



THE FUTURE OF EMS IN THE NORTHSHIRE

PRESENTED BY THE NORTHSHIRE RESCUE SQUAD
JANUARY 31, 2022

Tonight's Meeting

1. Background info on Northshire Rescue Squad
2. NRS Staff, Equipment and Response Times
3. NRS Financials
4. NRS Medical Performance
5. Issues with MRI Finding and Plans
6. Vermont EMS Licensing & Training
7. The Path Forward
8. Q & A Session



BACKGROUND INFO

SUSAN HOWARD
PRESIDENT, NRS BOARD OF TRUSTEES

Northshire Rescue Squad (NRS)

NRS is an independent, non-profit organization, in its 58th year of operation

NRS provides emergency medical services to 5 towns in the Northshire

NRS provides paramedic-level service, 24/7/365

NRS responds to over 1200 calls per year

NRS is currently headquartered in Manchester Municipal Complex

NRS has never been a municipal department

The History of the Northshire Rescue

First ambulance was a 1964 Cadillac ambulance donated by a Dorset resident

Back up ambulance was Brewster's Cadillac hearse

Previous headquarters:

- Leo's Motors: 1964
- Adam's Park: 1965 to 1971
- Behind police station & fire house on Depot St: 1971 to 1995

Paramedic-level service began August 2000

Our Mission

Provide prompt and professional EMS services to everyone in the communities we serve

Balance our capacity to serve communities with their needs

Be financially prudent in our operations, with focus on sustainability, value and longrange planning

Earn the reputation of being an organization people want to support

Maintain good relationships with all our partners

- town governments
- other public safety organizations (police and fire)
- regional and state EMS organizations

The Towns We Serve

- Manchester
- Dorset
- Danby
- Mount Tabor
- Winhall
 - Routes 11/30 until the 11/30 split

Management of NRS

Mike Casey: Chief Operating Officer

- Daily operations
- Staffing and scheduling
- Medical equipment and supplies
- Vehicles

Board of Trustees

- Financial
- Governance
- Fundraising
- Public and town relations
- Municipal EMS Board (representatives from the 5 towns we serve)



STAFF, EQUIPMENT & RESPONSE TIMES

MIKE CASEY, PARAMEDIC
COO, NORTHSHIRE RESCUE SQUAD

Northshire Rescue Staff

FULL TIME

- Michael Casey, COO, Paramedic
- Michael Lozito, Paramedic
- Mark Luce, Paramedic
- Jonathan Mazurek, Paramedic
- James Morin, Paramedic
- Craig Bowman, AEMT
- Alan Casey, AEMT
- Edward Muha, III, AEMT
- Jeffery Wheeler, AEMT
- Angelica Towsley, EMT

PER DIEM

- Andy Belcher, Paramedic
- Elizabeth Oakes, Paramedic
- Inge Smith-Luce, Paramedic
- Katie Vandale, Paramedic
- Tom Crowe, AEMT
- Rebecca Roy, AEMT
- Randy Summers, AEMT
- Carrie Dopkins, EMT
- Mikhaila Shum, EMT

VOLUNTEERS

- Linda O'Leary, EMT
- Stephen Mathias, EMT

EMS Crews

Crews are composed of two staff members

- strive for 1 Paramedic on each crew
- minimum staffing requirements:
 - state minimum: 1 EMR & 1 EMT
 - MRS minimum: 1 EMT & 1 AEMT
 - minimum of 1 paramedic preferred per shift

3 daily shifts

- 6:00 am to 6:00 pm
- 9:00 am to 6:00 pm
- 6:00 pm to 6:00 am

2 crews are on duty from 9 am to 6 pm

- heaviest call volume period

1 crew is on duty 24/7/365

EMS Education and Training

- Emergency Medical Responder (EMR)
 - 45 hr. initial course
 - 24 hrs. continuing education every 2-year recertification cycle
- Emergency Medical Technician (EMT)
 - 150 hrs. didactic plus clinical requirements (usually taught over 6 months)
 - 72 hrs. continuing education every 2-year recertification cycle
- Advanced Emergency Medical Technician (AEMT)
 - EMT plus 150 hrs. didactic and clinical requirements (usually taught over 6 months)
 - 72 hrs. continuing education every 2-year recertification cycle
- Paramedic
 - EMT plus 2-year college course involving didactic, hospital clinical time & ambulance clinical time
 - 72 hrs. continuing education every 2-year recertification cycle

Vehicles

3 Ambulances

- 2021 Ford E450 4WD Osage ambulance
- 2017 Ford F350 4WD Osage ambulance
- 2015 Chevrolet G3500 Osage ambulance

All ambulances are fully-equipped for paramedic-level services

Medical Equipment

Each ambulance is outfitted with:

- Stryker Power Cot
- Zoll X Series Cardiac Monitors
- Medications for advanced life support during transport
- Zoll Autopulse
- Intravenous pumps
- Oxygen tanks
- Specialized equipment to assist with various illnesses and injuries

Cost to outfit each ambulance:

- \$100,000

Service Calls: FYE 6/30/21

TOWN	SERVICE CALLS	PERCENT
Manchester	781	69%
Dorset	234	21%
Danby	82	7%
Mt. Tabor	16	1%
Winhall	14	1%
Other Towns	13	
Mutual Aid	80	
Hospital Transfers	14	

Response Times in 2021 (over 1200 calls)

TOWN	ENROUTE	ARRIVED AT SCENE	LEFT SCENE	ARRIVAL AT DESTINATION	UNIT BACK IN SERVICE
Manchester	3:48	10:57	31:08	1:04:13	2:05:01
All Towns	3:57	13:12	34:27	1:07:40	2:09:02

All times are from when NRS is notified

NRS Community Service

CPR Training

- usually the first Monday of the month
- special times and classes upon request
- classes include AED training and first aid upon request

Ambulance coverage at local events include:

- Burr & Burton graduation
- Burr & Burton football
- Vermont Summer Festival Horse Show
- Maple Leaf Half Marathon



NRS FINANCIALS

JIM SALSGIVER
TREASURER, NRS BOARD OF TRUSTEES

2021/2022 Budget Overview (simplified)

INCOME	
Medical Revenues	\$540,000
Donations & Subscriptions	\$215,000
Municipal Operations Support	\$195,000
Municipal Ambulance Support	\$75,000
Other	\$40,102
TOTAL	\$1,065,102

EXPENSES	
Payroll & Benefits	\$707,000
Rent & Dispatch	\$125,000
Ambulance Lease	\$65,000
Medical Billing & Collections	\$60,000
Medical Equip. & Supplies	\$35,000
Vehicle Fuel & Maintenance	\$25,000
Other	\$91,511
TOTAL	\$1,108,511

Medical Billing

Billing administered by New England Ambulance Billing.

- experienced medical billing firm in Vergennes, VT
- 11% commission paid on collections
- aggressively pursue payments from Medicare, Medicaid, private insurance and patient-direct
- 92% collections rate on all allowable charges

All patients are billed for services, regardless of transport

- Medicare and Medicaid reimbursement only for hospital transport
- private insurance companies follow suit
- our subscription program fills in the gaps (\$0 out-of-pocket costs for subscribers)

All subscription administration is handled in-house

- some squads pay their medical biller to administer

Annual Fund

2021-2020 Campaign

- 5000 letters mailed in November to Grand Lists of all supported towns
- Currently 6 months into the campaign
- Goal: \$95,000
- Funds raised to-date: \$98,989
- 453 donors

Total Fundraising (annual fund, subscriptions, additional donations)

- Goal: \$215,000
- Funds raised to-date: \$221,164

Subscription Program

Annual EMS “insurance” program

Grass-roots funding mechanism for NRS

\$110 fee per household

100% of patient costs are covered, whether patient is insured or not

- NRS bills patient’s insurance company, Medicare, or Medicaid
- all out-of-pocket cost (deductibles, non-covered costs) are covered by NRS

2021-2020 Subscriptions (Aug. 1 – July 31)

- postal patron mailing to all towns served
- 777 subscribers (to-date), 501 from Manchester (65%)
- goal: \$95,000
- revenue to-date \$85,335

Municipal EMS Services Board

Formed in 2017 with NRS and all 5 supported towns

- method of communication between NRS and towns
- NRS reports on finance and operations
- 1 representative from each town
- 2 meetings per year intended
- voting rights reflect each Town's population

All towns agreed to one system of municipal support

- operations support based on call volume per town
- new ambulance support based on each town's population

Has this board worked well?

- not as well as hoped
- town reps have not felt the need to meet when asked
- NRS has been communicating well with reps, but reps have not communicated well with selectboards
- suggestion: town reps should include selectboard members

Municipal EMS Services Contracts

Contract needs to be executed by all 5 towns

First contract was signed by all towns in July 2017

Contract expired on 6/30/2020

- Manchester has refused to sign contract for 18 months
- Manchester has paid for services through 6/30/2022

Manchester Municipal Support

YEAR	GROSS AMOUNT	% INCREASE	NRS RENT & DISPATCH	NET AMOUNT	YEAR-TO-YEAR INCREASE
FYE 6/30/18	\$119,637		\$105,000	\$14,637	
FYE 6/30/19	\$144,296	20.6%	\$105,000	\$39,296	\$24,659
FYE 6/30/20	\$149,697	3.7%	\$105,000	\$44,697	\$5,401
FYE 6/30/21	\$179,287	19.8%	\$105,000	\$74,819	\$29,590
FYE 6/30/22	\$183,819	2.5%	\$110,000	\$73,819	\$(468)
FYE 6/30/23	\$190,969	3.9%	\$110,000	\$80,969	\$7,150
AVERAGE		9.8%			\$13,266



NRS MEDICAL PERFORMANCE

DR. BOB SCHWARTZ
NRS MEDICAL OFFICER

NRS Medical Performance

No medical issues ever reported to...

- NRS medical officer
- District 12 EMS board (*from Dr. Daniel Perregaux, EMS District 12 medical officer*)
- Vermont EMS board (*from Dr. Daniel Wolfson, state EMS medical director*)

My personal experience with NRS medics...

- professional
- prompt
- well trained

Mission Lifeline tracks data on rescues of persons over 35 with chest pain

- NRS has a 100% record of EKG's given

Need for Paramedic-Level Services

Paramedic-level services are critical in rural areas like Manchester

- 25-minute drive to SVMC or RRMC
- paramedics can dispense life-saving drugs during transport
- Paramedical-level service can make the difference between life and death

NRS has done a great job growing their paramedic staff

NRS second ambulance crew

- implemented in 2015
- critical to level of care in the Northshire

Public/Private Partnerships

Vermont does not have any public/private ambulance services
The risk in these partnership is shouldered by the public entity



MRI FINDINGS & PLANS FOR MANCHESTER

BEN WEISS
NRS ADVISORY BOARD MEMBER

Jan. 11th Selectboard Meeting

A consultant (Municipal Resources, Inc.) presented slides from their recent study

- Manchester hired MRI to study EMS in Manchester only
- MRI's full report has not yet been submitted

Same consultant was hired by Manchester and Dorset in 2015

- to report on public safety (police, fire and rescue) in the Northshire
- 2015 report concluded more consolidation of public safety needed
- rescue services were then, and still are, consolidated

Current study focused exclusively on Manchester

- consultant seemed to ignore the fact that NRS serves 5 towns
- the single-town focus directly contradicts their 2015 report
- 9 of 20 findings in the study are based upon NRS not being Manchester-centric

MRI's Questionable Findings (1)

No actions taken on MRI's 2015 consolidation plan

- NRS board members took significant action
- MRI recommended consolidation in 2015, now recommending focus on Manchester

Response times are excessive considering a staffed unit is based in Manchester

- consultant used an urban standard, not rural
- consultant seemed to ignore that NRS serves 5 towns
- lights and sirens are not used in non-critical calls

Manchester Public Safety officials indicated regular complaints/concerns

- NRS has received none of these complaints
- we can't fix potential issues that we are not informed of
- NRS has received positive feedback from police, fire and state EMS boards

MRI's Questionable Findings (2)

Internal culture of NRS not focused on Town of Manchester

- we serve 5 towns in the Northshire
- how can an assessment of culture be determined by interviewing only 1 staff member

Manchester pays 68.5% of muni. support, but only 49.9% of population served

- EMSB contract calculates municipal fees based on call volume
- 70% of all service calls are in Manchester
- Manchester pays only 6% of NRS budget
- due to our fundraising (25% of our budget) all 5 towns served get a great deal on EMS

Despite largest stakeholder, the town has little power to effect change at NRS

- Manchester has 4 votes on Northshire EMS Board (Dorset 2 votes, all other towns 1 vote each)

MRI's Questionable Findings (3)

Manchester's EMS costs rising too fast - 14% annual increase

- 5-year average increase is 9.8% (including ambulance funding)
- 2.5% increase this fiscal year
- 3.9% increase next fiscal year

Revenue stream is not optimized & medical biller charges too much

- NRS treasurer periodically compares our billing rate to other Vermont EMS organization
- a recent review showed that NRS charges 110% of 5 similar squads
- our biller has a 92% collections rate on all "allowable" bills (Medicare/Medicaid max.)

MRI's Suggested Options

1. Continue services with Northshire Rescue Squad

- sign agreement
- enhance communications

2. Create a Town EMS department

- taxpayer-funded
- public/private partnership with local healthcare organization

3. Contract with a for-profit ambulance service

- not considered a viable option in this area (too few customers to make money)

Issues with Option 2

Consultant considers this to be the costliest option

- \$92,500 consulting fees (1 .25 years of what Manchester currently pays for EMS services)
- ambulances need to be purchased (minimum 2-year wait for new ambulances)
- medical equipment and supplies need to be purchased
- loss of \$225,000 - \$250,000 in annual donations

\$500,000 of ARPA money used to fund setup costs

- this would take ARPA funds away from necessary infrastructure projects in Manchester

Significant effort involved in getting the plan implemented

- department head and medics would need to be hired (Vermont and national shortage of medics)
- another budget to review and approve annually
- Town would need to develop HIPPA protocols

Other issues

- increases the number of Town employees, injury exposure and liability costs
- creates uncertainty within the 4 other towns currently served by NRS

Issues with Option 2 Plus

Option 2 Plus has most of the problems/issues of Option 2

- start-up costs
- staffing
- injury and liability
- significant start-up effort
- takes ARPA money away from other projects
- create uncertainty with surrounding towns

Adds a private partnership to help with funding

- the private partner was not disclosed
- terms and conditions of the partnership were not disclosed

Significant risk to Town if private partner fails to hold up their end of the bargain

Questions You Should Ask? (1)

Are the plans for a Manchester EMS department even feasible?

- was consultant aware of potential licensing issues?
- consultant's plan calls for Town EMS service to be set up by July 2023 – is this possible?
- does Town Manager have the desire or the bandwidth to oversee an ambulance service?
- “If you are going to make a change in EMS delivery system now is the time.” Does this make any sense?

Will new EMS department be paramedic-level or basic life support?

- paramedic-level services are essential, due to hospitals being a 25-minute drive away

How many ambulances and in what condition are these units?

- Manchester purchased and leased an ambulance to NRS in 2014
- we assume the Town would repossess this ambulance from NRS – it is our oldest with 125,000 miles
- NRS sells ambulances when they are no longer feasible to operate (downtime and expense)

Questions You Should Ask? (2)

Who is the undisclosed private partner in the 2-Plus option?

- how does the private partner benefit from this deal?
- are there any potential conflicts of interest?
- what is the long-term sustainability of the private partner?
- who shoulders the risk if things go wrong?

What are other potential uses for the ARPA money in Manchester?

- allocating ARPA funds to a new service takes money away from essential projects in Manchester

Will the town continue with 2 crews in the long term?

- consultant suggests evaluating the need for 2 crews after 1 year

Questions You Should Ask? (3)

What does this plan mean for Northshire citizens outside of Manchester?

- the consultants plan suggests Manchester should offer services to these towns
- what will be the initial cost of these services?
- how will the cost rise over time?
- with their Manchester-centric focus, what does this mean for level of service in surrounding towns?
- will the new town department compete with NRS to serve these towns?

What does this plan mean for the subscription plan?

- citizens of the Northshire appreciate this plan
- in addition to the revenue, the subscription plan creates grass-roots support for NRS



VERMONT EMS LICENSING & TRAINING

INGE SMITH LUCE, PARAMEDIC
NORTHSHIRE RESCUE STAFF
TRAINING COORDINATOR, EMS DISTRICT 12

New Ambulance Services

A new ambulance service application to District 12 must demonstrate...

- a need in proposed service area
- no negative financial effect on neighboring ambulance services
- no negative staffing effect on neighboring ambulance services

The Licensing process usually take 12 months or longer

There's a shortage of EMS personnel in Vermont and nation-wide

EMS Personnel Licensing & Training

EMS License Levels

- VEFR: Vermont EMS First Responder
- EMR: Emergency Medical Responder
- EMT: Emergency Medical Technician
- AEMT: Advanced Emergency Medical Technician
- Paramedic

Training required for each level

- VEFR: 24 hours
- EMR: 60 hours
- EMT: 150 hours
- AEMT: 180 hours
- Paramedic: 1000-1500 hours at college or trade school (30 college credits)



THE PATH FORWARD

BOB NILES
NRS BOARD MEMBER

What is the Issue?

The issue is not the quality of Medical Service

The issue is a failure of communication

Municipal Governance

All 5 towns commit to the Emergency Medical Services Board structure

Maintain the current voting arrangement

- Manchester: 4 votes
- Dorset: 2 votes
- Danby, Mt. Tabor and Winhall: 1 vote each

One elected office from each community an active board member
EMSB to meet publicly at least twice a year

All 5 towns sign the EMS Agreement through June 30, 2025

Urgency

Take advantage of existing data to measure performance

Initial focus on “time out the door” and “time to the scene”

Track patterns over time and compare to Vermont benchmarks

Results reviewed and discussed at each NRS monthly board meeting

Quarterly results shared with 5 towns and posted on NRS website

Collaboration

A functioning 5-town EMSB the best venue for partners to work together on long term planning and opportunities for the NRS

NRS will restructure to enable direct, accountable daily communication with each town at the operational level

NRS will participate in town staff meetings and planning sessions

NRS commits to work individually with each town to customize an operational collaboration structure

Communication

Involved Emergency Medical Services Board an important first step

NRS Trustees available to attend town Select Board Meetings on a predetermined schedule

Information provided would include:

- call volume
- response times
- financial status
- upcoming events

NRS Trustee available to answer questions & accountable for delivering followup info

Restructured NRS enhances daily operational collaboration and communications

Conclusion

All 5 towns sign a 3-year EMS contract

All 5 towns and the NRS must be committed to communicate



Q&A SESSION

AUDIENCE AND PRESENTERS