

# REQUEST FOR BOARD ACTION

## Henderson County Board of Commissioners

**Meeting Date:** October 18, 2006

**Subject:** EMS Enhancement

**Attachments:** Proposal, Memo to County Manager, Budget, Edneyville Memorandum of Understanding

### Summary of Request

The Board of Commissioners provided \$250,000 for enhancements to Emergency Medical Services in the fiscal year 06-07 budget. Staff has prepared a proposal to collocate an EMS station with Edneyville Fire & Rescue, reducing response time in eastern Henderson County subsequently improving service levels county-wide.

### County Manager's Recommendation/Board Action Required:

The Board may choose to act on this proposal by:

- 1) Accepting the proposal as presented and authorizing staff to execute the Memorandum of Understanding with Edneyville Fire & Rescue for use of their facility as an EMS station.

**HENDERSON COUNTY  
INTEROFFICE MEMORANDUM**

**TO: STEVE WYATT, COUNTY MANAGER**

**FROM: ROCKY HYDER, EMERGENCY SERVICES**

**DATE: SEPTEMBER 29, 2006**

**SUBJECT: EMS ENHANCEMENT PROPOSAL**

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I am writing to provide a detailed summary of the proposal to enhance Emergency Medical Services (EMS).

EMS endeavors to respond to emergency calls within 9 minutes of notification. The American Heart Association recommends advanced life support care delivery within 10 minutes for optimum patient survival rate. A nine minute response provides time for EMS crews to arrive, access the patient and begin advanced life care within the 10 minute window. Some EMS programs establish a goal of eight minute response time in order to compensate for dispatch time.

To identify the geographical area(s) with response times greater than 9 minutes staff plotted 3 months of EMS calls utilizing the GIS system. The results of this study identified the largest geographical area with response times greater than nine minutes was eastern Henderson County. Staff reviewed the road system in eastern Henderson County and identified the Edneyville area as the most desirable due to access provided by Highway 64 toward Hendersonville and Bat Cave, Mills Gap Road toward Fletcher and Ridge Road toward Dana.

The Edneyville Fire & Rescue department and the Edneyville community in general embraced the possibility of locating an EMS station in eastern Henderson County. The department has agreed to provide bay space and living quarters for an EMS unit to facilitate this effort. The Edneyville Fire & Rescue Board of Directors is currently developing a Memorandum of Understanding for use of these facilities.

The overall benefit to Henderson County citizens from the EMS east station will be an improvement in percentage of response times within nine minutes from 73% to 83%.

Due to the generosity of the Edneyville fire department and community the resource requirements to establish another EMS station are a bargain. The station will require the acquisition of an ambulance which can be done through a 3 year lease with purchase option for approximately \$26,000 per year or a straight purchase of \$86,000. Staff recommends the lease program with option to buy ( $\$26K \times 3 = \$78K + \$9K$  to purchase at end of lease = \$87K vs. \$86K purchase) in order to free up additional resources for staffing and equipment for this station. The additional ambulance will require equipment (e.g. cardiac monitors, radios, splints, medic kits, etc.) which normally cost around \$35,000. However staff will check on the availability of a refurbished cardiac monitor which will save approximately \$14,000 in equipment cost. Staffing will be the most challenging aspect of this proposal. In the past five years there have been more paramedic positions available in NC than successful graduates. Blue Ridge Community College currently has a paramedic class of 8 persons which is scheduled to graduate in December 06; of those eight persons three are available for work in this area. Asheville Buncombe Community College has a paramedic class of 17 persons scheduled to graduate in May of 2007, we are actively recruiting from this class, providing clinical service time with our service. Recruiting paramedics from other counties is possible however most paramedics that leave a system actually change to a different profession or to a different job in the medical field. Miscellaneous equipment will be required to furnish the living quarters, telephone system, refrigerator, base radio, etc.

The station will be open January 1, 2007. Initially we will use the spare ambulance with a peak crew which will man the station 12 hours per day / 7 days per week. As additional personnel are recruited and trained the station will evolve into a 24 hour / 7 day operation by June 07.

EMS STATION #4 EASTERN HENDERSON COUNTY				PLAN A		PLAN B			
EMS PERSONNEL				8 FTE		4 FTE			
				EFF JAN 07		EFF JAN 07		EFF MAY 07	
SALARIES & WAGES-REGULAR				\$	114,098.40	\$	57,049.20	\$	17,087.20
SALARIES & WAGES-OVERTIME				\$	17,197.44	\$	8,598.72	\$	2,645.76
SALARIES & WAGES-TEMP/PT				\$	-	\$	-	\$	-
457 SUPP DEFERRED COMPENS									
401(K) SUPP DEFERRED COMP (457/401k)				\$	2,281.97	\$	1,140.98	\$	341.74
FICA				\$	10,044.13	\$	5,022.07	\$	1,509.57
RETIREMENT-LGERS				\$	6,564.79	\$	3,282.40	\$	986.65
MEDICAL INSURANCE				\$	26,520.00	\$	13,260.00	\$	4,080.00
DENTAL INSURANCE				\$	1,404.00	\$	702.00	\$	216.00
<b>TOTALS</b>				\$	178,110.73	\$	89,055.37	\$	26,866.92
<b>EMS EQUIPMENT</b>									
AMBULANCE LEASE					\$26,000.00	\$26,000.00		\$0.00	
RADIO AMBULANCE					\$2,500.00	\$2,500.00		\$0.00	
CARDIAC MONITOR					\$15,000.00	\$15,000.00		\$0.00	
MEDICAL SUPPLIES					\$6,000.00	\$6,000.00		\$0.00	
RADIO BASE STATION					\$3,200.00	\$3,200.00		\$0.00	
PORTABLE RADIO					\$500.00	\$500.00		\$0.00	
COMPUTER					\$1,900.00	\$1,900.00		\$0.00	
PRINTER					\$400.00	\$400.00		\$0.00	
PHONE					\$500.00	\$500.00		\$0.00	
FAX					\$200.00	\$200.00		\$0.00	
FURNITURE					\$2,000.00	\$2,000.00		\$0.00	
LOCKERS					\$1,800.00	\$900.00		\$900.00	
UNIFORMS					\$5,000.00	\$2,500.00		\$2,500.00	
MISCELLANEOUS (safety equipment, cleaning supplies)					\$3,000.00	\$3,000.00		\$0.00	
<b>TOTAL EQUIPMENT</b>					\$68,000.00	\$64,600.00		\$3,400.00	
<b>TOTAL SALARIES AND EQUIPMENT</b>					\$246,110.73	\$153,655.37		\$30,266.92	

# **EMS ENHANCEMENT PROPOSAL**

***Providing advanced life support  
services to the sick and injured***



# EMS ENHANCEMENT

- Goal

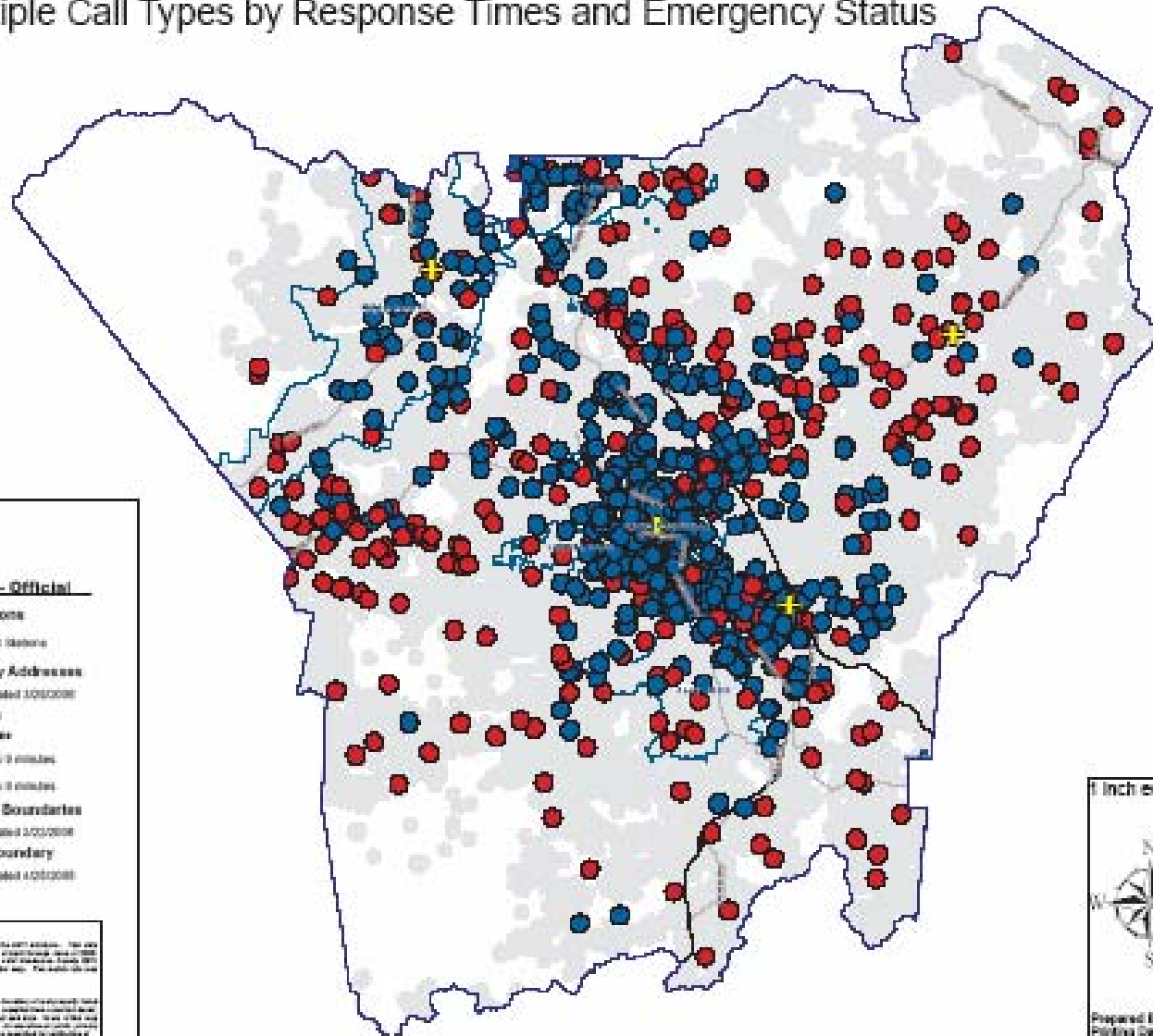
**Respond to emergency calls within 9 minutes of dispatch.**





# EMS Calls from March to May 2006

## Multiple Call Types by Response Times and Emergency Status



### Legend - Official

#### EMS Stations

⊕ EMS Stations

#### All County Addresses

○ Updated 1/03/2008

#### EMS Calls

##### Response Time

● 10 to 12 minutes

● 7 to 9 minutes

#### Municipal Boundaries

⊕ Updated 1/03/2008

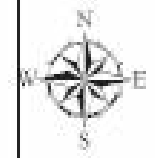
#### County Boundary

□ Updated 1/03/2008

**NOTE: INFORMATION**  
This data was compiled from the EMS stations. The data was compiled and the results were published on 07/25/08. The data was compiled and published on 07/25/08. The data was compiled and published on 07/25/08. The data was compiled and published on 07/25/08.

**NOTE: DATA SOURCE**  
This data was compiled from the Henderson County EMS stations. The data was compiled and published on 07/25/08. The data was compiled and published on 07/25/08. The data was compiled and published on 07/25/08.

1 inch equals 0.95 miles



Prepared By: [Name]  
Printing Date: July 25, 2008  
File: EMS\_Calls.mxd  
Henderson County (TN)

# EMS ENHANCEMENT

- Proposed Enhancement

**EMS Station with ambulance and crew co-located with Edneyville Fire & Rescue.**





# EMS ENHANCEMENT

- Outcome

**Improve percentage of response times within 9 minutes from 73% to 83%.**



# EMS ENHANCEMENT

- Resource Requirements
  - **1 Ambulance @ \$26,000 yr lease or \$86,000 purchase**
  - **Equipment – cardiac monitor, radios, splints, medic box, etc. \$42,000**
  - **Personnel \$116,000**



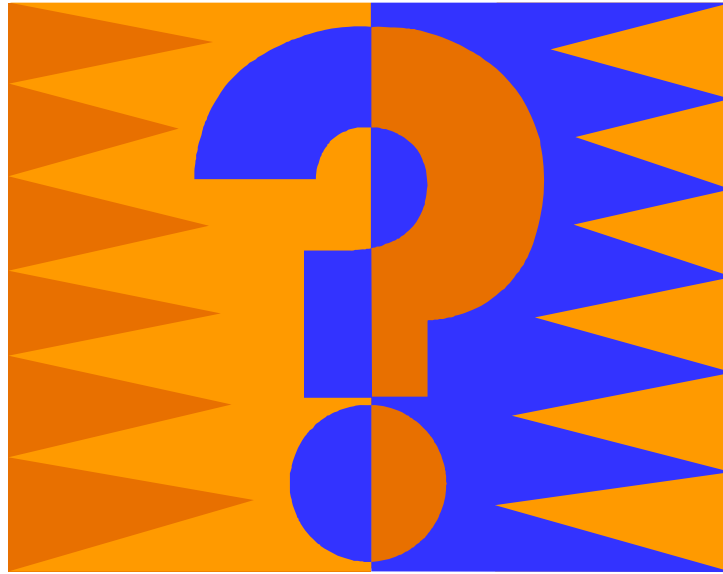
# EMS ENHANCEMENT

## Timeline

- **Open station using available apparatus**
- **New ambulance delivered 3-4 months from order**
- **Peak crew for initial operations**
- **New personnel must be trained for 3 months after hire date**
- **EMS East station opens January 1, 07**



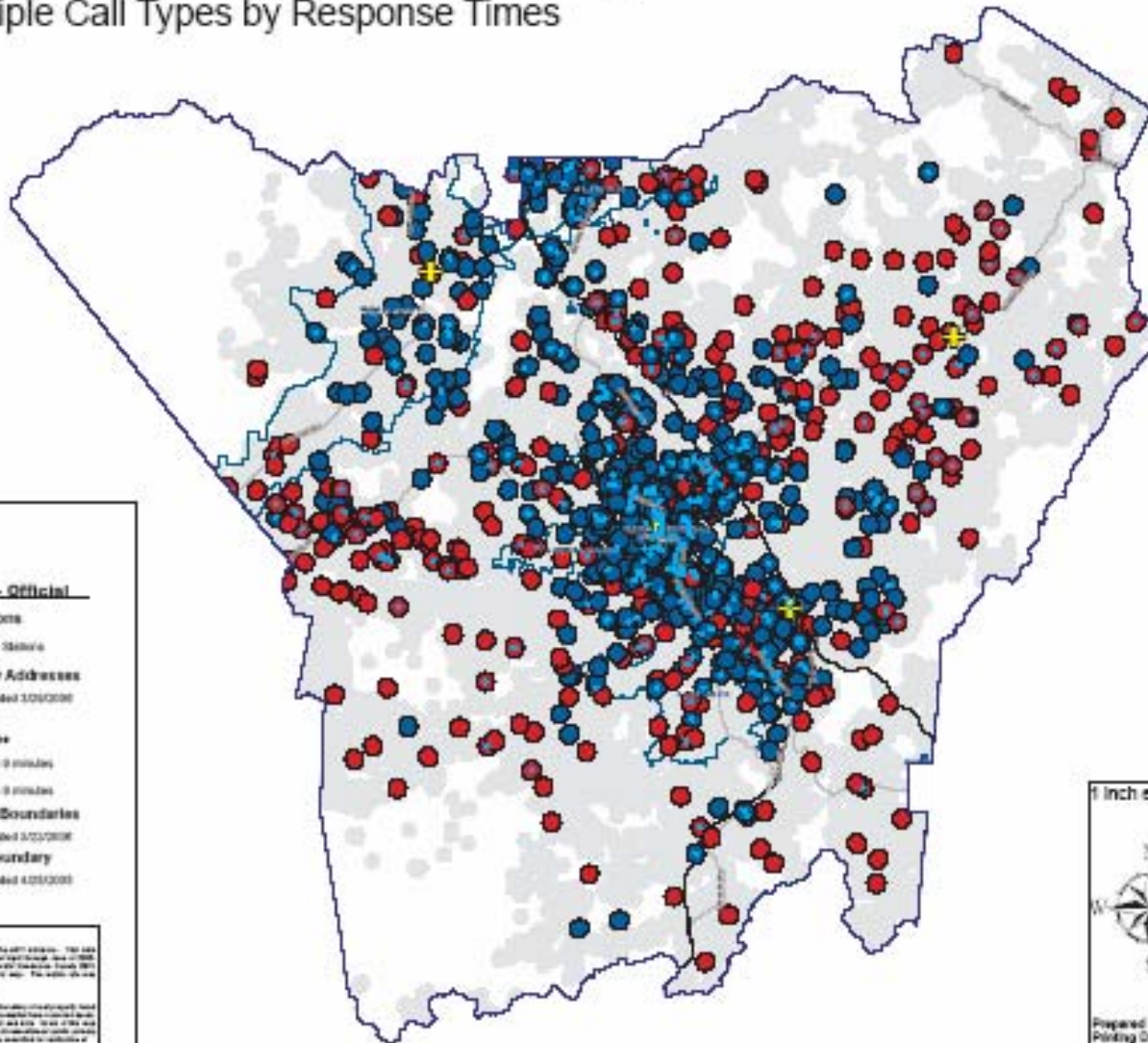
# EMS ENHANCEMENT PROPOSAL





# EMS Calls from March to May 2006

## Multiple Call Types by Response Times



### Legend - Official

EMS Stations



All County Addresses



EMS Calls

Response Time



Municipal Boundaries



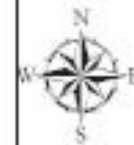
County Boundary



**DATA ACQUISITION:**  
This data was derived from the EMS database. The data represents all EMS calls from March to May 2006. The data was processed and analyzed by the EMS database. The data was processed and analyzed by the EMS database. The data was processed and analyzed by the EMS database.

**DATA SOURCES:**  
The data was derived from the EMS database. The data was processed and analyzed by the EMS database. The data was processed and analyzed by the EMS database. The data was processed and analyzed by the EMS database.

1 inch equals 0.85 miles



Prepared By: Krewer  
Printing Date: July 26, 2008  
File: EMS\_Calls.mxd  
Henderson County (TXHS)



## **Housing of EMS Contract**

The following is what Edneyville Fire & Rescue, Inc. will provide to Henderson County Emergency Medical Services (EMS).

- An area to house one ALS transport unit, staffed with a crew. Also an area of wall space to place equipment, lockers, medical cabinets, etc.. .
- Living quarters for the EMS crew to stay. This includes two bedrooms, dayroom, and bath/shower room. (Area of living quarters will not be furnished by Edneyville Fire & Rescue, Inc.)

The following are items and areas where Henderson County EMS will be responsible for:

- Any communication that is required by Henderson County EMS, such as but not limited to, Phone system, phone lines or added lines, radios, speakers for rooms, tone systems, IT equipment, etc.. .
- All living area furnishings to complete and outfit the EMS crews, such as but not limited to, Beds, TVs, desk, computers, chairs, etc..
- Be responsible for all cleaning supplies and house hold items used by EMS, including but not limited to, Truck wash, tire shine, degreaser,
- bathroom cleaner, towel paper, soap, vacuum cleaner, carpet cleaner, shower towels, bed linings, etc.. .

Edneyville Fire & Rescue, Inc. and its Board of Directors aspects the following of Henderson County EMS and its crew to abide by:

- Any building changes will have to go before the Fire Chief and Board of Directors.
- EMS crews must abide by Edneyville Fire Rescue, Inc. rules of the department.
- EMS crews must keep their living quarters and bay area, clean and neat at all times.

To provide excellent customer service to the community at all times. To show

Respect to Edneyville Fire & Rescue members, in turn, they will do for the EMS crews. To work as one unit under unity together.

***DRAFT***

We hereby understand and agree to all condition of the contract set forth by Edneyville Fire & Rescue, Inc. and its Board of Directors. Each party agrees that they will give the other party three (3) years written notice prior to any termination of this agreement, in the absence of a breach of this agreement by the other party.

\_\_\_\_\_  
Henderson County Emergency Management      Date

\_\_\_\_\_  
Henderson County EMS Director      Date

\_\_\_\_\_  
Edneyville Fire & Rescue President of BOD      Date

\_\_\_\_\_  
Edneyville Fire & Rescue Fire Chief      Date

The above individuals personally appeared before me on this, the \_\_\_\_\_ day of

\_\_\_\_\_

~~Notary Signature~~ \_\_\_\_\_

Seal

I  
~~My Commission Expires~~ \_\_\_\_\_

***DRAFT***