

# Staff Report

**Subject:** Radio Tower Network Connectivity  
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**Department:** Information Technology, Fire/Emergency Management, E911 Services, Sheriff's Office, Emergency Medical Services (EMS)  
**Meeting Date:** 11-15-2022

**Item Description:** Consideration to approve a service agreement with Planters Communications to provide a Layer 2 fiber Network to the three Public Safety Radio Towers for interconnectivity.

**Summary Recommendation:** Effingham County's Public Safety radio towers are located at three remote locations within the county and are critical for emergency communications. The microwave systems that interconnect the towers have some age and are due to be replaced soon. As part of future planning and during negotiations with our communication vendors we requested quotes on providing connectivity to the towers.

## **Executive Summary/Background:**

1. This communications infrastructure is critical to all Public Safety including county Fire, EMS, Sheriff's Office, EMA, our cities Law Enforcement, and Fire, along with State and Regional agencies including State Patrol, Forest Service, Department of Natural Resources, Flight EMS Services, and other SEGARRN Public Safety members.
2. The board has approved and spent millions building out, upgrading, and maintaining our Public Safety communications infrastructure in the past, it would be a major loss to the community to not maintain it and let it fail.
3. In the past we have experienced occasional outages on the radio towers due to adverse environmental conditions. This has left parts of the county cut off from having county wide public safety radio communications.
4. Microwave dishes can be knocked out of alignment or damaged from high wind situations such as from hurricanes or tornados. After such events a tower crew must be called in to make repairs. Getting a tower crew onsite usually takes weeks to coordinate leaving the site offline until they arrive and complete the repairs.
5. Having an underground fiber to provide the connectivity to the sites is more reliable and can carry more traffic than the microwave system. If the fiber were to be damaged we can call our provider, who has on staff fiber repair crews who can be called in to make the repairs almost immediately.

## **Alternatives for Commission to Consider:**

1. Board approval of the service agreement with Planters Communications for Layer 2 fiber .
2. Board approval of the service agreement with Motorola Solutions for Microwave Systems Replacement.
3. Do not approve either of the Services Agreements.

**Recommended Alternative:**

Staff recommends Alternative number 1

**Other Alternatives:** N/A

**Department Review:** Information Technology / Emergency Management / 911 Services / Sheriff's Office / Emergency Medical Services (EMS)

**Funding Source:** This project can be partially funded from the IT Department Budget (Computers, Servers, and Other Equipment G/L), partially funded from 911 Recovery Fees with the remaining from the General Fund. This was partially budgeted in this budget year.

**Attachments:**

1. Planters Contract (SITES 25-27).pdf
2. Motorola Microwave Budgetary Quote.pdf
3. Email Quote Request and Advising of Planned Microwave Change.pdf
4. Staff Review of Proposals for Public Safety Radio Tower Sites Connectivity.docx