REPORT ON THE

STATE OF EMERGENCY MEDICAL SERVICES

IN

GRAFTON COUNTY, NEW HAMPSHIRE

Prepared by:

Municipal Resources Inc.
66 Main Street, Suite B
Plymouth, NH 03264
www.mrigov.com
(603) 279-0352

January 2026

TABLE OF CONTENTS

CHAPTER I. PROJECT SCOPE AND METHODOLOGY

Municipal Resources, Inc. (MRI) was retained by the Grafton County Commissioners to provide an analysis of emergency medical services (EMS) capabilities, needs, gaps, vulnerabilities, and capacity in Grafton County. The goal of this initiative is to provide the county commissioners with an in-depth understanding of the EMS environment in Grafton County and to provide recommendations on ways to ensure the continuation and enhancement of high-quality pre-hospital care.

The MRI assessment team employed a variety of strategies to gather information and insight. Our efforts included:

- Development and distribution of an online survey of EMS agencies to identify staffing levels, response statistics, resource capabilities, training and certification levels, recruitment and retention challenges, resource needs, and current and future challenges
- In-person and virtual interviews with a cross-section of stakeholders, including EMS agency chiefs, EMS providers, fire chiefs, hospital providers, town administrators, state agencies, and selectmen
- Site visits to observe facilities, vehicles, and equipment
- Analysis of response data, EMS resources, and capabilities
- Evaluation of county demographics and growth data
- Review of research literature and nationally recognized standards and best practices for EMS
- Review of state statutes, administrative rules, federal regulations, and pending legislation related to EMS operations and funding
- In collaboration with CAI Technologies of Littleton, NH, developed GIS maps that identify key information about EMS coverage in Grafton County
- Development of twelve (12) recommendations for planning, advocacy, outreach, funding, and organizational structure that could be undertaken by the county commissioners to support and strengthen EMS throughout the region

This report is intended to provide a starting point for future initiatives by the county, municipalities, hospitals, and non-governmental EMS services to collaborate on efforts to strengthen EMS in Grafton County. Our recommendations identify the specific steps that the Grafton County Commissioners could take to lead and facilitate such efforts. Other stakeholders will no doubt identify steps that they could initiate in their respective areas of influence and responsibility.

The residents of Grafton County can rest assured that they are served by a viable, modern EMS system that provides for prompt, effective patient care in the pre-hospital environment. The career and volunteer personnel who provide these services are highly dedicated, compassionate, and well-trained. We continue to be impressed by the skills and commitment of the first responders, EMTs, paramedics, firefighters, police officers, public safety officers, emergency dispatchers, hospital providers, and agency leaders who serve round-the-clock to ensure the health and well-being of their constituents.

CHAPTER II. GLOSSARY OF TERMINOLOGY & ACRONYMS

The following technical terms and acronyms are used throughout this report and are provided as a convenience to the reader.

Acute Care Hospital: An acute care hospital provides short-term, immediate medical and surgical care for severe illnesses, injuries, and other urgent medical conditions. An acute care hospital can also be classified as a **critical access hospital**. There are twenty-six (26) acute care hospitals in New Hampshire.

AED (Automatic External Defibrillator): An AED, or automated external defibrillator, is a portable medical device that can save the life of someone experiencing sudden cardiac arrest by analyzing the heart's rhythm and delivering an electric shock if necessary to restore a normal rhythm. These devices are designed for use by the general public, with clear voice and visual prompts, and are often found in public locations like schools, recreational facilities, places of assembly, and government buildings.

AEMT (Advanced Emergency Medical Technician): An AEMT is a mid-level emergency medical services provider who bridges the gap between an EMT-Basic and a paramedic. In the hierarchy of pre-hospital care, the AEMT provides limited advanced life support. While an EMT focuses on stabilization and non-invasive care, an AEMT is authorized to perform invasive procedures (like starting intravenous fluids) and administer medications that treat specific medical emergencies effectively in the field.

ALS (Advanced Life Support): ALS refers to the highest level of pre-hospital medical care provided by emergency medical services. ALS focuses on treating the medical emergency effectively at the scene and during transport by cardiac monitoring and electrical therapy, advanced airway management, and advanced pharmacology. Treatment is provided by AEMTs or paramedics.

BEMS (NH Bureau of Emergency Medical Services): BEMS is the state agency responsible for provider and service licensing, the state trauma and stroke systems, EMS patient reporting system, and regulation of EMS training. It is a unit of the Division of Fire Standards & Training & EMS in the NH Department of Safety.

CPR (Cardio-Pulmonary Resuscitation): CPR is an emergency procedure performed when a person's heart stops beating (cardiac arrest). Its primary goal is to manually preserve intact brain function until further measures (like defibrillation or advanced life support) can be taken to restore spontaneous blood circulation and breathing. CPR can be performed by the general public with a minimal amount of training or instruction.

Critical Access Hospital (CAH): A critical access hospital is a special federal designation given to small rural hospitals by the Centers for Medicare & Medicaid Services (CMS). CAHs serving Grafton County are Alice Peck Day Memorial Hospital (Lebanon), Concord Hospital-Franklin (Franklin), Cottage Hospital (Woodsville), Littleton Regional Healthcare (Littleton), MaineHealth Memorial Hospital (North Conway), and Speare Memorial Hospital (Plymouth).

DHART (Dartmouth Hitchcock Advanced Response Team): DHART provides medical helicopter care and transport of critically ill or injured patients from incident scenes, critical access hospitals, and acute care hospitals to a trauma center or higher-level medical center. DHART also provides interfacility transfers (IFTs) via ground ambulance.

EMR (Emergency Medical Responder): An EMR, commonly referred to as a "first responder", is a BEMS licensed provider who performs immediate, life-saving interventions while waiting for an ambulance or advanced life support intercept unit to arrive. EMRs in Grafton County are typically members of a FAST squad or a fire department.

EMT (Emergency Medical Technician): An EMT, also known as EMT-Basic, is the primary level of BEMS licensed provider for ambulance transport and care. EMTs are licensed by BEMS.

FAST Squad (First Aid Stabilization Team): A FAST squad is a BEMS licensed, non-transporting EMS organization designed to solve the critical problem of long ambulance response times in rural areas. FAST squad members arrive in a rescue-type vehicle or their personally owned vehicle and provide lifesaving care until the arrival of an ambulance or paramedic intercept unit. Members can be any level of provider, from EMR to paramedic.

First Responder: The term "first responder" refers to licensed EMRs but can generally describe any trained individual who responds in the early stages of an emergency incident, including firefighters, police officers, public safety officers, and public works employees.

FSTEMS (NH Division of Fire Standards & Training & EMS): FSTEMS is the state agency that oversees fire and EMS training, licensing, and certification. FSTEMS operates the Richard M. Flynn Fire Academy in Concord and the Raymond S. Burton Training Facility in Bethlehem. It is a division of the NH Department of Safety.

ICS (Incident Command System): ICS is the standardized management hierarchy used by all emergency responders (fire, EMS, police, public works, emergency management) to organize and coordinate a response to an emergency. ICS is a component of the National Incident Management System (NIMS).

IFT (Interfacility Transfer): An IFT is transportation via ambulance, stretcher van, or wheelchair van between hospitals or between a hospital and a skilled nursing facility (e.g., nursing home, rehabilitation facility, etc.). IFTs can be routine, scheduled, non-emergency transfers or emergency transfers of critically ill patients.

Medicaid: Medicaid is a joint federal and state program that provides free or low-cost health coverage to millions of Americans, including eligible low-income adults, children, pregnant women, elderly adults, and people with disabilities. It is the single largest source of health coverage in the United States, administered by individual states according to federal requirements. Ambulance services can be reimbursed for transporting Medicaid patients.

Medicare: Medicare is a federal health insurance program in the United States primarily for individuals aged 65 and older, as well as certain younger people with disabilities and those with end-stage renal disease. Unlike Medicaid, it is not based on income but is a federally administered entitlement program funded through payroll taxes and premiums. Ambulance services can be reimbursed for transporting Medicare patients.

MIH (Mobile Integrated Health Care): An MIH program (also known as **community paramedicine**) is a patient-centered healthcare model where emergency medical service (EMS) providers deliver non-emergency care directly in a patient's home. These mobile teams fill gaps in the healthcare system by managing chronic diseases, performing post-hospital follow-ups, and providing preventative treatment to keep patients out of the emergency room.

Naloxone: Naloxone (often known by the brand name Narcan) is a life-saving medication called an "opioid antagonist" that rapidly reverses an opioid overdose by blocking the drug's effects on the brain and restoring a patient's breathing. It is designed to be easily administered by both medical professionals and laypeople (often via nasal spray) to prevent death while waiting for emergency medical care.

Paramedic: A paramedic is the highest level of pre-hospital emergency provider, licensed by BEMS to provide ALS care that effectively brings the emergency room to the scene. Unlike basic EMTs, they are trained to perform invasive procedures—such as interpreting complex heart rhythms (ECGs), inserting breathing tubes (intubation), and administering a wide range of medications—to stabilize critical patients during transport.

Paramedic Intercept: Paramedic intercept is the response by one or more paramedics in a non-transport vehicle to an emergency scene. Paramedics can then treat and accompany the patient to the hospital in the ambulance. A paramedic intercept can also meet an ambulance that is enroute to the hospital.

PIFT (Paramedic Interfacility Transfer): A PIFT is a specialized ambulance transport designed to move patients between hospitals when they require emergent transfer to a facility capable of providing a higher level of care. These transfers typically involve patients who need advanced clinical monitoring or interventions that exceed the scope of standard non-emergent transfers.

PSAP (Public Safety Answering Point): A PSAP receives 9-1-1 calls, determines the appropriate response agency, and transfers the call to the local or regional dispatch center. 9-1-1 telecommunicators also provide emergency medical instructions to callers, including CPR, AED use, bleeding control, and childbirth. NH 9-1-1 PSAPs are located in Concord and Laconia.

SCOT Analysis: A SCOT analysis is a strategic planning framework used to evaluate an organization's competitive position by identifying its internal **S**trengths and **C**hallenges, as well as external **O**pportunities and **T**hreats. By mapping these four distinct quadrants, leaders can visually assess their current reality and develop informed strategies to capitalize on advantages while mitigating risks. A SCOT analysis of the Grafton County EMS system is included as part of this report.

Stop The Bleed®: Stop The Bleed is an advocacy and training program of the American College of Surgeons to promote the training of citizens who can then treat victims of serious bleeding injuries. Stop The Bleed kits contain dressings and a tourniquet and can be placed in publicly accessible buildings, typically near AEDs.

Telemedicine: EMS telemedicine is the use of high-definition video and audio technology to connect pre-hospital providers (EMTs and paramedics) with remote physicians in real-time. This allows for immediate "virtual" consultation, enabling crews to perform advanced procedures, triage patients more accurately, or treat patients on-site without transporting them to the hospital.

Trauma Center: A trauma center is a specialized hospital facility equipped with dedicated surgeons and resources available 24/7 specifically to treat life-threatening physical injuries, such as gunshot wounds, major car crashes, or severe burns. Unlike a standard emergency department, which handles a broad range of medical issues, a trauma center is officially designated by levels (I through IV) based on its capability to provide complex, immediate surgical intervention versus just stabilization.

CHAPTER III. OVERVIEW OF EMS IN GRAFTON COUNTY

Emergency medical services delivery in Grafton County consists of a network of ambulance transport services, non-transport first responder agencies, critical access and acute care hospitals, trauma centers, public safety dispatch centers, and the state's 9-1-1 telecommunications center. This system of integrated components enables residents and visitors to receive high-quality emergency medical care at the first responder, basic life support, advanced life support levels with transportation via ground or air to the appropriate hospital facility.

All EMS services, ambulances, and personnel are licensed by the New Hampshire Department of Safety, Bureau of Emergency Medical Services (BEMS). Personnel are trained and certified based on criteria established by the NH Department of Safety, Division of Fire Standards & Training & EMS (FSTEMS) and by the National Registry of Emergency Medical Technicians. EMS providers are required to recertify every two (2) years by completing a required minimum number of continuing education hours based on the level of certification.

Grafton County is served by nineteen (19) ambulance transport services:

- Fourteen (14) services are operated by fire departments.[1]
- Three (3) services are operated by municipal (non-fire) ambulance services: Enfield Ambulance, Grafton Ambulance, and Woodsville Ambulance.
- Two services, Upper Valley Ambulance in Fairlee, Vermont, and Linwood EMS in North Woodstock, are independent nonprofit organizations.

Thirteen (13) ambulance services are covering more than one (1) municipality:

- One (1) service provides coverage to two (2) municipalities.
- Five (5) services provide coverage to three (3) municipalities each.
- Three (3) services provide coverage to four (4) municipalities each.
- One (1) service provides coverage to six (6) communities, of which five (5) are outside of Grafton County.
- One (1) service provides coverage to seven (7) communities.
- One (1) service provides coverage to eight (8) communities, of which four (4) are in Vermont.
- One (1) service provides coverage to nine (9) communities, of which seven (7) are in Vermont.

[1] Lisbon EMS, also known as Lisbon Life Squad, is licensed as a fire-based EMS agency under the Lisbon Fire Department but maintains a separate leadership structure and operational profile.

A total of thirty-nine (39) ambulances are distributed as follows:

- Eight (8) services operate one (1) ambulance each.
- Four (4) services operate two (2) ambulances each.
- Five (5) services operate three (3) ambulances each.
- Two (2) services operate four (4) ambulances each.

The MRI assessment team could not obtain ambulance response data from the NH Bureau of Emergency Medical Services (BEMS). BEMS is the central repository for patient care data through the NH Emergency Services Reporting System, formerly known as TEMSIS. The following numbers are estimates based on published town reports and information reported in the online survey:

2024 Grafton County EMS responses: 14,147
2019 Grafton County EMS responses: 11, 771[2]

These estimates show a 20.1% increase in calls over five (5) years, a significant increase in the demand for service. During that same period, the population of Grafton County increased by 3.5%. Clearly, the increase in EMS service demand is likely due to factors other than population growth, such as an aging population, increased vehicle crashes, and rebound from the reduction in service demand during the pandemic.

Without the ability to perform a "deep dive" into response data, we could not analyze the frequency and type of events, actual response times, time on scene, number of simultaneous calls, the frequency of use of mutual aid, and other metrics that are essential to developing data-based strategies for improvement.

If and when BEMS develops a publicly accessible analysis tool (see our Recommendation 3), EMS services and municipalities will have the ability to strengthen their operational capabilities based on valid response data rather than anecdotal experience.

Eight (8) licensed volunteer first aid stabilization teams (FAST squads) operate in Grafton County. In addition, many fire departments that do not operate an ambulance respond to critical medical emergencies, vehicle crashes, and technical rescue incidents to provide initial care, specialized rescue equipment, and operational support. Some police departments in the county carry trauma kits and automatic external defibrillators (AEDs) and can provide immediate lifesaving care upon arrival at an incident.

Critical access and acute care hospitals within or in immediate proximity to Grafton County receive most patients. These hospitals provide medical direction, clinical quality assurance support, and continuing education opportunities to the county's EMS services.

[2] Two services failed to report call data in 2019. Additionally, several department reports lacked clarity.

The primary hospitals serving Grafton County are:

- Alice Peck Day Memorial Hospital (Dartmouth Health), Lebanon*
- Concord Hospital-Franklin*
- Cottage Hospital, Woodsville*
- Dartmouth-Hitchcock Medical Center, Lebanon
- Littleton Regional Healthcare, Littleton*
- MaineHealth Memorial Hospital, North Conway* [3]
- Speare Memorial Hospital, Plymouth*

Patients who are experiencing life-threatening injuries or a life-threatening medical condition may be transferred to a trauma center or cardiac/stroke center by the primary ambulance service, an interfacility transport ambulance service, or by medical helicopter.

A trauma center is a hospital specifically equipped and staffed to provide comprehensive medical care for patients with severe, life-threatening injuries. Unlike a typical emergency department, a trauma center has 24-hour in-house access to trauma surgeons and a wide range of specialists, advanced diagnostic and treatment technologies, and intensive care units, often at different levels of designation based on resources. They handle serious incidents like motor vehicle collisions, falls, and gunshot wounds from the point of arrival through definitive care and rehabilitation. Trauma center designations are established by the NH Division of Fire Standards & Training & EMS and range from Level I (highest level of care) to Level IV. Trauma center designations in the region are:

- Concord Hospital, Concord—Level II
- Cottage Hospital, Woodsville—Level IV
- Dartmouth Hitchcock Medical Center, Lebanon—Level I
- Littleton Regional Healthcare, Littleton—Level III
- Speare Memorial Hospital, Plymouth—Level IV

Critical care transport by medical helicopter is typically provided by the Dartmouth Hitchcock Advanced Response Team (DHART). DHART coordinates protocols, training, and landing sites with the region's EMS services and hospitals.

* Designated as a Critical Access Hospital. A critical access hospital (CAH) in NH is a small, rural hospital that provides 24/7 emergency care and has no more than 25 independent beds. To qualify, it must also be located more than 35 miles from another hospital (or 15 miles in mountainous terrain) and have an average annual length of stay of 96 hours or less. This designation is intended to improve the financial viability of rural hospitals and ensure access to healthcare in underserved areas.

[3] MaineHealth Memorial Hospital typically only receives patients who are transported from a portion of Livermore covered by Conway Fire-Rescue.

All 9-1-1 emergency calls in New Hampshire are routed to the state's public safety answering points (PSAPs) in Concord or Laconia. The 9-1-1 telecommunications specialists prioritize the call and transfer it to the appropriate local public safety dispatch center. In the case of medical emergencies, the 9-1-1 telecommunications specialist will stay on the line to provide instructions to the caller on how to provide lifesaving care, such as cardio-pulmonary resuscitation (CPR), use of an AED, bleeding control, and childbirth. An EMS call in Grafton County is then dispatched by one of the following dispatch centers:

- Hanover Regional Emergency Communications Center, Hanover
- Lakes Region Mutual Fire Aid, Laconia
- Lebanon Fire Department, Lebanon
- Lincoln Police Department, Lincoln
- Twin State Mutual Fire Aid Association/Grafton County Sheriff's Department, North Haverhill

EMS staffing by services in Grafton County includes full-time, part-time, part-time per diem, paid-on-call, and volunteer personnel. Some services are exclusively full-time or volunteer, while some are a combination of all staffing types. Some individuals work at more than one service, which limits their availability during peak service periods.

Personnel who serve in EMS agencies are trained and certified at the following levels, ranging from entry level to the highest level of pre-hospital care:

- *Emergency Medical Responder (EMR)*, commonly referred to as a "first responder". They provide immediate, life-saving interventions while waiting for an ambulance or advanced life support intercept unit to arrive.
    - Training: ~48-60 hours
    - Scope of Practice:
        - CPR & AED: High-performance CPR and use of automated external defibrillators
        - Hemorrhage Control: Tourniquets and wound packing
        - Airway: Basic maneuvers (jaw thrust) and oral/nasal airways
        - Meds: Oxygen, Narcan (naloxone) for overdoses, and assisting patients with their own auto-injectors (EpiPens)

- *Emergency Medical Technician (EMT)*, also known as EMT-Basic, the primary level for ambulance transport and care.
    - Training: ~150–200 hours
    - Scope of Practice (includes everything in EMR, plus):
        - Diagnostic: Blood glucose monitoring, pulse oximetry, lung sound assessment

        - Airway: In NH, EMTs are often trained to use CPAP (for respiratory distress) and supraglottic airways (a device that keeps the patient s airway open while being ventilated) during cardiac arrest
        - Meds: Aspirin (chest pain), Albuterol (nebulizers for asthma), epinephrine (for anaphylaxis), oral glucose, and sometimes nitroglycerin (if prescribed to the patient)
        - Splinting: Traction splints for femur fractures and spinal immobilization

- *Advanced EMT (AEMT)*
    - Role: AEMTs bridge the gap between basic and paramedic care. They are valuable in rural New Hampshire, where transport times are long, as they can initiate IVs and give fluids to stabilize shock.
    - Training: ~200–300 hours (requires EMT certification first).
    - Scope of Practice (includes everything in EMT, plus):
        - IV/IO Access: Starting intravenous lines (IVs) or drilling into bone (IO) for fluid resuscitation.
        - Advanced Airway: More options for securing airways in unconscious patients
        - Expanded Meds: For such conditions as hypoglycemia, cardiac events, and some pain management.
- *Paramedic*
    - Role: The highest level of pre-hospital provider. Paramedics effectively bring the emergency room to the scene. They make complex clinical decisions and can perform invasive procedures.
    - Training: ~1,200–1,800 hours (often an Associate's degree program).
    - Scope of Practice (includes everything in AEMT, plus):
        - Cardiac: 12-lead electrocardiogram (ECG) interpretation, manual defibrillation, and transcutaneous pacing (using electricity to speed up a slow heart)
        - Invasive Skills: Endotracheal intubation (breathing tubes), needle decompression (for collapsed lungs), and surgical airways
        - Pharmacology: A vast array of medications for pain, seizures, cardiac arrest, and respiratory failure

All patients in Grafton County have access, when needed, to advanced life support (ALS) care by an AEMT or a paramedic. The ALS provider may respond on the ambulance or in a non-transport response vehicle (also known as paramedic intercept). The ALS provider then continues to provide care in the ambulance while en route to the hospital.

Critical Challenges Facing EMS Services

The EMS system in Grafton County is facing numerous challenges, not unlike those faced by rural EMS systems in other parts of New Hampshire and throughout the United States.

- **Financial Challenges.** As discussed in further detail in Chapter VIII, EMS services are under severe financial pressure due to several factors, including but not limited to:
    - Reimbursements from private insurers and government insurance (Medicare/Medicaid) programs do not cover the true cost of an ambulance call
    - Wages for paramedics, AEMTs, and EMTs can be highly competitive
    - Cost of vehicles and equipment continues to increase at a rate considerably higher than the consumer price index. For example, the cost of purchasing a new ambulance has increased dramatically over the last five years, largely due to a "perfect storm" of chassis shortages, supply chain disruptions, and inflation. For a new ambulance vehicle, the price has increased by approximately 30% to 50% since 2020 and can typically cost from $250,000 to $500,000, depending on operational needs. The wait time for a new ambulance from the time of order to delivery can be two years or more.
- **Staffing Challenges.** Recruitment and retention of EMS personnel is challenging because of competition and demand for highly skilled and trained licensed EMS providers throughout the region. In addition, EMS providers face long work hours, high call volume, stress associated with managing critical patients, and deprived sleep time that can result in individuals leaving the profession. There is a dramatic shortage of volunteers and paid on-call personnel in most fire departments and EMS agencies, and this trend will continue without a focused strategy to recruit and retain volunteers. Housing costs (rent and mortgage) in some parts of the county can be unaffordable for EMS providers. Many EMS providers must work two or three jobs just to make ends meet. Individuals in today's labor force want a balance between work and personal life, and the schedules and long hours associated with EMS work inherently conflict with this goal. In general, public safety recruitment pools have not fully bounced back to pre-COVID levels, resulting in fewer applicants who wish to pursue a career in EMS. Due to short staffing, some EMS chiefs frequently respond on ambulances. This takes away valuable administrative time and can have a detrimental impact on overall operations.
- **Rural Geography.** Grafton County's geography can result in long travel times to incidents and to hospitals, which emphasizes the importance of highly skilled pre-hospital care. Severe weather conditions can have a dramatic impact on response and transport times, as well as taking a toll on the EMS crews. Geography is a critical factor for mutual aid response, since response times to cover simultaneous calls or a mass casualty incident will be lengthy.

- **Aging Population.** Grafton County is currently experiencing a demographic shift where the senior population is growing significantly faster than younger cohorts. The county's population is older than the national average and is aging rapidly. Residents aged 65+ now make up approximately 22-24% of the county's population. For EMS agencies, this data correlates directly with operational volume and case mix. For example, seniors can typically account for 40-50% of EMS demand, which can include lift assists, falls, and non-urgent medical transports. The *Healthy Aging Data Reports* for Grafton County towns show a high prevalence of hypertension (~60-75% of the 65+ population, arthritis (~50%, contributing to mobility issues and falls), and heart disease (~30-35%). Seniors who are aging in place in homes that are not adapted for mobility and accessibility are at an increased risk for falls and social isolation. As a result, EMS is increasingly called to handle this demand for care.
- **Potential Closing of Health Care Facilities.** The financial crisis facing hospitals and primary care practices could result in more closures of facilities such as Ammonoosuc Community Health Services in Franconia. EMS agencies may see an increase in calls to fill this gap in available care.

CHAPTER IV. STAKEHOLDER INTERVIEWS

The MRI assessment team conducted in-person and virtual interviews with twenty-two (22) stakeholders, including select board members, town administrators, EMS agency heads (volunteer and career), fire chiefs (volunteer and career), EMS providers, and hospital administrators (emergency department directors and EMS coordinators). The following summarizes the concerns and recommendations expressed by the interviewees.

Workforce and Housing Crisis

The most critical issue cited by nearly all stakeholders is a severe lack of personnel.

- **Aging Workforce:** Many agencies rely on a "graying" roster of providers aged 50–60+, with very few younger recruits (18–40 demographic) entering the field.
- **Housing Barrier:** Recruitment is stalled by the lack of affordable housing. Clinicians and potential recruits cannot afford to live in the towns they serve, and some hospital systems have lost staff (such as nurse anesthetists) due to housing costs.
- **Volunteer Decline:** The volunteer/call model is described as "not sustainable" or "gone," forcing towns to consider expensive transitions to paid staff.

Regionalization and "Hub" Dependency

A shift from town-based squads to a regional "hub and spoke" model is widely viewed as inevitable.

- **Service Collapses:** The financial failure of smaller services (e.g., Warren-Wentworth) has already forced towns to contract with larger neighbors like Plymouth.
- **The Hubs:** Larger agencies (e.g., Plymouth, Littleton, Lebanon, Woodsville, Linwood) are effectively becoming regional providers, covering multiple surrounding towns that can no longer support independent services.
- **Cultural Resistance:** While operational logic favors regionalization, political and cultural friction exists. Some smaller towns prefer specific partners over others due to union/non-union dynamics or historical relationships.

Financial Instability

The cost of providing modern EMS exceeds the revenue available to most towns.

- **Cost of Readiness:** 24/7 ALS readiness is estimated to cost nearly $1 million annually, yet town subsidies and billing often cover only a fraction of this.
- **Reimbursement Gaps:** Stakeholders consistently noted that Medicare/Medicaid rates do not cover the actual cost of service, leaving the burden on local taxpayers.
- **Subsidy Disparities:** There is tension regarding "fair share" payments, with some "hub" towns concerned that they are subsidizing the emergency coverage of their rural neighbors.

Interfacility Transfer (IFT) Bottleneck

Hospitals and field providers report a dangerous lack of capacity for moving patients between facilities.

- **Resource Scarcity:** Hospitals frequently struggle to find ambulances for critical transfers, as 911 agencies prioritize their primary response areas.
- **Internal Solutions:** Some hospitals (e.g., Littleton Regional Healthcare, Dartmouth-Hitchcock Medical Center) are developing their own internal transport capabilities or pilot programs to manage transfers because they can no longer rely on external agencies.
- **Staffing Cannibalization:** Hospital-based hiring for these internal roles often draws staff away from field EMS agencies, worsening the street-level shortage.

Infrastructure and Communications

Critical gaps in infrastructure pose safety risks.

- **Communication Failures:** At least one area operates on disparate radio systems that cannot easily talk to one another. Some agencies report unreliable radio coverage, forcing them to monitor police scanners or use personal cell phones to receive calls.
- **Equipment Gaps:** Some services lack the ability to transmit 12-lead electrocardiograms (EKGs) or rely on older, donated equipment that is difficult to maintain.

Fire vs. EMS Dynamic

There is friction regarding the prioritization of fire versus EMS.

- **Workload vs. Funding:** While EMS accounts for most call volume (often >60-70%), funding and voting power in mutual aid associations often remain controlled by fire suppression interests.
- **Integration:** Some fire departments are reluctant to take on EMS duties, while others are fully integrating transport into their fire operations to justify staffing levels.

CHAPTER V. STAKEHOLDER SURVEY

MRI developed an online survey that was sent to twenty-nine (29) EMS service chiefs who serve Grafton County. Eighteen (18) chiefs (62%) took the survey, with twelve (12) chiefs (41%) submitting complete responses and six (6) submitting partial responses. These participation rates are generally considered to be good for external customer or membership surveys.

The survey questions covered topics including service type, number of personnel, number of vehicles, response data, funding challenges, and resource needs. Respondents could include comments that clarified or expanded upon their answers. The survey questions can be found in **Appendix A**.

The following summarizes key aspects of the survey results:

- The overwhelming majority of EMS calls are for 911 emergencies, ranging from 70% to 80%.
- Response times (from the time the agency is dispatched until the first EMS-licensed unit arrives on scene) range from one (1) to fifteen (15) minutes, with most in the 8-12 minute range.
- ALS calls account for 30% to 85% of calls, depending on the agency.
- Of those who answered the question about the number of calls that result in non-transport, all were less than 50%.
- Most agencies had few or no calls to a recreational area (e.g., ski area, state park, national forest, hiking trail, snowmobile trail, etc.). One agency reported that 70% of their calls were to recreational areas, and one agency reported a 20% call volume to recreational areas.
- None of the agencies surveyed provide interfacility transfers (IFTs).
- Twelve (12) services provide standby coverage at sporting events.
- Ten (10) of fourteen (14) services are having difficulty in meeting call volume demands. Reasons cited include:
    - “with limited personnel, we rely on our mutual aid partners more now than ever.”
    - “during certain times of the year, we experience difficulty in handling overlapping incident and require mutual aid assistance.”
    - “short-staffed”, “need more EMS providers.”
    - “shortage of daytime responders.”
    - “we struggle with per diem shifts and call/volunteer involvement for multiple calls.”
- Five (5) of fourteen (14) services have difficulty in meeting response time goals. Reasons cited include:
    - “the majority of our providers live outside of town.”

    - "we have to wait for off-duty personnel or mutual aid resources during multiple calls."
- One (1) agency reported that they are transitioning to full-time staffing to improve response times.
- One (1) first responder agency reported that they meet their response time goals by equipping all their responders with full medical bags, oxygen, and AEDs.
- The top four (4) biggest staffing challenges are:
    - Recruitment of paid staff
    - Recruitment of volunteers
    - Insufficient numbers of paid staff (full-time and part-time)
    - Lack of qualified candidates
- Most respondents reported that they can provide adequate continuing education for staff.
    - Many use a combination of in-house and outside training opportunities
    - Some use a combination of in-person and online training
    - One (1) agency reported a lack of funds to hire a trainer
- Training needs include:
    - Firefighting training
    - An adequate training room and training aids
    - More participation from members
    - Regularly scheduled EMT and AEMT classes within a reasonable travel distance that are scheduled well in advance
    - Access to training simulators without the need to travel long distances or coordinate acquisition
- One (1) agency reported that it needs additional equipment for its ambulances, including ventilators with CPAP/BPAP[4] capabilities, power load cots[5] and stair chairs, and a video laryngoscope[6]
- The top three (3) facility deficiencies are:
    - Lack of adequate vehicle space
    - Lack of adequate crew quarters
    - Lack of adequate storage space

[4] CPAP: continuous positive airway pressure
BIPAP: bilevel positive airway pressure
A ventilator with CPAP/BIPAP capabilities is a hybrid medical device designed to treat patients in respiratory failure who need precise medical management.

[5] A power-load ambulance cot is a battery-operated stretcher equipped with a hydraulic lifting mechanism and an integrated vehicle fastening system that automates the process of raising, lowering, and securing the patient into the ambulance, thereby minimizing physical strain on emergency responders.

[6] A video laryngoscope is an intubation device equipped with a camera at the tip of the blade that projects a real-time view of the airway onto a screen, allowing the operator to visualize the vocal cords without establishing a direct line of sight.

Other concerns include a lack of adequate administrative space, structural deficiencies, building security, lack of fire protection systems, lack of a vehicle exhaust extraction system, and poor disaster resilience.

- A large majority of respondents reported that they have adequate communications technology.
- All respondents reported that they have adequate broadband/internet service at their facility, and they have up-to-date technology for patient reporting.
- A large majority of respondents reported that they pay for dispatching services.
- The following chart shows EMS agencies ranked and their collaboration and coordination with other agencies:

Rate your collaboration and coordination with the following:

	Excellent	Very Good	Average	Below Average	Poor	Total
Other EMS agencies in Grafton County:	4(30.77%)	3(23.08%)	5(38.46%)	1(7.69%)	0(0%)	13
Fire services in Grafton County:	6(46.15%)	3(23.08%)	4(30.77%)	0(0%)	0(0%)	13
Police agencies in Grafton County:	3(23.08%)	4(30.77%)	6(46.15%)	0(0%)	0(0%)	13
NH State Police:	3(23.08%)	1(7.69%)	6(46.15%)	2(15.38%)	1(7.69%)	13
NH Bureau of EMS:	5(38.46%)	1(7.69%)	6(46.15%)	1(7.69%)	0(0%)	13
Local hospitals:	4(30.77%)	4(30.77%)	5(38.46%)	0(0%)	0(0%)	13
				Total Responded to this question:	13	72.22%
				Total who skipped this question:	5	27.78%
				Total:	18	100%

Figure 1. Survey Summary: Collaboration & Cooperation

Recommendations for improving interagency collaboration and coordination included more meetings, more joint training, increased hospital-led training opportunities, standardized incident command system (ICS) protocols and training, table-top exercises and full-scale drills, improved communications protocols across all agencies, shared technology and group purchasing, region-wide planning, mutual aid compacts and sharing agreements for specialized equipment, enhanced incident debriefing, and sharing of metrics to analyze response times, resource allocation, and communications gaps.

- Most services receiving funding from their respective municipal budgets were in a range of 100% to less than half of their budget. Other funding sources include commercial insurance reimbursements, government insurance (Medicare/Medicaid) reimbursements, direct pay by patients, grants, and private donations through fundraising.
- All patient transport services bill patients for their services; only one non-transport first responders service bills patients ($75 flat fee).

- Six (6) of thirteen (13) services have a written agreement with their service community(s) that include agreed upon expectations for service delivery.
- Respondents were asked, "In a few words, what are the three (3) greatest challenges that your organization will face in the next 3-5 years."

Based on the survey responses, the greatest challenges facing EMS agencies in the next 3–5 years fall into three distinct categories, with **staffing** being the overwhelming primary concern:

Personnel and Staffing Crisis

Almost every respondent cited staffing as a critical issue. Specific challenges include:

- **Recruitment and Retention:** High turnover rates, difficulty finding certified providers, and the retirement of senior staff.
- **Transitioning Models:** The struggle to move from "call/volunteer" models to full-time career staffing.
- **Workforce Conditions:** Issues regarding affordable housing for employees and competitive disadvantages in shift schedules (e.g., 3-shift vs. 4-shift systems) compared to peer agencies.

Financial Sustainability

Agencies are facing a "financial burden" from multiple angles:

- **Rising Costs:** Increased expenses for equipment, apparatus replacement, and adding necessary staff.
- **Poor Reimbursement:** Medicare reimbursement rates that do not cover the cost of services, despite recent legislative adjustments.
- **Taxpayer Burden:** The difficulty of balancing service needs with the financial impact on local taxpayers.

Operational and Structural Strain

Agencies are struggling to adapt their infrastructure and systems to current demands:

- **Facilities:** A lack of adequate building space to house staff and equipment.
- **System Design:** A need for "regionalization" or creating EMS systems separate from fire department systems to ensure clinical excellence.
- **Service Demands:** managing increasing call volumes, town growth, long-distance transports due to hospital bypasses (STEMI/Trauma)[7], and a lack of preparedness for mass casualty incidents.

[7] STEMI: ST-Elevated Myocardial Infarction is a severe type of heart attack caused by the complete blockage of a coronary artery. STEMI and trauma patients are often transported to a hospital with specialized capabilities instead of the closest critical access hospital.

Survey respondents were asked, “What additional concerns, ideas, or suggestions do you have concerning the delivery of EMS in Grafton County?”

The feedback regarding “additional concerns and suggestions” centers on the friction between **rural geography**, **rising costs**, and **operational models**.

Here is a summary of the key themes:

The Push for Regionalization and County Leadership

Several respondents argue that the current town-by-town model is unsustainable for smaller communities.

- **County Involvement:** There is a specific call for Grafton County to take a “leadership role” in providing regional services for towns that cannot support their own, like Cheshire County and other county-based models outside of New England.
- **Hub-and-Spoke Reliance:** Larger agencies (e.g., Plymouth, Littleton) are increasingly relied upon to cover rural, non-contracted communities. While some respondents view this as a sustainable model (citing successful cardiac saves via shared resources), others note that it overworks the covering agencies and strains resources without adequate funding.

Financial Realities vs. Service Expectations

A major theme is the disconnect between the cost of readiness and available funding.

- **The Cost of Readiness:** One respondent provided a detailed breakdown, noting that a 24-hour ALS ambulance costs roughly **$1 million annually**.
- **The Tax Gap:** Billing revenue and small town contributions ($140k–$280k) do not cover the full cost. The deficit must come from the tax base.
- **The “Cheap vs. Fast” Trade-off:** Respondents warned that if towns want “cheap” EMS, they must accept significantly longer response times (30+ minutes). If they want geographically close ALS, they must pay significantly more.

Operational Models: Fire vs. EMS

Respondents highlighted the need to re-evaluate how EMS fits into the emergency response hierarchy.

- **Volume Reality:** It was noted that 80% of calls are medical, yet the focus and funding often remain on fire services.
- **Staffing Integration:** Successful models were highlighted where fire departments provide first response (personnel/AEDs) while a regional service provides transport.
- **Innovation:** Suggestions included utilizing paramedic fly-cars (non-transport vehicles) to allow advanced care clinicians to respond where and when needed

Demographic Pressures

Small communities are reportedly "overlooking" EMS needs despite growing risks.

- **Population Shifts:** An increase in older residents and second-home owners is driving up call volume.
- **Lack of Basics:** Some communities reportedly do not even provide basic first response services, forcing total reliance on mutual aid.

CHAPTER VI. SCOT ANALYSIS OF EMS IN GRAFTON COUNTY

The purpose of this **SCOT** analysis is to provide a comprehensive framework showing the **strengths, challenges, opportunities,** and **threats** facing the Grafton County region relative to providing high quality emergency medical response and care. A SCOT analysis is an important component of a strategic plan for improving EMS services.

The MRI assessment team has created this SCOT analysis based on our in-person interviews, the online survey, statistical analysis, response area mapping, and direct observation during field visits. We recommend that this analysis be reviewed and updated on an annual basis as conditions change. Individual agencies may find it helpful to perform their own SCOT analysis.

STRENGTHS: **Strengths** are those areas that should be built upon or enhanced to ensure future resilience and can be leveraged to offset challenges and threats.

CHALLENGES: **Challenges** can be strategic or tactical in nature, but often point to the areas where the county and its EMS agencies should direct resources to critically deficient areas. Identifying a challenge should NOT be considered a criticism of past decisions or actions.

OPPORTUNITIES: **Opportunities** can focus on innovative ways for the county and its partners to implement cost-effective solutions that have long-range benefits. Opportunities can be aspirational and reflect thinking that is outside the box".

THREATS: **Threats** are not always under the control of the county or its EMS services, but their impact can be mitigated with thoughtful, intentional planning and problem-solving.

Strengths:

- **Tenured Leadership:** EMS agencies in the county benefit from experienced leaders who provide organizational stability, calm demeanor at emergency incidents, and provide trusted expertise to select boards, city councils, and town meetings.
- **Recruitment:** Although also a challenge, EMS agencies have been successful in recruiting qualified trainees and experienced EMS providers.
- **AED Operational Capability:** Fire departments, EMS agencies (ambulance and FAST, including some personal vehicles), and some police departments are equipped with automatic external defibrillators (AEDs).
- **Problem Recognition:** Most EMS providers and leaders are aware of the challenges facing EMS in Grafton County and can clearly articulate potential solutions.

- **Fire Service Recognition of EMS Issues:** Fire departments and the fire mutual aid systems in the county recognize their role in improving EMS, particularly since EMS incidents can account for 75% or more of a fire department's responses.
- **Current Staff Capabilities:** EMS providers, both volunteer and career, are well-trained and continue to adapt to the many challenges facing EMS.
- **Clinical Care:** Patients in Grafton County are provided with excellent, high-quality emergency medical care by their EMS providers.
- **Hospital Support for EMS:** All of the acute care and critical access hospitals that serve Grafton County provide significant support to EMS through medical direction, quality assurance oversight, and continuing education programs.
- **Mobile Integrated Health Care (MIH):** Lebanon Fire Department, Littleton Fire Department, Lisbon EMS, and Linwood Ambulance have established MIH programs to deliver in-home, health and safety services to at-risk residents in an effort to prevent injuries in the home and reduce their reliance on 911 services, reduce ED admission or re-admission to the hospitals from preventable accident injuries or chronic disease conditions.
- **Increased Medicaid Reimbursements:** In 2023, NH increased the Medicaid reimbursement rate to equal the Medicare reimbursement rate.
- **Statewide Ambulance Billing Rate for Insurers:** Effective January 1, 2026, private insurers can be billed at 350% of the Medicare reimbursement rate. Medicare and Medicaid rate increases are beneficial to the financial stability of EMS agencies.

Challenges:

- **Reimbursement Rates:** Even with recent increases, insurance reimbursement rates (private and governmental) do not reflect the actual cost of responding to emergencies and providing care.
- **Recruitment and Retention**: Low wages, long hours, high stress, reduced candidate pool, and cost-of-living factors have created significant challenges in recruiting and retaining career and volunteer EMS providers.
- **Staffing Levels:** Most EMS agencies are operating with staffing that can cover the first call and then rely on mutual aid for simultaneous events. Fire departments often staff an ambulance and a fire pumper with the same personnel. Mutual aid or off-duty personnel are called in to handle additional calls for fire or EMS. Staffing levels have

not kept up with increased demand for service, and overtime expenditures can be high. Agency chiefs are often required to staff ambulances, which takes away from their administrative duties.

- **Loss of Volunteers:** Fire departments and EMS agencies have experienced a significant drop in the number of volunteers and on-call personnel. The remaining cadre of long-standing volunteers is aging out.
- **Taxpayer Support:** Garnering community support for the cost of EMS can be extremely difficult.
- **Limited Access to EMS Training and Continuing Education:** Training is costly and time-consuming, with extended travel times to reach specialized training. Instructor availability is limited.
- **Many EMS Stations Don't Meet Current Needs:** EMS facilities throughout the region have not been updated to meet current occupational health and safety standards, have inadequate space for vehicles, duty crews, administrative services, training, storage, and lack disaster resilience.
- **Critical Access Hospitals (CAH) Experience Delays in Transferring Critically Ill Patients to a medical center better suited to care for the patient**: Interfacility transfer (IFT) ambulances are often unavailable or delayed due to travel times, resulting in the inability of critically ill patients to receive specialized care within desired time frames.
- **Data Systems and Technology Are Not Fully Utilized:** Existing data systems are complex and are not effectively used for planning, monitoring trends, and improving resource allocation.

Opportunities:

- **Communities Have the Opportunity to Establish or Enhance FAST Teams:** Communities not currently served by their own ambulance service and/or FAST team could save lives and improve patient outcomes by establishing a first response unit. Existing FAST teams need more volunteers.
- **The County and Communities Have the Opportunity to Establish Public Education Programs:** Cardio-pulmonary resuscitation (CPR), automatic external defibrillator (AED), Stop The Bleed®, and naloxone training for the general public is proven to save lives as they often are at the patients' side upon discovery of the

emergency. Programs can be established in partnership with schools, service organizations, and faith organizations.

- **The County Has an Opportunity to Promote Recruitment and Retention of Volunteers:** A county-wide volunteer recruitment and retention program for fire and EMS agencies could serve as a referral clearinghouse for volunteer vacancies, promote the benefits of community service, partner with schools and colleges to promote volunteerism by young people, and serve as a gateway to a career in EMS.
- **The County Has an Opportunity to Facilitate Strategic Planning for EMS:** The county could serve as an impartial facilitator to bring stakeholders together to collaborate, consider mergers and resource sharing, and plan for the future of EMS in Grafton County.
- **Communities Have the Opportunity to Support and Expand Multi-Community EMS:** Initiatives currently underway in Plymouth, Lebanon, and Littleton are examples of coverage and response systems that can be joined or modeled by other towns.
- **The County Has the Opportunity to Advocate for EMS Funding at the State and Federal Level:** The county can advocate on behalf of its EMS providers for sustainable reimbursement rates and funding for training, equipment, vehicles, facilities, and technology.
- **The County Has the Opportunity to Advocate for Improved EMS Data:** The county can advocate on behalf of its EMS providers for the NH Bureau of Emergency Medical Services to provide data and statistics for planning and resource allocation.
- **EMS Agencies Have the Opportunity to Provide Resilience Training for Personnel:** Resilience training provides personnel and families with skills to cope with the challenges and stresses of EMS work.
- **EMS Agencies Have the Opportunity to Provide Leadership Training and Professional Development Planning:** Professional development plans, leadership training, and mentoring will prepare the next generation of EMS leaders.
- **The County, Communities, and Hospitals Have the Opportunity to Invest in Communications Infrastructure:** Continued investment in communications infrastructure and information technology systems will ensure reliable dispatching, balanced resource allocation, effective medical control, and future implementation of advanced telemedicine capabilities.

- **Communities and Hospitals Have the Opportunity to Implement and Expand Mobile Integrated Health (MIH) Programs:** MIH programs are proven to improve patient outcomes, reduce hospital readmissions, and save health care costs.
- **EMS Agencies and Hospitals Have the Opportunity to Strengthen Mass Casualty and Disaster Planning and Training:** Comprehensive mass casualty and disaster plans, training, exercises, and drills will strengthen the region's resilience from catastrophic events.

Threats:

- **Economic Downturn: An** economic downturn could result in reductions in state and local funding for EMS.
- **Reductions in Allowable Reimbursement Rates:** Medicare and Medicaid reimbursements could be reduced. The statewide rate for private insurance reimbursement will be re-evaluated and updated in 2027 based on a yet to be determined actuarial review.
- **Loss of Insurance Coverage:** Individuals who lose government or private health care insurance may not have the means to pay for EMS care.
- **Closure or Reduction of Local Health Care Resources:** If hospital, urgent care, or primary care facilities close or reduce the level of service, EMS providers will be required to fill the gap.
- **Overuse of Mutual Aid to Meet Daily Demands:** Mutual aid is intended for use in unusual or large-scale events, not to support daily EMS operations. Overuse of mutual aid incurs unplanned costs and strips coverage from a wide area.
- **Climate Change:** Climate change has been proven to result in increased frequency and severity of disasters, including high wind events, severe storms, flooding, drought, and wildfire, all of which increase EMS demand and the need for comprehensive planning, drills, and exercises.
- **Increased Costs for Equipment and Vehicles:** The costs for ambulances, specialized equipment, and medical supplies continue to increase at rates well above inflation.
- **Aging Population:** As the county's population ages, demand for EMS will continue to increase.

CHAPTER VII. MAPPING

MRI and CAI Technologies have partnered to create a dynamic online GIS mapping tool that provides the county and its EMS stakeholders with a visual representation of the Grafton County EMS system. This tool is a valuable asset for pinpointing current capabilities and planning for the future. The website URL for the mapping tool is provided to the county commissioners and can be shared with interested parties.

The EMS mapping tool is multi-layered and shows a wide range of attributes and data that can be turned on and off depending on the needs of the user. Attributes and data include:

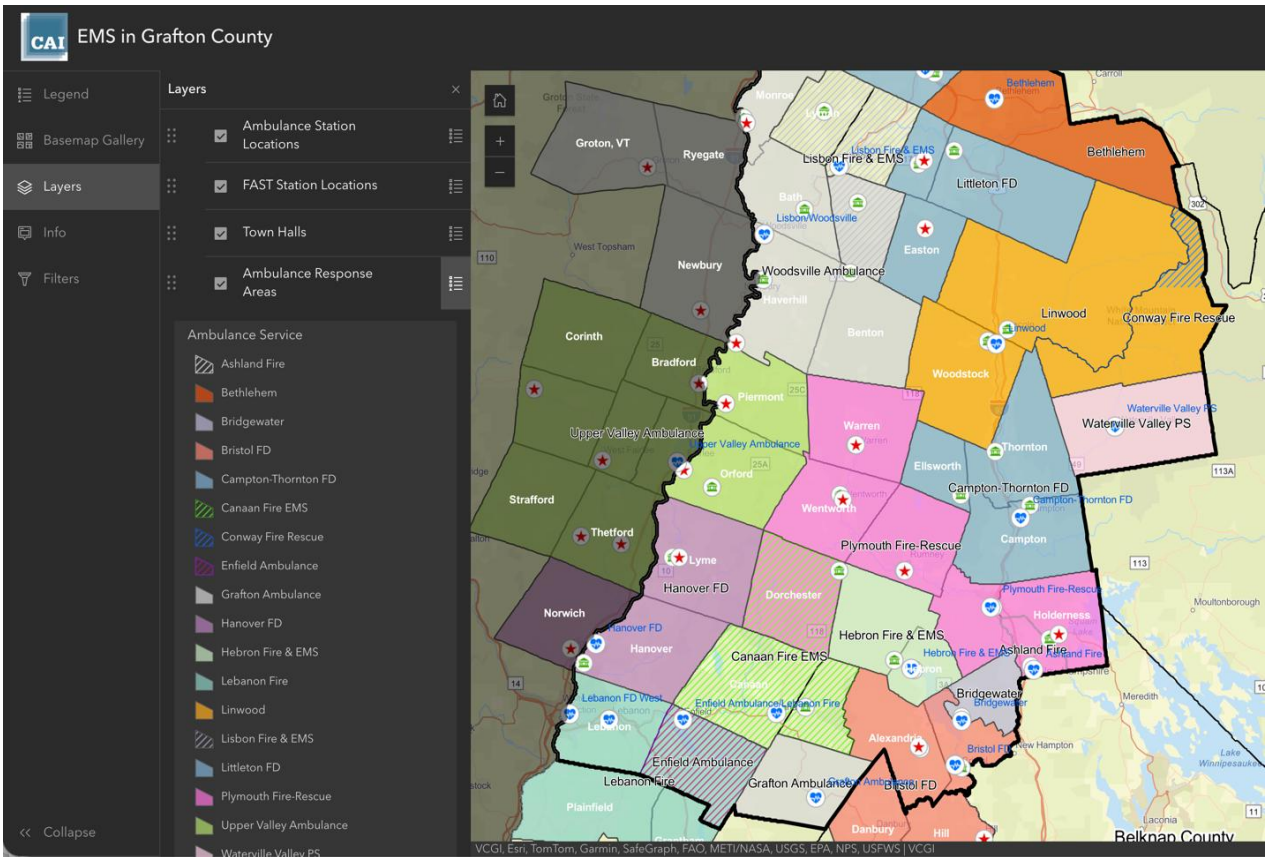
- Ambulance station locations
- FAST squad station locations
- Ambulance response areas by service
- ALS response areas by service
- Drive times from stations to areas within each community
- Municipal boundaries

By clicking on a town, the user can see the following data for that town:

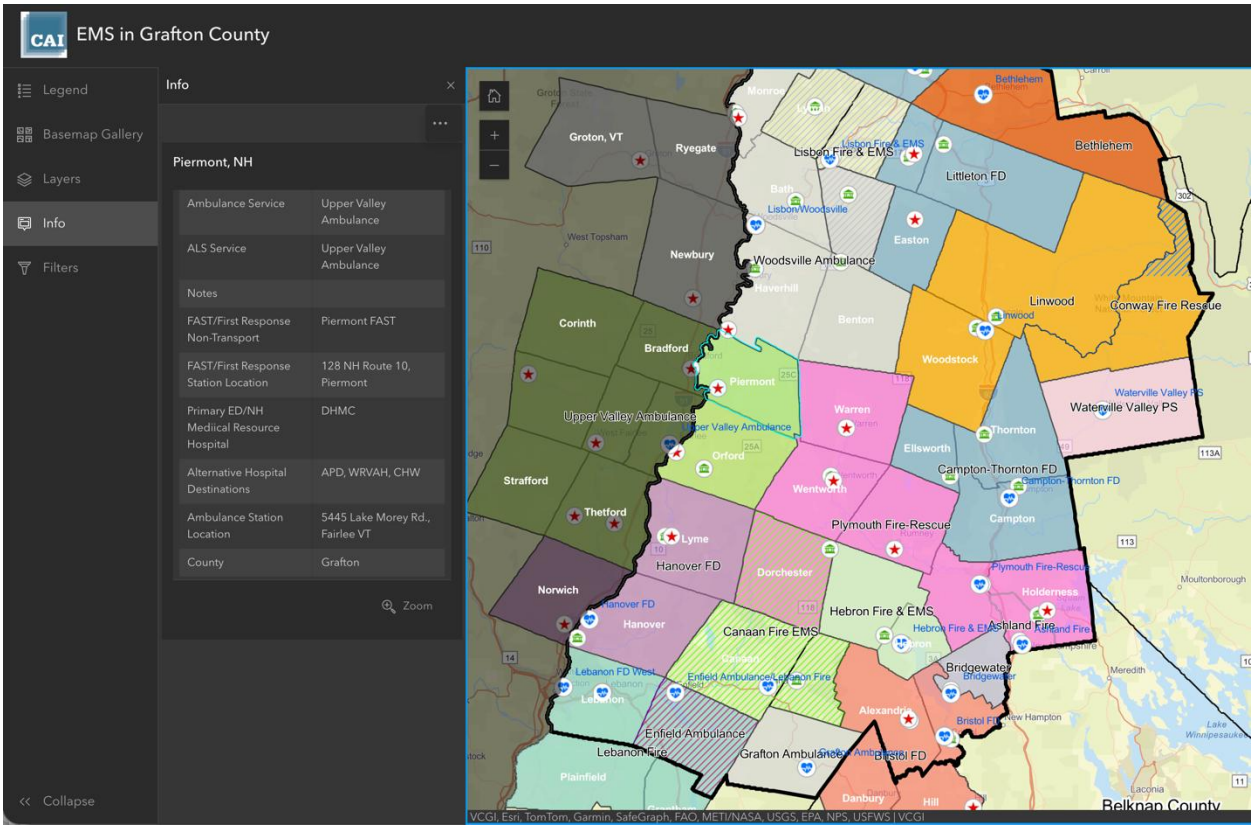
- Ambulance service
- ALS service
- FAST squad
- Station address(s)
- Primary hospital
- Alternate hospital(s)

Users can also select a wide variety of basemap layers, including road network, topographic terrain, and satellite view.

The screenshots below show examples of the mapping tool features.



Map 1. Ambulance Response Areas



Map 2. Ambulance Response Map showing information for the Town of Piermont.

CHAPTER VIII. EMS FINANCE

Ambulance services in New Hampshire are funded through a complex mix of patient insurance reimbursements (Medicare, Medicaid, and private health insurance), local property taxes, municipal contracts, and occasional grants and donations. Unlike police and fire services, emergency medical services are not universally classified as an essential service mandate for towns. As a result, there are significant variations in funding structures and service availability across the state, particularly in rural areas.

Ambulance services may only charge and be reimbursed for medically necessary care and/or transportation of a patient.

- Medicare currently does not reimburse for treatment in place without transportation.
- NH Medicaid does reimburse for medically necessary treatment without transportation at a set rate of $93.60
- Commercial health insurers are starting to see the value of treatment-in-place at a percentage of their established rate schedule.

Key Funding Sources:

- **Insurance Reimbursements:** The primary sources of revenue come from billing patients' health insurance programs. Medically necessary ambulance services are reimbursed as a medical transportation benefit. Historically, reimbursements from Medicare and Medicaid are well below the actual cost of service. In 2023, NH Medicaid modified its ambulance fee schedule to match the federal Medicare fee schedule for New Hampshire, which provided some relief to EMS revenue levels. In 2025, SB 245 was passed to improve the fiscal infrastructure of NH ambulance services by setting a temporary two-year reimbursement rate for in-network commercial health insurers at 325% of the current Medicare rate and banning surprise billing (balance billing) to patients. The legislation commissioned an actuarial study to develop a methodology for a cost-based reimbursed formula that is equitable for all.

- **Patient Fees and Billing:** The majority of Grafton County ambulance services outsource their billing to third-party vendors who specialize in EMS billing. Patients are billed for services, and their insurance coverage determines the amount paid to the service and the final out-of-pocket costs to the patient based on benefit levels, co-pays, and deductibles. SB 245 protects consumers from balance billing by out of network providers, ensuring they are only responsible for paying the in-network cost sharing amounts.

Below are the four primary sources of revenue for services in Grafton County.

- **Medicare:** Provides coverage for those age 65 and older or those who are on Supplemental Social Security Disability and meet qualifications. Ambulance services are covered under Medicare Part B and reimbursed according to the Medicare ambulance fee schedule, which includes adjustments for the geographic location and patient acuity. The specific amount is determined by the patient's location, specific to population density (urban, rural, frontier, or super rural) and the level of care required, e.g., ALS, IFT, or special care transport. Additionally, loaded mileage is charged if the patient is transported. Medicare has an annual deductible currently less than $300 and pays 80% of the bill with a patient co-pay of 20%. Many patients purchase a commercial supplemental Medicare plan to cover the 20% co-pay. Reimbursement to an ambulance service generally covers 45-50% of the actual cost per call. Federal law prohibits services from billing patients for the difference between what Medicare pays, including the amount covered by a supplemental plan, and what the service charges. The difference between what is paid and the service's retail charge must be written off as a contractual allowance.

- **Medicaid:** Medicaid is a state health insurance program that is partially funded by the federal government. It provides a health insurance benefit for those residents who are within 138% of the federal poverty level (higher for specific populations). Medicaid reimburses for medically necessary ambulance transportation according to an ambulance fee schedule that, in NH, currently mirrors the Medicare ambulance fee schedule. Prior to 2023, reimbursement covered 25-30% of a service's cost per call. As with Medicare, state and federal law prohibit providers from billing the difference between what Medicaid pays and what the service charges. The difference must be written off as a contractual allowance.

- **Commercial Health Insurance:** Reimbursement is based on the specifics of the beneficiary's policy and the presence and the specifics of an employer's health savings account. Policy deductibles may range from $500 annually to $6,000 per person/$12,000 per family. A few high-deductible plans ultimately become self-pay accounts with an average collection rate of $.06 on the dollar if the patient has not met the individual or family deductible. It is noteworthy that Medicare Advantage plans have relatively low annual deductibles, but a number include a per-use co-pay of $250-$400 per use of an ambulance service.

- **Self-Pay:** The patient has no insurance or has not met their deductible. After following the individual billing service protocol, these accounts may go to monthly payment plans or be written off to charitable care based on the ambulance service's policies.

- **Municipal Tax Base:** The cost of operating fire and police departments, as well as community or regional public safety telecommunication centers (911 dispatch centers) have long been identified as "essential services" funded by municipalities or county government. 911 ambulance services lack the "essential service" designation despite the fact 100% of the communities have realized the need to provide municipal financial support to their EMS services to assure timely, quality emergency medical ambulance response.

Municipalities and counties in New Hampshire are under chronic financial strain. Unfortunately, fees for services, grant funds, and donations that historically balanced EMS budgets in many communities have eroded. All services recognize that external revenues do not cover the cost of providing care. Services have benefited from modifications in the Medicaid ambulance fee schedule and the establishment of a temporary state mandated rate for commercial insurers. While the latter is a step in the right direction, SB 245 does not overrule the individual policy limits for deductible or co-pays. Additionally, proposed federal changes to Medicaid eligibility rules and reimbursement may dramatically reduce Medicaid reimbursement rates.

The impact of the current EMS funding framework on residents and patients has reached a critical point. Services and municipalities are struggling to stabilize or reduce operational costs while still providing prompt, quality emergency medical care. Revenue options are limited, which means that taxpayers are increasingly being asked to subsidize EMS availability. In Grafton County, one EMS service has recently closed its doors, and several are in a fragile condition.

CHAPTER IX. EMS ORGANIZATIONAL AND SERVICE OPTIONS

Grafton County can consider a number of options for the delivery of emergency medical services, ranging from maintaining the status quo to a complete restructuring of the EMS system. There are dozens of EMS structures throughout the U.S., but we are providing the potential benefits and challenges of nine (9) examples: village districts, agreements between government units, commercial ambulance service, non-profit ambulance service, fire-based ambulance service, non-fire municipal ambulance service, hospital-based ambulance service, and maintaining the status quo. The MRI study team has identified the most significant benefits and challenges of each organizational structure.

VILLAGE DISTRICTS: Pursuant to RSA 52:1, towns can mutually establish a so-called village district for a variety of purposes, including "the maintenance of ambulance services".[8] A village district is a political subdivision that can span multiple municipalities and has its own annual meeting, district commissioners, and taxation authority.

Potential Benefits of a Village District for EMS

- The EMS district would be a regional approach to EMS. Deployment of response vehicles and personnel could be adjusted based on service demands and response times without regard to town lines.
- EMS district boundaries could be established based on proximity of towns, traditional cooperative efforts, operational effectiveness, mutual aid practices, or hospital catchment area.

[8] **RSA 52:1 Establishment. –**
I. Upon the petition of 10 or more voters, persons domiciled in any village situated in one or more towns, the selectmen of the town or towns shall fix, by suitable boundaries, a district including such parts of the town or towns as may seem convenient, for any of the following purposes:
(a) The extinguishment of fires;
(b) The lighting or sprinkling of streets;
(c) The planting and care for shade and ornamental trees;
(d) The supply of water for domestic and fire purposes, which may include the protection of sources of supply;
(e) The construction and maintenance of sidewalks and main drains or common sewers;
(f) The construction, operation, and maintenance of sewage and waste treatment plants;
(g) The construction, maintenance, and care of parks or commons;
(h) The maintenance of activities for recreational promotion;
(i) The construction or purchase and maintenance of a municipal lighting plant;
(j) The control of pollen, insects, and pests;
(k) The impoundment of water;
(l) The appointing and employment of watchmen and police officers;
(m) The layout, acceptance, construction, and maintenance of roads; and
(n) The maintenance of ambulance services.
II. The voters who are domiciled in any village shall cause a record of the petition, pursuant to paragraph I, and their proceedings thereon to be recorded in the records of the towns in which the district is situated.

- Capital budget and equipment planning would be coordinated over a larger area, potentially reducing duplicate efforts to provide specialized vehicles and equipment.
- Uniform training and quality improvement system.
- Some administrative costs and overhead could be reduced.
- The EMS district would be able to recruit EMTs and paramedics who do not wish to serve as firefighters.
- Participation in the NH Retirement System could be an incentive for recruitment and retention.
- Public employees are prohibited from striking.
- All voters in the district would have legislative decision-making authority (voting at annual meeting, approval of budget, election of district commissioners, etc.).

Potential Challenges of a Village District for EMS

- Participating select boards/city council and town/city managers would lose direct control over their respective EMS agencies.
- Existing EMS agencies would be disbanded and/or merged into the new village district EMS entity. This may or may not include the transfer of personnel, vehicles, and facilities.
- Initial start-up costs would be incurred for hiring, establishment of a command structure, establishment of personnel management practices, rules and regulations, standard operating procedures and protocols, mutual aid agreements, and dispatch services.
- It may be necessary to establish new stations or buy ambulances if existing resources could not be leveraged.
- Fire departments could be impacted by the transfer of personnel to the EMS agency
- Unlike commercial or nonprofit EMS employees, public employees must participate in the NH Retirement System which results in higher personnel costs.
- The district would not be able to recruit EMTs and paramedics who also wish to serve as firefighters.
- Difficult to dissolve a village district (requires 2/3 vote at a village district annual meeting).

Village district example to consider: Tilton-Northfield Fire District

AGREEMENTS BETWEEN GOVERNMENT UNITS: RSA 53-A authorizes political subdivisions to enter into agreements *"to provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population and other factors influencing the needs and development of local communities."* Towns and cities can contract with one another to provide EMS services.

Potential Benefits of Agreements Between Government Units

- Does not require the restructuring of an existing EMS agency
- Select boards, etc., retain direct control of EMS services
- Easier to modify or sever a contractual arrangement

Potential Challenges of Agreements Between Government Units

- An agreement can be severed, leaving a municipality that is receiving EMS services without those services.
- The agreement should address ownership of equipment and facilities, responsibilities for personnel management and oversight, and potential revenue sharing.

Agreement Between Government Units example to consider: Campton-Thornton Fire Rescue

COUNTY-OPERATED EMS SYSTEM: Grafton County could establish an EMS service based on the model of Cheshire County EMS. Cheshire County EMS provides 911 ambulance (BLS and ALS) to seven (7) municipalities that had previously been served by a commercial service. They also provide paramedic intercept and back-up ambulance services to additional municipalities throughout the county. Cheshire County EMS provides interfacility transfer services for Cheshire Medical Center/Dartmouth Health. A county-operated EMS system has many of the benefits and challenges of a village district-based system.

Benefits of a County-Operated EMS System

- A county system would be a regional approach to EMS. Deployment of response vehicles and personnel could be adjusted based on service demands and response times without regard to town lines.
- Capital budget and equipment planning based on the needs of the entire county, potentially reducing duplicate efforts to provide specialized vehicles and equipment.
- Uniform training and quality improvement system.
- Some administrative costs and overhead could be reduced.
- The county could establish a county-wide mobile integrated health program (MIH) as part of its EMS delivery.
- The county EMS service could offer interfacility transfer services to the critical access hospitals in the county.
- The county already operates a fire and EMS dispatch center.
- County-wide planning and coordination for mass casualty and disaster events.
- Participation in the NH Retirement System can be an incentive for recruitment and retention.
- Public employees are prohibited from striking

Potential Challenges of a County-Operated EMS System

- Participating select boards/city councils and town/city managers would lose direct control over their respective EMS agencies.
- Existing EMS agencies would be disbanded and/or merged into the county EMS service. This may or may not include the transfer of personnel, vehicles, and facilities.
- Initial start-up costs would be incurred for hiring, establishment of a command structure, establishment of personnel management practices, rules and regulations, standard operating procedures and protocols, and mutual aid agreements.
- It may be necessary to establish new stations or buy ambulances if existing resources cannot be leveraged.
- Fire departments could be impacted by the transfer of personnel to the EMS agency.
- The county would not be able to recruit EMTs and paramedics who also wish to serve as firefighters.
- Unlike commercial or non-profit EMS employees, public employees must participate in the NH Retirement System, which results in higher personnel costs.
- Taxpayers who are not served by the county EMS agency (if not covering the entire county) would be paying for a service that they are not receiving. As an alternative, the system could be set up as an enterprise fund with no taxpayer support.

County-based EMS system example to consider: Cheshire County EMS (the only county-based EMS service in New England)

EMS DELIVERY BY A COMMERCIAL AMBULANCE SERVICE: A commercial ambulance service could contract with the county or with one or more municipalities to provide EMS services.

Potential Benefits of a Commercial Ambulance Service

- Municipalities and the county are relieved of the burden of administering EMS services, including staff, vehicles, equipment, billing and collection, and future capital costs.

Potential Challenges of a Commercial Ambulance Service

- It may be difficult to attract multiple bidders for the service to ensure competitive pricing.
- Commercial services typically require communities to pay to subsidize the service in addition to revenue generated from patient billing and insurance coverage.
- Outsourcing to a commercial service may conflict with existing collective bargaining agreements.

- Fire departments that currently provide EMS services may see a reduction in staff due to loss of revenue and reduction in responses.
- Unlike public employees, employees of commercial ambulance services are not prohibited from striking.
- Participating select boards/city councils and town/city managers would lose direct control over their respective EMS agencies. Resources would have to be dedicated to oversight of the EMS service contract.
- Municipalities may be left with facilities, vehicles, and equipment that are no longer needed.

EMS Delivery by a Commercial Ambulance: examples to consider: Wolfeboro, Manchester, Claremont

EMS DELIVERY BY A NONPROFIT EMS SERVICE: An existing nonprofit EMS service in the county could be expanded, or a new nonprofit EMS service could be established to contract with the county to provide EMS services.

Potential Benefits of a Nonprofit EMS Service:

- Municipalities and the county are relieved of the burden of administering EMS services, including staff, vehicles, equipment, billing and collection, and future capital costs.
- The board of directors of the nonprofit could be county residents, resulting in local control and a local perspective on needs.
- The nonprofit service could be partially supported through private donations and endowments.

Potential Challenges of a Nonprofit EMS Service

- Communities may be required to appropriate funds to subsidize the service.
- Outsourcing to a non-profit EMS service may conflict with existing collective bargaining agreements.
- Fire departments that currently provide EMS services may see a reduction in staff due to loss of revenue and reduction in responses.
- Unlike public employees, employees of non-profit ambulance services are not prohibited from striking.
- Participating select boards/city councils and town/city managers would lose direct control over their respective EMS agencies. Resources would have to be dedicated to oversight of the EMS service contract.
- Unless transferred to the nonprofit service, municipalities may be left with facilities, vehicles, and equipment that are no longer needed.

EMS delivery by a nonprofit EMS service examples to consider: Linwood Ambulance, Upper Valley Ambulance, 45th Parallel EMS (Colebrook), McGregor Memorial EMS (Durham)

FIRE-BASED EMS DELIVERY: Most of the EMS services in Grafton County are currently provided by fire departments.

Potential Benefits of a Fire-Based EMS System

- Personnel are cross trained in both firefighting and EMS which maximizes workforce utility.
- Larger fire departments have the resources to simultaneously deliver fire, rescue, and EMS services at an incident.
- Unity of command is easily established.
- Fire departments typically have higher rates of retention.
- Fire stations are existing resources that are optimally located in community centers.
- Public employees are prohibited from striking.
- Participation in the NH Retirement System can be an incentive for recruitment and retention.

Potential Challenges of a Fire-Based EMS System

- An EMS response can strip the community of fire coverage until off-duty personnel or mutual aid can staff apparatus, and vice versa.
- Unlike commercial or nonprofit EMS employees, public employees must participate in the NH Retirement System which results in higher personnel costs.
- Because EMS incidents are the overwhelming majority of a fire department's responses (often up to 75%), firefighting training and experience may decline.

Fire-based EMS delivery examples to consider: Plymouth, Littleton, Lebanon, Hanover, Keene, Conway

NON-FIRE MUNICIPAL EMS DELIVERY SYSTEM: A municipal ambulance service operates independently of other public safety agencies for administration and staffing.

Potential Benefits of a Non-Fire Municipal EMS System

- The municipal service can recruit EMS providers who do not wish to be firefighters.
- EMS services are not impacted by routine fire calls.
- The municipal service can develop career tracks and promotional opportunities that are specific to EMS.
- The service may be able to share facilities with the fire department.

- Participation in the NH Retirement System can be an incentive for recruitment and retention.
- EMS personnel are in the Group I Retirement System, resulting in a lower contribution rate by the employer as compared to firefighters in Group II.
- Public employees are prohibited from striking.

Potential Challenges of a Non-Fire Municipal EMS System

- Establishment of an additional town department results in increased administrative costs.
- The service may require its own facility.
- Unlike commercial or nonprofit EMS employees, public employees must participate in the NH Retirement System, which results in higher personnel costs.

Non-fire municipal EMS examples to consider: Enfield, Grafton, Woodsville, Henniker, Milford

HOSPITAL-BASED EMS DELIVERY: One or more of the region's hospitals could establish a BLS and ALS ambulance service or a stand-alone non-transport paramedic intercept service.

Potential Benefits of a Hospital-based EMS Service

- Municipalities and the county are relieved of the burden of administering EMS services, including staff, vehicles, equipment, billing and collection, and future capital costs.
- The hospital provides direct supervisory oversight over quality assurance and EMS provider performance.
- During downtime, EMTs and paramedics can be assigned to patient care responsibilities in the emergency department or throughout the hospital.

Potential Challenges of a Hospital-based EMS Service

- If all ambulance responses originate at the hospital, response times to remote areas of the county could be dramatically impacted.
- It may be necessary to enhance community-based first response (fire and FAST team) capabilities if ambulance response times are increased.
- Communities may be required to appropriate funds to subsidize the service due to the current financial restraints faced by hospitals.
- Outsourcing to a hospital-based EMS service may conflict with existing collective bargaining agreements.

- Fire departments that currently provide EMS services may see a reduction in staff due to loss of revenue and the elimination of ambulance transport services.
- Unlike public employees, employees of non-government hospitals are not prohibited from striking.
- Participating select boards/city councils and town/city managers would lose direct control over their respective EMS agencies. Resources would have to be dedicated to oversight of the EMS service contract.
- Unless transferred to the hospital-based service, municipalities may be left with facilities, vehicles, and equipment that are no longer needed.

Hospital-based EMS example to consider: New London Hospital

MAINTAINING THE STATUS QUO OF EMS DELIVERY: The current EMS system in Grafton County has evolved over time and includes fire-based EMS, municipal EMS, independent non-profit EMS, and non-transport volunteer first responder (FAST) units. All communities receive basic life support (BLS) and advanced life support (ALS) services.

Potential Benefits of Maintaining the Status Quo

- Existing organizations, governance, and collective bargaining agreements remain in place.
- Existing protocols, mutual aid agreements, and dispatch coverage remain in place.
- Existing funding mechanisms are maintained (taxpayer supported, combined with patient and insurance billing).

Potential Challenges of Maintaining the Status Quo

- Some communities are vulnerable to the elimination of EMS coverage (e.g., Wentworth, Warren).
- Some communities are paying high premiums for ambulance coverage (e.g., Franconia, Sugar Hill).
- Volunteer fire departments, ambulance services, and FAST teams are in crisis due to a lack of volunteer or on-call paid personnel.
- No coordination of strategic planning for resource needs.
- Coverage and response times are based on municipal boundaries.
- Quality assurance programs vary from community to community.
- Training programs vary from community to community.
- Government insurance (Medicare/Medicaid) reimbursements are at risk.
- Private insurance reimbursements are at risk.
- EMS agencies compete with one another to recruit and retain personnel.
- Tendency to resist change and follow the mantra “we’ve always done it that way”.

CHAPTER X. THE FUTURE OF EMS

In general, the outlook for rural EMS in the United States is defined by a massive structural transition. This chapter describes some of the key issues that will impact the performance and viability of rural EMS through the end of the decade.

Rural Health Transformation Program

The immediate future (2026–2030) will be dominated by the implementation of the Rural Health Transformation (RHT) Program, which is intended to provide the capital necessary to modernize these health care systems, provided organizations and agencies are willing to consolidate and innovate.

Based on the New Hampshire Department of Health and Human Services (DHHS) application submitted in November 2025, New Hampshire is eligible for and expects to receive approximately **$500 million over the next five years** (FY 2026–2030) from the RHT Program. The NH DHHS application ("Granite State Health Transformation Plan") specifically earmarks a portion of this funding for **"Pre-hospital Stabilization and Navigation."** It was recently announced that New Hampshire will be receiving over $204 million in federal fiscal year 2026 for its initiatives, which is significantly higher than expected. The application process for distributing those funds has not been established as of January 2026.

If approved and funded, the plan makes the following projects eligible for direct state grants:

Regional Mobile Integrated Health (MIH) Units: Funding to equip and staff paramedics (i.e., community paramedics) who perform non-transport home visits (e.g., post-discharge follow-ups, wound care) to reduce readmissions.

Telemedicine-Enabled Ambulances: Grants to retrofit ambulances with the connectivity hardware required to bill for "Treatment in Place" (TIP).

Workforce Housing: A unique provision in the NH plan allows funds to be used for "essential workforce retention," which some towns are planning to use to subsidize housing for paramedics and fire/EMS personnel in high-cost-of-living areas.

This influx of funds to New Hampshire is **not** a permanent operational subsidy. It is "transformation capital" that cannot be used to cover existing payroll gaps or buy a standard replacement ambulance. Examples of potentially eligible projects include merging of dispatch centers, launching a community paramedicine consortium, or acquiring technology for ambulance-to-hospital telemedicine infrastructure. Funding is largely contingent on **efficiency and sustainability**. Independent, low-volume agencies are unlikely to receive direct funding unless they demonstrate partnerships or consolidation

with regional systems. A county-based collaboration in partnership with the region's critical access hospitals would likely qualify for project funds.

The "Rural EMS Paradox" Shift

For decades, rural EMS faced a paradox: agencies with the fewest resources and lowest call volumes handled the highest acuity patients over the longest distances.

Previous Outlook: Gradual collapse, hospital closures, and lengthening response times.

2025-2030 Outlook: Consolidation and Clinical Sophistication. Small independent EMS squads are merging into "Health Districts" or regional authorities. The focus is shifting from "transport" to "mobile healthcare," funded by new federal streams that pay for *treatment* rather than just *transport*. Reimbursement reform includes a shift toward paying for Treatment in Place (TIP) and Transport to Alternative Destinations (TAP) (e.g., mental health crisis centers or urgent cares rather than just ERs). This makes community paramedicine/mobile integrated health programs a viable revenue stream.

Workforce: The End of the "Volunteer" Era

The volunteer model has collapsed in all but the most resilient communities. The new outlook focuses on **"Community Emergency Response Networks."**

Hybrid Models: Agencies are moving to "paid-on-call" or full-time staffing models supported by special tax districts.

The Whole Community Concept: In very remote areas, the focus is shifting from "waiting for the ambulance" to empowering immediate community response. Formalized networks of residents (trained in CPR, Stop The Bleed, and basic triage) are being equipped with two-way radios and AEDs to bridge the gap before the ambulance arrives.

Critical Stress Crisis: Retention strategies are shifting toward better benefits, mental health support, and "career ladders" that allow paramedics to work in clinical settings (clinics/hospitals) alongside their field duties.

Operational Innovations: Regionalization & Technology

Unfortunately, the "siloed" town-based ambulance service is becoming obsolete.

Regional Consolidation: Across the US, there is an increase in the establishment of **"Super-Rural" consortiums**—multi-county EMS authorities that share administrative costs, billing, and fleet maintenance while keeping ambulances stationed locally. This allows for "dynamic deployment" (moving ambulances to cover gaps in real-time).

Telemedicine Standards: Telemedicine for EMS is no longer a pilot project; it is a standard of care. Rural ambulances are deploying with high-definition telemedicine kits.

Impact: A paramedic in a remote location can connect via satellite (Starlink, etc.) to a board-certified emergency physician who can authorize critical interventions or clear a patient to stay home, saving a lengthy transport.

AI in Dispatch: Artificial Intelligence is beginning to handle non-emergency triage and "predictive posting," analyzing historical data to place ambulances where calls are *likely* to happen, rather than sitting at a station.

Clinical Focus: Community Paramedicine (Mobile Integrated Health)

Rural EMS is becoming the "primary care safety net."

Preventative Rounds: Community Paramedics (CPs) are now routinely funded to visit high-risk patients (congestive heart failure, chronic obstructive pulmonary disease, diabetes, etc.) *before* they call 9-1-1. This "hospital-at-home" approach is essential as rural brick-and-mortar hospitals continue to close or downsize to freestanding ERs.

Behavioral Health: Specialized CP teams are being deployed for mental health crises, often keeping patients out of the ER entirely.

Ambulance Purchase Costs

As discussed in Chapter III, the cost of purchasing an ambulance continues to increase at a much higher rate than the rate of inflation and can take two (2) years or more for delivery. The fire service is facing a similar challenge with the ballooning cost of fire apparatus. A fire service leadership group recently proposed creating a National Fire Apparatus Specification (NFAS), which would be developed jointly by fire service leaders, engineers, manufacturers, and other subject matter experts. The new specs would be used to create less costly base models for several types of fire apparatus, including standard lines of trucks for rural, suburban, and urban settings. That standardization, which does not currently exist, would allow manufacturers to produce trucks much faster and more cheaply by taking advantage

of economies of scale. EMS could establish a similar concept for ambulances. Instead of each ambulance service developing a customized vehicle specification, they could choose from a standardized model that meets the needs of their region or service area. Combined with group purchasing and coordinated capital equipment planning, Grafton County communities could realize significant savings.

CHAPTER XI. RECOMMENDATIONS

The MRI assessment team has developed the following recommendations that the county commissioners could consider implementing to support the improvement of EMS in Grafton County.

PLANNING:

1. The county commissioners should establish an EMS strategic task group to coordinate and facilitate the planning for the future of EMS that is already underway by the fire mutual aid systems that serve Grafton County. The task group would not supersede the work of the mutual aid systems but would identify synergies, ensure that all stakeholder interests are represented, facilitate efforts to seek funding or grants for EMS initiatives, and advise the county commissioners on issues that they should address or bring to the attention of the legislative delegation. Membership could include representation from the following groups and disciplines:
    a. One member from each of the fire mutual aid districts (Twin State Fire Mutual Aid Association, Lakes Region Mutual Fire Aid, Upper Valley Regional Emergency Services)
    b. One member of a municipal non-fire ambulance service
    c. One member of a non-profit ambulance service
    d. One selectboard member or city councilor
    e. One town administrator, town manager, or city manager
    f. One hospital representative
    g. One municipal or regional planner
    h. Two citizens-at-large

    The task group would report to the county commissioners and could be responsible for the following activities:

    - Monitor and coordinate the EMS planning work of the fire mutual aid systems, hospitals, and other stakeholder groups.
    - Identify and advocate for opportunities for consolidation or restructuring of existing EMS agencies that build on current initiatives for multi-community EMS.
    - Monitor the status of EMS agencies that are at risk of failure and assist with efforts to ensure suitable EMS coverage in the affected response area.
    - Identify and advocate for opportunities for resource sharing.

- Identify and recommend initiatives for coordinated and enhanced training and continuing education offerings for EMS.
- Identify and advocate for opportunities for increased hospital collaboration with EMS.
- Identify and recommend funding and grant opportunities to the county commissioners.

ADVOCACY:

2. The county commissioners should support legislative efforts to make ambulance reimbursement rates sustainable, such as:
    a. Ensuring that the actuarial study of EMS costs mandated by Senate Bill 245 (2025 session, amending RSA 420-J) reflects the actual total cost of providing EMS in Grafton County and that reimbursement rates for private insurers are based on actual costs.
    b. Advocating for Medicare and Medicaid reimbursement rates that are based on actual costs.
3. The county commissioners should advocate, through the legislative delegation or directly to the Department of Safety, for increased availability and visibility of EMS data. For example, the Bureau of Emergency Medical Services should be required to establish an online data dashboard and analysis tools so that EMS agencies and the public can evaluate and compare their operational capabilities and trends. BEMS should also be encouraged to publish an annual report on EMS statistics, trends, and resource needs.

OUTREACH:

4. The county commissioners should establish a volunteer recruitment program for EMS and fire agencies in Grafton County. The program could be modeled after initiatives developed by the National Volunteer Fire Council (NVFC) and the International Association of Fire Chiefs (IAFC). Components could include:
    - Hiring a part-time coordinator.
    - Establishing a database of volunteer opportunities with online or telephone access to the information.
    - Creating marketing materials that could be used by EMS and fire agencies in their respective communities.
    - Establish partnerships with high schools, vocational-technical schools, and the NH Community College system to promote volunteerism and the establishment of EMT courses as part of their curriculum.

- Assist agencies with the development of cadet programs that would be open to young people who are interested in volunteering or a career in EMS.

5. The county commissioners should lead an initiative to establish Grafton County as a "HEARTSafe Community", a community-based approach to improving cardiac arrest outcomes. The program is based on criteria established by the Citizen CPR Foundation (https://citizencpr.org/heartsafe-community/).

FUNDING:

6. The county commissioners should establish a fund to provide FAST teams (including their personally owned vehicles) and police departments with trauma kits and automatic external defibrillators (AEDs) and associated training. Funding could be supported by grants or private donations.
7. The county commissioners should establish a fund to place AEDs and bleeding control kits in publicly accessible locations throughout the county, such as municipal buildings, schools, places of assembly, recreational facilities, and houses of worship. Funding could be supported by grants or private donations.
8. The county commissioners should seek grants and Congressionally directed spending appropriations to support improvements to the county's EMS capabilities based on the recommendations of the EMS strategic task group recommended above.
9. The county commissioners should continue to strengthen county-wide dispatching and radio communications capabilities for EMS to ensure the elimination of "dead spots", upgrading of obsolete technology, and adoption of telemedicine capabilities.
10. The county commissioners should consider the establishment of a group purchasing system for EMS and fire agencies. Group purchasing could reduce the cost of supplies through bulk purchases. Group purchasing of specialized equipment and ambulances could reduce costs through the development of standardized design specifications, centralized bidding, and coordinated capital purchase planning. Group purchasing could also include soliciting proposals for a third-party billing service that would contract directly with participating municipalities and services to perform EMS billing and collection services.
11. The county commissioners should aggressively pursue funding for innovative EMS projects through the Rural Health Transformation (RHT) program.

ORGANIZATIONAL STRUCTURE:

12. There is no single EMS organizational structure that will meet the needs of Grafton County unless stakeholders and taxpayers are willing to commit to dismantling the

current system and establishing a uniform, countywide EMS organization. The MRI assessment team does not believe that this is a feasible approach. We urge all EMS stakeholders in Grafton County to recognize that the current system is not sustainable for the long term due to the fiscal and resource challenges identified in this report. As discussed in Recommendation 1, we recommend that the county commissioners and EMS stakeholders embrace strategic planning initiatives that focus on:

a. Building on the strengths of the existing EMS system.
b. Establishing partnerships, mergers, and multi-community EMS response capabilities.
c. Building a financial model that will sustain first responder, ALS intercept, and ambulance transport availability.
d. Ensuring that EMS in Grafton County keeps pace with ever-changing service demands, new technologies, and evolving patient care protocols and practices.

In conclusion, the sustainability of emergency medical services in Grafton County depends on a collective willingness to adapt to the evolving landscape of pre-hospital care. By addressing the financial and structural challenges identified in this study and implementing the strategic recommendations outlined above, stakeholders can ensure a resilient system capable of meeting future demand. MRI would like to thank the many agency leaders and providers who contributed to this process through interviews and surveys. Your contribution and transparency were vital to understanding the true state of the system. We hope this report serves not merely as an analysis, but as a foundational roadmap for preserving and enhancing public safety across Grafton County.

CHAPTER XII. ABOUT MRI

MRI was founded in 1989 by six former municipal and state government managers, with both public and private professional experience. MRI provides professional, technical, and management support services to municipalities, schools, and non-profit organizations throughout the Northeast. MRI provides technical knowledge and practical experience that others cannot offer because it hires the best in the municipal consulting industry. This is evidenced by a high level of implementation of MRI's recommendations by its clients. MRI's clients have come to expect the organization to provide for whatever they need, and it fulfills their expectations.

MRI's dynamic management staff adapts services to specific client needs. Clients realize that MRI has been in their shoes and has the experience, sensitivity, and desire that it takes to develop and deliver services that specifically meets their needs. The depth of MRI's experience is reflected not only in the experiences of its associates, but in the scope of services it provides its clients, from professional recruitment to organizational and operational assessments of individual municipal departments and school districts, or ongoing contracted services for various municipal government and school business support activities. Municipal Resources has a particularly strong public safety group with nationally recognized expertise in fire and emergency medical services.

MRI's professional staff is always focused on helping its clients solve problems and provide solutions for their future success. We simply work to gain an understanding of past events to build a framework for future success. We do not put forth idealistic, unachievable, or narrowly focused solutions.

MRI'S Philosophy

Municipal Resources, Inc. is committed to providing innovative and creative solutions to the problems and issues facing local governments and the agencies that serve them.

The purpose of MRI's approach is to supplement the efforts of municipal employees and other personnel and enable them to do their jobs well. MRI is committed to supporting and enhancing positive, sustainable communities through better organization, operations, and communication.

This is achieved by:

- Supporting towns, cities, counties, school districts, and other community service agencies with management and technical services to facilitate constructive change within client organizations.

- Conducting studies and analyses designed to assist clients in achieving organizational improvement.
- Advocating and advancing cooperation, coordination, and collaboration between government organizations and related community support agencies.
- Maintaining a staff of highly qualified professional, experienced and open-minded life-long learners to serve as consultants and advisors to clients.
- Maintaining awareness and understanding of advances in "best practices" for delivery of all levels of core community services and related professional management.
- Developing and refining techniques for effective community engagement, information dissemination, and constructive change.

Grafton County EMS Study Project Team

Donald P. Bliss, Project Leader

Donald P. Bliss has extensive experience in emergency medical services, having served as a volunteer EMT, career firefighter-EMT, and as chief of two fire departments that provide ambulance transport services. He is a former chair and vice-chair of the NH Emergency Medical Services Coordinating Board and is the current vice-chair of the board of directors of McGregor Memorial EMS, which services Durham, Lee, Madbury, and the University of New Hampshire.

Bliss is the retired vice-president for field operations at the National Fire Protection Association, where he was responsible for NFPA's efforts to promote the adoption and use of fire and electrical safety standards throughout the world. He completed a 34-year fire service and emergency medical services career, ultimately serving as the Salem, NH, fire chief and emergency management director, New Hampshire state fire marshal, state emergency management director, and governor's homeland security advisor. He led the non-profit National Infrastructure Institute's Center for Infrastructure Expertise and oversaw applied research projects on intermodal cargo container security, US/Canada cross-border emergency planning and response, school safety, and critical infrastructure risk analysis. Bliss is the immediate past chair of the FEMA National Advisory Council and is a Distinguished Senior Fellow with Northeastern University's Global Resilience Institute. He holds a BA in political science and a master's in public administration from the University of New Hampshire.

Bruce Baxter, Subject Matter Expert

Bruce Baxter is a seasoned EMS provider, educator, and leader with over 40 years of experience in EMS systems development, operations, finance, and government affairs. He specializes in implementing cost-effective, high-quality pre-hospital care solutions that improve patient outcomes and meet or exceed stakeholder expectations.

Mr. Baxter has serviced in various roles—clinical provider, educator, manager, consultant, and leader across diverse EMS organizations, including state regulatory agencies, volunteer, paid on call services, for-profit entities, hospital-based organizations, nonprofits, and fire based EMS. His expertise spans frontier, rural, suburban, and urban settings.

He recently retired as CEO/Chief of Service of New Britain Emergency Medical Services, a nonprofit 911 ambulance service and lead EMS response agency for the city of New Britain, CT, after 28 years of transformative and dynamic leadership. He served as the Director of Emergency Medical and Environmental Services at Exeter (NH) Hospital and led the establishment of the Exeter Hospital paramedic response program. He is a former regional coordinator for the NH Bureau of Emergency Medical Services.

APPENDIX A

Municipal
Resources, Inc.

APPENDIX A. SURVEY QUESTIONS

Grafton County EMS Needs Assessment

1. Name of Organization:

2. Type of EMS service (check all that apply):
   - Fire-based ambulance
   - Non-profit ambulance
   - Municipal ambulance
   - ALS provider (transport)
   - ALS provider (non-transport)
   - Non-transport first responder provider
   - If other, please specify

3. Primary service area (towns/cities covered):

4. Approximate population of your primary service area:

5. Staffing:

Number of full-time providers:

Number of part-time paid providers:

Number of volunteer (with stipend) providers: Number of volunteer providers:

6. Number of EMS response vehicles:

Ambulance

First response (non-transport)

ALS intercept

Command

Off-road rescue (please describe)

Trailers (please describe)

Other (please describe)

7. Number of mobile AED units in your primary service area (not on your organization's vehicles):

Fire apparatus

Police cruisers

Other government-owned vehicles

Call Volume and Responses

8. Average annual call volume (past 3 years):

9. Three (3) highest peak volume months:

10. Percentage of calls that are emergency (911):

11. Average response time to emergency calls (from time your agency is dispatched until the first licensed EMS unit arrives on scene):

12. Percentage of calls requiring ALS-level care:

13. Percentage of calls resulting in non-transport:

14. Percentage of calls to a recreational area (e.g., ski area, state park, national forest, hiking trail, snowmobile trail, rail trail, etc.):

15. Percentage of calls for critical care inter-facility transfer:

16. Percentage of calls for non-critical inter-facility transfer:

17. Do you provide event standby services (sporting events, concerts, etc.)?

- Yes
- No

Additional Comments

18. Are you experiencing any difficulties in meeting call volume demands?

- Yes
- No

Additional Comments

19. Are you experiencing any difficulties in meeting response time goals?

- Yes
- No

Additional Comments

Staffing and Training

20. What are your biggest staffing challenges? (Check all that apply)

- Recruitment of paid staff
- Recruitment of volunteers
- Retention of paid staff
- Retention of volunteers
- Insufficient number of volunteers
- Insufficient number of paid staff (part-time and full-time)

- Lack of qualified candidates
- If other, please specify

21. What levels of certification does your staff operate at? (Check all that apply):
    - First responder
    - EMT-Basic
    - AEMT
    - Paramedic
    - If other, please specify
22. Are you able to provide adequate continuing education for your staff?
    - Yes
    - No

    Additional Comments
23. What additional training needs does your organization have?

Equipment and Resources

24. Are your ambulances/vehicles adequately equipped?
    - Yes
    - No
25. If you answered NO to the above question, please explain:
26. Do you have adequate access to medical supplies?
    - Yes
    - No
27. If you answered NO to the above question, please explain:
28. What challenges or deficiencies are you facing with your facility(s)? Please check all that apply.
    - Lack of adequate vehicle space
    - Lack of adequate crew quarters
    - Lack of adequate training space
    - Lack of adequate administrative space
    - Lack of adequate storage space
    - Structural deficiencies (roof, windows, foundation, electrical system, plumbing system, HVAC system, etc.)
    - Lack of adequate building security

- Lack of standby emergency power
- Lack of fire detection or fire sprinkler system
- Lack of vehicle exhaust extraction system
- Poor disaster resilience (flood zone, proximity to high-risk hazards, etc.)

If other, please specify

29. Do you have adequate communications technology (two-way radios, pagers, etc.)?
    - Yes
    - No

    Additional Comments
30. Do you have adequate broadband/internet service at your facility?
    - Yes
    - No

    Additional Comments
31. Do you have access to up-to-date technology (ePCR, telehealth, etc.)?
    - Yes
    - No

    Additional Comments
32. What agency provides your emergency dispatching service?
33. Does your organization pay for dispatching services?
    - Yes
    - No

    Additional Comments

Interagency Collaboration

34. Rate your collaboration and coordination with the following:
    - Other EMS agencies in Grafton County
    - Fire services in Grafton County
    - Police agencies in Grafton County
    - NH State Police
    - NH Bureau of EMS
    - Local hospitals
35. Please describe ways in which interagency collaboration and coordination could be improved.

Funding and Sustainability

36. What are your primary funding sources (check all that apply)?
    - Municipal budget
    - Commercial insurance reimbursements
    - Medicare/Medicaid
    - Direct pay by patients
    - Grants
    - Fundraising/private donations
    - If other, please specify

37. Do you bill for patient transport?
    - Yes
    - No

    Additional Comments

38. Do you bill for patient treatment/non-transport?
    - Yes
    - No

    Additional Comments

39. What percentage of your revenue is derived from:
    - Municipal budget or warrant article
    - Medicare/Medicaid
    - Commercial insurance
    - Self-pay
    - Fundraising/donations

40. Do you have a written agreement with your service community(s) that includes agreed upon expectations for service delivery?
    - Yes
    - No

    Additional Comments

41. What additional concerns, ideas, or suggestions do you have concerning the delivery of EMS in Grafton County?

42. Please provide your contact information:

END OF SURVEY