

COLUMBUS COUNTY BOARD OF COMMISSIONERS
Workshop for Emergency Communications
Monday, March 08, 2010
6:00 P.M.

The Honorable Columbus County Commissioners met on the above stated date and at the above stated time in the Dempsey B. Herring Courthouse Annex Building, located at 112 West Smith Street, Whiteville, North Carolina, for the purpose of conducting a **Workshop** for Emergency Communications.

COMMISSIONERS PRESENT:

Edwin Russ **Chairman**
 Giles E. Byrd, **Vice Chairman**
 Amon E. McKenzie (Arrived: 6:33 P.M.)
 James E. Prevatte
 Lynwood Norris
 Ricky Bullard
 Ronald Gore

APPOINTEES PRESENT:

William S. Clark, **County Manager**
 Mike Stephens, **County Attorney**
 June B. Hall, **Clerk to Board**

EMERGENCY SERVICES STAFF:

Jeremy Jernigan, Director
 Kay Worley

WORKSHOP CALLED to ORDER:

At 6:00 P.M., Chairman P. Edwin Russ called the Workshop for Emergency Communications to order.

READING of WORKSHOP PROCEDURES:

Chairman P. Edwin Russ stated the following:

1. First, the workshop meeting is to inform the Board and permit discussion - no final action is taken; **and**
2. Second, the procedures are less formal than at a regular meeting, but such meetings are part of the decision-making process, deliberations are going on, and therefore, they constitute "official meetings".

Chairman Russ turned the floor over to Jeremy Jernigan, Emergency Services Director, for presentation.

PRESENTATION and DISCUSSION by JEREMY JERNIGAN:

Jeremy Jernigan, Emergency Services Director, presented the following information to the Board.

1. I am here to address the overall 911 system, our radio communications and the complaints we have been receiving on coverage issues;
2. Emergency Communications involve the following:
 - A. Allows us to receive 9-1-1 calls;
 - B. Allows the dispatcher to send the call to the responders;
 - C. Allows the responders to receive the call and talk back to the dispatcher; **and**
 - D. Allows mutual aid from other counties, states, etc., to talk with our responders when needed.
3. **The Overall 9-1-1 Center is composed of the following components:**

Component 1.. Phone:

-Connects the caller to the dispatcher; **and**
 -Recorded for quality assurance and legal purposes.

A. Problems with Phone:

1. No maintenance contract (due to its age, not supported by vendor);
2. Equipment is from the original 9-1-1 Center (circa 1994);
3. System composed of equipment from different vendors which makes

- 4. maintenance difficult; **and**
- 4. Current system is not able to support a transition to Next Generation 9-1-1, which has not been developed, but is in the process of being developed.

B. Solution to Problems with Phone:

Upgrade system with equipment that can be used to support the Next Generation 9-1-1 as it develops, with the Legacy 9-1-1 system which can be easily transitioned to the Next Generation 9-1-1.

Component 2. Computer Aided Dispatch (CAD):

- Record keeping for 9-1-1 calls and radio traffic;
- Allows for management of resources;
- Integrates automatic vehicle locator technology; **and**
- Allows for units in the field to implement mobile CAD for reporting.

A. Problems with Computer Aided Dispatch (CAD):

- 1. No maintenance contract;
- 2. Software has reached end of life and is not supported by the vendor;
- 3. Hardware is not fast enough to support needs; **and**
- 4. Current version of software does not support the latest version of our medical dispatch software.

B. Solution to Problems with Computer Aided Dispatch (CAD):

Upgrade system to a system, that will have the ability to integrate all units for mobile CAD.

Component 3.. Call Recorder:

- Records all telephone and radio traffic for documentation purposes; **and**
- This information is routinely requested by law enforcement and attorneys.

A. Problems with Call Recorder:

- 1. No maintenance contract on the recorder; **and**
- 2. As evolution to Next Generation 9-1-1 takes place, existing recorder will not support the transition.

B. Solution to Problems with Call Recorder:

Upgrade existing equipment to meet the future requirements of the Next Generation 9-1-1.

Component 4. Work Stations:

- House the equipment the dispatchers use to take 9-1-1 calls and dispatch units in the field;
- Provide cable management for electronics to prevent cables from being damaged or accidentally disconnected; **and**
- Provide ergonomic work environment for employees.

A. Problems with Work Stations:

- 1. Mechanical equipment designed to raise and lower workstations is in poor repair;
- 2. Positions are no longer supported by the manufacturer;
- 3. There is no cable management system incorporated in the equipment;
- 4. Suspected electrical issues with equipment; **and**
- 5. Current layout contributes to background noise.

B. Solution to Problems with Work Stations:

Purchase new workstations that incorporate cable management and ergonomic features.

4. Replacement Cost of 9-1-1 Equipment:

Component	State Initial Cost	County Initial Cost	State Yearly Cost (Yrs 2-5)	County Yearly Cost (Yrs 2-5)
Phone	\$514,000	-0-	\$35,000	-0-
CAD	\$195,000	\$23,000	\$17,000	\$3,000

Component	State Initial Cost	County Initial Cost	State Yearly Cost (Yrs 2-5)	County Yearly Cost (Yrs 2-5)
Call Recorder	\$40,000	-0-	\$4,000	-0-
Work Station	\$51,000	\$17,000	-0-	-0-
TOTAL:	\$800,000	\$40,000	\$56,000	\$3,000

5. **Radio System - the other half of Emergency Communications:**

-National standard 95% in building coverage 95% of the time for residential and commercial structures; **and**

-Focus on handheld radio coverage not vehicle radio coverage.

A. **Our System:**

1. Voting based - What is the best tower?
2. Number of Tower Sites:
 - a. County Fire 4
 - b. County Rescue 4
 - c. County Police 5
 - d. County sheriff 6
 - e. Local Government 1
3. Dispatch for:

a. ADR Fire and Rescue	b. Fair Bluff Fire and Rescue
c. Whiteville Fire	d. Whiteville Rescue
e. Tabor City Fire	f. Whiteville Police
g. County Fire	h. County Rescue
I. County Police	j. County Sheriff
4. Supports:
 - a. Five (5) police departments (UHF)
 - b. Sheriff's Office (UHF)
 - c. Twenty-one (21) Fire and EMS agencies (VHF)
 - d. Numerous county agencies (VHF)

B. **Problems with Our System:**

1. Coverage;
2. Narrow banding;
3. Connection of tower sites;
4. Interoperability; **and**
5. Plan for the future.

C. **Coverage Issues:**

1. Estimated 70% coverage with hand-helds;
2. Believed that some of this is related to age of equipment; **and**
3. Current problem areas: Boardman, Evergreen, Cerro Gordo, Fair Bluff, Tabor City, Fireway, Nakina, Bolton, St. James.

D. **Narrow Banding:**

1. Takes effect January 1st, 2013 (no waivers);
2. Requires re-licensing of existing frequencies and reprogramming equipment to go from 25 mhz to 12.5 mhz;
3. Equipment that was manufactured before 1997 is not generally capable of being narrow banded;
4. After January 1st, 2011, no equipment will be manufactured or imported that is wide band (25 mhz), meaning that availability of replacement equipment will be limited; **and**
5. Impacts all agencies.

E. **Connection of Tower Sites:**

1. Currently using radio or phone links which are unreliable;
2. Significant recurring costs for the phone links; **and**
3. If a link is down, then it is not possible to receive communications from units

in that area.

F. Interoperability:

1. Allows UHF, VHF and/or 800 mhz to talk;
2. Allows for better management of resources;
3. On a day-to-day basis, Sheriff's Office can talk with Highway Patrol and EMS on a traffic accident; **and**
4. On a major incident, allows Columbus County units to talk to SC, Robeson County and Bladen County.

G. Plan for the Future:

1. Need to operate in the present but plan for the future;
2. Recommended service life for radio equipment is five to seven (5-7) years. Ten (10) years can be expected if equipment is maintained.;
3. Future FCC requirements?;
4. Numerous options; **and**
5. Cost to the agencies we support?

H. Solutions to Problems With our System:

1. Replace existing equipment to meet FCC narrow banding requirements;
2. Add additional receive sites to fill in areas of poor coverage;
3. Replace existing phone/radio links at tower sites with broadband or fiber optic links to improve coverage;
4. Implement equipment that will allow units operating on different bands to reliably communicate;
5. Re-license all frequencies to operate under new FCC regulations;
6. Develop and implement a narrow banding plan;
7. Designate a committee to evaluate systems for future implementation. (E-911 Committee with the addition of key personnel);
8. Add additional radio frequencies to meet future demands of end users; **and**
9. Strong maintenance program that includes remote diagnostics.

I. Cost of Replacement of Radio System:

ACTION	COST
Replace Existing Equipment, New Receive Sites	\$360,000
Broadband Links for Towers`	\$180,000
Interoperability	\$60,000
Remote Diagnostics	\$50,000
Narrow Banding Plan (Have not located company who can quote)	To Be Determined
SUBTOTAL:	\$650,000
*** Yearly Maintenance ***	\$65,000
*** Expansion of Channels if Recommended by E-911 Committee ***	\$300,000
GRAND TOTAL:	\$1,015,000.00

NOTES: These figures are not estimates, they are what if's.
This equipment will bring us to 2013 FCC compliance.

SYNOPSIS of TOTAL COST INVOLVED:

Replacement Cost of 9-1-1 Equipment:	\$ 800,000.00
Replacement Cost of Radio System:	\$1,015,000.00
TOTAL COST of REPLACEMENT:	\$1.815,000.00

6. **Overall Review:**
1. This is a system;
 2. 9-1-1 Calls provide the demand for the responders;
 3. Responders provide the services for 9-1-1 callers;
 4. The Communications System makes this all possible;
 5. Existing equipment has reached its end of life;
 6. New requirements are coming for Next Generation 9-1-1 and Narrow Banding;
 7. Lack of support from vendors due to age of equipment;
 8. Safety issues related to poor coverage from the radio system; **and**
 9. Need to better manage mutual aid resources.

QUESTIONS / DISCUSSION:

1. **Commissioner Gore:** stated the following:
- A. Columbus County Schools have nine hundred thousand and 00/100 (\$900,000.00) dollars worth of poles at various sites throughout the County, almost at every single school;
 - B. We have a remote site north of Whiteville; **and**
 - C. Do these numbers reflect any possibility of us using those towers and poles that are already there?

Jeremy Jernigan: I have discussed this matter with Ken Buck, Columbus County Schools, and some of the vendors I have talked to, and we would need to take an inventory of this equipment to see what is there and if it would be feasible to use it.

2. **Commissioner Bullard:** Are we looking at a total cost of six hundred fifty thousand and 00/100 (\$650,000.00) dollars to replace this equipment?

Jeremy Jernigan: That cost is for the replacement of the radio system.

3. **Vice Chairman Byrd:** The total cost is \$1.8 million.

4. **Commissioner Prevatte:** stated the following:
- A. The cost is almost \$1.9 million;
 - B. The idea of expanding the E-911 Committee to develop a plan is a good idea, and should be in the near future; **and**
 - C. We will not be able to do all this at one time

Jeremy Jernigan: stated the following:

- A. There is currently a \$1.2 million Fund Balance in the 9-1-1 Fund from the State, and that is what is restricted to taking the 9-1-1 calls;
- B. When I spoke to the \$800,000 initial outlay from the State, that is the Fund Balance I was referring to;
- C. The number I got from Finance on what revenue we are bringing in from the E-911 Fund is around \$700,000.00 yearly;
- D. If we expend \$800,000.00 yearly, we are roughly replacing those funds;
- E. From the conversation I have had with the State 9-1-1 Board, they are strongly encouraging for us to spend those funds, and we are sitting on a \$1.2 million fund balance;
- F. The State 9-1-1 Board is stating that you should meet these requirements;
- G. There may be a move in 2011, to allow you to spend 9-1-1 funds on radio communications;
- H. If we have a system that is in place and meets all the standards from the State 9-1-1 Board, that may be another source of funds we could use;
- I. We do need to watch how we spend those funds because at some point in time, we will have to replace all the 9-1-1 equipment as well.

Commissioner McKenzie: Are you recommending that we replace all this equipment at one time?

Jeremy Jernigan: For the 9-11 portion of it, yes, because we have the majority of that Fund Balance, and we were looking at about \$40,000.00 that was coming from the County, we made plans to go ahead and spend those funds as we work toward

the radio system.

Commissioner McKenzie: You are recommending that we change out the whole system at one point, \$1.8 million.

Jeremy Jernigan: Yes.

Vice Chairman Byrd: Are there any grant money available?

Jeremy Jernigan: We have looked at two (2) options:

1. Right now, we are looking at fixing the UHF and VHF system, and we are not looking at applying for an 800 megahertz radio system, we are restricted from the State from being able to apply for DHS funds;
2. The reason we are restricted is the State's strategy, which is what they have to have in place to receive Homeland Security Funds, is 800 megahertz, because that is what they have designated as the State funded radio system;
3. By us applying for UHF and VHF, it is not supporting the State Homeland Security Strategy;
and
4. I have looked at the VIPER System extensively, which is the Statewide 800 System, and in the areas where we have coverage issues now, we will still have coverage issues with VIPER.

Commissioner Prevatte: Can you use unrestricted Fund Balance for radios?

Jeremy Jernigan: Yes.

Commissioner Gore: If we go to narrow band, will the radios have to be replaced, and at what cost throughout the whole county?

Jeremy Jernigan: Yes, and I am thinking of allowing the E-911 Committee to negotiate the prices for the radios.

ADJOURNMENT:

At 6:55 P.M., Commissioner Prevatte made a motion to adjourn, seconded by Commissioner Norris. The motion unanimously passed.

APPROVED:

JUNE B. HALL, Clerk to Board

P. EDWIN RUSS, Chairman