# Washington Police Department



115 WEST JEFFERSON STREET WASHINGTON, ILLINOIS 61571 NON-EMERGENCY (309) 444-2313 FAX (309) 444-7511

To:

Mayor Manier and City Council

From:

Ted Miller - Chief of Police

Date:

April 7, 2017

Re:

911 Consolidation Study Proposals

#### BACKGROUND

The ETSB Board recently sent out RFPs for the purpose of hiring a consultant to study the 911 consolidation process for Tazewell County and drafting a consolidation plan to present to the state.

#### **SUMMARY**

Four companies responded to the request for proposal. They are as follows: **AECOMM**, **IXP**, **MISSION CRITICAL**, and **RICHARD S. TUCKER CONSULTANTS**. All of the companies appear to meet the requested specifications for the proposal as well as the timelines prescribed. However, it should be noted that most of the consultants noted that the timeline, as mandated by the state is extremely tight, which requires near immediate action by the ETSB to stay in compliance.

The four companies that responded to provide the consulting work range in size from global in scope to a two person consulting firm. The pertinent specifics on each company are provided in an attached comparison chart for better clarity. Also attached, you will find the actual proposals from each company, which are copious in nature.

## The final bids for each company are as follows:

AECOMM \$115,520.00

MISSION CRITICAL \$73,980.00

IXP \$69,750.00

RICHARD S. TUCKER ASSOCIATES \$23,555.00

The cost of the study could be paid for in the following manner: The ETSB could attempt to pay for the study, although their funds are very limited at this time (this would be the preferred direction). Tazewell County could solely fund the study or the county could fund the study and ask each of the shareholder communities to participate.

# REQUESTED ACTION

The ETSB will meet on April 19<sup>th</sup> for the purpose of discussing and potentially awarding the contract. As your voting representative on the ETSB, I am requesting input into the firm selection process.

#### **ATTACHED**

Attached to this correspondence are copies of the proposals as well as the business comparison chart.

	IXP	MISSION CRITICAL	AECOMM	RICHARD S TUCKER
Profile of Company	Princeton, NJ based firm provides solutions for 911 dispatching, security monitoring, operational, technical and facility support. In addition, consulting, technology, managing.	Based in PA, NC, and Texas partners in public safety providing shared services & consolidation, technology implementation.	Based in NY & LA, multidiscipline company global provider of professional, technical and mgmt. support. Not necessarily specialized in law enforcement technology	Independent consultant since 1985, Worked with many Illinois clients. Former Illinois Law Enforcement & Fire Practioners. Currently based in South Dakota.
Experience	17 years	30 years	32 years	31 years
Local Presence in Illinois	Gurnee, IL – Consolidation Services City of Elgin-Consolidation Assessment Southeast Emerg Communications-IL- Consolidation & Share Service Evaluation Village of Gurnee-Business Consolidation Imitative (List of references on pages 12-13 of document listing.)	DuPage CO-Consolidation & Feasibility Study/Facility Assessment O'Fallon & Fairview Hts-Consolidation & Feasibility Study ISP-Next Gen 9-1-1, Feasibility Study-Procurement & System Implementation Support, Tri-Com-Technology Assessment & Strategic Tech Plan (pgs. 18-27)	Winnebago CO, Will CO,	Over a dozen consolidation projects in Illinois: Lake County Native-Police & Fire Berwyn IL, CENCOMM, Fox Lake, Glenview, Des Plaines/Park Ridge, LC Sheriff Office
Project Approach	Meetings via webinar One visit to assess need will be made in Phase 3 of 4. Preliminary (Phase 4) report delivered on or before June 1, 2017.	Pre-kick-off survey tool given to each PSAP. Phase 3 data interviews/calls, collection of data. Preliminary Report in Phase 4. Phase 5 is final analysis and plan with one onsite visit.	Using their company core group assignments they set the timeline to meet our deadlines. They really don't divulge how they do that except using a graph. It is apparent they will spend little or no time in Washington.	Recognition of compressed time table to complete deadline. Will modify their approach to ensure timeliness. Personal presence in Washington to interview & inventory dispatch centers to develop plan for consolidation.
Do they meet all deadlines & proposal specs	Phase One Meeting-Phase 4 Meetings will gather all necessary documentation. In Phase 4 a preliminary report will be delivered by June 1, 2017 (Pgs 3-4).	Pre-Project Mtg; Data Gathering; Follow-up Interviews & Observations; Prelim Report/Plan; Final Analysis & Plan (Pgs. 32-39)	They can but they will complete the assignment with very little "face-time"	Yes, can meet aggressive timelines if decisions by the Principals are made in timely fashion.
Cost	\$69,750.00	\$73,980.00	\$115,.520.00	\$23,555.00



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. March 31, 2017





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AECOM 20715 Timberlake Road, Suite 106 Lynchburg, VA 24502 www.aecom.com

434 258 8427 434 582 5500 mob tel

March 31, 2017

Tazewell County ETSB ATTN: 9-1-1 Consolidation 101 S. Capitol Street Pekin, Illinois 61554

#### Re: Request for Proposals Tazewell County PSAP Consolidation Study

AECOM Technical Services, Inc. (AECOM) is pleased to respond to your request for proposals seeking assistance in Public Safety Answering Point (PSAP) Consolidation study for the Emergency Telephone System Board (ETSB) of Tazewell County.

AECOM is excited to have the opportunity to support the Tazewell County ETSB with extensive Public Safety Communications and PSAP consolidation experience. We have assisted many communities across the United States to develop an efficient and effective consolidation plan.

We recognize this project as an important step towards improving your public safety communications environment. We understand the need to provide the best possible solutions, make forward progress within the region, while working within your budgets. We understand your goals for the consolidation solution are:

- submitting a consolidation plan, by October 1, 2017, to meet federal and state requirements
- developing a staffing plan that outline the management structure and integration of current telecommunicators
- assess facility/space needs that evaluated the current facilities and their potential expansions
- develop initial budgets for implementation and operations
- develop a stakeholder funding allocation
- identify equipment needs, including the incorporation of NG911
- recommend an operations structure

AECOM is independent of and has no affiliation with any vendor, manufacturer, supplier, or dealer of equipment, software, or services. Our history of recommendations in competitive procurements proves our objectivity. In the midst of a highly competitive marketplace with a proliferation of marketing hype, this objectivity provides our clients with a fully, impartial perspective.

We are familiar with, understand, and appreciate the complexity involved in developing a consolidation plan. We have a record of successfully completing many similar efforts for other localities within Illinois. We have taken the time and care to select the best team members who will bring a wealth of knowledge and experience to your project and will be the right fit to the services you have requested. Our project lead, Bob Currier, is currently serving on the NENA Executive Board as North Central Region Director; and previously served in the same position from 2005 – 2013; and has been a member of Finance and Operations committee, By-Laws Committee, Policy Committee and served as the liaison to the Annual Conference. Our team will dedicate themselves to providing the best recommendations, while also meeting the critical end date of June 16, 2017.

Thank you for the opportunity to present our qualifications, and we look forward to meeting with you and your colleagues to discuss how we may help you with your current and future communication challenges. If selected for this project, we will look forward to the opportunity to negotiate mutually acceptable contract terms. If you have any questions or require additional information, please call me at 434.582.5500 or contact me by e-mail at <a href="mailto:cheryl.Giggetts@aecom.com">Cheryl.Giggetts@aecom.com</a>.

Sincerely.

Cheryl S. Giggetts, PMP, CHS-III

Senior Vice President

# a. Introduction

At AECOM Technology Solutions' we believe a competent and successful consulting team will offer you the following capabilities and attributes:

- We will be mindful of the project timeline, budget, and scope to avoid cost overruns and schedule slippage. We strive
  to complete projects cleanly, and if there are a few bumps in the road or unexpected circumstances, we proactively
  manage those events to minimize any negative impact on the project.
- 2. We will provide a team with *technical competence* regarding the aspects of consolidation that are associated with the project. They need to understand the technologies that will affect your system.
- We will provide a team with professional competence to assist the Emergency Telephone System Board's (ETSB) in making the critical decisions necessary to consolidate your Public Safety Answering Points (PSAPs)
- 4. We will provide a team with practitioner experience that demonstrates an understanding of the operational, governance, budgetary and service provision goals and objectives that the project is intended to accomplish. Consultant teams that include staff who have previously worked in public safety have the insights needed to understand your environment.
- 5. We will provide a team with an ability and willingness to form a collaborative partnership with key client representatives where our work, on your behalf, becomes an extension of your organization's efforts to accomplish goals and objectives. A high performing team will be a collaborative effort, working together towards a successful project conclusion.
- 6. We will serve as <u>your advocate</u>; looking out for your best interests, providing expert advice, watching for risk areas, and identifying ways to mitigate that risk. We will fill in the gaps where you may not have the necessary internal expertise, or where you simply do not have the capacity to take on this extra effort on your own.

The right consulting team will provide expertise and advice that will result in cost savings, expense avoidance, and risk mitigation that will far exceed the cost of the underlying consulting fees. At AECOM Technology Solutions, our consultants all strive to meet or exceed the above attributes and performance objectives.









## Why AECOM?

AECOM will be honored to have the opportunity to work with the Tazewell County ETSB project team and believe we are the best choice for *your* project's success. That success is built upon the following foundation:

#### ✓ Ability to Meet the Scope of Work & Schedule

AECOM has experience working with Public Safety clients around the country, consolidation studies to facility needs recommendation to cutover. We understand the operational challenges for the ETSB, your PSAP staff and county citizens. While the obvious responsibility we would have as your consultant is to provide you with the benefit of our technical, design, operational, project management, implementation and acceptance experience, a less obvious but equally important responsibility is to assist the ESTB in making critical decisions. Part of this second responsibility is to break down technical and operational solutions into understandable language and processes for your Project Manager and Project Team and then guide the Project Team toward consensus. Our team will provide your requested scope of services efficiently, effectively, and we will meet your schedule requirement of June 16<sup>th</sup>.

#### √ 911 Related Experience

AECOM has developed a group of consultants and a body of experience specifically in public safety radio dispatch assessment, design and implementation. Our operations experience entails developing requirements for 9-1-1, NG911, CAD, RMS and GIS equipment, as well as the design of Dispatch Centers and Emergency Operations Centers (EOC). AECOM has on staff people that have been 911 directors, and understand the requirements needed to go beyond Public Safety operations, and fire ground communication issues, facing emergency responders. We facilitate effective solutions precisely to meet your needs.

#### Staff Qualifications

For your project, AECOM has selected a team with the specific knowledge and backgrounds to support your goals. Your primary team will include a project manager, a project lead, and a staff engineer. Behind this primary team is a cadre of specialized engineers and subject matter experts - employees, not subcontractors - who can be brought into the project as required. This effort will be led by the AECOM's Senior Vice President, Cheryl Giggetts, whose passion for quality and service is unsurpassed. . Our project manager has successfully managed city, county, statewide, and nationwide implementations and this experience will guide your project to success.

#### √ References

AECOM has a long and successful history with clients similar in size to Tazewell County ETSB and have provided reference information for similar projects. We have a history of excellence in building and fostering relationships long after a project is complete. We are proud to have many clients who come to us years after their initial project is complete to again partner with us to provide the quality services they need. We are committed to your success.

#### Commendations from Jim Junkins of Harrisonburg:

"The concurrent implementation of a complex 800 MHz simulcast radio system and renovation of an existing building to create a new consolidated Emergency Communications Center has been particularly challenging. AECOM's coordination and management of these programs have been instrumental in keeping them on project scope, on schedule and within budget. I personally have enjoyed working with AECOM and highly recommend use of their services for radio communication systems and emergency communications center development and implementation."

#### Commendation from Ben Hess Montana:

It speaks well of AECOM to say that all five consortium counties were pleased with the recommendations and the professionals they dedicated to our project, and we continue to follow their plan as we implement their suggestions.

I have worked with them on both projects and can only say they "know their business". They have the expertise; they deliver on time as promised, and have exceeded all expectations. Without reservation I recommend them for any projects involving communications systems or Communications Center development.

# b. Company Organization Capabilities

AECOM Technical Services, Inc. (AECOM) is a global provider of professional technical and management support services to a broad range of markets, including communications, transportation, facilities, environmental, energy, water and government. Headquartered in Los Angeles with approximately 90,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM was incorporated in California in 1970, and provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural, and social environments.

The difference we help our clients make is felt in every region of the world. Clean water for developing communities. Iconic skyscrapers. Power and security to fuel economic prosperity. Transportation that brings people together. Thoughtful planning that sustains cities and natural resources.

Our clients face tough, interrelated challenges that can only be solved by a company like ours. One with deep roots, diverse perspectives and an innovative approach. One with the people, technology and vision to deliver what others can only imagine.

#### We are AECOM — built to deliver a better world.

## Firm Background

Within the AECOM framework, **Technology Solutions** operates as a Technical Center of Excellence in the United States and has been providing public safety consulting services for over 30 years. Established in 1984 as Communications Technology Associates, Inc., (CTA) quickly gained a national reputation for responsiveness, commitment, and service excellence. CTA merged with AECOM in January 2007, and has delivered communications solutions to more than 300 clients.

We blend together the focus of a small group of technical experts with the capabilities of a firm with global presence.

Technology Solutions is a dedicated, in-house technology division with extensive experience providing the services required under this RFP for contracts of similar size and complexity. Our expertise encompasses all radio and wireless technologies, telecommunications networks, 911 and communications/dispatch systems, and facility/architectural design. Our team's **core competencies** include all stages of public safety communications projects including initial assessment, analysis and planning, engineering design, procurement, implementation support, coverage testing, and final acceptance.

AECOM offers Tazewell County over thirty years of experience implementing innovative and effective solutions for public safety facilities.

Our team of project managers, engineers, public safety consultants, and technical specialists work in concert to develop complex technologies, from conceptual design to operational readiness. By focusing on our clients' unique operational and interoperability requirements, we facilitate effective solutions to meet precisely your needs.



# c. Company Staff Qualifications

## **Public Safety Technologies and Trends**

AECOM is proud of our reputation as industry experts and influencers of current public safety radio technologies and trends. AECOM has experience with radio system designs and implementations throughout the country working with various radio system and 911 dispatch equipment manufacturers. Our staff participates and influences discussions on various committees pertinent to the industry. We regularly provide presentations at the NENA, APCO, and IWCE International conferences to share with the public safety community what we have learned through our many successful project experiences.

AECOM employees belong to industry-related scientific, professional, and technical committees and associations and we are aware of not only the new developments in these areas, but also contribute to and help drive innovation in the industry.

Our project lead, **Bob Currier**, is currently serving on the NENA Executive Board as North Central Region Director; and previously served in the same position from 2005 – 2013; and has been a member of Finance and Operations committee, By-Laws Committee, Policy Committee and served as the liaison to the Annual Conference. He is an instructor for the NENA Education Advisory Board; and volunteers as Senior Technical Advisor for the St. Clair County (MI) Office of Homeland Security and Emergency Management. Mr. Currier also serves on Michigan State 9-1-1 Committee's Legislative Action Sub-Committee Emerging Technologies Sub-Committee; Policy Committee, and is former Chairman of the Michigan Chapter of NENA's annual 9-1-1 Conference; which marked its 30<sup>th</sup> annual conference in 2016.

We understand as the 9-1-1 industry evolves, we need to stay on top of the most valuable information, since this can provide short- and long-term benefits to our clients.

- Next Generation 911 Working Group
- National Emergency Number Association (NENA)
  - Executive Board
  - Education Advisory Board
- Industry Council for Emergency Response Technologies (iCERT)
- Various State Chapters of APCO
- Public Safety Wireless Advisory Council (PSWAC)
- Association of Public Safety Communications Officers (APCO) International:
  - Civil Contingencies Network (CCN)
  - Commercial Advisory Committee (CAC)
  - Membership & Chapter Services
     Committee
- Project 25 Technical Interest Group (PTIG)
- Telecommunications Industry Association (TIA)
- National Society of Professional Engineers
- Institute of Electrical and Electronic Engineers (IEEE)
- American Board for Certification in Homeland Security (CHS)
- National Institute of Standards and Technology (NIST) Community Resilience Panel
- Police Executive Research Forum (PERF)

Technology Solutions' team of consulting experts is recognized as leaders in the communications industry, with clients throughout the world. Our involvement with these committees and organizations is shaping the standards and applications of "what's next in technology."











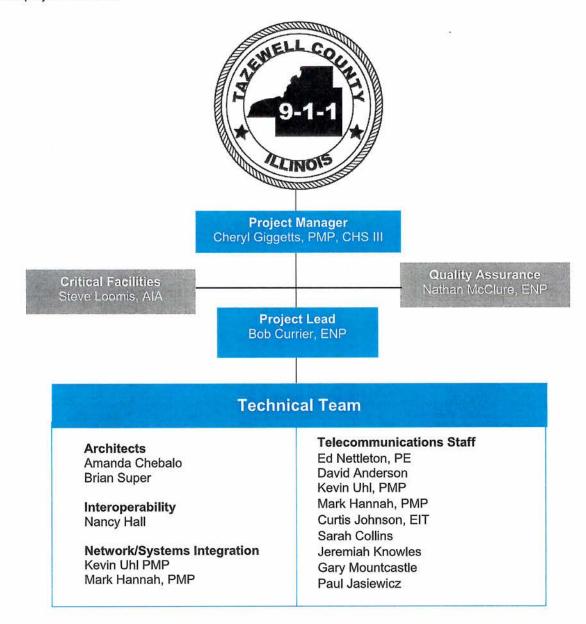






#### **Team Qualifications**

We selected a project team based on thoughtful consideration of your objectives and propose a team with strong credentials to meet your goals. Our team has a solid understanding of the function of public safety facilities, and will bring this experience to the ETSB to provide a thorough consolidation study. The project team is ready to move quickly to meet your critical project schedule.



In the following table, we provide the roles and responsibilities for the key members of your project team.

Key Personnel	Qualifications and Experience Summary	What does it mean for you?
Cheryl Giggetts, MBA, PMP, CHS-III Principal-in-Charge Project Manager	<ul> <li>Senior Vice President</li> <li>27 years of experience in Public Safety 9-1-1</li> <li>Authority for legal and financial decisions</li> <li>Extensive experience in PSAP Consolidation Management</li> <li>Experience in the Illinois ETSB environment</li> </ul>	Ms. Giggetts is the senior management point of contact for you and is responsible for the overall performance of the project team and to verify we meet all of our responsibilities in a professional and timely manner. She will be available to the ETSB's project manage and the stakeholders throughout the duration of the project. She serves as the primary point of contact for this engagement.
Bob Currier, ENP Project Lead	<ul> <li>42 years public safety communications</li> <li>18 as a Fire Fighter, 8 years as Assistant Chief</li> <li>NENA Executive Board Member</li> <li>Instructor for NENA Education Advisory Board</li> <li>Senior Technical Advisor for St Clair Office of Homeland Security and Emergency Management</li> </ul>	Mr. Currier will be your day-to-day technical point of contact. He will direct the team performing the work on your project, attend meetings, and participate in the interviews. He is responsible for the content of your project, reports, correspondence, and presentations.
Steve Loomis, AIA Critical Facilities	<ul> <li>Registered Architect</li> <li>32 years of experience as a designer, architect, and planner</li> <li>recognized nationally for his expertise in ECC/PSAP facilities</li> <li>Experience in the Illinois ETSB environment</li> </ul>	Steve will lead the architectural team in making facility/space recommendations. He will incorporate industry standards (APCO and NENA) and legislative requirements (OSHA, ADA, NFP, etc.)
Nathan McClure, ENP Dispatch / Public Safety Operations	<ul> <li>44 years public safety communications</li> <li>17 years as director of 911 dispatch center</li> <li>22 years as volunteer/paid on-call firefighter</li> <li>hands-on experience in every aspect of the Public Safety field</li> <li>Experience in the Illinois ETSB environment</li> </ul>	Mr. Nathan McClure's distinctive experience in Public Safety gives him an exclusive insight and knowledge of the issues facing Public Safety Communications as technology advances. He is a Senior Operations Specialist specializing in Emergency Communications Center and 911 system design and operation. Mr. McClure is available to provide input as needed for Dispatch and Public Safety Operations.

#### Resumes

## Cheryl Giggetts, MBA, PMP, CHS-III Principal in Charge **Project Manager**

Ms. Giggetts is a senior vice president and director of AECOM's Technology Solutions group. She has over 30 years of experience in management, and 25 consecutive years in the Public Safety and utilities industries.

#### **EDUCATION:**

MS, Business Administration, Lynchburg College BA, Psychology, Randolph-Macon Women's College

#### PROFESSIONAL LICENSES / REGISTRATIONS:

Project Management Professional Homeland Security Level III Certification

#### PROFESSIONAL AFFILIATIONS:

Project Management Institute American College of Forensic Examiners International Certified Homeland Security Preparation and Response Team

Telecommunications Industry Association (TIA)

APCO International:

- Civil Contingencies Network (CCN)
- Commercial Advisory Committee
- Membership + Chapter Services Committee
- Project 43 Working Group

APCO Virginia NENA Virginia

Commonwealth of VA Interoperability Advisory Team Emergency Interoperability Consortium Project 25 Technical Interest Group Region 2000 Technology Council:

- · Board of Directors
- Executive Committee

VA Research & Technology Investment Advisory Committee

#### **Project Manager**

Ms. Giggetts has extensive knowledge of emergency communications centers, 911 technology, land mobile radio systems, including analog, digital, UHF, 800 MHz, 700 MHz, 900 MHz, APCO P25, conventional, VHF, and trunked systems. Ms. Giggetts also is experienced in cost management and analysis. The following is a sampling of her AECOM's past and current clients:

San Bernardino County, California - ECC/EOC and Radio Studies. AECOM was team responsible for performing the ECC/EOC for the largest county in the continental U.S. County Fire and Sheriff's Departments, along with several independent City departments need consolidated emergency operations from upgraded facilities. AECOM also developed the ECC/EOC operational concept and facility plans

# Virginia Information Technologies Agency

As Project Manager, Ms. Giggetts led the team responsible for consulting services to assist Virginia localities, the Virginia Wireless E911 Services Board, and the DTP Public Safety Communications Division. These services were intended to assist local governmental agencies explore the feasibility of consolidating their 911 Public Safety Answering Points (PSAPs). Recognizing that a shared communications center with proper implementation offers significant service improvements to all of the participants, improves interagency coordination. and at the same time reduces the overall cost of providing service to the community, the AECOM team recommended that a shared public safety Emergency Communications Center be created in each of the studies.

**Emergency Communication Center** Consolidation/Co-Location and Space Study. Tucson, AZ. Project Manager for the team responsible for EOC Information Survey - Dispatch environment needs assessment and ECC Report -Recommendations on City/County centers

#### Principal in Charge

As the Principal in Charge for the majority of our projects, Ms. Giggetts has complete authority and responsibility for all legal and financial decisions on projects. Her role is critical in the development of agreements with clients and any changes, if required. More importantly, she ensures that the right company resources are available to complete projects successfully. The following is a sampling of her AECOM's past and current clients:

Bi State Metro Planning Commission, Illinois and lowa. AECOM conducted a feasibility study for consolidating two or more of the dispatch centers in Scott County. Recognizing that a shared center with proper implementation offers significant service improvements to all of the participants improves interagency coordination, and at the same time reduces the overall cost of providing service to the community, AECOM recommended that a shared public safety Emergency Communications Center be created. Participants in the shared center include the City of Davenport, Scott County Sheriff's Office, City of Bettendorf, and MEDIC-EMS.

Winnebago County Emergency Telephone System, Illinois. Winnebago County is one of the largest counties in Illinois with a population of 360,000+. AECOM (formerly CTA Communications) was tasked to review their current level of service and equipment. The goal was to move their operating environment to modern standards in the areas of 9-1-1 customer premise equipment (CPE); computer aided dispatch (CAD), radio control systems, console furniture, as well as the overall dispatch center employee work environment. The study explored fully the existing situation and the County was presented with a multiple alternative approach to achieve the desired goals. The expected costs and cost trade-offs were fully investigated with the County.

#### Will County, Illinois

The Will County Emergency Telephone System Board's Long Range Planning Committee (LRPC) commissioned AECOM (formerly HSMM) and Healy Bender to perform a space needs study and site selection for two regional dispatch centers as part of its regionalization plan for nine existing centers in the county. In several workshops, the design team engaged participants from the existing centers, 9-1-1 administrative staff, and the Will County management staff to analyze existing space needs and projected future requirements for a 20-year planning window.

Valley Emergency Communications Center (VECC) AECOM assisted this agency, which provides public safety communications for the region's 19 jurisdictions in the surrounding Valley, except Salt Lake City. VECC retained AECOM as part of a multi-discipline team to design a \$6.2 million 911 call dispatch center. We provided the equipment layouts for the facilities and assisted in planning radio tower adjacent to the building. To gather the necessary data for this project, the members conducted workshops and interviewed management, dispatch, and technical personnel (stakeholders), to identify their requirements for the communications center. We created extensive cutover plans that account for personnel, radio, CAD, E911, recording and other issues. He assisted in obtaining new and additional equipment, and attended cutover and building status sessions. We were on-site during the actual cutover process to assist and guide the move.

Harrisonburg and Rockingham County Consolidated Dispatch Center, Virginia. AECOM completed the design and renovation of an existing building into the new Emergency Communications Center. This project involved the consolidation of three public safety dispatch centers and the implementation of a new 800 MHZ trunked radio system. It also consisted of installing a new 911 system, an upgraded computer aided dispatch system, new radio consoles and new dispatch workstations. AECOM provided cutover planning and assistance.

Orleans Parish Communications District New Orleans, Louisiana 911 Center and EOC. Prior to the impact of Hurricane Katrina, the Orleans Parish Communications District began work on establishing a new 911 and dispatch center. AECOM was brought on board immediately after the storm. We assisted the District during three relocations and moves into temporary facilities. We worked with the architects and engineers to establish the needed facilities and operational areas for the permanent dispatch operation and EOC.

City of Springfield Centralized Public Safety
Dispatch Center Feasibility Analysis and
Assessment, Massachusetts. AECOM worked
with the City Police and Fire, and the
Commonwealth's Finance Control Board to
complete the Feasibility Study designed to assist in
the identification and resolution of all issues related
to the development, planning, and implementation
of a combined (police and fire) dispatch center; to
identifying possible locations for the center; and
recommend the equipment and systems necessary
with cost estimates associated with a single
consolidated center.

Town of Monson Regional ECC Consolidation Study, Massachusetts. AECOM developed a Study for the Towns of Monson, Palmer, and Hampden to determine the feasibility and desirability of combining the dispatch services for fire, police, and emergency medical services, including the development of a state-of-the-art emergency operating center. When complete, the study will describe current conditions, alternatives considered, the process used to arrive at that design, our recommended project approach, and a preliminary schedule for implementation.

# Robert Currier, ENP Project Lead

Mr. Currier is a Senior Operations Specialist specializing in 911 and Emergency Communications. He has 42 years of experience in the public safety field as an Emergency Medical Technician. He worked with the St. Clair, Michigan Fire Department for 18 years, for 8 of those years as Assistant Chief, and as a founding member in the county's first Hazardous Materials Response Unit. He also served 27 years as a Marine Deputy for the St. Clair County Sheriff's Department Marine Division and is serving as a Field Training Officer.

Mr. Currier is currently serving on the NENA Executive Board as North Central Region Director; and previously served in the same position from 2005 – 2013; and has been a member of Finance and Operations committee, By-Laws Committee, Policy Committee and served as the liaison to the Annual Conference. He is an instructor for the NENA Education Advisory Board; and volunteers as Senior Technical Advisor for the St. Clair County (MI) Office of Homeland Security and Emergency Management.

#### EDUCATION:

AA, Business & Accounting, Delta College, University Center MI

Certificate in First Line Supervision, Criminal Justice Management Institute, Lansing MI Certificate Program, Fire Science, St. Clair County Community

#### PROFESSIONAL AFFILIATIONS:

National Emergency Number Association (NENA) North Central Regional Director

St. Clair County (MI) Dept. of Homeland Security / Emergency Management - EOC Technical Advisor

#### AREAS OF EXPERTISE:

College, Port Huron MI

Public Safety Communications Center Operations
Public Safety Dispatch Center Design
State and Federal Legislative and Regulatory
911 / PSAP
NextGen 911
CAD / RMS
Grant Writing

Mr. Currier currently serves on Michigan State 9-1-1 Committee's Legislative Action Sub-Committee; Emerging Technologies Sub-Committee; Policy Committee, and is former Chairman of the Michigan Chapter of NENA's annual 9-1-1 Conference; which marked its 30<sup>th</sup> annual conference in 2016.

#### Relevant Project Experience

**Utah Valley Dispatch Center, Special Service District.** Mr. Currier performed Quality Assurance for the extensive cutover plans that account for personnel, radio, CAD, E911, recording and other issues. He will also support the actual cutover process to assist and guide the move.

# County of St. Clair (Michigan) Fire Chief's Association.

Mr. Currier served as subject matter expert and consultant on overall review, analysis and delivered recommendations for upgrades to the county-wide fire department paging and alerting network. This network supports 20 paid on call and combination fire departments; as well as the county-wide alert and warning network, including community sirens. The current network is a 6 site simulcast VHF system; with single points of failure.

South Dakota Association of Counties. Mr. Currier was primary project lead on a statewide assessment of Public Safety Answering Point (PSAP) readiness to accept wireless 9-1-1 calls for service. The project consisted of on-site inventory and analysis of each PSAP and its equipment; creation of a readiness report, recommendations for system upgrades; and associated cost elements for necessary upgrades. The final project report served as a template for the State's revised statewide 9-1-1 plan.

County of St. Clair (Michigan) Sheriff's Department, As the County's Director of Communications and 9-1-1 Project Coordinator, was primarily responsible for planning, development and deployment of the County's Enhanced 9-1-1 services for a county of 170,000 population. The Sheriff's Dispatch center served seven (7) local law enforcement agencies, the County Sheriff, Michigan State Police; 22 Fire Departments, and 4 EMS providers.

Mr. Currier was the primary project manager for complete dispatch center upgrades that included construction of new dispatch rooms, flooring, electrical, implementation of Computer Aided Dispatch and Records Management; and installation of current state of the art radio consoles.

# Steven E. Loomis, AIA, LEED AP Public Safety Architect

Mr. Loomis is a designer, architect, and planner. He lists to his credit a number of major projects, including interior space renovation, exterior renovation, space planning studies, master planning studies, additions, and new facility design. His role with each has varied from programming and space planning to design and project management, for which he has overseen all project phases. Mr. Loomis is particularly sensitive to context and critical functional requirements, as well as aesthetic qualities created by design. His commitment to quality control is demonstrated by his completion of projects on time and within budget.

Mr. Loomis is recognized nationally for his expertise in public safety facilities and has elevated the function of critical public safety facilities through sympathetic and innovative practices. His unique ability to design comfortable work environments for professionals who encounter stressful situations proves his sensitivity to the user, context, and critical requirements, as well as aesthetics. Steve is a proven leader in the planning, programming, and design of critical public safety facilities, including law enforcement, 9-1-1, and emergency operations centers.

#### **EDUCATION:**

BA, Environmental Design, Miami University, 1981 MA, Architecture, Washington University, 1985

#### PROFESSIONAL AFFILIATIONS:

Society of American Military Engineers
American Institute of Architects
American Institute of Architects
American Correctional Association
Association Public Safety Communication Officers
National Emergency Number Association
AIA Academy of Architecture for Justice (AAJ)
Association of Public-Safety Communications Officials
(APCO)
National Emergency Number Association (NENA)

#### **Project Experience:**

#### Will County, Illinois

The Will County Emergency Telephone System Board's Long Range Planning Committee (LRPC) commissioned AECOM (formerly HSMM) and Healy | Bender to perform a space needs study and site selection for two regional dispatch centers as part of its regionalization plan for nine existing centers in the county. In several workshops, the design team engaged participants from the existing centers, 9-1-1 administrative staff, and the Will County management staff to analyze existing space needs and projected future requirements for a 20-year planning window.

Sheriff's Office Regional Emergency Communication Center Expansion and Facility, Barnstable County, MA. Public Safety Design programmer for the DCAMM Certified Study, which is a precursor to the approval of a building project moving forward to the next stage which is a full design initiative.

Public Safety Communications Center, Oklahoma City, OK. Principal-in-Charge of Programming, Planning, and Design for a new 25,300-SF secure emergency communications center.

Ronald Reagan Washington National Airport Consolidated Communications Center, Washington, DC. Principal-in-Charge of Programming, Planning, and Design.

**9-1-1** and Emergency Communications Center, Kearneysville, WV. Principal-in-Charge of the Programming, Planning and Design for the renovation of an existing approximately 10,000-square foot, one-story Emergency Communications Center.

Emergency Communications/ Operations Center and Judicial Parking Expansion, Virginia Beach, VA.

Principal-in-Charge of Design for the planning, complete architectural and interior design, engineering services for a new 26,000-SF ECC and Emergency Operations Center (EOC), as well as provided construction administration services for the City

Valley Emergency Communications Center, 9-1-1 Call Dispatch Center, West Valley City, UT. Project Manager, Programmer, Planner and Designer for this new dispatch center that also houses the statewide headquarters for the Utah Communications Area Network.

**Johnson County, Communications Center, Olathe, KS.** Principal-in-Charge of Programming, Planning, and Design.

Emergency Communication Center Consolidation/Co-Location and Space Study, Tucson, AZ. Architect for Program, Planning, and Design.

# Nathan McClure, ENP 911 Interoperability

Mr. McClure is a Senior Operations Specialist specializing in Emergency Communications Center and 911 system design and operation. He has 44 years of public safety communications experience, including 17 years as the director of a consolidated 911 dispatch center, 8 years as an emergency services coordinator, and 9 years as a deputy sheriff. Additionally he has over 22 years of experience as both a volunteer or paid oncall firefighter and medical first responder. A former president of APCO, Mr. McClure possesses hands-on experience in every aspect of the Public Safety field.

Mr. McClure specializes in Public Safety Communications Center operations and design. He works on Public Safety Dispatch Center consolidation and design, Computer Aided Dispatch (CAD), and Records Management.

#### **EDUCATION:**

Master's in Public Administration, Western Michigan University B.S. in Political Science and History, Rockford College

#### PROFESSIONAL AFFILIATIONS:

APCO – Life Member, President (1978-1979)
Illinois Chapter – President (1973, 1974)
Michigan Chapter – President (1987)
North Central Regional Conference Chair (1988, 1998)
NENA Michigan Chapter – President (1995-1999)
Chair, Michigan 911 Conference (1996-2001)
National Fire Protection Association – Technical Committee on Public Emergency Service Communications – Principal member 2005 - Present
Radio Club of America, Fellow
Amateur Radio License N8TE

#### AREAS OF EXPERTISE:

Public Safety Communications Center Operations
Public Safety Dispatch Center Consolidation
Public Safety Dispatch Center Design
9-1-1
NG9-1-1
CAD / RMS
Grant Writing

#### Certifications:

NENA Certified Emergency Number Professional (ENP) APCO Institute – Master Instructor CALEA – Certified Assessor & Certified Team Leader State of Michigan:

- Firefighter II and Fire Service Instructor
- CAMEO Instructor
- Hazmat Awareness & Operations Instructor

#### Relevant Project Experience

Bi State Metro Planning Commission, Illinois and Iowa. Mr. McClure served as project lead for the feasibility study for consolidating two or more of the dispatch centers in Scott County. Recognizing that a shared center with proper implementation offers significant service improvements to all of the participants improves interagency coordination, and at the same time reduces the overall cost of providing service to the community, AECOM recommended that a shared public safety Emergency Communications Center be created. Participants in the shared center include the City of Davenport, Scott County Sheriff's Office, City of Bettendorf, and MEDIC-EMS.

Harrisonburg and Rockingham County Consolidated Dispatch Center, Virginia. Mr. McClure served as the Project Lead for the design and renovation of an existing building into the new Emergency Communications Center. This project involved the consolidation of three public safety dispatch centers and the implementation of a new 800 MHZ trunked radio system. It also consisted of installing a new 911 system, an upgraded computer aided dispatch system, new radio consoles and new dispatch workstations. AECOM provided cutover planning and assistance.

City of Springfield Centralized Public Safety
Dispatch Center Feasibility Analysis and
Assessment, MA. To enhance their public safety and
general government two-way radio communications
capabilities, the County, City, and municipalities
undertook the design and implementation of a multiagency 800 MHz simulcast two-radio system. They
retained AECOM to assist with the design, procurement,
and implementation of the system and supporting
physical plant. The contracted system is a seven site,
18 channels, simulcast trunked, dual mode (analog and
digital) 800 MHz radio system. Mr. McClure worked as
the Project Lead.

Town of Monson Regional ECC Consolidation Study, MA. The consolidation study project for the Towns of Monson, Palmer, and Hampden includes these three towns located in Hampden County of Western Massachusetts. The towns are each operating their own public safety dispatch centers. AECOM recommended a consolidated public safety communications center be created. Mr. McClure was the Subject Matter Expert for this project

March 31, 2017

#### Amanda Chebalo Architect

Ms. Chebalo is a Registered Architect experienced in designing a variety of building types throughout the country including Public Safety, Commercial, and Health Care facilities. She earned her Master of Architecture degree from Savannah College of Art and Design and an Associate's Degree in Interior Design from Tidewater Community College. Amanda's interiors and architectural background enables her to lead projects holistically from early programming and planning through construction administration.

#### Education

AS, Interior Design, Tidewater Community College, 2000

M Arch, Architecture, Savannah College of Art and Design, 2004

#### **Professional Licenses**

NCARB Certificate, 113614, 2010 Registered Architect, Virginia, 0401014353, 2009

#### Relevant Project Experience

Lexington-Fayette Urban County Government, Public Safety Operations Center, Lexington, Kentucky.

San Bernardino CONFIRE, San Bernardino Public Safety Operation Center, San Bernardino, California.

Frederick County Sanitation Authority, Public Safety Building, Winchester, Virginia.

Kentucky Administrative Office of the Courts, Commonwealth Emergency Operations Center -Architectural Design Services, Frankfort, Kentucky.

Pennsylvania Emergency Management Agency, State Emergency Operations Center - Planning & Design Services, Lebanon, Pennsylvania.

Dare County, Regional Emergency Communications Center and Emergency Operations Center, Dare County, North Carolina.

New York State Police, Troop G Headquarters - Design, Programming, & Planning Services, Colonies, New York.

#### Brian Super Architect

Mr. Super leads a team of architects and support staff that specializes in the design of law enforcement facilities, emergency communication and operations centers, court houses, and correctional facilities. His experiences over his career have included interior and exterior renovation, space planning and master planning studies, additions, construction administration, and new facility design. Mr. Super's primary focus has been to understand and meet the special needs of public safety clients so that they can perform their duties with efficiency while protecting the public. To this end, he uses his skills in programming, planning, design development, coordinating

#### Education

AAS, Architectural Design, Tidewater Community College, 1990

#### **Professional Licenses**

Registered Architect, Virginia, 10292, 1998

#### Relevant Project Experience

Will County, County 9-1-1 East Campus MEP Services, Joliet, Illinois.

City of Honolulu, Alapai Joint Traffic Management Center and Emergency Operations Center, Honolulu, Hawaii.

Pennsylvania Emergency Management Agency, State Emergency Operations Center - Design Services, Fort Indiantown Gap, Pennsylvania.

Leon County/City of Tallahassee, Consolidated Public Safety Complex, Leon County, Tennessee.

Massachusetts Division of Capital Asset Management, Regional Emergency Communications Center - 9-1-1 Consolidation, Barnstable, Massachusetts.

Barnstable County, County Emergency 911 System Consolidation Study, Bourne, Massachusetts.

Western Will County Communication Center, Consolidated Communications Center - Independent Technical Design Review, Plainfield, Illinois.

City of Raleigh, Critical Public Safety Facility - Design Services, Raleigh, North Carolina.

#### Telecommunications Staff

David Anderson has 35 consecutive years of experience in engineering, R&D, and applications, working in radio and broadband communications systems for 28 of those years. Responsibilities consist of project management, needs assessment, system design, specification development, proposal technical analysis, and system performance evaluation. Areas of expertise include mobile data systems operating over private, commercial, and broadband wireless networks, and IP-based solutions for voice and data.

Kevin Uhl has 17 consecutive years of experience in Project Management and Systems Engineering Management in Land Mobile Radio (LMR) Systems implementation. He has directed engineering teams to complete all facets of implementation for major radio system procurements, from planning and design, through to testing and final signoff. These major procurements involved integrating new systems as well as transitioning from legacy systems.

Mark Hannah has 30 consecutive years of experience in telecommunication system design and implementation management, including microwave networks. He has over 25 years of experience in project management in the Public Safety and Utilities industry. At AECOM he leads technology teams in the development, design, and implementation of complex public safety systems for Land Mobile Radio (LMR), microwave networks, and technology infrastructure for critical public safety facilities, including Emergency Communications Centers (ECC) and Emergency Operations Centers (ECC).

Curtis Johnson, EIT is a communications engineer in AECOM's Technology Solutions group. His experience includes coverage prediction, network testing and maintaining existing land mobile radio (LMR) systems. He also is skilled in software and hardware interaction, leadership, and customer communications. Mr. Johnson has extensive experience in customer service and is driven by customer satisfaction. His experience working on the vendor side of radio systems give him a great understanding of all stages of the procurement process for Project 25 (P25) LMR systems.

Sarah Collins is a telecommunications engineer in AECOM's Technology Solutions group. Her experience includes coverage prediction, system costing, and network testing and maintaining existing land mobile radio (LMR) systems. She also is skilled in software and hardware interaction, leadership, and customer communications. Ms. Collins has extensive experience in customer service and is driven by customer satisfaction. Her experience working on the vendor side of radio systems give her a great understanding of all stages of the procurement process for Project 25 (P25) LMR systems.

Paul Jasiewicz has 30 years of engineering and site management experience including system engineering, field installation, acceptance testing, and qualification test engineering for two major radio manufacturers. His responsibilities include needs assessment, system design, specification development, vendor proposal technical analysis, and system performance evaluation. Areas of expertise include simulcast conventional and trunked systems, dispatch, multiplex systems, and commercial wireless.

Jeremiah Knowles has 18 consecutive years of experience with Two-Way Radio Communications Systems, Point-to-Multipoint Two-Way systems, Point-to-Point Microwave Links, and RF propagation, with a focus on wireless communication in LMR and Point-To-Point Microwave links. His responsibilities have comprised many key aspects of the communications consulting process, including radio coverage testing, radio/microwave site surveying, inspecting equipment installations, radio/microwave site acceptance, system acceptance, interviewing system users, writing test reports, microwave path analysis, measuring RF and EME levels at sites, RF and EME studies, and propagation studies

Gary Mountcastle is a telecommunications specialist and has previously worked in the electronics field as a technician in both the military and civilian sectors. He has designed test systems and written code (LabView, HP Rocky Mountain Basic) for automation. His responsibilities include determining the facilities requirements for the wireless communications system. He also participates in the on-site project initialization and on-site surveys, assists in determining facility upgrades required for the new system design, and participates in developing the report.

# d. Experience

Technology Solutions' experience entails working as an integrated team with our engineers and architects to design and implement data centers and communications facilities for classified government clients, as well as public safety communication systems, 911 centers, dispatch systems, and emergency operations centers.

Public Safety communications require special considerations because they impact users who deal with life and death situations. Law Enforcement officers face dangers from criminals, fugitives and other socially deviant persons. Firefighters and Emergency Medical personnel are faced with emergencies that threaten life and property, as well as their own personal well-being. In this day and time, budget pressures force all government agencies to "provide more services with fewer resources," the effectiveness of a public safety communications system is critical to the government entity's ability to provide the services required of it.

Our Operational subject matter experts have over 30 years' experience in direct environments, such as firefighting, law enforcement, government budgeting and planning, government procurements, training development, and communication center management. AECOM's operations experience entails developing requirements for 911, NG9-1-1, CAD, RMS and GIS equipment, as well as the design of Dispatch Centers and Emergency Operations Centers (EOC).

AECOM has on staff people that understand the requirements needed to go beyond Public Safety operations, and fire ground communication issues, facing emergency responders. The communications projects undertaken frequently require both communications expertise and structural, mechanical, or electrical expertise associated with A/E construction service providers. The A/E construction capabilities of AECOM complement our communications capabilities.

The AECOM expertise includes a broad range of 911, PSAP, ECC/EOC capabilities, examples are listed below:



#### **Communication Center Design**

- Building design
- Radio consoles
- Computer Aided Dispatch (CAD)
- Records Management Systems
- Logging recorders
- Operations analysis/planning
- Relocation and cutover
- Network Control Management (NOC)
- Remote fault detection & fault isolation
- Information technology
- Grounding (to include R-56)
- Telephony

#### 911 / E911 / NG 911

- 911 customer premise equipment
- 911 wireless phases I & II
- 911 wireless compliance testing
- PSAP consolidation
- 911 cyber security
- Network engineering

#### **Disaster Planning / Recovery**

## Information Assurance

- LMR focused
- FISMA
- DIACAP (including DoDD 8500.1 &.2, AR 25-2, etc.)
- STIGs

#### **Physical Facilities**

- Site planning
- Tower, shelters, generators, UPS, HVAC
- Grounding, surge protection, installation
- Roads, fencing, foundations, geotech

#### Staffing and Management Services

- Staffing/benefits assessment
- System implementation
- Project management
- Resident site management
- Program Integration
- Costing/ budget
- Life-cycle cost analysis
- Business case analysis

# Similar Project Experience

AECOM is pleased to offer our services where Public Safety dispatch and 9-1-1 technologies are a distinct specialty. We have worked with numerous dispatch centers providing assistance with operations; technology, facilities, operating procedures, and cost sharing. Below is a chart that details consolidation projects and the number of communities that participated in the project.

Client Name	Number of Communities
Town of Amherst, Massachusetts	8
Bi-State Regional Commission, Illinois	4
Carteret County, North Carolina	3
DU-COMM (Dupage Public Safety Communications), Illinois	4
Frederick County, Virginia	2
Gallatin County, Montana	3
Harrisonburg/Rockingham County, Virginia	2
Honolulu County and City, Hawaii	4
James River PSAP Group, Virginia	5
Metropolitan Washington Airports Authority (MWAA)	2
New York Troop G, New York	7
Northern Middlesex Council of Governments (NMCOG), Massachusetts	10
Old Colony Planning Commission, Massachusetts	7
Orleans Parish, Louisiana	4
Pima County, Arizona	7
City of Aurora, Illinois	3
Solano County, California	6
City of Springfield, Massachusetts	3
Town of Monson, Massachusetts	3
Town of Monson (second study), Massachusetts	4
Valley Emergency Communications Center (VECC), Salt Lake City, Utah	7
Virginia Information Technology Agencies(VITA) Consolidation Studies	16
West Cook Municipal Conference, Illinois	14
Will County, Illinois	4
Winnebago County, Illinois	9

Our experience runs the gamut from a three-position center in Dare County, NC, to a planned 100+ position center in Tucson, AZ. We have published numerous articles on the topic, and offered presentations at APCO and NENA. We belong to the National Fire Prevention Association Standard 1221 and NENA Next Generation committees. We bring all of our company and experience to bear on the ETSB project.

The following table summarizes the key elements and relevant technologies of the projects provided below to further demonstrate our ability to successfully fulfill your key objectives:

Project Experience	Bi-State Regional Commission Cities of Davenport and Bettendorf, and Scott County, Iowa State - PSAP Consolidation	Aurora, Illinois - Upgrade of Public Safety Facilities	Winnebago County, Illinois - 9-1-1 System Study and Facility and Equipment Replacement	Will County 9-1-1 Emergency Telephone System, Illinois - Programming and Site Selection Services	Salt Lake Valley Emergency Communications Center - ECC Design, Equipment Layout, Cutover	City of Springfield, Massachusetts - Centralized Public Safety Dispatch Center Feasibility Analysis and Assessment	City of Harrisonburg & Rockingham County, Virginia - Radio and ECC Building Design Project	Pima Gounty Wireless Integrated Network (PCWIN)
Staffing and Human Resources	Х	Х	X	Х	X	Х	Х	Х
Facility / Space Needs	Х	X	X	X	X	X	X	X
Financing: Budget, Cost of Operations	Х	Х	X	Х	X	Х	Х	Χ
Stakeholder Funding Distribution	X		X	X	X	Χ	Χ	Х
Governance	X	X	X	X	X	Χ		
Equipment:								
9-1-1 CPE	X	Х	X	Х	Х	Χ	Х	Х
CAD	Х	Х	Х	Х	Х	Х	Х	Х
Recording Equipment	Х	Х	Х	Х	Х	Х	Х	Х
CAD Networking to Police and Fire Stations	X	Х	X	Х	Х	Х	Х	Х
Radio	X	Х	X	X	X	X	Х	X
Technical Specifications	Х	Х	Х	Х	Х	Х	Х	Х
Procurement Support	X	Х	X	Х	Х	Х	Х	Х
Implementation oversight	Χ	Х	Х	Х	Х	Х	Х	Х
Cutover		Х	Х	X	Х		X	Х

# **Project Descriptions**

The best demonstration of our qualifications comes directly from our past and current clients. To highlight our experience and knowledge in consolidation studies similar in scope and size, we have included the following detailed project descriptions, with clients for whom we have worked in their 9-1-1/dispatch facility and operations areas. We encourage you to contact our references for their comments on the quality of our services.

# Bi-State Regional Commission Cities of Davenport and Bettendorf, and Scott County, Iowa State

## **PSAP Consolidation Study**

Denise Bulat Executive Director 1504 Third Avenue P.O. Box 3368 Rock Island, IL (309) 793-6300

- Davenport
- Scott County Sheriff's Office
- Bettendorf
- MEDIC-EMS

Scott County, Iowa is the largest of the four counties in the Quad Cities Metropolitan Statistical Area (MSA). The City of Davenport is the largest of the incorporated cities in the Quad City Metropolitan Area. Bettendorf is the smallest and fastest growing of the Quad Cities. Scott County represents a blend of the urban and rural. While the area around Davenport and Bettendorf is highly urbanized, a large percentage of the 465 square mile land area of Scott County is farmland. MEDIC EMS provides Advanced Life Support transport service for most of Scott County including the Cities of Davenport and Bettendorf. MEDIC's service area is approximately 456 square miles and has a population of 160,000.

There are currently three primary and one secondary Public Safety Answering Point (PSAP) in Scott County, Iowa. The four PSAPs perform similar functions for the entities they serve. Previously, the communities attempted to consolidate dispatch service without success. In 2005, a new approach was tried. A "Blue Ribbon Committee" was formed, and AECOM was hired to conduct a feasibility study for consolidating two or more of the dispatch centers in the County.

The study was designed to answer the following questions:

- How would a consolidation take place and provide improved service?
- How should it be organized and staffed?
- What services should it perform?
- How should policies be made and changed?
- How should it be funded?
- With consolidation, what communications changes or improvements should be made in order to support the operations better than provided today?
- Recognizing that a shared center with proper implementation offers significant service improvements to all of the
  participants, improves interagency coordination, and at the same time reduces the overall cost of providing
  service to the community, AECOM recommended that a shared public safety Emergency Communications Center
  be created. Participants in the shared center include: Davenport, Scott County Sheriff's Office ,Bettendorf,
  MEDIC-EMS.

# Aurora, Illinois

## **Upgrade of Public Safety Facilities**

Mr. Ted Beck, Chief Technology Officer City of Aurora 44 East Downer Place Aurora, IL 60507-2067 (630) 264-3043 tbeck@aurora-il.org

The City of Aurora embarked on significant upgrades of its public safety facilities and public safety communications systems. The City constructed a new 158,000-square-foot police headquarters facility. The facility will house the primary 9-1-1 PSAP and dispatch center, as well as the prime site for the City's new 800 MHz radio system. The new center has been designed to accommodate up to twenty dispatch positions. The center will be equipped with twelve positions initially. In addition, the back-up dispatch center will be relocated in conjunction with this project. The backup center will be configured initially for up to ten positions.

The City is participating in the Northern Illinois Interoperable Communications Systems initiative. This initiative seeks to implement a multi-agency trunked radio system for Naperville, Aurora, and North Aurora. As part of the implementation of the new radio system, 800 MHz rebanding will occur in conjunction with the cutover to the OpenSky system.

In conjunction with the new facility and radio system upgrade, a new 9-1-1 Customer Premises Equipment (CPE), a new citywide PBX system, and a new digital voice logging system will be procured and installed. Because of the complexity and number of these projects extensive effort is required by the City's technical support staff. Because the City staff has limited availability due to their normal workload, the City has sought outside assistance from AECOM to supplement the efforts of the City staff.

AECOM developed the technical portions of the requests for proposals for

- 9-1-1 CPE Equipment
- Digital Voice Recording System
- Zetron Fire Station Alerting System

Once the proposals were received, AECOM assisted in evaluating the proposals. AECOM will be providing cutover assistance and support for the dispatch center, back-up dispatch center, and emergency operating center when the relocation occurs.

# Winnebago County, Illinois

# 9-1-1 System Study and Facility and Equipment Replacement

Sandy Stansell, 911 Division Administrator Rockford Fire Department 204 S. First Street Rockford, IL 61104 815.987.5783 (O) 815.967.6999 (F) Sandy.Stansell@rockfordil.gov

Chief Bill Robertson

"In this day and age where changes in technology out run even the experts it's been a great comfort to have AECOM working with us on our new E-911 centers. They have done a remarkable job and provide a great service."

Winnebago County is one of the largest counties in Illinois with a population of 360,000+. The County is currently was served by two full 9-1-1 answering centers, Rockford 9-1-1 and Loves Park 9-1-1. Both Centers have been operating since 1991 with little change. They asked AECOM (formerly CTA Communications) to review their current level of service and equipment. The goal was to move their operating environment to modern standards in the areas of 9-1-1 customer premise equipment (CPE), computer aided dispatch (CAD), radio control systems, console furniture, as well as the overall dispatch center employee work environment. The existing leased mobile data system was also studied.

The study explored fully the existing situation and the County was presented with a multiple alternative approach to achieve the desired goals. The expected costs and cost trade-offs were fully investigated with the County.

In addition to the initial findings on CPE, CAD, radio control, and dispatcher environment, new discoveries led to the community's decision to explore a major relocation and renovation of the dispatch centers. Recommendations were made in reference to the new, modern 9-1-1 equipment (CPE), the existing CAD system without a viable records management interface, and the ergonomics of the work place.

The study recommended that a new consolidated dispatch center be constructed, with a new CAD system, with a records management interface, new 9-1-1 Customer Premise Equipment compliant with FCC (94-102 & 98-245) Phase I & II requirements, new radio console equipment, and that also the existing 9-1-1 center be renovated and equipped with sufficient equipment to serve as a live back-up PSAP and meet ICC rules.

The County proceeded with the next phase of the project, and AECOM was contracted to assist the County in defining the technical and electronic requirements of the centers, developing the specifications and assisting in the procurement of the CPE, CAD, radio controls, dispatch furniture, and developing and managing the cutover plan for both centers. This cutover plan was designed so that the operations can move in a "live" 9-1-1 environment, and ensuring no lost calls. The system was cutover to the two new facilities.

# Will County 9-1-1 Emergency Telephone System, Illinois

## **Programming and Site Selection Services**

Steve Figved Will County 9-1-1 ETSB 2531 W. Division Street, Suite 105 Joliet, Illinois 60435 (815) 725-9802

The Will County Emergency Telephone System Board's Long Range Planning Committee (LRPC) commissioned AECOM (formerly HSMM) and Healy | Bender to perform a space needs study and site selection for two regional dispatch centers as part of its regionalization plan for nine existing centers in the county. In several workshops, the design team engaged participants from the existing centers, 9-1-1 administrative staff, and the Will County management staff to analyze existing space needs and projected future requirements for a 20-year planning window.

Using national space standards and local practice for the region, AECOM and Healy Bender concluded that one center, designated Center A, would include 9-1-1 administrative and management staff, functions and spaces, and the County's Emergency Management Agency and Emergency Operations Center. The second center – Center B – would include dispatch functions and a minimal amount of administrative office space. A two-story concept was designed along with a single-story for both schemes. Additionally, the design team reviewed technological upgrade requirements for the existing Joliet Communications Center and new center.

The site selection process was two-fold, as it deducted areas of the county deemed unacceptable from a risk perspective as well as nominated and investigated prospective sites. The design team developed criterion to objectively evaluate each site that held significant importance to the LRPC, including functionality, natural conditions, man-made threats, cost, and technological factors. Buffer zones were assigned to potential risk areas such as one-mile standoffs from major highways, railroads, and navigational water routes. Other areas specifically excluded from consideration included Peotone airport areas, nuclear power plants, and chemical plants. Fire primary zones were identified as acceptable for new centers.

Generally, sites were classified into two separate zones. Initial analysis ranked sites with the highest score and selections were made for further investigation. The design team overlaid the idealized site plan to determine a test fit for each site. After preparing an environmental site assessment, no additional investigations would be required.

# Salt Lake Valley Emergency Communications Center

# ECC Design, Equipment Layout, Cutover

Georgina Smith, Assistant Director 5360 South Ridge Village Drive, West Valley City, UT 84118-4100 Commendations from Gary Lancaster, former Interim Director: "As part of our building projects I had the opportunity to work with CTA Communications (now AECOM). During the three phases of planning and construction CTA proved to be extremely knowledgeable and helpful in identifying creative ways to complete applications, coordinate and keep vendors on track, while keeping value engineering issues in mind. I found CTA to be a valuable part of our building project team."

The Valley Emergency Communications Center (VECC) provides public safety communications for the region's 19 jurisdictions in the surrounding Valley, including Salt Lake City. VECC retained AECOM (formerly CTA Communications and HSMM) as part of a multi-discipline team to design a new \$6.2 million 9-1-1 call dispatch center. The center also houses the statewide headquarters for the Utah Communications Area Network (UCAN).

AECOM provided the equipment layout for these facilities and assisted UCAN in planning a 100-foot self-supporting tower adjacent to the radio equipment building. Our architects designed the call dispatch center; a 25,000-square-foot, one-level building and two outbuildings; a 3,000-square-foot radio equipment building (prime site) and is providing a master plan for a 5,000-square-foot electronic maintenance building.

To gather the necessary data for this project, team members conducted a charrette workshop and interviewed management, dispatch, and technical personnel (stakeholders), to determine their requirements for the communications center, then drove the facility design to address those needs. Stakeholder concerns included anxiety about a "bunker-like" feeling from a secure but windowless building. The firm responded by incorporating natural lighting for the dispatch through glazed clerestory windows installed at a slant to eliminate computer screen glare. Not only does the design visually open up the space but it also lightens the often-stressful atmosphere of the dispatch center by affording the dispatch team grand vistas of the Salt Lake Valley.

The calming view of the Valley supplements the employee-focused environment. The team's interior design group designed ergonomically adjustable consoles for each dispatcher's station. The consoles are configured to allow each of the dispatchers an exterior view from their workstation.

These three-bay computer consoles adjust heights to accommodate standing and sitting use. Additionally, each bay has individual temperature controls and floor level heating panels to allow staff personal control of their work environment.

Also of concern to the client was that the move be coordinated so that there was no reduction in service for the citizens and agencies served. AECOM personnel have created extensive cutover plans that account for personnel, radio, CAD, E911, recording and other issues. AECOM personnel assisted in obtaining new and additional equipment, and attended cutover and building status sessions. AECOM personnel were on site during the actual cutover process to assist and guide the move. This facility is a base-isolated structure, totally self-sufficient in an emergency and able to withstand seismic events.

# Springfield Finance Control Board City of Springfield, Massachusetts

## Centralized Public Safety Dispatch Center Feasibility Analysis and Assessment

Patricia Vinchesi Deputy Director 36 Court Street, Room 312 Springfield, MA 01101 (413) 784-1582

The City of Springfield is a city of approximately 34 square-miles and more than 150,000 residents located in the Connecticut River Valley. Bordered by Chicopee and Ludlow on the north, Wilbraham on the east, Longmeadow and East Longmeadow on the south, and Agawam and West Springfield on the west, the City is the major urban center of Western Massachusetts. It is also the third largest city in the State of Massachusetts. In recent times, Springfield municipal government has experienced a series of financial difficulties. As a result, the City is currently governed by a finance control board, a five-member board created by state statute to restore financial stability vested with full executive and legislative authority.

Springfield currently operates two municipal dispatch centers. In addition, a private ambulance services and EMS dispatch center operates in Springfield as well.

The study was designed to perform the following tasks:

- Assist in the identification and resolution of all issues related to the development, planning, and implementation of a
  combined (police and fire) dispatch center, including organizational structure, governance, staffing, technology,
  training, the need to provide a back-up dispatch facility, and licensing and waivers required to operate a centralized
  facility.
- Identify and assess up to three locations that could house the City's combined dispatch center, which will meet the City's current needs, as well as provide expansion potential for the site to host a regional central dispatch in the future, if appropriate.
- Identify and recommend equipment, systems, software, and hardware to be used in the combined dispatch center, which will meet the center's operational and communications needs and integrate with records management and other support systems.
- 4. Provide cost estimates for the capital and yearly operational costs associated with a single consolidated center.

Recognizing that a shared center with proper implementation offers significant service improvements to all of the participants improves interagency coordination, and at the same time reduces the overall long-term cost of providing service to the community, AECOM recommended that a shared public safety Emergency Communications Center be created. Participants should include the Springfield Police Department and the Springfield Fire Department.

# City of Harrisonburg & Rockingham County, Virginia

# Radio and ECC Building Design Project

Jim Junkins
Director
101 North Main Street
Harrisonburg, VA 22802
(540) 434-2006
ilijunkins@hrecc.org

Commendations from Jim Junkins:

"The concurrent implementation of a complex 800 MHz simulcast radio system and renovation of an existing building to create a new consolidated Emergency Communications Center has been particularly challenging. AECOM's coordination and management of these programs have been instrumental in keeping them on project scope, on schedule and within budget. I personally have enjoyed working with AECOM and highly recommend use of their services for radio communication systems and emergency communications center development and implementation."

Rockingham County and the independent City of Harrisonburg are located in the heart of the Shenandoah Valley of Virginia. The City and County were using a variety of conventional radio channels and equipment operating in the UHF and VHF bands. Radio system users were experiencing severe problems with their existing systems. On November 1999, Harrisonburg and Rockingham County hired AECOM to conduct a Two-Way Radio Needs Assessment of the City's and County's public safety and general government radio systems, and 911 Emergency Operations Centers.

AECOM completed the Needs Assessment in 2002, recommending competitive procurement of a wide-area 800 MHz trunked radio system. AECOM prepared specifications for the radio system and guided the City and County through the selection of a vendor and contract negotiations. Harris Corporation (formerly M/A-COM) was awarded the contract in 2004. The final system configuration consisted of two EDACS-IP simulcast "cells" or systems. The first simulcast system had 8 sites with 11 channels; the second simulcast system I had 2 sites with 5 channels. There was also a third 5-channel EDACS site which had an RF link to the 2-site simulcast cell; Harris refers to this as a "virtual" site. The simulcast systems were in a multi-site configuration for improved coverage in mountainous areas. AECOM assisted the County throughout the implementation and acceptance of the radio system.

AECOM prepared license applications and Regional Planning Committee (RPC) application packages for 800 MHz channels needed for the new system. AECOM interfaced with the Region 42 RPC, the National Radio Quiet Zone (NRQZ), the frequency coordinator and the FCC to assist HRECC in obtaining the necessary frequencies. The needs assessment also recommended that the City and County develop a consolidated 911 center to serve both jurisdictions. AECOM architects participated in the project to determine the requirements to integrate the current public safety 911 operations into the new Emergency Communications Center facility in downtown Harrisonburg. AECOM provided design and management of the implementation of the ECC on the fifth floor of the building. In a separate contract, AECOM provided services relating to the renovation of the entire building, including cutover and relocation of systems and equipment to the new center.

AECOM was contracted to assist the City and County in their evaluation of a system upgrade proposal from their current vendor, which will transition them to P25 Phase II technology. Our services included evaluating the vendors proposed design and pricing, providing implementation oversight services and serving as advocates for the client as they implement next generation technology.

# Pima County Wireless Integrated Network (PCWIN)

# Radio and ECC/EOC Building Design Project

Captain Paul Wilson Project Manager Pima County Sheriff's Office 1750 E. Benson Hwy Tucson, AZ 85714 (520) 741-4878 paul.wilson@sheriff.pima.gov "AECOM has been a valuable resource for the PCWIN project. Their engineering skills have been particularly beneficial to our success. AECOM's staff has been dedicated and professional in their dealings with County representatives and other local jurisdictions involved in our large regional project. I am satisfied with AECOM's work because they have produced high quality work product backed by qualified engineering experience."

Pima County, Arizona established the Pima County Wireless Integrated Network (PCWIN), to be a regional network allowing 31 public safety and governmental agencies in the County located along the U.S.-Mexican border to communicate within their own jurisdictions and with other agencies in emergencies.

The mission of the PCWIN is to design, procure, deploy and operate a regional public safety voice and data communications network; improve public safety radio interoperability; and to design, construct and operate a regional communications center.

AECOM's team of trained specialists surveyed and accessed the high potential tower site and **dispatch locations**. The purpose of this step allowed us a first-hand look at the sites to verify and document existing conditions and assets. Careful evaluation at this step allowed us to develop a realistic conceptual design and produce cost estimates with a high level of confidence.

- Surveys were completed for existing and potential dispatch centers. Our team considered building and facilities; interior space, parking, office space, break areas, bathroom facilities, heating and cooling, lighting, acoustics, and workers inputs on needed improvements. Existing equipment was considered including age, remaining service life, expansion space, and potential interactions of old and new equipment.
- Dispatch assessments were done by experienced 911 specialists and considered recognized NFPA 1221 guidelines and requirements.
- AECOM architects worked with PCWIN on selection of potential existing building properties for renovation as dispatch centers.

AECOM presented several architectural alternatives for the future PCWIN voice and mobile data design. An interoperable shared system concept based on Project 25 Phase 2 technology was selected. This concept was selected because of its capability as a durable common platform that could serve public safety and public service agencies and accommodate radio users offering assistance from anywhere in the region. The 26-site LMR system included three trunked simulcast systems, several trunked repeater sites, three solar-powered repeaters, **County and City 911 centers (capable of redundant backup)**, and several smaller dispatch environments. A looped microwave connectivity network expanded upon existing microwave and fiber networks.

In support of the PCWIN project, AECOM has delivered many reports, reviews and support documentation to verify the design and implementation of the system. The following is a list of project deliverables relating to the ECC/EOC:

- Site Assets Matrix Summary of site assets and needed improvements
- Concept of Operations Report Operating environment under new shared systems
- Business Architecture Planning Connects the proposed design to funding and business processes
- EOC Information Survey Dispatch environment needs assessment
- ECC Report Recommendations on City/County centers
- Standard Operating Procedures

Please take a moment to visit the PCWIN website for updated information on this project and the opportunity to review some of these reports. http://webcms.pima.gov/cms/one.aspx?portalld=169&pageId=7633

# e. Project Schedule

# **Project Schedule**

AECOM's Project Team is committed to schedule development and adherence. As part of our preparation to offer our services to Tazewell County, AECOM developed a preliminary schedule displayed on the following pages, which defines and identifies project tasks, time frames, interdependencies, deliverables, critical paths, and responsibilities.

The schedule aligns with the Project Approach and will be an important part of our Project Team's review and management activities. As we progress through the Project, completion dates are included, and additional tasks or subtasks are inserted as appropriate. Responsibilities are assigned, and every participant is fully aware of the impact of their contribution to the overall project success.

Our Project Timeline is compliant with the Consolidation Plan completion date of June 16, 2017. We provide a detailed timeline so that both Tazewell and AECOM fully understand the expectations we must met to achieve the completion date. We have listed all meeting expectations, dates you will receive documents for review, and date when your comment are due. It is critical that everyone buy into this schedule during our initial kickoff teleconference. The key to success in maintaining this schedule is a solid project management plan.

## **Project Management**

AECOM is committed to and proficient in the core processes of proactive project management philosophy. To accomplish this, the AECOM Team assigns responsibility and accountability to the lowest possible organizational level, yet retains project oversight at a senior corporate level. Our proven management control systems will aid our Project Manager in tracking progress and variances from expected performance. These systems drive the AECOM Team to continuous improvement, by tracking agreed-upon performance objectives.

We focus on continuous improvement of our performance through refinement of existing practices (lessons learned) and new management initiatives and innovations. We build on past performance and accomplishments, while pursuing new initiatives that will result in the timeliness and accuracy of project tasks, specifically our bid documents and packages. AECOM will facilitate a clean and protest free procurement process that will encourage the best vendor solutions.

Our philosophy has five basic components:

- Organize the project to support the execution of the work with clearly defined roles and responsibilities.
- Staff the organization with a team of well-qualified technical professionals with directly relevant experience and performance.
- Formulate the work in accordance with the project-specific requirements recognizing when and where innovative solutions can be implemented.
- Execute the work with a multi-disciplined team, with strong management oversight and control, by seasoned AECOM engineering and management professionals, using proven management tools and systems.
- Control the effectiveness of the work execution and make adjustments as necessary to continually improve our performance.



The secret to AECOM's success in projects of this complexity is *communications*. Internal AECOM communications will be accomplished with scheduled project review meetings where all core Project Team participants are present either in person or, if need be, by teleconference. Project communications, where key Project personnel work with the City's

project Team members in regularly scheduled project meetings and/or teleconferences, will be carefully documented by AECOM with meeting and conference records.

AECOM will establish an information trail supporting decisions, and agreements, including the processes and assumptions used to reach these points. Project tracking, where our Project Team tracks all transmittals (hard copy and electronic), all action items (yours, ours, and those of the equipment or service providers), anticipated risks (so that we can minimize or mitigate them early), all schedule items (by responsibility, so everyone is operating as a team), and all budget items (so that you have cost information at its current level).



Coordination with City of Amarillo representatives will be pro-active: Regularly scheduled meetings and teleconferences, carefully developed project management reports scheduled to provide current information at times when you need it for your management and reporting requirements, and rapid response when you need it. AECOM uses electronic communications routinely, and we treat each communication as if it were a hard copy transmittal, with a careful tracking and nomenclature procedure,

filing, and most importantly, the attention necessary to provide complete communications in each transmission.

AECOM has developed a decision-making process that we call our interactive **Impact Analysis Process**<sup>SM</sup>. While not strictly a problem resolution procedure, it is a formal interactive process for evaluating and ranking multiple alternatives. We first produce a "needs" list establishing what the solution is intended to address. We submit this list to the people for whom the solution is being developed, with a structured format so that they can establish the impact of these needs on their function. We then review the alternative solutions to establish the ability of each solution to respond to these needs. By use of numeric rating and weighting systems, we derive a combined assessment that produces a numerical ranking for alternatives.

The AECOM Design Excellence Program has as its foundation that "quality is conformance to the requirements," where the requirements are as developed and identified by the stakeholders of a given project or task. The program covers the full range of AECOM's professional consulting activities, from pre-contract through project completion, employing a series of standard AECOM processes and business practices.



Because the design and implementation of the City of Amarillo Radio Communications Project is a complex and significant project, successful implementation will require an innovative staff comprising a combination of high technical expertise, demonstrated management capability, and a strong commitment to quality, schedule, and cost-control. AECOM demonstrates the qualifications of our proposed Key Personnel and Project Organization in our proposal via our organization chart and Project Team resumes.

ID	Task Name	Resource Names	Duration	Start	Finish	7 Apr 23, '17	May 7, '17 May 21	'17 Jun 4, '17 Jun
0	AECOM Project Work Plan		43 days	Thu 4/20/17	Mon 6/19/17	M F I S	WSTMFT	S W S T M F
1	Contract		7 days	Thu 4/20/17	Fri 4/28/17	-		
2	Contract Award	Tazewell	1 day	Thu 4/20/17	Thu 4/20/17	No.		
3	Contract Negotiations	Tazewell/AECOM	5 days	Fri 4/21/17	Thu 4/27/17	******		
4	Contract Execution	Tazewell	1 day	Fri 4/28/17	Fri 4/28/17	*		
5	Phase 1 - Pre-Project Meeting		5 days	Mon 5/1/17	Fri 5/5/17			
6	Notice to Proceed	Tazewell	0.5 days	Mon 5/1/17	Mon 5/1/17	*		
7	Initialization Letter	AECOM	0.5 days	Mon 5/1/17	Mon 5/1/17	1	4 1	
8	Background Data		4 days	Mon 5/1/17	Thu 5/4/17	( page	400	
9	Request Data	AECOM	1 day	Mon 5/1/17	Mon 5/1/17	*	*	
10	Provide Data	Tazewell	2 days	Tue 5/2/17	Wed 5/3/17	**		
11	Review Data	AECOM	1 day	Thu 5/4/17	Thu 5/4/17	0000	*	
12	Kickoff Teleconference	Teleconference	1 day	Fri 5/5/17	Fri 5/5/17			
13	Review Project Goals	Tazewell	1 day	Fri 5/5/17	Fri 5/5/17		Y	
4	Review Work Plan and Methology	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	1	*	
5	Review Responsibilities	Tazewell/AECOM	1 day	Fri 5/5/17	Fri 5/5/17	100	*	
16	Review detailed schedule	AECOM	1 day	Fri 5/5/17	Fri 5/5/17		*	
17	Review Background Data	AECOM	100 000 000 000 000 000 000 000 000 000	Fri 5/5/17			*	
18	크 그 그 그 그 그 그 집에 가게 되었습니까? 그리게 가장하게 하면 되었습니다.	AECOM	1 day		Fri 5/5/17	14.0	M	
-	Phase 2 Data Gathering	T	14 days	Tue 5/2/17	Fri 5/19/17	4		
9	Interview/Survey Scheduling	Tazewell	2 days	Tue 5/2/17	Wed 5/3/17	100		
0.0	Initialization Meeting	Meeting,	1 day	Mon 5/8/17	Mon 5/8/17			
21	Written Survey	0.000.000.000.000	4 days	Mon 5/8/17	Thu 5/11/17		*	
2	Provide Written Survey	AECOM	1 day	Mon 5/8/17	Mon 5/8/17		1	
23	Written Survey Response	Tazewell	3 days	Tue 5/9/17	Thu 5/11/17		W-W	
24	Tazewell/Pekin	Tazcom	3 days	Tue 5/9/17	Thu 5/11/17			
25	East Peoria	East Peoria	3 days	Tue 5/9/17	Thu 5/11/17		800	
6	Morton PD	Morton	3 days	Tue 5/9/17	Thu 5/11/17			
27	Washington PD	Washington	3 days	Tue 5/9/17	Thu 5/11/17			
28	Interviews		9 days	Tue 5/9/17	Fri 5/19/17			
29	Interview Sessions		4 days	Tue 5/9/17	Fri 5/12/17		(Quanty)	
30	Tazewell/Pekin	Meeting	1 day	Tue 5/9/17	Tue 5/9/17			
31	East Peona	Meeting	1 day	Wed 5/10/17	Wed 5/10/17			
32	Morton PD	Menting	1 day	Thu 5/11/17	Thu 5/11/17			
33	Washington PD	Teleconference	1 day	Fn 5/12/17	Fri 5/12/17			
34	Draft Interview Records	AECOM	4 days	Mon 5/15/17	Thu 5/18/17		Younge	
35	Review/Return Records			Wed 5/10/17	Wed 5/17/17			
36	Tazewell/Pekin	Tazcom		Wed 5/10/17	Fri 5/12/17			
37	East Peoria	East Peoria	3 days		Mon 5/15/17			
38	Morton PD	Morton	3 days	Fri 5/12/17	Tue 5/16/17		The state of the s	
39	Washington PD	Washington	THE RESERVE AND ADDRESS OF THE PARTY OF THE	Mon 5/15/17	Wed 5/17/17		Constant line	
10	Edit Records	AECOM	1.5 days	Thu 5/18/17	Fri 5/19/17			+
41	Finalize Records		1 N. A. P. C. P. G. T. T. P. C. W.		10,000,000,000,000			
42		AECOM	0.5 days	Fri 5/19/17	Fri 5/19/17			
	PSAP Surveys		9 days	Tue 5/9/17	Fri 5/19/17			
3	Surveys		4 days	Tue 5/9/17	Fri 5/12/17		4	
14	Tazewell/Pekin	AECOM	1 day	Tue 5/9/17	Tue 5/9/17		<b>1</b>	1
15	East Peona	AECOM	1 day		Wed 5/10/17			
46	Morton PD	AECOM	1 day	Thu 5/11/17	Thu 5/11/17			
17	Washington PD	AECOM	1 day	Fri 5/12/17	Fri 5/12/17		JI-	
8	Draft Survey Records	AECOM		Wed 5/10/17	Tue 5/16/17			
9	Review/Return Surveys		6 days		Wed 5/17/17			
50	Tazewell/Pekin	Tazcom	3 days	Wed 5/10/17	Fri 5/12/17			
51	East Peoria	East Peoria	3 days	Thu 5/11/17	Mon 5/15/17			
2	Morton PD	Morton	3 days	Fri 5/12/17	Tue 5/16/17		ORDERS-	
53	Washington PD	Washington	3 days	Mon 5/15/17	Wed 5/17/17			
4	Edit Surveys	AECOM	1.5 days	Thu 5/18/17	Fri 5/19/17			
55	Finalize Surveys	AECOM	0.5 days	Fri 5/19/17	Fri 5/19/17			
56	Phase 3 Follow-up Interveiws/Observations		13 days	Thu 5/4/17	Mon 5/22/17			
57	Analysis		13 days	Thu 5/4/17	Mon 5/22/17	4		
58	Technology		1 day	Thu 5/4/17	Thu 5/4/17	- 4		
59	9-1-1 CPE	AECOM	1 day	Thu 5/4/17	Thu 5/4/17		6	
60	Radio frequencies	AECOM	1 day	Thu 5/4/17	Thu 5/4/17			
61	Recording equipment	AECOM	1 day	Thu 5/4/17	Thu 5/4/17			
62	Mobile data system	AECOM	1 day	Thu 5/4/17	Thu 5/4/17			
63	CAD system/networking	AECOM	1 day	Thu 5/4/17	Thu 5/4/17			
	-,,	, in o olvi	, our	01-11 11	01-11 11		92.1	

ID	Task Name	Resource Names	Duration	Start	Finish	7 Apr 23, "17 May 7, "17 May 21, "17 Jun 4, "17 Jun 18 M F T S W S T M F T S W S T M F T
65	Statistics		1 day	Fri 5/5/17	Fri 5/5/17	7 W F 1 S W S 1 M F 1 S W S 1 M F 1
66	9-1-1 call volume	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	7
67	Seven digit admin call volume	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	7
68	CAD generated call volume	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	
69	Police units tracked	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	7
70	Fire units tracked	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	
71	EMS units tracked	AECOM	1 day	Fri 5/5/17	Fri 5/5/17	7
72	Policies, Procedures, Processes	AECOM	5 days	Mon 5/8/17	Fri 5/12/17	7
73	Staffing		3 days	Fri 5/12/17	Tue 5/16/17	7
74	Current staffing	AECOM	3 days	Fri 5/12/17	Tue 5/16/17	7
75	Tumover Rates	AECOM	3 days	Fri 5/12/17	Tue 5/16/17	7
76	Pay Scales	AECOM	3 days	Fri 5/12/17	Tue 5/16/17	7
77	Governance	AECOM	5 days	Fri 5/12/17	Thu 5/18/17	7
78	Facility/Space Requirements	AECOM	7 days	Fri 5/12/17	Mon 5/22/17	7
79	Stakeholder Review		3 days	Mon 5/15/17	Wed 5/17/17	7
80	Tazewell ETSB Management	Teleconference	1 day	Mon 5/15/17	Mon 5/15/17	7
81	Tazewell/Pekin	Teleconference	0.5 days	Tue:5/16/17	Tue 5/16/17	7
82	East Peona	Teleconference	0.5 days	Tue 5/16/17	Tue 5/16/17	7
83	Morton PD	Teleconference	0.5 days	Wed 5/17/17	Wed 5/17/17	7 K
84	Washington PD	Teleconference	0.5 days	Wed 5/17/17	Wed 5/17/17	
85	Phase 4 Preliminary Report		15 days	Thu 5/18/17	Wed 6/7/17	
86	Facility/Space Needs	AECOM	7 days	Thu 5/18/17	Fri 5/26/17	7
87	Staffing & Human Resources	AECOM	4 days	Tue 5/23/17	Fri 5/26/17	7
88	Financing		7 days	Thu 5/18/17	Fri 5/26/17	7
89	Initial Budget	AECOM	2 days	Thu 5/18/17	Fri 5/19/17	7
90	5 year Budget Projections	AECOM	2 days	Mon 5/22/17	Tue 5/23/17	7
91	Stakeholder Contributions	AECOM	3 days	Wed 5/24/17	Fri 5/26/17	7
92	Goveranance	AECOM	. I	Wed 5/24/17	Fri 5/26/17	7
93	Equipment Transition	AECOM	3 days	Wed 5/24/17	Fri 5/26/17	7
94	Operations	AECOM	7 days	Thu 5/18/17	Fri 5/26/17	7
95	Assemble Preliminary Report	AECOM	3 days	Mon 5/29/17	Wed 5/31/17	
96	Submit Preliminary Report	AECOM	1 day	Thu 6/1/17	Thu 6/1/17	7
97	Optional Review Meeting	Meeting	f day	Wed 6/7/17	Wed 6/7/17	
98	Phase 5 Final Analysis & Plan		13 days	Thu 6/1/17	Mon 6/19/17	
99	Provide Comments	Tazewell	5 days	Thu 6/1/17	Wed 6/7/17	7
100	Review Comments	AECOM	1 day	Thu 6/8/17	Thu 6/8/17	
101	Teleconference	Tazewell/AECOM	1 day	Fri 6/9/17	Fri 6/9/17	1
102	Incorporate Comments	AECOM	5 days		Fri 6/16/17	
103	Submit Final Analysis & Plan	AECOM	0 days	Fri 6/16/17	Fri 6/16/17	
104	Optional Presentation	Meeting	1 day	Mon 6/19/17	Mon 6/19/17	

# f. Associated Costs

# Total cost, including personnel, travel, and expenses for this request for proposals.

#### SERVICES & TRAVEL

Phase One:	Pre-Project Meeting	\$ 4,950.00
Phase Two:	Data Gathering	\$ 30,720.00
Phase Three:	Follow-up Interviews and Observations	\$ 27,800.00
Phase Four:	Preliminary Report	\$ 28,200.00
Phase Five:	Final Analysis and Plan	\$ 6,500.00
Optional Revie		\$ 7,300.00
Optional Prese	entation	\$10,050.00

#### Basis of Fees:

 AECOM's basis our professional fees on the scope of work presented by Tazewell in your RFP dated March 6, 2017 and detailed in our project schedule.

2. AECOM's basis our project schedule and professional fees on sufficient review and information gathering meetings in Tazewell County ETSB to obtain the necessary information and make the necessary decisions pertaining to the project. AECOM estimates the following visits will be sufficient for the project, and has based our project schedule and fee accordingly:

10	Initialization Meeting	Visit 1
10	Interviews	Visit 1
0	Surveys	Visit 1

At the direction of Tazewell, we can also include the following meetings to enhance the communications between AECOM and Tazewell:

0	Optional Review Meeting	Visit 2
	Optional Presentation	Visit 3

- 3. AECOM's basis our professional fee on the project schedule included in this proposal. If any portion of the project is delayed more than 60 days, AECOM may request that the fee be adjusted to provide for additional effort (services and expenses) resulting from or arising out of the delay, and for escalation of costs and labor rates for the delayed portion of the project.
- The stated professional fees assume monthly progress payments, based upon percentage of work complete.
   These monthly billings are due within 30 days of receipt.
- 5. If a schedule of payments is requested, the fee breakdown describes progress payments that are due upon fulfillment or partial fulfillment of a designated milestone that may or may not be related to a specific deliverable. Association of a portion of the fee with the described milestone does not imply that said portion of the fee is the value of that milestone nor of any deliverable described in that milestone. Should AECOM receive a request to modify the scope of work, AECOM will provide a fee change quotation in accordance with the contract. Once an agreed fee is established, AECOM will provide a modified schedule of payments.

# 2017 Domestic Rate Schedule

If Tazewell desires to enter into a Time & Materials contract the following rates apply:

Category	Billing Rate
PROJECT ADMINISTRATOR	\$68.50
SR PROJECT ADMINISTRATOR	\$72.50
STAFF ENGINEER / ARCHITECT	\$95.00
OPERATIONS / TELECOMMUNICATIONS SPECIALIST	\$99.50
PROJECT COORDINATOR / SENIOR TELECOMMUNICATIONS SPECIALIST	\$115.00
PROJECT CONTROLS / TECHNOLOGY SPECIALIST	\$129.00
SENIOR OPERATIONS SPECIALIST / SENIOR TECHNOLOGY SPECIALIST	\$154.00
SENIOR ENGINEER	\$169.50
PROJECT MANAGER	\$173.00
SR PROJECT MANAGER	\$177.50
TECHNICAL WRITER / TECHNOLOGY SPECIALIST - SUBJECT MATTER EXPERT	\$182.00
SENIOR TECHNOLOGY SPECIALIST - SUBJECT MATTER EXPERT	\$191.00
SR PROJECT MANAGER - SUBJECT MATTER EXPERT	\$208.50
PROJECT DIRECTOR	\$246.50

# g. Legal Requirements

### **Equal Employment Opportunity and Affirmative Action**

AECOM is committed to providing equal employment opportunity, without discrimination, to all employees and qualified applicants for employment without regard to race, ethnicity, sex, pregnancy, age, ancestry, military or veteran status, color, religion, creed, disability, marital status, medical condition, genetic information, national origin, gender (including gender nonconformity and status as a transgender or transsexual individual), gender identity, gender expression, sexual orientation, citizenship status or any other characteristic protected by applicable federal, state or local law.

Equal employment opportunity applies to all terms, conditions and privileges of employment, including, but not limited to, recruitment, hiring, compensation, training, promotion, demotion, transfer, termination, benefits, furloughs and retirement.

All employees are responsible for maintaining a respectful workplace free of unlawful discrimination, harassment and retaliation.

Any employee who witnesses or observes any form of discrimination, including harassment, related to this policy, is encouraged to report the incident to his or her supervisor, management or to a Human Resources representative. Employees may also use the AECOM Ethics Hotline 1-888-299-9602 or 1-770-613-6332 (outside of the U.S.) or email AECOMethics.hotline@tnwinc.com to report incidents of discriminatory, harassing or retaliatory conduct in the workplace.

Any manager/supervisor who knows of, or thinks he or she knows of, or witnesses a potential violation of this policy, has an added responsibility to act and must notify Human Resources immediately. To the extent possible, all notifications will be maintained with strict confidentiality.

We will take appropriate disciplinary action, up to and including termination of employment, if: (a) an employee is determined to have violated this policy; (b) an employee files a false complaint or provides false information regarding a complaint; (c) an employee fails to fully cooperate in the investigation of a complaint of alleged discrimination, harassment, retaliation or other noncompliant behavior; or (d) an employee retaliates against another employee for complaining of harassment or discrimination, or for participating in an investigation related to a complaint of harassment or discrimination.

As a government contractor, AECOM is committed to complying with the requirements of Executive Order 11246, as amended, Section 503 of the Rehabilitation Act, as amended, and the Vietnam Era Veterans Readjustment Assistance Act, as amended. As such, AECOM will create and maintain written Affirmative Action Plans. U.S.-based employees are able to review the non-confidential aspects of Affirmative Acton Plans during normal business hours by contacting your EEO Officer or Human Resources Department.

### Basis of Proposal

In order to control and reduce costs, AECOM proposes well-defined responsibility for our team and the Tazewell County ETSB's team. Our project schedule and professional fees are based on the following:

### **Tazewell County ETSB Considerations:**

- 1. The Tazewell County ETSB will appoint a project manager who will be the single point of contact for this project. This individual will coordinate all activities for the participating entities.
- The Tazewell County ETSB will provide review and approval of submittals and draft reports according to the proposed schedule, and respond with consolidated comments.
- 3. To the fullest extent permitted by law, the Tazewell County ETSB hereby acknowledges and agrees that it is the express intent of the parties that AECOM be entitled to the same immunity from claims by third parties arising out of or in any way related to the subject matter of this contract under any applicable tort claim act or similar statutes and regulations as that provided by said act, statutes or regulations to the Tazewell County ETSB. In addition, to the fullest extent permitted by law, the Tazewell County ETSB hereby acknowledges and agrees that it is the express intent of the parties that AECOM be entitled to assert the government contractor defense to any such third party claims.
- 4. To the fullest extent permitted by law, the Tazewell County ETSB and AECOM waive against each other, and the other's employees, officers, directors, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project.

### **AECOM Considerations:**

- This proposal is valid for 90 days from the proposal date. It may be extended by mutual agreement between the Tazewell and AECOM.
- 2. AECOM' proposal is contingent upon the negotiation of mutually agreeable contract terms and conditions if it selected for award.
- AECOM warrants that all services performed or furnished by AECOM will be performed in accordance with the
  care and skill ordinarily used by members of AECOM profession practicing under similar circumstances at the
  same time and in the same locality. AECOM makes no other guarantees or warranties, express or implied, in
  connection with AECOM services.

#### **About AECOM**

AECOM is a premier, fully integrated professional and technical services firm positioned to design, build, finance and operate infrastructure assets around the world for public- and private-sector clients. The firm's global staff — including architects, engineers, designers, planners, scientists and management and construction services professionals — serves clients in over 150 countries around the world. AECOM is ranked as the #1 engineering design firm by revenue in Engineering News-Record magazine's annual industry rankings, and has been recognized by Fortune magazine as a World's Most Admired Company. The firm is a leader in all of the key markets that it serves, including transportation, facilities, environmental, energy, oil and gas, water, high-rise buildings and government. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering customized and creative solutions that meet the needs of clients' projects. A Fortune 500 firm, AECOM companies, including URS Corporation and Hunt Construction Group, have annual revenue of approximately \$19 billion.

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Title:

REQUEST FOR PROPOSALS

PSAP CONSOLIDATION STUDY FOR THE EMERGENCY TELEPHONE SYSTEM BOARD OF TAZEWELL COUNTY

Due Date:

March 31, 2017

submitted by:



### IXP CORPORATION

Princeton Forrestal Village 103 Main Street Princeton, NJ 08540 609.759.5100 phone | 609.759.5099 fax

WWW.IXPCORP.COM



### **COVER LETTER**

March 31, 2017

Tazewell County ETSB ATTN: 9-1-1 Consolidation 101 S. Capitol St. Pekin, IL 61554

RE: REQUEST FOR PROPOSALS (RFP) FOR A PUBLIC SAFETY ANSWERING POINT CONSOLIDATION STUDY FOR THE EMERGENCY TELEPHONE SYSTEM BOARD OF TAZEWELL COUNTY

To Whom This May Concern,

We are pleased to submit this proposal to Tazewell County in response to the Request for Proposals (RFP) to provide a Public Safety Answering Point (PSAP) Consolidation Study. We understand the Emergency Telephone System Board of Tazewell County has a strong desire to provide the most efficient and effective emergency services and that consolidation is the means to achieve that goal. IXP proposes to analyze the Governance, Operations, Technology and Facility aspects of consolidating the Tazcom, East Peoria PD, Morton PD and Washington PD PSAPs. We will follow our analysis with a comprehensive consolidation study report that will guide you toward this goal.

IXP has been the go-to expert and leader in conducting public safety consolidations and shared services studies for dozens of counties and municipalities. Our 17 years of experience enables us to solve emergency dispatch governance, operations, staffing, technology, and fiscal challenges. In particular, IXP has completed similar consolidation studies for many customers including the Village of Gurnee and the City of Zion, IL; City of Elgin, IL; Little Elm and The Colony, TX; the North Texas Emergency Communications Center (cities of Carrollton, Addison, Coppell, and Farmer's Branch, TX); Navajo County, AZ; and Cottonwood, AZ. Our consulting studies provide objective information for decision makers to answer questions such as "Where are we? Where do we want to be? What does it take? And how do we get there?" We are excited to collaborate with Tazewell County on your path forward.

Please contact me directly if you have any questions or need more information regarding this proposal.

Best regards,

Lawrence D. Consalvos, President and Chief Operating Officer

IXP Corporation 609.759.5102 *Direct* 609.439.2496 *Mobile* 

lconsalvos@ixpcorp.com Email

Spersey O. Corales

# Message from the Chairman & Chief Executive Officer



It gives us great pleasure to respond to this opportunity to deliver public safety services and solutions to your organization. As a successful, mid-tier corporation, we have structured our company to deliver real value and public safety expertise to you, our most important client.

Over our twenty-plus years working together as a management team, we have played pivotal roles in helping our clients tackle some of their toughest challenges involving governance, operations, technology, and facility needs. Our vision of "Making Communities Safer" means that we introduce innovative, practical, and cost-effective solutions that breathe new vitality into the public services that our clients provide to their communities. Solutions that range from custom software solutions to managed dispatch operations.

We have earned the trust, confidence, and respect of our clients for one simple reason—we have great people. IXP is a company with over 200 employees listening, responding, innovating, and implementing to fulfill IXP's promise of making communities safer. We pull together the right people, processes, technology and expertise to transform service from just "good enough" to GREAT. Our people come from the same markets and areas that we serve. Many of them have been in your same shoes and are experts in their respective fields.

IXP operates under the firm belief that a diverse workforce is required in the world today to continue meeting the changing needs of our clients and their communities. We are proud of the diverse backgrounds and individual experience that our people have, and we are eager to share them with you. To be a strong company on the outside, we have to be a strong company on the inside.

We are motivated to become your partner in providing a better public safety experience to you and to the communities to which you serve.

William E. Metro

# IXP PROPOSAL

# 9-1-1 CONSOLIDATION STUDY FOR TAZEWELL COUNTY

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### A. INTRODUCTION

IXP Corporation has been solving public safety challenges for local governments, universities, and private organizations across the country since 1999. IXP has three lines of services: consulting, technology integration and managed services. Our successful track record of assessment, management and operational expertise for emergency communications centers nationwide solidifies that IXP is the right partner for Tazewell County.

One of IXP's core competencies is our ability to assist in the analysis, planning and execution of complex public safety communications initiatives, ranging from multi-jurisdictional or multi-disciplinary expansions or consolidations to periodic technology system refreshments. In each of these engagements, IXP brings all the experiences gained from prior customers as well as knowledge and understanding of best practices in the public safety communications industry. This approach allows each of our customers to tailor our level of consultation and support to match their own unique circumstances and constraints, and to develop the factual and impartial information needed to reach sound strategic decisions.

### UNDERSTANDING AND SOLUTION

IXP understands the Emergency Telephone System Board of Tazewell County (Tazewell County ETSB) is seeking a qualified and experienced company to form a consolidation plan for the Public Safety Answering Points (PSAPs) within its 9-1-1 System. We also understand the Tazewell County ETSB has been granted an extension to comply with the Emergency Telephone System Act requiring a plan be submitted to the Illinois Statewide 9-1-1 Advisory Board by October 1st, 2017. IXP is aware of the rapid timeline needed for this plan and has the resources to deliver a consolidation report by mid-June 2017. We also have the experience and capabilities to be Tazewell County's partner and serve as the Consolidation Project Manager to complete the consolidation by July 1st, 2019.

In order to comply with the Emergency Telephone System Act, IXP will formulate a consolidation report based on the data we retrieve from the four PSAPs currently part of the Tazewell County ETSB: Tazcom, East Peoria PD, Morton PD and Washington PD. An assessment of staffing, human resources, facility and space needs, financing, governance, technology, and operations of the participating PSAPs will provide the County with the information needed to:

- Assess the current state of each PSAP to establish scalability from a staffing, technology and facility perspective;
- Review the potential staffing and workload absorption for consolidating the participating PSAPs;
- Understand the equipment and technology needs for a consolidated center, including a provision of NG911;
- Provide start up, project implementation and operating budgets for potential consolidation;
- Understand the roles and funding distribution of each of the stakeholders;
- Understand the service level a consolidated center can provide;
- Create expansion performance metrics that would equal or exceed the PSAPs' current service; and,
- Create a consolidation plan that would be beneficial for all the communities involved.

### B. COMPANY ORGANIZATIONAL CAPABILITIES

### **COMPANY PROFILE**

IXP Corporation delivers cost effective public safety solutions and 9-1-1 dispatching, security monitoring, and other operational, technical and facility support functions. Our approach is to build close relationships with our clients and fully appreciate their day-to-day emergency communications responsibilities and challenges. We have found that this ability to relate to our clients and our clients' ability to connect to our team is mutually beneficial. We have built and are continuously improving our processes for better results and a more robust experience for our clients and their communities.

IXP has been delivering emergency communications projects for the past 17 years. We understand the complexity of Tazewell County's project and that a result of the completed study may be additional phases. We have helped many of our clients with the assessment (feasibility study), business case, implementation and operational phases of PSAP consolidation projects. This means we have the experience of providing best-fit recommendations, implementing the recommendations and then operating a consolidated center using our recommendations. This niche experience differentiates IXP from any other public safety consulting company.

IXP offers a variety of unique public safety skills and services that distinguishes our firm from others, making us the best choice for Tazewell County. We have in depth experience and knowledge working with Emergency Telephone System Boards (ETSB) and multi-agency PSAPs to meet their public safety consolidation needs. We have delivered and implemented consolidation solutions for the Village of Gurnee and the City of Zion, IL; City of Elgin, IL; Little Elm and The Colony, TX; the North Texas Emergency Communications Center (cities of Carrollton, Addison, Coppell, and Farmer's Branch, TX); Navajo County, AZ; and Cottonwood, AZ. IXP also consolidated the developing communities of Johns Creek, Sandy Springs, Dunwoody and Brookhaven (Georgia) into the Chattahoochee River 9-1-1 Authority (ChatComm) emergency communications center that we also designed, built, and now operate and staff.

IXP is able to provide additional services as the Consolidation Project Manager that Tazewell may later require by using one, or any combination of, our focused areas of expertise in Consulting, Technology Integration and Managed Services. We are able to assess our clients' needs and present several options to achieve their objectives.

consulting. IXP's value is in our deep experience and best practices knowledge developed over 60 consolidation projects and 17 years in emergency communications consulting. We assess all the contributing factors and possible solutions, while considering the available resources and the optimal functioning of the mission critical environment. We then develop a business case that outlines the best possible solution and what is required to implement the solution.

TEGHNOLOGY. We use our broad experience in public safety and emergency communications technologies to assess legacy environments and create functional and technical architectures. We implement all aspects of the solutions we design, including writing specifications, selecting vendors and creating custom solutions. We design and build facilities, develop custom software and interfaces, integrate disparate systems, hire and train personnel, set up management systems and establish ongoing analytics.

MANAGED SERVICES. For municipalities interested in achieving long-term financial predictability and improved operational services, we offer customized solutions that include:

- Communications Center Management
- Telecommunicator Staffing
- Security Operator Staffing

- Training
- Technology Support
- System Administration Support
- Graphical Information System Management
- Information Technology Management
- 3-1-1 Staffing and Support
- Front Lobby/Window Staffing



Our proven managed services solution exceeds desired service levels, enhances customer service, streamlines schedules, and improves operational capabilities. IXP operates the first and only private communications center in the United States to reach accreditation through the Commission on Accreditation of Law Enforcement Agencies (CALEA®). Similarly, IXP uses CALEA® standard models in all of our Managed Services projects, a tremendous advantage for client agencies seeking or already CALEA® accredited from a communications perspective.

Our clients trust us with the day-to-day operations of their mission critical communications environment and we manage it to a guaranteed level of performance. Our strength is the genuine insight we have into your requirements and challenges, which helps you focus on your mission: a safer community.

### PROJECT APPROACH

IXP will provide a service that is both unbiased and based on industry standards. IXP utilizes a proprietary and copyrighted process named System Assurance Integration Framework (SAIF®). This process ensures we take a defined step by step approach in each of our engagements. The four major tenets of this process are — Governance, Operations, Technology and Facilities. These four areas are critical tenets that must be evaluated when a consolidation is being considered. The Tazewell County Emergency Telephone System Board (ETSB) has requested that six specific areas be studied in this RFP. Those six areas are Staffing & Human Resources, Facility/Space Needs, Financing, Governance, Equipment, and Operations. Each of these areas fits well within SAIF®. Staffing & Human Resources, Financing, and Operations will be addressed under our section for Operations; Equipment will be covered under Technology; Facility/Space Needs will be found under Facilities; and Governance will be within Governance. IXP will analyze these six areas within our framework and evaluate them in the context of the future needs of all the

organizations taking part in the consolidation effort. IXP will model its recommendations on industry best practices and standards. Those best practices and standards will then be leveraged to achieve the goals that the participating PSAPs and the Tazewell County ETSB have laid out for this project.

#### 4 CRITICAL BUILDING BLOCKS GOVERNANCE: OPERATIONS: Financial Predictability Workload-Based Staffing Public-Private Partnership Policy & Procedures Reporting to Stakeholders Performance Metrics National Perspective Industry Standards Emergency Communication Services TECHNOLOGY: FACILITIES: CAD/RMS/Radio • Site Selection Architecture & Engineering 9-1-1 Systems Recording & Logging Space Planning **Network Architecture** Project Managment

### PHASE ONE: PRE-PROJECT MEETING

IXP proposes to conduct the pre-project meeting by webinar and conference call. This is the most efficient way for both the IXP personnel assigned to the project and the Tazewell County project team to introduce themselves and discuss the various aspects of the project. IXP believes that communication is the key to success and will ensure that project communication protocols are solidified. During the meeting, we will clearly define goals and responsibilities with the organizations involved. IXP will walk the Tazewell County Team through the tasks in the project plan and explain what the expectations are from each party. We will then review the tailored site visit guide which will have been prepared in advance. IXP does not want to be just a consultant to the Tazewell County agencies but to be a trusted partner in this endeavor.

### PHASE TWO: DATA GATHERING

IXP will provide the client with a tailored site visit guide prior the project kick-off meeting. This document will include a list of data elements that IXP will need Tazewell County to provide for analysis. IXP has found that a tailored site visit guide is a very effective and efficient method to begin the study. Our site visit guide will allow each organization to prepare the information needed and formulate their own questions that need to be discussed with the IXP team during the site visit. The participating PSAPs and the Tazewell County Emergency Telephone System Board will be given a period of time to collect this data and return it to IXP. IXP usually recommends the participating organizations have a two-week period to complete the site visit guide. However, given the short timeline requested for this project the guides will need to be completed in seven days. We have intentionally planned the preproject meeting to fall in the middle of the data collection process in order to address any questions that have arisen. IXP will then review that data before coming onsite to conduct the site visits and interviews.

### PHASE THREE: FOLLOW-UP INTERVIEWS AND OBSERVATION

IXP will schedule time to visit each PSAP and the Tazewell ETSB. The discussions will cover the data received in the site visit guide as well as any questions the client may need clarified or any additional data IXP may require. We will strive to capture any additional information that may be needed and make sure we have a solid understanding of the current environments. IXP will sit with stakeholders from the PSAPs and ETSB and get the input and direction needed from them as well as the operational and technical staff that are the end users in day-to-day operations. IXP will communicate the onsite schedule with plenty of notice so that anyone that wishes to make time in their calendar may do so. Typically, IXP would spend a day at each site but with the accelerated timeline we feel it will be better served to move to half day site visits to allow more time for data collection and preparing the report after the onsite visit.





#### PHASE FOUR: PRELIMINARY REPORT

Once the interviews and observations are complete the information obtained from the site visit guide and the onsite time will be compiled into a preliminary report. During this compilation process if any questions or clarifications arise IXP will reach out to Tazewell County in the manner agreed upon during the kick-off meeting.

On or before June 1st, 2017 IXP will deliver a preliminary report to the Tazewell County ETSB. This report will include the requested information contained within the contract and be laid out in the following manner:

#### Governance

IXP believes that a key piece of any consolidation is the governance structure of the organization. It has been our experience that those organizations that fail to adequately address this aspect of a consolidation will experience more issues with inter-agency cooperation than those that address it in the beginning. We can see through the language of the RFP that the Tazewell County ETSB already understands the importance of this aspect of consolidation. Our approach will include the following:

- Assess current interagency agreements
- Assess and document required, desired and current service metrics (quality of service) and the effect of a consolidated model on the service levels
- Document the existing organizational and operational structures
- Document interaction between each agency

- Combine our knowledge of similar projects to recommend potential best fit governance structures
- By-Laws
- Budgeting and assessment structure

### **Operations**

IXP understands that the operations aspect of an organization is where the bulk of the visible work is accomplished. When an organization undertakes a consolidation, this is the area that causes the most anxiety because this is where most of the people in an organization work. As stated earlier, IXP will discuss Staffing & Human Resources as well as Financing in this area of the report. Operations is a very multi-faceted area in a PSAP and care must be taken when discussing it so that nothing gets left undiscovered. While staffing is a large part of the functions of this area it is vital not to miss collecting all the financial information or not address SOP changes that must take place because of a consolidation. IXP will strive to understand every aspect of the operations of the individual PSAPs so that you can capitalize on getting the most benefit out of this consolidation. Our report will include the following:

- · Provide recommendations for quality assurance and quality control
- Analyze how recruitment may change in a consolidated center.
- Evaluate current business processes (from intake through completion, workflow, etc.)
- Evaluate existing policies and procedures and compare them to industry standards (including meeting the Association of Public-Safety Communications Officials (APCO), Emergency Medical Dispatch (EMD), Emergency Fire Dispatch (EFD) and CALEA® standards)
- Document readiness for a major event and assess how a major event would be handled using the current situation versus a consolidated center
- Document existing certifications (State requirements)
- Document current workload
- Document current staffing and scheduling and provide recommendations for the staffing and scheduling of a consolidated center
- Document quality assurance programs
- Identify potential cost sharing opportunities
- Provide potential operation costs savings at year 5 and year 10 years of operation
- Document tasks that will not move into a consolidated center. Provide recommendation on how to handle those tasks
- · Document how consolidation might affect the automatic aid between fire departments as well as ISO ratings
- Address Ancillary Duties:
  - Maintaining the walk-up lobby window
  - Answering administrative phone lines
  - Paging specialty law enforcement and fire teams; animal control; public works; ESDA
  - Preparation of tapes or electronic audio files pursuant to member agency internal investigations or subpoenas
  - Notification of commercial utilities
  - OWSS activation
  - o CCTV monitoring
  - o LEADS entry
  - Monitoring weather radar

### Staffing & Human Resources

IXP knows that having enough staff to provide the proper level of support to the County's first responders and citizens is a vital aspect of any PSAP. So, as part of the operational review and recommendations we will include an analysis of expected call volume and the staff required to handle that call volume. We will assess the salary and benefit programs in the region and provide a recommendation based on the current levels in the region. Our report will include the following:

- Assess and document existing organizational structures and recommend an organizational structure for a consolidated center
- Document existing labor agreements
- Document salary and benefit programs
- Document and assess current staffing levels by time of day
- Document current employee retention and compare it with potential employee turnover of a consolidated center
- Document the existing methods of recruiting, hiring, training and professional development and make recommendations that are based on industry standards and best practices
- Analysis of:
  - Seniority issues
  - o Benefits carry-over
  - o Employee and Management Selection
  - o Payroll Administration
  - o Health Insurance
  - o IMRF
  - o Deferred Comp
  - o Labor Negotiations

#### Financing

When evaluating the operations of each PSAP, IXP will collect financial information. This information will include costs of operations (building payments/rent, utility bills, technology support costs, etc.) and salary/benefit costs. This information will be documented, evaluated and included in the report for comparison purposes. IXP will then project what those costs would be within a consolidated environment at the recommended staffing levels and system support levels. This information will all be included in the operations section as part of our normal approach to a consolidation study. These costs will be shown in a breakdown as yearly and then combined to show the costs at five year increments.

- Document existing budgets
- Document existing funding sources
- Document current operational costs and compare them to the operational costs of a consolidated center
- Document full time and part time expenses and compare these costs to a consolidated center

#### Technology

Outside of an engaged and well trained workforce, IXP understands that in today's world the technology of a PSAP is its next most important asset. IXP has worked with organizations across the country not only in consolidation efforts but also to simply study their use of technology and provide insight on where efficiencies could be found with technology. IXP will evaluate the technology in use at each location today and provide a recommendation on technology within the consolidated environment. This recommendation may include purchase of new technology or the reuse of existing technology that can be expanded to support a consolidated operation. Our report will include:

Document the existing systems and technology functionality

- Document technical issues as they relate to service providers
- Document current capital expenditures and compare them with the capital expenditures of a consolidated center
- Identify potential cost sharing opportunities
- Provide potential technology costs savings at year 5 and year 10 years of operation
- Document current data sharing and provide recommendations on how to achieve data sharing in a consolidated environment
- · Provide recommendations on the most efficient way to use existing technology
- Analysis of:
  - o 9-1-1 CPE
  - o Computer-Aided Dispatch (CAD)
  - o Recording Equipment
  - CAD Networking to Police and Fire Stations
  - o Radio
  - CCTV
  - o OWSS
  - IT support needs beyond staff provided by Tazewell County ETSB



### Facility

When reliability and safety are a key factor, as they are in PSAP facility structures and systems, it is vital that much thought and preparation goes into the planning. IXP is very experienced in looking at facilities and comparing them against industry standards, including APCO and NENA, and best practices. Each organization has a different idea of where they want to balance between structure size, system performance and reliability, and cost. IXP will work with the Tazewell ETSB to find the balance that works for them when it comes to the facility and facility systems. Our report will include:

- Evaluate the existing facilities as they pertain to suitability for staff and technology to maintain desired levels
  of performance, reliability and support
- Document each centers' space
- Document each centers' supporting technology room
- Document existing access into each center and assess the longevity of each center
- Provide potential facility costs savings at year 5 and year 10 years of operation
- Document current capital expenditures and compare them with the capital expenditures of a consolidated center
- Provide backup facility considerations
- Document current facility environment
- Provide the facility needs of a consolidated center
- Provide cost and timeline estimates associated with recommendations
- Identify potential cost sharing opportunities





<u>Deliverable:</u> IXP will provide one hard and electronic copy of the Preliminary Consolidation Report to the Tazewell ETSB and each participating agency by June 1, 2017.

### PHASE FIVE: FINAL ANALYSIS AND PLAN

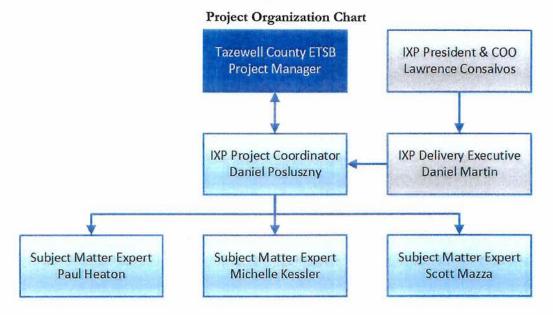
After the completion of the Preliminary Consolidation Report review with Tazewell County ETSB, IXP staff will take any feedback and make the final edits and incorporate those changes into the final document. Once those edits are complete and the document is finalized we will schedule a meeting to review and discuss the final report with the stakeholders. IXP will come onsite for this meeting, on or before June 15, 2017, and review the deliverable in person and in the format and quantities defined in the contract.

<u>Deliverable:</u> IXP will provide one hard and electronic copy of the Final Consolidation Report to the Tazewell ETSB and each participating agency by June 15, 2017.

### C. COMPANY STAFF QUALIFICATIONS

IXP's talented team consists of former agency executives and command officers in emergency communications, law enforcement, firefighting and emergency medical services. They are some of the most experienced public safety professionals in the country. IXP leadership enjoys decades of experience in the industry and continues to serve as trusted advisors to our clients. We provide innovative and flexible solutions to solve public safety challenges—even the unexpected ones.

We have included the below project organization chart followed by brief biographies of our project team members and their experiences. Detailed resumes are located in Appendix A.





### DANIEL MARTIN, PMP Delivery Executive

Dan Martin has over 32 years of management and consulting experience including 22 years in the IT industry and 13 specifically within public safety. He is an adept program and project manager able to manage multiple priorities with the proven ability to work within multiagency, multi-disciplinary environments. At IXP, Dan has been involved with a variety of projects for NYC agencies in both a program/project management role as well as an analytical role. He has served as the project manager for the Village of Gurnee and City of Zion (IL)

consolidation initiative and the North Texas Emergency Communications Center that was a four-city consolidation. He also helped develop a consolidation plan for the South Shore Regional Emergency Communications Center that consolidated four cities. He assessed the Towns' governance, operations, facilities, and technology components. Other projects ranged from business and process analysis; CAD product analysis including the creation of an extensive CAD system gap analysis for the FDNY, logging and recording system requirements and design for the NYPD and FDNY. Part of Dan's ongoing activities with IXP is the management of both corporate and remote Information Technology staff and resource allocation for the company. He looks to achieve high utilization rates for IXP staff, oversee staffing and project plans to match key tasks with the most qualified staff and maximize performance and cost efficiency. Dan is a certified Project Management Professional (PMP) and enjoys a lengthy record of delivering projects on time and on budget.

Role: Dan will provide corporate oversight for the Tazewell County PSAP Consolidation Study. He is a Subject Matter Expert in consolidations of emergency communications centers. Any issues that may arise can be escalated to him at any time.



### DANIEL POSLUSZNY Director

Dan is a Director with IXP Corporation. As a former Chief of Police, Dan had executive leadership of approximately 80 employees, both sworn officers and civilians. He has experience in government purchasing, finance and staffing. His education is in both criminal justice and leadership, management and policy for higher education. Dan is a graduate of the FBI National Academy and has been actively involved in all facets of emergency management operations and policy development related to emergency management and law enforcement.

He has had leadership roles in the Mercer County, NJ, Police Chief's Association having served two terms as president of the organization. Additionally, he was the chairperson of the New Jersey State Association of Chiefs of Police Policy Development and Evaluation Working Group. Dan has experience in organization and administration of emergency medical service operations as well as fire department activities. He has served as the Project Manager for Danbury's transition to a consolidated center and continues to manage IXP's managed services at the center by interviewing, vetting and hiring current staff, assisting with technology integration, and providing guidance and oversight.

Role: Dan will be the Project Coordinator and will collaborate with the Tazewell County Project Manager overseeing the entire project. He is also a Subject Matter Expert and will be involved in every phase of the project. He has worked on Governance, Operations, and Technology components for many consolidation projects.



### PAUL HEATON JR. Technical/Operational Consultant

Paul Heaton joined IXP in 2011 after working for seven years in public safety. He delivers services for IT support, GIS support and Computer Aided Dispatch (CAD) support/maintenance on multi-jurisdictional collaborations. He has expertise working with CAD, Record Management Systems (RMS) and Mobile Data/Computer Terminals. Paul's recent engagements include the North Texas Emergency Communications Center and the Chattahoochee River 9-1-1 Authority (ChatComm) where he served as a subject matter expert

for technology and operational components. He delivered feasibility and cost analyses for future technology refits as well as transition plans. Paul has training on the state and federal level in the areas of crime analysis and electronic surveillance technologies. While working in the government sector, he was responsible for maintaining mobile computers, mobile connectivity, and managing vendor support tickets. He is a trained system administrator for SunGard OSSI CAD/RMS/Mobile applications. Paul also worked closely with Special Operations to help them maintain and deploy covert surveillance technology. He has worked with IP camera solutions, audio transmitters, and covert body worn camera systems and is also trained in installation of audio and video recording devices into vehicles.

Role: Paul is a Subject Matter Expert and his primary focus will be on the equipment, facility and operational analysis.



#### MICHELLE KESSLER Consultant

Michelle Kessler is a consultant in Communications Management and brings over 29 years of law enforcement experience to IXP. With an impressive background in senior-level police communications management, and records management administrative experience, she brings a combination of skills and experience to assist municipalities, corporations, utilities, colleges and universities with their communications and administrative challenges. Michelle has recently served as a consultant for the Village of Gurnee and City of Zion (IL) consolidation

initiative and the Lake County (IL) Consolidation Study project where she coordinated, gathered and analyzed staffing and financial date. She also worked as a consultant for the Galveston County Sheriff's Office Communication Center (TX) project where she determined proper staffing levels and tailored solutions to improve the County's emergency communications. Michelle joined IXP after retiring from the City of Phoenix Police Department in June of 2014. During her time with Phoenix PD, Michelle held the titles of RMS Administrative Manager, Communications Shift

Manager, Communications Administrative Supervisor, Communications Supervisor, and Communications Operator. Michelle established a base study for calculating staffing needs. This study was incorporated into the Association of Public-Safety Communications Officials International (APCO) project RETAINS, which is APCO's method for helping agencies determine proper staffing levels. A member of the Department's Infrastructure Committee, Michelle also collaborated with Information Technology Bureau on common issues. She received numerous commendations and recognitions for outstanding performance for special projects and job functions.

Role: Michelle is a Subject Matter Expert and her primary focus will be on the staffing, human resources and workload analysis.



### SCOTT MAZZA, PMP Managing Director of Business Integration

Scott Mazza is a certified Project Management Professional (PMP) who has lead large teams of high performing individuals in mission critical projects with a focus on improving efficiency and productivity. With IXP he has managed our dispatch services contract with the Monmouth Ocean Hospital Service Corporation (MONOC) while also performing significant staffing and financial analysis work on consolidation studies for Lake County, IL and Washoe County, NV. Prior to joining IXP he supported the US Department of Homeland Security as a contractor in

many of their preparedness efforts; including the preparations for Salt Lake City to host the XIX Olympic Winter Games, and special events planning for Georgia to host the 2004 Sea Island G8 Summit. Scott also served for 15 years as a volunteer EMT in Fairfax, Virginia and holds a MBA from George Mason University.

Role: Scott is a Subject Matter Expert and his primary focus will be on the financial analysis.

### D. EXPERIENCE

IXP has managed numerous public safety initiatives over the years and enjoys a lengthy record of being on time and on budget. A local example is our current project with the Village of Gurnee and City of Zion, IL. IXP was first engaged with the Village of Gurnee where we were asked to assist the Village analyze what consolidation might look like in their specific set of circumstances and help them identify potential opportunities for consolidation before concepts were forced on them from external sources. We were then engaged to assist the City of Zion consolidate with the Village of Gurnee. We are providing expertise in the creation of the State required ETSB Consolidation Request as well as the creation of a State Grant Request to assist with the associated costs of the consolidation. Another local example, is IXP's engagement with the consolidation of the cities of Elgin and South Elgin, IL. We provided both agencies an understanding of their current operational models, various technology systems utilized in those operations, analysis of expected workload increases, and current and future costs of operations for both jurisdictions.

IXP was also engaged with the North Texas Emergency Communications Center (NTECC). Initially, IXP conducted a comprehensive PSAP consolidation feasibility study for the Town of Addison and the cities of Carrollton, Coppell, and Farmer's Branch, TX. Each jurisdiction operated their own emergency communications center and recognized that consolidation or collaboration initiatives would provide numerous opportunities to reduce current operational costs, minimize duplicated capital investments and reinvestments, and create opportunities to improve service levels. Following IXP's business case, the cities engaged IXP to project manage the consolidation implementation for NTECC. IXP supported a full range of governance, operational, technology, facility and transition support to assure successful outcomes.

One of IXP's core competencies is our ability to assist in the analysis, planning and execution of complex public safety communications initiatives, ranging from periodic technology system refreshments through complex multi-jurisdictional or multi-disciplinary expansions or consolidations. In each of these engagements, IXP brings all the experiences gained from prior customers as well as knowledge and understanding of best practices in the public safety communications industry. This approach

allows each of our customers to tailor our level of consultation and support to match their own unique circumstances and constraints, and to develop the factual and impartial information needed to reach sound strategic decisions.

"IXP has done a phenomenal job at organizing and developing our new combined 911 dispatch center. Their staff is knowledgeable, hardworking, and committed. This was a complex project, and the City of Danbury was proud to have IXP as our partner."

-MAYOR MARK BOUGHTON, DANBURY, CT

IXP has provided similar services to the below list of clients over the last several years.

Client Name	Services Provided
Village of Gurnee & the City of Zion, IL	Consolidation Services
City of Elgin, IL	South Elgin Police Department Consolidation Assessment
Southeast Emergency Communications (SEECOM), IL	Consolidation & Share-Services Evaluation
Village of Gurnee, IL	Open for Business Consolidation Initiative
Lake County Emergency Telephone System Board (ETSB), IL	Consolidation Study
Union County, IL	Emergency Communications Assessment
Village of Wilmette, IL	Communications Center Upgrade
Cottonwood, AZ	Regional Communications Center Consolidation Study & Design

Client Name	Services Provided
Navajo County, AZ	Consolidation/Feasibility Study
Town of Buckeye, AZ	Public Safety Communications Master Plan
Paradise Valley Police Department, AZ	Communications Center Remodel
Jefferson County, AL	Emergency Communications Strategic Plan
City of Danbury, CT	Consolidation Assessment, Implementation and Staffing Managed Services
Chattahoochee River 911 Authority (ChatComm), GA	Consolidation Assessment, Implementation and Staffing Managed Services
Roswell, GA	Consolidation Assessment/Business Case
Hendricks County, IN	Communications Center Strategic Plan Operations, Staffing, Technology & Facilities
Chicopee, MA	Police/Fire Consolidation
South Shore Regional Emergency Communications Center (SSRECC), MA	Consolidation Implementation & IT Support
Falmouth, MA	Consolidated Center Integration
South Worcester County Communications Center (SWCCC), MA	Communications Center Assessment and Consolidation Study
Metro Area Planning Council (MAPC), MA	Consolidation Study & Implementation Plan
City of Somerville, MA	Consolidation Study
Revere/Winthrop Regional, MA	Emergency Communications Center Assessment
County of Scott, MN	PSAP Consolidation Study
East Windsor Township, NJ	Consolidation Assessment, Implementation and Staffing Managed Services
Princeton Communications Center, NJ	Consolidation Program Management
Washoe County, NV	Regional Dispatch Consolidation Study
North Texas Emergency Consolidation Communications Center (NTECC)	Consolidation Implementation/Project Management
City of Addison, Carrollton, Coppell & Farmer's Branch, TX	Consolidation Business Case
South Sound 9-1-1 (SS911), WA	Dispatch Facilities Study
Town of Douglas, WY	Consolidation Assessment
Sweetwater County, WY	Communications Center Assessment
Converse County, WY	Consolidation Business Case

### REFERENCES

IXP has compiled several references that highlight our qualifications and experience. Details of each of our projects follows.

Client Name & Location	Client Reference
Village of Gurnee & City of Zion	Chris Velkover, Information Systems Director, Village of Gurnee
Village of Gurnee, IL	847.599.7531
	chrisv@village.gurnee.il.us
City of Elgin	Bill Wolf, Deputy Chief, Elgin Police Department
Elgin, IL	847.289.2762
	Wolf_B@cityofelgin.org
Little Elm & The Colony	Joe Florentino, Assistant Town Manager
Little Elm, TX	214.975.0425
	JFlorentino@littleelm.org

Project Name:

## VILLAGE OF GURNEE AND CITY OF ZION, IL - CONSOLIDATION INITIATIVE



of regional shopping and entertainment venues. The Village's 9-1-1 community that is also home to a wide diversity of regional shopping and entertainment venues. The Village's 9-1-1 communications and dispatch center provides Law Enforcement dispatching for the Village as well as Fire/EMS dispatching for the Village and several neighboring Fire Districts. The 9-1-1 and dispatch operations are supported by state of the art technology systems and the communications center operates pursuant to industry standards and best practices. The City of Zion's Police Department provides their 9-1-1 dispatching operations. After recognizing the quality of services the Village communications center provides, as well as state mandates, the Village and the City started an initiative to consolidate their two emergency communications centers.

client business problem: The Village of Gurnee reached a formal agreement with the City of Zion to host Zion's emergency communications. While the stakeholders in Gurnee are more than capable of executing the necessary migration and configuration of services, they were in need of specialized support in a number of areas. Specifically, they required an experienced emergency communications consolidation project manager with extensive firsthand knowledge of the challenges faced with consolidating two live emergency communication centers (ECC) to guide them through the process. They also were in need of expert assistance in the creation of the State required Emergency Telephone System Board (ETSB) Consolidation Request as well as the creation of a State Grant Request to assist with the associated costs of the consolidation.

IXP SOLUTION: IXP provided a Project Management Institute (PMI) certified Project Manager (PMP) with extensive experience in consolidating ECCs. Our Project Manager worked very closely with stakeholders to develop a comprehensive project plan identifying all the necessary tasks with appropriate timelines and interdependencies. Biweekly meetings were held with the project team to track progress and identify and resolve issues. In addition, a Subject Matter Expert (SME) was assigned to develop the ETSB Consolidation Plan and State Grant Application.

KEY RESULT: The project is approximately 30% complete at this point and continues on track for a July cut-over. The ETSB Consolidation Plan and the State Grant Application were developed and submitted to the respective authorities within a compressed timeframe and on time.

Project Name:

### THE CITY OF ELGIN. IL - CONSOLIDATION ASSESSMENT



CLIENT OVERVIEW: The City of Elgin, Illinois operates a robust Emergency Communications Center that supports the Police, Fire and EMS communications needs of the City's 111,200 population. They also provide Fire/EMS dispatching for a neighboring Fire Protection District. The neighboring Village of South Elgin, population 22,300, currently receives their dispatching services from another agency, and wanted to explore the possibility of shifting their business to the City of Elgin. IXP was jointly retained by these two jurisdictions to help them examine the costs for Elgin to prepare for and offer these services and to assist in developing a potential rate model for the ongoing service relationship.

Glient Business Problem: The Village of South Elgin Police Department has a significant level of routine interaction with the City of Elgin Police Department due to their large shared border. Similarly, the fire department that serves South Elgin is already dispatched by the Elgin Police Department's Emergency Communications Center (ECC) and there are routine interactions between these two fire departments and both police departments. Therefore, South Elgin wanted to explore the potential to move their dispatching services to the Elgin ECC. Further, the South Elgin Emergency Telephone System Board (ETSB) falls below the population threshold established in recent statewide legislation changes that requires smaller ETSBs to consolidate with one or more ETSBs to get above the population thresholds. Therefore, a shifting of dispatching service relationships would also result in the South Elgin and Elgin ETSBs being merged into a single Joint ETSB.

IXP SOLUTION: IXP worked with both agencies to gain an understanding of their current operational models and the various technology systems utilized in those operations. Information was also collected on current costs of operation for both jurisdictions. With this information in hand, IXP developed an analysis of expected workload increases at the Elgin ECC if services were offered to South Elgin PD. This included analysis of 9-1-1 and 10-digit telephone workload, dispatched calls for service and officer initiated calls for service. Analysis was also performed on the current primary radio channel used for Elgin PD to determine if capacity existed to accommodate the added volume of traffic that South Elgin would bring or if a dedicated dispatch position would be needed during certain hours of the day. Analysis was also done on the various one-time and ongoing costs that would be associated with Elgin offering services to South Elgin. All of this information was then distilled into a cost basis and rate model framework that the jurisdictions can use to continue their negotiations on whether to enter into this service relationship.

**KEY RESULT:** IXP's breadth of experience in multi-jurisdictional operational and business models coupled with our impartiality allowed both jurisdictions to have a consistent set of data to use to further their discussions about establishing a service relationship and merger of ETSBs. This is extremely useful in situations of this nature when both parties need to operate from a basis of consistent information that fairly represents the costs and interests of all parties involved in the negotiations.

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Project Name:

## THE COLONY AND LITTLE ELM, TX - CONSOLIDATION BUSINESS CASE





CLIENT OVERVIEW: The Colony and Little Elm, Texas are located in the Dallas Metro area with a combined population upwards of 80,000. Little Elm is experiencing increased growth, mainly in residential housing while The Colony is realizing growth in commercial and retail space, including several new hotels. The municipalities have different methods of providing 9-1-1 emergency communications services for their individual jurisdictions. Little Elm's emergency services are handled by Denton County, Texas, and The Colony has their own in-house 9-1-1 Public Safety Answering Point (PSAP). Over the years, these municipalities have participated in a number of collaborative public safety initiatives including routine fire/EMS mutual and automatic aid.

**CLIENT BUSINESS PROBLEM:** Little Elm has been less than satisfied with the services of Denton County and believes there is minimal control over 9-1-1 services since there is no consistent method to address concerns. Additionally, Little Elm is on the Denton County radio system with upwards of eight municipalities dispatching off one frequency. This causes problems with emergency dispatching.

Although The Colony has their own 9-1-1 communications center, there is belief they can improve services through a combined center with Little Elm. A combined communications center would benefit police/fire/EMS responses by pooling resources, provide consistent training and deliver better services to the public.

Both municipalities realize that by combining dispatching services, they can expect financial savings in both operational and capital expenses.

IXP SOLUTION: After recognizing potential service level improvements and cost efficiencies that may result through consolidation of their emergency communications functions, the jurisdictions wanted a better understanding of what a combined center could provide. After meeting with IXP, Little Elm and The Colony made a decision to engage IXP to develop a business case that would further explore consolidation. The purpose of this analysis was to establish a common understanding of the current operational configurations and costs for each individual jurisdiction. It also identified the costs for the governance, operations, technology, and facility elements of a consolidated emergency communications center.

**KEY RESULT:** The Colony and Little Elm have gained a better understanding of their current operations and the potential for shared services, shared systems or some form of consolidated operations. By taking the time to carefully understand the various advantages and challenges in these relationships, each of them is becoming better prepared to make informed decisions moving forward.

## E. PROJECT SCHEDULE

To implement Tazewell County's consolidation study, IXP will follow the below timeline and associated task list. We will complete a full consolidation study for Tazewell County within eight weeks of contract signing dependent upon Tazewell County personnel availability. We will be receptive to your needs and will work closely with the County's team to ensure our schedule is flexible and adapted to meet your goals and timeline.

Task Name	Start	Finish
Tazewell County PSAP Consolidation	Thu 4/20/17	Thu 6/15/17
Notice To Proceed	Thu 4/20/17	Thu 4/20/17
Phase 1: Pre-Project Meeting	Wed 4/26/17	Wed 4/26/17
Project Kick-off Meeting CC/Webinar	Wed 4/26/17	Wed 4/26/17
Phase 2: Data Gathering	Thu 4/20/17	Fri 5/5/17
Develop and Send Site Guide	Thu 4/20/17	Fri 4/21/17
Client To Gather Information for Site Guide	Mon 4/24/17	Tue 5/2/17
Collect and Analyze Data From Guides	Wed 5/3/17	Fri 5/5/17
Phase 3: Follow-Up Interviews and Observations	Tue 5/9/17	Thu 5/11/17
Visit and Meet with Tazcom Team	Tue 5/9/17	Tue 5/9/17
Visit and Meet with East Peoria PD Team	Tue 5/9/17	Tue 5/9/17
Visit and Meet with Morton PD Team	Wed 5/10/17	Wed 5/10/17
Visit and Meet with Washington PD Team	Wed 5/10/17	Wed 5/10/17
Follow-Up Interviews with ETSB Stakeholders	Thu 5/11/17	Thu 5/11/17
Phase 4: Preliminary Report	Mon 5/15/17	Thu 6/1/17
Information Organization and Analysis	Mon 5/15/17	Thu 5/18/17
Report Writing	Fri 5/19/17	Fri 5/26/17
Staffing & Human Resources	Fri 5/19/17	Thu 5/25/17
Facility/Space Needs	Fri 5/19/17	Thu 5/25/17
Financing	Fri 5/19/17	Thu 5/25/17
Governance	Fri 5/19/17	Thu 5/25/17
Equipment	Fri 5/19/17	Thu 5/25/17
Distribute Draft Report for Client Review	Fri 5/26/17	Fri 5/26/17
Client Review Period	Fri 5/26/17	Wed 5/31/17
Review Draft Report with Tazewell ETSB - Conference Call/Webinar	Thu 6/1/17	Thu 6/1/17
Phase 5: Final Analysis and Plan	Fri 6/2/17	Thu 6/15/17
Incorporate Feedback from ETSB Review	Fri 6/2/17	Mon 6/5/17
Issue Final Report	Tue 6/6/17	Tue 6/6/17
Client Review Period	Tue 6/6/17	Mon 6/12/17
Review Final Report with Tazewell ETSB - Onsite	Thu 6/15/17	Thu 6/15/17

### F. ASSOCIATED COSTS

IXP proposes a fixed price for this project of \$69,750.00. The following invoice schedule is presented for your consideration:

35% at Contract Signing	\$24,412.50
35% at Delivery of Preliminary Report	\$24,412.50
30% at Delivery of Final Analysis & Plan	\$20,925.00

All prices are inclusive of travel and living costs and other customary business expenses such as printing, telephone charges, etc. All prices are exclusive of any State, County or City taxes or business fees that may be required to conduct business with Tazewell County, Illinois. Payment is due Net 30 days from date of invoice.

# APPENDIX A - RESUMES

# DANIEL MARTIN, PMP Delivery Executive



Dan Martin is IXP's Delivery Executive and has over 32 years of management experience, including 22 years within the IT industry and thirteen specifically within public safety. Dan has the demonstrated ability to develop large and complex requirements and designs, to implement and manage complex technologies spanning multiple disciplines, and to deliver within multi-disciplinary and multi-agency environments. In conjunction with his management and technical skills, Dan builds strong working relationships with both clients and team members, which greatly contributes to successful outcomes. Dan is a certified Project Management Professional (PMP) and has a lengthy history of delivering projects on-time and on-budget.

### RELEVANT EXPERIENCE

Village of Gurnee & City of Zion, II.: Executive Project Manager for a consolidation initiative for the Village and City that consisted of a comprehensive consolidation assessment and plan and grant application with the State of Illinois.

Lake County, II.: Project Manager for the County's ETSB Consolidation Study. Assisted the participating agencies to gain a better understanding of their current operations and the potential opportunities for shared services, shared systems or some form of consolidated operations.

North Texas Emergency Communications Center: Executive Project Manager for a four city Emergency Communications Center consolidation. Responsible for the management and delivery of a comprehensive plan to define, establish and turn-up a new ECC. We assisted with the establishment of the Corporation, the Board of Directors, Operations Advisory Committee and Technical Advisory Committee. Developed a complete set of job descriptions and assisted the HR departments with issues concerning salary and benefits. Currently developing a comprehensive set of SOPs.

Falmouth, MA: Dan served as the Program Integration Manager who was responsible for the coordination of the system integration and consolidation of dispatch operations for Police and Fire Services. He provided oversight of all project components: Governance, Operations, Technology and Facilities.

South Shore Regional Emergency Communications Center (SSRECC), MA: Project Management for a four city Emergency Communications Center consolidation. Responsible for the management and delivery of a comprehensive plan to define, establish and turn-up a new ECC. We assisted with the establishment of the Corporation, the Board of Directors, and Technical Advisory Committee. Developed a complete set of job descriptions and assisted the HR departments with issues concerning salary and benefits, collective bargaining and the hiring process. The creation of a comprehensive set of SOPs was completed. All technologies were sourced, procured, installed and turned up. A training program was developed which encompassed both operations and technologies for the new center.

<u>Danbury, CT:</u> Planned and managed the technology consolidation of the Danbury Police and Fire Departments into a single Emergency (ECC) Communications Center. The existing Danbury PD ECC was expanded and the desperate CAD systems were combined to accommodate consolidated dispatch.

<u>ChatComm, GA:</u> Planned and managed the technology refresh of mission critical systems within the live operations of the ChatComm Emergency Communications Center. This was accomplished with zero time to operations.

Fire Department of the City of New York, NY (FDNY): Provided Project Management and technical oversight of the integration of technologies for the FDNY HQ Operations Center. Worked with multiple vendors and contractors to build and turn up a state of the art 24 x 7 operations center housing both Fire and EMD command.

Grady Hospital Emergency Communications Center Relocation, GA: Developed System Requirements, Purchasing Specs and assisted with procurement cycle and migration of EMS Dispatch Operations move to new location. Developed TAP, detailed low voltage cable schedule, and cut-over schedule. Participated in weekly planning and construction meetings.

Fire Department of the City of New York, NY (FDNY): Performed an extensive review of the CAD requirements of the FDNY for CAD product analysis. This was then followed by a detailed review of the capabilities of a proposed replacement system. Developed and delivered extensive CAD system gap analysis for the FDNY.

<u>City of New York, NY:</u> Developed detailed Logging and Recording system requirements for NYPD and FDNY. As part of the Emergency Communications Transformation Project (ECTP) in New York City, successfully worked with multiple agencies with varying agendas to develop a single comprehensive set of system requirements.

<u>City of New York, NY:</u> Successfully managed the implementation of a Quality Monitoring system for NYC-311 which included both audio and screen capture for 575 agents in two locations.

#### CERTIFICATIONS/AFFILIATIONS

PMP - Project Management Professional

# DANIEL POSLUSZNY Director



Dan Posluszny is a Director with IXP Corporation. As a former Chief of Police, Dan led approximately 80 employees, both sworn officers and civilians. He has experience in government purchasing, finance and staffing. His education is in both criminal justice and leadership, management and policy for higher education. Dan is a graduate of the FBI National Academy and has been actively involved in all facets of emergency management operations and policy development. Dan has held leadership roles in the Mercer County, NJ Police Chief's Association having served two terms as President of the organization. He was the chairman of the New Jersey State Association of Chiefs of Police Policy Development and Evaluation Working Group. Additionally, Dan has experience in organization and administration of emergency medical service operations as well as fire department activities.

### RELEVANT EXPERIENCE

<u>Danbury, CT:</u> Dan served as the Project Manager for Danbury's transition to a consolidated dispatch center where he helped oversee the operations, technology and facility integration. He continues to project manage all of the 9-1-1 Telecommunicators staffed by IXP and provides services such as interviewing, vetting and hiring current staff, assisting with technology integration, and providing guidance and oversight. During implementation of the Danbury project, Dan provided weekly meetings with senior executives of both the police and fire department.

East Windsor, NJ: Serves as Project Manger for the East Windsor communications center where IXP staffs the center with nine full-time and four part-time employees. IXP provides police/fire/EMS services for the municipalities of East Windsor and Highstown, which is dispatched by the East Windsor Communications Center. Responsible for proper integration and operation of all technologies including CAD (both Spillman and Law Soft platforms), KML 9-1-1, recording and logging equipment, as well as administrative phones. Provides interaction and communication with administrators from both the East Windsor Police Department and the Hightstown Police Department on operations in the center.

Lawrence Township Police Department, NJ: As Chief of Police, Dan supervised 58 sworn officers and 22 civilian employees, which included budget and fiscal development and management of the Emergency Medical Services function as well as a key member of the Township Emergency Management team. Dan was involved in community outreach projects and had oversight of patrol, investigations, and evidence and records functions. He was involved in collective bargaining negotiations, planning and development for the Department including personnel, training, policy development and logistics. He maintained the oversight of construction and technology integration for the new police facility and implementation of managed services for the 9-1-1 Center and implemented new trunked radio system and coordinated several technology improvement projects including video surveillance and access control platforms.

Metropolitan Area Planning Council, Boston, MA: Dan worked as a Project Manager to evaluate and provide a roadmap for the consolidation of communication operations for five towns in the north-west suburbs of Boston.

<u>Union County, IL:</u> Dan developed a project plan to assist Union County with improving services in their communications center and examining the benefits of a consolidated communications center with several counties located in southern Illinois.

Rutgers University: Dan has been an Instructor of courses in Homeland Security and Crises Intervention.

### **CERTIFICATIONS/AFFILIATIONS**

- Past President Mercer County Association of Chiefs of Police
- Past Trustee Mercer County Police Academy
- Member New Jersey State Association of Chiefs of Police and committees: Chair, Policy Development, Evaluation
- Working Group, Testing
- Member International Association of Chiefs of Police
- Member Federal Bureau of Investigation National Academy Associates (National and New Jersey chapters)
- Member New Jersey Supreme Court Committee on Electronic Discovery
- Member Mercer County, NJ Radio Working Group

### EDUCATION

Ed.D, Doctor of Education in Educational Leadership, Seton Hall University, South Orange, NJ (2004) M.A., Administration and Supervision of Higher Education, Seton Hall University, South Orange, NJ (1996) B.S., Law and Criminal Justice, The College of New Jersey, Ewing Township, NJ (1992) A.A., Business Administration, Mercer County Community College, West Windsor, NJ (1985)



# PAUL HEATON Technical/Operational Consultant

Paul Heaton is a Technical/Operational Consultant with IXP and has over ten years of experience in law enforcement and public safety. He has the ability to coordinate and manage implementation of law enforcement software technology including Records Management Systems and Mobile Computing Technology. Paul also has experience in crime analysis, reporting technologies, covert electronic surveillance and mobile technologies. With IXP, Paul works with the customer to collect and document technology, infrastructure, operations, procedures, and all aspects of public safety installations in a complete an accurate manner. He conducts analysis of the existing customer environment and formulates recommendations for improvements, and assists in onsite implementations.

#### RELEVANT EXPERIENCE

Chattahoochee River 9-1-1 Authority, ChatComm: Backup Center Feasibility/Cost Analysis Study.

<u>City of Detroit, MI</u>: City of Detroit implemented a new public safety software suite. Responsible for business process identification and mapping for Detroit Police Department.

North Texas Emergency Communications Center: Provides project management support for a four community consolidation effort. Responsible for several technology and operational components as well as the procurement and oversight of the consolidation communications center.

City of Roswell, GA: Feasibility study/Cost Analysis for PSAP Consolidation or Technology Refit.

City of Dunwoody, GA: Transition of PSAP Services to Consolidated Center.

Navajo County, AZ: Business Case for PSAP Consolidation.

City of Addison, TX: Business Case for PSAP Consolidation.

City of Phoenix, AZ: Phoenix PD RMS RFP/Purchase.

City of Decatur, GA: Business Case for PSAP Consolidation and Project Oversight for PSAP Move.

City of Paradise Valley, AZ: Technology Refresh Roadmap for Police Department.

Drexel Heights Fire District, Tucson, AZ: PSAP Consolidation Transition Plan.

City of Sandy Springs Police Department: Research and Evaluation of Multiple Software Applications.

<u>City of Sandy Springs Police Department:</u> Records Management, Mobile Computing, and Field Reporting Applications Software Project.

<u>City of Sandy Springs Police Department:</u> Implementation and management of IP Camera Systems for Narcotics and Detectives Divisions.

<u>City of Sandy Springs Police Department:</u> Served on Regional Crime Analyst Network identifying crime trends and patterns.

Atlanta Police Department: Uniformed Patrol Officer.

### CERTIFICATIONS/AFFILIATIONS

- Certified State of Georgia Police Officer
- Certified Crystal Reports Software

#### EDUCATION

B.S., Individualized Programs, University of Toledo, OH (2002)



## MICHELLE KESSLER Consultant

Michelle is a Consultant with IXP Corporation who brings over 29 years of law enforcement experience to IXP. With an impressive background in senior-level police communications management and records management administrative experience, Michelle brings a combination of skills and experience to assist municipalities, corporations, utilities, colleges and universities with their communications and administrative challenges. Michelle joined IXP after retiring from the City of Phoenix Police Department in June of 2014 where she had been employed since 1985.

#### RELEVANT EXPERIENCE

Village of Gurnee & City of Zion, IL: Subject Matter Expert for a consolidation initiative for the Village and City that consisted of a comprehensive consolidation assessment and plan and grant application with the State of Illinois.

Lake County, IL: Michelle was responsible for the Lake County Emergency Telephone System Board (ETSB) Consolidation Study, to include the evaluation of all Communication sites within Lake County. Interaction with the various teams and organizations to include ETSB boards, PD and Fire agencies to incorporate information from legislative changes within the State of Illinois. Coordination of meetings and presentations of material gathered to include staffing and financial model.

Galveston County Sheriff's Office Communication Center, TX: Michelle was part of the consulting team that conducted an assessment for the Galveston Sheriff's Office to help determine proper staffing levels and aid in the best communications with all entities associated with the County Sheriff's Office. She assisted in providing tailored solutions to improve the County's emergency communications.

<u>City of Detroit, MI</u>: The City of Detroit implemented a new public safety software suite. Michelle was the Records Management Business Analyst responsible for documenting existing workflows and processes in the ongoing RMS implementation for the Detroit Police Department.

Phoenix Police Department, AZ: During her time with Phoenix PD, Michelle held the titles of RMS Administrative Manager, Communications Shift Manager, Communications Administrative Supervisor, Communications Supervisor, and Communications Operator. She managed the installation of technical systems necessary for 9-1-1 and radio operations to include the Bureau's first computer based telephone system. She also conducted a staffing study/audit of the Peoria Police Communications personnel and implemented the Bureau's first complete re-bid process, which is still in use today. Michelle established a base study for calculating staffing needs. This study was incorporated into the Association of Public-Safety Communications Officials International (APCO) project RETAINS, which is APCO's method for helping agencies determine proper staffing levels. A member of the Department's Infrastructure Committee, Michelle also collaborated with Information Technology Bureau on common issues. She received numerous commendations and recognitions for outstanding performance for special projects and job functions. Michelle was also a member of the RMS Project Management Team assisting in all aspects of the coordination, selection, and implementation of a new commercial off the shelf Records Management System.

#### CERTIFICATIONS/AFFILIATIONS

- Past Chapter President of the Association of Public-Safety Communications Officials (APCO)
- National Emergency Number Association (NENA)
- Cooperative Law Enforcement Award; Shannon's Law Education and Enforcement Operation Steering Committee
- Introduction to Law Enforcement Inspections and Audits, 2010

- West Point Leadership, 2005
- Introduction to Crime Analysis, 2003
- AZPOST Introduction to Emergency Management, 2003
- Enlightened Leadership, 2001
- Cooperative Law Enforcement Award
- Shannon's Law Education and Enforcement Operation Steering Committee

### EDUCATION

Webster University, Masters of Public Administration, 2009 Arizona State University, Certified Public Manager, 1993 Northern Arizona University, Bachelor of Applied Science, Interior Design, 1981



# **MissionCriticalPartners**

Your Life Safety Mission Is Our Passion













### **Tazewell County PSAP Consolidation**

Copy 1 of 15

SUBMITTED MARCH 30, 2017 TO: City of Tazewell County Emergency Telephone System Board



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### INTRODUCTION

March 30, 2017

Tazewell County ETSB Attn: 9-1-1 Consolidation 101 S. Capitol Street Pekin, IL 61554

Re: Request for Proposal – Tazewell County PSAP Consolidation

To Whom It May Concern:

Mission Critical Partners, Inc. (MCP) appreciates the opportunity to provide this proposal for consulting services to form a consolidation plan for the Public Safety Answering Points (PSAPs) within Tazewell County's (County) 9-1-1 System. The MCP team serves as an independent agent with considerable experience in local government management roles, and extensive experience in performing public safety consulting services for state, local, and federal government entities.

As required, we are submitting the proposal in the following formats: Fifteen (15) printed copies and one (1) exact digital copy in PDF format.

Mission Critical Partners has identified Rob Sterner, as the point of contact and authorized representative for this proposal response. His contact information follows:

Rob Sterner, Consultant

Cell: 717-324-7732

Mission Critical Partners, Inc.

Office: 814-753-4387

690 Gray's Woods Blvd.

Fax: 814-217-6807

Port Matilda, PA 16870

Email: robsterner@mcp911.com

I, John L. Spearly, Director of Administration of Mission Critical Partners, am the authorized representative signing and submitting this proposal on the Company's behalf. I may be contacted at 888-862-7911 or JohnSpearly@mcp911.com.

On behalf of our entire team, we stand behind the Tazewell County ETSB to serve as your partner and your advocate.

Sincerely.

John L. Spearly

**Director of Administration** 



### COMPANY ORGANIZATIONAL CAPABILITIES

### ABOUT MISSION CRITICAL PARTNERS

Mission Critical Partners helps transform our clients' public safety systems and operations at every stage of their lifecycle: design, procure, build or manage. We provide consulting and lifecycle management services that enable clients to make lasting improvements and achieve their goals. Our clients view us as much more than a consultant, instead, they see us as a long-term advocate that adds significant value to their organization.

#### WHO WE ARE

A consulting firm focused on all aspects of public safety communications, Mission Critical Partners is comprised of more than 80 subject-matter experts who bring decades of public safety experience to every project. Our work is defined by the quality of our people. For this reason, we invest heavily in hiring the best talent to join our award-winning team. We are committed to listening, and to being responsive, consistent, accountable, reliable, effective and visionary.

Our consultants include former public safety managers, project management professionals, and technology, forensic and policy specialists. They joined Mission Critical Partners and share our common value—because the mission matters.

### WHAT WE DO

We bring a global perspective of the entire public safety communications network and its operation to every engagement. A firm with a comprehensive and wide-ranging focus on public safety, our clients rely not only on our depth but also our breadth. Our approach is further strengthened by an understanding of how policy, financing, governance, operations, and technology come together to solve each client's complex challenges.

We serve a broad mix of municipal, county, state and federal organizations of varying sizes across North America—with offices in Pennsylvania, North Carolina, and Texas—and specialize in the following categories:

- Executive consulting and strategic planning
- Networks and Next Generation 9-1-1
- · Radio, wireless and broadband
- Facilities and operations

- Shared services and consolidation
- Technology implementation
- · Forensics and systems analysis
- Lifecycle management services



### OPERATIONS AND FACILITIES PRACTICE TEAM

Mission Critical Partners brings more than 30 years of experience in planning, designing and integrating mission critical technology and operations into new and renovated facilities. We are passionate about creating environments, processes and systems with our clients; enabling them to excel at their life safety mission.

Our Operations Facilities Practice team applies hands-on experience with public safety answering points (PSAPs), emergency operations centers (EOCs), network operations centers, security and call centers to develop a solution that best fits the client's needs **because the mission matters**. We are familiar with the requirements of mission critical facility architectural and engineering design and are highly qualified to manage the many complexities that arise with each building project. We also apply our understanding of all elements of the facility construction

including site development, electrical, mechanical, structural, security and technology to coordinate systems install, acceptance, training and operational transition.

The focus of every project is to optimize the functional use of the space for operational integrity. MCP works closely with the client to develop the technology solutions, migration schedule and operations floor layout.



### SHARED SERVICES AND CONSOLIDATION

In today's market, everyone is asking, "How can we do more with less?" Communications centers are impacted by this question as budgets become tighter, technology matures, operational demands become more complex and training increases. Many are finding that consolidation is a solution to consider. The Mission Critical Partners team has extensive experience with consolidation efforts in past public sector roles and as consultants.

We recognize that elected and public safety leaders strive to provide the most effective and efficient emergency response system possible. Ultimately, the delivery of quality life safety services is the achievable objective. Mission Critical Partners develops a collaborative approach with our clients to assess the opportunity for operational and administrative efficiencies through potential consolidation, collocation or organizational change. The MCP team's impartial and even-handed approach has a proven track record of success.

Today's economic realities require a thorough program analysis to define a future path of economizing while effectively delivering service. Appropriately applied, consolidation or collocation can achieve operational efficiencies through systemic interoperability via staffing, scheduling, technology, training and reduction in systems cost basis.

Mission Critical Partners appreciates the necessary balance required of seemingly competing objectives with operations, organizational, technology, fiscal, human resources, and governance



issues. The variables and constraints associated with each are carefully weighed to develop an approach with a lasting solution. MCP is sensitive to the sense of ownership and loyalty each community and agency has with a local communications center. We honor the history of service while providing an independent view of how the community is best served by advancing to the future. To ensure a comprehensive transition that is as smooth as possible, we also provide assistance with the migration efforts and the many challenges inherent in combining organization, facility, technology and operational resources.

### **FACILITY AND TECHNOLOGY DESIGN AND INTEGRATION**

Mission Critical Partners is familiar with the requirements of mission critical facility architectural and engineering design and we are highly qualified to manage the many complexities that arise with each building project. We also apply our understanding of all elements of the facility construction including site selection, site development, electrical, mechanical, structural, security and technology to coordinate systems install, acceptance, training and operational transition.



The focus of every project is to optimize the functional use of the space for operational integrity. MCP works closely with the client to develop the technology solutions, migration schedule and operations floor layout that best meets their needs now and in the future.

Our team has a profound care for our clients, an indefatigable work ethic, and a proven record of success; we utilize industry leading intellectual capital to provide highly responsive, customized, solutions and strategies for our clients.

#### **EXECUTIVE CONSULTING SERVICES**

MCP partners with clients to develop customized technical and operational solutions for life safety communications because the mission matters. Our staff has extensive experience serving in public sector and public safety management roles and applies that depth of real-world knowledge to advocating for our clients. Through our first-hand experience, we have earned the reputation for being accountable, prudent, persistent, progressive and reliable problem solvers.

Mission Critical Partners provides services that are initiated at a strategic level. An integral part of our executive level consulting is providing master planning services. Our team of policy specialists collaborates with clients to create comprehensive plans that help direct decision making in the public safety sector. In developing a strategic plan, MCP incorporates master planning, organizational structuring, hiring assistance, fiscal planning, operations and technology and policy solutions.

By seeking to understand and assembling a strategy that serves as a guide, Mission Critical Partners is able to execute a comprehensive, tactical approach that addresses all elements of the client's sphere of influence. Our team directs its collective energy on understanding the full scope of the client's



responsibility and objectives. We evaluate the unique challenges that stand in the way of achieving success. Mission Critical Partners mitigates those challenges by leveraging policy, as well as human, technological and fiscal assets to develop a sustainable solution.

Our clients are responsible for delivering reliable service 24 hours a day, seven days a week to first responders and the public while operating with limited resources. In recognition of the need to achieve more with less, Mission Critical Partners works to put the client in a position to do more with more. This means structuring organizations, programs and projects for available grant funding through policy development, technology and appropriate fiscal planning.

#### RADIO WIRELESS SERVICES

Mission Critical Partners has a staff of highly qualified radio experts with varied backgrounds ranging from technicians in large municipal radio systems to persons holding electrical engineering degrees. However, all of our staff have one thing in common – first-hand knowledge and experience as public safety users of two-way radios. This unique combination of experience and education brings you a team dedicated to the success of your project.



Our team approaches your project with only one task in mind – your success. This is accomplished through our unique approach that determines your operational needs and designs a radio network around your needs and budget.

Many agencies have operational constraints because of the design and operation of their radio network. The network should serve public safety users, as well as be another tool to keep our first responders and communities safe. The protection of life and property begins with a single dispatch. From there, the radio system is the link that connects and delivers your response and services to your citizens. It is far too important to trust to anyone other than your partner, your advocate, and your agent for innovative solutions because the mission matters. Mission Critical Partners' staff works tirelessly to provide the guidance necessary for our clients to obtain the most capable, reliable and affordable communications systems, custom designed for their needs and budgets. Projects include, but are not limited to, operational and technical assessments, procurement support, Federal Communications Commission (FCC) licensing, performance acceptance testing and FirstNet support.

#### **NETWORK 9-1-1 SERVICES**

Mission Critical Partners staff has extensive experience with planning, designing, procuring, negotiating and implementing all Next Generation 9-1-1 (NG9-1-1) call delivery and processing elements. The public safety answering point (PSAP) environment will continually evolve with new technologies, processes and expectations. Mission Critical Partners' goal is to help our clients implement resilient and effective future-focused solutions that will enhance emergency response and result in better outcomes for public safety because the mission matters.





The MCP approach includes funding models, system life-cycle analysis, objectives, incident processing approach, network resources, and governance opportunities, in order to establish a thorough understanding of the unique PSAP environment.

Mission Critical Partners develops a plan for incident processing in the PSAP, incident dispatch and data management. MCP develops a comprehensive Master Plan for the agency or region and a conceptual design to NG9-1-1 deployment. The Master Plan considers all options and establishes timely deployment by incrementally upgrading technology and recommending policy, funding and governance modifications. Projects include, but are not limited to, master planning, design and procurement support of a wide variety of communications networks, including Internet Protocol (IP) based networks, such as Emergency Services IP networks (ESInet).

#### LIFECYCLE MANAGEMENT SERVICES

Mission Critical Partners helps our clients manage and protect their communications systems and facilities long after the project closes. Our holistic approach to managed services ensures that clients realize maximum value from their investments throughout their lifecycle, while remaining confident that their system is running at peak performance.

Clients partner with us so that they can focus on the strategic aspects of public safety by offsetting activities not core to their mission. We provide solutions that achieve our client's goals, not their vendors, by applying a technology-independent approach.

With Mission Critical Partners' help managing their networks and operations, our clients realize simplified, protected, cost-effective, and interoperable communications networks that are sustainable. Our objective is to help them drive return from their investments while reducing their operating expenses.

We provide a broad portfolio of solutions that are natural fit after we've consulted with a client to plan, procure or implement including the following services:

- Network management services
- Building and site management services
- Data management services



#### COMPANY STAFF QUALIFICATIONS

MCP recognizes that as a consulting firm, our corporate capabilities are directly dependent on the capabilities and experience of our staff. MCP has assembled the most experienced and knowledgeable teams in the country. A synopsis of the resumes highlighting the requested qualifications are provided below.

Mission Critical Partners' experience with 9-1-1 operations, consolidation, facilities and technologies goes beyond a simple "working knowledge" level of understanding. Our experts are working every day to improve PSAP operations and implement new technology solutions for our clients across the nation. We are conducting planning, system design, reviewing vendor proposals, assisting with implementation and ensuring that systems meet or exceed client requirements. Our technologists and operations consultants stay abreast of current offerings and changes within the community, and we share this knowledge and insight with our clients.

MCP has identified the key team members from our staff that we plan to assign to this important project. Each of these team members brings a unique skill set and depth of experience in mission critical automated systems in particular, but additional resources and subject matter experts (SME) are available as we are a full-service firm focused on all aspects of public safety in and around the 9-1-1 center.

Additionally, the MCP Team includes **more than 85 subject matter experts** across all disciplines involved in this project. The MCP Team is unmatched in the industry, and can call on resources throughout the company to ensure that the schedule is met or exceeded and that no single resource is over-tasked.

Mission Critical Partners intends to use its staff to fulfill the requirements of this engagement; therefore, no sub-contractors are anticipated. All staff members identified have sufficient hours available to support this project in addition to their assignments supporting other projects.

Unlike other competitors that have experienced retraction and frequent loss of staff, Mission Critical Partners is a growing firm and has sustained consistent staffing resources.

# Robert H. Sterner, Jr., Vice President

Client Manager

Mr. Rob Sterner, a company Vice President with responsibility for all projects in the State of Illinois, is proposed as the Client Manager. He will work with the Project Manager, Brian Melcer, and will jointly be responsible for the success of this project. The role of the Client Manager is to ensure that the MCP team is meeting your expectations and that the project is successful. Rob brings 14 years of public administration and public safety experience together with 7 years of executive level consulting experience. As a county project director he managed a \$68M upgrade to the entire public safety infrastructure in York County, Pennsylvania, which included a 50,000 SF Facility, 24-site P25 radio system and 13 site alphanumeric paging system, and CAD/Mobile and RMS implementation.





Additionally, as a consultant his experience includes dozens of additional PSAP assessments, procurements, and implementations of multiple systems and he has worked with all members of the project team.

#### **Brian Melcer**

Project Manager/Operations SME

Brian Melcer started in the 9-1-1 industry in 1991 as a telecommunicator and has held the roles of Director of Communications, Deputy Director of Public Safety and ultimately as Director of Public Safety. He served as the Director of Public Safety for 13 years, overseeing several transformational projects including the complete rewrite of the County's operational policies, training program, new hire recruitment program and quality assurance program. From 2013-2016, he oversaw a \$20 million capital upgrade program, replacing the County's telephone system with a regional shared NG9-1-1 ready call handling solution, replacing the County's analog radio system with a P25 Phase II trunked radio system, and constructing a new PSAP and EOC. He has significant experience in program review, budgeting and operational analysis, consolidation of systems at the local level as well as regionalization of shared resources.

#### Steve M. Haberman, ENP

Lead Technology and Facility Specialist

Mr. Haberman is a Technology Specialist with an extensive background in public safety, emergency communications and EOC operations. At MCP, Steve brings over 20 years of public safety experience having served as a shift commander and communications supervisor. As a 9-1-1 shift commander at Allegheny County, PA Emergency Services, Steve provided support for the County's PSAP consolidation project. Steve also provided support to the Pennsylvania Emergency Management Agency (PEMA) by providing a technical services review and analysis for PEMA's Next Generation 9-1-1 project. Steve is also the current Project Manager for the Fairview Heights and O'Fallon, Illinois PSAP Consolidation and served as the lead technology consultant during all phases of that project. Steve is well versed in all PSAP technologies with particular expertise in shared technology, consolidation and system cutover planning and implementation.

#### Richard B. Harrison, ENP

PSAP Operations/CAD Specialist/Fire Service SME

Mr. Rick Harrison, is proposed as PSAP Operations, fire services SME and CAD Specialist. Rick brings more than 35 years of telecommunications experience in the public safety sector. His accomplishments include managing projects such as a CAD system development that resulted in the development of a national CAD product, initiating a text-to-911 program, and implementation of a P25 radio project. Rick has served as PSAP Operations Manager, Primary Supervisor, Assistant Supervisor and Dispatcher for Police, Fire and EMS. Additionally, Rick has served in the fire service for 31 years including 5 as the chief of a busy suburban department. Rick's project role will be to provide assistance during the assessment phase to help identify PSAP operational requirements, attend stakeholder meetings and observation sessions.





## Louisa Rand Lake, ENP

9-1-1 Operations and Staffing SME

Ms. Lake has over 25 years of experience in the Public Safety industry. Louisa has served as the supervisor of Guilford Metro 911 where, during the consolidation of City and County operations, Louisa revised policies and procedures necessary for a consolidated center. At Mission Critical Partners, her experience as a Public Safety Consultant includes operational analyses of 9-1-1 Communications Centers, including staffing analyses and policies and procedures, quality assurance/quality control, training, supervision, call take and dispatch procedures, protocol usage, hiring and retention practices, salary reviews, and consolidation.

# Jeffrey Lupinacci, ENP RCDD/DCDC

Mr. Lupinacci is a senior telecommunication and network design professional with extensive experience in multiple technologies and infrastructures. As a Project Manager/Technology Specialist at Mission Critical Partners, Jeffrey is a registered Communications Distribution Designer (RCDD) and Data Center Design Consultant (DCDC). Jeffrey has recently been involved in several consolidation efforts in North Carolina including Dare County, Burke County, and Rockingham County. His experience includes needs assessments, programming, systems specifications for various technology components, systems technology and facility design covering security.

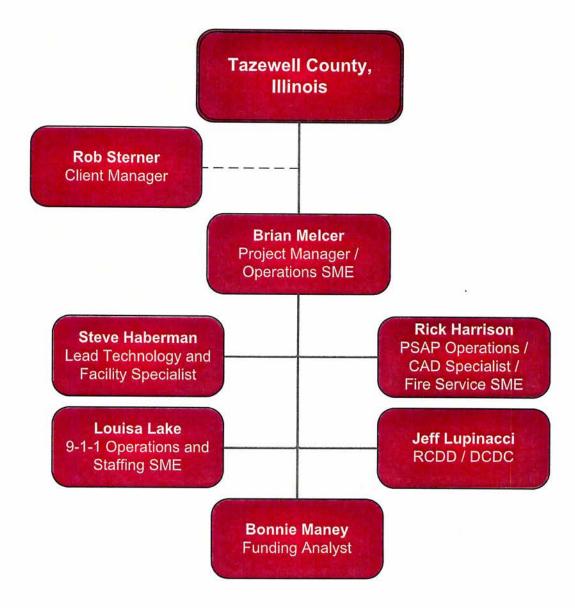
#### **Bonnie Maney**

Funding Analyst

Ms. Maney is a Project Manager and Communications Consultant with extensive communications leadership, project management, emergency management, information sharing and technology experience throughout the U.S. at all levels of government. At MCP, Bonnie applies her experience to manage program budgets, coordinate grants and contracts and prepare deliverables. Bonnie's experience includes work with the National Capital Region Study for Regional Next Generation 9-1-1 Design and has delivered technical services under the U.S. Department of Homeland Security Office of Emergency Communications Interoperable Communications Technical Assistance Program (ICTAP). Bonnie has been closely involved with financial modeling and governance models for the O'Fallon and Fairview Heights consolidation and will provide similar support for the Tazewell County project.



# **ORGANIZATIONAL CHART**



MCP provides clients with access to Corporate Leadership, Program Managers, Project Managers, and exceptional Operational and Technical Specialists.

#### RESUMES

Resumes and qualifications are provided on the following page.







Robert H. Sterner, Jr. Vice President of Business Development Mission Critical Partners

#### Industry Experience 25 years

#### Education

B.A., Government/Public Administration, York College of Pennsylvania

#### **Associations**

National Emergency Numbers Association (NENA)

Association of Public Safety Communications Officials (APCO) Rob provides executive level consulting services involving upgrades to a multi-million dollar public safety communications infrastructure projects, grant identification and writing, contract management, and analyzing federal and state legislation and policies that impact public safety. He has researched and developed new public safety and communication's technology services to assist clients in state and county government markets. Rob is a proven communicator who maintains direct contact with public safety clients to resolve project issues. Rob has also served as a key staff member in the U.S. House of Representatives and Pennsylvania Senate.

#### Professional Experience

- Client Manager of public safety projects ensuring client expectations are met for client success
- Project Manager for various projects to include PSAP assessments, procurements, and implementations of multiple systems
- · York County, Pennsylvania—Deputy County Administrator, Director
- Emergency Services Center Project
- Pennsylvania Department of Community and Economic Development, Governor's Center for Local Government Services—Local Government Policy Specialist
- Pennsylvania Department of Labor and Industry
  - Executive Assistant for Safety and Labor Management Relations
  - Division Chief, Bureau of PENNSAFE
- U.S. House of Representatives, Committee on Education and the Workforce— Oversight/Professional Staff
- · Senate of Pennsylvania—Legislative Assistant
- United States Army Reserve—Nuclear Biological and Chemical Warfare Non-Commissioned Officer

#### Representative Project Experience

- State of Kansas—800 MHz Radio System Study, Client Manager
- Adams County, Colorado—PSAP Assessment, Client Manager
- Cities of O'Fallon and Fairview Heights, Illinois—PSAP Consolidation Assessment, Client Manager
- Orange County, Virginia—PSAP Assessment, Client Manager
- Northern Virginia Emergency Response System (NVERS)—Client Manager
  - Northern Virginia Fire and EMS Assessment, Client Manager
  - National Capital Region (NCR) Computer Aided Dispatch (CAD) to CAD Strategic Plan
- Carbon County, Pennsylvania—Radio Equipment Maintenance Procurement Support, Project Manager
- Emergency Services IP Network (ESInet) Project (10 counties and cities)— Northeastern Pennsylvania
- Customer premises equipment (CPE) replacements—
  - Blair and York Counties, Pennsylvania
- Land Mobile Radio (LMR) Projects
- Adams County, Pennsylvania
- Armstrong County, Pennsylvania
- Berks County, Pennsylvania
- Bucks County, Pennsylvania
- o Indiana County, Pennsylvania
- Schuylkill County, Pennsylvania
- Union County, Pennsylvania
- York County, Pennsylvania—Deputy County Administrator Director
  - Emergency Services Center Project—Directed comprehensive upgrade of the York County's public safety communications infrastructure (i.e. new emergency services center facility,24 site P25-LMR, CPE, CAD)

# **MissionCriticalPartners**





Brian R. Melcer Program Manager Mission Critical Partners

#### Industry Experience 25 years

#### Education

B.S., Human Resources Geneva College

#### Certifications

FF-I, FF-II, Fire Instructor I, Hazardous Materials Awareness/Operations, Vehicle Rescue Technician, Hazardous Materials Technician, Advanced Emergency Management Coordinator

#### Associations

Association of Public Safety Communications Officials (APCO)

International Association of Fire Chiefs (IAFC), Volunteer & Combination Officers Section (VCOS)

National Emergency Number Association (NENA), PA Past President

Pennsylvania Keystone Chapter Fire Service Instructors Brian brings extensive experience of public safety leadership and project management experience to MCP. He served as a Public Safety Director overseeing million dollar projects to include a countywide P25 radio system implementation and the construction of a new 9-1-1 and emergency operations center (EOC). Brian has a clear understanding of the aspects of public safety that lead talented teams to successful outcomes. He serves as MCP's Program Manager for Western Pennsylvania Region 13 Task Force projects.

#### **Professional Experience**

- Lawrence County Pennsylvania, Director of Public Safety
  - Reorganization of Emergency Management and 9-1-1 functions into one department
  - Construction of prime tower site
  - Oversight of capital improvement program:
  - \$13 million countywide P25 VHF Phase II radio system:
    - Best Value Procurement selection process
    - Eight site system (three new construction, five collocation sites)
    - Microwave loop backhaul system with fiber
    - Radio infrastructure, subscriber equipment
  - Construction of new 9-1-1 and emergency operations center:
    - 9-1-1, EOC and office complex
    - Garage facility
  - Led 12-county regional Airbus CPE solution, served as WestCORE committee chair from inception to implementation phase
  - Supported procurement of a regional CAD solution with multiple counties
  - County delegate on Western PA Region 13 Task Force
  - Served as chair of committee for PA Region 13 ESInet
  - Implementation of county fire academy
- Firefighter/EMT, Neshannock Township Volunteer Fire Company, Pennsylvania since 1989, Deputy Chief since 2002





Steven M. Haberman, ENP **Technology Specialist** Mission Critical Partners

#### **Industry Experience** 20 years

#### Education

B.S. Business Administration –Management Information Systems, Indiana University of Pennsylvania

#### Certifications

**Emergency Number** Professional (ENP)

National Incident Management System/ Incident Command System (NIMS/ICS)-100, 200, 300, 400, 700, 800 courses

Pennsylvania Emergency Management Agency-PEMA Basic Certification

**Data Processing Certificate** 

#### Associations

National Emergency Number Association (NENA)

Association of Public Safety Communications Officials (APCO)

Southwest Regional Terrorism Task Force. Communications Committee

Scott Township, Pennsylvania, Local EMA Coordinator and Deputy

Steve is a Technology Specialist that has served as a shift commander and communications supervisor in emergency management and 9-1-1 services. Steve is skilled in emergency communications and emergency operations center (EOC) operations with a clear understanding of the aspects of public safety that lead talented teams to successful outcomes.

#### **Professional Experience**

- Allegheny County, Pennsylvania Department of Emergency Services
  - 9-1-1 Shift Commander
  - Mobile Command Post project design and support team
  - Radio interoperability project coordinator using Raytheon gateway solutions
  - Project Manager, Emergency Notification Systems
  - Southwest Regional Counter Terrorism Task Force, Communications Committee
    - Regional Communications Planning and Exercise support
    - Communications Unit Leader and Pennsylvania State 800 Radio Project Specialist
    - Project Manager, Regional Video Conferencing IP network deployment
- Pittsburgh International Airport, Pennsylvania-Operations Coordinator, Airfield Operations-Responsible for ensuring that the conditions and safety of the airport were maintained for compliance and preparedness in accordance with federal government and local operational standards, participated in coordinating emergency response to aircraft alerts and emergencies

- Lawrence County, Pennsylvania—Project Manager and Technical support for county-wide P-25 VHF trunked radio system, broadband network project and new EOC construction project
  - Procurement, vendor selection and implementation support
- Armstrong County, Pennsylvania—Project Manager and Technical support for county-wide 800 megahertz radio system, Broadband Network project and new **Emergency Operations Center construction project**
- Butler County, Pennsylvania—Project Manager for Radio Communications Assessment and Tower Relocation and new P-25 Radio System procurement
- Pennsylvania Emergency Management Agency (PEMA)—Technical support for state-wide PSAP inventory of 69 PSAPs
- Pennsylvania Emergency Management Agency (PEMA)-Technical services review and analysis for Next Generation 9-1-1 project
- City of Parma, Ohio-Technical support for PSAP facility
- Cities of Fairview Heights/O'Fallon, Illinois-Project Manager and Technical support for PSAP consolidation study and financial impact study relocation project evolving into a consolidated center
- Allegheny County, Pennsylvania—Enhanced 9-1-1, PSAP consolidation project support
- Moon Township, Pennsylvania—Project Manager for Police Communications Assessment
- Pennsylvania, Regional Shared Services PSAP Assessment—Project Manager:
  - Allegheny County
  - Armstrong County
  - Beaver County
  - Beaver County
  - Cambria County
  - Fayette County
  - Greene County
- Indiana County
- Lawrence County
- Somerset County
- Washington County
- Venango County





Richard B. Harrison, ENP Technology Specialist Mission Critical Partners

#### Industry Experience 37 years

#### Certifications

Emergency Numbers Professional (ENP)

Certified Pennsylvania 9-1-1 Supervisor

Emergency Management Certification

#### **Associations**

National Emergency Number Association (NENA)

Association of Public Safety Communications Officials (APCO)

South Central Task Force Communications Sub-Committee

Board Member Lancaster County Fire Chiefs—Present Treasurer

Lancaster City—County Crime Stoppers

Richard brings telecommunications experience in the public safety sector. His accomplishments include managing projects such as a computer aided dispatch (CAD) system development that resulted in a national product, initiating a text-to-9-1-1 program and implementation of a Project 25 (P25) radio project.

#### **Professional Experience**

- · Lancaster County, Pennsylvania—County-Wide Communications
  - Served as Operations Manager; Primary Supervisor; Assistant Supervisor; Dispatcher—Police, Fire and EMS
  - Oversaw all PSAP radio room supervisory staff including hiring and termination
  - Managed PSAP daily operations and development of policy and procedure
  - Planned and oversaw PSAP move to another location
  - Developed Field Communications vehicle and subsequent policies for response
  - Assisted in the development of three different CAD systems
  - Assisted in the delivery of a texting program to 9-1-1 through Crime Stoppers initiated prior to text-to-9-1-1 being implemented
  - Handled complete renovation of a main 9-1-1 center including procuring furniture and designing the room layout to best fit the needs of staff
  - Assisted with the rebuild of a back-up center which is a complete functional center
  - Supported P25 radio system project from development of infrastructure to subscriber equipment to code plug development

- Pennsylvania Emergency Management Agency (PEMA)—Supported data gathering and reporting for statewide PSAP assessment
- PEMA—Next Generation 9-1-1 Support Project
- Montgomery County, Pennsylvania—Technology Project Management for law enforcement RMS
- Hillsborough County, Florida—Fire and Rescue Department CAD system assessment
- Durham, North Carolina—Police Department Headquarters Complex relocation
- Pasquotank County, North Carolina—Radio system assessment and coverage testing
- Northern Virginia Emergency Response System (NVERS)—Fire and EMS assessment
- Orange County, Virginia—Emergency communications consolidation assessment
- City of Denton, Texas—Organizational assessment of PSAP
- Adams County, Colorado—PSAP assessment





# Jeffrey Lupinacci, ENP, RCDD/DCDC

Project Manager/ Technology Specialist Mission Critical Partners

#### Industry Experience 32 years

#### Education

B.S. Industrial Technology, Electrical Systems, Central Connecticut State University

#### Licenses/Certifications

Registered Communications Distribution Designer (RCDD)

Data Center Design Consultant (DCDC)

Emergency Numbers Professional (ENP)

#### Associations

Building Industry Consulting Service International (BICSI)

National Emergency Numbers Association (NENA) Jeff brings RCDD and DCDC certifications to client projects. He is a senior telecommunication and network design professional with experience assessing and meeting customer requirements in a variety of projects and industries. With demonstrated success in multiple technologies and infrastructures, Jeff is recognized as a hands-on professional team leader working to ensure customer satisfaction.

#### **Professional Experience**

- Design, estimating and project management support of data centers and structured cabling systems (SCS)
  - Developed bid specifications and drawings, and RFPs
  - Consultation and technology systems architecture
  - Systems testing and commissioning
  - Configuration implementation of Avaya Converged Communications Solutions, PBX and voice mail systems
  - Telecommunications project management
  - Certified designer of cabling systems by Hubbell, Leviton, TE Connectivity NET-Connect, and Panduit
- Technical resource and support for business development, marketing and construction management
- Produced telecommunications plans in AutoCAD software, specs and as-built drawings
  - Implementation of integrated services digital network (ISDN) video conferencing networks
  - Conversion of corporate wide area networks (WANs) and private networks
- Expertise in:
  - WiFi, WAN and LAN connectivity
  - Voice over Internet protocol (VoIP) and session initiation protocol (SIP)-based systems
  - Security and video systems

- Pennsylvania Emergency Management Agency (PEMA) New Headquarters— Design of telecom, security, DAS and A/V systems cable infrastructure design as part of the Architectural Design Team
- Southeastern Pennsylvania Regional Task Force—Design and implementation of Emergency Services IP Network (ESInet) for the transport of emergency services traffic (voice, data, video)
- Burke County, North Carolina—PSAP Consolidation/New Facility—Developed systems specifications for various technology components, and services associated with the construction of the new facility
- Rockingham County, North Carolina—PSAP Consolidation/New Facility— Participant in the programming, needs assessment and facility design covering security, telecommunications, systems technology, and its operationalization
- Dare County, North Carolina—Three-county 9-1-1 PSAP consolidation; programming and feasibility study; grant application support
- Shelby/Memphis County, Tennessee—Technology support for PSAP Renovation
- Port Authority of Allegheny County—Installed VoIP with integration to emergency systems
- Iredell County, North Carolina—Emergency Communications Center
- Fayetteville, North Carolina—PSAP Co-Location Study
- Durham, North Carolina—Police Department Headquarters Complex





Louisa Rand Lake, ENP Public Safety Consultant Mission Critical Partners

#### Industry Experience 26 years

#### Education

B.A. Biology, St. Andrew's Presbyterian College, North Carolina

#### Certifications

Emergency Numbers Professional (ENP)

ICS 100, 200, 300, 400, 700, 800

IAED EFD, EPD, EMD

## Associations

National Emergency Numbers Association (NENA)

**NENA Instructor** 

Louisa, beginning in the Police Department as a telecommunicator, progressed into a training role and subsequently transitioned into a supervisory position for the Police Department's Emergency Communications Division for the City of Greensboro, North Carolina. During the consolidation of city and county operations, Louisa revised policies and procedures necessary for a consolidated center. She brings expertise in operations, CAD and CALEA accreditation. Louisa is also a NENA instructor for staffing and policy development.

#### **Professional Experience**

- Consultant—Conducted operational analyses of 9-1-1 communications centers, including staffing analyses and policies and procedures, quality assurance/quality control, training, supervision, call take and dispatch procedures, protocol usage, hiring and retention practices, salary reviews and consolidation initiatives
- Technical Editor—Edited reports, documents, correspondence, and presentations; performed quality assurance/quality control on reports and projects

- Consultant
  - Richmond County, North Carolina
  - North Central Texas Council of Governments (NCTCOG)
  - City of Fayetteville and Cumberland County, North Carolina
  - Martin County, North Carolina
  - Mitchell County, North Carolina
  - City of Charlotte, North Carolina
  - Wayne County, North Carolina
  - Dare County, North Carolina
  - Allegheny County, Pennsylvania
  - Alachua County, Florida
  - Pueblo County, Colorado
  - Wayne County, New York
- Technical Editor
  - Federal Emergency Management Agency (FEMA)
  - Chemical Stockpile Emergency Preparedness Program (CSEPP)
  - 。 U.S. Department of Transportation, National 9-1-1 Program
  - Pennsylvania Emergency Management Agency (PEMA)
  - State of Missouri
  - Kansas Association of Counties
  - o Plano, Texas
  - Kaufman County, Texas
  - Allegheny County, Pennsylvania WestCORE
  - Region 13, Pennsylvania Customer Premise Equipment Procurement and WestCORE
  - Burke County, North Carolina Consolidation
- PSAP Needs Assessment
  - Alexander County, North Carolina
  - Alleghany County, North Carolina
  - Adams County, Colorado
  - City of Fayetteville, North Carolina
  - · Martin County, North Carolina
  - o Cities of O'Fallon and Fairview Heights, Illinois
- Iredell County, North Carolina—New Emergency Communications Center and expanded 9-1-1 services
  - Revised policies and procedures for a consolidated center
  - Built CAD files for consolidated center







Bonnie B. Maney
Project Manager
Mission Critical Partners

#### Industry Experience 25 years

#### Education

M.S. Emergency Management, Jacksonville State University, Alabama

B.S. Business Administration, Northwood University, Florida

#### Associations

First Responder Network Authority (FirstNet), Public Safety Advisory Committee (PSAC)

National Public Safety Telecommunications Council (NPSTC)

National Emergency Number Association (NENA)

Association of Public-Safety Communications Officials (APCO)

SAFECOM

Bonnie is a Communications Consultant and has project management, information sharing specialist and public safety training manager experience overseeing the preparation of deliverables, assisting public safety and justice agencies throughout the U.S. in all levels of government. Bonnie was responsible for managing program budgets, coordinating grants and contracts with local, state and federal agencies, and preparing and developing public safety communications training initiatives. Bonnie has extensive experience in PSAP operations, communications, leadership, project management, emergency management, information sharing and technology.

# **Professional Experience**

- Organized and facilitated stakeholder workgroups to define user needs and requirements analysis
- Assisted in the development of Strategic Communications Interoperability Plans (SCIPs) and investment justifications
- Course developer and instructor for Institute for Emergency Management/Public Safety Telecommunicator degree programs, legal issues in public safety communications, hazard analysis and impacts, basic emergency planning, response and recovery operations, and media relations in emergency management,
- Project managed communication center renovations, CAD, records management systems, radio and 9-1-1 upgrades that enable communications interoperability and information sharing
- Delivered services under the U.S. Department of Homeland Security Office of Emergency Communications Interoperable Communications Technical Assistance Program (ICTAP)

- Broward County, Florida—Project Manager for Radio system needs assessment, procurement and implementation of P25 radio, microwave, fire station alerting, and alphanumeric paging systems
- Virginia Department of Emergency Management (VDEM)—Develop Strategic Planning Roadmap—Serve as a consultant to assist the Virginia Department of Emergency Management assessing their technology requirements to develop a strategic road map and report
- State of Arizona—National public safety broadband network planning activities, organized and facilitated stakeholder workgroups, developed tribal education and outreach plan, PSAP data collection and assist in planning and execution of HSEEP compliant LTE exercise
- El Paso Teller E911, Colorado—Serve as consultant to provide operations support for PSAP consolidation
- Town of Palm Beach, Florida
  - Managed all administrative, operational and technical aspects of the town's Communications Unit
  - Managed 800 MHz trunked and conventional radio systems and upgrades West Palm Beach, Florida
  - Supervised activities in consolidated public safety answering point (PSAP)
  - Performed call handling, emergency medical dispatch, police/fire/EMS dispatcher, and teletype operator duties



# **EXPERIENCE**

#### **CONSOLIDATION EXPERIENCE**

Mission Critical Partners is the industry leader in Public Safety Consulting supporting many Federal state and large county and city level projects across the country including the national 9-1-1 Program Office and the States of Illinois, Maryland, Pennsylvania, Minnesota, Nebraska, Kansas, and Virginia. Our team has unmatched depth and experience working with public safety agencies as a full service public safety consulting firm. We are currently working on active consolidation projects in Orange County, VA, Imperial Valley, CA and the cities of Fairview Heights and O'Fallon, IL.

MCP has extensive experience with the design and implementation of solutions used in transitioning regions from traditional E911 systems and services to a NG9-1-1 environment where shared services can be realized. MCP's consolidation and regionalization experience includes South Eastern PA Regional Task Force (Metropolitan Philadelphia) and Pennsylvania's Region 13 (a 14 County region in western Pennsylvania, including City of Pittsburgh serving a population of three million), which established its countywide 9-1-1 service in 1998 with six regional PSAPs, the City of Pittsburgh and the County PSAP. Over the last eight years the county consolidated all 9-1-1 call taking into the County PSAP. While some secondary dispatch centers do exist within Allegheny County, the County PSAP has an emergency call load in excess of 1.5 million annually. To date shared systems including public safety radio and 9-1-1 and administrative telephony have saved the region 14 million dollars.

Furthermore, Mission Critical Partners has played a vital role in supporting NG9-1-1 at the national level through its work with the U.S. Department of Transportation's National 911 Program. Founded by Congress in 2004, the National 911 Program was created to provide a national focus for 911 services in the United States. At the national level, MCP has developed minimum training standards for telecommunicators, identified NG9-1-1 cybersecurity standards and developed 911 focused infrastructure risk assessment, developed "interstate playbook" to assist multiple states in ensuring state-to-state communications and data interoperability. Additionally, MCP monitored and reviewed 911 technical and operational standards, performed gap analyses of national and international 911 technical and operational standards and produced bi-monthly webinars to highlight the success of NG9-1-1 early adopters.

Mission Critical Partner's support for the National 911 program demonstrates our national perspective on E911/NG9-1-1 issues, specifically around technology, operations, policy/governance, and funding.

MCP has lead numerous additional consolidation efforts as evidenced by the project experience sheets included in this proposal.

#### STATE OF ILLINOIS EXPERIENCE

Specific to the State of Illinois, MCP has been selected as the State's Consultant for NG 9-1-1. We are very familiar with the Legislative change enacted in 2015 mandating the consolidation of PSAP's. MCP regularly attends the Illinois 9-1-1 Advisory Board meetings and is actively engaged with members of





Illinois NENA. In support of the IL PSAP community, MCP conducted an educational consolidation Webinar in early 2016 and at the 2016 Illinois Public Safety Telecommunications Association (IPSTA) Conference that was widely attended. This session focused on the options available to Illinois PSAPs as they explore creative solutions to consolidating, collaborating and sharing services as required by recent legislation.

There are many considerations that must be taken into account as Illinois ETSB's and PSAPs commence discussion and development of plans for PSAP consolidation (however locally defined.) Operational challenges can become a barrier to success without the appropriate level of stakeholder buy in. Proper education, common talking points and a comprehensive understanding of key issues will allow agencies to work toward mutually agreeable solutions and objectives. Whether leveraging technology to improve interoperability and information sharing or planning for physical consolidation, the primary goal is to improve service levels to both citizens and agencies.

In 2014, the Emergency Telephone System Board (ETSB) of DuPage County, Illinois needed to determine the feasibility of a consolidated public safety answering point (PSAP). Areas of concern were staffing, facility and space needs, start up and operating budgets, equipment needs and the overall operations of a consolidated PSAP. MCP delivered a final consolidation and feasibility report that covered staffing and human resource requirements; facility and space needs, including future growth needs; financing, governance, equipment needs, operations tasks, and ancillary duties. MCP supported DuPage County in its compliance with State legislation to consolidate the number of PSAPs currently in the state based upon population.

Currently, MCP is working with the Cities of Fairview Heights and O'Fallon in St. Clair County, Illinois in support of a PSAP consolidation. The effort began with a Feasibility Study and was followed by a Governance and Funding report. This report reviewed current operating budgets of each center and presented the initial impact of the consolidation on each city as well as forecasted the budget of the consolidated operation including equipment and personnel. The report presented various funding models for the ongoing financial support of the consolidated PSAP. Mission Critical Partners utilized our PSAP consolidation financial modeling tool successfully through this process. This tool would be utilized during our evaluation of the consolidation scenarios in Tazewell County.



Illinois State Police

Office of the Statewide 9-1-1 Administrator

SERVICES PROVIDED: Next Generation 9-1-1 (NG9-1-1) Feasibility Study,

Procurement and System Implementation Support

CITY CONTACT:

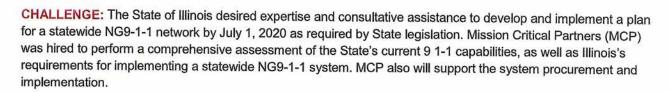
Cindy Barbera-Brelle State 9-1-1 Administrator

217-782-3200

cindy barbera-brelle@isp.state-il.us

PROJECT DATES:

August 2015 to March 2016



SOLUTION: The first step in the assessment process is to collect data through surveys distributed to every Emergency Telephone Services Board (ETSB) in the State, and through a series of town hall meetings held throughout Illinois during March 2017.

Additional tasks that MCP will perform during the project include the following:

- Assess the current state of the customer premises equipment (CPE), i.e., 9-1-1 telephony, emergency call logging/recording equipment, computer-aided dispatch (CAD) equipment, and geographic information system (GIS) equipment used in Illinois public safety answering points (PSAPs)
- Assess whether these systems will need to be upgraded to perform in a NG9-1-1 environment, and provide recommendations for executing any needed upgrades
- Assess the statutory and regulatory framework regarding 9-1-1 service in the state, as well as current and potential funding sources
- Identify the federal, state and local entities whose support will be essential to implementing NG9-1-1 service in Illinois
- Develop a cost and timeline estimates for implementing a statewide NG9-1-1 system
- Develop a request for proposals (RFP) for the procurement and implementation of a statewide NG9-1-1 system
- Provide support regarding the scoring of vendor proposals, vendor selection and contract negotiation
- Provide project management and oversight, including system implementation and acceptance testing
- Planning of the proposed NG9-1-1 and call-taking systems
- Program management of the NG9-1-1 and call-taking systems implementation

KEY RESULT: To date, the data-collection effort is in progress and on schedule with five town hall meetings completed.





**Joint Legislative Committee** 

Illinois Chapter(s) of the National Emergency Number Association (IL-NENA) and the Association of Public Safety Communications Officials (IL-APCO)

SERVICES PROVIDED: Next Generation 9-1-1 Legislation for the State of Illinois

CLIENT CONTACT: Patrick Lustig, Director

IL NENA & IL-APCO Joint Legislative Committee

618-457-5911 plustig@jc911.org

PROJECT DATES:

October 2011 to January 2012

CHALLENGE: Next Generation 9-1-1 (NG9-1-1) will result in a fundamental change in the way 9-1-1 calls are handled that will be as different from today's emergency calling as modern high definition television is from its black and white TV predecessors. Transitioning a legacy 9-1-1 system to a modern NG 9-1-1 system requires a program management framework that will facilitate and enable implementation; then gracefully evolve to one that achieves the maximum potential from the operation of a highly capable system. In addition, the organizational structure must facilitate stakeholders working together to make sure that policies and procedures are in alignment with objectives at all levels.

In order to enable the deployment of Next Generation 9-1-1 (NG9-1-1) capability in the State of Illinois, the Illinois Chapter(s) of NENA (IL-NENA) and APCO (IL-APCO), through its joint legislative committee, was in need of NG9-1-1 legislative language. The proposed language would complement existing wireline and wireless 9-1-1 legislation; identify funding and recognition for non-traditional emergency call delivery processing and address non-regulated network and services that would impact 9-1-1.

**SOLUTION:** Mission Critical Partners, Inc. (MCP) worked with the Committee to understand the funding, regulatory and legislative constraints that affected the Illinois 9-1-1 community. MCP gathered research and performed an analysis of the current legislative regulatory and funding environment. Recommended additions and modifications to existing state statutes and rules to enable NG 9-1-1 access via funding and technology were presented to the Committee. MCP developed a framework for NG9-1-1 legislation, then worked collaboratively with the Committee to develop NG9-1-1 legislative wording, which was in addition to or replaced the current Illinois state statutes. The product was unique and tailored to Illinois. An example is the option to create multi-jurisdictional Network Operating Authorities to implement, operate and maintain the network, applications, and databases which comprise an NG9-1-1 system and will deliver increased effectiveness and efficiency through economies of scale and cost avoidance.

**KEY RESULT:** MCP provided the Joint Legislative Committee with complete NG9-1-1 legislative language that will accommodate and support a successful migration to next generation emergency communications.



Tri-Com Central Dispatch, Illinois

SERVICES PROVIDED: Technology Assessment and Strategic Technology Plan

CLIENT CONTACT:

Nicole Lamela, Interim Executive Director

Tri-Com Central Dispatch

(630) 232-4739

nlamela@tri-com911.org

PROJECT DATES:

October 2016 to December 2016

CHALLENGE: Tri-Com Central Dispatch (Tri-Com) has made significant investments in public safety technology and supporting infrastructure over the past several years to maintain a high level of operational efficiency. Investing in mission critical computer aided dispatch (CAD), 9-1-1 telephony, land mobile radio (LMR) and other systems requires strategic and budgetary planning. It also requires a maintenance and support plan that provides a structure that balances vendor provided support with internal system administrative support.

To better meet the challenges that lie ahead, such as Next Generation 9-1-1 (NG9-1-1) and ever increasing reliance on geographical information systems (GIS), Tri-Com sought to develop a five-year strategic plan. The plan was intended to assess existing systems and infrastructure and develop a public safety systems roadmap that included priorities, timelines and appropriate support personnel to maintain optimal system performance.

SOLUTION: Mission Critical Partners, Inc. (MCP) was hired to assess existing systems and provide recommendations regarding upcoming procurements based on Tri-Com priorities and industry best practices. The MCP assessment provided a holistic view of the Tri-Com enterprise from a funding, public safety systems, personnel support and underlying technology infrastructure perspective. Bringing MCP in as a partner in this initiative allowed Tri-Com to gain objective insights from a firm with national experience and solid understanding of best practices.

KEY RESULT: MCP provided Tri-Com with a comprehensive assessment of its current public safety technology footing and its strengths and weaknesses. Looking at the state of existing technology platforms allowed MCP to develop a five-year strategic plan with Tri-Com for upgrading, replacing or migrating systems. The future technology investments or initiatives projected were interwoven with recommendations regarding the hiring of information technology support personnel and a GIS specialist to ensure the systems were maintained appropriately. Partnering with MCP allowed Tri-Com to plan for its future, anticipate growth and be better positioned to undertake new initiatives in the years ahead.



CLIENT: City of Fairview Heights and O'Fallon, Illinois

SERVICES PROVIDED: Public Safety Answering Point

Consolidation and Feasibility Study

CLIENT CONTACT: Nick Gailius, Chief

City of Fairview Heights Police Department

10027 Bunkum Rd.

Fairview Heights, IL 62208

Eric R. Van Hook, Police Chief O'Fallon Department of Public Safety

285 N. Seven Hills Rd. O'Fallon, IL 62269

PROJECT DATES: October 2015 to Present

**CHALLENGE:** Due to recently enacted state legislation, the cities of Fairview Heights and O'Fallon, Illinois wanted to determine the feasibility of consolidating their public safety answering points (PSAP). Areas of concern for both cities included staffing, facility and space needs, start up and operating budgets, equipment needs and the overall operations of a consolidated PSAP.

**SOLUTION:** Mission Critical Partners was retained to address these needs through a phased approach. Detailed data gathering occurred that allowed Mission Critical Partners to assess current call volume, staffing and budgets and equipment, as well as deficiencies in the current systems. Stakeholder interviews and observations were conducted to gain a clear picture of the current PSAP environment. A report was delivered to Fairview Heights and O'Fallon that summarized the initial findings and considerations regarding the following:

- · Expectations and desires of the agencies
- Current PSAP facilities and technology
- Dispatch policies and procedures
- Personnel policies
- Staffing and procedures
- · Collective bargaining agreements
- Supervisory structure and ancillary duties assigned to the PSAP
- Summary of recent State of Illinois statute changes
- Identified risks and opportunities related to consolidation

**KEY RESULT:** Mission Critical Partners delivered a consolidation and feasibility report that supported the two cities in their plan to move forward with consolidation. Additionally, Mission Critical Partners supported the cities of Fairview Heights and O'Fallon regarding their compliance with State of Illinois legislation to consolidate the number of PSAPs currently operating in the state, based upon population.







**DuPage County, Illinois** 

**Emergency Telephone System Board** 

SERVICES PROVIDED: Public Safety Answering Point Consolidation and Feasibility Study

CLIENT CONTACT:

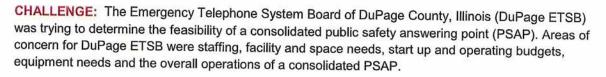
Linda M. Zerwin, Director

**DuPage County** 630.550.7743

Linda.Zerwin@dupageco.org

PROJECT DATES:

October 2014 to September 2015



SOLUTION: Mission Critical Partners (MCP) was retained to address these needs through a phased approach. Detailed data gathering occurred that allowed MCP to determine current call volume, staffing and budgets, equipment, as well as looked at deficiencies in the current systems. Stakeholder interviews and observations were conducted to gain a clear picture of the current PSAP environment. An interim report was delivered to DuPage ETSB to assure that all expected items and sections were covered. Included in the interim report were preliminary findings based on the stakeholder interviews.

KEY RESULT: MCP delivered a final consolidation and feasibility report that covered staffing and human resource requirements; facility and space needs, including future growth needs; financing, governance, equipment needs, operations tasks, and ancillary duties. In addition, consideration was given to legislative changes to ensure compliance if the consolidation was approved. Mission Critical Partners supported the DuPage ETSB in its compliance with State of Illinois legislation to consolidate the number of PSAPs currently in the state based upon population.





**DuPage Public Safety Communications, Illinois** 

SERVICES PROVIDED:

Facility Assessment for Backup Public Safety

Answering Point

CLIENT CONTACT:

Brian Tegtmeyer, ENP Executive Director 630,260,7503

btegtmeyer@ducomm.org

PROJECT DATES:

December 2012 to April 2013

CHALLENGE: DuPage Public Safety Communications (DU-COMM) is the largest consolidated 9-1-1 center in Illinois. In 2012, it processed more than one

million calls and generated more than 550,000 computer-aided dispatch (CAD) calls-for-service. In 2008, DU-COMM served 27 agencies. Today, it serves 39 agencies and is projected to add up to four more in the near future. This rapid expansion has stretched the operational and staffing capacities of DU-COMM's existing public safety answering point (PSAP) facility, severely limiting the organization's growth potential and its ability to meet the future needs of the communities it serves.

**SOLUTION:** DU-COMM officials recognized the need for a back-up PSAP facility and reached out to Mission Critical Partners (MCP) to help move the project forward.

MCP developed a multi-tiered plan designed to provide DU-COMM officials with an objective analysis of facility options. These options included maintaining the current facility, transitioning to an Active-Inactive PSAP model or adopting an Active-Active PSAP configuration. MCP's recommendations were based on a thorough process that included:

- Stakeholder meetings and ongoing communication with the DU-COMM leadership team, local elected officials, and representatives from more than 30 police, fire and emergency medical service agencies
- An independent assessment of previous studies related to a second facility
- A comprehensive review of DU-COMM's current operations, facilities and back-up strategies
  which identified inefficiencies and inadequacies related to CAD abilities, critical communication
  systems to police and fire agencies, alarm monitoring, and fire paging and station alerting
- Research on possible configurations to determine their respective benefits and shortcomings, including operational efficiencies and cost/benefit analyses

**KEY RESULT:** Following its comprehensive review, MCP provided DU-COMM officials with a complete assessment overview, report of findings, alternate solutions and recommendations of a path forward for a backup facility. MCP recommended that DU-COMM acquire an additional facility, equip the new facility to meet the same level of standards as the primary facility, renovate the existing primary center to support the Active-Active configuration, and implement the Active-Active configuration at both sites. DU-COMM has adopted this recommendation and efforts are underway to implement the recommendations with MCP's support.





Orange County, Virginia

SERVICES PROVIDED: Emergency Communications Consolidation

Feasibility Assessment

CLIENT CONTACT:

Nicola Tidey E9-1-1 Director 540-672-1234

ntidey@orangecountyva.gov

PROJECT DATES:

June 2016 to August 2016

CHALLENGE: Orange County, Virginia (County) desired to consolidate its emergency communications center with one that is operated by the Sheriff's Office. The consolidated center would be housed in a new facility and supported by technology enhancements that would yield better-coordinated emergency communications across the County's footprint, as well as operational and cost efficiencies.

SOLUTION: Mission Critical Partners (MCP) was retained to perform a high-level feasibility assessment concerning the potential consolidation of the Emergency Communications Center and the Sheriff's Office Dispatch Center. In performing the assessment, MCP subject-matter experts analyzed the following at the two existing centers:

- Organizational structure
- Operating procedures
- · Staffing and scheduling
- 9-1-1 call volume
- 9-1-1 call-taking and dispatching performance relative to industry standards

In addition, the SMEs performed a comprehensive assessment of the communications technology in each center, to identify the systems that could migrate to the new consolidated center, those that need to be upgraded, and those that need to be replaced because they have become obsolete or have reached end of life. The systems assessed include the following:

- Computer-aided dispatch(CAD)
- Geographic information systems (GIS)/mapping
- Radio
- 9-1-1 telephony
- Logging/recording

Finally, MCP analyzed the policy, governance, fiscal factors that would affect whether the consolidation comes to fruition.

KEY RESULT: Orange County was provided with a detailed written analysis on the proposed consolidation initiative. Although several challenges exist, Mission Critical Partners supports the County in its consideration of the consolidation project.





Dare County, North Carolina

(Dare, Tyrrell, Hyde Counties, North Carolina)

SERVICES PROVIDED: Emergency Operations Center and Regional

Operations Center Consolidation

CLIENT CONTACT:

Captain Trey Piland, MPA, Communications Director

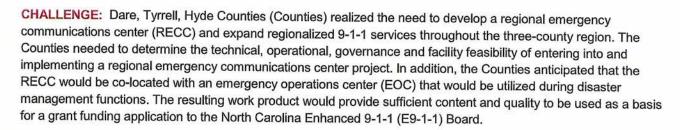
Dare County Sheriff's Office

252.475.9351

trey.piland@darenc.com

PROJECT DATES:

March 2014 to Present



SOLUTION: Mission Critical Partners (MCP) was retained to develop a feasibility study with specific review and recommendations for the technical, operational, governance and facility components, which are required to establish and implement a regionalized 9-1-1 emergency communications service. MCP made site visits to the two public safety answering points (PSAPs) operating in the Counties. The site visits allowed MCP to interview stakeholders and create a sustainable solution set of recommendations that would integrate operations from the two Counties into the proposed RECC. The findings of these interviews were analyzed and a draft report was provided to the Counties for review and input. Based on collaborative efforts between MCP and the Counties a final report was prepared for submission to the North Carolina E9-1-1 Board.

KEY RESULT: The Counties were awarded a grant from the North Carolina E9-1-1 Board to implement the RECC program. MCP and the Counties are now working on Phase II of the project to administer the completion of and reporting of the grant; provide support for Dare County for RECC/EOC construction administration and integration of technology systems; assist to procure and implement grant funded technology; support the commissioning of facility infrastructure and technology systems; and oversee the transition and migration to the new RECC facility. The project is expected to last for a period of 30 months.



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J Stevens will be notified.





Post a comment to start a discussion. @Mention someone to notify them.



Department of Homeland Security (DHS)

**Federal Emergency Management Agency** 

(FEMA)

SERVICES PROVIDED: Emergency Operations Facility and Technology

Design and Integration

CLIENT CONTACT:

Russ Gates, Chief Engineer Russell.Gates@dhs.gov

202-212-2196

PROJECT DATES:

May 2009 to Present

CHALLENGE: The Department of Homeland Security/FEMA is in charge of planning, designing and implementing an integrated emergency communication system to support the joint FEMA/Department of Defense Chemical Stockpile Emergency Preparedness Program (CSEPP). As mandated by Congress, the program must provide maximum protection to communities located in the emergency planning zones surrounding the eight chemical weapons depot sites located in the United States.

SOLUTION: Mission Critical Partners, Inc. (MCP), as a sub-consultant to Innovative Emergency Management (IEM), provides facility and communication system planning, design and implementation oversight to support the CSEPP program at the eight chemical weapons stockpile sites. Efforts to integrate the federal, state and local emergency communication system include:

- Emergency operations center and 9-1-1 facility planning, design and implementation services
- 9-1-1 system planning and design
- Wireless voice data and data communications systems to include UHF, 800MHz and IP broadband communications systems
- Public alert and notification systems to include EAS, sirens, public announcement systems and reverse 9-1-1 emergency notifications systems
- Microwave, radio and fiber optic communications design services 'Site Book' documentation -- gathering and assembly of critical and relevant site information. These books are used for the purpose of operations and maintenance as well as baselining the systems for future upgrades.











KEY RESULT: MCP provides innovative, cost-effective solutions to upgrade the mission critical systems and facilities that support the FEMA CSEPP Program. Its ability to deliver services on time and on budget has helped position it as the FEMA's primary provider of mission critical communications services to support this program. Under this CSEPP program, MCP is currently in various stages of planning, design and integration of eight new facilities, as well as two facility redesign and reuse projects.



#### SCOPE OF WORK

#### CONSOLIDATION PLAN

# Phase One: Pre-Project Meeting

Prior to project kick-off, MCP will conduct an introductory conference call and familiarize the Tazewell ETSB and PSAPs with our pre-kick-off survey tool. During MCP's initial on-site visit, a project kick-off meeting will be held concurrent to the beginning of work with the Tazewell Project Team. The purpose of this meeting is to introduce the MCP and County project teams, verify alignment of project expectations regarding the scope of work to be performed, desired and expected outcomes, project deliverables, and project schedule. A project communication plan will be finalized, and single points of contact identified.

With the conclusion of the kick-off meeting, MCP and the Tazewell County representatives will address the project timeline and also the initiation of data gathering. While the agencies are preparing and providing needed data, the project kick-off meeting will address the ongoing project management and methodologies with the County.

MCP's process follows Project Management Institute (PMI) methodologies by creating a project charter that encompasses the following:

- Project Scope and objectives description, purpose, goals and objectives
- Project deliverables expected
- Project team organization to address critical success factors and measurement
- Assumptions and boundaries
- Project schedule
- Risks and constraints

The project charter will include major project milestones (schedule), roles and responsibilities, tasks and work packages, deliverables and points of contact. With approval of the project charter, the project plan will be reviewed. It is critical that there be designated single points of contact for both MCP and the County. Each dispatch center must provide a single contact that will be responsible for facilitation of any tasks described for the completion of the draft and final report.

The project plan is the central document by which the project is formally managed and lists the activities, tasks and resources required to complete the project, while addressing the requirements of the project scope as proposed to meet the County's requirements, and includes the following:

- A description of the major phases undertaken to complete the project
- A schedule of the activities, tasks, durations, dependencies, resources and timeframes
- A listing of the assumptions and constraints identified during the planning process
- Project milestones, activities and tasks with proposed effort required



- Discuss various factors surveyed and included in the report relating to human resources management that must be taken into consideration in the consolidation process. These factors include but may not be limited to:
  - Seniority
  - o Benefits
  - Management and Employee Selection
  - o Payroll
  - Health Insurance
  - o Illinois Municipal Retirement Fund (IMRF)
  - o Deferred Compensation
  - Labor Negotiations

#### **FACILITY / SPACE NEEDS**

MCP understands that the County has identified two potential consolidated PSAP candidate facilities for evaluation, which include the current Tazewell/Pekin Consolidated Communications Center (T/PCCC) facility and a planned expansion of the Morton Police Dispatch Center. MCP will begin by analyzing the approximate amount of space that will be required for consolidated operations. MCP's experience in architectural programming will allow us to work with the County to assess space issues and conduct space analysis during interview(s), to determine preliminary, high-level space needs (technology, operations, support, and common areas) and requirements for comparison to standards and best practices.

MCP will make recommendations on space needs. A high-level spreadsheet will be included to address rough square footage needs, as MCP has significant experience in space programming and has team members with a background in working with architectural firms. This effort will provide the County with a recommendation on space requirements based on NENA and APCO standards as well as any other legislative requirements (OSHA, ADA, etc.).

This section of the report will present high level space considerations for any staff/organizational recommendations that may consider some of the following space needs:

- Size of dispatch room floor
- Director's Office
- · Assistant Director's Office
- Shift Supervisor's Office (Shared)
- IT Manager's Office
- Database Manager's Office
- Spare Offices for Growth
- Reception/Waiting Area
- File Room (Active Files)
- Inactive File Storage
- Conference Room
- Training Room





Governance is often organized with a high-level Policy and Fiscal Oversite Board and a practitioner driven Operational Committee. The Executive Director of the new organization often serves as an ex officio member of both groups.

The management of the PSAP's daily operations and governance are separate issues. Management involves the day-to-day operation of the PSAP. Governance involves a higher level of oversight in the operation of the consolidated system. Based on our experience with numerous successful consolidation initiatives, MCP will provide potential governance models and provide recommendations to the County and stakeholders regarding potential governance models that provide for senior officials representing the member jurisdictions to have representation and involvement in issues related to budgeting, major purchases, new jurisdictions requesting dispatch services and significant changes in operational procedures. MCP will provide models and recommendations for the County to use in drafting governance.

At a minimum the governance section of the report will include

- By-Laws that will address items such as structure (Board of Directors composition; Executive Committee; Liaison Committees)
- · Budgeting and assessment structure
- New member buy-in provisions; member withdrawal provisions
- Sample governance documents based upon MCP recommendations

#### **EQUIPMENT**

MCP anticipates auditing existing equipment in the PSAP and discussing with the County Project Team what the current upgrade and replacement plan is to gain an understanding of the current projects started and future projects planned. The audit inventory and assessment will focus on operations, hardware/software, maintenance, expected upgrades, redundancy, ownership, financing etc., for any system in operation, including but not limited to the following:

- 9-1-1 customer premises equipment (CPE)
- Recording Equipment
- Radio Consoles
- Alerting
- Computer Aided Dispatch (CAD)
- Records Management Systems (RMS)

MCP will identify technology changes required to transition to and operate a consolidated facility with emphasis on leveraging existing assets and planned upgrades.

#### **Connectivity Needs**

MCP will document existing connectivity internal to and between each of the facilities and identify connectivity required to transition to and operate a consolidated facility with emphasis on leveraging existing assets wherever possible. This effort will address:





# ADDITIONAL CONSIDERATIONS

# Project Coordinators and Candidate Agency Contacts

The MCP Project Manager shall serve as the single point of contact for the project. Each participating PSAP and the ETSB will also be requested to provide a single point of contact to ensure efficient and effective communication.

#### **Timelines**

MCP understands that the ETSB is under a tight timeline based upon its approved extension. However, given the level of effort and number of stakeholders involved in the process, MCP respectfully proposes the following, alternate schedule:

Table 1 - Project Timeline

Phase / Milestone	Proposed Timeline
Project Kick-off	May 2, 2017
Data Gathering/Observations/Interviews	May 2-5, 2017
Review Draft Report Outline	May 23, 2017
Deliver Draft Report	June 22, 2017
Deliver Final Plan	July 18, 2017
Project Closeout	As mutually determined by the ETSB and MCP

#### Expenses

MCP has proposed a fixed fee and recognizes that it is responsible for costs related to travel, housing, transportation, per diems, communications devices, and computer equipment. MCP understands that change orders will only be permitted for adjustments in scope.

#### **Deliverables**

MCP will provide an electronic copy and one hard copy of the Draft and Final Reports to each participating PSAP and Tazewell ETSB.

## PROJECT SCHEDULE

Please see Table 1 – Project Timeline for the proposed schedule for this project.





# LEGAL REQUIREMENTS

As an Affirmative Action and Equal Opportunity Employer, Mission Critical Partners shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, age, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or veteran status.

# **Proposal For Consulting Services**

Preparation of a Qualified

Tazewell County PSAP Consolidation Plan

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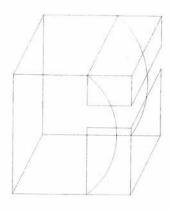
Consolidation Plan Submission ISP 7-302

Proposal Due Date:

March 31st, 2017

Submitted By:

Richard S. Tucker & Associates Public Safety Consulting



# Richard S. Tucker & Associates Public Safety Consulting

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March 28th, 2017

Tazewell County Emergency Telephone System Board 101 S. Capitol Street Pekin, Illinois 61554

ETSB Members,

Thank you for the opportunity to submit this proposal for consulting services regarding a consolidation study meeting the requirements of Illinois laws and the needs of Tazewell County. I have been a professional and independent consultant since 1985 specializing in the needs of public safety entities and, in particular, the design and operation of 9-1-1 systems. My experience includes all facets of the consolidation process including the successful conclusion of over a dozen different consolidations and the preparation of plans for several more.

I will be assisted in the process by my associate Paul Maplethorpe, a distinguished retired fire chief who also possesses expert knowledge in 9-1-1 operation and Illinois requirements. Both Paul and I are independent consultants, not affiliated with any vendor or manufacturer of 9-1-1 equipment or services. Our resumes are included within this proposal. We have both been ETSB or 9-1-1 Commission members.

The following proposal conforms to the format requested in the RFP. This Letter of Introduction is followed by Company Organizational Capabilities, Company Staff Qualifications, Experience, Project Schedule, Associated Costs and Legal Requirements. We concur with the *methodology* contained in the RFP as valid and appropriate for the project. We are concerned with the proposed time-line; however, we are confident that with the cooperation of the participants, the Plan can be produced within the period requested.

We understand the needs of the ETSB during this time of mandated change to 9-1-1 operation. The recent requirement to reduce the number of PSAPs has caused many questions as to the whether or not existing operations can be changed for the better and in a cost-effective manner. Every ETSB faced with reducing the number of PSAPs must approach the problem with both an analytical approach and one that recognizes that the agency stakeholders in the current process are impacted in many ways.

Besides the cost of moving personnel, facilities and technology, offset costs for personnel tasks performed beyond 9-1-1 must be recognized. In certain cases, the overall cost of consolidation may be excessive compared to existing operational scenarios. In such cases, the argument for status quo with an extended implementation period, compliant with the waiver exclusions of the statute, may be justifiable.

Please note that this proposal document was composed specifically in its originality for Tazewell County. Many consultants re-cycle prior documentation with cut-and-paste or provide a standard packet of information. We consider your project far too important and unique to take the approach that one solution works for all or that Tazewell County can be fitted into a standard model. While this approach takes a great deal more time and resource, it indicates the level of care we will take configuring your Consolidation Report and Plan submission. I am your single point of contact for this project.

Included within this Proposal Package and on electronic media is a *Contract Draft* and 2 samples of work product.

Sincerely,

Richard S. Tucker

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# Company Organizational Capabilities and Approach

The design of 9-1-1 systems involves many different systemic components. It includes a facility which is located away from and hardened against natural and man-made occurrences, accidental or hostile. It includes communication systems allowing notification of incidents, dispatching of response units, collection of information and production of records. The facility must be sized to allow operation at peak times as well as additional space should it be designated as a back-up location for another center.

Besides brick, mortar and technology, the 9-1-1 system includes personnel. The staff must operate in a 24-7 environment. There must be a sufficient number on duty to support the call activity of the demographic area. They must be trained on specialized equipment and technology. They must be supervised, have rest periods and sufficient leave time between shifts. In certain cases, personnel must be coached or disciplined.

Agencies providing 9-1-1 first response require a reliable communications system or systems to manage operations and record response information. Radio based systems must provide reliable 2-way coverage within operational and routine mutual-aid response area. Systems based on Federal Communications System licenses must be designed to prevent interference with other radio systems. New communications and data systems such as being implemented in the FirstNet initiative may provide acceptable alternatives.

The first 9-1-1 legislation in Illinois was passed in 1975 giving the Illinois Commerce Commission regulatory authority over the operation of 9-1-1 systems. The legislation was updated in 1987 to provide funding by means of a customer surcharge on telephone line billing. Later, as technology improved to provide cellular radio calling it was updated for a surcharge on wireless accounts.

The initial surcharge legislation provided for the wireline amount to be paid to the local government organization, initiated through referendum, called the Emergency Telephone System Board, with a small amount going to the State for Administration. The wireless surcharge was paid to the State of Illinois and disbursed to the ETSB's based on the number of subscribers per covered zip code.

Recent legislation has changed the relationship of the ETSB's with the telephone carriers and surcharge monies are collected by and distributed through the State of Illinois. In 2016, regulation of 9-1-1 services has changed from the Illinois Commerce Commission to a component of the Illinois State Police, Office of the Statewide 9-1-1 Administrator. New requirements including reduction in the number of ETSBs and PSAPs along with the implementation of IP based Next Generation 9-1-1 are now placed into a near term calendar schedule.

The Tazewell County ETSB has been granted a waiver to extend its reduction of PSAPs to July 1<sup>st</sup> 2019. However, the official Plan for this consolidation must be submitted by October 1<sup>st</sup>, 2017. This Proposal addresses the creation of a *Tazewell County Consolidation Plan* for submission *preceded* by a *Tazewell County Consolidation Report* detailing costs, options and impact.

#### Plan Requirements

The Plan document format for submission has been set by the Office of the Statewide 9-1-1 Administrator and is identified in the 24 page ISP Form 7-302 (5/16). Many fields of the Form are straightforward and relatively simple to complete requiring only easily identifiable information. However, there are several narrative based submissions which require significant thought and choices.

While Tazewell County has identified many of the informational aspects of the plan, it has not yet determined the actual methodology of PSAP consolidation. This is evident in the RFP Scope of Work identifying "potential consolidated PSAP locations" and staffing requirements. While this indicates thought has been given to the need to consolidate, the actual details have yet to be developed and agreed upon. This factor requires a comprehensive and detailed assessment of current operations and the ability to conceive all details of a change scenario or perhaps multiple alternatives.

Consolidating 9-1-1 operations is not typically a simple or inexpensive exercise. First, a target location must be large enough to support operations and be in a location which meets the criteria of being free of natural and man-made hazards. There are several accepted standards regarding PSAP location and design, particularly ICC regulation Part 725 and the NFPA (National Fire Protection Association) standard 1221 which includes several references to other NFPA standards regarding power, HVAC, construction type and others. In addition to proper sizing for peak jurisdictional operations, the facility must also accommodate additional workload from other agencies should it be designated a "backup" PSAP. Personnel standards and training are identified in NFPA standard 1061 and APCO Project 33.

The ISP Plan Document includes requirements to identify call-receipt and dispatch technology systems. In addition to participant agency communications, the PSAP(s) must be able to communicate with adjacent/bordering jurisdictions. Current systems may require modification or replacement to meet these requirements when a PSAP location is changed. In addition, current communications systems may have drawbacks or problems which will be exacerbated by a PSAP change in location or other consolidation requirement.

The ISP Plan Document calls for a comprehensive financial picture for consolidated operation. While the Tazewell County ETSB has been required to submit yearly AR-911 financial documents, these forms do not necessarily show overall PSAP capital and operational costs, only those supported by surcharge. A detailed consolidation plan must include all costs as related to capital investment and operations to determine the impact to participating agencies or their funding jurisdiction. In addition, the document should include an acceptable fee structuring and modification plan to achieve a sustainable agency participation agreement.

# Report Requirements

Given the condition that many of these Plan items have not yet been determined or decided upon, the Tazewell County ETSB first requires a *Consolidation Report* which sets forth the details and identifies options which must be decided. 1 or 2 PSAPs? Existing remodel or new construction? New technology and/or software? Independent organization of component of existing governmental unit? Agency mix? Level of standards compliance?

The largest operational cost to a PSAP is operating personnel. Staffing is based on scheduling models considering task, demographic and activity requirements. Scheduling flexibility may be impacted by collective bargaining agreements. Consolidation plans consider aggregation of activities to achieve economy of scale. In most cases however, local tradition along with existing norms and benefits play a role in determining personnel expense. Will existing personnel transition into new positions?

Many other components, particularly transition costs, play a role in a comprehensive and acceptable plan. Mr. Tucker has prepared many such plans. In some cases, the costs involved have discouraged immediate consolidation. A phased implementation plan may be required.

## Organizational Capabilities

Richard Tucker has planned and completed many projects similar to that required by Tazewell County. He maintains current knowledge and 'tools of the trade' to address almost all aspects of project requirements insuring the capability to identify problems and conceive workable solutions. Besides extensive document production systems, Mr Tucker maintains computer and network testing tools, radio system design and testing hardware and software, telephony and line testing equipment, and if necessary, tools to make or modify connection to systems being examined.

Most public safety related consulting firms require subcontracting for many of the systemic details of PSAP design or system replacement. This is most noticeable in radio system design and coverage. In many cases, alternatives are predicated on information from local system suppliers who may have an interest in a particular brand or type. In some cases, particularly STARCOM21, other cost-effective alternatives may be ignored.

Some projects require significant organizational overhead to keep stakeholders informed, meetings coordinated, milestones verified, etc. The project nature and compressed timetable of Tazewell County ETSB require that the consultant performance be straightforward, accurate and extremely detailed on the first pass. This is shown in the identified project schedule and considers limited administrative overhead impact on project resources.

#### Approach

The completion of the ISP 7-302 Submission Document requires detailed narrative information regarding the consolidation mechanism and costs. These details have not yet been reviewed by or agreed upon by the Tazewell County ETSB or its member agencies.

After years of experience in communications center operations, including serving as a communications officer, Richard Tucker approaches projects like Tazewell County with certain planning characteristics including, but not limited to:

Telecommunicators monitor/control only 1 radio channel for dispatch purposes.
 The chance for error and missed messages increase exponentially with additional channels. This requirement is usually achieved by placing multiple agencies on the same communications channel or talk group. Depending on system flexibility, channel/group assignment can change based upon activity loading. This impacts the number of required positions and operating personnel.

- The PSAP uses only 1 Computer-assisted Dispatch (CAD) System/Software. While it is not always possible to limit the workstation to a single keyboard or input device, the software for recording incidents, dispatching calls and querying information has to be the same at each position. Most current standards of design or review require the 9-1-1 call information to be automatically populated to the CAD system.
- A wide area radio system based on simulcast is preferred to diverse channel multi-cast systems. Multi-cast systems require the response unit to change radio settings as the unit traverses coverage boundaries.
- A dispatch radio system should provide native portable coverage throughout the response area. Achieving coverage through the use of unit based radio repeaters typically results in problematic communications.
- Whenever possible, a mobile data workstation system, connected to the CAD and available for unit queries should be in use to reduce voice radio traffic.
- As PSAP size and staffing increases, there is a stepped need for structured increases in operational supervision, administrative management, quality assurance and training positions.
- Interviews and discussions are premised on the positive factors of change.
   Many, if not most public safety personnel regard externally induced change as a determent to operations. In all cases, the aspects of efficiency, safety, and utility are emphasized and all questions answered.

Acceptance of a consolidation plan includes the participating agencies. In most cases (as evidenced in the RFP Scope of Work), the participating agencies subsidize the consolidated center through a periodic fee. The fee model can be based on one or a combination of several metrics. These include proportionate activities, demographics, assessment values, agency budget and a number of others. Each agency desires to know its projected cost as well as the stability factor should the fee be based on relative activity.

The mechanism of PSAP organization and administration is also a critical factor. Is the PSAP based upon an independent stand-alone model or is a component of another agency? The structure has a major impact on operational and administrative costs as well as acceptance by the other agencies. If the support agency is a client/participant, does that agency receive an offset from fees based on the level of support it provides?

Finally, what method of governance and oversight is employed? Will the ETSB play a role? Most consolidated operations work efficiently with a 2-tiered method of governance: a principal based budgetary board and an agency based operations board. Both boards are participant based.

Mr Tucker recognizes that many of these factors have already been discussed in Tazewell County and certain preferences exist. Normally, these preferences are identified after presentation of alternatives in a draft report review. There is insufficient time to use this process given the Project completion requirements. The level of preference will be determined through the interview process and presented to the ETSB prior to draft report preparation.

#### References

Brian Tegtmeyer, Director Dupage County Communications Center (DU-COMM) 600 Wall Street Glendale Heights, IL 60139 btegtmeyer@ducomm.org 630-260-7503

David Dato, Chairman
Lake County Emergency Telephone System Board
109 W Liberty Street
Wauconda, IL 60084
DDato@waucondafire.org
847-526-2821

John Ferraro, ENP, Executive Director Northwest Central Dispatch System 1975 East Davis Street Arlington Heights, Illinois 60005 JFerraro@nwcds.org (847) 590-3407

Sherrill Ornberg, Director (Retired)
Northwest Suburban Emergency Communications Center
SOrnbergENP@msn.com
847-878-4370

Thomas O'Halloran, Chairman City of Berwyn Emergency Telephone System Board 6401 W 31<sup>st</sup> Street Berwyn, IL 60402 TO'Halloran@ci.berwyn.il.us 708-795-2103

# **Company Staff Qualifications**

Richard Tucker has direct professional experience as a law enforcement officer, collective bargaining representative, computer and electronics technician, business owner, consultant, and member of a 9-1-1 commission. He has expert level understanding of radio, telephony, computer and IP networking systems, facility and tower construction, technology installation tradecraft, personnel management, public safety operations, governmental operations, accounting, budgeting and control. He has successfully overseen dozens of completed projects ranging from tens of thousands to millions of dollars.

Chief Paul Maplethorpe (retired) has 30 years direct professional experience in all aspects of the fire service from firefighter-paramedic to Fire Chief. He has served over 28 years in law enforcement as a Police Officer. He is an expert in communications systems technology as a technician through business owner. He is a NIMS certified COML. He has been an ETSB member as well as a participant in a consolidated center governing board. Paul has a Bachelors degree in Fire Sciences and a Masters degree in Management. He serves as a course instructor for the College of Lake County.

The resumes of Richard and Paul are included as attachments to this Proposal.

# **Experience Citations**

The staff who will be participating on the Tazewell County project both have extensive professional experience in 9-1-1 and communication system design, PSAP design, dispatch center operations and personnel management, agency operations, Illinois legislation and vendor relationships. Unlike many consulting firms who present eminently qualified prime personnel and have relatively inexperienced field staff, Tazewell County will have Richard Tucker and Chief Paul Maplethorpe both as principals and field consultants. Both are intimately familiar with the project needs and requirements, the concerns of the Tazewell County ETSB and the staff of the participating agencies. The resumes of Richard and Paul are included as attachments to this Proposal.

Richard Tucker is the company and proposed project manager. He has worked both as an independent consultant and contracted to other major consulting firms. He has successfully completed dozens of public safety related projects. Noted as citations in his resume, his experience as principal, associate or participant includes the following consolidations or supporting analysis (alphabetical order starting with Richard Tucker):

Berwyn, Illinois - Regional Consolidation Study

Broward County, Florida - 56 Agencies

Carroll, Jo Daviess & Stephenson County Sheriff's - 3 County Consolidation Plan

Cedar Rapids, Iowa - Countywide Consolidation Plan

CENCOM/Grayslake, Illinois - Consolidation Plan

City of Chandler, Arizona - Fire Department Consolidation Plan with City of Phoenix

Clermont County, Ohio - 18 Agencies

Fox Lake, Illinois - Client/Consolidation Plan

Glenview, Illinois - Client/Consolidation planing, RED Center spinoff

Des Plaines/Park Ridge, Illinois - 4 Agencies

Lake County, Illinois - 4 Primary PSAPs, 1 Secondary PSAP

NSECC - Des Plaines/Morton Grove/Niles/Park Ridge, Illinois - 8 Agencies

Rock County, Wisconsin - 44 Agencies

State of South Dakota, Pierre, South Dakota - Preliminary Orientation Statewide Plan

Chief Maplethorpe is a major contributor to and principal MABAS operations in Illinois and the project initiator, project manager and ETSB member of the **CENCOM** PSAP in Round Lake, Illinois. He has experience at grant application and management at both the state and federal levels.

# **Project Schedule**

The following schedule considers the project tasks, work stated in the Request For Proposal and, accommodation of meetings, interviews and information by the particular Tazewell County agencies and organizations. The overall time for project completion is considered extremely aggressive. While the Consultant planning and design aspects are possible within the proposed period due to the expert familiarity of the team, certain decisions by the Tazewell County ETSB may be required on extremely short notice. Given the governmental process, it is suggested that ETSB based meetings regarding this process be official, publically scheduled on the dates shown and attended by a quorum should a major decision regarding Plan components be required.

The second concern regarding plan completion is acceptance of planning components by the stakeholder agencies. As discussed, the financial impact of moving and/or decommissioning PSAPs falls both on the ETSB and the affected agencies. If capital costs are treated as a first-year expense, agencies may be faced with a significant budgetary impact. Where PSAP personnel have been performing agency tasks, the agency must decide whether to re-task other personnel or retain existing 9-1-1 staff for the required duties. In such case, should there be consolidation based agency fees, the overall agency budget is likely to be increased.

It is the consultant's experience that volunteer agencies may face a new fee assessment and may not have a revenue stream to support any change in budgetary requirements. These decisions may disproportionately affect a major agency where a public hearing or other extended review process is necessary.

Because of the compressed performance time line it is proposed that Mr. Tucker and Mr. Maplethorpe will begin work on the project immediately after notification. Initial work includes preparing interview forms, agenda and handouts for the kick-off meeting and arranging travel and lodging reservations. It should be noted that the proposal makes uses of several conference calls to reduce the expenses of travel and per-diem.

Week 1 - Otherwise starting on Monday, April 24<sup>th</sup> given notification to proceed on April 20<sup>th</sup> Monday AM - Kickoff Meeting including ETSB members, staff, Agency participants Monday PM - PSAP 1 Review, Interview PSAP supervisor, Agency Principal(s) Tuesday AM - PSAP 2 Review, Interview PSAP supervisor, Agency Principal(s) Tuesday PM - PSAP 3 Review, Interview PSAP supervisor, Agency Principal(s) Wednesday AM - PSAP 4 Review, Interview PSAP supervisor, Agency Principal(s) Wednesday PM - Interview law enforcement client agency principals./personnel. Thursday AM - Interview fier/EMS client agency principals/personnel Thursday PM - Compile initial findings, prepare discussion topics Friday AM - ETSB meeting

Week 2 - Otherwise starting on Monday, May 1<sup>st</sup>
Monday - Data Compilation - Personnel, Technology Systems

Tuesday - Data Compilation, Inquiry call-back
Wednesday - Systems Configuration, Report Preparation
Thursday - Systems Configuration, Report Preparation

Friday - Systems Configuration, Report Preparation

Week 3 - Otherwise starting on Monday, May 8th

Monday AM - ETSB Conference Call Status Update

Monday PM - Governance Model

Tuesday - Activity Correlation, Agency Distribution

Wednesday - Floor Model, Personnel Requirements

Thursday - Personnel Scheduling and Cost Model

Friday - Technology Systems Configuration and Cost

Week 4 - Otherwise starting on Monday, May 15th

Monday AM - ETSB Conference Call Status Update

Monday PM - Technology Systems Configuration and Cost

Tuesday - PSAP(s) Configuration, Sizing

Wednesday - ETSB Meeting

Thursday - PSAP Drawing(s), Costing

Friday - Operational/Administrative/Capital Budget

## Week 5 - Otherwise starting on Monday, May 22

Monday AM - ETSB Conference Call Status Update

Monday PM - Budget Refinement

Tuesday - Draft Report

Wednesday - Draft Report

Thursday - Draft Report

Friday - Draft Report Complete - Forward to ETSB

## Week 6 - Otherwise starting on Monday, May 29th

Monday - ETSB Report Review

Tuesday - ETSB Conference Call - Draft Report Updates

Wednesday - Generate Final Report

Thursday - Final Report - Forward To ETSB - Distribute to Stakeholders

## Week 7 - Otherwise Starting on June 5

Wednesday AM - Meeting - General Report Review and Comment Thursday - Prepare Draft ISP 7-302

Friday - Prepare Draft ISP 7-302

## Week 8 - Otherwise Starting on June 12

Monday - Complete ISP 7-302

## Associated Costs

Richard Tucker & Associates is offering completion of this project on a fixed cost basis. The project cost includes all aspects of consultant time, research, materials and expenses including on-site travel and per-diem. The total project cost including deliverables of a Tazewell County Consolidation Report and completed Application For 9-1-1 Consolidation Plan - ISP 7-302 is \$23,555.00. A \$4,500 retainer is required on project initiation.

The Project Scope of Work requires technology system review and costing The potential of system modifications or replacement is high and costs will be estimated as required. The proposed scope of work does not include detailed system engineering, design or procurement documentation. While the consultant is capable of generating such documentation, the requirement for specific systems or scope of work is not known at this time. Should the Tazewell County ETSB desire such documentation and procurement assistance, each system procurement will be treated as a separate and unique project with costs proposed accordingly.

Should the Tazewell County ETSB desire Additional Work beyond the scope stated in the Proposal, i.e.: a grant application under ISP Part 1327, Richard Tucker & Associated is willing to provide a specific proposal or perform work tasks on a time and materials basis. The rate for work performed during the calendar year 2017 is \$195 per hour, invoiced on a monthly basis. Travel expenses are invoiced at cost using IRS guidelines for mileage and the prevalent GSA schedule for per-diem.

A proposed contract is included in the Proposal package.

# Legal Disclaimers

The services furnished by the Consultant and its subcontractor(s) are provided as an Independent Contractor and not as an agent or employee of the Client. The Consultant specifically has the right to direct and control its own activities in providing the agreed services in accordance with the requirements and plan set out in this Proposal. The Consultant shall provide the Client an executed IRS Form W-9 indicating the official tax identification number to be used by the Client in respect to any and all payments made to the Consultant.

The Consultant, its assignees, delegates or subcontractors shall not discriminate against any person in the performance of any of its obligations on the basis of race, color, creed, ethnicity, religion, national origin, age, sex, marital status, veteran status, sexual orientation or the presence of any disability.

The Consultant represents that he is not an Agent, Representative, Employee of, or maintains any other official or non-official relationship with any manufacturer or supplier of equipment or services otherwise currently used or maintained by the Client in their course of operations or one that might otherwise solicit such sales or services during the term or this Agreement.

The Client agrees and understands that Services provided by the Consultant are professional in nature and do not include legal, engineering, architectural, design or any other services requiring a particular license or registration within the State of Illinois. Any and all claims, calculations, representations, opinions and conclusions are made by the Consultant given information provided to him by the Client and its Agencies and the Consultant shall not be responsible for same if given incomplete or inaccurate information by said Agencies or other parties of information in the course of providing Services or Other Services.

The Consultant shall not disclose, communicate, reveal or publish any proprietary information, photos, data or observations of a confidential or public safety sensitive nature acquired during the course of providing Services under this Agreement. Documentation in electronic or hard copy format provided to the Client by the Consultant as work product to this Project shall become the Intellectual Property of the Client; however, Consultant shall have the right to keep a permanent copy of all Project work, data, research and other information and retain the right to use any specific formulas, calculations, designs, algorithms or other conceptual ideas produced. Should the Client release any specific document, data or other information publically, the Consultant shall have the right to use and release the same such document, data or information.

## **Attachments**

Resume - Richard S. Tucker

Resume - Paul A. Maplethorpe

# Additional Documentation Copy Included in Proposal Package and On Electronic Media

**Contract Draft** 

Option Feasibility Study 2012

9-1-1 Call Taking and Public Safety Dispatch Analysis

## **Experience:**

Over 43 years experience in all aspects of Law Enforcement/Public Safety operations and systems with emphasis on communication, information management and security. Over 36 years experience in the communication industry including two-way radio, paging, telecommunications system design and implementation, tower erection, technical service and support, product procurement, sales and consulting. Over 47 years experience in business management and consulting including formation of new business entities, business accounting, financial management, alternative procurement, marketing, sales and taxation. Computer science experience includes over 31 years experience in data processing system design, implementation of computerized management, accounting and network systems. Mr. Tucker also has experience in product engineering, design, service, software, model development and production.

Professional Experience (abridged for public safety consulting related citations):

#### **Consultant - Public Safety Services**

Mr. Tucker has been employed as a professional consultant since 1985. He provides strategic planning, direction and specialized support for public safety projects including communications, security, management information systems, staffing, training, assistance in accreditation and operational procedures. Mr. Tucker provides Public Safety C<sup>4</sup> system studies, simulations and reports. He has personally performed the full spectrum of system procurement activities including concept development, needs analysis, system design, specification preparation, vendor selection support, implementation supervision, acceptance testing, upgrade development, certification and user training. He has served as both a contract consultant and as a subcontractor to other private sector service firms.

The following is a listing of principal clients (in alphabetical order) and associated projects.

## Bernie Ebstein Associates (Consulting Firm), Highland Park, Illinois

**Berwyn**, Illinois - Managed the 1990 implementation of an enhanced 9-1-1 Public Safety Answering Point (PSAP) including extensive architectural design support and system procurement.

Des Plaines, Illinois - Managed development of a comprehensive enhanced 9-1-1 system plan including consolidation of police and fire/EMS dispatch services, development of a new combined facility, staffing and system design services. Phase II included architectural design support for a new communications facility and systems procurement assistance. Phase II also included studies and negotiation assistance which lead to a cooperative consolidated communications service with Park Ridge, Illinois, an adjoining community. Procured systems included radio backbone and consoles, facility security, WAN based computer-assisted dispatch and fire department alerting.

**Rock County**, Wisconsin - Assisted in the development of a comprehensive enhanced 9-1-1 system plan including county-wide consolidation of over 44 public safety agencies, dispatch facility and automation system alternatives. Phase II project tasks included architectural design support, preparation of purchase documentation, contract negotiations, vendor liaison, and implementation oversight. Procured systems include 9-1-1 telephone, radio backbone and consoles, computer-assisted dispatch, mobile data terminals and backup facility.

Dr. Gregory M. Stone & Associates (Consulting Firm), Alexandria, Virginia

**Port Authority of New York and New Jersey** - Assisted in the procurement of a regional 800MHz trunked radio system. Services included technical specifications, FCC license modifications, negotiation support and operational planning. Prepared alternative plans for consolidation of dispatch centers.

Omnicom, Inc.(Consulting Firm), Tallahassee, Florida

**Cedar Rapids**, lowa - Assisted in the development of a regional consolidation plan. Planning criteria included workload and personnel assessment, facility sizing and design, regional radio system costing, WAN based computer-assisted dispatch and mobile data system costing.

**Coral Gables**, Florida - Provided support for development of a consolidated 9-1-1 PSAP LAN based computer-assisted dispatch system purchase specification.

Oppermann Architects (Architectural Firm), Naperville, Illinois

**Danville**, Illinois - Development of a PSAP move evaluation and systems design. Project included design and construction of a new PSAP and equipment room, HVAC and electrical upgrade, network and CAD equipment procurement.

RJO, Inc.(Consulting/Integration Firm), Lanham, Maryland

**U.S. Department of Justice** - Assisted in the development of a classified computer-assisted dispatch system, contracted under the U.S. Department of Justice for the Immigration and Naturalization Service Border Patrol services.

SFA, Inc.(Formerly Sachs, Freeman Associates, Consulting Firm), Landover, Maryland

**Boca Raton**, Florida - Developed a computer-aided dispatch system and police records system specification and assisted in system procurement through certification.

**Broward County**, Florida - Prepared a county-wide communications center consolidation plan for development of a new facility and computer-aided dispatch system. Assisted in design and evaluation of a pilot county-wide 800 MHz trunked radio communications system.

**City of Chandler**, Arizona - Assisted in the development of a needs and requirements analysis for a public safety communication system. Alternatives explored consolidation of fire and EMS dispatch services with the City of Phoenix regional communication system.

**City of Houston**, Texas - Assisted in the design of a city-wide broadband fiber-optic communications WAN which included both data and voice requirements.

**City of Norfolk**, Virginia - Evaluated city prepared computer-aided dispatch system purchase specification.

Chicago Fire Department, Chicago, Illinois - Evaluated vendor supplied dispatch automation system; reviewed department developed radio console and computer-aided dispatch system specifications; reviewed CAD vendor proposals and provided system recommendation; assisted in CAD vendor negotiations; assisted in development of city-owned wireline testing procedure.

Clermont County, Ohio - Assisted in county-wide consolidation of public safety dispatch services including 9-1-1, radio system alternatives and the design of a new communications center. Project included a needs and requirements analysis for a county-wide C/CJIS system including WAN based computer-aided dispatch, sheriff's department records system and courts information system.

**Howell Township**, New Jersey - Assisted in dispatch center radio console placement analysis.

Metropolitan Emergency County-wide Communications Agency, Indianapolis, Indiana - Reviewed staff developed 800 MHz trunked radio, computer-aided dispatch and mobile data terminal system specification; assisted in vendor evaluation and recommendation.

**Minnesota State Patrol**, St. Paul, Minnesota - Assisted in development of a consolidation plan for the Minneapolis and St. Paul dispatch communication facilities; evaluated radio communication, computer-aided dispatch and mobile data system alternatives.

**Northwest Central Dispatch System**, Arlington Heights, Illinois - Assisted in the development of radio communication system testing procedures to determine modification requirements for extended coverage.

Ohio State Highway Patrol, Columbus, Ohio - Assisted in the development of a comprehensive design plan for a statewide radio, mobile data terminal and computer network gateway systems.

Port Authority of New York and New Jersey, New York, New York - Assisted in the design analysis of an advanced video communication system for the PA's antiterrorist unit. Assisted in the design analysis of an airport fuel dump surveillance system. Prepared a needs and requirements analysis for an airport mechanical surveillance system. Reviewed an authority prepared computer-aided dispatch system specification. Assisted in the preparation of a comprehensive regional public safety radio communications needs and requirements analysis.

**Michigan State Police**, Lansing, Michigan - Assisted in the development of a project mechanism for radio site evaluation for a state-wide 800 MHz radio communication system.

## Wm. R. Henry Associates (Architectural-Engineering Firm), Elkhorn, Wisconsin

**Kenosha County**, Wisconsin - Review of county based consolidated PSAP facility. Assisted in preparation of analysis report including operational requirements, projected growth, systems and facility requirements and costing.

Dyonics, Inc. (Corporate Entity)

**Antioch**, Illinois - Provided 9-1-1 PSAP facility construction design support. Prepared bid specifications and procurement support for radio backbone and console systems.

**Berwyn**, Illinois - Provided support for management of an enhanced 9-1-1 PSAP. Tasks included preparation of budgets and plans, operational and administrative support. 1995 project included replacement of radio console control systems. 1999 project included design and procurement of major communications systems, expansion of the police radio system channels, and provision of an E9-1-1 center in a new Public Safety facility.

**CENCOM**, Round Lake Beach, Illinois - Developed fee distribution analysis for reapportioning costs of 7-agency consolidated dispatch operation to member agencies.

**Des Plaines - Park Ridge**, Illinois - Provided support for management and security of a consolidated enhanced 9-1-1 PSAP and WAN. On-call and on-site administrative and MIS support for a 7-site multi-protocol WAN using Novell and UNIX based servers.

**Des Plaines - Morton Grove - Niles - Park Ridge**, Illinois - Developed consolidation plan and provided system upgrade procurement support. Assisted in the development of a unified communications workstation environment.

**EDS Federal Corporation**, Herndon Virginia - Functional review of computer-assisted dispatch software product.

Lake County, Illinois - Developed county-wide consolidated enhanced 9-1-1 system plan for 4 primary and 1 secondary PSAP. Developed implementation plan, Illinois Commerce Commission application, purchase specifications for major systems and liaison with providing vendors. Project services included decision support for the 9-1-1 Emergency Telephone System Board, system procurement, certification assistance and ongoing operational support. Procured systems include 9-1-1 telephone, backup power, voice logging, regional computer-assisted dispatch and mobile data radio network.

**Lake Zurich**, Illinois - Developed Audio, Security and Surveillance System design and bid package for police department and 9-1-1 center.

Lincolnshire, Illinois - Provided development and procurement support for a new enhanced 9-1-1 PSAP, police department and administrative facility. Supported dispatch consolidation with Vernon Fire Protection District. Provided design support, bid purchase documentation, vendor negotiation and liaison, dispatch client fee structure and negotiation, construction oversight and system certification. Procured systems include 9-1-1 and facility administrative telephone system, radio backbone and consoles, facility security, facility communications/LAN wiring, voice logging and computer-assisted dispatch.

**Morton Grove** and **Niles**, Illinois - Prepared analysis for impact of consolidation of E9-1-1 and dispatch communications services with other agencies or maintenance of stand-alone centers. Consolidation process completed with the cities of Des Plaines and Park Ridge, Illinois forming the North Suburban Emergency Communications Center (NSECC).

**Vernon Hills**, Illinois - Computer-assisted dispatch system procurement. Provided design analysis and procurement support for a new CAD and police records system.

#### Richard S. Tucker Consulting (Tucker Dyonics Proprietorship), Pactola Heights, SD

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Berwyn, Illinois - Providing ongoing support for Emergency Telephone System Board. Tasks include provision of technical advice, operational/administrative support and system upgrade. Procured ISO/NFPA compliant supervised fire house alerting system. Designed new fire department VHF narrowband radio system. Developed financial oversight process. Planned 9-1-1 telephone system upgrade and dispatch center furniture replacement in 2008. Assisted development of radio programming templates and interoperability in 2010. Prepared Regional Consolidation Study in 2012. Assisted in radio narrowbanding project in 2012. Prepared alternative research paper to replace the Police UHF T-Band radio system. Prepared research paper to procure an LTE data system for public safety use. Prepared accounting and budget template compliant with new State of Illinois legislative requirements and mandated report fot 2012/2013.. Prepared 700 MHz conventional radio system design, CAPRAD/FCC application, Region 54 Committee justification document and project implementation pricing. Prepared 700 MHz Radio Infrastructure RFP, currently under implementation. Procurement for replacement IP based Fire Station Alerting System under implementation.

Carroll, Jo Daviess & Stephenson County Sheriff's Departments, Illinois - prepared 9-1-1 PSAP/dispatch center consolidation study with optional alternatives.

**CENCOM**, Round Lake Beach, Illinois - Radio system evaluation and procurement including propagation analysis, field testing, system replacement. Phase II consulting included selection and provision of portable radios for regional deployment. Assisted in FCC licensing and concurrence process.

**CENCOM - Grayslake**, Illinois - Consolidation and Cutover Plan to include the Village of Grayslake Police Department and the Grayslake Fire Protection District into CENCOM operations. Plan included costs for equipment and services, client based and shareholder pricing.

**DU-COMM - Glendale Heights**, Illinois - Fire Radio Options Plan to update current transmitter steered regional radio system. Prepared a Management Structure Analysis and staff seminar in 2010. Assisted in reconfiguring a regional simulcast VHF fire paging system in 2013. Provided staff training session on RF propagation software. Preparing document templates for standardized Bid & RFP procurements. Assisted in design and prepared IP transport Microwave Backbone RFP 2016.

**DuPage County ETSB - Wheaton**, Illinois - Prepared RFP Technical Specification for procurement of Next Generation 9-1-1 Telephone systems for 4 PSAPs 2016.

**Fox Lake**, Illinois - Assistance in the design and procurement of a new 9-1-1 PSAP facility. Systems included control consoles, telephone, radio and UPS. Design support provided for electrical, HVAC, backup power and room design. Developed Implementation Plan for future dispatch client expansion. Developed option plan for support of current clients.

**Glenview**, Illinois - Assistance in the consolidation of a police with a fire dispatch center. Project tasks included systems configuration, procurement and implementation of new computer-assisted dispatch software and hardware, evaluation of wireless data network, support for dispatch client migration and funding presentations.

**Hinsdale High School District 86, Hinsdale**, Illinois - Multi-site Security Radio system. Design and bid procurement for an expandible VHF Moto-Turbo based multi-site infrastructure.

McHenry Township Fire Production District, McHenry, Illinois - Prepared Phase I study and assisted architect in designing new 9-1-1 PSAP and dispatch center facility infrastructure in new Administration Building.

**State of South Dakota, Pierre**, South Dakota - Prepared and presented an orientation session to a special Governor's Committee tasked with examining the consolidation of South Dakota's then current 48 9-1-1 centers.

Wheaton, Illinois - Design of 2 fire station tower structures to provide 2-way radio and wireless network antenna support. Considerations included height requirements, placement, cabling support, microwave options and community esthetics.

West Suburban Consolidated Dispatch Center, Forest Park, Illinois - Prepared bid specification for the replacement of a 30KVA battery uninterrupted power supply (UPS) system. Reviewed submitted bids and prepared formal award recommendation.

#### Papers and Publications:

Communications Center Workload Analysis - APCO - Boston, MA, 1990
Optimum Scheduling Alternatives - APCO - Tulsa, OK, 1991
Emerging Communications Technology - APCO/NENA - St Charles, IL 1991
Pitfalls in Overbuying Computer Technology - APCO Magazine, January 2001

#### **Public Service:**

Pennington County, SD, 9-1-1 Commission member

#### Security Clearances (Prior):

Defense Industrial Security Clearance Office (DISCO) - Secret U.S. Department of Justice - Secret

## Paul A. Maplethorpe

(03-28-2017)

#### Experience:

Over 36 years experience in all aspects of Law Enforcement/Fire Service/Public Safety operations and systems with emphasis on communications, management, mutual aid and disaster response. Over 38 years experience in the communications industry including two-way radio, paging, telecommunications system design and implementation, tower erection, technical service and support, product procurement, sales and consulting. Over 29 years experience as an educator in Fire Sciences. Over 10 years of management and accounting experience including grant application and management for a quasi-governmental organization.

## Professional History (abridged for public safety related citations):

#### Fire Chief - Administrator

Mr. Maplethorpe served as Chief and Administrator of the Greater Round Lake Fire Protection District from 1986, retiring in 2016.

## Treasurer/Comptroller

Mr. Maplethorpe served as the Treasurer/Comptroller of the Mutual Aid Box Alarm System – Illinois from 2007 to February 2017.

#### Instructor - Fire Science Program

Mr. Maplethorpe has served as an instructor for Fire Sciences at the College of Lake County since 1989.

#### Police Officer

Mr. Maplethorpe served as an officer of the Village of Round Lake Police Department from 1987 to 2015.

#### Firefighter - Paramedic

Mr. Maplethorpe served as a Firefighter/Paramedic for the Village of Gurnee Fire Department from 1980 to 1986.

#### Consultant

**Sangamon County Rural Fire Radio Network**, Illinois - Project to enhance MABAS radio coverage in a county-wide scenario.

#### Education:

M.A. Management (1987), Webster University, St. Louis, MO
B.S. Fire Science Services (1983), Southern Illinois University
A.A.S. Fire Science Technology (1981), College of Lake County
Certificate Emergency & Disaster Management (2008), College of Lake County

## Certifications (Selected particular to Public Safety):

Communications Technician (FEMA/DHS) (2010)
Communications Specialist (FEMA/DHS) (2009)
Communications Unit Leader (2008)
Master Fire Service Instructor IV (1984)
Advanced Certified Firefighter III (1982)
Licensed Emergency Medical Technician – Paramedic (1981)
Certified Firefighter II (1978)

#### **Public Service:**

**CENCOM** Emergency Telephone System Board member (1989-2017) **Softball Coach** (Volunteer) Round Lake Senior High School (2006 to present)

#### **Professional Organizations:**

FEMA Region 5 - Regional Emergency Communications Coordination Working Group Illinois Terrorism Task Force Communications Committee - Co-Chair Illinois Statewide Interoperability Executive Committee
Lake County Emergency Telephone System Board
International Fire Chiefs Association
Illinois Fire Chiefs Association
National Emergency Number Association
Association of Public Safety Communications Officials
Fox Lake – Round Lake Area Rotary Club