



State of New York County of Broome Government Offices

Broome County Office of Emergency Services
Jason T. Garnar, Executive - Patrick E. Dewing, Director

MEMORANDUM

To: Public Safety & Emergency Services Committee
From: Patrick E. Dewing
Date: April 11, 2022
Re: Public Safety Radio System Update

Overview

Since the last report in December of 2021, we have made substantial progress on the construction of the remaining tower sites. I am happy to announce all the tower sites are now complete.

Emergency Services has continued to conduct weekly meetings with our vendors to promote communication and project awareness. Our target to cutover to the new system July 2022; this delay is the direct result of battery shortages and extended delivery times.

Physical Infrastructure

Completed Towers:

- Ingraham Hill Tower
- Pease Tower
- Kopernik Tower
- Andrews Tower
- Old State Road Tower
- Hawkins Town
- Union Tower
- Lisle Tower
- Maine Tower
- Ely Park Tower
- Nabinger Tower
- Sanford Tower
- Laurel Lake Tower
- Windsor Tower
- Kirkwood
- Deposit

Microwave

Aviat completed the microwave connectivity installation at all the remaining tower sites last month.

911 Center Radio Consoles

Final integration of the radio consoles to the new radio system will take place the week of April 25, 2022.

Motorola P25 System

We continue to receive end user shipments at our Wayne Street warehouse. Most of the nearly 4,000 radios have been delivered and we are sorting and completing inventory on a constant basis. Motorola has sub-contracted with United Radio out of Syracuse to perform the mobile and base station installations for the agencies. This was due to their experience and staffing ability to do multiple installations at once. They will begin some of the installations in the next few weeks, including radios for the recently purchased transit buses.

All the Motorola radio infrastructure has been installed at the sites and at the Public Safety Facility except for some base stations for backup capability. There are still issues with the delivery of some of that equipment due to supply chain issues, mostly antennas. We are now expecting those to arrive in August.

Motorola has turned on and activated the new radio system at several of the sites. Early testing is showing very promising coverage from those sites. At this time, we are expecting all the sites to be turned on and optimized by end of May. Full countywide coverage testing is now planned for the month of June. This involves breaking the county map into ½ mile by ½ mile grid squares and then two teams of a third-party contractor will be driving around the county making sure to stop in every one of the grid squares and perform a portable radio test to prove we have at least 95% coverage. The teams will have county employees to witness the testing.

If testing is accepted, we plan to begin training end users and migrating agencies over to the new radio system, hopefully by late July. Two agencies will have to be switched over first: Transit and Town of Union Highway. This is because we are going to be using those agencies' current radio frequencies on the new system, necessitating them to abandon their current radio systems before the new P25 system can be fully operational. From there we plan to migrate other agencies one-by-one and the process is expected to take several months to complete, likely into spring of 2023.

The user-agency MOU agreement has been completed and is currently under review by the Law department and Risk. We will be requiring agencies to adopt the MOU before we distribute the radios.

Talk path profile design and development is still underway for all the end users.

Paging System

We recently completed the final phase of our paging system for Fire and EMS agencies. The main portion of this was installed and activated in 2017 however we needed the final towers to be constructed and microwave connectivity to complete the project. Three additional sites were brought online last week, and we now have a 12-site simulcast paging system.



