History of Emergency Dispatch Radio System

The County went to the first countywide 800 MHz radio system in 1996. Motorola proposed at that time that we purchase a system with 21 or 22 towers for between $12 million and $18 million. The County instead purchased a system with only 7 towers for $4.5 million. Only police (23 departments) and County government operated on the system. The police purchased their own radios (all analog) and the County paid to install them. Police paid for parts going forward, but the County provided service at no cost. Some departments opted for encrypted radios to prevent eavesdropping via scanner.

Three towers were added over the next three years to increase coverage.

The 22 ambulance service providers were welcomed onto the system in 1999. They purchased their own radios (still analog) and paid for installation. Going forward, the ambulance providers paid for parts and the County provided service at no cost.

In 2000, the Marino administration entered into a $17 million contract with Motorola to upgrade both the capacity and coverage of the system. An additional 13 towers were added for coverage and the backbone of the system was upgraded to increase capacity. The system supported both digital and analog radios, but could only support encryption on digital radios. The County paid to swap the 440 analog police radios with encryption for digital radios with encryption. The County kept the analog radios for its own use and as loaners for radios that broke and were in need of repair.

When this upgrade was finished in 2001, there was enough capacity to add the fire departments to the system as well. The fire companies purchased their own digital radios and paid for installation. Going forward, the fire companies paid for parts and the County provided service at no cost.

In 2009, negotiations were entered into with Motorola to upgrade the system again. Good portions of the system (infrastructure and most police radios) are original 1996 equipment. Motorola no longer services or sells that equipment. If it breaks, used equipment will have to be scavenged to patch the repairs needed. In addition, more towers are needed to increase coverage and increased capacity (number of channels) is needed because the system gets bogged by the volume of use during major events.
The number of major weather events has increased significantly over the past three years.

Motorola submitted a proposal in April 2010 that would have provided an upgrade at a cost of $40 million (+/-). The Commissioners were not satisfied because the process had not been conducted in a competitive manner. A consultant (ACD) was hired to conduct a competitive comparison. Their report was insufficient, however, because it compared the cost of like amounts of equipment (towers, infrastructure and radios). What was needed was a comparison of what the competitors would charge to provide like amounts of coverage (towers), capacity (channels/infrastructure) and radios.

Another RFP was issued for a consultant to meet with fire, EMS and police representatives and conduct a comprehensive user needs assessment, present that assessment to the County Commissioners and senior staff and create comprehensive specifications to meet those needs. The responses to that RFP have been received and need to be reviewed.

There are two related matters that should be noted.

1) There have been a limited number of 700 MHz frequencies reserved for Montgomery County for increasing capacity. Those frequencies are only protected until June of this year (2012). That deadline could change. Other jurisdictions are waiting for those frequencies to become available and they will snap them up. The County must submit a letter to the FCC by that time indicating that we are considering a proposal to employ those frequencies in the near future and that we have committed financing to do so, or we will lose our right to them. Without those frequencies, the system will be able to increase coverage, but not capacity, in the future.

2) Motorola’s upgrade proposal includes the cost of the equipment for additional towers. It does not include the cost of acquiring or renting space for those towers or the cost of the structures need to house the equipment. (possibly several million dollars)