

IREDELL COUNTY BOARD OF COMMISSIONERS
BRIEFING MINUTES
APRIL 6, 2004

The Iredell County Board of Commissioners met in Briefing Session on Tuesday, April 6, 2004, 5:00 p.m., in the Iredell County Government Center (South Wing Conference Room), 200 South Center Street, Statesville, NC.

Present were:

Chairman Steve D. Johnson
Vice Chairman Godfrey Williams
Doug Madison
Marvin Norman
Sara Haire Tice

Staff present: County Manager Joel Mashburn, Finance Director Susan Blumenstein, Transportation Director Ben Garrison, Planning Supervisor Ron Smith, Elections Supervisor Becky Galliher, Chief Deputy Rick Dowdle, Health Director Ray Rabe, Nursing Director Donna Campbell, Communications Director David Martin, Emergency Management Director Tracy Jackson, Support Services Director Jim Vernon, and Clerk to the Board Jean Moore.

CALL TO ORDER by Chairman Johnson.

REQUEST FOR THE TEMPORARY CLOSING OF SR 1363 - BETHLEHEM ROAD: Statesville Mayor John Marshall requested the county's assistance in the temporary closing of a portion of Bethlehem Road. He said the duration of the closing would be approximately six months.

Chairman Johnson said the Federal Aviation Administration (FAA) had concerns that the road's traffic might interfere with the airport's instrument landing system. He said an individual from Ohio University would conduct tests regarding the situation.

Planning Supervisor Smith said he would determine if the portion of the road slated for closure was located in the county or city's jurisdiction.

In regards to the city/county Inter-Governmental Agreement pertaining to sewer and the release of extra-territorial jurisdiction in the airport vicinity, Mayor Marshall requested for these two items to be deleted from the 7:00 p.m. agenda.

REQUEST FOR APPROVAL OF A BUDGET AMENDMENT REGARDING A \$103,133 BIOTERRORISM GRANT: Health Director Rabe requested permission to use a \$103,133 grant for (1) office equipment (desk/file cabinet) for the new part-time bioterrorism coordinator (2) vaccine freezer along with an alarm system (3) planning and training equipment plus a contract with Larry Dickerson for updates to the Bioterrorism Plan, and (4) a generator for the Statesville main office. Rabe said the proposed generator costing \$89,998.00 would, unfortunately, only service about 10% of the building. He said that to have backup service for the entire building, he would suggest buying one generator this year, and another in 2005, if the same grant funds were available.

REQUEST FOR APPROVAL OF A BUDGET AMENDMENT REGARDING A FAMILY PLANNING (TITLE X) GRANT: Health Director Rabe said an additional \$10,475 had been received for the Family Planning Program. He asked permission to allocate the revenue for the following:

3 Clinic Exam Lights at \$561 each	\$ 1,683
7 Wall Mounted Otoscope/Ophthalmoscopes at \$570 each	3,990
1 OBGYN Exam Table	885
1 Medical Records Cart	800

2 Acrylic Pamphlet Holders at \$50 each	300
Contraceptive Technology Book	60
Foam and Condoms	2,757

(Note: The family planning grant was added to the agenda.)

REQUEST FOR GUIDANCE REGARDING THE 800 MHZ PROJECT:

Joining the commissioners for this portion of the meeting were Emergency Management Coordinator Tracy Jackson and Communications Director David Martin. Mr. Martin referenced a five-page report that outlined the Communications Task Force's work since November 2002. He said the 800 MHz system had been designated as a long-term goal in the report, and the task force now needed guidance on whether or not the project should be pursued. Mr. Martin's written report is as follows:

Short Term (In Progress or Completed)

- *Addition of a communications tower in the northern portion of the county. An agreement was signed with Olin Community Development and the Harmony VFD for the placement of a 190-foot tower at 645 Olin Loop Road. The tower was bid and awarded at a cost of \$43,303. The tower is scheduled to ship sometime in April and should be erected by May.*
- *Facility Services has completed an addition to the building at Olin that will be used as an equipment room for transmitters and other radio equipment.*
- *An emergency generator has been installed at Olin at a cost of \$9,500.00, and it is in operation.*
- *Nine new Motorola Quantar transmitters have been purchased on state contract at a total cost of \$100,815 and are scheduled for delivery in March. This will allow new transmitters for Sheriff, EMS/Rescue and County fire at three locations (Rhinehart, ECOM and Olin).*
- *New antennas and coax has been purchased and installed at ECOM at a total cost of \$7,456.*
- *New antennas have been bid and ordered for the Olin tower at a cost of \$6,878 (installation not included).*
- *FCC Licensing for the new Olin location and addition of Sheriff transmit site at ECOM have been obtained.*
- *FCC Licensing of a repeater input frequency for EMS/Rescue has been submitted and passed coordination. (Awaiting FCC license issuance.)*
- *Placement of receivers for Sheriff, EMS/Rescue and County VFD at the West Iredell VFD substation on Sharon School Road. (West Iredell VFD has agreed.) In process of locating a 40-60 foot section of small tower to be placed. Receivers, currently, in operation at Union Grove will be relocated to Sharon School Road upon completion of Olin site.*

Short Term (Not in progress)

Note: A Request for Proposal was issued in November 2002 for a complete simulcast system for the Sheriff, EMS/Rescue and County Fire utilizing the sites at Olin, ECOM and Rhinehart. During the prebid conference there were a lot of unanswered questions regarding the analog versus digital microwave system. A digital microwave system was not included in the budget, therefore the RFPs were cancelled.

- *Upon receipt of a repeater input license from the FCC for EMS/Rescue, it is anticipated that duplexers will be added and field units reprogrammed giving the capability of repeater function to all EMS/Rescue units.*
- *It is recommended that a consultant be obtained to assist with the design and procurement of a digital microwave system and simulcast capabilities on Sheriff, EMS/Rescue and County Fire. Current analog microwave links will have to be updated to digital and a new digital link established for Olin in order to successfully complete a simulcast system. Currently obtaining a proposal from RCC Consultants for their fees.*
- *It is recommended that the above simulcast system be implemented. It is anticipated the total cost will be \$250,000 - \$270,000 including digital microwave and simulcast capability. The current budget has approximately \$190,000 remaining and \$75,000 has been included in the 04/05 budget. (This is only an estimate. True figures can not be obtained until completion of the consultant's recommendations.)*

- *Renovation of the Rhinehart tower (painting, etc.) is needed to meet FAA/FCC compliance. This is anticipated at a cost of \$20,000 and is included in the 04/05 budget.*

Long Term

The Communications Task Force, in researching the capabilities and desires of a long term radio system, had several discussions with various vendors and looked at future possibilities. The following is a result of those discussions.

- *In March 2003, it was decided that 800 MHz technology was a possibility that needed further consideration. Due to issues such as interoperability, private talk groups, emergency call functions, spectrum refarming, as well as data transmission, makes 800 MHz the ultimate system.*
- *The county, with the assistance of Mr. Al Linker with Wireless Communications, applied for six 800 MHz frequencies (funded through the Sheriff's Department). The Town of Mooresville also applied for six 800 MHz frequencies. It was the plan that these frequencies be combined for a total county-wide system of twelve frequencies. The FCC issued the frequencies in August 2003 which included a five-year-slow-growth plan.*
- *In the fall of 2003, the task force recommended that Mr. Al Linker be obtained as a consultant to pursue recommendations for a county wide trunked radio system. The total cost for Mr. Linker's services was \$31,640 with the county share being 74% (\$23,414) based on population.*
- *Mr. Linker has recommended an 800 MHz system with (full functional) transmitters at Rhinehart, Olin and ECOM (with a new 500 ft. tower built in West Statesville to replace the tower at ECOM) and a mutual aid transmitter in the Love Valley area. There is a possibility that a fourth site may be needed. This would allow for 95% in street portable coverage. The infrastructure total cost for a fully functional three site system, new Statesville tower and one mutual aid site was projected by Mr. Linker to be \$4,680,000. If an additional fourth site is needed the cost could increase by an estimated \$1,300,000. The cost of mobiles and portables would range from \$2,500 to \$4,015 each. Replacement of all radios now in service (1423 as of fall 2002) would cost between \$3,557,500 and \$5,713,345. On March 11, 2004, a tour was conducted with a member of RCC Consultants. Upon examination of the Rhinehart tower, it was his initial opinion that this tower would not be capable of supporting additional loading. It will be imperative that the tower be capable of supporting additional equipment, including a six to eight foot solid dish for digital microwave for an 800 MHz system. Therefore, replacement of this tower would be needed to support 800 MHz at an estimated cost of \$125,000. Also, to support a large enough digital microwave dish for 800 MHz, the tower at ECOM may need upgrading to a larger tower at an estimated cost of \$65,000. Total implementation of an 800 MHz system is projected to cost \$9,727,500 to \$11,883,345. The county share of this cost, if all other jurisdictions participate, will be \$7,198,350 to \$8,793,676. (Based on a maximum four site system)*

The Communications Task Force has recommended that a consulting firm be obtained to examine this project. It is felt that a larger firm with experience in the implementation of these types of systems is desirable over an individual consultant. It is projected that the total cost for such a firm would be \$220,481 to \$270,000 or about 2-2.5 percent of the total projected system cost.

Comparisons

After consultation with other counties, it was learned that Forsyth County was in the process of implementing an 800 MHz that will require eight tower sites. Catawba County has just concluded a study that will require eleven tower sites (note that Catawba is requesting in house coverage instead of in street coverage). Catawba County is looking at budgeting \$400,000 a year for seven years for seven receiver sites and four transmit sites on VHF/UHF and upgrading current towers. This cost does not include digital microwave that will be needed for simulcast. After bringing their current system up to date, they advised they are projecting an additional \$21 million to build out an 800 MHz system. At this point, they are not sure of their future direction regarding 800 MHz.

With this information, it is questioned if the proposed three to four- site system would be sufficient to cover Iredell County. Any additional sites that may be required is projected to cost \$1.3 - \$1.5 million each.

Possibilities

The county could possibly work with the State Highway Patrol and the VIPER network to partner with us and therefore maintain our current assigned 800 MHz frequencies, if pursuit of our own 800 MHz system is not currently feasible, but is planned for the future. There are variables associated with this plan and retention of our 800 MHz frequencies would not be guaranteed.

Looking at alternative solutions for supplementing our current system is also possible. This could include working with cell carriers to provide private talk groups and console integration until such

time as build out of our own system is possible. Again, retention of our 800 MHz frequencies would be questionable.

Options

Plan A

- Continue the upgrading of our current UHF/VHF system to a fully functional simulcast system.
- Continue pursuit of a fully functional 800 MHz system and begin implementation during fiscal year 2004/2005 with full county-wide implementation completed in fiscal year 2007/2008.

Plan B

- Continue the upgrading of our current UHF/VHF system to a fully functional simulcast system.
- Continue pursuit of a fully functional 800 MHz system in stages with the first stage being the placement of single sites at ECOM and Rhinehart. * This plan would benefit the City of Statesville and the Town of Mooresville. There would not be county-wide coverage for county units.
- County to look at alternate supplemental private system until such time as county wide 800 MHz is implemented.

Plan C

- Continue the upgrading of our current UHF/VHF system to a fully functional simulcast system.
- Totally abandon the pursuit of 800 MHz and begin exploring the possibility of UHF/VHF trunking (no cost estimates available).

Conclusion

It is recommended that the county continue to upgrade the current UHF/VHF systems to include digital microwave and simulcast. Retention of a consulting firm is needed to assist with design and procurement.

An 800 MHz system is the "best of the best," if constructed to perform and cover the entire county. However, it will be costly to build a system to cover all the needs, and at this time, the total sites needed is questionable. A consulting firm will be imperative to insure the design will cover all our needs.

With FCC mandates, it will be imperative that future plans include 12.5 kHz radios by 2008 with implementation of some type digital system by 2013.

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Martin asked for direction regarding the 800 MHz project. He said the purchase of the digital microwave system and the simulcast capabilities were highly recommended, and the estimated cost was approximately \$250,000.

Chairman Johnson asked Martin how satisfied he would be with the county's coverage after the microwave and simulcast components were added.

Martin said the audibility with the three transitor sites simulcasting should be fairly clear.

Chairman Johnson said the original estimates for the 800 MHz system were too low, and he suggested that the county complete the projects already started. Johnson said the 800 MHz costs might be lowered in the future, especially if the technology changed.

Martin acknowledged that the prices for an 800 system seemed to continually "grow."

Jackson said his department would stay alert as to price changes. He mentioned that a discussion pertaining to directional amplifiers might be requested in the future.

Commissioner Williams asked if the task force would continue to meet.

Martin said yes.

Jackson asked if the board would like the staff to maintain the frequencies and to continue working with the state.

Johnson said yes, and the options needed to be left open.

ADJOURNMENT: Chairman Johnson adjourned the briefing session at 6:34 p.m.

Approved: _____

Clerk to the Board