

## **Franklin County Emergency Communication System: OPTIONS FOR THE FUTURE:**

In the coming months the public safety community and town officials will need to decide on the future of emergency communications in Franklin County. To put it bluntly, the current system is failing. It is not meeting the communication needs for those who protect us. In an effort to inform you on the current situation prior to making this very important decision, please review the fact sheet below. In the near future the FRCOG will be hosting regional community meetings to discuss this issue in further detail.

Please know that the current system is not being abandoned as we wait for a directive on the future. The FCECS Oversight Committee is diligently working on the current system's reliability and communication effectiveness.

Both the FRCOG and FCECS Oversight Committee have been engaged in discussions with EOPSS and the Governor's Office at the highest levels, advocating for funding or the opportunity to migrate to the Commonwealth System. Up until recently EOPSS has not been able to convey to FRCOG or the FCECS information regarding scope of work, cost, and schedule for the state-wide project. This is due to funding for the project being tied to a proposed increase in the 911 telecommunication surcharge. On July 9th the Massachusetts Department of Telecommunications and Cable (DTC) voted to allow the increase to the 911 surcharge. Immediately following that decision the telecommunication vendors lodged a formal appeal. That appeal has since been denied by the DTC. After the denial the vendors had twenty days to appeal to a higher court. The twenty days passed as of September 25th without the vendors appealing DTC's decision to deny their appeal. The completion of these proceedings clears the way for full funding of the state-wide upgrade. Next steps for this project are for EOPSS to release a notice of intent and then the full RFP for the engineering study. The RFP is expected to be advertised the mid October. With the funding for the state-wide project now set FRCOG and FCECS will be meeting with EOPSS to have them answer the questions the County needs in order to make an informed decision.

### **FCECS Overview:**

- The Franklin County Emergency Communication System (FCECS) is the critical infrastructure first responders rely on to perform their work.
- It is built on thirteen towers across the county and transmits on the 450MHz band using simulcast format. It was funded primarily from Homeland Security funds.
- The FCECS is the **equipment** used by dispatchers and emergency responders; **it is not dispatch.**
- The Franklin County Emergency Communication System (FCECS) is owned and maintained by the FRCOG on behalf of and at the request of the towns of Franklin County and the public safety professionals who use and rely on this system every day.
- Because the FRCOG does not have technical expertise in radio equipment and technology, a condition of the FRCOG agreement for ownership was the creation of an oversight committee

comprised of the users of the system. The mandate of the committee is to oversee and manage the system.

## **System Issues:**

The FCECS Oversight Committee understood the need to start planning for the future. In 2015, they commissioned Communication Design Consulting Group, LLC (CDCG) to perform a system study that reported on the current state of the system and provided options for future improvements. CDCG determined the current system is plagued by two main issues.

- **SYSTEM AGE:**
  - Radio system experts tell us the life expectancy for the components in our system is 7 to 10 years. The average age of our system's components is 12 years old. In some cases, the equipment initially installed was last generation equipment.
  - Many critical components have been issued end of life and end of service notices. This means that manufactures will no longer sell the components, service them, or supply parts. We have identified that if a particular part, which is currently not supported fails, we will not be able to transmit or receive communication on that tower.
  - Due to the vintage of our system, it lacks key components which would make for a much more reliable and cost efficient system. In addition, we are unable to upgrade parts when there are failings due to incompatibility issues.
  
- **SYSTEM DESIGN:**
  - The Committee has been told by multiple engineers the design of our system is at fault for many of our current reception issues. Even if the parts and pieces were new there would still be issues.
    - The antennas are not correct in terms of type, bearing, and power.
    - The towers are not in the optimal locations, causing interference.

## **Options Review:**

The three options presented below are the outcomes from intensive discussion and deliberation by the FCECS Oversight Committee. The Committee based their decision on the options found in the study performed by CDCG, the most current information from EOPSS about their offer for Franklin County to join their system, and advice from radio system engineers

### **OPTION ONE: Migrate to the Commonwealth's Statewide 800 MHz system**

Benefits:

- Relieves the region of ownership and maintenance responsibility.
- Could relieve the region of ongoing and large financial responsibilities.

- Meets the Commonwealth's long-term goal of one statewide interoperable communication system.
- Is supported by EOPSS, the Governor's office, and our legislative delegation.

Obstacles:

- The timing of a transition has not been defined but we have received assurances that Franklin County is a priority and EOPSS will help us in the event of any kind of system failure.
- The region would be reliant on EOPSS for emergency communications and there is not a plan for local oversight at this time.
- Until the statewide system is expanded and improved, the system has service gaps, especially in the eastern section of the county.
- In its current configuration, the Commonwealth Radio System currently cannot page emergency services. There is one pager, Unication G5, which can receive pages on the Commonwealth System. EOPSS understands this issue and is working with vendors to find a solution. If a solution cannot be found prior to the migration, the FCECS would need to be kept online, in a reduced capacity, so that paging can take place.

Notes:

- EOPSS has secured funding for the entire statewide radio upgrade project. We have been assured that radios for Franklin County are included in that funding stream.
- It is possible that EOPSS will fund a base radio type for public safety in Franklin County. If a town would like to use a different type of radio then that town might need to pay the difference.
- EOPSS is currently crafting a RFP to start the statewide project. Franklin County public safety will be a part of that RFP.
- As of this report there have been no discussions about making Franklin County pay a user fee to be on the system. This could change in the future.

**OPTION TWO: Rebuild the 450 MHz system**

Benefits:

- Region maintains local control.
- The rebuild could occur in phases so that eventually, with the relocation of antennas (a longer-term and more expensive fix), the system would work better.

Obstacles:

- The cost of rebuilding the system (\$8-10m) would be the full and total responsibility of the municipalities of Franklin County.



## Franklin Regional Council of Governments

- The cost of maintaining the system would continue to be the annual responsibility of the municipalities of Franklin County.
- If the FRCOG is to continue as owner of and be responsible for the system, an increase to the assessment fee would be applied for a system overhaul in 10 to 12 years.
- The funding for the rebuild would come from the FRCOG bonding on behalf of the Towns. This could only proceed after ballot approval at all 26 Town Meetings and the passage of special state legislation.
- The new system may not meet the state's goal of a single interoperable system.
- The State has said they would not fund standalone radio systems like the FCECS.

### **OPTION THREE: Other**

We have heard rumor that some Franklin County municipalities are considering building their own emergency communication system. To be very clear, the FRCOG has no pride of ownership and is more than willing to cede responsibility of emergency communication to another entity or municipality if another feasible solution emerges that meets the region's needs. We are in this together; let's work together.