Proposal for

Bid#(2014-18) RFP St. Lawrence County Communications Study

submitted to

St. Lawrence County
Canton, New York

May 1, 2014
April 29, 2014

Mr. Michael Cunningham  
Purchasing Office  
St. Lawrence County  
48 Court Street, Courthouse  
Canton, New York 13617-1194

Subject: Request for Proposal for Bid# (2014-18) RFP St. Lawrence County Communications Study

Dear Mr. Cunningham:

CDI-Infrastructure, LLC dba L.R. Kimball (Kimball) is pleased to respond to your Request for Proposal for consulting/engineering firm to review current operations and evaluate needs and propose system and infrastructure options to best meet St. Lawrence County’s requirements. We are certain that you will find the enclosed proposal fully responsive to your request.

Kimball continues to build on our legacy of offering public safety communication consulting services, with a staff comprised of professionals dedicated to supporting all aspects of public safety communications system planning and design projects. Kimball has grown to become a national leader in providing consulting services for public safety environments and is recognized for applying technological and operational innovation to keep critical infrastructure survivable and sustainable. We are particularly known for our specialized expertise in radio and wireless communications, networks; telecommunications, next generation (NG) technologies, cyber security; operational and design expertise, and geospatial solutions.

If you have any questions or need clarification regarding the information submitted, please contact Mike Harper by phone at 412-418-8474 or via email at Mike.Harper@LRKimball.com.

<table>
<thead>
<tr>
<th>Location Providing Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.R. Kimball</td>
</tr>
<tr>
<td>615 West Highland Avenue</td>
</tr>
<tr>
<td>Ebensburg, PA 15931</td>
</tr>
<tr>
<td>Fax: 614-472-7712</td>
</tr>
</tbody>
</table>

Sincerely,

Deborah C. Irwin  
Vice President

/dak

Enclosure
Table of Contents

Relevant Qualifications and Experience of the Firm................................................................. 1
  Company Background ............................................................................................................ 1
  Demonstrating Value for Our Clients .................................................................................. 1
  Synopsis of Capabilities ...................................................................................................... 2
  Wireless Voice and Data Communications Engineering Services ..................................... 2

Staff Assignment to the Project ............................................................................................ 5
  Project Manager .................................................................................................................. 5
  Subject Matter Experts ...................................................................................................... 5

References .............................................................................................................................. 16

Project Plan ............................................................................................................................ 20
  Phase 1—Systems Review and Needs Assessment ............................................................... 20
    Task 1.1—Project Kick-off Meeting .................................................................................. 21
    Task 1.2—Existing System(s) review ............................................................................. 21
    Task 1.3—Operational Enhancement Analysis .................................................................. 22
    Task 1.4—Spectrum Review ............................................................................................ 23
    Task 1.5—Conceptual Design Development ................................................................... 24
  Phase 2—Request For Proposal Development and Procurement ....................................... 25
    Task 2.1—Pre-Request For Proposal Preparation ............................................................. 25
    Task 2.2—Request for Proposal Development ................................................................ 25
    Task 2.3—Pre-proposal Conference and Site Visits ......................................................... 26
    Task 2.4—Vendor Questions and Answers ..................................................................... 26
    Task 2.5—Proposal Evaluation/Vendor Recommendation ............................................. 27
  Phase 3—Implementation Oversight (Optional—Time and Materials) ............................... 27
    Task 3.1—Program/Project Management ........................................................................ 28
    Task 3.2—Design Review(s) ........................................................................................... 29
    Task 3.3—Installation Oversight and Construction Management ..................................... 29
    Task 3.4—Factory Staging and Acceptance Testing .......................................................... 29
    Task 3.5—System Coverage and Functional Acceptance Testing .................................. 30
    Task 3.6—Training Oversight ......................................................................................... 30
    Task 3.7—Cutover Planning and Execution .................................................................... 30
    Task 3.8—Punch List Final Inspection and System Acceptance ..................................... 30
  Preliminary Project Schedule ............................................................................................. 31

MBE/WBE Participation Goals: ............................................................................................ 33
  YES Inc. - Service Offerings ............................................................................................. 33
  Public Safety and Homeland Security .............................................................................. 33
Required Forms .................................................................................................................. 35
Cost Proposal ..................................................................................................................... 42
Terms and Conditions ........................................................................................................ 43
RELEVANT QUALIFICATIONS AND EXPERIENCE OF THE FIRM

L.R. Kimball (Kimball) is pleased to present this response to St. Lawrence County (County) for consulting services supporting the definition, procurement and implementation of a Countywide interoperable emergency communications system. Kimball has performed many similar projects for large public safety clients and we recognize that the County is seeking an independent consultant that brings experience and knowledge needed to define and procure the most cost-effective, reliable system meeting your user’s needs for coverage, features and performance.

The following sections of the proposal demonstrate the capabilities and experience of our firm and what our staff brings to the County to provide the required consulting services. Below, we provide an overview of our company with detailed descriptions of the specific services and capabilities we offer related to radio and wireless systems. Our submittal includes a cross-section of detailed project sheets from similar projects, including client contact information for use as references. Similarly, we identify the proposed key team members anticipated for assignment on the project and provide resumes for a cross-section of professional staff, illustrating the individual capabilities and experience of the proposed Kimball staff.

Company Background
Kimball is the infrastructure business unit of CDI Engineering Solutions and is listed as number #12 on Engineering News Record’s list of “Top 50 Telecommunications Firms”. Headquartered in Pennsylvania and founded in 1953 as a civil engineering firm, Kimball has evolved into a contemporary, multi-faceted full-service solution provider. Kimball’s continuous growth and success are the result of an established reputation for delivering high-quality services.

Kimball, continues to build on the more than 17-year legacy of offering public safety consulting services, with a staff comprised of professionals dedicated to supporting all aspects of public safety communications system planning and design projects. Since inception, Kimball has grown to become a national leader in providing consulting services for these environments and is recognized for applying technological and operational innovation to keep critical infrastructure survivable and sustainable. Serving as strategic partners for Kimball clients, uniquely blending policy, operations, technology and financial expertise under one roof are the keys to our success.

Kimball is well known throughout the industry for our specialized expertise in the following areas:

- Radio and wireless communications
- Interoperability planning
- Operational and design expertise

Kimball has an unsurpassed reputation for exceeding client expectations by providing straightforward, high quality and independent advice in the form of highly collaborative relationships. Kimball’s independence is important to our clients since it assures that we can provide objective and viable solutions based on our clients’ unique needs and on our knowledge and experience and not on any specific vendor or manufacturer.

Demonstrating Value for Our Clients
Kimball’s qualifications include technical competence in the entire public safety telecommunications and technology enterprise; ranging from voice communications, data networks, automated technologies and geographic information system (GIS), as well as familiarity with staffing structures, consolidation and automated technologies.

Some of the keys to Kimball’s successful support of similar clients and projects include the following items:
Objectivity and Independence—Kimball maintains an independent position in the critical infrastructure communications industry, we provide an objective assessment of all available options and recommend an ideal match for your needs. Kimball acts as your advocate and seeks the best solutions to meet your exact system requirement.

Specialized Experience, Diverse Capabilities—All members of Kimball’s staff are experts in at least one specialized area of critical infrastructure communications, but our project staff has experience with a broad range of technology and systems, dispatch and operations as well. These diverse capabilities set Kimball apart as you begin to converge these components into a single, cohesive system.

Interactive Approach—Kimball is widely known for our emphasis on collaborative interaction with our clients and associated stakeholders. Kimball’s staff understands that while we may bring technology, operational experience and structure to the project, our clients best know and understand their unique issues and problems. Working Interactively with our clients and stakeholders at every step of the project, seeking input and concurrence on recommendations, helps assure an outcome that is indeed your “best-fit”.

Synopsis of Capabilities
Kimball’s Communications Technology Division has supported a large number of clients at the county, regional and state level in the assessment of the needs of their public safety radio communications systems, the development and procurement of the solution and technology best suited to their needs and oversight of the successful implementation of the system.

Kimball consulting services enable our clients to achieve enhanced interoperability, maximize returns on their radio and wireless investments and employ an improved capability to communicate for smooth, seamless operations. Kimball is skilled in every aspect of radio and wireless communications including the following: system design, procurement, implementation, communications site design and complete end-to-end program management services.

Wireless Voice and Data Communications Engineering Services
Kimball radio and wireless engineering services provide clients with the engineering and technical expertise typically needed in development and design of radio and wireless systems. Kimball engineering services and capabilities encompass the entire range of technical expertise needed for reliable radio frequency (RF) design, as well as supporting system elements sites as site/civil, microwave and connectivity networks and Federal Communications Commission (FCC) licensing and spectrum pursuit.

- Trunking and Conventional System Design
- Wireless Voice and Propagation Analysis
- Microwave and Fiber System Design
- Tower and Site Engineering and Design
- Maximum permissible exposure (MPE) Studies

Operational and Functional Needs Assessments
Kimball assesses our client’s current technology environment and incorporates their vision in order to determine the operational and functional requirements that must be met. A significant amount of time is spent understanding user operating environment and specific requirements. Only after Kimball is completely assimilated do we begin to formulate our recommendations.

Trunking and Conventional System Design
Kimball engineers and technical staff provide complete system design services ranging from conceptual designs and cost estimates to ready-to-build systems. Kimball’s personnel are experts in all aspects of RF system design, including conventional or trunked systems supporting voice or data applications. Kimball’s experience and advanced product
knowledge covers all facets of wireless radio communications and technologies, accepted design practices and standards. This experience and knowledge enables Kimball to provide innovative, yet practical, applications for our clients.

**Wireless Voice and Propagation Analysis**

When it comes to voice and propagation analysis, Kimball performs various computerized radio propagation studies to predict coverage for conceptual designs. Kimball is known for efficient studies that achieve credible results. Working in conjunction with client expectations, Kimball experts define the sites necessary to meet their desired radio coverage. Kimball coverage models include: mobile, portable, paging, talk-out and talk-back, in-street and in-building designs.

**Microwave and Fiber System Design**

Kimball’s engineering capabilities include assessment and design of the connectivity networks typically required to support modern radio communications systems. Kimball’s network architects identify and incorporate service, feature and performance requirements in the design of these critical connectivity and back-haul networks. Kimball’s physical and logical network design services and capabilities include the following:

- Traditional fiber/wired based network design, including all elements such as transport, routing, access, management and security
- Microwave-based transport network design and engineering, including integration with fiber

**Technology Upgrade Planning**

Kimball assists with migration planning from legacy systems to current generation platforms; a process that is often more complex than original system implementation. Kimball experts are experienced in all vendors’ offerings, current standards and trunking issues. Kimball’s independent knowledge during the planning process helps agencies acquire more competitive pricing and conduct more effective planning. After determining system-specific needs and objectives, Kimball makes migration possible without interrupting day-to-day operations.

**Federal Communications Commission Licensing and Regulatory Services**

A key element to procuring and implementing a successful communication project is the availability of clear and usable frequency spectrum. Kimball identifies available spectrum as your advocate working with the FCC and frequency coordinating agencies. This results in greater speed to implementation, less risk and a greater likelihood of success.

**Tactical and Strategic Interoperability Planning**

Kimball provides our clients with a complete approach to interoperability assessments and improvement plans. Kimball’s depth of experience with interoperability projects has demonstrated that interoperability planning requires much more than technology changes or upgrades. Kimball’s approach to interoperability not only addresses technology requirements, it helps establish effective operating procedures, defines strong, participative governance plans, trains users how to best leverage new tools to their advantage and acquire funding necessary to fulfill interoperability missions.

**Tower and Site Engineering and Design**

A key element in virtually any radio or wireless network are the towers and supporting facilities and sites needed for mounting RF antennas and equipment. Kimball offers a range of capabilities needed to evaluate, design and acquire these important facilities. Kimball’s capabilities for tower and site design and development include the following:

- Design and specification of tower, shelter and civil work for new or upgraded transmission site facilities
- Site acquisition and development services, (environmental and historical impact evaluations) and negotiation support
- Feasibility analyses for use of existing tower facilities and/or additional structures (buildings, electric power structures, etc.) instead of a new tower
- Comprehensive planning and mapping of tower sites and facilities
- Listing of relevant projects
The following table provides a subset of radio projects that Kimball has performed or is performing. We have provided the four reference projects required by the County in the Reference Section of the proposal.

<table>
<thead>
<tr>
<th>Client</th>
<th>Project Description</th>
<th>Manufacture</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucks County, Pennsylvania</td>
<td>700/800 MHz P25 Countywide Trunked System</td>
<td>Motorola</td>
<td>Sept 2009 – Ongoing</td>
</tr>
<tr>
<td>Butler County, Ohio</td>
<td>800 MHz P25 Trunked County System</td>
<td>Motorola</td>
<td>Aug 2004 – Apr 2009</td>
</tr>
<tr>
<td>Charleston County, South Carolina</td>
<td>700/800 MHz P25 County System</td>
<td>Motorola</td>
<td>Nov 2010 – Mar 2013</td>
</tr>
<tr>
<td>Franklin County, North Carolina</td>
<td>VHF P25 Trunked System</td>
<td>Harris</td>
<td>Aug 2009 – Ongoing</td>
</tr>
<tr>
<td>Monmouth County, New Jersey</td>
<td>700/800 MHz P25 Countywide Trunked System</td>
<td>Motorola</td>
<td>Jan 2009 – Ongoing</td>
</tr>
<tr>
<td>Niagara County, New York</td>
<td>UHF P25 Trunked System</td>
<td>Motorola</td>
<td>Apr 2011 – Ongoing</td>
</tr>
<tr>
<td>Okeechobee County, Florida</td>
<td>800 MHz EDACS Trunked System</td>
<td>Harris</td>
<td>Jan 2007 – Jul 2012</td>
</tr>
<tr>
<td>Ontario County, New York</td>
<td>700 MHz P25 Trunked System</td>
<td>Harris</td>
<td>Aug 2006 – Sep 2013</td>
</tr>
<tr>
<td>Washington County, Maryland</td>
<td>UHF P25 Trunked System</td>
<td>Motorola</td>
<td>Jun 2004 – Jan 2010</td>
</tr>
<tr>
<td>York County, Pennsylvania</td>
<td>UHF P25 Trunked System</td>
<td>Harris</td>
<td>Apr 2011 – Dec 2012</td>
</tr>
<tr>
<td>York County, South Carolina</td>
<td>800 MHz P25 Trunked System</td>
<td>Motorola</td>
<td>Mar 2004 – Feb 2007</td>
</tr>
<tr>
<td>State of Maryland</td>
<td>Statewide 700MHz P25 Phase 2 Trunked Radio System</td>
<td>Motorola</td>
<td>Jun 2008 – Ongoing</td>
</tr>
<tr>
<td>State of Missouri</td>
<td>Statewide VHF/700/800 P25 Trunked System</td>
<td>Motorola</td>
<td>Oct 2009 – Ongoing</td>
</tr>
<tr>
<td>State of Vermont</td>
<td>Conventional Analog UHF/VHF Statewide System</td>
<td>Harris</td>
<td>Apr 2009 – Ongoing</td>
</tr>
</tbody>
</table>

Table 1—Partial List of Kimball Radio Projects
STAFF ASSIGNMENT TO THE PROJECT

Kimball recognizes the success of any project for our clients is directly correlated to the skills and knowledge of our professional staff. Projects consisting of the type of services being proposed require close coordination and communications with your staff to assure proper understanding of the work and efforts required to achieve your goals. Our professionals spend the time required to understand each user agency’s operating environment and specific requirements, system ownership/operation, budget and funding available.

Kimball’s proposed team members have backgrounds in public safety operations as law enforcement, emergency management fire, rescue and emergency medical services (EMS) officials and first responders, government communications, radio engineering, Internet technology (IT), systems management and operations. This insight and experience provides a greater understanding of the requirements, operating environment, features and capabilities needed by the system users.

The key professional staff roles that interact with the County on this engagement will be the Kimball Project Manager (PM) and a supporting group of subject matter experts (SMEs) in those areas identified as specialized requirements by the County.

Project Manager

The Kimball PM brings knowledge of current technology trends and vendor community offerings and regulatory issues. The PM will work closely with the County to develop overall project strategies and direction. The PM will coordinate all of these elements and lead technical specialists in the development of a solution that is in alignment with the County and stakeholder agencies’ needs, as well as with the products that are currently being offered.

For this project, Kimball proposes Mike Harper as the PM. Mike has extensive demonstrated project management experience in radio and wireless public safety communications systems, as well as many successful projects implementing critical infrastructure IT systems such as computer aided dispatching (CAD). Mike has led several public safety radio consulting projects in New York State and in the Northeast with similar scope of works (SOWs). Mike and the proposed team have successfully implemented several countywide public safety radio systems and are intimately familiar with the complexities involved in working through the processes for frequency selection and licensing along the Canadian border. This real world experience will be vital to the success of the County’s system.

Subject Matter Experts

The PM is supported by Kimball’s staff of in-house SMEs that are assigned to projects on an as-needed basis, based on functional or technical areas of need and experience. Kimball has in-house SMEs covering a broad range of areas related to public safety communications and related fields. Our technical specialists may be assigned as needed for the following:

- Radio systems needs analysis and implementation planning
- Interoperability planning
- Conventional and trunked radio design and implementation
- Radio propagation analysis
- Microwave and RF control link design and specification
- Frequency research and coordination
- Radio site development and construction management
- Radio communications system operations and management
- Civil and structural analysis and design
- Mobile data communications
- Wireless local area network/LAN/wide area network (WAN) design
- GIS/mapping
- Public safety answering point (PSAP) Management and Operations
- Policy and procedures
- Administration
- Grants and funding
Resumes of Kimball’s proposed PM and all professional staff that are available to be assigned to provide services to meet the County’s requirements are provided on the following pages detailing their education, qualifications, experience and training. The chart below represents the organization of the key staff proposed for this project. Resumes of additional Kimball staff with expertise relevant to the proposed project are included. The expertise of these staff can be called upon should additional expertise be needed.

Figure 1—Proposed Kimball Team
Jack Dougherty served with The Pennsylvania State Police (PSP) for over 26 years, retiring in 2012 at the rank of Major. As the Director of the Bureau of Communications and Information Services, Jack was responsible for the administration and operation of PSP statewide communications and information systems which were utilized by over 5,000 end users. In this position, Jack had oversight over all communications and information technology projects undertaken by the Bureau. Jack managed the Statewide Radio Implementation and Interoperability Office (STARNet 800 MHz), the Technical Support Division (VHF Radio and Telephony) and the Dispatch Operations Division. Jack served at the rank of Lieutenant and Captain with PSP in Dispatch Operations and Computer Operations and has extensive experience in dispatch consolidation, dispatch center operations, CAD, GIS systems, 911 systems, mobile data terminals, network operations, and law enforcement databases (NLETS, NCIC, DMV, RMS, etc.). Jack served in a number of command level positions with PSP and has extensive experience in patrol operations, criminal investigation, forensics, security, and emergency management. Jack has extensive experience as a Senior Consultant with several large county and regional radio projects.

Project Experience

- Bucks County, Pennsylvania, 700MHz P25 Public Safety Radio Network implementation and transition from UHF T-Band
- Berks County, Pennsylvania, 700MHz P25 Public Safety Radio Network implementation
- Eastern Shore of Virginia 911 Radio System Interoperability Assessment and Recommendations
- Cumberland County, Pa. Technical Support
- PSP VHF Legacy System narrow banding project
- PSP Dispatch Consolidation migration
- PSP Norristown Dispatch Center construction and implementation
- Philadelphia Highway Dispatch expansion project
- PSP/PA DOT ITS/CCTV project
- Commonwealth Law Enforcement Assistance Network Portal project
- PSP Mobile Data Terminal and Mobile Video Recorder refresh projects
- PSP Automated License Plate Readers

Relevant Experience

- Operation, implementation and management of PSP 800 MHz and VHF radio systems, CAD System, Consolidated Dispatch Centers, Station Communications Centers, GIS System, Records Automation, Mobile Data Terminals and law enforcement databases
- Communications center planning, construction, staffing and operation
- Served as NLETS representative for the Commonwealth of Pennsylvania
- Authored policies, standard operating procedures, technical documents, staff studies, strategic and operations plans, and after-action reports
- Managed law enforcement officers, telecommunicators, telecommunications specialists, and support staff
- Command and administration of law enforcement functions
- PSP operations, patrol operations, criminal investigation, specialized functions, task force operations
- Commonwealth/PSP policies, procedures, procurement
Michael Harper | Project Manager


Mike Harper has extensive experience in project management, IT systems engineering, systems development and product management. Mike has managed multiple highly successful multi-agency radio and mobile data projects. He has established and maintained relationships with hardware and software providers to identify and prioritize product enhancements, create initial system and network designs, and develop detailed project plans for new wireless network projects. Mike directed internal engineering staff in the development of product support infrastructure and developed, produced and delivered project documentation including sales collateral, installation guides and users manuals.

Project Experience
- Ontario County, New York, 700 MHz Digital Trunked Radio System Design and Implementation
- Monmouth County, New Jersey, 700 MHz Digital Trunked Radio System Design and Implementation
- Niagara County, New York, UHF Trunked Radio System Design and Implementation
- York County, South Carolina, 800 MHz Trunked Radio System Design and Implementation
- Washington County, Maryland, UHF Trunked Radio System Design and Implementation
- Butler County, Ohio, 800 MHz Trunked Radio System Design and Implementation
- Butler County, Pennsylvania, UHF Simulcast Radio System Design and Implementation
- Allegheny County, Pennsylvania, Airport Authority, 800 MHz Communications System Design
- Metropolitan Washington Airports Authority, Virginia, 800 MHz Radio System Assessment
- Department of Homeland Security, ICTAP Program Support
- Crawford County, Pennsylvania, Multi-Agency RMS Design and Implementation
- Niagara County, New York, Radio Console/9-1-1 Telephony/Dispatch Furniture
- Onondaga County, New York, Dispatch Console System and Dispatch Center Remodel
- Onondaga County, New York, CAD/MDT System
- Butler County, Pennsylvania, CAD Integration and Implementation
- Lycoming County, Pennsylvania, CAD Specification and Implementation
- Cambria County, Pennsylvania, CAD Integration and Implementation
- Westmoreland County, Pennsylvania, CAD Integration and Implementation
- Mercer County, Pennsylvania, CAD Integration and Implementation
- University of Pittsburgh, Pennsylvania, Medical Center Health Systems, Paging/Wireless Messaging Systems

Publications:
Mobile Data Networks: Changing with Technology, 9-1-1 Magazine, July 2006
R. ALLEN (AL) SMITH  Consultant

Licenses:  First Class Radio Telephone License with Radar Endorsement
Affiliations:  APCO
Education:  Associate, Communications Electronics, DeVry University, 1976; Edinboro University of Pennsylvania, General Studies (Science Focus), 1969-1971
Certifications:  Motorola:  SMARTNET Trunked Systems, CentraCom Gold Elite, CPS/RSS; Technical:  Propagation Study, Simulcast Solutions

Al Smith started his career at Mobilcom as a field technician and worked his way up the career ladder to systems manager. In his capacity as systems manager, Al provided technical consulting (including RF radiation studies, selection of site locations, construction of tower sites, design of public safety communication and radio dispatch systems) and direction to public safety divisions of local and county government. Al's background includes experience in all project phases, from developing long-range planning to implementation and final completion of projects.

Project Experience

- State of Oklahoma, System Assessment and Recommendations for System Improvement
- State of Missouri, System Assessment and RFP Development
- State of Vermont, RFP Development, System Procurement and Implementation
- Niagara County, New York, RFP Development
- Indiana County, Pennsylvania, Radio System Upgrade from VHF to 800 MHz P25 Trunking
- York County, Pennsylvania, Microwave Upgrade and Paging Review
- Erie County, Pennsylvania, County Public Safety Communications Assessment and Recommendations
- Armstrong County, Pennsylvania, Radio System Assessment and Recommendations for Improvement, and Radio System Upgrade from VHF to 800 P25 Trunking
- Lorain County, Ohio, Radio System Assessment and Recommendations for Improvement
- Chenango County, New York, Microwave and Radio System Upgrade
- Saint Clair County, Illinois, Paging System Expansion and Upgrade
- Armstrong/Indiana County, Pennsylvania, Develop Regional Broadband Strategy
- Lewis County, West Virginia, Interference Assessment and Recommendations

Relevant Experience

- Managed tower constructions resulting in expanded carrier lessees
- Managed FAA, FCC and regulatory agency relations for construction
- Managed antenna support structure leasing division
- Engineered high tier communications infrastructure for sales division
- Developed RF propagation and path studies for coverage evaluations
- Served as technical representative to high-tier clients
- Implemented metric for team performance tracking program
- Developed ongoing maintenance strategy for public safety systems
- Reorganized division structure, reducing personnel costs
- Developed infrastructure repair team for 9-1-1 services to systems
- Developed repair cycle time program, decreasing turn time
RUSSELL (RUSTY) HIMELWRIGHT  Consultant

Years of Experience:  31

Affiliations:  APCO

Education:  Associate, Instructor of Technology and Military Science, Community College of the Air Force, 1992,
Associate, Electronic Systems Technology, Community College of the Air Force, 1992

Certifications:  Master Instructor Certification, Advanced Digital Wideband Systems Evaluation, USAF

Rusty Himelwright is experienced in microwave and radio communications systems operations, maintenance, planning and design. He obtained the bulk of his communication system experience during his 20-year stint with the USAF with radio relay (microwave) equipment repair training. This particular equipment maintenance/repair course concentrated on fixed heavy tropospheric scatter and line-of-sight microwave, as well as tech-control facilities and mobile terminals training. Rusty focused his training on the operation and maintenance of mobile microwave/tropo.tech-control and associated test equipment, and then redirected his training to the operation and maintenance of microwave and satellite radios, multiplexers, cryptographic modules and VHF/UHF receivers. During his career, Rusty provided supervision, training and technical expertise to a 28-man satellite and microwave communications maintenance work center, both in garrison and under field conditions and was subsequently selected as a HQ 16th Air Force contingency communications planner, providing multi-support functions throughout the USAF’s southern European region.

Project Experience

- Ontario County, New York, Emergency Communications System Design and ongoing implementation
- Berks County, Pennsylvania, 700/800 MHz P25 Public Safety Radio Network Conceptual Design
- Adams County, Pennsylvania, Public Safety Radio Communications System Conceptual Design
- Monmouth County, New Jersey, UHF (T-Band) Public Safety Radio System and 6 GHz MPLS Microwave System Conceptual Design and ongoing implementation
- GHC, Texas, NG MPLS Microwave System Conceptual Design
- Montgomery County, New York, 6 GHz Microwave System Conceptual Design, 2 GHz AWS migration negotiations and multi-county loop system implementation

Relevant Experience

- Performed computer-generated VHF, UHF, 700/800 MHz propagation modeling
- Performed conceptual NG MPLS and Legacy TDM microwave systems designs
- Conducted RFI and MPE Studies
- Developed numerous RFP and RFB specification documents
- Designed wireless in-building system to improve cellular, PCS, IDEN and paging signals in communications centers
- Designed countywide UHF and VHF tone alert/voice/alphanumeric paging systems to support fire, EMS and administrative agencies
- Skills sets associated with FM/AM/PM and microwave communications networks

Training:

RONALD V. (RON) GIFFIN  Consultant  

Licenses:  FCC General Radio Operator License  

Education:  Associate Degree, Electronic and Computer Technology, Electronic Institute, Harrisburg, Pennsylvania  

Ron Giffin has experience working in the LMR systems field, working with public safety and business customers, providing solutions-oriented RF design, installation, optimization and maintenance. Ron has worked with customers, salesmen, engineers and technicians providing cost-effective solutions with optimal performance, providing reliable radio communications to a wide variety of customers. He is an impassioned team leader who mentors with purpose and understands that strong working relationships create great teams and produce exceptional results. Ron is proficient with radio propagation studies, FCC frequency allocations and has had numerous assignments associated with LMR public safety radio and business radio equipment. Ron is knowledgeable in analog and digital microwave systems, analog and digital paging systems. He is experienced with CCTV wired and wireless surveillance systems, remote access of these systems and video compression technology including H.264 video compression. This experience includes the design and installation of network DVR and IP camera systems and the setup of the associated IP networks including port forwarding for routing equipment and DNS setups.

Project Experience

- Managed the construction process and implementation of infrastructure equipment for 800 MHz P25 simulcast system for Charleston County, South Carolina
- Conducted technical and feasibility studies for county migration to the WISCOM state interoperability radio system in Wisconsin
- Participated in the design and organization of a reference guide for statewide interoperability assets for regional COG and counties in Texas
- Conducted technical and feasibility studies for Transtar Union Railroad radio system upgrade and improvements
- Commonwealth of Pennsylvania
  - Managed the implementation and optimization of infrastructure equipment and mobile radios for PENNDOT’s radio system upgrade for counties in District 9
  - Participated in design, installation, programming and optimization of a wide area simulcast radio system upgrade and new PSAP implementation in Blair County
  - Designed and actively participated in installation, programming and optimization of VHF analog/digital paging system and UHF combiner radio system upgrade for the VA Van Zandt Medical Center in Altoona
  - Managed implementation, programming and optimization of the radio system upgrade including new dispatch consoles and new tower sites in Snyder County
  - Worked closely with Motorola engineers and Saint Francis personnel on initial installation, programming and optimization of equipment for RF and IP bridge development for the CERMUSA project, Saint Francis University, Loretto
  - Designed, installed and optimized the 96-camera CCTV security system upgrade and computer controlled recording system for Altoona Hospital.

Training:  Computer Science Workshop, Shippensburg State College, Centracom Series Consoles, IBM DCS Gemini Base Station, MSF Digital Base Station and Digital Microwave
PROPOSAL FOR
BID# (2014-18) RFP ST. LAWRENCE COUNTY COMMUNICATIONS STUDY
SUBMITTED TO
DEPARTMENT OF GOVERNMENTAL SERVICES CANTON, NEW YORK

THOMAS R. (TOM) HARMON  Consultant

Licenses: Radio License, Technician Class Amateur KB3MTQ
Affiliations: IACP, APCO

Tom Harmon served The Pennsylvania State University Police for 33 years. As the Director of University Police for 15 years, he was responsible for the administration of all police and security operations at the University Park campus, as well as administrative oversight of security and police programs at all 24 university locations including patrol, investigations, traffic control, parking enforcement, residence hall security, records, communications, escort service and emergency management. The agency budget was approximately $5.5M. Tom managed a single site, 7-channel trunked radio system with more than 1,500 subscribers. He served as line instructor for municipal police-in-service training courses for the Criminal Justice Training Center, Indiana University of Pennsylvania, and was the Interim Director of public safety for Villanova University.

Project Experience
- PEMA Regional Deployment Manager, Wireless 9-1-1 Deployment Project
- State of Michigan TICP
- Centre County, Pennsylvania, Pennsylvania Radio Communications Assessment
- The Pennsylvania State University, Centre County, Pennsylvania, 800 MHz Rebanding
- State of Missouri STR Assessment for Public Safety Interoperable Communications Grant
- State of Oklahoma Statewide Public Safety Communications Survey and Oklahoma Field Operations Guide
- Texas Golden Crescent Regional Interoperable Communications Plan
- Franklin County, North Carolina, Assessment, Procurement and Implementation Support
- Detroit UASI Interoperability Assessment and TICP Update

Publications:
“Penn State’s Breathalyzer Program—An Education Approach to the DUI Problem,” Campus Law Enforcement Journal
“Campus Police as First Response Fire Fighters,” Campus Law Enforcement Journal
“Hiring Student Security Employees—Good Sense and Good Business, Using Students in Campus Public Safety,” Campus Law Enforcement Journal
“Planning for Interoperability—It’s About More Than Just The Hardware,” Public Safety Communications
Shag Kiefer has extensive prior experience providing public safety two-way radio communications consulting including radio systems implementation, tower site evaluation, RF coverage testing, E9-1-1 phone system implementation and project management for PSAP infrastructure development. Shag has experience in design, layout, grounding and integration services for PSAP relocation and is able to diagnose communications failures at the design, system and component levels. He has conducted P25 subscriber certification testing to field validate P25 performance. Shag writes training manuals, assessment reports, technical proposals and quotes, and creates system and as-built documentation.

Project Experience

- **Virginia Wireless E9-1-1 Project**
  - PSAP readiness assessments
  - State funding submissions and reconciliations
  - Equipment procurement assistance: RFP, pre-bid meetings, vendor proposal evaluation and selection
  - Equipment installation oversight, site preparation planning and acceptance testing for CPE, CAD, mapping and logger
  - Deployment preparation: request for service submissions, routing analysis, ALI data corrections and conducting deployment meetings
  - Phase 1 and Phase 2 deployment test services: schedule tests, conduct on-site testing, provide acceptance criteria, document test results, coordinate failure resolution and file reports with state agency

- **Pennsylvania Wireless E9-1-1 Project**
  - Project organization and technical assistance to deployment managers
  - PSAP readiness assessment
  - Technical analysis of emerging 9-1-1 technologies for PEMA, wireless carrier compliance assistance

- **Granville County, North Carolina, Wireless E9-1-1 Project**
  - Project management for PSAP site and equipment upgrades required for wireless deployment
  - Phase 1 and Phase 2 deployment services to the PSAP
  - Wireless deployment concerns review with the North Carolina Wireless Board

- **Essex County, Virginia**
  - Dispatch console needs assessment and recommendations
  - Console upgrade project management and technical lead
  - Radio communications system needs assessment and recommendations
  - Evaluation and negotiations for radio system proposal submittal received by the county
  - County PM for VHF simulcast public safety radio system implementation and tower lease negotiations

- **Shenandoah County, Virginia, ECC**
  - FCC licensing and technical specifications for radio system upgrade
  - Wireless E9-1-1 deployment in SALI environment
  - Radio system RFP, evaluation and selection, vendor negotiations, project oversight
Continued from previous page

- Bucks and Berks County, Pennsylvania
  - Evaluate tower site co-location options for radio system build out
  - Coordinate co-location applications with tower site owners

- WISCOM
  - Perform field and bench testing to validate interoperability of subscriber performance for multiple vendors on the statewide P25 radio system
  - Coordinate resolution of P25 performance issues

- Arlington County, Virginia
  - Coordinate and engineer design, construction, cabling, dispatch furniture, radio console, CPE, CAD, video system, specialty systems and grounding standards for PSAP relocation
  - Coordinate design documentation, standards implementation and network documentation
CHARLES A. (CHARLIE) HEBEL  Consultant

Years of Experience: 11

Affiliations:  NENA
Certifications:  ENP

Charlie Hebel has wireline/wireless radio communications system experience and his responsibilities include underground utility locating and mapping, equipment room/shelter layouts, radio and ancillary equipment evaluation and inventorying and site safety signage deployments. Charlie’s background includes construction oversight experience and he assists with pre-construction planning and site layout, reviewing and revising tower and shelter design drawings and oversight of all aspects of site development to assure compliance with design specifications, safety regulations and accepted common practices. Charlie’s site acquisition support responsibilities have encompassed identification, evaluation and documentation of candidate properties or sites, investigation of deeds, surveys and right of ways for candidate properties or sites. He has participated in the negotiation of leasing, access and co-location agreements. Charlie has experience researching permitting processes associated with site developments and co-locations, preparation of exhibits and testimony for, and participation in, zoning, planning and supervisory meetings, and completing FCC applications.

Project Experience
- Chester County, Pennsylvania, Radio System Auditing and 800 MHz Rebanding Support
- Crown Castle Due Diligence and Asset Evaluation
- IEM FEMA
  - Public Alert Siren System Upgrade in Indiana
  - Communications Center Upgrades in Alabama and Kentucky
- Cingular Wireless UMTS Project
- Linn County, Iowa, Radio System Analysis/Consolidation Project
- NYS OMH Radio Frequency Licensing Support
- Connectiv, Inc. (Delmarva and Atlantic Regions), Radio Communications Tower Site Audits and Equipment Inventory
- Cumberland County, Pennsylvania, Radio System Auditing and 800 MHz Rebanding and Narrowbanding Support
- Dauphin County, Pennsylvania, UHF Public Safety Wireless Radio Communications System Site Acquisition and Construction Oversight
- Lancaster County, Pennsylvania, Site Acquisition and Radio System Auditing
- Cumberland County, Maine, Radio System Site Development Support
- State of Oklahoma County Level Radio System Surveys
- Adams County, Pennsylvania, Radio System Candidate Site Assessments
- State of Vermont (Vermont Communications) Radio System Site Development Support
- SEPARTF, Updating of Interop System User Manuals
- Berks County, Pennsylvania, Site Acquisition and Site Development Services
- Bucks County, Pennsylvania, Site Assessment and Site Acquisition Services
- Armstrong and Indiana Counties, Pennsylvania, Site Assessment Services
- Ontario County, New York, Site Assessment and Acquisition Services
REFERENCES

Kimball is providing references for whom we have completed, or are completing, radio communications system projects. For each reference, we have included our contact’s phone number and email address.

Monmouth County, New Jersey
Radio Design and Installation

Scope of Work:
Kimball was selected by Monmouth County, New Jersey to provide consulting services to replace the existing aging radio system and equipment with a new trunked radio system. Kimball designed and provided project management services and oversight to the installation of the new radio system.

Kimball’s support to Monmouth County is divided into four phases:
- Needs Assessment and Requirements Analysis
- Procurement Documents
- Procurement
- System Implementation Support

Kimball assessed the existing systems network infrastructures, surveyed users, compiled and analyzed the data gathered, developed recommendations and the conceptual system designs. Kimball provided a detailed report detailing our findings and provided recommendations and cost/benefit analysis for each. Kimball developed the RFB for the new system.

Upon completion of request for bid (RFB) development Kimball worked closely with Monmouth County to develop a schedule for releasing the RFB and fully supported all aspects of the procurement process, bid evaluation and vendor selection. Kimball provided assistance and support and participated in the evaluation of vendor responses.

Kimball continues to provide project management implementation support to Monmouth County including installation oversight services throughout the full implementation of the system.
Ontario County, New York
County Communications System Upgrade Planning

Scope of Work:
Ontario County, New York, selected Kimball to assist them in the development and implementation of a new countywide radio communications system for public safety. Kimball provided consulting services required for the analysis of the existing radio communications system, as well as conceptual design and budget estimates for a new system and assistance with 800 MHz rebanding.

After performing a detailed needs assessment and investigating the availability of different frequency spectrum ranges, Ontario County adopted Kimball's recommendation to pursue 700/800 MHz channels and develop a P25 compliant trunked system in that band.

In the second phase of the project, Kimball developed an RFP based on the findings of the needs assessment and assisted Ontario County in releasing and evaluating vendor responses. Kimball assisted Ontario County with proposal evaluations and negotiations with the selected vendor, Harris. Kimball is currently acting as PM overseeing and coordinating all facets of the implementation and acceptance testing of the Harris P25 trunked system.
Niagara County, New York  
County Communications System Upgrade  
Planning, Procurement and Implementation Support  

Scope of Work: 
Niagara County, New York, selected Kimball to assist them in evaluating separate unsolicited proposals for a new countywide public safety radio system and to provide consulting and support in the procurement and implementation of the selected system. 

Ultimately Niagara County determined it would be in their best interests to release a competitive RFP for the new system. Kimball worked closely with Niagara County to clearly identify the performance requirements for the new system, document the functional and performance requirements and develop the RFP documents. Kimball offered additional support to Niagara County providing a thorough evaluation of vendor proposals and contract negotiations. 

Niagara County estimates that this change from evaluating unsolicited vendor proposals to a competitive procurement resulted in savings of more than $7M in the initial purchase price of the system. 

Kimball is contracted to act as Niagara County’s project manager, overseeing the system construction, coordinating installation activities, site acquisition and readiness and providing acceptance testing oversight and related activities. 

Kimball assisted Niagara County in developing their successful grant application to the New York State Interoperable Communication Program. Niagara County has been awarded $2M for the purchase of new P25 capable subscriber equipment to be used on the new trunked radio system.
Scope of Work:
Kimball has supported a number of public safety dispatch, 9-1-1 and radio communications projects for Bucks County, Pennsylvania. Bucks County initially selected Kimball to assist with defining requirements and developing detailed specifications for the acquisition and implementation of new integrated E9-1-1 telephony CPE for the Bucks County 9-1-1 Center/PSAP.

Kimball supported their architect, W2A Design Group, to specify and design technology system upgrades, facility programming, allocation and design, transition and migration services for the renovation and upgrade of their current EOC into a new emergency services center. Kimball provided procurement support for radio consoles, microwave systems, console furniture, security and audio-visual systems for the new dispatch center.

Bucks County selected Kimball to provide a thorough assessment of the county’s existing public safety radio communications system and make recommendations for system upgrades. In particular, this assessment included an examination of the impact of the FCC narrowband mandate on the Bucks County UHF trunked radio system, and related conventional paging and MED channel subsystems.

Kimball performed a needs assessment of all system users to identify areas requiring functional or performance improvements such as loading, coverage, new features, etc. Kimball presented the initial recommendations from this project to Bucks County in the spring of 2010, in order for Bucks County to begin budgeting to implement the required upgrades prior to the end of 2012.

- Bucks County adopted the recommendations for the system upgrade and engaged Kimball to support procurement of a new 700 MHz Project 25 Phase 2 Countywide system. After developing a vendor-neutral RFP and supporting Bucks County in evaluation and selection of a vendor (Motorola Solutions), Kimball is now supporting Bucks County in the implementation phase of the project, providing technical support, project management, site development, testing and related consulting and implementation oversight services.
PROJECT PLAN

Kimball proposes to work closely with the County and stakeholder agencies in a multi-phased approach to the project. The project will proceed in three consecutive phases, each with its own goals and deliverables. Kimball understands that Phase 1 and Phase 2 are mandatory and Phase 3 is an optional phase.

The County has identified and defined three project phases defined in the County’s request for proposal (RFP) and Kimball’s project plan below adheres to these phases as follows:

- Phase 1—Systems Review and Needs Assessment
- Phase 2—RFP Development/System Procurement
- Phase 3—Implementation Oversight (Optional—Time and Materials)

*Per the answer to Question #10 – Addendum 1, we will provide a standard hourly rate to the County for the personnel/job classifications that would most likely be involved with the system implementation phase.*

We have found that the first two phases of a project of this type can usually be accurately projected and priced, but since there are so many unknowns in what level of effort is included in the system implementation a firm final price for the final phase cannot be developed at this time.

There are a large number of unknowns including but not limited to:

- The number of agencies participating and the coordination required between Kimball, the vendor, the County and those agencies
- Will the system be deployed as a “turnkey project” or as multiple components (e.g., radio infrastructure, site construction, network backhaul)
- The number of sites required
- The number of frequencies to be used
- The number and type of new construction tower sites
- The number and type of leased sites and the modifications that may be required to these sites
- The number and type of land and site leases that will be required

Once all of the variables are clearly defined through the assessment and procurement processes, if the County wishes to have Kimball provide implementation oversight services, we will be able to provide a quote to provide the services required.

The Kimball project plan envisions a mix of on-site and remote support to provide efficient and cost effective management of the project. There will be times in the project where having personnel on-site will be absolutely critical (e.g., site review, stakeholder meetings,) and we commit to being on-site as required. But other tasks may be just as effectively performed by staff in their respective home locations. Kimball commits to providing the proper mix of in-person and remote access and make extensive use of remote access technologies such as video and teleconferencing, with a goal of providing timely and cost effective support to our clients.

Phase 1—Systems Review and Needs Assessment

In the first phase of the project, Kimball will work with the County to develop an overall view of existing systems and facilities in use in the County. This effort will include radio transmit site assessments, to determine how/if current sites may be used in a new system and what changes would be required at those sites. Our consultants will work with the County and stakeholder agencies to determine user radio inventories, and to identify features that will be needed in any new system and subscriber
equipment. Through stakeholder meetings and interviews, Kimball and the County will determine what levels of coverage are required by the various user agencies and how these coverage requirements can be incorporated into the system procurement.

Kimball will meet with representatives of the local radio consortiums to determine their plans for frequency use and system growth and to develop a strategy to aid the County in planning for interoperability between the systems in use in the area.

Task 1.1—Project Kick-off Meeting
Kimball will meet with the County project staff to discuss the key elements of the needs assessment, review and confirm the specific objectives to be addressed in the assessment and associated reports and establish an overall project schedule. The project plan will be presented and discussed with the County project team and modified as necessary, including assigned staff members and roles, status reporting plan, project communication plan, project schedule, etc.

Primary users and stakeholders will be identified and the County will provide contact information to Kimball. The County staff will provide and review with Kimball, background information on the existing system(s), interoperability relationships within the County and surrounding jurisdictions and contact information for these entities.

County staff will provide any available documentation relevant to the project and status of the current systems, radio system configurations and tower sites, copies of existing system documentation, “as-built-drawings,” existing site locations and facilities, copies of FCC licenses.

Kimball allocates a full day on-site with the County’s project team to conduct the kick-off meeting. Based on this meeting, we will finalize the master project plan to guide all activities and tasks throughout the project.

Deliverables:
- Master project plan
- Schedule for periodic status reports
- Regularly schedule project conference calls with project committee

Task 1.2—Existing System(s) review
NOTE: Because of time constraints imposed by the Statewide Interoperable Communications Grant funding, we believe that meetings with stakeholders should begin immediately following the kickoff meeting. Any efforts that the County can make to identify the appropriate stakeholder agency representatives prior to the kickoff meeting will be greatly appreciated. Kimball personnel will be available to meet after hours to accommodate the needs of those first responder agencies that are unable to meet during normal business hours.

Working interactively with designated County staff, the current radio service provider and through on-site visits to transmission sites and dispatch points, and interviews with Police, Fire and Ambulance/Rescue squad representatives identified by the County, Kimball will develop a baseline assessment of the current radio system(s), infrastructure, redundancy, system backhaul, consoles, system management tools and subscriber radios.

This will involve the following:
- Collecting equipment inventory information, assessing and documenting the condition of support systems, power subsystems, antenna subsystems and antenna subsystems at RF sites and facilities and analyzing network connectivity and structure
Documenting the conditions at each RF site in the system, identifying any gaps or deficiencies and needs for site upgrades to current standards and identifying site capabilities to support new system equipment during and after transition to a new system

Collecting information on current hardware, software and system release versions currently installed and in use

Evaluating the current radio and backhaul systems, transmission sites and infrastructure for the survivability, redundancy and diversity required to sustain and maintain system operations and determine compliance with current industry standards

Collecting current frequency plans and analyzing current licensing

Creating conceptual coverage maps based upon the current as-built system

Our project plan calls for up to three Kimball personnel to be on-site for up to five days to gather documents, visit transmit sites and dispatch locations.

**Deliverables:**

- Assessment report of current radio facilities including available space, heating, ventilation and air conditioning (HVAC), power, backhaul, redundancy
- Conceptual coverage representation of current system

**RFP Requirement(s) Fulfilled:**

- 3.2.1 Existing System Review

**Task 1.3—Operational Enhancement Analysis**

Kimball will develop an understanding of the current operational and functional needs of the system based on input and discussion with the system users and stakeholder agencies identified by the County during the kick-off meeting. Our consultants will conduct up to six interviews with groups or individuals designated by the County as being representative of users from police, fire, EMS, public safety communications, Emergency Management Agency (EMA) and any other identified user groups, to obtain an understanding of the current and long term operational, functional and interoperability needs of all end users. Kimball will utilize the results of the interview sessions to gain an understanding of the current and future goals and requirements of the radio system, existing infrastructure, in-house system management and administration capabilities.

During these interviews and information gathering efforts, Kimball will ask questions and seek input designed to gain an understanding of the relationships, department and jurisdictional requirements of the user community served or potentially to be served by the new system and surrounding entities/jurisdictions.

Kimball will interview appropriate individuals or groups as identified by the County and will:

- Identify system limitations, performance, operational issues, current coverage issues and coverage areas critical to first responders
- Identify current and long term system management and administrative capabilities
- Identify current and long term maintenance requirements
- Identify the current and future level of service required including maintenance requirements of the system and subscriber equipment
- Identify current radio console equipment used and document console features that will be required in any new system
- Identify current and long term requirements for mutual aid and interoperability
Kimball will solicit radio inventory information from the stakeholder agencies to determine:
- Manufacturer of equipment
- Radio model(s) used
- Radio frequency band(s) used/programmed into the radios
- Special features currently used or expected to be needed (e.g., encryption, keypads, submersion, inherent safety)
- Current radio inventory and expected change in inventories for a one year, three year and five year horizon
- Current agency Fleetmap, and any anticipated extensions to the Fleetmap

The insights gained in these interviews will be documented and considered in the recommendations developed for the requirements for any new system.

Our project plan calls for up to two Kimball personnel to be on-site for up to five days to meet with stakeholder agencies, perform interviews and gather information regarding current and expected future requirements.

**Deliverables:**
- System capabilities Report that will include
  - Documentation of agency coverage requirements, including a list of critical buildings and facilities that require coverage
  - Documentation of dispatch console system requirements including to the extent that the agencies can provide it a list of all tones and paging formats being used.
  - Documentation of desired capabilities (e.g. global positioning system [GPS], messaging)
  - Estimate of channel loading/channel requirements based on current radio traffic, number of subscribers and anticipated growth
  - Inventory of current user equipment by stakeholder agency with anticipated growth projections
  - Documentation of required and desirable subscriber equipment features

**RFP Requirement(s) Fulfilled:**
- 3.2.2 Operational Enhancement Analysis

**Task 1.4—Spectrum Review**

Based on the analysis of the existing systems and the expected number of radios that will operate on the system, Kimball can determine the number of frequencies that will be needed to support effective operations in the new system. Once the number of frequencies has been identified and agreed upon, Kimball will evaluate several possible sources for the frequencies.

Based on FCC database lookups performed in support of this proposal, it appears that the large majority of Police, Fire and EMS agencies in the County are currently using very high frequency (VHF) radio systems and subscriber equipment. A small number are using ultra high frequency (UHF) equipment. Both the VHF and UHF bands are extremely congested, and we expect that finding additional frequencies in these bands (if needed) will be a challenge.

Possible options to be considered are:
- Consolidation/pooling of existing licenses
- Search for available frequencies using FCC databases and software tools.
- Consideration of frequencies in bands other than VHF or UHF (700/800)

All licensing activities will be further complicated by the County’s proximity to the Canadian border. Kimball has worked with several other clients including Ontario County, Niagara County and the State of Vermont that are “North of Line A”, and we clearly understand the challenges of any licensing effort that is undertaken. We have worked successfully with FCC 700/800
Kimball will analyze the Region 30 planned allocations for the County’s geographic area and attempt to determine if a 700 MHz solution is viable based on the number of frequencies allocated in the plan, those that are designated as US Primary in the US/Canadian border sharing agreement, the subscriber loading requirements of the plan and other items that will determine how many frequencies may reasonably be expected to be granted by the Regional Planning Commission (RPC).

As required in the RFP, we will prioritize the spectrum opportunities available to the County and provide our recommendations for how to best proceed with frequency acquisition.

Because we do not know the types or number of frequencies that will be needed, we cannot provide an estimate for the cost of the licensing efforts. If selected, Kimball will quote a number of hours to prepare license forms and submit them for frequency coordination. The County will be responsible for all licensing and coordination fees.

**Deliverables**
- Documentation frequencies currently in use in the County
- Documentation of options for attaining additional frequencies
- Initial frequency review and planning document

**RFP Requirement(s) Fulfilled:**
- 3.2.3 Spectrum Review

### Task 1.5—Conceptual Design Development

Based on the results of the interviews with stakeholders regarding desired/required features and functionality, as well as the review of the current infrastructure and available frequencies, Kimball will develop two conceptual design alternatives for consideration and approval by the County.

The County will provide Kimball with the contact information for the New York Development Authority of the North County (DANC), the Adirondack Regional Interoperable Communications Consortium, and the Central New York Interoperable Communications consortium. Kimball will contact these agencies/consortiums to identify how the new system to be developed in St Lawrence County may interface with their existing systems and possibly take advantage of their existing fiber or microwave infrastructure.

These conceptual designs will incorporate the stakeholder coverage and capacity requirements identified above. To control recurring costs we will work with the County to identify candidate transmission sites located on County or municipally owned property. Kimball will review commercial tower site databases to identify tower locations that may be used to deliver the coverage required by the County and its stakeholder agencies. Kimball will develop conceptual system designs that deliver the coverage, redundancy and scalability required by the County and based on that design, develop detailed cost estimates.

In other projects, we have worked with our clients to have vendors deliver presentations, so that the County and the user community can see and learn from the different products offered by each vendor. In a market that has been long dominated by one vendor, users are often pleasantly surprised to find that there is indeed more than one option available. We recommend that the County consider this approach in conjunction with the “educational” presentations to be developed by Kimball.
Kimball will develop presentation materials and will work with County personnel to conduct four presentations with a goal of gathering consensus regarding a final system design and direction.

Once this consensus has been achieved, Kimball will prepare a final presentation, outlining a phased approach for the County to implement the system.

**Deliverables:**
- Maximum of two conceptual system designs
- Coverage predictions for each design
- Cost estimates for each design including ten year estimate of maintenance and other recurring costs
- Four presentation/educational sessions
- Preliminary Project Implementation Plan

**RFP Requirement(s) Fulfilled:**
- 3.2.4 Design Alternatives

**Phase 2—Request For Proposal Development and Procurement**

**Task 2.1—Pre-Request For Proposal Preparation**

The RFP requires the consultant to prepare licensing forms and engineering information for the spectrum required to support the system design.

While we will certainly provide licensing support, we must point out that licensing frequencies before a vendor submits a final design, may result in additional costs to the County. Each license must be processed by a frequency coordinator, who typically charges approximately $200 per frequency per site to perform their services. If the vendor’s design does not include all of the sites initially licensed, then there would not be any significant costs to modify the licenses to remove sites.

However, if a vendor’s design requires sites that are different than those initially licensed, the County would be faced with paying the coordination fees a second time.

Kimball will prepare a maximum of four FCC Form 601 documents and supporting engineering documentation for submission to a frequency coordinator of the County’s choosing. The County will be responsible for all frequency coordination fees. Further, all applications must be approved by the FCC and Commission approval, while expected, cannot be guaranteed by Kimball or any external agency.

If a decision is made to use 700 MHz frequencies, the process for approval is far more cumbersome and costly than filing a standard FCC licensing application. If that path is chosen, Kimball will provide additional pricing to prepare and submit an application package, first to FCC Regional Planning Committee 30, and then to the FCC. The RPC approval process can add months to the licensing timeline.

**Task 2.2—Request for Proposal Development**

Kimball will prepare the technical portion of vendor-neutral bid specifications for release to system vendors for system acquisition. The specifications will not be based on any particular vendor’s system design approach but will be based upon the coverage, redundancy and performance requirements of the County and stakeholder agencies identified in Phase 1.
Utilizing the data gathered in Phase 1, the specifications will be formulated to be functional in nature and standards and performance based. The functions and services required will be clearly defined and performance benchmarks established. For example, vendors will be required to demonstrate how their proposals meet or exceed the P25 (Telecommunications Industry Alliance/Electronics Industries Alliance [TIA/EIA] 102) family of standards.

To be clear, Kimball recommends developing specification documents that require the proposing parties to develop a final system design that delivers the radio system coverage, capacity/grade of service, interoperability and expandability required by the County. By following this approach, the proposing vendor is required to assume all responsibility for delivery and validation of these requirements. If the system as delivered is shown not to meet the objective requirements of the contract and testing parameters, the proposing vendor will be responsible for bringing the system into compliance.

The specification package(s) will be provided in a format suitable to be combined with the appropriate procurement “boilerplate” terms and conditions. Kimball will work with the County to develop proposal grading and evaluation criteria so that all proposals are evaluated to the same standard. Use of well-defined evaluation criteria can help to minimize the likelihood of vendor challenges to purchasing decisions.

Kimball will provide draft RFP documents to the County and conduct a review of the documents with the County and additional stakeholder representatives, as appropriate. We will incorporate any necessary changes resulting from this review process into “final” RFP documents to be provided to the County and ready for release for response by vendors.

**Deliverables:**
- Draft RFP documents
- Final RFP documents
- Requirements matrix/evaluation criteria

**RFP Requirement(s) Fulfilled:**
- 3.3.2 RFP Development
- Develop proposal evaluation criteria/requirements matrix

**Task 2.3—Pre-proposal Conference and Site Visits**

Kimball will conduct one pre-proposal conference. Kimball and the County will accept questions at the pre-proposal conference and provide written answers to all questions to all vendors within one week of the conference.

Immediately following the pre-proposal conference Kimball will participate in site visits. Depending on the number of sites to be visited, site visits may require two full days. We are not proposing to provide any vendor transportation to the sites, but merely to provide locations and/or directions and to be present at the sites to record possible vendor questions.

Our project plan calls for up to two Kimball personnel to be on site for up to three days to attend the pre-proposal conference and attend site visits.

**Task 2.4—Vendor Questions and Answers**

Any RFP will include a fixed timeframe in which vendors may ask questions regarding the RFP. Kimball will work with the County to accept and address written questions from vendors and develop answers to vendor questions. We will submit our responses for to vendor questions for review by the County and its procurement officer. Once the County has approved the answers they will be distributed to the vendor community.
If vendor questions or other newly learned information require the preparation of addenda or modification of the RFP documents, Kimball will prepare such addenda and provide them to the County for approval and distribution to the vendor community.

**Deliverable(s)**
- Answers to vendor questions
- RFP addenda if needed

**Task 2.5—Proposal Evaluation/Vendor Recommendation**

Based upon Kimball’s evaluations of the vendors’ responses, we provide our assessment and ranking of the firms responding to the RFPs in a written report. The report will provide the County with our rationale and recommendation for the selection of a vendor to provide the required public safety systems including supporting justification for the recommendation. The content of this report is based on the evaluation matrix developed and utilized to guide the ranking of all valid proposal submissions.

The report provides a composite scoring matrix and a written summary of each valid proposal received. We provide our recommendation of the vendor(s) whose products and organization we believe best provides the functionality, operation, vendor reliability and pricing criteria required by the County. Working closely with the County, this written report outlines the evaluation process, clarifications, rankings and Kimball’s recommendations to support the selection of the most qualified vendor.

The final selection report is crafted in a manner to support a recommendation by the County to the appropriate governing body and procurement agency for selection and contract award. Depending on the preferences of the County, this report can be advisory, reflecting only Kimball’s assessment, ranking and recommendation for selection among the proposing vendors as input to the County selection process; or it can be developed on behalf of the County as their evaluation, justification and recommendation for the selection of a vendor for a contract award.

Kimball will further support the County by making one presentation of the recommendation to stakeholders and/or elected officials as designated by the County.

Our project plan calls for up to two Kimball personnel to be on-site for up to five days for proposal review and for one presentation of the recommendation to stakeholders and/or elected officials as designated by the County.

**Deliverable(s):**
Proposal Review and Recommendation Report

**RFP Requirement(s) Fulfilled:** Review vendor proposals and recommend a solution.

**Phase 3—Implementation Oversight (Optional—Time and Materials)**

The County has indicated that consultant support for the implementation Phase 3 is optional. We have provided a typical task listing of services for Kimball to provide implementation oversight. As previously noted, the level of effort required for system implementation oversight cannot be accurately projected at this time. Kimball is providing the hourly rates of personnel that would likely be assigned to perform this work, but is not providing a fee for these services at this time.
Task 3.1—Program/Project Management

Kimball will provide overall program/project management support throughout the implementation phase of the project. Our project plan envisions a mix of on-site and remote support to provide efficient and cost effective management of the project. There will be times in the project, where having personnel on-site will be absolutely critical (e.g., stakeholder meetings, system construction management) and we commit to being on-site as required. But other tasks may be just as effectively performed by staff in their respective home locations. We commit to providing the proper mix of in-person, and remote access and make extensive use of remote access technologies such as video and teleconferencing, with a goal of providing timely and cost effective support to our clients.

The Kimball PM will oversee all aspects of project implementation and will work with the County and the selected vendors in an attempt to assure that the project is delivered on-time and within budget. For the sake of this estimate, we are proposing to provide a PM that will provide at least 16 hours of weekly support to the project for two calendar years. The PM is projected to be on-site in the County every other week for the duration of the project. In addition, the Kimball PM will be on-site at least once a month to assure that the County’s needs are being adequately addressed by us.

The Kimball PM will:
- Lead and oversee all aspects of project implementation.
- Develop a Project Communications Plan.
- Conduct weekly project status meetings via a conference bridge or on-site as required and transcribe and publish minutes of these meetings.
- Provide monthly status reports.
- Establish project teams and assign tasks to project team members.
- Establish a Change Order Management Plan.
- Review change orders, invoices and other documentation provided by the vendor and recommend or disapprove acceptance.
- Collaborate with the selected vendor and develop a project schedule outlining tasks, durations and milestones. The schedule will be updated through the life of the project as required. The project schedule will be a deliverable in MS Project format.

The Kimball PM will work with the vendor to develop and oversee the development of:
- Infrastructure Installation and Deployment Plan
- Radio Coverage Acceptance Test Plan (CATP)
- Mobile Unit Installation Plan
- Factory and Field Radio and Microwave Acceptance Test Plans
- Full System Acceptance Plan
- Training Plan

Deliverable(s)
- Project Communications Plan
- Monthly status reports
- Meeting minutes
Task 3.2—Design Review(s)
Once the County enters into a contract with a vendor, the vendor will update their final design documents to reflect any changes required during contract negotiations and will prepare a final design reflecting the vendor’s contractual obligation. There is sometimes a further clarification of the design to account for unforeseen impediments (e.g., a proposed microwave link is blocked, a planned antenna location is not available) or by changes in product offerings between the time the proposal was prepared and the contract was finalized (e.g., new user radio announced).

Kimball will work with the County and the vendor through the design review process and will make recommendation for design modifications if they are warranted.

Task 3.3—Installation Oversight and Construction Management
Kimball will oversee the construction of any needed new sites and the installation of upgrades and updated equipment in existing sites.

Kimball responsibilities include:

- Provide sample lease documents for the lease of property for new construction sites, will review lease documents provided by site/landowners for co-location sites and for new construction sites on privately owned property and recommend modifications to the owner’s lease documents and recommend pricing modifications if needed.
- Review all construction documents provided by the contractors to verify that they meet the requirements of the County. We will provide on-site review of final site construction to verify that site construction matches the provided drawings and will develop detailed punch lists for each site.
- Perform National Environmental Policy Act (NEPA)/State Historic Preservation Office (SHPO) screenings for tower site construction at “green field sites” and will work with the construction contractor(s) to verify that planning and zoning requirements are met for these sites.

County responsibilities include: Provide legal support to provide final review, approval and execution of lease documents and other agreements relating to site construction and improvements.

Deliverables:

- Lease templates for raw land development sites
- Lease document review
- Site review checklist
- Site punch lists

Task 3.4—Factory Staging and Acceptance Testing
The selected system should be fully assembled and tested (staged) at the vendor’s factory, exactly as it will be installed in the field at the County sites. This gives both the vendor and County the opportunity to test each feature of the system prior to shipment, resolve any malfunctions and make changes to the system. The vendor will be required to provide a Staging (or Factory) Acceptance Test Plan (SATP or FATP). Kimball personnel will review the vendor’s plan and will recommend changes if required. Once any recommended changes are made Kimball representatives will accompany the County project team to the vendor radio and microwave staging facilities and oversee and verify all factory test procedures.

Vendor responsibilities include:

- Provide initial FATP/SATP documents for review and approval
- Provide County/Kimball with ample advance notice for testing dates
- Provide personnel to perform and witness testing at vendor site(s)
Kimball responsibilities include:
- Review FATP/SATP documents, recommending changes if needed
- Attend testing with County representatives
- Witness and verify testing results

**Deliverables:**
- Completed FATP/SATP testing report, that will consist primarily of documenting any failed tests and corrections agreed to by vendor
- In the event that the tests do not result in failures or changes, Kimball will recommend signing FATP certification

**Task 3.5—System Coverage and Functional Acceptance Testing**
Kimball will work with the County and the vendor to manage and replicate the functional acceptant testing (FAT) in the field, to verify that the system as installed is delivering the full functionality and operation of all system components and sub-systems.

The second test is the Coverage Acceptance Test Plan CATP that tests field coverage of the system to mobile and portable radios. Kimball will work interactively with the vendor and the County to develop a test plan that tests the entire operational area for coverage, in accordance with industry standard TSB-88C. One consultant will oversee and observe the first two days of the testing process to verify that County and vendor personnel fully understand the process and that testing is being performed properly. Once testing is completed, the vendor will provide a detailed report to the County and Kimball clearly outlining the results and showing at a minimum, signal strength, delivered audio quality (DAQ) and bit error rate (BER) in each tested grid. We will review the test results and if the results are acceptable, will recommend acceptance to the County.

If the results are not acceptable, Kimball will work with the County and the vendor to determine what actions the vendor will need to take to improve the performance of the system. Once these remedial actions are implemented, the vendor will be responsible to retest to demonstrate that the system meets the coverage requirements.

**Task 3.6—Training Oversight**
Kimball will assist the County in evaluating vendor provided courseware presented for end user and dispatcher training for appropriateness and applicability to dispatch and end user personnel. Our PM and/or consultant will monitor training classes for presentation and content to assure proper training of the users, dispatchers and system managers.

**Task 3.7—Cutover Planning and Execution**
Kimball will work with the County and the vendor to develop an appropriate and detailed cutover plan, along with a fall back contingency plan, that allows orderly cutover while maintaining needed ongoing critical infrastructure dispatch operations and quality of service to the end users. We will have an on-site presence at cutover.

**Task 3.8—Punch List Final Inspection and System Acceptance**
Kimball will work with the County to develop a punch list. We will then perform a punch list inspection of each installation site and furnish the vendor with a list of items to be corrected. Kimball will then perform a final inspection at all installation sites to assure all contractor issues and observed punch list items have been satisfactorily resolved and the system is ready for final acceptance.

Once all the end users are operational, a 30 day test period begins where the system must operate without a major failure under full user load. The Kimball PM will monitor this test closely for system failures. Should a failure occur, the test will be restarted for another 30 days.
Kimball will receive and approve all vendor and contractor as-built and maintenance/service documentation. Upon 30 day acceptance test completion, punch list clearing and receipt of all vendor documentation and deliverables, we will recommend system acceptance, release of final payment and retention and commencement of warranty.

Preliminary Project Schedule

A preliminary project schedule is included for the County’s review. As noted throughout the proposal, the true duration and level of effort required for Phase 3 can only be fully determined once a vendor’s solution is selected. We have included this schedule for reference and to demonstrate that we believe that a system can be implemented in a timeframe that will allow the County to meet its goal.

The balance of this page is intentionally left blank.
PROPOSAL FOR BID# (2014-18) RFP ST. LAWRENCE COUNTY COMMUNICATIONS STUDY SUBMITTED TO DEPARTMENT OF GOVERNMENTAL SERVICES CANTON, NEW YORK

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Description</th>
<th>Duration</th>
<th>Start Date</th>
<th>Finish Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>St Lawrence County RF - Preliminary Project Schedule</td>
<td>527 days</td>
<td>Mon 6/23/14</td>
<td>Thu 7/14/16</td>
</tr>
<tr>
<td>2</td>
<td>Phase 1 System Review and Needs Analysis</td>
<td>68 days</td>
<td>Mon 6/23/14</td>
<td>Fri 7/25/14</td>
</tr>
<tr>
<td>3</td>
<td>Contract Draft</td>
<td>0 days</td>
<td>Mon 6/23/14</td>
<td>Mon 6/23/14</td>
</tr>
<tr>
<td>4</td>
<td>Project Kick Off Meeting</td>
<td>1 day</td>
<td>Mon 6/23/14</td>
<td>Mon 6/23/14</td>
</tr>
<tr>
<td>5</td>
<td>Technical Assessment of Current Facilities</td>
<td>5 days</td>
<td>Tue 6/24/14</td>
<td>Mon 6/30/14</td>
</tr>
<tr>
<td>6</td>
<td>Operational Assessment and Stakeholder Interviews</td>
<td>5 days</td>
<td>Tue 7/1/14</td>
<td>Tue 7/8/14</td>
</tr>
<tr>
<td>7</td>
<td>Analysis of Radio Traffic</td>
<td>1 day</td>
<td>Wed 7/9/14</td>
<td>Wed 7/9/14</td>
</tr>
<tr>
<td>8</td>
<td>Interoperability Requirements Definition</td>
<td>10 days</td>
<td>Wed 7/9/14</td>
<td>Thu 7/18/14</td>
</tr>
<tr>
<td>9</td>
<td>Concept Paper Presentations</td>
<td>10 days</td>
<td>Wed 7/18/14</td>
<td>Tue 8/4/14</td>
</tr>
<tr>
<td>10</td>
<td>Prepare Needs Assessment and Requirements Definition Report</td>
<td>15 days</td>
<td>Wed 8/6/14</td>
<td>Tue 8/26/14</td>
</tr>
<tr>
<td>11</td>
<td>Present Report</td>
<td>5 days</td>
<td>Wed 8/27/14</td>
<td>Wed 9/3/14</td>
</tr>
<tr>
<td>12</td>
<td>Design Conceptual System</td>
<td>5 days</td>
<td>Thu 9/4/14</td>
<td>Thu 9/10/14</td>
</tr>
<tr>
<td>13</td>
<td>Prepare Project Plan Design Report</td>
<td>7 days</td>
<td>Thu 9/11/14</td>
<td>Fri 9/19/14</td>
</tr>
<tr>
<td>14</td>
<td>County Review of Design</td>
<td>5 days</td>
<td>Mon 9/22/14</td>
<td>Fri 9/26/14</td>
</tr>
<tr>
<td>15</td>
<td>County Approves Design</td>
<td>0 days</td>
<td>Fri 9/26/14</td>
<td>Fri 9/26/14</td>
</tr>
</tbody>
</table>

**Phase 2 - RFP Development and Procurement**

113 days | Mon 9/29/14 | Mon 3/9/15

16. Develop Specifications for RFP
17. Draft RFP for County Review
18. County Reviews RFP
19. Update RFP to Reflect County Changes
20. Final RFP Drafts and Rights to County
21. Final Draft RFPs to County
22. County Publishes RFP
23. Conduct Preliminary Site Visits
24. Proposals Received and Opened
25. Proposal Review and Scoring
26. Kickoff Meetings and Presentations
27. Vendor Selection
28. Vendor Invitation and Notification
29. Phase 3 - System Design and Implementation Support
30. 346 days | Tue 3/10/15 | Thu 7/14/16

31. Contract Negotiations
32. Contract Execution
33. Design Review
34. Fleetmap and Template Development
35. Subcontract Assignment Order & Installation (As needed)
36. System Integration and Testing
37. System Infrastructure Installation
38. Conduct System Commissioning and Testing
39. System Test Acceptance Testing
40. System Design, Manager & User Training
41. System Validation
42. Punch List Resolution
43. System Acceptance Testing
44. System Acceptance Testing
45. Final System Acceptance

**Date: Fri 4/25/14**

**May 2014 | Page 32**
MBE/WBE PARTICIPATION GOALS:

Kimball will partner with Young Enterprise Systems, Inc. (YES Inc.) to aid the County in meeting their Minority Owned Business Enterprise/Woman-Owned Business Enterprise (MBE/WBE) participation goals for this project.

Incorporated in Virginia, YES Inc. was founded in 1999 by its current President, Dr. Young J. Kim, with a small consulting contract from TRW Inc. (now Northrop Grumman Corporation). Since its inception, YES Inc. has been successfully performing various complex critical infrastructure and large scale government programs as a prime or a subcontractor.

The mission of YES Inc. is to be a responsive provider of high quality professional technical services that provide strategic value to their customers while recruiting and retaining exceptional employees who exceed customer expectations. YES Inc. operations place emphasis on customer satisfaction, employee satisfaction, and manageable growth while maintaining flexibility and competitive pricing.

YES Inc. provides advanced systems engineering, professional services, information technology, public safety radio and telecommunications solutions to Federal, State, and Local governments, and commercial clients with our proven expertise in program management and systems engineering and integration. YES Inc. is growing and currently well positioned in its focused markets which include Federal, State, and Local IT and Telecommunications Systems, Public Safety, Emergency Management, Transportation and Homeland Security, and Aviation Systems and Management.

The company has established a highly successful performance history through its technology specialization and highly experienced staff with past clients including the Federal Aviation Administration, Department of Energy, New York City, District of Columbia, Lockheed Martin, Northrop Grumman, Avaya, and SAIC.

As a small company, YES is prepared to respond on short notice to provide on-site or local contract support to clients throughout the United States. Their highly experienced staffs bring a thorough understanding of critical infrastructure systems, especially aviation, public safety, homeland security and emergency management industry and technologies.

YES Inc. is a SBA-certified 8(a) company and an MBE certified in the Commonwealth of Virginia, Massachusetts and Pennsylvania and the States of Maryland and New York, in addition to New York City and Port Authority of New York and New Jersey.

YES Inc.’s headquarters is located in Reston, Virginia with multiple project offices around the US; including New York, New York, Jamaica; New York, Boston, Massachusetts; Atlanta, Georgia; Dallas, Texas; Kansas City, Missouri; Chicago, Illinois; Los Angeles, California; Anchorage, Alaska; Overland Park, Kansas and Washington, DC.

YES Inc. - Service Offerings

YES Inc. is a growing company and a proven performer with core competencies in Program Management, Systems Engineering/Integration and Implementation. Our highly qualified employees provide specialized technical and managerial professional services in the following focused markets:

Public Safety and Homeland Security

A key YES Inc. advantage is that it is composed of senior engineers and managers who have designed, built and implemented recent public safety and emergency management systems for large city, county, state and national customers.
YES Inc. is ready to respond on short notice to provide on-site or local contract support to clients throughout the United States.

The core technical competencies of our public safety, emergency management and Homeland Security systems integration and engineering include:

- Consolidated public safety and Homeland Security communication and command systems integration
- Wire and wireless telecommunications systems
- Radio communications and interoperability
- Conventional and digital trunked land mobile radio (LMR); wireless LAN; wireless interoperability
- System and network security

Kimball will use YES Inc. personnel to assist with the systems review and needs assessment phase of the project. It is not clear if their efforts will meet the 20 percent goal, as final taskings can only be determined after contract award and mobilization.

The balance of this page is intentionally left blank.
REQUIRED FORMS

The signed non-collusion form/signature page can be found on the following pages. Signed addendums #1 and #2 can be found on the following pages.

The balance of this page is intentionally left blank.
NON-COLLUSION BIDDING CERTIFICATION

By submission of this bid or proposal, the bidder certifies that:

(1) Prices in this bid or proposal have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

(2) Unless otherwise required by law, the prices which have been quoted in this bid or proposal have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

(3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid or proposal for the purpose of restricting competition.

Project, Equipment, or Material being bid:

(2014-18) RFP St. Lawrence County Communications Study
Proposal Due Date: Thursday, May 1, 2014 @ 3:00 PM

I agree to comply with all Specifications, including St. Lawrence County General Specifications and Requirements, and Non-Collusion Bidding Certification and St. Lawrence County Standard Contract Provisions (Revised Schedule A) knowing that failure to do so may result in disqualification and/or cancellation of any contract that may be awarded as the result of this request for bid proposals.

Company Name: CDI-Infrastructure, LLC dba L.R. Kimball
Address: 615 West Highland Avenue
City/State/Zip: Ebensburg, PA 15931 Phone/Fax #: 814-472-7700/814-472-7712
Tax ID #: 27-2620523 Email Address: Deb.Irwin@LRKimball.com

Authorized Signature: ____________________________ Printed Signature: ____________________________ Date: 4-28-2014
Addendum #1

Bid # (2014-18) RFP St. Lawrence County Communications Study

April 22, 2014

Please utilize the following additional information when preparing your response to the above mentioned Request for Proposals:

The following written questions were received by the Purchasing Office. Please utilize this clarification in preparing your RFP.

**Question #1**  1: Phase 3 Review of Vendor equipment and Design is designated as optional. Please clarify the term optional. For example is it the county’s option to peruse Phase 3 or the responders’ choice? If it is county option, under what criteria will the determination be made to pursue or not peruse Phase 3?

**Response:** Any phase 3 work will be at the discretion of St. Lawrence County. The determination to continue into Phase 3 will be dependent on what is recommended as a course of action for the County to pursue, funding, and time constraints of any funding streams.

**Question #2**  2.8 MWBE participation requirement. Please identify if this is a hard requirement or a “goal”. Additionally, how is the 20% calculated? Is it based on dollar amounts, hours of work, or personnel assigned to the project? Does the ability of a responder to meet the 20% requirement affect the evaluation process? If so, how?

**Response:** The MWBE participation is based on a percentage of the total grant monies awarded. The various expenditures, individually, are not held strictly to the “goals” that the State has set.

There would be no “points” awarded to any vendor based on MWBE during the evaluation of proposals. We would like to know what if any effort to help reach this goal, % of cost if awarded, will be made by the vendor.

**Question #3**  2.10 Cost Proposal. The County identifies (3) completion dates 9/30/14, 8/31/15, 12/31/15. Please clarify the meaning of these dates. Does the county have specific work that must be completed by these dates? If so, please identify the appropriate sections of the scope of work. Additionally, as phase 3 is identified as optional, does the County require this as a separate cost item? Is Phase 3 required to be completed on or before 12/31/15?
**Response:** The dates represent various grants that we will be using to fund the study in the RFP. The milestones are established to ensure that timelines are met to coincide with various grants that we will be using to fund the study.

When milestones are set, with the vendor of choice, the payment schedules will also be set. The County will manage the expenditures from the appropriate grant monies to accommodate these completion dates.

**Question #4** General -- Will the County be hiring a Project Manager to oversee the complete project, including the acquisition of radio sites, etc?

**Response:** Not for the first two phases, we may consider it as we progress into Phase 3.

**Question #5** General -- What is the deadline to spend the SICG funds awarded in December 2013?

**Response:** 12-31-14 with a 1 year extension expected, if granted 12-31-15

**Question #6** Section 2.7 -- Please provide a copy of the RFP in word format to allow for a point by point response.

**Response:** This will be emailed to the entire vendor listing in word format.

**Question #7** Section 2.1 B -- What project phases align with the following dates listed in the RFP -- 09/15/14, 08/31/15 & 12/31/15?

**Response:** The dates represent various grants that we will be using to fund the study in the RFP. The “Milestones” are established to ensure that timelines are met to coincide with various grants that we will be using to fund the study.

When “Milestones” are set, with the vendor of choice, the payment schedules will also be set. The County will manage the expenditures from the appropriate grant monies to accommodate these completion dates.

**Question #8** Section 3.2.1 -- What other agencies (State, County or Local) might participate in the study?

**Response:** Some of the site locations may have considerations involving the NY State Police and their communications, microwave, within St. Lawrence County to their communication center in the Town of Lewis. Other than this possibility, only Fire and EMS services are being looked at for now.

**Question #9** Does the County require the consultant to develop specifications for other systems related to their radio operations such as computer aided dispatch (CAD), logging recorders, fire station alerting systems, etc.?

**Response:** No, only the radio systems.

**Question #10** The scope of work for Phase III may be highly variable and is dependent on the outcome of the previous two phases. Does the County require a fixed price proposal, based on a defined scope of work, for this phase or will hourly rates suffice?

**Response:** We are looking for an hourly rate only at this time.

**Question #11** Does the required scope of services for Phase II include negotiations with the selected vendor and support throughout the contract ratification activities?

**Response:** No.

**Question #12** What level of documentation does the County maintain on all existing land mobile radio subsystems (e.g., network controllers, remote site network equipment, network architecture designs, traffic usage statistics, backhaul ratios, antennas, combiners, dispatch consoles, HVAC, UPS, operations and maintenance information)?
a. Are these files current and comprehensive?
b. Are these files available in electronic formats?

Response: We have no up to date documents for our or outside departments equipment.

Question #13 Does the County require site visits to all radio sites to document this information?
Response: For the County’s repeater sites yes.

Question #14 How many radio towers exist?
Response: We have 8 repeater sites; some are on towers some are on structures.

Question #15 How many total radios operate on the County’s radio systems?
Response: That will be determined as part of the study.

Question #16 Does the County maintain detailed subscriber inventory information radio vendor, make, serial number, software load, channel plan, etc. or is the selected vendor expected to physically gather information on the County’s subscriber radios?
Response: We do not have up to date information. Part of the study will be working with the Fire and Rescue Departments to gather this information.

Question #17 How many distinct dispatch centers do the County and its independent municipalities operate?
Response: We have one central dispatch center.

Question #18 Page 4, Existing System Review; Section 3.2.1 – This section states “This initial phase of the project would involve the consultant’s review…of all St. Lawrence County radio systems.” Can the County please identify the radio systems to be reviewed with information about their manufacturer, agencies served, and the radio sites that support each system?
Response: We do not have up to date information. Part of the study will be working with the Fire and Rescue Departments to gather this information.

All other terms and conditions remain the same. Please sign this acknowledgement and include with your “Request for Proposals” response.

Acknowledgment of Addendum #1: (2014-18) RFP St. Lawrence County Communications Study

[Signature]
Authorized Signature

[Date]
Date
Addendum #2

Bid # (2014-18) RFP St. Lawrence County Communications Study

April 25, 2014

Please utilize the following additional information when preparing your response to the above mentioned Request for Proposals:

The following written questions were received by the Purchasing Office. Please utilize this clarification in preparing your RFP.

Question #1 Does the county require bids to phase three (listed as optional) in their cost proposal? If yes, does it need to be listed as a separate cost item from phases one and two?

Response: We would like a quote on a per hour rate as indicated in the RFP. This would not affect the consideration for Phase 1 or Phase 2.

Question #2 Our firm wants to help St. Lawrence meet their MBE/WBE participation goal as time allows:

    a. Please confirm an out-of-state company should obtain NYS MBE/WBE certification with the state directly in order to count towards your MBE/WBE participation goal of 20% for this contract?

    b. Can a firm provide their local/state certifications instead, for MBE/WBE participation, and obtain NYS MBE/WBE after bid submittal?

Response: It would be preferred that any vendor who was selected if eligible, obtain NYS MBE/WBE certification. We would require NYS MBE/WBE prior to accepting a bid submittal.
Question #3  Please provide the forms and/or contract’s POC to begin the process for recommended MBE/WBE certification. Also, will you provide information about the grants you are utilizing in order for vendors to help satisfy this participation?

Response: At this time the POC for MBE/WBE certification is Kelly Reed, Ph. # (315)379-2250, email kreed@slawco.org.

Attached are the forms required for MBE/WBE compliance.

List of NYS Office of Homeland Security grants that will be utilized to cover cost of study:
   FY11 SHSP (contract dates 9/1/11 to 8/31/14)
   FY12 SHSP (contract dates 9/30/12 to 9/30/14)
   FY13 SHSP (contract dates 9/1/13 to 8/31/15)
   SICG Round 3 (12/3/13 to 12/2/14)
Some grants will have ability to have extension of contract end date.

All other terms and conditions remain the same. Please sign this acknowledgement and include with your “Request for Proposals” response.

Acknowledgment of Addendum #2: (2014-18) RFP St. Lawrence County Communications Study

[Signature]
Authorized Signature  4-28-2014  Date
COST PROPOSAL

<table>
<thead>
<tr>
<th>MAJOR MILESTONE AND TASK(S)</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1—Systems Review and Needs Assessment</td>
<td>$42,386</td>
</tr>
<tr>
<td>Task 1.1—Project Kick-off Meeting</td>
<td></td>
</tr>
<tr>
<td>Task 1.2—Existing System(s) review</td>
<td></td>
</tr>
<tr>
<td>Task 1.3—Operational Enhancement Analysis</td>
<td></td>
</tr>
<tr>
<td>Task 1.4—Spectrum Review</td>
<td></td>
</tr>
<tr>
<td>Task 1.5—Conceptual Design Development</td>
<td></td>
</tr>
<tr>
<td>Phase 2—RFP Development and Procurement</td>
<td>$49,238</td>
</tr>
<tr>
<td>Task 2.1—Pre-RFP Preparation</td>
<td></td>
</tr>
<tr>
<td>Task 2.2—Request for Proposal Development</td>
<td></td>
</tr>
<tr>
<td>Task 2.3—Pre-proposal Conference and Site Visits</td>
<td></td>
</tr>
<tr>
<td>Task 2.4—Vendor Questions and Answers</td>
<td></td>
</tr>
<tr>
<td>Task 2.5—Proposal Evaluation/Vendor Recommendation</td>
<td></td>
</tr>
</tbody>
</table>

Table 1—Major Milestones and Task(s)

Per the answer to Question #10 – Addendum 1, we will provide a standard hourly rate to the County for the personnel/job classifications that would most likely be involved with the system implementation phase.

<table>
<thead>
<tr>
<th>RATE SCHEDULE</th>
<th>Hourly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant—Onsite (Minimum 16 Hours)</td>
<td>$186</td>
</tr>
<tr>
<td>Consultant—Remote</td>
<td>$147</td>
</tr>
</tbody>
</table>

Table 2—Rate Schedule
PAYMENT TERMS

<table>
<thead>
<tr>
<th>MAJOR TASKS ASSOCIATED WITH MAJOR MILESTONES</th>
<th>PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1—Systems Review and Needs Assessment</td>
<td></td>
</tr>
<tr>
<td>Task 1.1—Project Kick-off Meeting</td>
<td>$14,835</td>
</tr>
<tr>
<td>Task 1.4—Spectrum Review</td>
<td>$10,597</td>
</tr>
<tr>
<td>Task 1.5—Conceptual Design Development</td>
<td>$16,954</td>
</tr>
<tr>
<td>Phase 2—RFP Development and Procurement</td>
<td></td>
</tr>
<tr>
<td>Task 2.2—Request for Proposal Development</td>
<td>$32,005</td>
</tr>
<tr>
<td>Task 2.5—Proposal Evaluation/Vendor Recommendation</td>
<td>$17,233</td>
</tr>
</tbody>
</table>

Table 3—Payment Based on Task Completion

TERMS AND CONDITIONS

Kimball’s proposal in response to the County’s RFP is an offer to provide the services requested based on our current understanding of the County’s requirements. As such, if selected Kimball reserves the right to review the County’s provisions referenced as Revised Schedule A, which was not included with the RFP, in order to develop a better understanding of the terms and conditions therein included and to obtain mutual agreement of these terms to ensure contractual clarity.

The balance of this page is intentionally left blank.