

GREGORY W. SKIBITSKY Commissioner

**DEPARTMENT OF EMERGENCY SERVICES** 

45 Elm Street – Buffalo, NY 14203 716 858-6578 – FAX 858-7937 www.erie.gov/emergency

October 14, 2009

## Erie County 400 MHz Interoperable Communications Project Update

During our last Power Point Presentation to the 400 MHz Committee in September of 2008, we outlined several aspects of the overall communications project that were in progress. At that time we noted that the Erie County Sheriff's Analog Simulcast System (Phase 1) had been completed by Motorola Staging in Schaumburg, IL and was scheduled to ship to Erie County on 9/26/08. We also identified that this system would require microwave connectivity between sites and therefore utilized a Motorola Point to Point System which was designed and shipped about six to eight weeks later. We also reviewed the latest coverage maps for the nine simulcast systems being built throughout the county.

The following is the progression since that time:

During the months of October, November & December 2008, the new analog simulcast system, including the microwave system, for the Erie County Sheriff's Office was deployed. This again took their 4 channel system on 4 separate sites to a single channel simulcast system over 8 sites. This essentially doubled their original coverage. Since the system went live on January 7, 2009 there has been no down time and the system has been working beyond original expectations.

Over the next several months we worked diligently with Motorola to finalize the design of the Sheriff's and Emergency Services Digital P25 Simulcast Systems, the police mutual aid UHF & VHF Crossband systems, and the Fire Service to include East Aurora, Angola, Hamburg, Helmuth and Springville Fire Controls. There is also a county-wide fire mutual aid repeater system to replace the old low band F2 frequency. In total there are nine simulcast systems being built across the county. By the end of June 2009 all of the Purchase Orders had been issued for the above systems. At this point Motorola began to manufacture the individual equipment and subsequently then assemble the racks of equipment for each of the 28 locations. There are a total of 74 repeaters and 64 voted receivers on the system. This process was expected to take 8–10 weeks to complete.

From July through September of 2009 we completed the design and procurement of the Motorola Point to Point Microwave System to link the 28 sites together. Each of the paths between towers were not only designed by a computer model but were also physically verified for long term reliability. The equipment manufacturing and delivery process was estimated to take 8-10 weeks. Equipment should be arriving in Erie County in mid to late October.

On October 1, 2009 Kevin Hughes and Greg Stroh from Erie County Emergency Services went to the Motorola Staging Facility in Schaumburg, IL. At that time they completed a preliminary factory test and acceptance procedure on the nine simulcast systems. All of the systems functioned well and passed the extensive testing procedures. The system was to be prepared for shipping with arrival in Erie County in mid-October.

Another large portion of the project is the antenna systems, multi-couplers and combiners. These systems are currently being custom built for each application and are not expected to be completed until later this year.

Our FCC Licensing and Coordination has been going well. We initially applied to modify each of the existing licenses for the nine channels and also had to apply for several additional licenses for the new sites being utilized. Currently we are good to go with the Emergency Services P25 System, East Aurora Fire Control and Angola & Hamburg Fire Controls. We are still working with the FCC and Industry Canada on the remaining licenses for the Erie County Sheriff and the CPS police mutual aid system. These approvals are expected at any time now.

Our search for potential Fire Ground frequencies identified ten potentially viable channels. To date we have successfully licensed four channels and are awaiting responses from the FCC and Industry Canada on three additional channels. The three remaining channels were denied. The specific assignment of all approved channels is being worked out at this time.

The largest remaining phase of the project involves site leasing, ground preparation, shelters, cabinets, generators, UPS's, etc. This has been an ongoing task on which we make continuous progress.

The towers owned by Erie County are undergoing structural studies at this time. Preliminary results indicate that two of our sites will require enhancements to accommodate the additional microwave dishes. This work will be going out to bid in the next few weeks and will hopefully be completed by the end of the year, weather permitting. The County is also updating the electrical service, HVAC, security and fire suppression systems at each of the sites. That work is also currently out for bid and will hopefully be completed by the end of the year, weather permitting.

Overall the 400 MHz Project is right on schedule. Our goal is to get as much equipment deployed to the field and as many sites ready to go as possible before the weather hampers our access to the tower sites. Should the weather become a factor, work will resume at the earliest possible date after the weather breaks. Our realistic goal is to have all of the systems in service in the Spring/Summer of 2010. There will then be a period of operational and coverage testing performed by Motorola and Erie County which should last about thirty days. Once the systems have been approved and accepted as being Public Safety ready, they will be turned over to their respective agencies for active use. Under the grant requirements, the systems must be completed no later than October of 2010. We fully expect to meet that deadline and satisfy our requirements. Some of our future plans will also address a solution for moving our EMS Operations to 400 MHz via the use of the MED frequencies. We are working now with the NYS EMS Office to procure the frequencies and approve our operational plan for use in and around Erie County. The frequencies will then need to be licensed and coordinated through the FCC. In the end this will greatly improve our EMS communications and continue our goal of getting our First Responder's down to one radio for everyday use in the field.

Again, thank you to all of you for your continued support on the 400 MHz Project. I look forward to working with all of you in the future as we continue to build out the largest communications project in County history.

If you have any questions regarding the 400 MHz Project please contact Kevin Hughes at 716-858-4832 or via email at <u>kevin.hughes@erie.gov</u>.

Sincerely,

Gregory W. Skibitsky Commissioner Erie County Emergency Services