PROJECT NAME: Data and Voice Radio Network - Wisconsin

Concepts To Operations was retained by FoxComm to provide consulting services with the Data and Voice Radio Network Design Consulting for the purpose to assist the FoxComm Counties (Brown, Calumet, Outagamie, and Winnebago Wisconsin) with:

➤ Assessment of the existing data networks and advise on needs considering inadequate present performance and upgrades required such as analog to digital for future technology advances and/or migration.

➤ Researched and provided options which included features, initial cost investment and on-going cost associations for each option, and manageability.

➤ Developed a plan for redundancy of and interoperability between FoxComm Counties for Public Safety voice communications, and 9-1-1 answering points with differing wireless and wireline network designs.

➤ Designed a system that complies with Federal and State mandates and grant funding initiatives.

➤ Network options included modern, future visioning, flexible media, i.e., dark fiber, sonic fiber ring, microwave that would provide conduits for voice radio communications, telephone communications, 9-1-1 service ability, VoIP, RadioIP, etc. and provide an advanced secure environment.

➤ Designed options offering capacity for consolidation of other public safety systems such as public safety answering points that are not in place or planned for today.

➤ Reviewed and provide recommendations for facility and staffing needs of FoxComm consortium (not individual County participants of FoxComm).

To determine the status of the existing systems as well as the future needs of the FoxComm agencies CTO conducted interviews with operational and technical personnel of the various involved counties, cities and Tribal Nation.

A set of alternatives were developed involving one regional trunked system to serve all four counties or separate trunked systems for each of the four counties. Because of the lack of suitable VHF frequencies, 700 MHz systems were proposed for voice, 800 MHz for data and VHF for paging. Interoperability systems with surrounding Wisconsin counties and with the state were recommended.