

APPENDIX F

EMERGENCY MEDICAL SERVICES

The message regarding Station 4 is as follows:

In addition to personnel to staff an ambulance in the southern end of the county, Rutherford County EMS will need a facility to house the EMS ambulance and crew. Based on the population and geographic area around the Henrietta community well as access to the projected response area via public roadways, the optimal location for the permanent proposed facility (EMS Station 4) would be near the intersection of Hwy 221-A and Main St. in Henrietta. New cost estimates of constructing a complete EMS base as a metal structure on a concrete slab with appropriate space for crew and equipment range between \$394,000 to \$426,000 depending on some variances. Until the desired permanent facility can be funded and constructed, EMS has had preliminary conversations with Cliffside Fire Department to temporarily house any funded EMS crew and ambulance at the main Cliffside Fire Department approximately 5 miles south of Henrietta. This alternate temporary location would not be optimal for response times in the southern end of the county but it would position an ambulance in the district and be a marked improvement over the current response from Spindale. Costs to prepare the Cliffside Fire Department as a temporary facility for EMS would be relatively minimal for the county and may be implemented rather quickly once approvals are received.



Rutherford County Emergency Services

339 Callahan Koon Road
Spindale, North Carolina 28160
Voice: (828) 287-6075
Fax: (828) 287-6489



Identified Issue and Objective

It is the objective of Rutherford County Emergency Medical Services to provide quality advanced life support care to all citizens and visitors of Rutherford County as expediently as possible from the onset of their emergency so as to decrease morbidity and mortality and to improve patient outcomes. Due to the large geographical area of the county as well as the increase in ambulance call volumes and the lack of corresponding increase in resources, it has become difficult for Rutherford County EMS to provide advanced life support ambulances to those people in need of our services in all areas of the county in a timely manner. This document will evaluate possible personnel and equipment options that will enhance and/or reallocate resources to better serve the citizens of Rutherford County. Each option will outline how this will be accomplished as well as significant advantages, disadvantages and the approximate initial implementation cost. These options do not address the need for a location to house any such resources.

Current Resources

Before options can be considered, current resources must be identified. Rutherford County EMS currently provides advanced life support care to the citizens of the county by utilizing four 24 hour EMS ambulances and one prime time EMS ambulance. These ambulances are located throughout the county over three stations. Station 1 is located in Spindale and is the main station for EMS operations. This station houses two of the 24 hour EMS ambulances in addition to the prime time EMS ambulance which operates Monday through Friday from 7AM-3PM and Sunday through Thursday from 10PM-6AM. Station 2 is an EMS satellite station and is located in the Bill's Creek / Hickory Nut Gorge area with Hickory Nut Gorge Rescue. This facility houses one 24 hour EMS ambulance. And finally, Station 3 is an EMS satellite station that is located in Bostic. This facility houses one 24 hour EMS ambulance.

Terms of Options Listed

The options listed below represents possible solutions to our concerns by either enhancing current resources with the addition of staff and/or equipment or the reallocation of current resources available. The options below does not represent all possible scenarios however they do represent the most feasible scenarios based on the current needs of the EMS System as identified by objective data and/or by the experience of the administrative staff of the department. If any of the listed options are chosen, there would still need to be discussions with any affected departments or districts to ensure a smooth operational transition.

Possible Options

Option 1 – Utilize Spare Ambulance and Add 6 Staff

This option represents the most direct approach to the issue identified. With the current EMS resources being utilized routinely and predominately in the central areas of the county, the most direct approach would be to add a 24 hour EMS ambulance in the specific identified area of the county in need. The addition of another 24 hour EMS ambulance would dictate the need for six additional full-time positions. These six positions would provide two personnel for each shift for a total of three shifts thereby staffing the ambulance 24 hours a day, 7 days a week.

Advantages

- *The additional paramedic level EMS ambulance will be above and beyond current resources*
- *The additional EMS ambulance will minimize the likelihood of that ambulance being pulled out of that area to answer calls elsewhere.*
- *The additional EMS ambulance will provide the county another transport resource in times of high call volume or in the case of a disaster.*
- *Option 1 does not diminish or affect service provided to other areas of the county*
- *Option 1 will provide employment opportunities to six individuals, hopefully from within the community, who hold the credentials and clinical expertise to provide the level of care expected by Rutherford County EMS.*
- *Option 1 will have strong public support in the new area served*

Disadvantages

- *Option 1 represents the highest total cost of presented options*

Approximate Cost

Number Needed	Item	Individual Cost	Total Cost
6	EMT-Paramedic Personnel	\$43,700	\$262,200
1	Cardiac Monitor	\$25,000	\$25,000
Various	Initial Equipment Needs	\$5,000	\$5,000
		Total Funds Needed:	\$292,200

Notes

To immediately be able to add this resource and to help minimize the expense to the citizens of the county, EMS would propose to utilize an ambulance and MDT that is currently utilized as a spare in cases where the primary unit is down for repairs. This spare would suffice until funds were available to purchase the additional unit.

Option 2 – Utilize Spare Ambulance and Add 5 Staff

This option represents an alternative to adding an entire extra crew as presented in Option 1. As mentioned prior, EMS currently has a 24 hour EMS ambulance at Station 2 (Hickory Nut Gorge). Because of the consistent response and support from Hickory Nut Gorge Rescue, this ambulance and crew could be moved to another identified area of the county where first responders are not as active or not existent. In response, EMS would add three staff members (1 per shift) to respond in tandem with Hickory Nut Gorge to cover that district. The individual who responds will be capable of providing the paramedic level of care if needed and thereby not diminishing the level of care provided to the citizens of that area of the county.

In addition, EMS currently has a prime time ambulance, as described earlier, which answers calls during times of identified high call volumes. Presently, this prime time unit is staffed with a total of four full time staff. By adding two additional full time staff, this prime time EMS ambulance could be converted to a 24 hour EMS ambulance. The conversion of this ambulance to a 24 hour EMS ambulance would enable this ambulance to be available during times when the prime time ambulance did not traditionally operate. For example, if Hickory Nut Gorge was not available to assist the individual paramedic on a response, this newly converted 24 hour EMS ambulance would be an extra ambulance that may be available to provide transport capabilities and coverage for the citizens of the county.

Advantages

- *Option 2 does not decrease the paramedic level of service currently provided to the Hickory Nut Gorge area of the county.*
- *Option 2 will increase the availability of the prime time EMS ambulance to a 24 hour EMS ambulance.*
- *The additional EMS ambulance will minimize the likelihood that other ambulances would be pulled out of their respective areas.*
- *The newly converted 24 hour EMS ambulance will provide the county another transport resource in times of high call volume or in the case of a disaster that was previously not available unless during prime time hours.*
- *Option 2 will provide employment opportunities to five individuals, hopefully from within the community, who hold the credentials and clinical expertise to provide the level of care expected by Rutherford County EMS.*
- *Option 2 will have strong public support in the new area served*
- *Option 2 is lesser expensive than adding 6 staff for a new EMS ambulance.*

Disadvantages

- *There is one advanced airway procedure which, by state regulations requires two paramedics therefore, if needed; the procedure would be delayed until another paramedic could respond to assist.*
- *Hickory Nut Gorge Rescue, while they are by far the most dependable volunteer rescue agency in the county and they do provide a paid member forty hours a week, they are still a volunteer service during the night time hours and on the weekend thereby are subject to not having anyone available to respond with the EMS paramedic.*

Approximate Cost

Number Needed	Item	Individual Cost	Total Cost
5	EMT-Paramedic Personnel	\$43,700	\$218,500
1	Cardiac Monitor	\$25,000	\$25,000
Various	Initial Equipment Needs	\$5,000	\$5,000
		Total Funds Needed:	\$248,500

Notes

To immediately be able to add the resources described and to help minimize the expense to the citizens of the county, EMS would propose to utilize an ambulance and MDT that is currently utilized as a spare in cases where the primary unit is down for repairs. This spare would be used as the response vehicle for the paramedics stationed at Station 2 since the original Station 2 EMS ambulance will be moved to cover another identified area of the county. This spare would suffice until funds were available to purchase the additional unit.

Option 3 – Utilize Spare Ambulance and Add 3 Staff Only

This option represents the minimal recommended actions to provide an additional transport resource in an identified area of the county. Currently, EMS has a 24 hour EMS ambulance at Station 2 (Hickory Nut Gorge). Because of the consistent response and support from Hickory Nut Gorge Rescue, this ambulance and crew could be moved to another identified area of the county where first responders are not as active or not existent. In response, EMS would add three staff members (1 per shift) to respond in tandem with Hickory Nut Gorge to cover that district. The individual who responds will be capable of providing the paramedic level of care if needed and thereby not diminishing the level of care provided to the citizens of that area of the county.

Advantages

- Option 3 option does not decrease the paramedic level of service currently provided to the Hickory Nut Gorge area of the county.
- Option 3 will provide employment opportunities to three individuals, hopefully from within the community, who hold the credentials and clinical expertise to provide the level of care expected by Rutherford County EMS.
- Option 3 will have strong public support in the new area served
- Option 3 is the least expensive while still providing a resource to an identified area of the county.

Disadvantages

- There is one advanced airway procedure which, by state regulations requires two paramedics therefore, if needed; the procedure would be delayed until another paramedic could respond to assist.
- Option 3 does not include any additional EMS ambulances so there is an increased chance that the newly placed EMS ambulance would still be pulled to other areas of the county based on call volumes and needs.
- Option 3 does not provide for any additional EMS ambulances with transport capabilities therefore it will not provide a transport asset during times of high call volume or in the case of a disaster.
- Hickory Nut Gorge Rescue, while they are by far the most dependable volunteer rescue agency in the county and they do provide a paid member forty hours a week, they are still a volunteer service during the night time hours and on the weekend thereby are subject to not having anyone available to respond with the EMS paramedic.

Approximate Cost

Number Needed	Item	Individual Cost	Total Cost
3	EMT-Paramedic Personnel	\$43,700	\$131,100
1	Cardiac Monitor	\$25,000	\$25,000
Various	Initial Equipment Needs	\$5,000	\$5,000
		Total Funds Needed:	\$161,100

Notes

To immediately be able to add the resources described and to help minimize the expense to the citizens of the county, EMS would propose to utilize an ambulance and MDT that is currently utilized as a spare in cases where the primary unit is down for repairs. This spare would be used as the response vehicle for the paramedics stationed at Station 2 since the original Station 2 EMS ambulance will be moved to cover another identified area of the county. This spare would suffice until funds were available to purchase the additional unit.

Summary

It is the objective of Rutherford County Emergency Medical Services to provide quality advanced life support care to all citizens and visitors of Rutherford County as expediently as possible from the onset of their emergency so as to decrease morbidity and mortality and to improve patient outcomes. In deciding upon possible options and based on the options listed, it is important to keep a couple of key issues in mind.

1. As Rutherford County continues to grow in population and in the age of its population, statistically the call volume of EMS will continue to rise as is evident in our recent data.
2. The more paramedic level EMS ambulances that Rutherford County has, the better prepared we will be for increased call volumes while at the same time decreasing our response times to all areas of the county.
3. Survivability of some patients is highly dependent upon response times of the paramedics.

The descriptions listed within this document are intended to give a general overview of an option and does not necessarily reflect every step or detail that will need to be addressed. Costs listed only represent initial implementation and does not represent the additional annual operational costs of such items as fuel, disposable supplies, vehicle maintenance, etc. Once a preliminary decision is made regarding the options, there will be additional discussions and planning to fully institute any option in the community as well as appropriate adjustments to operational line items in budget.

If there are any questions concerning anything within this document or if anyone would like to discuss these or other options, please contact the Emergency Services Director as listed below.



Rutherford County Emergency Medical Services
Richard Pettus, Emergency Services Director
339 Callahan Koon Rd.
Spindale, NC 28160
Office – 828-287-6075
Cell – 828-288-1369
Email – richard.pettus@rutherfordcountync.gov

