or remodeled structures reflect that character. Therefore, I did not believe that mobile homes that are used in some localities would be an accepted solution. However, mobile homes and even trailers certainly can provide NAS with much-needed facilities quickly and relatively inexpensively at either of the current locations.

Costs of constructing facilities are always a serious issue in any community. It would be cost effective to provide the needed facilities for Volunteers/Staff in the Northampton Ambulance Service quickly and relatively inexpensively by using Modular homes that have all of the features required. The modular facilities would be located adjacent to the vehicle parking facility that would contain the facilities needed for apparatus and equipment maintenance and storage.

There are a number of manufactured and modular homes dealers representing a number of manufacturers serving the Amsterdam NY region including Northampton. The following links to websites provide more information to search for homes and dealers in the region:

<https://www.manufacturedhomes.com/floor-plans/Northampton/New-York>

<https://www.google.com/search?q=modular%20homes%20amsterdam%20ny&oq=modular+homes+Amsterdam+NY>

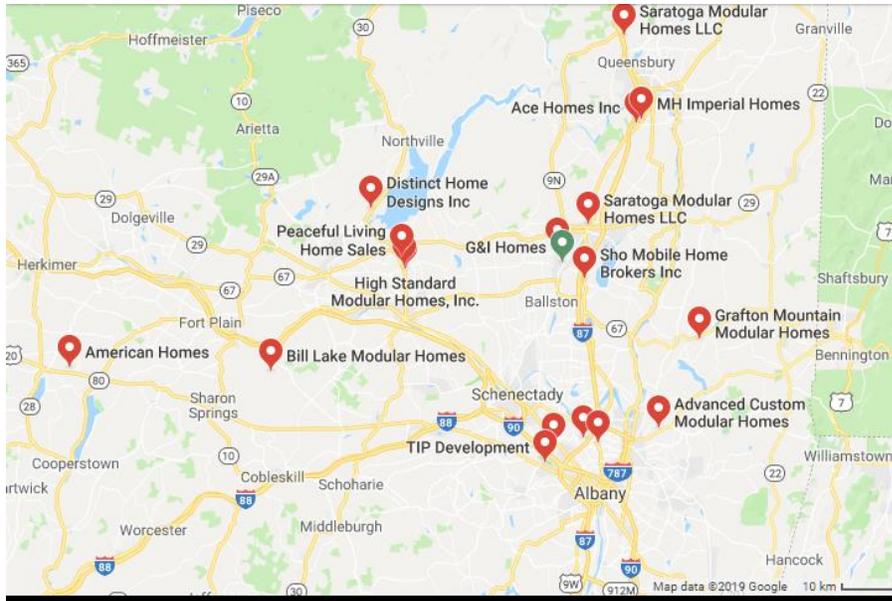


Figure 37: Modular Home dealers in the region

There is a local Fulton County modular homes dealer in Mayfield¹⁵. There are a wide variety of modular homes with architectural designs that would readily fit the character of the community.

- Specific Recommendation 37:** Until such time as the Village and the Town can come to an agreement regarding combining fire rescue services and EMS at the same facility, the Town can go forward with either manufactured housing or a mobile home facility option at the existing site of the NAS station. This immediate action would promptly provide the much needed station facilities for NAS. Expended funds for this action could be recouped by selling that facility after a new station is available.

¹⁵ On the web at: <http://www.distincthomedesignsinc.com/>

Community Trends

The understanding of population trends is important in predicting Emergency Medical Services demands. Population trends are also of particular importance when Volunteers are the primary source of Emergency Medical Service staffing. The Northampton area, as with much of NYS, is losing population as young people leave the community to search for jobs, lower costs of living, and lower taxes. This flight is a real problem for all of New York State for many reasons that are beyond the control of local officials, despite the best efforts of local, regional and Fulton County development groups to bring jobs to the region. Recruitment of business to the community has been successful with a couple of large distribution centers locating in the area. There are ongoing efforts to bring a national hotel chain to the area to increase tourism.

It is obvious that the outward migration of younger people is happening as the greater Northampton community and the Volunteer Emergency Medical force is aging and older people come into the area to establish second or retirement homes in the community. The clear fact is that in today's lifestyle there are decreasing numbers of younger people able and willing to volunteer to serve their community.

An excellent source for determining population trends in any community is to look at school population changes over a period of years. School administrators' track and project school populations to plan for staffing needs and budget impacts. The number of students in schools each year gives a clear indication of community population trends. Growing communities generally have a steady increase of children in school. I used the information available on the New York State Department of Education website to obtain school population data.

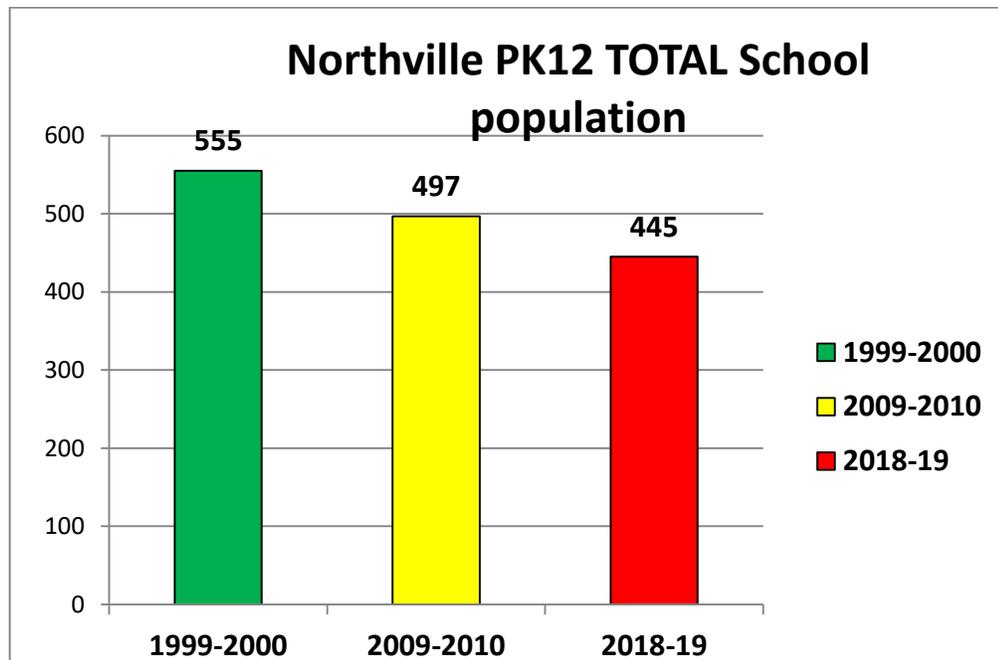


Figure 38: Total Pre K - 12th grade Enrollment in Northville School 1999 - 2019

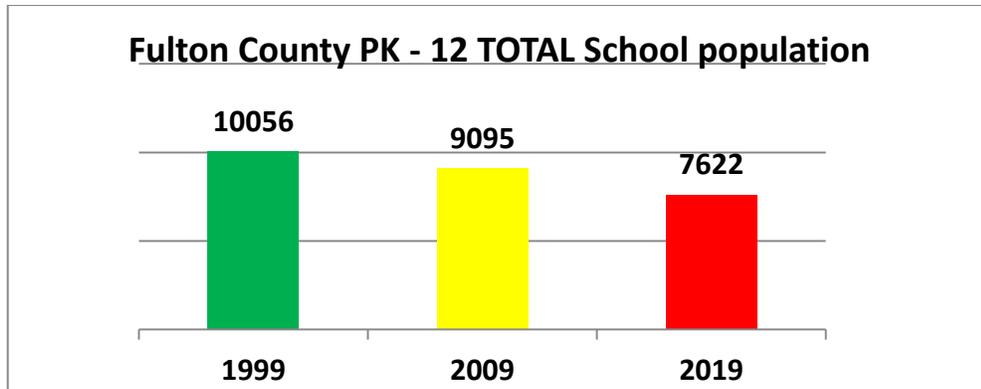


Figure 39: Total Fulton County School Enrollment 1999 - 2019

Observation 30: Our research has shown a decline in student populations with a decrease of more than 2,400 students in Fulton County schools and 110 students in the Northville schools, in all grades combined, between the years of 1999 and 2019

Observation 31: The school population charts reflect a shrinking and ageing community. In a Volunteer based emergency service it is the young people from the local schools who would be expected to join the Volunteer Ambulance Companies as their families did in previous generations.

A quick review of homes for sale in Fulton County on Zillow demonstrates the potential out flow.

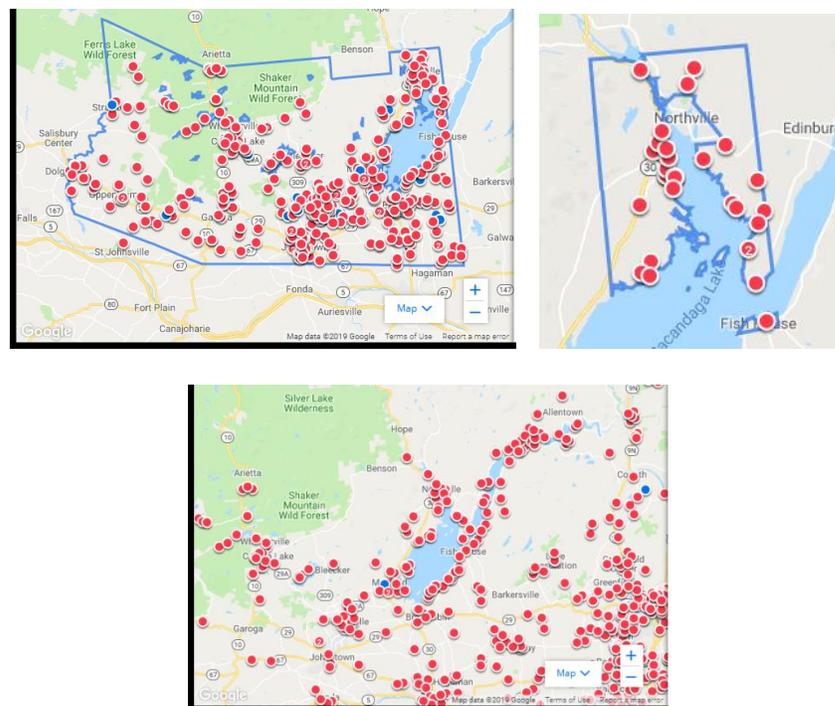


Figure 40 Homes for sale in Fulton County, Northampton & the region: Zillow 8/12/19

Area Ambulance Agencies



Figure 41: Map Fulton County Towns and municipalities

Although this study is focused on EMS in the Town of Northampton, no public safety agency ever totally operates in isolation from other agencies in their vicinity. When it comes to planning for public safety, it is always necessary to look at partners and potential partners for automatic aid and mutual aid. This is true both for coverage when the local agency is unavailable and for when a large scale incident requires more resources that the local community can provide.

Observation 32: It has been reported in the local media that there recently have been a number of ambulance agencies that have ceased operations either totally or sporadically. Those closings were the result of both funding issues and staffing issues. EMS staffing, costs, and response capabilities are a regional and statewide problem that must be addressed. The Town of Northampton is to be commended for its efforts to address this serious issue. The maps below reflect our findings during the time of this study, but may contain information about agencies that are still listed with NYSDOH but no longer serving in the region.

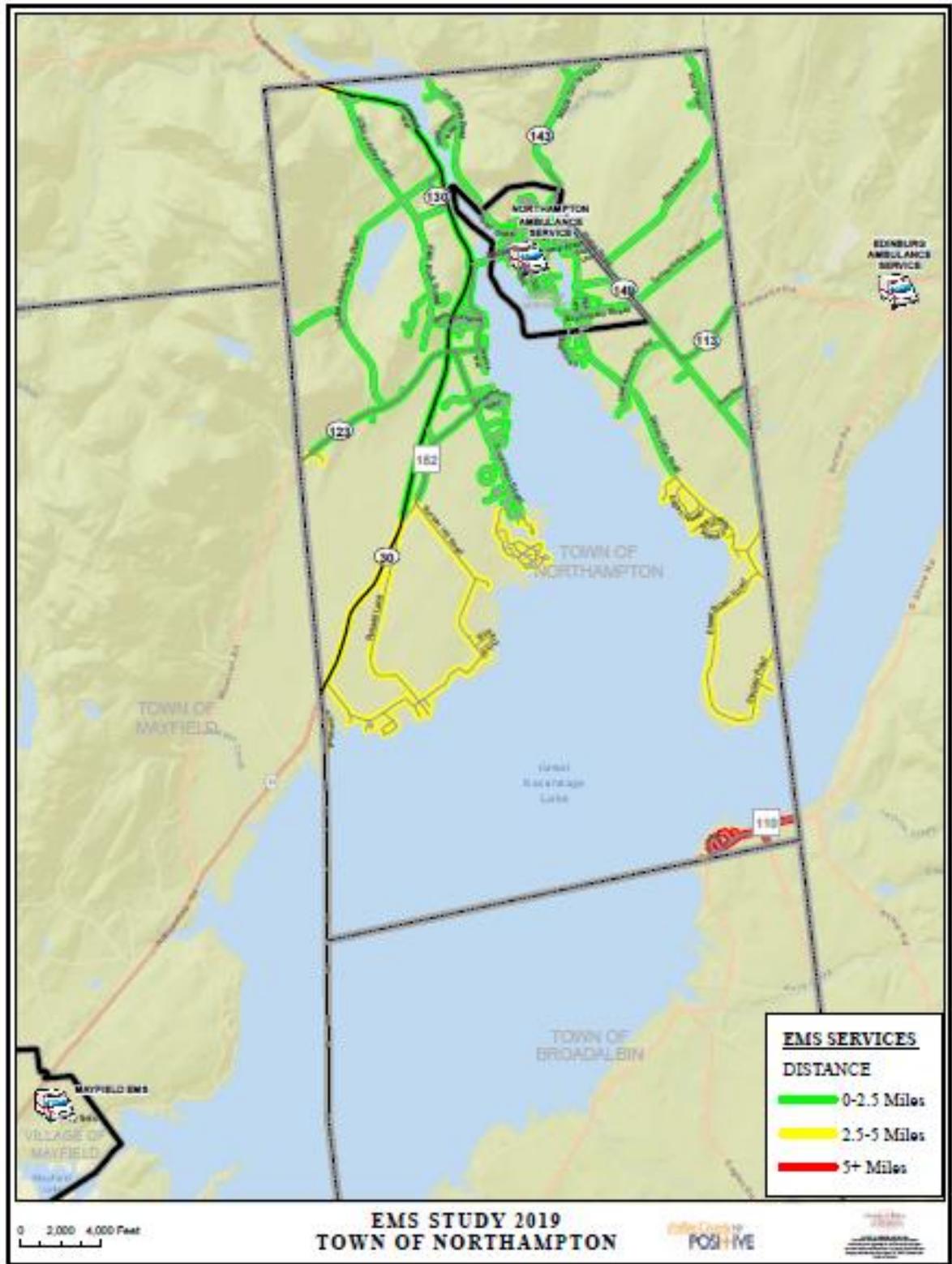


Figure 42: Map from Fulton County Planning Dept. showing travel distances from EMS station

Final Report EMS Services Study for Town of Northampton NY
 Ron Graner Public Safety Consultant Phone: 770 630 0104 Email: ronfgraner@gmail.com

[HTTP://FIRERESCUECONSULTING.COM](http://firerescueconsulting.com)

Northampton Ambulance, GAVAC & Edinburg Ambulance Response Protocols, Travel Distances and Travel Time

Observation 33: Greater Amsterdam Volunteer Ambulance Corps GAVAC is dispatched on all NAS calls. If NAS has a sufficient crew, GAVAC is cancelled if NAS has only a BLS crew, GAVAC continues for ALS support. If NAS is unable to respond, GAVAC takes the total call. GAVAC keeps a minimum of three to four ambulances available for Fulton County calls. GAVAC is the primary EMS agency for the rest of Fulton County plus all of Montgomery County.

- GAVAC is designated as a Volunteer Ambulance Corp and is a 501C3.
- There are no longer any GAVAC volunteer responders. All staff and responders are paid, either part-time or full-time.
- GAVAC bills patients for all services, but it is reported that EMS billing alone is not currently sufficient to retain the service.

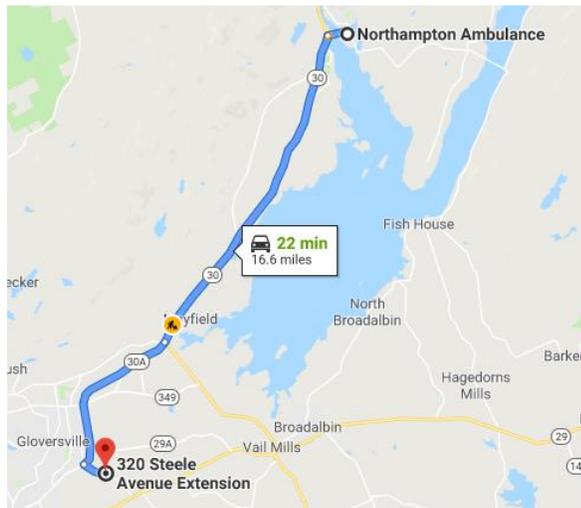


Figure 43: Map GAVAC Ambulance station at Berkshire Fire Station in Gloversville. This station is the primary EMS ALS ambulance dispatched by 9-1-1 to NAS: 22 Miles 22 Minutes

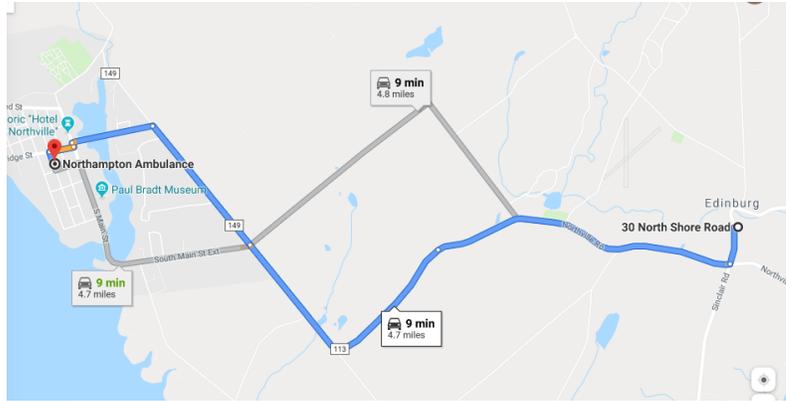


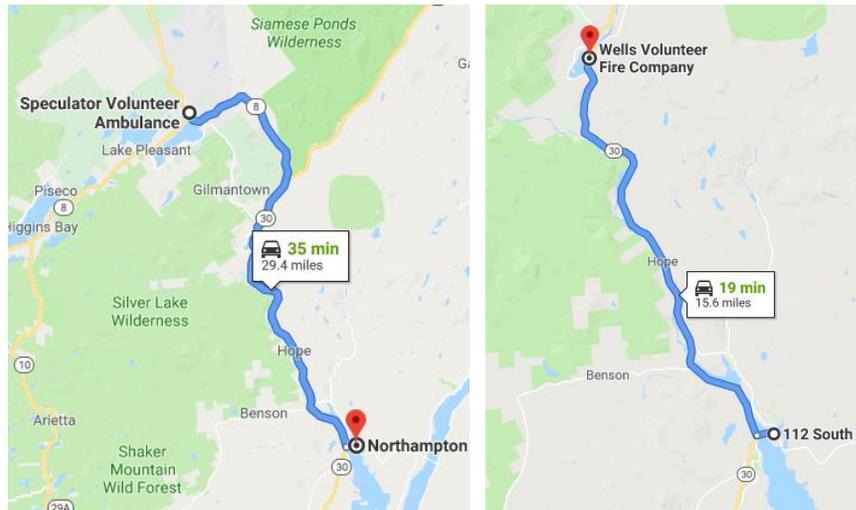
Figure 44: Map Edinburg Emergency Squad 4.7 miles 9 minutes

Edinburg Emergency Squad is an independent volunteer BLS ambulance in the adjacent town East in Saratoga County. It is the closest ambulance to NAS and is the only EMS agency in Saratoga County that NAS responds with.

- The 2 agencies are in the same zip code, share the peninsula and many families live or have roots in the both towns.
 - NAS has an old mutual aid agreement between the 2 agencies. It has been reported that there are some lingering “issues” between the two agencies, and the 2 agencies are rarely dispatched together.
 - Both agencies used to do a lot of ALS intercepts but not currently.
- **Specific Recommendation 38:** All possible efforts must be made by the leaders of NAS & Edinburg Emergency Squad and the leaders of the two communities to assure that there is a harmonious relationship between the agencies and their members. Operational Merger of these two independent agencies should be seriously examined to assure both communities of 24/7 EMS coverage.

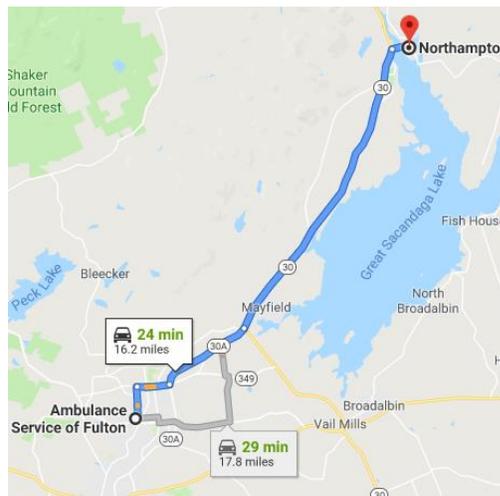
Area Ambulance Agencies Time & Distance Maps

It must be noted that it has been reported that several EMS agencies have ceased operations either temporarily or permanently. The agencies shown in this section are each currently listed as active on the NYSDOH website.



**Figure 45: Maps Speculator Volunteer Ambulance Wells Volunteer Fire Company
29.4 Miles 35 Minutes 15 Miles 19 Minutes**

- GAVAC also staffs an ALS Fly Car in southern Hamilton County for approximately 60 hours per week which is subsidized by Speculator and Wells.



**Figure 46: Map Ambulance Service of Fulton County, Inc. 8 Frontage Road
Gloversville, Time 25min 16.8mi**

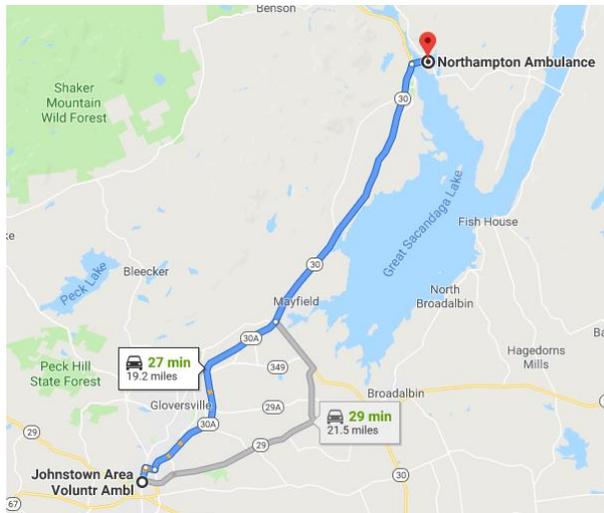


Figure 47: Map Johnstown Area Volunteer Ambulance Inc. 231 North Perry Street Johnstown Fire Department, City of 244 North Perry Street Johnstown, Time 27min 19mi

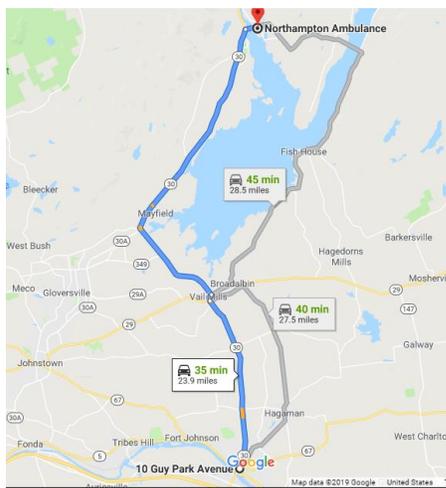
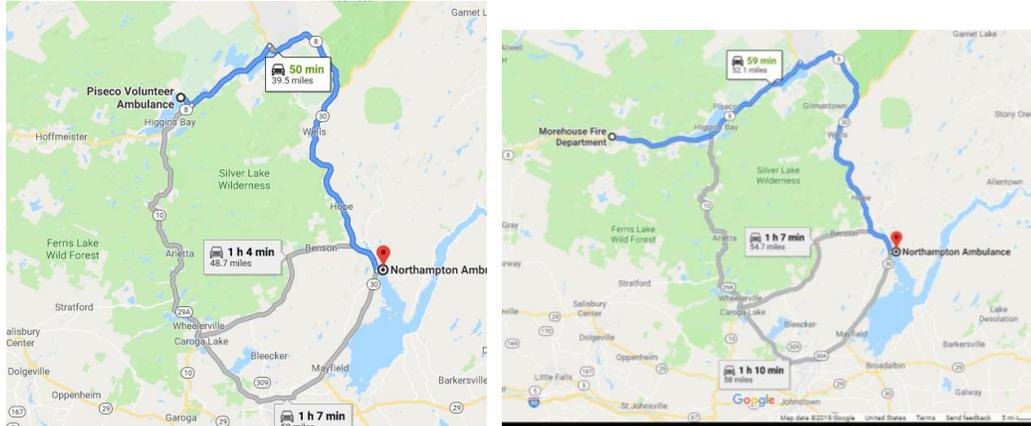


Figure 48: Map City of Amsterdam Ambulance, 10 Guy Park Ave Ext 35min 23.9mi



**Figure 49: Map Piseco ambulance Morehouse Fire Department 50 Minutes 39.5 miles
59 Minutes 52 miles**

- NAS could be dispatched to Piseco or Moorehouse, but would likely be extremely rare due to time and distances.

Emergency Medical Business Organization

The issues of business organization, budgets and funding future costs have been placed towards the rear of this report because this report's most important function was to focus on response to emergencies and patient care. However, organization and funding of every government funded service is, and should be, a primary requirement of all leaders in government who must consider costs to taxpayers for every service.

Emergency Medical Services in NYS are not considered an "essential service". However, the fact is that in today's world people everywhere expect that when they are sick or injured that there will be trained and equipped emergency responders coming to their aid. Emergency medical services have grown from the days of the village doctor making house calls to treat the sick and injured, to the days when funeral homes sent their vehicles to scoop up victims and bring them to local doctors and medical facilities, to where we are now. Today, trained and equipped medical responders have the ability to save lives at the scene and transport patients to hospitals for more advanced care and treatment.

The wide range of expertise found on ambulances today is also extensive. In France, every ambulance has a medical doctor. In this country today the majority of ambulances respond with personnel trained to provide basic emergency medical care to stabilize patients and get them promptly to medical care facilities. Advanced Life Support ambulances respond with Advanced Emergency Medical Technicians who are trained and equipped to treat sick and injured people at skill levels only found in hospital emergency wards just a few years ago.

No matter what level of emergency medical care is available in any community, this single factor remains constant: When people are sick and injured, they expect that somebody will promptly come to help them. The community survey in Northampton certainly reflected that expectation. So the question that all public officials must answer is: Who will provide and pay for emergency medical services?

Ambulances in cities and counties today are often operated by hospitals and/or the fire department. In other cities and counties, ambulance service is contracted to private companies who are responsible for all costs for operations and for meeting established response times. Unlike other public services, ambulance operators generally bill for the services they provide, be they privately owned or government services. In any service there must be a consistent revenue stream that provides those funds for operations, or operations cease. In many cases, revenue generated from patients, Medicare and patient health care insurance is supplemented by local government with tax dollars. Patient revenue is often not enough to pay the full cost of services.

The only consistent fact is that local government is expected by the public to assure that Emergency Medical Services will be available when needed.

I was chief of the Fulton County GEORGIA fire department. That fire department operated EMS services to the unincorporated areas north of the City of Atlanta. Grady hospital provided ambulance service to the areas in and immediately surrounding the City of Atlanta. A private ambulance company provided service in the area south of the city from six of the county fire stations. One night at 1800 hours I was notified that a repo¹⁶ company was at each of those fire stations repossessing all of the private ambulances, because the private operator had not generated sufficient revenue to pay for the ambulance leases.

That experience clearly demonstrated to me the need to assure a reliable revenue stream for EMS no matter who operates the EMS services in any community. The funding reality is that in smaller communities, it is difficult or impossible to generate sufficient revenue to cover costs only from charges for service.

In the Northampton community survey, the people in the community clearly understood that it will take tax dollars to support the Emergency Medical Services that they expect to have.

The people of Northampton provided the following input (below) to this survey question:

- “The cost of providing Emergency Medical Services is rising everywhere. Some of those costs are reimbursed by charges to patients and their health insurance. Due to the low numbers of calls for service in our community it is unlikely that reimbursements will cover total operating costs and taxpayers would need to make up the difference. How do you think those non-reimbursable costs for EMS should be paid for?”

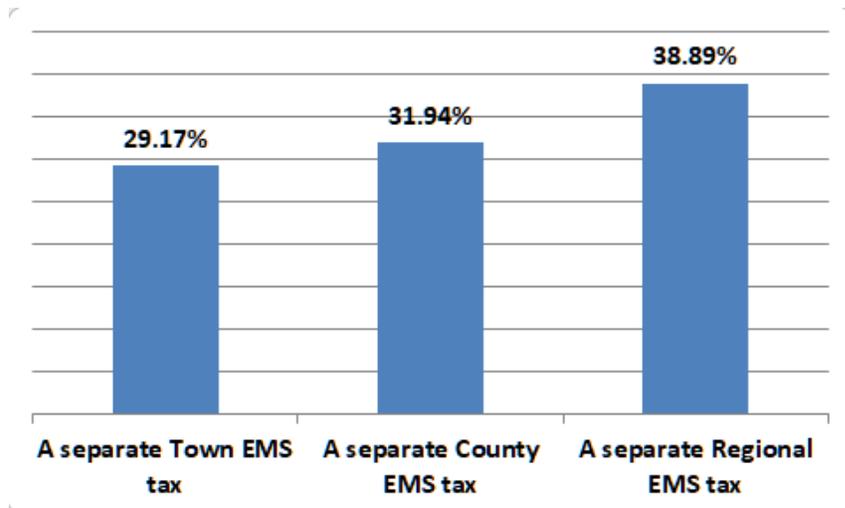


Figure 50: Community Survey Tax choices for paying for EMS

¹⁶ Repo: The companies that are hired to repossess vehicles that were purchased on vehicle loans for the companies who sold them to the buyers

Billing directly to the party who received the EMS benefit
Fund drives
Make EMS an essential tax supported service
No More taxes
State funding for EMS
Tax Regionally
Tax Separate Town (County) Tax for those with dwellings assessed over \$250,000
The same way we pay for the fire department
The way it currently is with increase in donation efforts!
Town Tax; financial considerations probably makes the Town tax the best deal for tax payers

Figure 51: Other funding question comments for consideration of planners

Observation 34: The people of this community clearly see the need to have effective and efficient EMS services. They certainly understand that while taxes may be required to support those services, the most cost effective method is to distribute the costs over as wide a tax base as possible.

Current NAS Organizational Structure

Agency legal structure			
Legal structure of agency under state laws	Department of Town of		
Title of directing body	Town Council		
Size of governing body (# of people)	5		
Strategic Plan approved by	None		
Operational plans approved by	Town Council		

Figure 52: NAS Governance

Observation 35: The agency reported that there is no Strategic Plan for EMS. There is a clear need to address that issue as noted in this report. The fact that the Town has commissioned this study indicates that the Town needs to establish and manage that strategic plan.

NAS Budget

The Northampton Ambulance service is a Town agency funded by the Town in the budget approved by the Town Board. The history of that funding can be seen in the budget report for 2017 – 2019

GENERAL FUND APPROPRIATIONS								
		Actually Spent Last Year	Actual Budget 2018	Budget This Year As Amended 2018	Actual Amount Expended Thru Aug. 2018	Budget Officers Tentative Budget 2019	Preliminary Budget 2019	Adopted 10/23/2018
Accounts	Code	2017	2018	2018	2018	2019	2019	2018
AMBULANCE								
Personal Services	A4540.1	\$ 7,959	\$ 8,000	\$ 8,000	\$ 5,510	\$ 8,000	\$ 8,200	\$ 8,200
Equipment	A4540.2	\$ -	\$ 1,500	\$ 91,500	\$ 87,570	\$ 1,000	\$ 1,000	\$ 1,000
Supplies & Materials	A4540.401	\$ 504	\$ 1,250	\$ 1,250	\$ 406	\$ 1,000	\$ 1,000	\$ 1,000
Repairs & Maint Equip	A4540.402	\$ 932	\$ 1,500	\$ 1,000	\$ 150	\$ 1,500	\$ 1,500	\$ 1,500
Insurance	A4540.403	\$ 2,278	\$ 3,000	\$ 3,000	\$ 347	\$ 2,500	\$ 2,500	\$ 2,500
Telephone	A4540.404	\$ 164	\$ 500	\$ 500	\$ 120	\$ 500	\$ 500	\$ 500
Fuel	A4540.405	\$ 841	\$ 1,000	\$ 1,000	\$ 481	\$ 1,200	\$ 1,200	\$ 1,200
Fuel (Heating)	A4540.406	\$ 2,843	\$ 1,750	\$ 2,750	\$ 2,292	\$ 3,000	\$ 3,000	\$ 3,000
Contracted Services	A4540.407	\$ 476	\$ 500	\$ 200	\$ 94	\$ 500	\$ 500	\$ 500
Repairs to Bldgs.	A4540.408	\$ -	\$ 500	\$ 800	\$ 779	\$ 500	\$ 500	\$ 500
Training	A4540.409	\$ 392	\$ 1,500	\$ 1,000	\$ 427	\$ 1,300	\$ 1,300	\$ 1,300
Total		\$ 16,388	\$ 21,000	\$ 111,000	\$ 98,176	\$ 21,000	\$ 21,200	\$ 21,200
Transfer To:								
Cap. Res. Fund for								
Ambulance	A9961.9	\$ -	\$ 20,000	\$ 20,000	\$ -	\$ 20,000	\$ 20,000	\$ 20,000

Figure 53: Town Budget for EMS FY 2017 - 2019

total Taxable assessed value Town of Northampton	\$ 260,600,817			
Mil Rate Calculator				
				Mil rate
Ambulance Current Cost	\$ 21,200			
total Taxable assessed value Town of Northampton	\$ 260,600,817	0.000081	1000	\$ 0.08

Figure 54: Current approximate Town Mil Rates for Providing EMS Funding

NAS Internal Financial Situation

The NAS internal financial situation is a mixture of tax dollars and donation dollars. It was reported that for many years, NAS held bank accounts in the name of the agency, but used the Town's EIN number. The money in those accounts was all donated funds from the community. In 2012, an audit of the Town's finances by the State Comptroller's office directed that NAS turn all of the money in those accounts over to the Town. The amount turned over was in excess of \$126,000. The Town Board set those funds aside for ambulance expenses. The Town spent some of those funds on ambulance operations over the last 6 years. The remainder of that money paid for half of the cost of the new ambulance in 2018. The ambulance Corporation provided over \$40,000 of post-2012 donation money to add the Stryker PowerLoad system and a new Stryker PowerPro cot to the new ambulance.

In 2012, NAS members formed a corporation and successfully applied for 501c3 nonprofit agency tax status. NAS was also granted NYS sales tax exemption. That organization is officially titled Northampton Volunteer Ambulance Association, Inc. NVAA exists solely for the purpose of fund raising and gifting money, supplies, and equipment to the Town's ambulance service. NVAA purchases all supplies used by the squad, as well as capital equipment including pagers, uniforms, radios, and new ambulance equipment. The current balance in the corporation's bank accounts exceeds \$116,000. The Corporation has spent over \$60,000 in ambulance supplies and equipment since it was formed. The Town pays a stipend to the Ambulance Chief. Currently \$8,200 is budgeted for Personal Services in the 2019 Town Budget. The Town also pays for all utilities and upkeep associated with the building, insurance, workers' compensation, and all vehicle maintenance on the ambulance. It has also has set aside funds in a capital reserve for the purchase of a new ambulance. It was reported that there are also reserves available that could be used for upgrades to the NAS building if needed.

Northampton Volunteer Ambulance Association is concerned that if EMS services were to move to any kind of compensated provider model, their donations could decline. The agency is also aware that some or all of the cost of operations for EMS might be recovered if there is a billing system for rendered services.

Fundraising Activities

In many small communities, Emergency Medical Services have for many years held fundraising events to generate funds for their local ambulance companies.

Observation 36: For the record, this consultant is totally opposed to any practices that ask VOLUNTEER Emergency Responders to also participate in fund raising activities to support a public service where they already donate their time and energy providing much needed services to the community. *Does the community ask the snow plow operator to raise the funds needed for buying and operating their trucks and equipment?*

If any public fund raising is conducted for EMS it should be done by people who are not active emergency responders.

- **Specific Recommendation 39:** While there are concerns that billing for EMS services may decrease donations, the reality is that charging for EMS services is a common practice in the industry and charging for services should be part of the funding formula in Northampton.

Fly Car Staffing Cost Calculations

The following calculations demonstrate the career staff and costs for providing 24 hour staffing per position staffed. The numbers reflect 24/7 staffing of an EMS Fly Car by career employees.

Staffing Calculator				
Day/year	364		Hours total per year 24 hr day	Hours available
Hrs /day	24			
Total Hours staffing required per 52 week year	8736		8736	
	Hrs Per Week			
Employee Work Hours/week	40		Total work hrs 52 weeks	2080
total Hours per 52 week year based on 40 hour week	2080			
Average Leave Hours	Days/Year		Leave hrs per year	
Training	15		120	
Leave	15		120	
Sick	5		40	
			Total leave hrs	280
			Hours each career staff on duty available per year	1800
			Career Staff required to fill each 24 hour slot over the year	5
			Career Staff required to fill each 24 hour slot over the year	5
salary EMT	\$ 25,000	\$ 25,000		
Benefits derived from County Budget Sheriff 2019				
A.3110.3110-4510 EXP- Uniforms	1%	\$ 191		
A.3110.3110-8000 EXP- State Retirement	16%	\$ 3,924		
A.3110.3110-8100 EXP- Social Security	9%	\$ 2,125		
A.3110.3110-8500 EXP- Hospital Medical	23%	\$ 5,735		
A.3110.3110-8600 EXP- Dental	1%	\$ 264		
Benefits above salary	49%			
			Staff cost for	

Figure 55: Career Staffing and cost required per 1 on-duty person 24/7

total Taxable assessed value Town of Northampton	\$ 260,600,817			
Mil Rate Calculator				
				Mil rate increase per position
Cost to staff each 24 Hour Position				
Career staffing cost per paid staff person on duty	\$ 180,736	0.000694	1000	\$ 0.69
total Taxable assessed value Town of Northampton	\$ 260,600,817			

Figure 56: Tax Mil Rate Impact per 24 hr. position Northampton taxpayers

Ambulance Staffing Costs

The following table demonstrates the costs of 24/7 staffing of one ambulance with Career Employees:

Staffing Calculator				
Day/year	364		Hours total per year 24 hr day	Hours available
Hrs /day	24	On duty		
Total Hours staffing required per 52 week year	8736	2	17472	
	Hrs Per Week			
Employee Work Hours/week	40		Total work hrs 52 weeks	2080
total Hours per 52 week year based on 40 hour week	2080			
Average Leave Hours	Days/Year		Leave hrs per year 8 hr day	
Training	10		80	
Leave	10		80	
Sick	5		40	
			Total leave hrs	200
			Hours each career staff on duty available per year	1880
			Career Staff required to fill each 24 hour slot over the year	9
salary EMT	\$ 25,000	\$ 25,000		
Benefits derived from County Budget Sheriff 2019				
A.3110.3110-4510 EXP- Uniforms	1%	\$ 191		
A.3110.3110-8000 EXP- State Retirement	16%	\$ 3,924		
A.3110.3110-8100 EXP- Social Security	9%	\$ 2,125		
A.3110.3110-8500 EXP- Hospital Medical	23%	\$ 5,735		
A.3110.3110-8600 EXP- Dental	1%	\$ 264		
Benefits above salary	49%			
			Staff budget for each 24 hour ambulance	\$ 346,091.10
	Budget cost per person	\$ 37,240		

Figure 57: Ambulance Staffing costs based upon County 2019 budget% for Sheriff's office

total Taxable assessed value Town of Northampton	\$ 260,600,817			
Mill Rate Calculator				
				mill rate increase per position covered 24 hrs day
Cost to staff each 24 Hour ambulance				
Career staffing cost per person on duty	\$ 346,091			
total Taxable assessed value Town of Northampton	\$ 260,600,817	0.001328	1000	\$ 1.33

Figure 58: Mil Rate impact of 24/7 staffing 2 responders 1 ambulance

Benefits of EMS Regionalization

When exploring cost impacts on taxpayers for any service it is always necessary to examine the benefits of reducing cost to taxpayers by expanding the tax revenue base of the service area.

Observation 37: It must be noted that the following mil rate impact chart demonstrates the combined Town of Northampton and Town of Edinburg Taxable Values as found online. The Town of Edinburg and its ambulance service were not part of this study and are being used only as an example of possible mil rate impacts of consolidation of the services in both Towns. I choose to use this example because both communities and their EMS are located very close to each other. If EMS was to be combined, it would provide prompt response in both communities while expanding the pool of available volunteers

Merge EMT services Northampton & Town of Edinburg				
total Taxable assessed value Town of Northampton & Town of Edinburg combined	\$	466,685,138		
Mill Rate Calculator				
				mill rate increase per position covered 24 hrs day
		Cost to staff each 24 Hour Position		
Career staffing cost per person on duty		\$ 173,046		
total Taxable assessed value Town of Northampton & Town of Edinburg combined	\$	466,685,138	0.000371	1000
				\$ 0.37

Merge EMT services Northampton & Town of Edinburg				
total Taxable assessed value Town of Northampton & Town of Edinburg combined	\$	466,685,138		
Mill Rate Calculator				
				mill rate increase per position covered 24 hrs day
		Cost to staff 24 Hour ambulance		
Career staffing cost per person on duty		\$ 346,091		
total Taxable assessed value Town of Northampton & Town of Edinburg combined	\$	466,685,138	0.000742	1000
				\$ 0.74

Figure 59: Tax Mil Rate Impact on Northampton & Edinburg if Northampton & Edinburg combine EMS services for the same level of paid responders as was presented for the Town of Northampton alone. The figures were calculated by combining the total Taxable assessed values in both the Town of Northampton & the Town of Edinburg.

The greatest benefit to conducting regional planning for Emergency Medical Service delivery is to understand that the issues of providing services are not confined to just the Town of Northampton. The above examples for staffing were for the cost of each career staff member in

Northampton, and perhaps Edinburg. But the reality is that with minor changes in staffing, the staffing and response solutions could be County-wide or regional. We will provide the Town with MS Excel workbooks for estimating costs of career staff including wages and benefits. The same workbook can easily determine costs of any number of on duty part time staff members at any hourly pay rate.

- **Strategic Recommendation 15:** Regional Strategic Planning efforts should examine the number of Ambulances and fly cars needed in the planning area to assure that emergency medical care reaches each potential patient in time to initiate treatment within the recognized accepted guidelines for patient survival and the tax mil rate costs for providing those services.

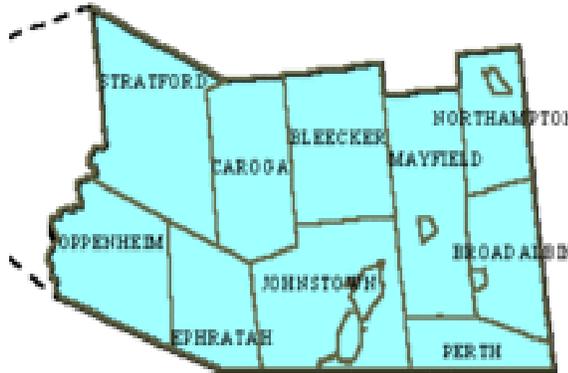


Figure 60: Map showing adjacent and nearby Towns

	Total Taxable value Town/City
City of Gloversville - 1705	\$ 376,720,158
City of Johnstown - 1708	\$ 452,001,401
Town of Bleecker - 1720	\$ 101,828,630
Town of Broadalbin - 1722	\$ 348,842,165
Town of Caroga - 1724	\$ 157,600,253
Town of Ephratah - 1726	\$ 67,719,299
Town of Johnstown - 1728	\$ 323,335,281
Town of Mayfield - 1730	\$ 347,259,208
Town of Northampton - 1732	\$ 260,600,817
Town of Oppenheim - 1734	\$ 55,358,634
Town of Perth - 1736	\$ 124,748,722
Town of Stratford - 1738	\$ 110,156,831
Total	\$ 2,726,171,399
Town of Northampton - 1732	\$ 260,600,817
Town of Edinburg	\$ 206,084,321
Total	\$ 466,685,138

Figure 61: Taxable Values in Fulton County Towns provided the information base for planning costs using the provided MS Excel workbook.

Appendix

Survey Summary Responses

It has always been my strong belief that the people in any community have valid views and opinions concerning their community’s services based upon their own perspective. It is important for those who serve the community as public servants, elected and appointed officials and as Volunteers to understand the views of those they serve. It is also important to understand the views of those who serve the public. It is that mutual understanding that creates a solid and harmonious community life for all.

To gauge the views of the community we conducted Three Internet surveys: Residents, Taxpayer & Business Operators; Elected and appointed public officials; Emergency responders and members of NAS. We sought insight into each respondent’s views and opinions regarding what the Priorities should be for the Emergency Medical Services. We asked what each believed the Core Values of the Emergency Medical Services should be, and what each viewed as the Strengths, Weaknesses, Opportunities, Threats, Challenges, Expectations and Concerns of the Emergency Medical Services in Northampton. We had an excellent response to each of the surveys. Over 170 people responded to the community survey. Much of the information gathered in the surveys was validated on the site visits and used in the body of this report. There was a consensus across the board to the majority of questions in the survey groups.

This section clearly demonstrates that there is great interest in the efforts by the Town and NAS to assure continued effective efficient and safe EMS services in the community.

The following information is directly from the Community survey:

Are you a Resident, Taxpayer or Business person in the Northampton community?

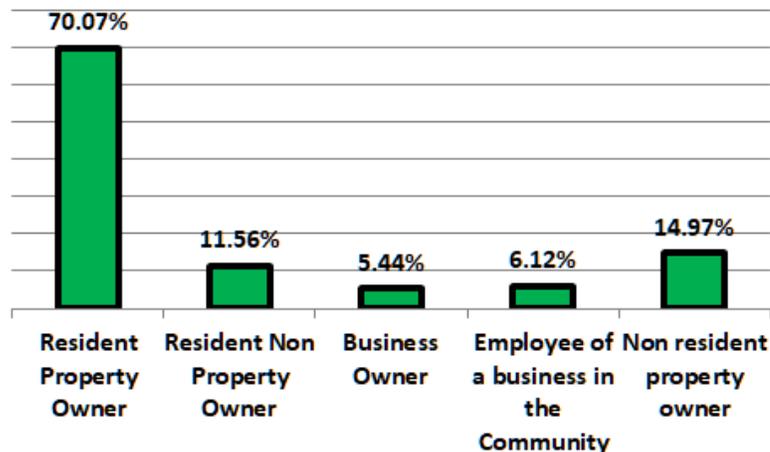


Figure 62: Community Survey respondents

Have you or a member of your family had an emergency in the past 3 years that required a response from your Emergency Medical Services?

Yes 32.28% No 67.72%

Emergency Services Received

Emergency Medical	80.00%
Medical Transport	57.50%
None Emergency Assistance	2.50%

Comments:

- On site care with transport to hospital
- Northampton ambulance did not respond, presumably due to inadequate staffing. Fulton County ambulance responded instead

Please rate how professional you think our Emergency Medical Services is based upon our response to your emergency:

Very professional	75.00%
Moderately professional	12.50%
Slightly professional	5.00%
Needs Improvement	7.50%

Overall, how satisfied were you with the Emergency Medical Services you received at your emergency?

Extremely satisfied	66.67%
Generally Satisfied	15.38%
Neither totally satisfied nor dissatisfied	2.56%
Generally dissatisfied	5.13%

How or what can we improve?

- Took almost 30 minutes and we called in heart attack symptoms
- Time, It took 20 minutes to get help
- The time from when I called to any care I received was very slow.
- Medic did his best but took a very long time when providing care
- Great service once they arrived but they took a long time to arrive

- The ambulance was having technical problems and had to call Fulton County
- The NAS crew stabilized my husband and then Fulton co took him to the hospital

Are you a Volunteer Emergency Medical Responder?

YES 6.85%
 NO 84.93%
 I am a former EMS volunteer: 8.22%

If you answered that you are a former volunteer, Why are you No Longer a volunteer?

Retired

 Age

 Family Schedule Conflicts

 Time Commitment required for training

 The total time that is required to serve

 Risk of Injury and its potential impact on my family

 I just cannot drop what I am doing and respond every time
 someone needs assistance

What incentives would help convince you to become a Volunteer Emergency Medical Responder?

An On Duty Schedule that I can work around my family and business schedule	47.62%
A place where I can stay overnight when I am on duty	14.29%
Flexible Training schedule so I can get my required training when I am available	61.90%
On line training for class room type material	61.90%
I am a college student nearby and would volunteer if I could live at the EMS station during the school year	0.00%
Better financial coverage if I am injured to reduce impact on my family	9.52%
OTHER COMMENTS	
I cannot afford to fit in volunteer work as I work multiple jobs to cover bills	
I am to old – Most common reply	
Live in Florida 8 months and here 4 months.	
My time and skills are probably better used for other initiatives that also benefit our community	
Monetary compensation of some kind, tax breaks, etc	
Not interested	
Unsure if current RN license prohibits EMS activity	

The following report to each open ended question represents a summary of the responses to questions in the **Community** survey. Responses shown have been edited to clarify the input of the people being served in Northampton

What in your opinion are the Major Strengths of the NAS Emergency Medical Services?

Dedicated local members

Knowledge /experience

Availability

Caring providers

close proximity

Commitment

Community members helping community members

compassion

courageous

Courteous

fulfilling a great need in the community with their service

Cost

Friendly

Kind and caring responders

Good equipment

1st responders

ability to help ill people

awesomeness

Clean ambulance

Dependable

familiarity with the area and patients

It's locally based & managed which helps quality control

It's nice to know who is helping you in a medical emergency

What in your opinion are the Major Weaknesses of the Emergency Medical Services?

Lack of volunteers

Response time

Aging Community

Aging Volunteer members

Availability of trained people

Extraordinary time commitment for volunteers

Keeping volunteers

lack of certified medical personnel

Length of training & requirements

Not enough help

Volunteer commitment

All volunteers

Ever-increasing training requirements

Lack of financial resources and poor budget management

Lack of knowledge

Lack of new recruits

Lack of personal

Lack of supplies

Not a large membership, need more recruitment

Take too long when on a call

Community involvement

Long hours/shifts

Management

need more higher level responders

Over tired medics

Poor or no Cell phone coverage in Northampton

poor response time

financial insecurity of organization

Funding & Costs

Need to collect insurance monies to keep afloat

Poor leadership

Youth Leaving Town and Village

Responders not knowing what to do

Not professional

Not recognized as Essential Service/paid

Peer criticism, community bias

Underappreciated

Budget

I do not see them in the community

Need for a trained MD on rescue vehicles

Not caring

One never knows if they will show up

Time from phone call to when we left for the hospital was very long

Poor attitude

What are your Major Concerns about the Emergency Medical Services?

Access to viable medical facilities

Aging equipment

Aging Medics and Drivers

Aging members carrying the work load

Are we billing insurance plans? Don't leave support on the table.

Becoming tax based and financially hurting me

Budget

Burning out the volunteers

Confidentiality

Cost

Coverage area

Current EMTS that don't come to training or sign for duty

EMS services not available

financial viability

Funding

It takes about 20 minutes for them to show up

Some members need to retire and give the younger team members the reins

Knowledge

Lack of advanced life support providers

lack of communication

lack of enough certified personnel

Lack of interest from current volunteers

Lack of members

Lack of public recognition

Leadership development

Limited financial resources

Losing this service

Loss of NAS

Loss of personnel due to complexity of training

No response or lengthy wait

No uniform cell phone coverage in Northampton

Northampton might close its doors like so many others

Not a dependable service

Not being able to stay in business

Not being available

Not being there in time needed to save lives

Not enough help

Not enough trained responders

Not enough volunteers

Not enough volunteers

Not having it!

Not receiving care in an emergency

Not responding to calls

Paying employees

people will no longer volunteer

Raising my taxes

Retention of Volunteers

Safety

Slow or nonexistent response

Slow response time

Slow response times

slow response to emergencies

Staffing

took a long time to arrive

Taking the volunteers for granted

That they continue to exist in our area

That they will discontinue services

There is not enough EMS coverage for this county

They only cover less than 50% of their calls

This service will not be available

Time to long to respond

Timeliness of arrival after 911 call

Too expensive

Too few personnel to do the job well

trying to attain more skills than are needed

Understaffed vehicle when responding

Up to date equipment

Volunteerism

Will the ambulance get to my house in a short amount of time?

What in your opinion are the Major Opportunities available in efforts to provide Effective efficient and Safe Emergency Medical Services to our community?

Cooperation with other agencies

Multiple communities share coverage - collaborative solutions

Support for local responders

Training to keep current in the field

better care for those in need

Caring community

Community support

countywide service

improve response time

More members

Needed service to aging population in rural areas

Use existing paid services

better education opportunities

Need Better facilities for volunteers

Comfortable staff area

Fly Car like Hamilton county

Go to a County service

improve quality of staff skills

Increase/Improve advertisements for recruiting

more incentives to serve

Paid personnel

Proper training

Young people have to take advantage of the available training to help their neighbors.

Available & regular training

Better info on how to contact

Contract with GAVAC for ALS

Financial incentives such as LOSAP (a length of time served retirement program for Volunteers)

Get smarter in the logistics, operation and scheduling of the EMS service.

Improved summertime pool of applicants

Officials/area representatives aware of obstacles in EMS field in rural areas

Recruitment

Use financial incentives to draw volunteers

Volunteers receive personal satisfaction helping those in need

Become a Basic Life Support service

Education to the public as to what EMS really is all about

Grants

job skills for younger people seeking health care jobs

Partner with counties in area to supplement volunteer efforts?

EMTs need a salary to live on
Seek political help from NYS
A cooperative Town Board
A good community communication system
appreciation
availability to schedule shifts
Fully stocked go bags for medics and EMTs to carry with them
Fundraising
Meet and greet Open House
More community fundraising to assist with training and maintaining certification costs
Speed up arrival of service. Ours came from Gloversville
Take advantage of training in house and out of the Northampton Ambulance building
There is a hospital nearby and a medical office in the Village - USE them.

What in your opinion are the Major Threats facing the Emergency Medical Services in the continuing efforts to provide Effective efficient and Safe Emergency Medical Services?

Closing NAS

Lack of available volunteers

Aging population

Funding

Inability to change

Amount of training necessary

Closed-minded attitude about available options

Finances.

Getting volunteers

Healthcare costs in general

Huge commitment in amount of training.

Lack of timely service

combine services with the fire dept.

Distance away from medical facilities

Distance from GAVAC when they are needed

Equipment

Facilities

Fewer people available to respond

Fewer volunteers

Lack of cell phone service in Northampton (towers)

Lack of financial support from local, county, state government

no salary for volunteers and low for paid people on GAVAS

Not enough people willing to join

The lack of funding from the county

Turf battles blurring effective solutions

Abuse of medical transport by people who really don't need an ambulance
Added training
Compensation for their time
Cost
Everyone works today
Excessive government regulation
Excessive training requirements for responders
lack of viable hospitals in the area
Losing volunteers due to work
Management
Need for paid personnel
Not good morale at EMS agency
state mandates with no funding
State vehicle and equipment requirements
Threat of lawsuit
time away from family that is unscheduled
youth leaving the area for better opportunities
Combine with the fire dept.
Long waits during the summer months
Number of vehicles available
Politics
time constraints on young families
young generation lack of involvement
lack of equipment required for rural situations

What do you view as Priorities of services that the Emergency Medical Services should be providing?

24 hour Service to this community
ALS from paid county paramedics
Ambulance service for emergencies
Care that is quick and efficient
Emergency care
Fast responses to all emergency calls
Quick response time
Trained personnel
911 calls
Access to advanced life support when needed
accidents with vacationers
Complete confidentiality
Consistent service
CPR training
Emergency transport to proper treatment center

Getting and keeping staff
Immediate and quick response
Life saving abilities
Reducing response times
transportation to medical facilities
basic life support not advanced life support
being professional
Better coordination with neighboring services
BLS from local volunteers (less training time, fairer to volunteers)?
caring
certified people to treat onsite
Education
Effective trained professionals that can provide the best on site care
Heart starting capabilities
Money
Overdose intervention
As first responders, stabilize patients before transporting them to hospitals
attend functions for public to interact
Community service through education
Community wellbeing support
Elderly 1st aid
Newer, better equipped ambulances
Pleasant attitude
school visits to recruit at young age
Welfare checkups
Current services appear appropriate
lifting assistance
Sporting events

What CURRENT services do you believe Emergency Medical Services should NOT be providing?

Any kind of transportation that insurance would cover with a private ambulance
Automatic response for accidents without injuries
Diagnosis before transport except in overdose cases
Free non-emergency transport
free services to non-residents
non-emergency transportation
Non-emergency care (go see your own doctor!)
parade participation
Rides to hospital for non-emergencies
Routine medical transportation

Taxi-type service for non-emergencies (unless paid for)
Transferring people from one facility to another
Transporting people home from the hospital
Transporting people to doctor appointments
Wellness visits instead of emergency response

What are your personal Expectations of your Emergency Medical Services?

Ability to respond in timely fashion
Accurate evaluation of medical emergency
Appropriate on site care
Arrive quickly prepared for emergency treatment
Be there when I call
Calm
caring
Compassionate
Continued excellent service
Courteous
Efficiently run (financially and operationally)
Emergency transportation to medical facility
EMS people should not discuss personal medical details with others.
Excellent training
Friendly attitudes
Fully staffed ambulance
Get to call within 3-5 minutes
Good communication skills
Good quality care
Have proper equipment and training to treat my illness.
Have qualified help on board
if you are providing services-- do it well
Knowledgeable staff
lifting assistance
Modern equipment
NAS should deal with internal problems promptly
Need higher skill level for ems staff
Organized
Polite & thoughtful care to victim & family
Professional conduct
Prompt arrival
Provide appropriate treatment
public education
Quick and efficient care
Quick response in the event of a true emergency

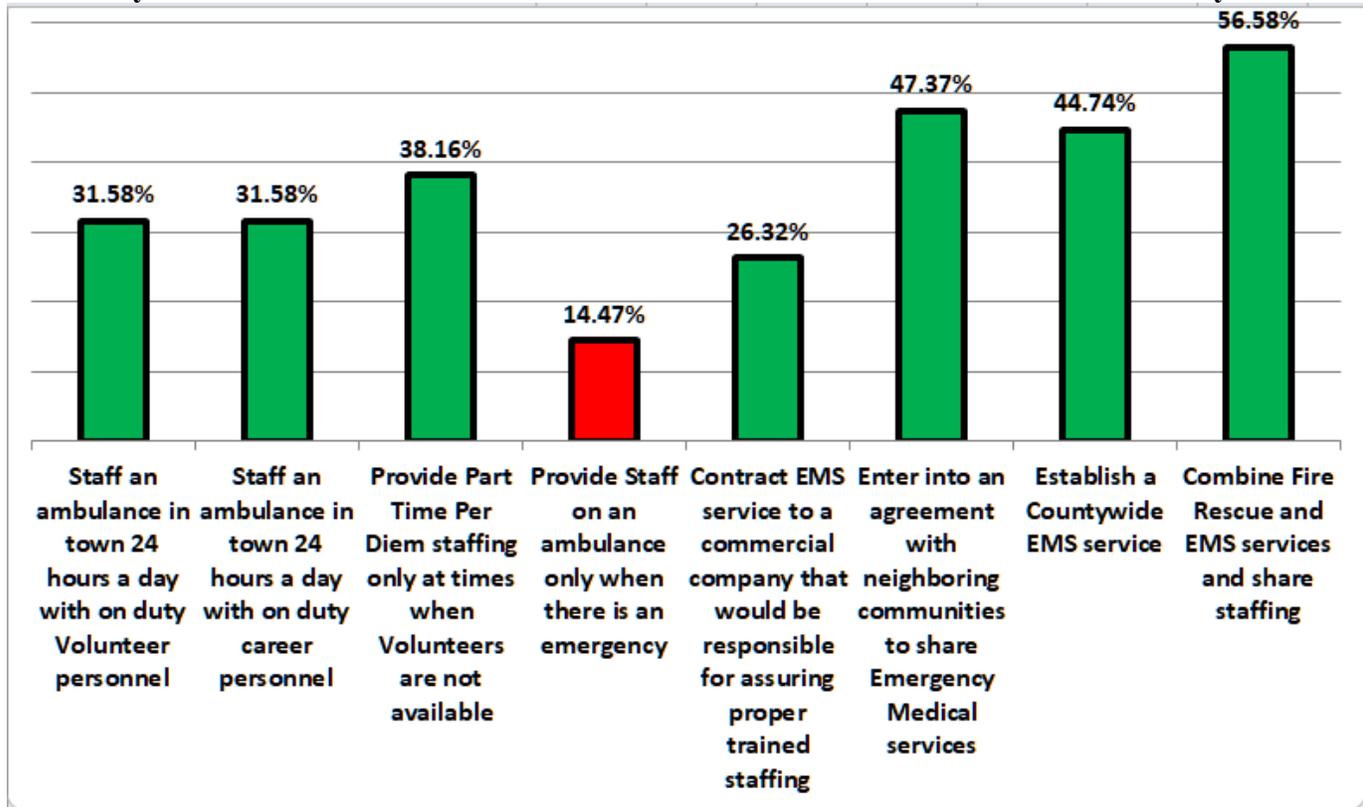
Respond quickly to my medical needs
 Respond to local calls and not rely on other EMS to come when our ambulance sits in the building.
 respond to scene within 5 minutes
 Safety when riding in ambulance
 That they will show up in an emergency
 Timely treatment and transport
 Trained EMS personnel
 Well maintained vehicles to provide transport

Emergency Medical and fire rescue services in our community historically have been provided by Dedicated Volunteers. Today that pool of people who are willing and able to volunteer their time and talent is shrinking in every community. As the number of volunteers shrinks the demands for services have been steadily increasing and the costs for providing these vital services have also increased.

How important is assuring that we have Emergency Medical Service in our community to you and your family?

I will never need it or use it	0.00%
Having EMS in our community is somewhat important but not vital	5.81%
<u>Having efficient and effective EMS is VITAL to the future of our community</u>	<u>94.19%</u>

What do you think should be done to assure efficient and effective EMS in our community?



NYSDOH EMS Regulations ¹⁷

The Bureau of Emergency Medical Services (EMS), part of the New York State Department of Health (DOH), is charged with oversight of the EMS system statewide. The Bureau works closely with various EMS councils and their committees to assure appropriate training and education of EMS providers, as well as quality Pre-Hospital Emergency Medical Care. The Bureau serves as staff to the State Emergency Medical Services Council (SEMSCO) and the State Emergency Medical Advisory Committee (SEMAC). Both committees are charged with making recommendations to the DOH on the design of the New York State EMS system.¹⁸

EMT Staffing Standard for Voluntary Ambulance Services¹⁹

There have been issues raised about the EMT staffing standard that became effective January 1, 2001 for voluntary ambulance services. Article 30 of the Public Health Law states that:

"the minimum staffing standard for a voluntary ambulance service shall be an Emergency Medical Technician with the patient."

The following is intended to help clarify the meaning of the law. This policy is written for ambulance service operation. It does not address first response service operation.

1. A voluntary ambulance service must have an Emergency Medical Technician (EMT) or higher, attending to the patient at the scene and in the ambulance while transporting the patient to the hospital.
2. If a voluntary ambulance service has a written response policy in place in which an EMT is allowed to respond directly to the scene from home or work, the ambulance may respond to the scene of the emergency even if an EMT is not on board.
3. If the EMT responding directly to the scene is delayed and the only other ambulance crew available are Certified First Responders (CFR), the CFR may begin care. It is acceptable to have a CFR as a part of an ambulance crew. The EMT assumes responsibility for care upon arriving at the scene.
4. If the EMT does not arrive at the scene, and another service is immediately available with appropriate staffing, the patient should be transported by that service. If no other service is immediately available, the patient should be transported. An intercept with an appropriately staffed ambulance or first response service should be sought while en route to the hospital.
5. Continual and repeated failure of a service to assure an EMT arrives at the scene to provide care may result in the Department taking disciplinary action against the service and/or the individual.

¹⁷ https://www.health.ny.gov/professionals/ems/operational_authority/non-certified/docs/blsfr_application.pdf

¹⁸ <https://www.health.ny.gov/professionals/ems/pdf/srgbureau.pdf>

¹⁹ <https://www.health.ny.gov/professionals/ems/policy/01-04.htm>

6. A service may send an ambulance and equipment to the scene of an emergency if they know another service will provide the EMT staff necessary to perform patient care. The service sending the ambulance would share responsibility for the care being provided. These types of mutual agreements to share the staff and equipment must be done in writing in advance.
7. The staffing standard requires one (1) EMT with a patient. Therefore, an ambulance must be staffed with at least one EMT. While it is preferable to have more than one EMT if there are multiple patients, the law does not require it. In the event of a multiple patient situation, the EMT would assume supervision of the care being provided to the patients being treated and transported.
8. If only one (1) EMT is available to staff the ambulance crew, that EMT must be the patient care provider and/or supervise the patient care being provided. The EMT may NOT be the driver of the ambulance when a patient is being transported. **NOTE:** In a multiple casualty incident (MCI), local or regional protocols should be followed.
9. An ambulance should NOT respond to the scene of an emergency if it is known in advance that an EMT is not available, as previously discussed in this policy. It is recommended that all ambulance services pre-plan for the lack of staffing by written mutual aid agreements with neighboring ambulance services and by alerting the local Public Safety Answering Point (PSAP) or dispatch authority as early as possible when you know that EMT level staffing is NOT available. Careful pre-planning, mutual aid agreements and continual recruitment programs are necessary to assure sufficient EMT staffing.

NYSDOH Operation of Emergency Medical Services Vehicles

Emergency Vehicle Operations for Ambulances and Other EMS Response Vehicles Including a *Model* Standard Operating Procedure for EMS Agencies

Purposes

1. To describe the legal requirements in New York State for driving ambulances and other EMS response vehicles.
2. To establish a standard in New York State for EMS response vehicle emergency operations.
3. To create a climate to help reduce the number of crashes and accidents and thereby reduce the injuries and property damage associated with EMS response vehicle emergency operations.
4. To provide information to develop educational programs for EMS emergency vehicle operators.

Background

Recently an epidemic of ambulance vehicle crashes and accidents has been identified. The magnitude of the problem requires that every NYS EMS agency be made aware of the problem and take immediate steps to reduce the potential for these accidents.

New York State Department of Motor Vehicle statistics illustrate a consistent yearly frequency of 400 ambulance accidents or crashes, injuring almost 2 persons per day. These statistics also show that most of these accidents are avoidable. Based on these statistics, if each EMS response vehicle were able to stop at every controlled intersection, 75% of all of these accidents could be prevented.

EMS emergency response vehicles must be operated in a manner that provides for due regard and the safety of all persons and property. Safe arrival and patient welfare shall always have priority over unnecessary speed or hazardous driving practices while enroute to an incident or to the hospital. The NYS Vehicle and Traffic Law (V&T) authorizes *privileges* that ambulance and other emergency vehicle drivers may use during an emergency operation. Modern EMS practices,^{1 2 3} including the use of Emergency Medical Dispatch (EMD), EMT and Advanced EMS training and the patient treatment modalities available today, dramatically reduce the need for emergency operations.

NYSDOH Traffic Law Legal Background

The NYS Vehicle and Traffic Law states the following⁴ :

114-b. Emergency Operations — the operation, or parking, of an authorized emergency vehicle, when such vehicle is engaged in transporting a sick or injured person... Emergency operation shall not include returning from such service.

101. Authorized emergency vehicles — every ambulance, ... emergency ambulance service vehicle.

1104 Authorized Emergency Vehicles —

(a) The driver of an authorized emergency vehicle, when involved in an emergency operation, may exercise the privileges set forth in this section, but subject to the conditions herein stated.

(b) The driver of an authorized emergency vehicle may:

- 1. Stop, stand or park irrespective of the provisions of this title;*
- 2. Proceed past a steady red signal, a flashing red signal or a stop sign, but only after slowing down as may be necessary for safe operations;*
- 3. Exceed the maximum speed limits so long as he does not endanger life or property;*
- 4. Disregard the regulations governing directions of movement or turning in specified directions.*

(c) Except for an authorized emergency vehicle operated as a police vehicle, the exemptions herein granted to an authorized emergency vehicle shall apply only when audible signals are sounded from any said vehicle while in motion by bell, horn, siren, electronic device or exhaust whistle as may be reasonably necessary, and when the vehicle is equipped with at least one lighted lamp so that from any direction, under normal atmospheric conditions from a distance of five hundred feet from such vehicle, at least one red light will be displayed and visible.

(e) THE FOREGOING PROVISIONS SHALL NOT RELIEVE THE DRIVER OF AN AUTHORIZED EMERGENCY VEHICLE FROM THE DUTY TO DRIVE WITH DUE REGARD⁵ FOR THE SAFETY OF ALL PERSONS, NOR SHALL SUCH PROVISIONS PROTECT THE DRIVER FROM THE CONSEQUENCES OF HIS RECKLESS DISREGARD FOR THE SAFETY OF OTHERS.

Discussion by NYSDOH

It is important to note that the V&T²⁰ law does not define specific operations permitted by the various types of emergency vehicles, such as police, fire or EMS. Generally personal opinion and tradition, not statute or regulation, have defined the perception of requirements for ambulance emergency operations. An example is the mistaken belief that an ambulance's red lights must be on if a patient is on board. *This historical precedent must change.* There is no requirement that emergency operations be used for any EMS response.

Emergency operations in EMS *are always affirmative* decisions that are made at the time of each response. Today, EMD, industry data, EMS educational materials, legal case precedents, and

²⁰ V&T- Vehicle % Traffic laws

other industry practices set a standard of care for emergency vehicle operation that is binding on all EMS providers. Drivers of emergency vehicles are reminded that they solely bear the responsibility for driving safely and with due regard. There is no immunity from liability provided in NYS law for driving.

Operating a vehicle in emergency mode is one of the most dangerous activities that an EMS provider is routinely involved in. Careful consideration must always be given for the lives and safety of the driver, the crew, the patient and for the safety of every other person that the vehicle will encounter during the call.

NYSDOH — EMS POLICY²¹

- *Every EMS response vehicle must be driven safely at all times, usually not exceeding the speed limit. Drivers exercising any of the V&T Law privileges must do so cautiously and with due regard for the safety of all others.*
- Types of Responses -
 - Non-emergency Operations - anytime an EMS response vehicle is out of the station on an assignment, other than an emergency run, shall be considered to be a routine operation. All routine operations will be considered non-emergency and shall be made using headlights only - no light bars, beacons, corner or grill flashers or sirens shall be used. During a non-emergency operation, the ambulance shall be driven in a safe manner and is not authorized to use any emergency vehicle privileges as provided for in the V&T Law.
 - Emergency Operations - shall be limited to any response to the scene or the hospital where the driver of the emergency vehicle actually perceives, based on instructions received or information available to him or her, the call to be a true emergency. EMD dispatch classifications⁶, indicating a true or potentially true emergency, should be used to determine the initial response type. Patient assessments made by a certified care provider should determine the response type (usually C or U as an emergency) to the hospital. In order for a response to be a true or potentially true emergency, the operator or certified care provider must have an articulable⁷ reason to believe that emergency operations may make a difference in patient outcome. During an emergency operation headlights and all emergency lights shall be illuminated and the siren used as necessary.
- Each EMS response vehicle operator must recognize that the emergency vehicle has no absolute right of way, it is qualified and cannot be taken forcefully⁸.
- During emergency operations every EMS response vehicle must be operated in such a manner and at such a speed upon approaching an intersection, controlled by a traffic control device so as to permit safe passage through the intersection. Before entering the intersection the operator must reduce the speed of the vehicle to be able to stop the vehicle if necessary to permit such safe passage. **They should come to a complete stop if they have a red signal or stop sign.**⁹
- **Every EMS response vehicle must stop upon encountering a stopped school bus with red lights flashing; any non-controlled railroad crossing or railroad crossing at which safety gates and/or warning lights are activated or if requested by a police officer.**
- EMS response vehicles are discouraged from using escorts or traveling in convoys due to the extreme dangers associated with multiple emergency vehicles operating in close proximity to each other. For the purpose of this policy statement and any developed from it emergency vehicles should maintain a spacing of at least 300 - 400 feet between them

²¹ <https://www.health.ny.gov/professionals/ems/policy/00-13.htm>

in ideal driving conditions and more when visibility is limited or road conditions are less than ideal.¹⁰

- At emergency scenes the use of emergency warning lights must be governed by the need to protect the safety of all personnel, patients and the public. In some cases the use of emergency lights should be minimized.
- **Per Part 800.21 of NYCRR, every NYS ambulance or ALSFR service must have and enforce a written policy which describes the authorized practices for driving EMS response vehicles by their members or employees.** The service policy must be consistent with this policy and must include the following:
 - A definition of emergency and non-emergency call types, including dispatch criteria for determining the type of call,
 - A description of the authorization required to use emergency operations on dispatch and enroute to the hospital, including call types, dispatcher and crew chief authority and other criteria,
 - A statement regarding exceeding the posted speed limit,
 - A statement regarding the speed permitted and stopping requirements through intersections which are uncontrolled or controlled,
 - Frequency and content of driver screening and training requirements for individuals authorized by the service to drive an EMS response vehicle,
 - Insurance company driver screening including age, driving record, training, and other requirements.
 - Every NYS-EMS agency shall have a training program¹¹ for all individuals authorized by the service to drive an EMS emergency response vehicle. The program shall include a curriculum, approved instructors, and frequency of training and documentation.
 - Every NYS EMS agency shall have a notification policy in the event of an accident or crash. This shall be consistent with Part 800.21(p).
 - A prompt, safe response can be attained by:
 - Knowing where you are going.
 - Having all personnel on board, seated with seat belts secured unless actively performing necessary emergency medical care.¹²
 - Leaving the station in a safe and standard manner:
 - quickly boarding the vehicle
 - opening station doors fully
 - Using warning devices to move with and around traffic and to request the right-of-way.
 - Driving defensively, at reasonable speeds, slowing or stopping at all intersections and giving approaching traffic adequate time to recognize the vehicle and yield the right of way.

- Using pre-planned response routes which take into account hazards, construction, traffic density, etc.

NYSDOH Model Service Specific Policy

The following model policy may be easily adopted by any EMS service to be included as a part of the service's policies and standard operating procedures.

Service Name

Policy and Standard Operating Procedure for Emergency Vehicle Operations

Purpose - There shall be established a system for the safe operation of all EMS emergency response vehicles.

Scope - These policies are binding on every driver and certified care provider in charge of patient care.

Types of Responses

Non — emergency Operations - anytime an EMS response vehicle is out of the station on an assignment other than an emergency run shall be considered to be a non-emergency operation.

Emergency Operations- shall be limited to any response to a scene which is perceived to be a true emergency situation. True emergencies are defined by EMD and dispatch policy for a response to any situation in which there is a high probability of death or life threatening illness or injury. The risk of emergency operations must be demonstrably able to make a difference in patient outcome.

Emergency Vehicle Operations

First and Foremost — *DO NO Harm !*

1. Emergency operations are authorized only to responses deemed by dispatch protocol to be emergency in nature where the risks associated with emergency operations demonstrably make a difference in patient outcome.
2. Upon dispatch, emergency operations are only authorized when the dispatch call type justifies an emergency response.
3. All operations considered non-emergency shall be made using headlights only: no light bars, beacons, corner or grill flashers or sirens shall be used. During a non-emergency operation, the EMS response vehicle should be driven in a safe manner and is not authorized to use any emergency vehicle privileges as provided for in the V&T Law.
4. Emergency operations are authorized at a scene when it is necessary to protect the safety of EMS personnel, patients or the public.
5. EMS response vehicles do not have an absolute right of way, it is qualified and cannot be taken forcefully
6. During an emergency operation the vehicle's headlights and all emergency lights shall be illuminated and the siren used as required in the vehicle and traffic law.

7. Once on the scene, the decision for determining the type of response for additional EMS vehicles responding to the scene shall be made by a NYS certified provider following assessment of the scene and all patients. It will be the responsibility of that certified responder to notify the dispatcher or other responding units of the type of response that is warranted, emergency or non-emergency.
8. The EMT/AEMT in charge of patient care, following assessment of the patient, shall be responsible for determining the response type enroute to the hospital
9. EMS response vehicles shall not exceed posted speed limits by more than ten (10) miles per hour.
10. EMS response vehicles shall not exceed posted speed limits when proceeding through intersections with a green signal or no control device.
11. When an EMS response vehicle approaches an intersection, with or without a control device, the vehicle must be operated in such a manner as to permit the driver to make a safe controlled stop if necessary.
12. When an EMS response vehicle approaches a red light, stop sign, stopped school bus or a non-controlled railroad crossing, the vehicle must come to a complete stop.
13. The driver of an EMS response vehicle must account for all lanes of traffic prior to proceeding through an intersection and should treat each lane of traffic as a separate intersection.
14. When an EMS response vehicle uses the median (turning lane) or an oncoming traffic lane to approach intersections, they must come to a complete stop before proceeding through the intersection with caution.
15. When traffic conditions require an EMS response vehicle to travel in the oncoming traffic lanes, the maximum speed is twenty (20) miles per hour.
16. The use of escorts and convoys is discouraged. Emergency vehicles should maintain a minimum distance of 300 - 400 feet when traveling in emergency mode in ideal conditions. This distance should be increased when conditions are limited.

Endnotes: ¹Use of Warning Lights and Siren in Emergency Medical Vehicle Response and Patient Transport, NAEMSP & NASEMSD, Prehospital and Disaster Medicine, April-June 1994.

²Scope of Performance of EMS Ambulance Operations F1517-94, American Society for Testing and Materials.

³National Fire Protection Association (NFPA) Part 1500, section 4-2

⁴NYS MV & T Law, italics provided to indicate direct quotation

⁵A principle of legal accountability in which a review of the specific circumstances of a crash or accident will determine if a reasonably careful person, performing similar duties and under similar circumstances would act in the same manner. This legal concept is analogous to the prudent man in ordinary liability cases.

⁶i.e. Emergency Medical Dispatch, U.S. Dept. of Transportation, Feb. 1996

⁷Capable of being expressed in a coherent verbal form, American Heritage Dictionary

⁸EMT Legal Bulletin, Vol. 15, No. 4, Med/Law Publishers, Inc.

⁹ NFPA 1500 4-2.7(b)(c)

¹⁰ U.S. DOT, NHTSA Emergency Vehicle Operator Course, Ambulance

¹¹ NYS-EMS Ambulance Accident Prevention Seminar, DOT EVOC, National Safety Council, programs provided by Insurance Carrier, etc.

¹² NFPA 1500 4-3.1.1

Authorized by: Edward G. Wronski, Director

Index of Strategic Recommendations

- Strategic Recommendation 1: The primary goal for planning for all Emergency Medical Services must be to assure that properly trained and equipped emergency responders arrive at the scene able to initiate patient care within nationally recognized response time windows for successful patient survival.10
- Strategic Recommendation 2: The Town and NAS together must assure that all emergency medical services are operated under the policies and regulations established by the NYS Department of Health.11
- Strategic Recommendation 3: The Town and NAS must assure that all ambulance responses comply with NYSDOH regulations for EMT Staffing Standard for Voluntary Ambulance Services and that the Fly Car staffing is part of that response staffing.11
- Strategic Recommendation 4: The Town Board should promptly create a broad community-based Emergency Medical Services Strategic Planning Committee to address the findings and recommendations in this report.11
- Strategic Recommendation 5: The PRIMARY goal of all planning efforts must be to address safety for the people in the community and all emergency responders.11
- Strategic Recommendation 6: Town, Ambulance Company and Community leaders should work together to identify members of the public who are not currently members of the Emergency Medical Services but who have the knowledge, skills and abilities to assist in the review and development of a successful EMS administration.11
- Strategic Recommendation 7: The Strategic Planning committee should carefully examine the impacts, both positive and negative, of merging Fire Rescue and EMS services in the community.12
- Strategic Recommendation 8: The Town EMS Strategic Planning Committee should develop incident specific standards of response coverage policies and regularly monitor benchmarks and baselines for response.22
- Strategic Recommendation 9: We urge the community to establish a program of regular communitywide CPR training for citizens and the installation of automatic defibrillation (AED) devices in areas where large congregations of people are common.26
- Strategic Recommendation 10: Strategic Planning for the delivery of emergency medical services in the community should recognize the nationally recognized standards for delivery of emergency medical services. Survival times for patients are directly impacted by response times.28
- Strategic Recommendation 11: NAS and all other EMS agencies must assure that they operate with automatic aid agreements between the agencies and that protocols are in place for emergency dispatchers at the 9-1-1 center to automatically relocate units to assure that there is proper EMS coverage with timely response to all districts at all times.32
- Strategic Recommendation 12: The Town should assure that every active Volunteer has a cell phone that is able to utilize the IamResponding.com program.56

- Strategic Recommendation 13: The Town should work with Fulton County to increase and improve cell service community wide. This would benefit the entire community but is of vital importance to Northampton’s Emergency Medical Services.56
- Strategic Recommendation 14: NAS should operate staffed, primarily as an On Duty Fly Car response agency with an On Duty Volunteer assigned to that unit for prompt timely response. The current ambulance company already dispatched to every incident, GAVAC, would continue it its current role responding for ALS and transport.60
- Strategic Recommendation 15: Regional Strategic Planning efforts should examine the number of Ambulances and fly cars needed in the planning area to assure that emergency medical care reaches each potential patient in time to initiate treatment within the recognized accepted guidelines for patient survival and the tax mil rate costs for providing those services.87

Index of Specific Recommendations

- Specific Recommendation 1: The primary issue that must be resolved immediately for Northampton EMS is to assure the community that when people need emergency medical assistance that help will arrive promptly with trained and equipped personnel to initiate lifesaving actions within the survivability window as shown in the Generally Accepted Benchmarks, Standards, Goals and Objectives section of this report.....10
- Specific Recommendation 2: The Town and Northampton Ambulance Service should IMMEDIATELY INITIATE A 24/7 STAFFED ON DUTY EMS FLY CAR for all EMS responses when there is not sufficient staffing available to staff an On Duty Ambulance. The On Duty Fly Car would respond to all EMS calls with a medic trained and equipped to initiate lifesaving efforts until such time as a properly staffed ambulance can arrive to provide enhanced treatment and transport to a medical facility.10
- Specific Recommendation 3: The Town should IMMEDIATELY provide NAS with a 4 wheel drive vehicle with proper emergency lights and markings to identify it as an EMS Fly Car. The policy for the Fly Car assigned EMT should assure that said vehicle remains within the jurisdiction at all times it is on duty. The assigned EMT should be able to utilize this vehicle as they would their own private vehicle while staying within the NAS response district and remaining immediately available to respond.10
- Specific Recommendation 4: The Town should establish policies and procedures for regularly monitoring EMS response times, services, staffing and patient outcomes.....11
- Specific Recommendation 5: The Strategic Planning Committee shall be community driven and comprised of Nine (9) members. The committee should include: two (2) active emergency medical responders; One (1) Representative from the fire department serving Northampton; Two (2) elected members of the Town Board and the Village Board; and Four (4) citizen members who have no ties to either of the community emergency services. Those citizen members should be selected from tax payer residents, leaders of the business community, the school district and the general public. The representatives from the ambulance company and the fire Company should be elected by vote of the active emergency responders in each company. No citizen member of the Strategic Planning committee should also be a current active emergency responder.11
- Specific Recommendation 6: Within 1 month of the creation and organization of the Emergency Medical Strategic Planning Committee that committee should create necessary Operating Practices Review and Planning Committees. Those Operations Practices & Planning Committees should be composed of active emergency responders with experience in the specific subject matter assigned to that committee and report to the Strategic Planning Committee.11
- Specific Recommendation 7: The total membership of the ambulance company must be encouraged to be involved in the planning and development of the new and revised administrative and operating structures of their Emergency Medical Services.12
- Specific Recommendation 8: The Operating Practices Planning Committees should review and address all issues in this report related to: Staffing, Training, Responder certifications

- and capabilities, Facilities, Apparatus, Equipment, Logistics, and all other response issues that impact the safety of responders and the community.12
- Specific Recommendation 9: The Strategic Planning Committee should assign a special committee to review current 9-1-1 protocols and call type classifications that apply to Northampton agencies to assure that each call type received has the proper units and staffing dispatched, or not dispatched, to meet the response goals and objectives established by the committee.12
 - Specific Recommendation 10: The findings and recommendations of the Operations Practices & Planning Committee(s) must be reviewed and approved by the Strategic Planning Committee and the Town Council before implementation.12
 - Specific Recommendation 11: The NAS family should immediately work to adopt the four basic elements of successful agencies: Senior Member Roles; We are a Family; Our company is the best; and Training for succession. Each leader and each member must work to assure the long term success of every other member, and the long term success of the Northampton Ambulance Service.20
 - Specific Recommendation 12: We urge the Town of Northampton and its EMS agency to engage the Town or other attorneys qualified to interpret those NYS Department of Health regulations that apply to Emergency Medical Services before implementing actions to address EMS services.29
 - Specific Recommendation 13: The operations planning committee should review the type of calls that will be responded to, the type and number of EMS Units and the staffing sent to each type of incident and when that staffing actually arrives on the scene.38
 - Specific Recommendation 14: If NAS wants to provide ALS services it must significantly increase the number of responders who are certified to provide those services.41
 - Specific Recommendation 15: The EMS chief and the organization need to promptly establish policies that ensure that the chief will serve primarily as a mentor and teacher, both in the field and administratively, rather than as a “doer”. The agency MUST take advantage of the fact that the chief is a singularly valuable resource for assuring the future success of NAS.44
 - Specific Recommendation 16: NAS should initiate a policy to regularly conduct Post Incident Reviews with the responders to incidents. The findings of Post Incident Reviews should form the basis for modifying operations, policies and practices to improve future incident operations.45
 - Specific Recommendation 17: Patient care reports need to be automatically linked to online dispatch data to assure report accuracy and to reduce the time required to complete the report.45
 - Specific Recommendation 18: The Recruitment, Retention, and Training of New and younger Volunteers must be a priority for agency leadership.47
 - Specific Recommendation 19: NAS MUST establish a policy that requires every emergency responder to have a regular annual fitness for duty physical.48

- Specific Recommendation 20: Recruitment efforts must be focused primarily on new Volunteers under the age of 40 while also incentivizing retention of all Volunteers who are medically fit to serve including those over the age of 50.48
- Specific Recommendation 21: Recruitment and retention efforts must assure that they are inclusive of women and men.....49
- Specific Recommendation 22: There must be a regular ongoing review and monitoring of Volunteer staffing Availability, Response Capabilities and Training to assure operational and emergency responder safety.49
- Specific Recommendation 23: The use of the County-provided I Am Responding software program will provide the data needed to review both the number of Volunteers who are available to respond and those who do respond to each incident.49
- Specific Recommendation 24: NAS needs to examine and adjust its training schedules to assure that all members can attend training on each topic. That may necessitate multiple times for each class.52
- Specific Recommendation 25: The Operations Planning Committee should establish a system that tracks who responded to every incident, when each responder arrived, and the qualifications of each responder, to allow for a regular analysis.53
- Specific Recommendation 26: The Town and the County should require the use of the IamResponding.com system tool that allows all Volunteers to regularly post their availability to respond prior to the report of emergencies.55
- Specific Recommendation 27: All emergency responders should use IAR to record their availability to respond AND their actual response to each incident.56
- Specific Recommendation 28: The ambulance company should immediately coordinate with the County 9-1-1 center to institute a policy that requires all Volunteers to log and maintain the status of their availability to respond in the IamResponding.com program....56
- Specific Recommendation 29: To assure Volunteer coverage with or without On duty staffing the must be an ongoing recruitment and retention efforts58
- Specific Recommendation 30: Planning Volunteer Staffing Schedules must also include scheduled training for Volunteers. All schedules must be created to ease the conflicts between a Volunteer’s personal life schedule and the needs of the Volunteer service.....59
- Specific Recommendation 31: The Fly Car would operate 24/7/365. Fly Car Time slots unable to be covered by a volunteer would be covered by paid staff. Those staffing costs are demonstrated in the Business Organization section of this report and in the provided MS Excel workbook.....60
- Specific Recommendation 32: The agency should work cooperatively with other EMS agencies in the region to assure that there are a sufficient number of Reserve Ambulances in the greater community to be placed into service anytime a primary unit needs to be out of service.62

- Specific Recommendation 33: The ambulance station should be equipped with facilities that allow emergency responders to wash and clean off contaminants from their bodies and their all of their equipment before leaving the station.65
- Specific Recommendation 34: NAS must have facilities that will permit the successful establishment of scheduled station duty time and/or in district available for duty time.....65
- Specific Recommendation 35: The Town should provide facilities and policies that encourage people to be in the station “On Duty” awaiting calls. Those facilities should include a lounge room, kitchen, male and female bathrooms with showers, and bunk rooms or other sleeping spaces.65
- Specific Recommendation 36: If the Village of Northville does decide to replace or modernize their current fire rescue station, the Town and the Village should work together to assure that the new facility can accommodate the needs of both the Village fire rescue company and the Northampton Ambulance.....66
- Specific Recommendation 37: Until such time as the Village and the Town can come to an agreement regarding combining fire rescue services and EMS at the same facility, the Town can go forward with either manufactured housing or a mobile home facility option at the existing site of the NAS station. This immediate action would promptly provide the much needed station facilities for NAS. Expended funds for this action could be recouped by selling that facility after a new station is available.68
- Specific Recommendation 38: All possible efforts must be made by the leaders of NAS & Edinburg Emergency Squad and the leaders of the two communities to assure that there is a harmonious relationship between the agencies and their members. Operational Merger of these two independent agencies should be seriously examined to assure both communities of 24/7 EMS coverage.....74
- Specific Recommendation 39: While there are concerns that billing for EMS services may decrease donations, the reality is that charging for EMS services is a common practice in the industry and charging for services should be part of the funding formula in Northampton.84

Index of Observations

Observation 1: Review of NAS ambulance arrival times as compared with recognized generally accepted standards of care clearly demonstrate that in the Northampton Ambulance Service’s current system, conditions exist that create a climate where a certain percentage of patients may not survive because emergency medical care failed to arrive or initiate care within the recognized time window of patient survivability.10

Observation 2: This study did not include a review of any other emergency service. However, it must be noted that logically many of the findings in this report concerning service demands and volunteer staffing for emergency medical services may also apply to fire and rescue services. Certainly communities around the world both large and small have seen the benefits of merging EMS and Fire Rescue services.12

Observation 3: For the record it is not uncommon for members of an organization such NAS to not want to meet in a group setting to personally discuss their feelings and any issues that may be sensitive to other members or agency leaders. That is the primary reason why I utilize online surveys and provide my personal email address to the members to gather member input. I did receive that member feedback in the survey and I validated what I received during my site visit.16

Observation 4: I am aware that some Emergency Responders may not have responded to the Emergency Responder survey. Some responders also may have responded more than once in an attempt to assure that their concerns would be heard. I have made strong efforts to assure that any multiple responses did not cloud results. I also made strong efforts to confirm that what was reported was validated with what we personally observed on site and by comparing other gathered information. Based upon review of all the materials we received and our observations on site, I believe that I had sufficient feedback and information to provide a valid base to evaluate the many important factors that are impacting Emergency Medical service in the Town of Northampton.....16

Observation 5: Unfortunately in my research and observations I have found that many of these basic elements for long term success are weak or missing in the Northampton Ambulance Service.20

Observation 6: Limited information was provided to demonstrate that NAS regularly monitors Effective Response Force time and staffing data beyond the tracking of calls dispatched but not responded to by the agency. However, there is a general awareness within the agency of the seriousness of issues that arise from delay in response.22

Observation 7: The data we were provided with demonstrated that each of these elements is not regularly captured or monitored either in the agency records management system or in the current 9-1-1 records system.22

Observation 8: NAS has been tracking its own responses to emergency calls for service for several years and is well aware of the fact that it has not been able to respond to many calls for service. NAS also has developed and utilizes a report form to identify the reasons for any non-response to calls for service in its ongoing efforts to identify the problems in its efforts to correct the problem.30

Observation 9: Review of the completed Responder’s Report forms at NAS demonstrated that the primary reason why NAS has been unable to respond to some calls is that only one person responded to NAS station. NYSDOH regulations require a minimum of 2 responders on an ambulance including at least 1 EMT31

Observation 10: Survey responses from the people in the community and from members of NAS itself recognize the high percentage of unanswered call for service. The growing increase in the number of those unanswered calls is unacceptable. The community as a whole wants the problem solved promptly.32

Observation 11: It must be noted that NO single standalone ambulance service operating a single response unit will ever be able to respond to 100% of the calls for service in their community. .32

Observation 12: I have been informed that currently Fulton County medical groups have not established the required guidelines that would allow the use of EMD in Fulton County. Local medical expert review is required to establish the EMD guidelines for emergency medical responses. Those efforts should eliminate situations like the example we discovered where an ambulance was dispatched to a person with a tooth ache. We urge the County and the local medical community to investigate and implement the use of EMD for all EMS calls. There will also be a need to review staffing levels at 9-1-1 to assure that EMD can be effectively utilized without creating a negative impact on other emergency dispatching.....35

Observation 13: Review of response records indicates that NAS does not consistently meet generally accepted response time goals. The chart below demonstrates the serious issue of NAS not accomplishing adequate response times for patient survival for cardiac and breathing types of incidents.36

Observation 14: Current records made available by NAS do indicate that the agency does manually track the number of emergency responders who actually responded to the scene. However, those records do not accurately track or indicate when each responder arrived or if a sufficient number of emergency responders arrived on scene. That level of tracking could easily be met if the agency utilized a tool like I Am Responding or in the CAD system.38

Observation 15: The County 9-1-1 office provided dispatch data for NVAS for the current year to date and 2017-2018. The review of those records and those provided by NAS indicated that there are serious response time issues with ambulance responses being outside of the recognized times for the best survival chances for patients with life threatening medical problems. That fact is currently recognized in County 9-1-1 office policies which direct that GAVAC ambulances be automatically dispatched to all NVAS area EMS calls. The Northampton Ambulance Service also provided us with copies of its response data which showed the same response time issues. 38

Observation 16: Only 4 of the responders were reported as having advanced EMT certifications. This low number seriously negatively impacts the agency’s ability to provide ALS services41

Observation 17: The fact that 15 out of 28 emergency responders were identified by the agency as being over 50 years old demonstrates that at any time the total number of volunteers in the agency could be drastically reduced as those volunteers retire, age out or are medically unable to perform their duties safely. The agency reported only 6 members under the age of 30. That number is less than 46% of the number of responders who can reasonably be expected to leave service.47

Observation 18: It was disturbing to see that over 66% of the emergency responders to the survey reported that they had never had a physical examination to determine their fitness for duty.48

Observation 19: The number of volunteers attending company training is generally below 50% of the number of volunteers reported by NAS. We did not see any report of company training for 2019 during January, February, March, or April. Training must be regularly scheduled and conducted at times when the majority of responders can attend.52

Observation 20: Northampton Ambulance Service generally does not have any On Duty Volunteers in their station. There is also no tracking or group knowledge of who is currently available to respond to incidents prior to the notification by the County 9-1-1 center that there is a call for service. It appears that the only time anyone knows who is going to respond to any emergency is after responders acknowledge the dispatch to 9-1-1 or when the handwritten response report is prepared after the event has been completed.....53

Observation 21: I was informed that some current members of NAS may not currently have cell phones and that there are areas in the community where cell service is poor or nonexistent.56

Observation 22: The on duty time demands of staffing solely with Volunteers speak for themselves. The community must ask itself: What volunteers can afford, or be expected to, donate an excessive amount of time in free service to their community when faced with the regular demand of family life and work?58

Observation 23: Currently there are not a sufficient number of qualified and available volunteers to cover the ambulance response staffing needed to assure proper timely response in accordance with recognized response times and levels.59

Observation 24: The 2018 ambulance is a fully equipped unit with the modern tools and equipment needed to provide excellent service in the community. The placement of equipment, including monitors, is evidence of a great deal of planning efforts by the agency to assure that the unit will allow emergency responders to operate efficiently and safely while enroute to medical facilities.....62

Observation 25: NAS currently operates out of a former equipment garage that does not provide the facilities emergency medical services and emergency responders need today.65

Observation 26: There are no designated facilities for cleaning equipment and PPE (Personal Protective Equipment) in the NAS station. There are limited facilities that would allow emergency responders to shower and clean up. These conditions create a health hazard of bringing contamination from the scene into responder’s vehicles and homes and responding to subsequent incidents with equipment that is not properly cleaned.....65

Observation 27: There are no facilities conducive for on duty staffing. The NAS station does not have a designated lounge area with the types of facilities that would encourage members to come to the station for duty beyond routine response work or training activities. The NAS station does not have bunk room facilities that would facilitate night time staffing or facilities for staffing the station during long term events. While there is a shower in the current station, it is located directly off the meeting room and does not really provide an area where emergency responders can shower and clean up after an incident. There are no facilities where responders can privately change clothes after an incident. There is no equipment where responders could wash their contaminated clothing before leaving the station.65

Observation 28: Addressing each of the facility issues in this report remain the same whether the community elects to transition to a Fly Car operation or stay as an ambulance operation. If the Fly car option is selected, there must be a place to park that vehicle inside the station or in another facility that is climate controlled.65

Observation 29: There is land available adjacent to the Current Village Fire station. This could accommodate the facility needs of both Fire Rescue and EMS services, and perhaps other public functions as well. The architectural design of a new structure could reflect either the historic homes across the street or the historic commercial structures on the same side of the street no matter what the station design might be67

Observation 30: Our research has shown a decline in student populations with a decrease of more than 2,400 students in Fulton County schools and 110 students in the Northville schools, in all grades combined, between the years of 1999 and 201970

Observation 31: The school population charts reflect a shrinking and ageing community. In a Volunteer based emergency service it is the young people from the local schools who would be expected to join the Volunteer Ambulance Companies as their families did in previous generations.70

Observation 32: It has been reported in the local media that there recently have been a number of ambulance agencies that have ceased operations either totally or sporadically. Those closings were the result of both funding issues and staffing issues. EMS staffing, costs, and response capabilities are a regional and statewide problem that must be addressed. The Town of Northampton is to be commended for its efforts to address this serious issue. The maps below reflect our findings during the time of this study, but may contain information about agencies that are still listed with NYSDOH but no longer serving in the region.....71

Observation 33: Greater Amsterdam Volunteer Ambulance Corps GAVAC is dispatched on all NAS calls. If NAS has a sufficient crew, GAVAC is cancelled if NAS has only a BLS crew, GAVAC continues for ALS support. If NAS is unable to respond, GAVAC takes the total call. GAVAC keeps a minimum of three to four ambulances available for Fulton County calls. GAVAC is the primary EMS agency for the rest of Fulton County plus all of Montgomery County.....73

Observation 34: The people of this community clearly see the need to have effective and efficient EMS services. They certainly understand that while taxes may be required to support those services, the most cost effective method is to distribute the costs over as wide a tax base as possible.80

Observation 35: The agency reported that there is no Strategic Plan for EMS. There is a clear need to address that issue as noted in this report. The fact that the Town has commissioned this study indicates that the Town needs to establish and manage that strategic plan.81

Observation 36: For the record, this consultant is totally opposed to any practices that ask VOLUNTEER Emergency Responders to also participate in fund raising activities to support a public service where they already donate their time and energy providing much needed services to the community. *Does the community ask the snow plow operator to raise the funds needed for buying and operating their trucks and equipment?*83

Observation 37: It must be noted that the following mil rate impact chart demonstrates the combined Town of Northampton and Town of Edinburg Taxable Values as found online. The Town of Edinburg and its ambulance service were not part of this study and are being used only as an example of possible mil rate impacts of consolidation of the services in both Towns. I choose to use this example because both communities and their EMS are located very close to each other. If EMS was to be combined, it would provide prompt response in both communities while expanding the pool of available volunteers86

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The reports prepared by the Consultant in the course of this contract, except working notes, surveys and internal documents, shall become the sole property of the Town of Northampton upon payment to Consultant for such work, and the Town shall have the sole right to use such materials in its discretion without further compensation to Consultant or to any other party.

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