### SERVICE CONTRACT Federal Engineering Inc (V# 7654)

AGREEMENT is made this 25<sup>11</sup> day of July 2023, by the COUNTY OF WASHTENAW, a municipal corporation, with offices located in the County Administration Building, 220 North Main Street, Ann Arbor, Michigan 48107 ("County") and Federal Engineering Inc , located at 10560 Arrowhead Dr Suite 100, Fairfax, VA 22030 ("Contractor")

In consideration of the promises below, the parties mutually agree as follows.

### ARTICLE I - SCOPE OF SERVICES

The Contractor will perform the services and present the deliverables as described in Attachment A (Proposal); based on tasks within the content of the RFP no. 8378

### **ARTICLE II - COMPENSATION**

Upon completion of the above services and submission of invoices the County will pay the Contractor an amount based on discounts and labor charges submitted in accordance with RFP #8378

### ARTICLE III - REPORTING OF CONTRACTOR

- Section 1 The Contractor is to report to Sheriff Jerry Clayton and will cooperate and confer with him/her as necessary to insure satisfactory work progress
- Section 2 All reports, estimates, memoranda, and documents submitted by the Contractor must be dated and bear the Contractor's name.
- Section 3 All reports made in connection with these services are subject to review and final approval by the County
- Section 4 The County may review and inspect the Contractor's activities during the term of this contract
- Section 5 When applicable, the Contractor will submit a final, written report to Sheriff Jerry L. Clayton
- Section 6 After reasonable notice to the Contractor, the County may review any of the Contractor's internal records, reports, or insurance policies

### ARTICLE IV - TERM

This contract begins on August 1, 2023, and ends on December 31, 2024, with an option to extend for one (1) additional one (1) year period

### ARTICLE V - PERSONNEL

- <u>Section 1</u> The contractor will provide the required services and will not subcontract or assign the services without the County's written approval.
- <u>Section 2</u> The Contractor will not hire any County employee for any of the required services without the County's written approval.
- Section 3 The parties agree that all work done under this contract shall be completed in the United States and that none of the work will be partially or fully

completed by either an offshore subcontractor or offshore business interest either owned or affiliated with the contractor. For purposes of this contract, the term, "offshore" refers to any area outside the contiguous United States, Alaska, or Hawaii

### ARTICLE VI - INDEPENDENT CONTRACTOR

Contractor and the County shall, at all times, be deemed to be independent contractors and nothing herein shall be construed to create or imply that there exists between the parties a partnership, joint venture or other business organization. Contractor shall hold no authority, express or implied, to commit, obligate or make representations on behalf of the County and shall make no representation to others to the contrary

Nothing herein is intended nor shall be construed for any purpose as creating the relationship of employer and employee or agent and principal between the parties Except as otherwise specified in this contract, Contractor retains the sole right and obligation to direct, control or supervise the details and means by which the services under this contract are provided.

Contractor shall not be eligible for, or participate in, any insurance, pension, workers' compensation insurance, profit sharing or other plans established for the benefit of the County's employees. Contractor shall be solely responsible for payment of all taxes arising out of the Contractor's activities in connection with this Agreement, including, without limitation, federal and state income taxes, social security taxes, unemployment insurance taxes and any other tax or business license fees as required. The County shall not be responsible for withholding any income or employment taxes whatsoever on behalf of the Contractor.

### ARTICLE VII - INDEMNIFICATION AGREEMENT

The contractor will protect, defend and indemnify Washtenaw County, its officers, agents, servants, volunteers and employees from any and all liabilities, claims, liens, fines, demands and costs, including legal fees, of whatsoever kind and nature which may result in injury or death to any persons, including the Contractor's own employees, and for loss or damage to any property, including property owned or in the care, custody or control of Washtenaw County in connection with or in any way incident to or arising out of the occupancy, use, service, operations, performance or non-performance of work in connection with this contract resulting in whole or in part from negligent acts or omissions of contractor, any sub-contractor, or any employee, agent or representative of the contractor or any sub-contractor

### ARTICLE VIII - INSURANCE REQUIREMENTS

The Contractor will maintain at its own expense during the term of this Contract, the following insurance.

- 1. Workers' Compensation Insurance with Michigan statutory limits and Employers Liability Insurance with a minimum limit of \$100,000 each accident for any employee.
- 2 Commercial General Liability Insurance with a combined single limit of \$1,000,000 each occurrence for bodily injury and property damage. The County shall be added as "additional insured" on general liability policy with respect to the services provided under this contract.

Automobile Liability Insurance covering all owned, hired and non-owned vehicles with Personal Protection Insurance and Property Protection Insurance to comply with the provisions of the Michigan No Fault Insurance Law, including residual liability insurance with a minimum combined single limit of \$1,000,000 each accident for bodily injury and property damage. For transportation services contracts, the County shall be added as additional insured on automobile liability policy with respect to the services provided under this contract

Insurance companies, named insured's and policy forms may be subject to the approval of the Washtenaw County Administrator, if requested by the County Administrator Such approval shall not be unreasonably withheld. Insurance policies shall not contain endorsements or policy conditions which reduce coverage provided to Washtenaw County Contractor shall be responsible to Washtenaw County or insurance companies insuring Washtenaw County for all costs resulting from both financially unsound insurance companies selected by Contractor and their inadequate insurance coverage. Contractor shall furnish the Washtenaw County Administrator with satisfactory certificates of insurance or a certified copy of the policy, if requested by the County Administrator.

No payments will be made to the Contractor until the current certificates of insurance have been received and approved by the Administrator. If the insurance as evidenced by the certificates furnished by the Contractor expires or is canceled during the term of the contract, services and related payments will be suspended. Contractor shall furnish the certification of insurance evidencing such coverage and endorsements at least ten (10) working days prior to commencement of services under this contract. Certificates shall be addressed to the Washtenaw County c/o Washtenaw County Sheriff's Office 2201 Hogback Road, Ann Arbor, Michigan 48105 and contract #54992, and shall provide for written notice to the Certificate holder of cancellation of coverage.

### ARTICLE IX - COMPLIANCE WITH LAWS AND REGULATIONS

The Contractor will comply with all federal, state, and local regulations, including but not limited to all applicable OSHA/MIOSHA requirements and the Americans with Disabilities Act

### ARTICLE X - INTEREST OF CONTRACTOR AND COUNTY

The Contractor promises that it has no interest which would conflict with the performance of services required by this contract. The Contractor also promises that, in the performance of this contract, no officer, agent, employee of the County of Washtenaw, or member of its governing bodies, may participate in any decision relating to this contract which affects his/her personal interest or the interest of any corporation, partnership or association in which he/she is directly or indirectly interested or has any personal or pecuniary interest. However, this paragraph does not apply if there has been compliance with the provisions of Section 3 of Act No 317 of the Public Acts of 1968 and/or Section 30 of Act No 156 of Public Acts of 1851, as amended by Act No. 51 of the Public Acts of 1978, whichever is applicable

### ARTICLE XI - CONTINGENT FEES

The Contractor promises that it has not employed or retained any company or person, other than bona fide employees working solely for the Contractor, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than bona fide employees working solely for the Contractor, any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or making of this contract. For breach of this promise, the County may cancel this contract without liability or, at its discretion, deduct the full amount of the fee,

commission, percentage, brokerage fee, gift or contingent fee from the compensation due the Contractor

### ARTICLE XII - EQUAL EMPLOYMENT OPPORTUNITY

The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, national origin, physical handicap, age, height, weight, marital status, veteran status, religion and political belief (except as it relates to a bona fide occupational qualification reasonably necessary to the normal operation of the business).

The Contractor will take affirmative action to eliminate discrimination based on sex, race, or a handicap in the hiring of applicant and the treatment of employees Affirmative action will include, but not be limited to. Employment, upgrading, demotion or transfer, recruitment advertisement, layoff or termination, rates of pay or other forms of compensation, selection for training, including apprenticeship

The Contractor agrees to post notices containing this policy against discrimination in conspicuous places available to applicants for employment and employees. All solicitations or advertisements for employees, placed by or on the behalf of the Contractor, will state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, sexual orientation, national origin, physical handicap, age, height, weight, marital status, veteran status, religion and political belief

### ARTICLE XIII - LIVING WAGE

The parties understand that the County has enacted a Living Wage Ordinance that requires covered vendors who execute a service or professional service contract with the County to pay their employees under that contract, a minimum of either \$15.90 per hour with benefits or \$17.73 per hour without benefits. Contractor agrees to comply with this Ordinance in paying its employees. Contractor understands and agrees that an adjustment of the living wage amounts, based upon the Health and Human Services poverty guidelines, will be made on or before April 30, 2023, and annually thereafter which amount shall be automatically incorporated into this contract. County agrees to give Contractor thirty (30) days written notice of such change. Contractor agrees to post a notice containing the County's Living Wage requirements at a location at its place of business accessed by its employees.

### ARTICLE XIV - EQUAL ACCESS

The Contractor shall provide the services set forth in Article I without discrimination on the basis of race, color, religion, national origin, sex, sexual orientation, marital status, physical handicap, or age

### ARTICLE XV - OWNERSHIP OF DOCUMENTS AND PUBLICATION

All documents developed as a result of this contract will be freely available to the public. None may be copyrighted by the Contractor. During the performance of the services, the Contractor will be responsible for any loss of or damage to the documents while they are in its possession and must restore the loss or damage at its expense. Any use of the information and results of this contract by the Contractor must reference the project sponsorship by the County. Any publication of the information or results must be co-authored by the County

### ARTICLE XVI - ASSIGNS AND SUCCESSORS

This contract is binding on the County and the Contractor, their successors, and assigns. Neither the County nor the Contractor will assign or transfer its interest in this contract without the written consent of the other.

### ARTICLE XVII - TERMINATION OF CONTRACT

Section 1 - Termination without cause. Either party may terminate the contract by giving thirty (30) days written notice to the other party

### <u>ARTICLE XVIII - PAYROLL TAXES</u>

The Contractor is responsible for all applicable state and federal social security benefits and unemployment taxes and agrees to indemnify and protect the County against such liability.

### **ARTICLE XIX - PRACTICE AND ETHICS**

The parties will conform to the code of ethics of their respective national professional associations

### ARTICLE XX- CHANGES IN SCOPE OR SCHEDULE OF SERVICES

Changes mutually agreed upon by the County and the Contractor, will be incorporated into this contract by written amendments signed by both parties

### ARTICLE XXI - CHOICE OF LAW AND FORUM

This contract is to be interpreted by the laws of Michigan. The parties agree that the proper forum for litigation arising out of this contract is in Washtenaw County, Michigan

### ARTICLE XXII - EXTENT OF CONTRACT

This contract represents the entire agreement between the parties and supersedes all prior representations, negotiations or agreements whether written or oral

### ARTICLE XXIII - ELECTRONIC SIGNATURES

All parties to this contract agree that either electronic or handwritten signatures are acceptable to execute this agreement

ATTESTED TO		WASHTENAW COUNTY  Fluom DW		
By Lawrence Restoration	08/04/2023	By 08/02/2023		
Lawrence Kestenbaum County Clerk/Register	(DATE)	Gregory Dill County Administrator	(DATE)	

APPROVED AS TO CONTENT'

CONTRACTOR

Ву Jerry Clayton By Ronald F. Bosco 07/25/23
Ron Bosco (DATE)
President - Federal Engineering Inc

Sheriff

APPROVED AS TO FORM.

Michelle K. Billard
Office of Corporation Counsel (DATE)

Attachment A Proposal - Federal Engineering, Inc



Federal Engineering, Inc. 10560 Arrowhead Drive, Suite 100 Fairfax, VA 22030 703-359-8200

### A. INTRODUCTORY LETTER/EXECUTIVE SUMMARY

February 9, 2023

Submitted via email duffyb@washtenaw org

Ms. Beth A Duffy, CPPB Purchasing Manager 220 N Main Street Ann Arbor, Michigan 48104

Dear Ms Duffy.

Federal Engineering, Inc. (*FE*) is pleased to submit this proposal to Washtenaw County, Michigan for Emergency Communications Consulting Services for the Sheriff's Office. Our response is complete and compliant with your Request for Proposal (RFP) #8378, as discussed during the mandatory pre-bid meeting held January 26, attended by Director Patti D'Andrea

FE offers Washtenaw County 40 years of experience in emergency communication center (ECC) performance audits, staffing assessments, and successful implementations of recommended improvements. Our combination of core qualifications and public safety consulting experience includes assessing dispatch operations and the feasibility of expanding dispatch services to law enforcement, fire departments, and other emergency services providers

Our team specializes in helping telecommunicators and dispatchers fully leverage the technologies available to them, including prioritized dispatch software, computer aided dispatch (CAD), records management systems (RMS), jail management systems (JMS), NG9-1-1, and public safety radio systems. We have extensive experience working with emergency fire dispatch (EFD) and emergency medical dispatch (EMD) protocol software systems since their inception *FE*'s team includes former first responders and dispatchers with hands-on experience in fire, emergency medical services (EMS), and police dispatch operations

FE has developed the tools, skillsets, and methodologies necessary to deliver practical, affordable solutions that most effectively meet the needs of first responders. As your consultant, our experts will work closely with the Sheriff's Office to assess existing operations of 911 Metro Dispatch and evaluate the feasibility of adding additional services to include dispatch for all law enforcement agencies in the County, the additional dispatch of Ann Arbor Fire Department, and the additional dispatch of all fire departments in the County

Our project manager will plan, facilitate, and document meetings and provide regular updates. Our subject matter experts (SMEs) will analyze these models for countywide call taking and dispatch service, developing recommendations for a ten-year strategic development framework for expansion of dispatch services. FE's expertise provides clients with an end-to-end suite of operational and



technical consulting services for the planning, design, and implementation of dispatch and public safety communications projects that is unmatched in today's market FE understands that every project is unique. Our proposed approach has been custom-tailored to meet your needs and achieve your goals

#### FE Capabilities & Services NG9-1-1/9-1-1 Systems Dispatch/Call Centers CAD/RMS/JMS Planning & implementation Staffing/efficiency analysis Network/ESINet Technology NG9-1-1/9-1-1 Mapping/GIS database Regional consolidation Phone bill audits Standard operating

**Public Safety** Consultants

Wireless

Technology

**SMEs** 

#### Large System Upgrades

- PM and migration planning
- Technology assessment
- User needs assessment
- Procurement support

procedures

988

- Contract negotiation
- Implementation oversight
- IV&V

#### **Public Safety Radio**

- Trunked, conventional
- Digital, analog, simulcast
- P25, DMR, Tetra technology Coverage & capacity analysis
- All frequency bands
- RF system recommendation Analog Simulcast over IP

- · Data analytics
- Cybersecurity
- Real-time crime centers

#### Governance & Funding

- Governance models
- CAPEX/OPEX funding models
- Legislative support
- · Statewide contract support

#### Other Wireless & Data

- Broadband/LTE data systems
- FirstNet
- Fire alerting/paging
- Smart City/IoT/AMI planning
- DMR
- Cybersecurity

FE's previous performance has earned us a reputation as the premier public safety consulting firm This reputation is based upon our long public safety heritage, our consultants have been assisting clients with public safety communications since our inception in 1983. We offer demonstrated knowledge and practical performance focused on assisting our customers in successfully and affordably attaining their emergency dispatch and 911 call answering goals

By my signature below, I authorize submission of this proposal and bind Federal Engineering, Inc. to its terms and conditions for a period of 90 days. Please contact Jeffrey Paré, Director of Business Development, by phone at 530-263-8541 or via email to pare@fedeng com with any questions FE looks forward to working with Washtenaw County on this critically important project.

Sincerely,

Ronald F. Bosco

Ronald F Bosco

President and Chief Executive Officer

Federal Engineering, Inc.





## B. FEDERAL ENGINEERING'S PROPOSED SCOPE OF WORK (RFP Section V)

### **B.1** Project Understanding

The Washtenaw County Sheriff's Office is the primary provider of emergency communications services in Washtenaw County, under the Emergency Services Division (ESD) ESD provides leadership for two critical public safety functions. Emergency Management and 911 Metro Dispatch. Located in Ann Arbor, Metro Dispatch is a consolidated Emergency Services. Communications Center (ESCC) that serves as the primary PSAP for the county. The ESCC facility is designed to provide space and environment for operations of the County's Emergency. Communications Center, 911 Metro Dispatch operations, and the Emergency Operations Center (EOC) when activated.

As discussed during the mandatory pre-proposal call, the telecommunicators located at the ESCC answer 9-1-1 calls and non-emergency calls for approximately 96% of the county's residents and answer 100% of wireless calls made across Washtenaw County. There are four smaller PSAPs who answer landline 911 calls within their jurisdictions. City of Saline, City of Chelsea, University of Michigan, and Eastern Michigan University. Metro Dispatch transfers wireless calls to these smaller PSAPs, when applicable

Fire and EMS calls are transferred for dispatch to Emergent Health Partners, also located in Ann Arbor Metro Dispatch provides direct police dispatching services for ten law enforcement agencies, including the agencies listed below

- Ann Arbor Police Department
- Department of Natural Resources
- Huron Area Metro Parks Police
- Michigan State Police
- Milan City Police
- Northfield Township Police
- Pittsfield Township Police
- Washtenaw County Sheriff's Office
- Ypsilanti Police Department

As noted on the County Sheriff's Office website, Metro Dispatch handles on average over 1,000 emergency and non-emergency calls every day

Washtenaw County is seeking a consultant to assess the Sheriff's Office 911 Metro Dispatch's existing operations and evaluate the feasibility and impacts of 911 Metro expanding its operations. As the County's consultant, FE will assess the following alternatives

- Washtenaw's Metro Dispatch's existing operations
- The feasibility of providing dispatch services to all law enforcement agencies in Washtenaw County





- The feasibility of providing dispatch services to all law enforcement agencies in Washtenaw County and the City of Ann Arbor Fire Department (AAFD)
- The feasibility of providing dispatch services to all law enforcement and public fire departments/fire services agencies in Washtenaw County

After gathering data from all PSAPs and dispatch centers and analyzing operations and performance metrics, *FE's* experts will use custom tools to determine required staffing levels based on industry standards for low, normal, and peak periods for each alternative. We will assess industry-standard governance models and organizational change recommendations, technology challenges and opportunities for more efficient operations, physical location, rule-based dispatch deployment, and anticipated funding and capital cost projections. Finally, we will identify any potential barriers for each proposed alternative. In summary, for each of the operational scenarios, *FE's* experts will assess the following areas critical to PSAP operations:

- Equipment and technology including NG9-1-1
- Call volumes
- · Human resources staffing, job tasks, scheduling, training, hiring, qualify of life
- Workload and operational models
- Policy and procedures
- Quality improvement and assurance
- Funding sources and financial planning
- Integration of crisis response/unarmed/alternative response models
- Co-location of similar and related services in the existing Emergency Services Communications Center (ESCC)
- Legal, legislative, and political environment

Following interviews, site observations, and detailed analysis of the areas outlined above for the alternatives under consideration, *FE* will prepare a *Feasibility Study and Recommendations Report*, documenting a ten-year strategic development framework for expanding the delivery of emergency services provided by the Washtenaw Sheriff's Office ESCC.

FE's recommendations will be grounded in national best practices, public safety communications industry trends, the mission of the Sheriff's Office, and the operational philosophy of the Sheriff's ESD. We will assist ESD in anticipating future needs, service opportunities, and the impact of external influences such as legislative and policy trends.

Our planned project approach is summarized in the diagram below





**Sheriff Emergency Communications Consulting Services** 



### **B.2** Project Management and Quality Assurance Approach

FE's project manager will focus on Washtenaw County's needs and establish a baseline project management process that centers on collaboration, open communications, consensus building, and the discovery and minimization of risk. She will continually coordinate activities with the County's project manager, plan, facilitate, and document meetings, provide regular updates, involve participating agencies for frequent input, and serve as a primary resource to the County

FE remains current with the Project Management Institute's Project Management Body of Knowledge (PMBOK). The project plan and schedule will be adjusted as needed as the project evolves through deliverables, approval processes, and meeting schedules

We appreciate that your personnel are already burdened with current work, and we will minimize the additional workload that this project puts on participating personnel. We anticipate that designated County personnel will have the following responsibilities during the effort

- Provide designated personnel at the appropriate technical and management levels to collaborate with *FE* consultants and make decisions throughout the project
- Provide existing documentation to FE upon request to facilitate a quick project start
- Provide adequate conference rooms for on-site meetings
- Review deliverables within the timeframe of the mutually agreed upon project schedule





### **Sheriff Emergency Communications Consulting Services**

· Facilitate consensus/decision-making on key issues in a timely manner

FE applies rigorous Quality Assurance (QA) measures throughout our project activities. We have developed a comprehensive deliverable review program, managed by our Quality Assurance. Review Board, shown below in Exhibit 1. The Board manages a well-defined peer review process to assure that our internal procedures, delivered documentation, reports, and recommendations are of the highest quality.

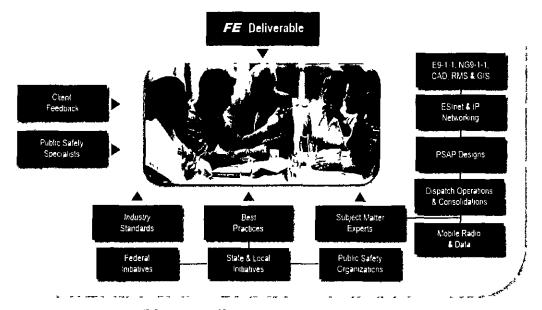
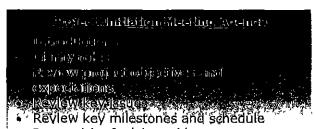


Exhibit 1-Quality Assurance Review Board

Peer reviewers are individuals with skillsets directly applicable to the program. They are not involved in the day-to-day aspects of the project, but rather provide an internal audit of deliverables and challenge the team to assure that all decisions have been well thought out

### **B.3 Project Initiation Meeting**

FE will schedule a project initiation meeting with the Washtenaw County project manager and designated representatives from the participating entities at a mutually agreed upon date. The project initiation meeting is essential and used to establish lines of communication, discuss the proposed work plan, and define project participant responsibilities. Through discussions, we will acquire a high-level strategic understanding of the short-term and long-term goals and objectives. Participation in the project initiation meeting allows background data related



- Review/clarify deliverables
- Plan interviews and identify interview participants and engagement strategies
- Review status reporting methodologies
- Determine final review meeting schedule
- Resolve immediate issues
- Build relationships





to the project to be identified, collected, and confirmed, helps to solidify goals and objectives, and clarifies and defines project scope, methodology, and schedule

During this meeting, our project manager will set project expectations, introduce participants, set the framework for ongoing work efforts, identify critical success factors for the project, and provide a draft project work plan and timeline. Following the meeting, *FE's* project manager will make agreed-upon changes and issue the final project work plan and timeline.

### B.4 Data Collection, Interviews, and Site Observations

### Data Collection Survey

In advance of the analysis, FE will submit a request for information to Washtenaw County to obtain existing documentation on Metro Dispatch existing operations, the County's four smaller PSAPs, and Emergent Health Partners fire dispatch operations FE has developed multiple proven approaches to administering data collection instruments to support PSAP assessments. Our project manager will collaborate with the County's project manager to determine the data collection approach that best supports your project's needs

The tool provides an initial collection methodology to obtain the baseline information necessary for the analysis of current countywide emergency communications conditions regarding operations, technology and equipment, facilities, staffing, budgets, services, service levels, as well as expectations and related issues of the PSAP managers and agencies they support. We will stress to stakeholders the importance of returning requested information within the allocated timeframe.

In conjunction with the survey tool, our project manager will submit a request for information (RFI) to each PSAP and Dispatch Center to obtain summary documentation regarding operations work processes, policies, protocols, and support programs such as training and technology

Information to be reviewed will include the following

- Call volume statistics
- Call processing and workload statistics
- Workflow/process maps for call handling, call transfers, and dispatching
- Staffing levels and type
- Organizational charts
- Performance metrics
- Policy, procedures, and protocols
- Operational and reporting requirements
- Training requirements
- Quality assurance processes

- Facilities space and layout
- Mapping/GIS, voice logging, CAD/RMS equipment, radio dispatch consoles, radio system configuration, dispatch channels
- Radio system partnerships and agreements
- 911 and non-emergency telephony
- Service level agreements (SLAs)
- Joint Power Authority (JPA) or other inter-governmental agreements
- Current budgets and operations costs
- Funding Sources





Sheriff Emergency Communications Consulting Services

#### On-Site Interviews and Observations

To execute an effective feasibility assessment and develop trusting relationships, we will rely heavily upon face-to-face sessions with individuals representing the County's PSAPs and dispatch centers. Our project manager will work with the County's project manager to determine a mutually acceptable interview schedule during our anticipated time onsite following the project initiation meeting.

It is critically important that the appropriate key staff attend sessions to adequately represent the needs of each agency and provide relevant existing system and operational information. Our team will conduct follow-up discussions with participants as necessary to complete the data-gathering interviews

Our subject matter experts will conduct visits at Metro Dispatch, the PSAPs serving Saline, Chelsea, University of Michigan, and Eastern Michigan University, and Emergent Health Partners' Dispatch Center. Our team will observe operations, complete survey data, and conduct the scheduled interviews and meetings with PSAP/dispatch center staff and designated police and fire officials. While observing PSAP/dispatch center operations, we will focus on the following

- Call receipt and dispatching methodologies
- Use of technology to support services and activities
- Range of duties and responsibilities performed by center personnel
- Staffing and supervision
- Sufficiency of facilities to support operations and technology utilized for emergency communications

We will use an interview and meeting approach that provides participants with ample opportunity to present their views regarding the feasibility, options, requirements, and concerns regarding existing dispatch services. We will explore the feasibility, options, requirements, and concerns about transitioning to a centralized model for dispatch to all law enforcement and fire agencies across Washtenaw County. Our subject matter experts understand the fundamental questions that must be addressed as we systematically evaluate and assess the feasibility of providing centralized dispatch services. These questions include the following

- How would centralizing fire and law enforcement dispatch affect services?
- How would the increased volume of dispatch services be organized and staffed?
- What are the labor/human resources issues that need to be addressed for successful countywide operations?
- What are the facility requirements and potential configuration for a countywide law enforcement and fire dispatch center?
- What technologies would be needed to effectively support centralized countywide call answering and law enforcement and fire dispatch services?
- What services and dispatch operations are feasible to perform at Metro Dispatch, and what services should remain local?





- What governance structure and funding models should be established for a countywide call answering and dispatch center to serve requirements and service commitments to first responder agencies?
- How would the centralized center be internally organized?

Our experienced project team members will sit alongside call takers and dispatchers, providing an opportunity to converse and solicit additional information and concerns about operations, services, and perceived views about a countywide center. Since our proposed project team members have extensive emergency communications center experience, they can connect comfortably as observers without disrupting operations.

From our experience on other consulting projects, *FE* finds collaboration with stakeholders often leads to an opportunity to share best practices and lessons learned from other jurisdictions. We have long-standing relationships with numerous current and former clients that have or are pursuing similar initiatives. Our insights into multiple operations allow us to draw from that knowledge, experience, and relationships to build a foundation for evaluation and benchmarking of comparable efforts. We understand the concerns that dispatchers may have. We will compare the PSAPs and dispatch centers performance and service levels with selected comparable operations in our client base across the nation, as well as to national standards and benchmarks. The results will be an evaluation of the current performance and a comparison with similar centers.

Based on the results of existing documentation, site observations, and interviews, *FE's* experts will summarize the following for the dispatch alternatives under consideration, then begin a comprehensive analysis of each.





Fea	sibility Study Areas of Focus	T	Γ	Γ	,
		Existing Metro Dispatch	Metro Dispatch + LE	Metro Dispatch+ LE + AAFD	Metro Dispatch + LR+ All FD
<u>i.</u>	Technology	✓	✓	✓	✓
	1 Radio communications	<b>✓</b>	<b>□</b> ✓	<b>√</b>	<b>V</b>
	2 Telephonic communications	/	<b>V</b>	<b>✓</b>	<b>✓</b>
	3. Use of available PSAP-related technologies	1	<b>√</b>	<b>✓</b>	✓
	4 Other potential technological innovation	<b>V</b>	1	✓	✓
ìı.	Staffing Levels and Types	<b>V</b>	<b>✓</b>	1	✓
	1 Front-line staff	1	<b>√</b>	<b>V</b>	<b>√</b>
	2 Supervisory staff	<b>V</b>	✓	1	<b>√</b>
	3 Support personnel	1	✓	<b>√</b>	<b>√</b>
iiı.	Workload – Main Radio Channel	1	✓ !	<b>✓</b>	<b>✓</b>
	1 Span of control	<b>V</b>	<b>√</b>	<b>√</b>	<b>√</b>
	2 Push-to-talk activations	<b>√</b>	✓	<b>\</b>	<b>\</b>
iv.	Call Volume	<b>V</b>	<b>✓</b>	<b>V</b>	/
	1 Emergency lines	<b>V</b>	✓	<b>\</b>	<b>\</b>
	2 Administrative lines		✓	✓	✓
	3 Text	/	<b>\</b>	<b>\</b>	<b>✓</b>
v.	Policy, Procedure and Protocols	<b>V</b>	<b>√</b>	<b>√</b>	<b>✓</b>
vi.	Training - Professional Development	<b>/</b>	<b>V</b>	<b>/</b>	✓
1	1 Internal	<b>\</b>	✓	<b>✓</b>	<b>✓</b>
	2 External	✓	<b>√</b>	<b>√</b>	✓
	3 State-mandated training	<b>V</b>	<b>✓</b>	✓	<b>√</b>
	4 Professional standards recommended training	<b>V</b>	✓	<b>V</b>	✓
vii.	Funding and Financial Planning	<b>V</b>	✓	✓	<b>✓</b>
	1 Provision of contract services	✓	✓	<b>✓</b>	✓
	2 State/local sources	✓	✓	✓	✓
	3 Potential additional sources	<b>✓</b>	✓	<b>√</b>	<b>√</b>
	4 Total cost breakdown of providing service	<b>\</b>	<b>\</b>	<b>✓</b>	✓





**Sheriff Emergency Communications Consulting Services** 

### **B.5** Alternatives Analysis

The collective results of the data collection, interviews, meetings, and observation of operations will provide the information necessary for our team to assess Washtenaw Metro Dispatch's current operations.

We will analyze the extent to which existing operations meet current and reasonably anticipated emergency communications standards and needs, including alignment with national best-practices as set out by organizations such as the National Emergency Number Association (NENA), State of Michigan 9-1-1 Office (SNC), Association of Public-Safety Communications Officials (APCO), and Commission on Accreditation for Law Enforcement Agencies (CALEA)

Concurrently, we will evaluate the same factors to determine the feasibility of Washtenaw 911-Metro Dispatch providing dispatch to all law enforcement agencies in the county, to all law enforcement agencies and the Ann Arbor Fire Department, and to all law enforcement and fire departments across the County

### 1. Call Volume Study (RFP SOW Areas iv and Item 1)

SOW Areas iv Call Volume Emergency Lines, Administrative Lines, Text

SOW Item 1 Call Volume Study Most efficient and effective staffing architecture and levels, propriety of the type of calls being routed to Metro Dispatch, and what would the effect of additional agencies be on current call volume and call-handling times

A key factor in any decision process to assess the feasibility of providing centralized dispatch services is a comprehensive call volume study and workload analysis *FE* will address the most efficient and effective staffing architecture, the propriety of the types of calls being routed to Metro Dispatch, and what the effect of additional agencies would be on current call volume and call handling times

We will work with the Sheriff's Project Manager and relevant stakeholders to gather information that includes data on agency emergency and non-emergency call volumes, talk times, dispatcher availability, delay answering, and maximum time in queue *FE* will work with your Project Manager to develop a sampling plan for reviewing CAD data

We will conduct the following analysis based on the existing data collected, industry standards, and our knowledge of industry best practices.

- Review workload in each PSAP/dispatch center for emergency/non-emergency services call volumes relevant to law enforcement and fire dispatches
- Document incoming call types (9-1-1, emergency, non-emergency, administrative calls)
- Document the projected volume of police, fire, and other public safety radio traffic
- Evaluate the volume of incident dispatches to law enforcement, fire, and other agencies
- Assess current staffing, staff allocations, and distribution of personnel by work assignments, shifts, and training
- Assess costs necessary to handle current and projected call volumes





- Review the operational service components for each PSAP/dispatch center, including call taking/receipt of transfers, dispatching, administrative, technical support, and ancillary functions
- Compare dispatch operations and staffing levels/requirements with other comparable centers, national standards, and best practices

FE will assess conditions regarding call transfers, dispatching protocols, accuracy of information communicated to police and fire units, location accuracy and supporting technology, performance metrics, expectations, interactions between dispatchers and responding units, and related issues.

Call volume projections will be made for five and ten years based on anticipated population trends and other known factors to be provided by the County. We will document the projected increase in fire radio traffic and the volume of incident dispatches to fire and other public safety agencies. We will review the projections with County decision makers to gain consensus and acceptance.

### 2. Operational Model/Radio Channel Analysis

SOW Areas III Workload Main Radio Channel Span of control and Push-to-talk activations

SOW Item 2 Operational Model - Radio Channel/Posts Effectiveness of the current model based on number of units dispatched and Call For Service volume, additional radio posts required to be staffed to integrated additional agencies into operations, and Back-Up Center

FE has considerable experience assisting clients in assessing their normal flow of operations and determining how they can best utilize their staff and technology to support operational goals Based on the interviews and onsite observations, we will evaluate call answering/transfer, processing, and dispatch processes. We will gather information on trunk types and intended usage, available queue, automatic call distribution, interoperability requirements, and dispatch mechanisms

FE's experts will analyze the effectiveness of the current dispatch models, including radio channels, push-to-talk activations, and protocols utilized to determine the number of units dispatched, compared to industry standards. Based on the results of our call volume and staffing analysis, we will assess the number of radio dispatch posts and staff required to support dispatch operations in each alternative. FE's subject matter experts can analyze existing caller location services, emergency dispatch protocols, call taking scripts, and CAD functionality for consistency and performance against national standards. FE has extensive experience with legacy and current 9-1-1 location services as well as accepted dispatch protocols. Several of our team members are nationally certified Dispatch Protocol trainers.

FE will evaluate your current backup dispatch centers. With a countywide PSAP, it becomes critical to identify a location where 9-1-1 and dispatch operations can continue if the primary facility is inaccessible. This may be another agency or regional dispatch center, or it may require a new geographically separate backup center to be created. As part of the analysis of each alternative, we will address the operational requirements to support radio dispatching from a back-up center.





**Sheriff Emergency Communications Consulting Services** 

## 3.a-c Investment in Human Resources: Staffing, Job Task Analysis, Scheduling

SOW Areas II Staffing Levels and Type Front-line staff, supervisory staff, and support personnel

SOW Item 3 a Staffing Staffing levels must achieve each of the above four identified areas in the most cost-effective manner. This should be broken down by staffing levels needed for each of the four service levels (current, all law enforcement, all law enforcement plus AAFD, all law enforcement and all fire), inclusive of Call-takers, Radio Dispatch Positions for Police and Fire (as applicable), Supervisory Staff, and Support Staff

SOW Item 3 b Job Task Analysis Identification of core tasks, assessment and recommendations for tasks being completed in the ECC that do not directly support the delivery of core services, for example Vehicle entries, Law Enforcement Information System entries, Court paperwork handling, Parking/Code enforcement dispatch, Public works call handling, Providing human point-of-contact service for non-emergent issues

SOW Item 3 c Scheduling Adequate range of staffing levels required based on services provided, any related training needs, cost-effective implementation of alternative schedules, costs and service implications of 8-hour shifts, 10-hour shifts, 12-hour shifts and what effect the current Collective Bargaining Agreement would have on ability to manage this, and adequate supervision

Based on the previously identified call volumes, *FE's* experts will assess the staffing levels, both full-time and part-time, needed for call taking, police dispatchers, fire dispatchers, supervisors, operations management, technology management, and other support functions in each of the dispatch alternatives under evaluation. The call answering and dispatch staffing required to meet the anticipated increase in call volume, enhance service levels, and achieve industry call handling metrics at optimum efficiency and cost-effectiveness will be determined

After gathering agency-specific data and conducting an analysis of dispatch operations and service level performance metrics, our project team will use automated tools, such as Erlang C calculations, to determine the call taker and dispatcher staffing requirements during low, normal, and peak call periods in an expanded services model. We will also perform a staffing model by agency call volume. For this model, our subject matter experts will gather the following types of data calls per hour, hours worked in a shift, days worked in a work year, total emergency and non-emergency calls received, total positions required, and shift relief factor.

To determine the estimated number of call takers needed to process the call and incident volume, we use formulas developed by APCO Project RETAINS. These nationally recognized formulas use the actual call volume, processing time, and staff availability to determine the number of call-takers needed to efficiently process call volume. Calculations estimate the average processing time, net available work hours, and agent occupancy rate and calculate against a determined turnover rate. Based on this data, we will apply proven modeling formulas to recommend staffing levels.

Combined with information from other areas that impact staffing needs (i.e., labor bargaining agreements on minimum mandatory staffing requirements), we will present the empirical data and an analysis of call volume by day-of-week and time-of-day to support decision making based on the following criteria





- Optimal staffing
- Staffing needs during peak periods or planned events
- Fire service staffing complexities
- Work schedules and tradeoffs among 8-hour, 10-hour, and 12-hour shifts
- Gaps in staff coverage
- Adjustments needed to enhance service levels
- Strategies to improve call-handling
- Strategies to minimize dispatcher fatigue

From this analysis and assumptions agreed to with stakeholders, we will develop draft workload projections and high-level staffing levels to meet the demands of both law enforcement dispatching and the specialized requirements of fire dispatching. We will review the staffing requirements with the County's designated stakeholders via a conference call to gain consensus

FE will then gather and analyze personnel resource information regarding Collective Bargaining Agreements, pay, classification, benefits, job titles, and descriptions to include function and responsibilities, direct reports, and length of service. This information will be compared and aligned where appropriate for same or similar positions. The goal of resource compensation and position alignments is to bring equity to critical personnel resources and to minimize any negative impact on staff who may transition from other PSAPs/dispatch centers.

We will evaluate any changes necessary to the organizational structure to best represent and manage the job functions, including an analysis of civilian versus sworn command models. Our recommendations will address job functions including the following

- Administrative
- Management
- Supervisory
- Technical support
- Quality assurance/quality control
- SOPs and policies

- Training
- · Clerical/secretarial needs
- Facility support needs
- Contractual obligations/risk mitigation (joint employment issues)

As part of the planning, our team will identify ancillary functions performed by staff that are not directly related to the dispatch function. As identified by the participating PSAPs and the agencies they support, these non-dispatch tasks may include

- Non-9-1-1 calls from other agencies, media calls, and records requests
- Court paperwork handling
- Police report handling
- Parking/code enforcement dispatch
- Public works call handling
- Walk-in complaints
- Functioning as a switchboard or receptionist for other community operations and nonemergent issues
- Getting accreditation data for other agencies
- Data entry for vehicles, Law Enforcement Information System





We will work with the participating PSAPs and their respective agencies to determine what tasks/functions are more appropriately kept at the local level, and what tasks/functions are appropriate for transitioning to Metro Dispatch. We will provide recommendations for addressing the non-dispatch functions. We will assist the PSAPs with determining the impact of maintaining or transitioning these services.

## 3.d-f Investment in Human Resources: Training, Hiring/Recruitment, Health & Wellness

SOW Area vi Training – Professional Development Internal, External, State-mandated training, Professional standards recommended training

SOW Item 3 d Training and Professional Development Basic and advanced training which would be required to incorporate additional agencies and/or services, e.g., police dispatch versus fire dispatch, Training should include compliance with any state and/or federal mandates

SOW Item 3 e Hiring and Recruitment

SOW Item 3 f Staff Health and Wellness

As Washtenaw County looks to assess the effectiveness of its emergency communications and feasibility of increasing its dispatch services, it is especially important that basic telecommunicator training programs, such as those provided locally and regionally, align with Michigan-legislated requirements, national standards, and best practices

We will evaluate the efficacy of current training programs in educating newly hired staff on policies, operational procedures, protocols, guidelines, and the use of systems and technology. We will assess whether telecommunicators are adequately skilled and trained to perform multiple tasks. We will assess internal requirements for ongoing training to maintain and enhance skills including knowledge of the region's geography, regional mutual aid agreements, representative sampling of regional languages spoken, demographics, policies and procedures, the complexity of coordinating with surrounding jurisdictions and other individual key performance indicators to be identified by management. We will recommend initial and ongoing training required to support the incorporation of additional agencies or services as well as systems and technology being utilized.

Standardized training encourages uniform levels of service to callers and compliance with standards and best practices. Less structured training that lacks critical training elements often results in systemic issues and a loss of critical thinking and judgement. Content and consistency in training improves the ability of personnel to interact with each other once everyone possesses the same baseline expectation of how to manage an incident

We will review the current training curriculum and in-service training processes to determine alignment with the APCO American National Standards Institute (ANSI) standards that address training minimum standards for telecommunicators, dispatchers, training officers, quality assurance evaluators, supervisors, managers/directors, and training coordinators. This review will also assess the ability of management to perform service reviews to measure the success of the training programs. Our assessment will include how exercises and content for critical thinking and judgement should be incorporated into the training curriculum, such as programs for





Sheriff Emergency Communications Consulting Services

telecommunictor drive-alongs with first responders and evaluations related to local landmarks and geography. We will work closely with the training staff to identify practical content and program metrics.

FE will then propose a high-level training plan with requirements for initial and ongoing training for a countywide PSAP/dispatch center. Guidance will be included on how to implement best practices for training, education, After Action Reporting, complaint intake, investigation, and resolution, and how to measure the success of the training program. The human resource analysis will include cross-training where applicable and acclimation of staff to new methodologies, systems, equipment, and processes

Recruitment and retention of qualified staff is critical to the work of emergency communications centers. To improve or create new recruitment and retention programs, *FE's* experts will develop requirements to consistently improve hiring practices to attract qualified employees. Employee retention and reallocation of overtime funds promote improved work-life balance, morale, and working environment for operational staff. We will offer guidance on how to implement best practices and how to measure the success of the program

### 4. Policy and Procedure Change Analysis

SOW Area v Policy – Development and Standardization of Fire Department Policy, Procedure and Protocols

SOW Item4 Anticipated Policy and Procedure Changes Areas include Law Enforcement, Fire, and other, e.g., alternative response models, Changes required in call-intake protocol for each service area, and General policy review and recommendations

FE will review and evaluate the efficiency of current operating policies, procedures, guidelines, and constraints and the effectiveness of these in call-taking and radio dispatching for both law enforcement and fire departments. We will identify anticipated changes required to policies and procedures in each of the alternatives under evaluation, as the County seeks to integrate fire dispatch into the Metro Dispatch services. We will evaluate the current usage of software-based dispatch protocols and their feasibility for each service area. The analysis will also recommend policies and procedures to be implemented for alternative response models.

FE will analyze information and prepare recommendations based on the following questions

- What are the current protocols used to screen callers and to transfer callers to fire, EMS, crisis response services, and law enforcement?
- What, if any, new procedures or protocols are necessary?
- What are the specific, unique needs of firefighters and law enforcement for ongoing dispatcher support?
- How will implementation of each alternatives for service delivery impact or change existing processes and protocols?
- For existing programs, what are the current evidence-based protocols used to screen callers and to transfer callers?
- As the County considers changes to dispatch, what new protocols may be necessary?





We apply our working knowledge of industry guidelines and standards, specifically APCO, NENA, IAED, and NFPA, for policy development and content in evaluating the efficacy of the current policies, procedures, protocols, and guidelines. Guidance will be provided to address issues, constraints, and gaps that are identified.

### 5. Quality Improvement and Assurance

SOW Item 5 Quality Improvement and Assurance Implementation of processes, policies, structures, and behaviors that are designed and intended to Ensure incremental and continuous improvement in emergency communications services, i.e., render better service at a more cost-effective rate by staff who are committed to the highest ideals of their profession and reduce potential risk and liability

In today's call center reality, almost any call can trigger an investigation. An effective Quality Assurance program is critical for call review to determine the need for corrective action or investigation. Quality assurance of call taking and dispatching are critical to attaining and maintaining the optimum quality of service necessary to support a community and its first responder agencies.

We will evaluate existing programs, processes, and outcomes implemented in the PSAPs and dispatch centers and identify changes to enable the countywide PSAP/dispatch center to render better emergency communications services. The ANSI-Accredited APCO/NENA Standard for the establishment of a Quality Assurance and Quality Improvement Program is used by FE in this review to resolve inconsistencies and provide a defensible base for recommended QA program improvements.

### 6. Funding and Financial Planning

SOW Area vii Funding sources Provision of contract services, State/local sources, Potential additional sources, and Total cost breakdown of providing these additional services

SOW Item 6 Funding and Financial Planning Partner agency contract costs, 9-1-1 funds received, General fund monies required, and Millage funds

FE will prepare a high-level cost estimate of existing operations and of each dispatching service models under consideration. For each alternative, we will determine the projected cost breakdown of providing additional call-taking and dispatching services, identifying workload per agency and service to evaluate the fair distribution of charges across first responder agencies. Our cost analyses and estimates will be based on current budgets and additional cost information collected during the previous tasks and industry knowledge. We will identify areas of potential cost increases and economies of scale reductions that may result from the transition to a countywide communications center. The cost estimates will include the following factors.

- Identification of projected start-up, transition, technological upgrades, and recurring operating costs required to provide call-taking and dispatch services in each alternative
- Preparation and comparison of high-level cost estimates between service delivery from a centralized countywide dispatch center compared to the cost of the current models provided by the PSAPs/dispatch centers





- Identification of operating costs for five-year projections based on two hypothetical funding models (typical models are based on population and/or workload, or allocation of staff time to process and dispatch calls)
- Identification of options for how and where cost reductions or cost increases will be assessed and cost-sharing agreements

FE's experts will evaluate the availability and requirements of potential funding sources, including contract costs for providing services, 9-1-1 funds, other state/local sources, general fund monies, millage funds, grants such as Urban Area Security Initiative (UASI)/State Homeland Security Grant Program (SHSGP)/Department of Homeland Security (DHS) sources, and public/private partnerships

### 7. Investment in Equipment

SOW Area I Technology Radio communications, Telephonic communications, Use of available PSAP-related technologies, and Other potential technological innovation

SOW Area 7 Investment in Equipment Additional radio consoles, Fire paging, Active 911, Fire CAD, MABAS, Backup Center

Our subject matter experts have assessed hundreds of PSAPs for system effectiveness and integration. Included in FE's data collection survey is a request for an inventory of technology in use by each PSAP/dispatch center. Our experts will evaluate the following PSAP/dispatch center equipment and identify necessary upgrades or new equipment investments that will be needed to support the additional services in each alternative under evaluation.

- The Michigan Public Safety Communications System (MPSCS) sub-system supporting radio communications across Washtenaw County, as operated by the Washtenaw Emergency Communications Consortium, including age, coverage, availability of frequencies for future use, and maintenance agreements for existing equipment
- Radio dispatch consoles
- Law Enforcement CAD, RMS, Fire CAD, and data analytics applications
- 9-1-1 / NG9-1-1 telephone routing and call handling equipment and hosted solutions, including NG9-1-1 equipment deployed in Washtenaw PSAPs
- Logging recorders
- Connectivity to the telephone and radio networks
- Connections to local, state, and federal computer systems and fire incident reporting databases
- Access to regional interoperability channels
- Mobile data infrastructure and applications, including Automatic Vehicle Location (AVL) and Automatic Vehicle Routing and Recommendation (AVRR)
- Access to up-to-date Geographical Information Systems (GIS) mapping and integration of mapping services with PSAP applications
- Station alerting and fire pagers





- Mass notification systems (MABAS)
- Backhaul connectivity
- Back-up dispatching provisions including alternate dispatching sites or mobile units

Building on the equipment analysis and recommendations, we will analyze efficiencies to be gained through better utilization of PSAP equipment. We will identify techniques to use current equipment while transitioning to a centralized countywide dispatch service. We will also assess staff resources and changes required to support new or enhanced technology. A key function in a centralized dispatch center will be support staff to keep the equipment current and performing at maximum efficiency. A critical task is often maintaining the resiliency of CAD solutions to provide necessary functionality and continuity of operations. For example, configuration of applications such as CAD have been identified as roadblocks to operational efficiencies in the dispatch environment. FE will examine the feasibility of interfacing disparate CAD systems through a CAD-to-CAD application to allow agencies to ease into working collaboratively with Metro Dispatch

FE has also found that dispatch errors and unit response delays can often be attributable to issues with GIS data. Our experts will analyze process efficiencies to be gained through better utilization of technology.

The resilience of any CAD system is important to continuity of operations. Our SMEs have a long history of planning backup solutions and configurations starting from their days managing PSAPs *FE* will review Metro Dispatch's standard operating procedures for a system outage and a facility failure. We will examine CPE, station alerting, call logging recorders, interfaces, radio consoles, and other ancillary systems that need to support a backup center.

### 8. Investment in Technology

SOW Area 8 Investment in Technology Recommendations surrounding the implementation of additional video/camera monitoring systems, Technological impact, and Impact on staff health and wellness

FE will identify best practices and provide recommendations in the areas of people, process, technology, and infrastructure for the deployment of video/camera monitoring systems. We will share our knowledge, based upon ongoing projects, of future directions in Video Management System technologies. We will examine and identify data privacy and surveillance issues that may be of significance to this project. Recording, storage, camera control, usage, sharing, and disclosure of video will need to be examined in the context of the existing policy, legislation, and current practices at the county, state, and federal levels. FE's experts will work with the Sheriff's Project Manager to develop local policies and standard operating procedures for video system implementation after evaluating the technological impact and impact on staff.

### 9. Crisis Response/Unarmed/Alternative Response Models

SOW Area 9 Recommendations surrounding the implementation of alternative response models to include but not be limited to receiving, processing, dispatching, and monitoring various types of crises calls for service, e.g., persons suffering from a mental illness creating issues of public peace





### **Sheriff Emergency Communications Consulting Services**

Members of our team understand that mental health and substance abuse calls need to be handled differently. We also appreciate that the public's perception is changing regarding how and which first responders are dispatched. Finally, we understand that time-life critical events need to be triaged and dispatched differently than lower priority (non-emergent) calls *FE's* team has experience in unarmed/alternative response dispatch including the following

- Experience developing PSAP processes, governance, and technological integration of 3-1-1 and 9-8-8 equivalent systems in a major metropolitan center
- Major case management experience with a trauma-informed perspective of innovative projects involving multiple organizational responses to vulnerable demographics
- Multi-organization coordination of trauma-informed investigations resulting in effectively advocating for services and system changes for vulnerable individuals
- Experience facilitating and coordinating government and non-government agencies to develop mental health initiatives and processes from PSAP to service delivery to follow up care
- Experience creating, developing, and implementing innovative partnerships to effectively respond to social disorder and mental health issues

FE will work with Metro Dispatch, as well as the County's first responder agencies, to determine the desired service levels and performance standards for both time-life critical incidents and lower-priority calls. Our experts will develop recommendations surrounding the implementation of alternative response models for lower priority, unarmed mental health, or substance abuse incidents.

### 10. Co-Location of Similar and Related Services in the ESCC

SOW Area 10 Feasibility of Co-Location of Similar and Related Services in the Existing Emergency Services Communications Center Another law enforcement dispatch service Public Safety, Eastern Michigan Public Safety, etc., Michigan Dept. of Transportation (MDOT), Washtenaw County Road Commission, Washtenaw County Community Mental Health

FE will evaluate the feasibility of colocating similar and related services in the ESD's ESCC to include the following.

- Another law enforcement dispatch service
- Michigan Department of Transportation (MDOT)
- Washtenaw County Road Commission
- Washtenaw County Community Mental Health

Our team will conduct a high-level evaluation of the currently available facilities to assess suitability to collocate similar and related services. Our analysis will incorporate the following types of information

- Key facility requirements including size, redundancy, and adherence to industry standards and best practices for mission-critical operations
- Required space needs, facility sizing, console position and layout, space programming and allocation, and adjacencies for collocating similar services in the ESCC facility





- Communications networks and systems
- · Applicable building standards and NFPA requirements
- · Facility-related transition issues

### 11. Legal, Legislative, and Political Environment

SOW Area 11 Review and Commentary on the Legal, Legislative and Political Environment Issues that the Sheriff's Office should be cognizant of and understand as it pursues and plans for emergency communications service development and change

FE has experience in the analysis of organizational issues, staffing constraints, labor relations issues, employment contracts, mutual aid agreements, and tiered response agreements. We regularly advise both regional and statewide clients on the regulatory and statutory requirements for 9-1-1 systems. Members of our team actively participate in NENA working groups that are engaged in developing recommended standards for the 9-1-1 industry. Our involvement with organizations such as NENA, National Association of State 9-1-1 Administrators (NASNA), APCO, IAED, IWCE, and NFPA enhance the sustainment of our expertise.

Since Federal Engineering does not have attorneys on our staff, we cannot provide formal legal opinions. However, *FE* will provide consulting services to support the County's legal counsel with issues identified during the review.

FE's subject matter experts will provide the following consulting services as outlined in the RFP

- Identify issues that the Sheriff's Office should be cognizant of and understand as it pursues and plans for emergency communications service development and change
- Review Mutual Aid Agreements, structure, and operations
- Review liability requirements
- Review existing labor agreements

### 12. Additional Topics (Optional)

SOW Area 12 Additional topics or areas the bidder feels are relevant to the intent and purpose of the initiative

FE recommends change management, development of a transition plan, and cybersecurity assessment as additional topics to be addressed during the County's dispatch feasibility study. As an option, FE can provide these services under a separate task order

#### Change Management (Optional Service)

Moving dispatching functions is a multi-faceted project requiring planning, training, and careful timing. One of the critical success factors for managing change is the need for clear and timely communications and involvement of those who are impacted by the change. Through early education, proper training, and transparency *FE's* experts will ease the stress of telecommunicators and dispatchers possibly moving to a different center and using new systems and technology applications. We are experts at collaborating with stakeholders and gaining buy in through open communications and sharing information.





**Sheriff Emergency Communications Consulting Services** 

### Transition Planning (Optional Service)

As part of the ten-year strategic plan, we will develop specific actions that each PSAP and dispatch center should take to begin aligning dispatch operations and preparing for a future transition *FE* will develop a high-level transition plan that provides specific sequencing of steps aligned with the recommended dispatch delivery alternative. Details will be included for guiding the transition of existing legacy systems and any new technologies. *FE*'s plan will focus on identifying areas that the County can begin addressing to facilitate the eventual transition, including operations, updated policies and protocols, personnel, facility issues, networks, systems and equipment, and vendor coordination

### **Cybersecurity Assessment (Optional Service)**

Cybersecurity is a critical concern to safeguarding critical infrastructure, especially communications centers and 9-1-1 networks *FE* offers a full suite of cybersecurity services, available on an optional basis to deal with these requirements, including an Information Technology (IT) Assessment and Penetration Testing.

An information security assessment is a formal process to evaluate and identify security issues and risks within an organization. The evaluation is done against industry and regulatory standard frameworks to understand the controls in place across all domains of the organization. Through interviews with personnel, sample testing, and understanding the wide range of security controls, the assessment shows the strengths and weaknesses of the organization's security posture.

Penetration testing, also known as pen testing or ethical hacking, is an authorized assessment to test the people, processes, and technologies of an organization by conducting real-world attack scenarios. The assessment identifies areas of weakness, then attempts to exploit them and gain unauthenticated access as a real-world attacker would do. The benefit of a penetration test is it is being conducted by a trusted and authorized partner to identify these weaknesses, provide recommendations, and collaborate on the prioritization to secure those gaps against a real attack

### **B.6 Feasibility Study and Recommendations Report**

FE will prepare a draft Washtenaw County Emergency Communications Feasibility Study and Recommendations Report This report will document the current conditions of the County's Metro Dispatch and evaluation of three alternative service delivery models, based on our interviews, observations, and analysis of collected data. The report will recommend a ten-year strategic development framework for expanding the delivery of emergency services provided by the Sheriff's Office. It will describe the resources and changes necessary for the County to establish and move to a centralized countywide law enforcement and fire dispatch operational model.

We will review the draft report with the County Sheriff's Office and designated stakeholders via an onsite meeting, followed by time for decision-makers to individually review the draft report. Our project manager will coordinate with the Washtenaw County project manager to review comments and suggested revisions to determine the changes to be incorporated into the final report. We will incorporate approved changes and issue the final Washtenaw County Emergency Communications Feasibility Study and Recommendations Report.





As an option, we can schedule an onsite presentation to designated Washtenaw County officials and stakeholders. The presentation will be focused on reviewing the findings and recommendations from the study and helping County officials make informed decisions regarding moving forward with recommendations for emergency communications call-taking and dispatching service delivery changes.

### **B.7** Anticipated Project Schedule

FE will commit the staff and resources needed to meet the County's scope and schedule FE is prepared to begin this project immediately upon execution of contract. The high-level GANTT chart below shows our estimated project schedule. This tentative schedule can be modified to meet the County's needs and will be finalized with the County's Project Manager upon contract execution.

ID	Task Name	Duration Start	Finish	2Q23 3Q23 4Q23
1	Notice to proceed	0 days Mon 4/3/23	Mon 4/3/23	Mar Apr May Jun Jul Aug Sep Oct N
2	Project Initiation	13 days Mon 4/3/23	Wed 4/19/23	
3	Finalize project plan/schedule	8 days Mon 4/3/23	Wed 4/12/23	<b>∫ j</b> a <sub>3</sub>
4	Plan/lead project initiation meeting	5 days Thu 4/13/23	Wed 4/19/23	
5	Data Collection	42 days Thu 4/20/23	Mon 6/19/23	
6	Prepare/issue survey and collect data	16 days Thu 4/20/23	Thu 5/11/23	==
7	Plan/conduct PSAP Interviews and observations	8 days Fri 5/12/23	Tue 5/23/23	( <u>*</u> ,
8	Summarize data for the existing PSAPs	18 days Wed 5/24/23		1   🛌
9	Alternatives Analysis	38 days Tue 6/20/23	Mon 8/14/23	
10	Complete call volume study	5 days  Tue 6/20/23	Mon 6/26/23	]   •
11	Analyze dispatch operations/radio utilization	5 days Tue 6/27/23	Wed 7/5/23	🛓
12	Assess human resources investment	4 days Thu 7/6/23	Tue 7/11/23	🛣
13	Assess/standardize dispatch policy/procedures/protocols	4 days   Wed 7/12/23	Mon 7/17/23	
14	Identify Quality Improvement/Assurance processes	3 days   Tue 7/18/23	Thu 7/20/23	
15	Evaluate funding sources and requirements	3 days Fri 7/21/23	Tue 7/25/23	
16	Analyze technology and equipment needs and costs	4 days   Wed 7/26/23	· !	
17	Evaluate models for crises response dispatch	5 days Tue 8/1/23	Mon 8/7/23	1   🛣
18	Evaluate co-location of similar services	3 days Tue 8/8/23	Thu 8/10/23	
19	Review legislative and political environment	2 days Fri 8/11/23	Mon 8/14/23	🕏
20	Final Report	35 days Tue 8/15/23	Tue 10/3/23	
21	Prepare and review draft report	25 days Tue 8/15/23	Tue 9/19/23	
22	Incorporate changes and present final	10 days Wed 9/20/23		<b>│</b>
23	Deliverable: Feasibility Study and Recommendations Report	0 days Tue 10/3/23	Tue 10/3/23	10/3



**Sheriff Emergency Communications Consulting Services** 

### C. COST PROPOSAL

### C.1 Price Sheet Form with Firm Fixed Price

The County's Price Sheet form is provided on the following page

FE's proposed price for this project is indicative of the efficiency of our operations, our proven automated tools, our vast experience completing similar projects, and our view of the strategic nature of Washtenaw County's project. Further, it is not our culture to "up-scope" during contract negotiations or during the project, unless Washtenaw County adds scope of work beyond that outlined in your RFP

### C.2 Hourly Rates

If required by Washtenaw County, **FE** can provide additional services in accordance with the rate schedule below.

#### **SCHEDULE A**

Effective January 1,	2023 through December 31, 2023

\$ 280 00 per hour
\$ 233 00 per hour
\$ 200 00 per hour
\$ 165 00 per hour
\$ 122.00 per hour
\$ 95 00 per hour

### **Proprietary Notice**

This proposal, its contents, and appendices are proprietary to Federal Engineering, Inc. and shall not be disclosed to third parties without prior written permission from Federal Engineering, Inc. Should this proprietary notice conflict with any government procurement regulations, policies, or practices, the government procurement regulations shall take precedence

Copyright ©2023 by Federal Engineering, Inc. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

Fairfax, Virginia



### **PRICE SHEET**

The undersigned, having familiarized themself with the instructions to bidders and the specifications, hereby proposes to perform everything required and to provide and furnish all of the labor, materials, equipment, and all utility and transportation services necessary to perform and complete all the work required for this RFP, all in accordance with the specifications at and for the following named price

Total estimated cost of project: \$_144,790					
Total estimated cost of project written: (ex One Thousand One Hundred Sixty Two dollars) in the event of a discrepancy, written estimate applies					
One Hundred Forty Four Thousand Seven Hundred Ninety					

Vendor Name: Federal Engineering, Inc. RFP #8378



Sheriff Emergency Communications Consulting Services

### C.3 Basis of our Proposal

- This proposal assumes Federal Engineering, Inc. will perform all of the tasks as called out in the technical proposal (excluding optional tasks). The deletion of a task, a significant change in scope of one or more tasks, or use of a phased implementation approach may affect the overall price.
- 2 FE will provide draft and final deliverables electronically to Washtenaw County, Michigan
- 3. This proposal assumes that Washtenaw County's project manager will schedule meetings, provide meeting facilities, notify attendees, and arrange for onsite visits
- 4 Any optional or additional tasking will be authorized by mutual agreement of Washtenaw County and FE Such tasking will be performed on a time and materials basis in accordance with the rates in Schedule A or on a fixed price basis as mutually agreed upon in a task order by Washtenaw County and FE
- FE's ability to fulfill this task depends, in part, on the willingness and ability of Washtenaw County, Washtenaw County participants, equipment vendors, service providers, third parties, and others to provide information in a timely manner, and upon the accuracy of the information as supplied. The accuracy of input data, whether provided in electronic or hard copy form, and the recommendations, actions, system designs, system procurements, and license filings resulting therefrom cannot, therefore, be warranted by FE nor can the performance, suitability, or reliability of said systems be warranted by FE accepts no responsibility or liability to any third party in respect to any information or related content delivered by FE. This information is subjective in certain respects, and, thus, susceptible to multiple interpretations and may be in need of periodic revisions based on actual experience and subsequent developments.
- FE is prepared to begin this project immediately upon execution of the contract. This proposal is based upon a start date on or before April 3, 2023, and assumes a six-month schedule. Delays to the project schedule due to actions or lack of actions on the part of the Washtenaw County, Washtenaw County participants, third parties, and others including, but not limited to vendor protests, protracted contract negotiations, vendor delays that impact the program schedule and/or costs to Washtenaw County will be brought to the attention of Washtenaw County's project manager in a timely manner and the schedule and cost impacts will be reduced to writing via a mutually agreed upon contract amendment.
- 7. In the event of a project delay by Washtenaw County, FE reserves the right to invoice for efforts expended towards the completion of a task or deliverable and client agrees to paid said invoice
- 8 This proposal assumes a mutually agreeable invoicing schedule for work completed
- 9 Federal Engineering reserves the right to assign/reassign work efforts and associated costs across tasks and between our professional staff members in order to meet our contractual obligations to Washtenaw County





Sheriff Emergency Communications Consulting Services

### ADDENDUM A-FE'S QUALIFICATIONS (RFP III.A)

### **Company Overview and Years in Business**

Since our founding in 1983, *FE* has grown to 50 subject matter experts, PSAP operational specialists, technologists, and former first responders

Our founder, Ronald F Bosco, a former first responder and degreed engineer, continues to lead the firm and has kept his vision steady to improve the functionality and cost-effectiveness of emergency communications. This consistency in ownership translates into consistency in performance as evidenced by the fact that our earliest government clients remain clients today, 40 years later

FE's philosophy to "exceed client expectations to retain that client for life" has resulted in client retention and repeat business since the firm's inception.

Federal Engineering offers Washtenaw County a unique combination of core qualifications and public safety consulting experience. With the addition of the L.R. Kimball communications practice seven years ago, FE continues to grow as the leading North American PSAP operations consulting firm. FE has integrated into our firm Kimball's 30+ years of experience consulting in PSAP performance assessments, operations, efficiency and staffing assessments, and consolidation studies. FE's team of specialists assess public safety technology, including NG9-1-1, E9-1-1, CAD, RMS, JMS, and other dispatch technologies.

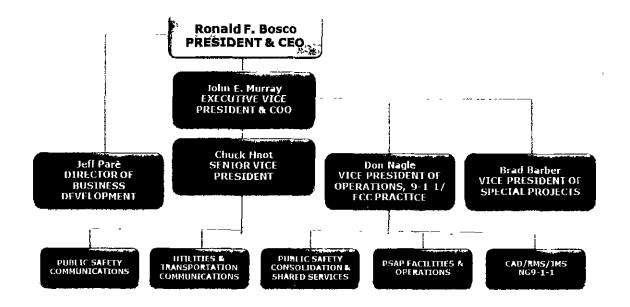
FE understands that every project is unique. Our proposed approach has been custom tailored to meet your needs and achieve your goals. Shown in the corporate organization chart in Exhibit 2 below, FE's principals, President & CEO Ronald F. Bosco and Executive Vice President John Murray, also a former first responder, are directly involved with every project, serving on the Quality Assurance Board and helping manage scheduling, as well as overall client satisfaction

FE's private ownership provides you with a distinct advantage corporate decisions are not impacted by outside investors or venture capital firms. Mr Bosco and Mr Murray care deeply about their clients and the reputation of the company they have built from the ground up. They are heavily invested in the success of this and all other projects involving FE As a result, you can count on the direct, personal involvement of FE's owners in every aspect of this critical project. Our owners are fully available to provide support as needed throughout the project, at no additional cost.

In addition to our headquarters in Fairfax, Virginia, we have regional offices in Iowa, Pennsylvania, New York, Connecticut, Florida, Arizona and California *FE* has a distributed workforce with consultants located in 11 states, supporting efficient response to our clients

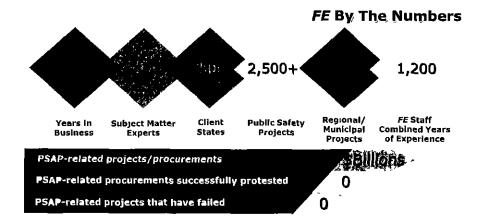


Sheriff Emergency Communications Consulting Services



### Exhibit 2—Federal Engineering's Corporate Structure

FE's qualifications and depth of experience with complex public safety projects, coupled with our independence from software and service vendors, will deliver the best value for Washtenaw County FE offers a winning combination of expert staff and polished methodologies that are clearly represented by our record of unmitigated success, summarized throughout our proposal



#### Independence Guarantee

FE's certified independence guarantees that Washtenaw County will receive totally objective analyses, free from the influences of hardware vendors, software suppliers, and service providers Unlike some consulting firms that have contracts with equipment, software, or managed services vendors, FE goes to great lengths to avoid such conflicts FE is not engaged in, nor are we associated with, the business of selling, servicing, or leasing radios, data systems, mobile computers, software, and other communications systems, nor do we provide managed services.





### **Sheriff Emergency Communications Consulting Services**

We are often asked by clients, "Why is independence so important to my project?" Because when you are getting advice from your consultant regarding a design or which vendor proposal to accept, you want to make sure your consultant does not have a conflict such as a contract with that vendor or relying upon that vendor for income Conflicts such as these can result in procurement protests or litigation by losing vendors. It is truly shocking how many consulting firms have contracts with the same vendors that they are evaluating for a jurisdiction.

### Leveraging Our Industry Reputation

FE is a corporate affiliate of leading industry groups, and our consultants are heavily involved in organizations that include APCO, NFPA, NENA, National Public Safety Telecommunications Council (NPSTC), Telecommunications Industry Association (TIA), Project 25 Technology Interest Group (PTIG), P25 Phase 2 Industry Roundtables and Best Practices Workshops, and Federal Partnership for Interoperable Communications (FPIC). Our team is recognized by their peers, our consultants chair national technical committees and have had papers published by many professional organizations. Over the past five years alone our experts have presented in over 80 sessions at the International Wireless Communications Expo (IWCE), APCO, and other conferences.

### FE's Services and Capabilities

FE has built an excellent reputation as a public safety consulting firm in communications center, Real-Time Crime Center, and radio system consulting, as highlighted below.

- PSAP/dispatch center consolidations
- PSAP/dispatch center regionalization
- 9-8-8/3-1-1 and alternate response methodologies
- ECC staffing and training studies
- Priority medical dispatch systems
- Business process analysis
- Organizational change
- Governance
- Grant application assistance
- Continuity of operations (COOP)
- Disaster recovery planning
- Mobile applications
- Networks / mobile infrastructure
- Cybersecurity
- Mobile hardware and infrastructure
- Networks and storage systems
- Interoperability and data integration
- Grant application assistance
- Real-time crime centers
- Body-worn cameras and CCTV surveillance
- Crime analysis and data analytics

- PSAP operations assessments
- Emergency dispatch protocol analysis
- Software technology migrations
- NG9-1-1 and E9-1-1 operations
- ESInet design and deployment
- PSAP/dispatch center facility analysis
- GIS and CAD mapping
- Police and fire RMS
- Jail/justice system assessment
- Project management
- Gap identification and analysis
- · Requirements gathering
- Vendor evaluation and selection
- Vendor contract negotiations
- Funding assessment and planning
- External systems and interfaces
- Dispatch consoles and voice logging
- Field surveys and reporting
- Radio systems and interoperability
- Regional information sharing
- In-vehicle video systems





Sheriff Emergency Communications Consulting Services

### FE's Performance Record on Similar PSAP Assessment Projects

Provided below is a record of *FE's* performance on similar PSAP assessment projects involving police, fire, and EMS dispatch over the past three years *FE* has been providing similar services for 40 years *These projects were all completed on-time and within budget*.

Federal Engineering Past Performance Record 9-1-1 Center Project Details					
Client Name/ Location	Project Title and Dates	Details (	of Work		
Greenville, South Carolina	Consolidated Dispatch Study 2022 - ongoing	<ul> <li>Data collections</li> <li>Interviews and ECC observations</li> <li>Workflow and call volume analysis</li> <li>Staffing and supervision assessment</li> </ul>	<ul> <li>Facility analysis</li> <li>Technology assessment</li> <li>Protocol utilization review</li> <li>Operational gap analysis</li> <li>Financial analysis</li> <li>Recommendations and study report</li> </ul>		
Cochise County, Arizona	PSAP Consolidation Study 2022	agreements review	<ul> <li>Identification and analysis of regionalization approaches</li> <li>Financial analysis and cost estimate development</li> <li>Recommendations and study report</li> </ul>		
City of Hollister, California	Dispatch Center/ Real-Time Crime Center Feasibility Study 2022 - ongoing	Interviews and operational observations	<ul> <li>Policy and regulation review</li> <li>Benchmarking of RTCCs</li> <li>Financial analysis/projections</li> <li>Recommendations and study report</li> </ul>		
Santa Monica, California	Evaluation of Regional Dispatch 2021 - ongoing		<ul><li>Recommendations</li><li>Assessment report</li></ul>		
Utah Communications Authority	Valley ECC Audit/ Assessment Study 2021 – ongoing	<ul> <li>Business process analysis</li> <li>Staffing study</li> <li>On-site evaluation of facility/infrastructure and</li> </ul>	<ul> <li>Governance review</li> <li>Financial analysis</li> <li>Continuity of dispatch operations</li> <li>Recommendations report</li> </ul>		
Washington, D.C.	PSAP Audit on behalf of the Office of the District of Columbia Auditor 2020 – ongoing	<ul> <li>Business process analysis</li> <li>Staffing study</li> <li>On-site evaluation of facility/infrastructure and</li> </ul>	<ul> <li>Governance review</li> <li>Financial analysis</li> <li>Continuity of dispatch operations</li> <li>Recommendations report</li> </ul>		
State of Arkansas	Public Safety Communications Consulting Services 2020 – ongoing	<ul> <li>PSAP consolidation analysis</li> <li>Existing equipment</li> </ul>	<ul> <li>Statewide regional workshops</li> <li>Alternatives evaluation</li> <li>Governance structure review</li> <li>Recommendations report</li> </ul>		





Federal Engineering Past Performance Record 9-1-1 Center Project Details					
Client Name/ Location	Project Title and Dates	Details of Work			
El Dorado Hills, California	Fire Department System Assessment/Design 2019 ~ 2020	<ul><li>Existing system analysis</li><li>Stakeholder interviews</li><li>User needs assessment</li><li>Site visits</li></ul>	<ul> <li>Dispatch processes assessment</li> <li>Assessment report</li> </ul>		
City of Reno/ Washoe County, Nevada	Dispatch and Public Safety Software Consulting 2020 – ongoing	<ul> <li>Existing system assessment</li> <li>Stakeholder interviews and data collection</li> <li>Gap analysis</li> <li>Requirements recommendations</li> </ul>	<ul> <li>Specifications development</li> <li>RFP development</li> <li>Vendor proposal evaluation</li> <li>Contract negotiations support</li> </ul>		
Redwood Empire Dispatch Communications Authority (REDCOM), California	Fire and EMS Dispatch Consolidation Study 2019 - 2020	recommendations  Data collection and existing	<ul> <li>Restructuring of JPA and governance</li> <li>Cost estimates</li> <li>Radio interoperability</li> <li>Legal barriers and solutions</li> </ul>		
City of Worcester, Massachusetts	CAD/RMS Consulting 2020 – ongoing	<ul> <li>Existing system review</li> <li>Needs assessment</li> <li>Requirements definition</li> <li>Interoperability requirements</li> </ul>	<ul> <li>Vendor RFP development</li> <li>Vendor proposals evaluation</li> <li>Contract negotiations support</li> </ul>		
City of Oakland, California	PSAP Staffing Study and CAD Implementation 2018 – 2020	<ul><li>Complete PSAP evaluation</li><li>CAD provisioning and configuration design</li></ul>	<ul><li>Staffing study/report</li><li>Implementation support</li></ul>		
Clark County, Ohio	Countywide Dispatch Center Project Management 2017 ~ 2019	<ul> <li>Space requirements, security and hazards evaluation</li> </ul>	<ul> <li>NG9-1-1 options assessment</li> <li>Identification of networking and transition plan</li> <li>Recommendations report</li> <li>Support of procurement of new dispatch center</li> </ul>		
City of Sugar Land, Texas	PSAP Efficiency Assessment Study 2018	<ul> <li>Complete PSAP assessment</li> <li>Business process analysis</li> <li>Staffing study</li> <li>On-site evaluation of facility/infrastructure and technology</li> </ul>	<ul> <li>Governance review</li> <li>Financial analysis</li> <li>Continuity of dispatch operations</li> <li>Recommendations report</li> </ul>		
Westport and Fairfield, Connecticut+	ECC Relocation and Consolidation Consulting Services 2018	<ul><li>Existing system assessment</li><li>Feasibility study</li></ul>	<ul><li>Financial analysis</li><li>Governance review</li><li>Implementation plan</li></ul>		
Loudoun County, Virginia	ECC Relocation 2017 – 2018h	<ul><li>Needs assessment</li><li>Requirements analysis</li><li>Specification development</li><li>Cost analysis</li></ul>	<ul><li>Negotiation support</li><li>Implementation oversight</li><li>Vendor oversight</li></ul>		





Federal Engineering Past Performance Record 9-1-1 Center Project Details				
Client Name/ Location	Project Title and Dates	Details of Work		
Marion County, Iowa	PSAP Consolidation 2017 ~ 2018	<ul> <li>CAD/RMS/JMS Assessment</li> <li>PSAP Governance</li> <li>NG9-1-1 impact analysis</li> <li>Facility</li> </ul>	<ul><li>Technology/equipment</li><li>Operations/staffing</li><li>Training</li><li>Assessment report</li></ul>	
City of Ashtabula, Ohio	PSAP Staffing Study 2017-2018	<ul><li>Staffing analysis</li><li>Technology analysis</li></ul>	<ul><li>Funding and cost estimates</li><li>Assessment report</li></ul>	
Town of Cary, North Carolina	PSAP Improvement Study 2017 ~ 2018	<ul> <li>Data collection</li> <li>Staffing analysis</li> <li>Personnel and technological cost estimates</li> </ul>	<ul> <li>Governance research</li> <li>Organizational structure analysis</li> <li>Recommendations report</li> </ul>	
Gwinnett County, Georgia	PSAP Assessment and CAD/RMS Upgrade 2017 – ongoing	<ul> <li>Business and technology analysis</li> <li>Existing systems assessment</li> <li>Needs and requirements assessment</li> </ul>	<ul> <li>Vendor RFP development</li> <li>Procurement support including evaluations</li> <li>Implementation project management</li> </ul>	
Spotsylvania County, Virginia	CAD/RMS Replacement 2016 – ongoing	<ul> <li>Needs assessment</li> <li>Procurement support including vendor evaluations and contract negotiations</li> </ul>	<ul> <li>RFP and functional specifications development</li> <li>Implementation Project Management</li> </ul>	
City of Harrisonburg, Virginia	CAD-Data Management Systems Consulting 2016 – 2020	<ul> <li>Stakeholder interviews</li> <li>Needs assessment</li> <li>Requirements documentation review</li> <li>Specifications and vendor RFP development</li> </ul>	<ul> <li>Vendor proposals evaluation</li> <li>Vendor demonstrations support</li> <li>Procurement and IV&amp;V support</li> </ul>	
City of Seattle, Washington	Staffing Assessment and CAD/RMS Public Safety Consulting 2015 ~ 2018	Technical and operational needs assessment	<ul> <li>Existing systems and processes analysis</li> <li>Gap analysis</li> <li>Recommendations report</li> </ul>	
City of Paducah, Kentucky	CPE, CAD, Logging Recorder Procurement 2016 ~ 2017	<ul><li>Requirements definition</li><li>Procurement support</li><li>Contract negotiations</li></ul>	<ul><li>Migration strategies</li><li>Implementation support</li></ul>	

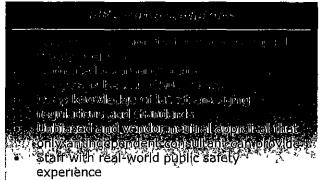




Sheriff Emergency Communications Consulting Services

Because we understand the unique needs of a multi-service and multi-agency center and the challenges inherent in exploring alternative public safety dispatch response models, Washtenaw County will immediately benefit from *FE*'s combination of knowledge and experience with PSAP/9-1-1 center projects across the country. We are readily available to meet with your team whenever the need arises.

FE is the most experienced public safety consulting firm in the United States. Washtenaw County can be assured of the credibility of our recommendations, which is critical to influencing decision makers. The team proposed for this initiative has combined experience of hundreds of years and are considered true thought leaders in public safety.



- Dedicated executive-level support
- Comprehensive experience with municipal police and fire services across North America
- Crisis response consulting experience and history
- Recent research, published articles, and presentations on the challenges of dispatch response to mental-health and substanceabuse calls

FE offers the County a truly independent and fresh insight into the dispatch services response environment and opportunities for improvement and optimization. Our recommendations will be completely unbiased and specific to your environment. FE has built a reputation as an advocate for our clients to identify unique needs and solutions that withstand the test of time. We do not enter into a relationship with pre-conceived ideas of what will work and what will not, and we only make recommendations that are practical and achievable.

#### **Key Personnel and Resumes**

FE staff brings an abundance of knowledge and experience working with public safety agencies to improve dispatch centers, PSAPs, and ECCs FE prides itself on the fact that many of our subject matter experts hold the National Emergency Number Association's (NENA) Emergency Number Professional (ENP) certification and have been instrumental in influencing current NENA standards, as well as national regulations

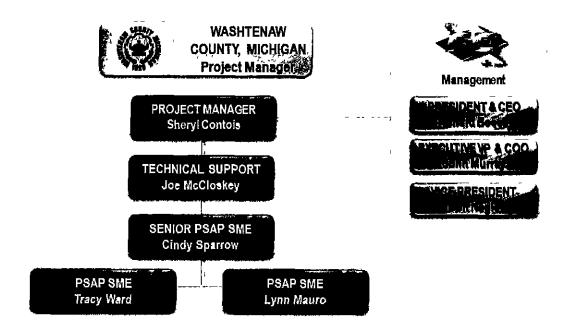
FE consultants understand the operational needs and not just the technology because we have "been in our clients' chairs." Our consultants have the following professional experiences

- Directors of PSAPs, dispatch centers, emergency operation centers (EOC)
- Managers of NG9-1-1, 9-1-1, CAD, RMS, mobile, telephony systems
- Law enforcement, fire, EMS personnel
- · Radio system managers and technicians
- Business analysts selected for their ability to lead focus groups to consensus
- Local and state government public safety communications officials





FE's team comes from diverse engineering, technical, operational, and first responder backgrounds. The proposed project team is well-versed in working with multiple jurisdictions and disciplines, and each team member has an extensive history of completing projects with objectives similar to those of Washtenaw County.



#### Exhibit 3—FE's Proposed Project Team for Washtenaw County

Vice President Don Nagle will be the Project Director for this engagement, managing the assigned resources towards meeting the project schedules and objectives. He will review regular progress reports and makes resource and other adjustments to align the project throughout its lifecycle with the County's desired goals and outcomes. Mr. Nagle will be responsible for the overall success of the project for both Washtenaw County and *FE* 

Ms Sheryl Contors will be the Project Manager for the duration of the project, providing a single point of contact to the County and managing our internal team on a day-to-day basis. She will lead all meetings and calls, track and document progress, identify issues or risks, and develop mitigation strategies as needed.

Our technical staff includes Joe McCloskey as Technical Support, Cindy Sparrow as Senior PSAP SME), and Tracy Ward and Lynn Mauro as PSAP SMEs

Executive Vice President and Chief Operating Officer, Mr John E Murray, will serve as executive sponsor for this project. He will manage *FE*'s processes for independent review and quality assurance of deliverables. His services, as well as any others provided by our principals, *are* provided at no cost to the County





FE will commit the staff and resources needed to meet the County's scope and schedule fully, on time, within budget, and in a high-quality manner. The key individuals listed above as the project team will perform the work and will not be substituted with other personnel or reassigned to another project without the County's prior approval.

At times however, life happens. People get sick, they switch jobs, and they get into accidents Life situations can have a devastating impact on a project, especially if it involved a key person. Washtenaw County deserves a firm that is prepared for when "life happens" *Federal Engineering is that firm.* In our four decades of doing business, we have experienced all of these. But with a deep bench and overlapping skill sets, we have consistently overcome life's happenings and successfully completed over 2,500 projects on schedule and to our clients' satisfaction

We identified your dedicated project team above, but when you hire *FE*, you hire all the unique skillsets of each member of the firm. There are no issues -technically or operationally - in the realm of public safety communications that we have not advised our clients on how to address

Resumes for FE's proposed project team are provided on the following pages.

"Our engagement with Federal Engineering was great. Their professionalism and flexibility to adjust was appreciated. The end product was professional and produced within agreed upon timelines. Thank you."

~Daniel Johnson, Chief Technology Officer, Douglas County, Nevada

"Columbia 911 Communications District was a direct beneficiary of the expertise of Federal Engineering. Extremely responsive, excellent communications, timely production of work and in a format that the average person can consume."

~Mike Fletcher, Executive Director, Columbia 911 Communications District, Oregon





**Sheriff Emergency Communications Consulting Services** 

#### **DONALD C. NAGLE**

Vice President, 9-1-1/ECC Practice



## EDUCATION & TRAINING

- A S , Criminal Justice, Northeastern University
- Administration of Law & Justice, University of Massachusetts-Lowell
- Public Safety
   Communications,
   University of
   Delaware,
   Wilmington,
   Delaware

#### **GENERAL BACKGROUND**

Mr. Don Nagle is a senior public safety communications consultant with proven experience in many fields, including industry leadership positions specializing in CAD/RMS software and wireless technology, and many projects involving assessments of and upgrades to NG9-1-1 Mr. Nagle has held multiple leadership positions for Massachusetts law enforcement agencies. He is uniquely qualified to provide direction, leadership and vision in public safety technology

Mr. Nagle has evaluated functional technology of CAD/RMS and radio dispatch systems, NG9-1-1 systems, and 9-1-1 networks. He has analyzed operational models, command structures, staffing, and processes of communications centers and dispatch systems. As Director of Telecommunications for the Massachusetts State Police, he centralized command and control centers for each troop and regional E9-1-1 PSAP for over 50 cities and towns, providing interoperability between state and local agencies.

#### PROJECT EXPERIENCE

#### State of Iowa

City of Marion PSAP Consolidation Study, Planning, and Support

#### State of South Carolina

Charleston County Dispatch Consolidation Consulting Services

#### State of California

REDCOM Dispatch Consolidation Feasibility Study

#### State of Utah

- Valley Emergency Communications Center Assessment
- Utah Communications Authority NG9-1-1 Consulting

#### State of Oregon

Malheur County Communications Assessment

#### Washington, D.C.

· Office of the District of Columbia Auditor - PSAP Audit

#### State of Washington

 Seattle Police Department Operations and CAD/RMS Technical and Operations Needs Assessment

#### State of Oregon

Malheur County Communications Assessment

#### State of North Carolina

· Scotland County Facility Assessment

#### State of Ohio

Clark County Dispatch Center Planning, Design, and Procurement

#### State of Texas

City of Sugar Land Dispatch Assessment

#### State of Georgia

Gwinnett County CAD/RMS/MDT Consulting Upgrade

#### State of Illinois

· Winnebago County CAD/RMS Systems Technical Consulting

#### AREAS OF EXPERTISE

- CAD/RMS
- E9-1-1 and NG9-1-1
- ESInet
- ECCs and PSAPs
- Dispatch operations
- Public safety mobile radio
- 700/800 MHz

## PROFESSIONAL ORGANIZATIONS

- National Public Safety Planning Advisory Committee Planning Committee
- Massachusetts ETS, Standards Board
- Massachusetts ETS, Training Committee





**Sheriff Emergency Communications Consulting Services** 

#### **SHERYL CONTOIS**

Project Manager

#### **EDUCATION & TRAINING**

- Organizational Management Coursework, University of Phoenix
- Business and Criminal Justice course work, University of Portland & West Valley College

#### **AREAS OF EXPERTISE**

- CAD/RMS SME
- NIBRS SME
- Project management
- LE/FIRE/EMS/EMD/9-1-1 policy and operations
- 9-1-1 technology and operations
- Project schedule development

#### GENERAL BACKGROUND

Ms. Sheryl Contois is experienced in public safety technology, including E9-1-1 and NG9-1-1 systems, CAD, RMS, radio infrastructure, logging recorders, mobile data computers, incar video systems, GIS/mapping systems, and wireless broadband. Ms. Contois is an experienced 9-1-1 executive well versed in emergency communications, fire, EMS/EMD, and law enforcement operations with an emphasis in project management, consulting services, selection and implementation of public safety technology, business process and organizational change management, and implementing new systems and programs. Ms. Contois is a retired public safety professional with 27 years of local government service and 18 years as a member of executive fire and law enforcement command staff organizations. Her work experience has been at the local, state and federal levels.

#### PROJECT EXPERIENCE

#### State of Georgia

- Gwinnett County CAD/RMS/MDT Consulting Upgrade
- Gwinnett County CAD/RMS Project Management and On-Site Crime Center Assessment

#### State of Illinois

Winnebago County CAD/RMS Upgrade Project

#### State of Washington

 Seattle Police Department CAD/RMS Technical and Operational Needs Assessment

#### State of Iowa

 Polk County Governance Needs Assessment and Analysis for CAD

#### State of New Mexico

• City of Albuquerque Dispatch Audit

#### State of Nevada

City of Reno/Washoe County CAD/RMS/JMS Consulting

#### State of North Carolina

• Charlotte-Mecklenburg Police Department RTCC Assessment

#### Commonwealth of Virginia

- City of Harrisonburg CAD Implementation Support
- Harrisonburg-Rockingham ECC CAD/RMS/MDS Consulting
- Spotsylvania County CAD/RMS Replacement Project

#### AREAS OF EXPERTISE (cont.)

- 9-1-1 systems implementation
- · Integration of complex systems
- Organizational transition planning
- Team facilitation and consensus building
- Current member NENA 9-1-1 Scheduling Working Group

#### **AWARDS**

- Award of Distinction, California Police Officer's Association, Interoperability/Integrations Project
- Lion's Award for Excellence in Community Service Interoperability Project
- Susan A. Voellger Award for Excellence in Leadership and Management

#### **PAST AFFILIATIONS**

- Northrop Grumman Corporation
- Palo Alto Police Department
- Mountain View Fire Department
- San Jose Fire Department





**Sheriff Emergency Communications Consulting Services** 

#### JOE MCCLOSKEY

Technical Support

# \*

#### **EDUCATION & TRAINING**

- Project Management Fundamentals
- NCI 9-1-1 Manager Course
- NENA Managing the 9 1 1 Center
- The 9-1-1 Puzzle
- E9-1-1 Database

#### **AREAS OF EXPERTISE**

- Consolidated PSAP management, operations, and technology
- Communications center staffing
- SQGs
- Facility programing
- CAD
- RMS
- Mobile data interfaces
- E9-1-1
- CPE
- ALI data

#### **GENERAL BACKGROUND**

Mr McCloskey has more than 30 years of experience in the operations of consolidated, multi-jurisdiction and multi-discipline 9 1 1 communications centers of all sizes.

Mr McCloskey possesses experience in communication center staffing, SOGs, and facility programming with considerable experience in consolidated PSAP management, operations, and technology. He has an extensive knowledge of all technology installed in PSAPs including CAD, RMS, mobile data/interfaces, E9 1 1 CPE, ALI data, GIS/mapping, wireless 9-1-1, VoIP, NG9 1 1, and various radio systems and digital logging recorders. He has conducted technology system assessments, procurements, acceptance tests, and cutovers

#### **PROJECT EXPERIENCE**

#### State of Arizona

- Conchise County PSAP Consolidation
- Pinal County CAD/RMS Needs Assessment

#### State of Arkansas

Arkansas Public Safety Communication Consulting Services

#### State of California

- City of Berkeley Prioritized Dispatch Consultant
- City of Hayward Communications Center Needs Assessment for the Police and Fire Departments
- Mono County PSAP Consolidation

#### **State of Connecticut**

 Westport and Fairfield Emergency Communications Center Relocation and Consolidation Consulting Services

#### State of Florida

 Reedy Creek Improvement District Florida Fire Department PSAP Study

#### State of Georgia

 Gwinnett County Provision of Consulting Services for an On-Site Assessment for a Real Time Crime Center

#### State of Iowa

- City of Marion PSAP Consolidation Study, Planning, and Support
- Polk County CAD Governance and Needs Assessment

#### State of North Carolina

Scotland County Facility Assessment

#### State of Texas

City of Sugar Land Dispatch Assessment

## PROFESSIONAL ORGANIZATIONS

- National Emergency Number Association (NENA)
- Association of Public Safety Communications Officials (APCO)





Sheriff Emergency Communications Consulting Services

#### **CINDY SPARROW**

Senior PSAP SME



#### **EDUCATION & TRAINING**

- M A , Leadership, Royal Roads University, Victoria, British Columbia
- B.S , Emergency Management, Jacksonville State University, Jacksonville, Alabama
- Communications Centre Manager Certification, Fitch & Associates/IAED, Kansas City, Missouri
- Primary Care Paramedic (EMT-A), First Aid & Safety Training Institute, Edmonton, Alberta

#### **GENERAL BACKGROUND**

Ms Cindy Sparrow has more than 24 years of experience in both the private and public sectors of public safety communications at various command and consulting levels. In addition to crime prevention, policing and public safety, she is knowledgeable in management, planning, procurement and implementation of public safety software and hardware with a thorough knowledge of communications technology infrastructure Ms Sparrow's areas of expertise include CAD, VHF, ROIP, P25, telephone systems and systems management, Alberta 9-1-1 TELUS Infrastructure, audio/data recording, NG9-1-1, and RMS including provincial, national, and international police information databases

#### **PROJECT EXPERIENCE**

#### State of California

- · City of Hayward Communications Center Assessment
- City of Berkeley Prioritized Dispatch Consultant
- City of Hayward Data Analysis Services Add-On
- City of Hayward General Consulting Services

#### State of Iowa

· Polk County Governance Needs Assessment and Analysis

#### State of South Carolina

· City of Greenville Consolidated Dispatch Study

#### State of Arizona

 Pinal County CAD/MDS/RMS/JMS Procurement and Implementation

#### State of Arkansas

 State of Arkansas Public Safety Communications Consulting Services

#### Washington, DC

Office of the Auditor OUC 9-1-1 Operations Division Audit

#### **Province of Ontario**

- Niagara Regional Municipality Public Safety NG9-1-1 Consulting
- City of Peterborough Consulting Services for NG9-1-1
- City of Hamilton NG911 Consulting Services
- City of Belleville NG911 Study
- Town of Milton Service Delivery and Infrastructure Review for the Provision of Fire Services Communications
- Kitchener Fire Emergency Communications Center Review

## LICENSES & CERTIFICATIONS

 Alberta College of Paramedics, Registered Primary Care Paramedic

## PROFESSIONAL ORGANIZATIONS

- APCO CANADA
- APCO International
- Alberta E911 Advisory Association
- National Emergency Number Association (NENA)
- Alberta Fire Chiefs
   Association





Sheriff Emergency Communications Consulting Services

#### **TRACY WARD**

**PSAP SME** 



#### **EDUCATION & TRAINING**

 Bachelor of Arts, Psychology, University of Alberta

#### **AREAS OF EXPERTISE**

- Certified information systems auditor
- IT security assessments
- Information security standards and governance
- Systems analysis
- Auditing
- IT risk management

#### **GENERAL BACKGROUND**

Ms Tracy Ward is a strategic leader with 30 years of experience in law enforcement and public safety, serving in leadership roles and collaborating with internal and external stakeholders to enhance public safety and serve the health needs of the most vulnerable citizens. Ms. Ward has extensive background in police dispatch, serving as a Staff Sergeant in charge of the Police. Communications Branch with Edmonton Police Services. She led training and employee development, and developed, implemented, and approved policy and procedure for PSAP operations.

#### PROJECT EXPERIENCE

#### State of California

- · City of Hayward Communications Center Needs Assessment
- · City of Hayward Data Analysis Services Add-On
- · City of Berkeley Prioritized Dispatch Consulting

#### ADDITIONAL RELEVANT EXPERIENCE

#### **Edmonton, Alberta Police Services**

- Staff Sergeant
  - Officer in Charge of Training and Employee Development
  - Program Manager of talent acquisition, training, and development of Sworn and Civilian staff
  - Medical Accommodations Manager-Developed, implemented, and approved policy and procedures for PSAP Operations
  - Project Supervisor
  - o Employee Wellness Program Director
  - Additional Duties. PSAP training, mentoring, quality assurance, continuity of operations
- Sergeant-in-Charge of Heavy Users of Service Project
  - Major Case Manager/Coordinator advocate for vulnerable individuals involving multiple organizations
- Sergeant in Charge of Quality Assurance and Training
- Active Assailant International Instructor
  - One of eight worldwide instructors
- Emergency Police Dispatch International Instructor
- Constable

## PROFESSIONAL ORGANIZATIONS

 International Academies of Emergency Dispatch (IAED)

#### **HIGHLIGHTS**

- Women's Coordinator P4W - Self Defense Program with Canadian Innovative Protective Solutions
- International Council of Standards Board Member





**Sheriff Emergency Communications Consulting Services** 

#### LYNN MAURO

**PSAP SME** 



## EDUCATION & TRAINING

- B S , Computer Information Systems, Westfield State College
- Oracle Database Management Microsoft SQL Database Management

#### **GENERAL BACKGROUND**

Ms Lynn Mauro has over 20 years of experience as a system/business analyst, developer, and project manager in the design, implementation, and deployment of information systems. Her domain expertise covers LERMS, JMS, CAD, and Fire/EMS Records Management. She has a strong understanding of IT project life cycles using PMI best practices starting from project inception, contract negotiations, SOW, application installation, training of staff, documentation, testing and data analytics.

Ms Mauro is a specialized technical liaison with the capacity to coordinate with all stakeholders

#### PROJECT EXPERIENCE

#### State of Nevada

 City of Reno Emergency Dispatch and Public Safety Software Consultant

#### State of North Carolina

· Charlotte-Mecklenburg Police Department RTCC Assessment

#### State of Washington

· South Sound 911 RMS Consulting

#### State of South Carolina

Greenville Consolidated Dispatch Study

#### State of Arizona

Pinal County CAD/MDS/JMS/RMS Procurement and Implementation

#### State of California

- City of Oakland CAD Provisioning
- City and County of San Francisco NIBRS Assessment
- City and County of San Francisco Public Safety Radio System Replacement
- City of Hollister Dispatch Center/Live Crime Center Feasibility Study

#### State of Illinois

City of Naperville CAD/RMS Consulting

#### State of Idaho

Idaho Law Enforcement RMS Consulting

#### State of Iowa

Polk County Governance Needs Assessment and Analysis for CAD

#### Province of Ontario, Canada

- City of Hamilton Consulting Services for NG9-1-1
- City of Peterborough NG9-1-1 Specifications

## AREAS OF EXPERTISE

- Project management
- Public safety communications
- System design and development
- Emergency management
- CAD/RMS/JMS/LER MS/MDC
- System procurement and contract negotiations
- User training
- OS and Web server Windows, IIS, AIX, HP/UX
- Reporting Crystal Reports, SQL, PeopleSoft
- Software MS
   Office, Tiburon
   CAD/RMS, Telestaff,
   Chameleon, Cimage





Sheriff Emergency Communications Consulting Services

#### ADDENDUM B-REFERENCES (RFP III.B)

FE's references and project information for several projects similar in scope to that described in Washtenaw County's RFP are provided on the following pages

"Federal Engineering accepted a difficult project on a tight timeline and completed it masterfully and on time. Their team proved knowledgeable, responsive, friendly, trustworthy, and capable in every respect. Federal Engineering is a trusted partner invested in our success."

~ Quinton Stephens, Director, General Counsel/ Deputy Director
Utah Communications Authority

"We needed additional expertise and selected Federal Engineering because of their unique technical and operations backgrounds.

FE personnel have served as first responders and understand, from a user perspective, how these systems must function.

~Terry Owen Edmonton Project Manager, Canada "FE consultants continue to be very helpful throughout this phase of the project. Your project manager has developed an excellent relationship with our County Manager and the Directors on the Governance Committee."

> ~Jay Vargo IT/Radio Communications Director Pinal County, Arizona

"Elmore County would like to thank the Federal Engineering team for their professional work done on our recent study we had done by them. They worked in a timely manner with all our department heads to put together a complete and accurate package for us to use in our future upgrades to our emergency radio and dispatch services. We would highly recommend them to anyone looking for this type of work."

Alan Roberts, Emergency Services Director, Elmore County, Idaho



**Sheriff Emergency Communications Consulting Services** 

# CHARLESTON COUNTY, SOUTH CAROLINA Dispatch Consolidation Consulting



Project Dates: 2005 - 2017

#### Relevant Technologies

- PSAP
- 800 MHz
- P25
- Motorola ASTRO25
- Trunked

#### **Project Contact**

Joe Dawson
County Attorney
4045 Bridge View Drive
North Charleston, SC 29405
843-958-4010
Idawson@charlestoncounty.org

#### Project Snapshot

- Comprehensive communication systems assessment and recommendations
- Consolidation feasibility study
- Transition plan development
- Planning and implementation support
- Vendor proposal review and evaluation
- Design and system implementation support

#### **Project Description**

FE completed a comprehensive communication systems assessment and recommendations study utilized by Charleston County to implement a countywide 800 MHz radio system Charleston County used this highly detailed report as a guide for radio system implementation and recommendations for self-supporting system funding. The report has proven to be invaluable

**FE** also completed an in-depth countywide consolidation feasibility study and developed, with Charleston County, a detailed transition plan. Operational components of the plan included detailed staffing and organizational development and transition planning. **FE** worked closely with staff, and multiple public safety agencies and stakeholders, to identify and provide planning for a phased approach to consolidation. **FE** continued to support the County and multiple municipalities through planning and implementation culminating in a successful consolidation of ten centers in a newly constructed state of the art communications center that opened its doors in June 2012.

In March 2010, Charleston County retained *FE* to conduct a Needs Assessment and Evaluation on a proposal from Motorola Motorola designed their proposal to provide for improved coverage of their ASTRO25 P25 trunked radio system in oceanfront communities, mitigate summer "skip" interference, and to propose interim solutions *FE* completed this assessment and evaluation in August 2010 and provided recommendations to Charleston County, identifying potential frequency conflicts in the interim solutions provided by Motorola

**FE** supported the County from design review through system implementation, with a successful on-time and within budget go-live of the expanded system





**Sheriff Emergency Communications Consulting Services** 

# STATE OF ARKANSAS PSAP Consolidation

Project Dates: 2020-2021

#### Relevant Technologies

- CAD
- GIS
- ESInet
- NG9-1-1 Technologies



#### **Project Contact**

C J Engle Executive Director, 9-1-1 1509 W 7th Street Little Rock, AR 72201 501-682-4140

AR911Board@adem arkansas gov

#### **Project Snapshot**

- · Facilitate project initiation meeting
- Conduct PSAP surveys and follow up interviews
- Conduct needs assessment regional workshops
- Analyze consolidation alternatives
- Develop consolidation plan

#### **Project Description**

Arkansas Act 660 of 2019, "The Public Safety Act of 2019," required the Arkansas 9-1-1 Board to develop a feasibility strategy and plan by January 1, 2022, to provide funding for no more than 77 PSAPs. However, the State had 104 PSAPs in its 75 counties, and consolidation was at the initiative of an individual county or municipality or a group of counties or municipalities with the State planning to operate the NG9-1-1 Program on a "state guided, local control" basis

**FE** worked closely with the Arkansas 9-1-1 Board to develop a strategic plan outlining how PSAPs can consolidate technologically, virtually and/or physically to achieve operational and cost efficiencies in preparation for NG9-1-1 To that end, we convened and directed regional stakeholder workshops to provide information and build consensus regarding a statewide consolidation strategy

**FE** conducted PSAP assessments for equipment life cycle replacement to minimize loss and maximize existing 9-1-1, LMR, FirstNet data assets and the planned ESInet, including funding and the distribution of the existing revenue flow. To minimize risks, **FE** identified consolidation alternatives

Based on the findings of the data gathering activities and the regional workshops, *FE* developed the *State of Arkansas Regional Workshops Summary Report*, distributed the report and posted it to the website Following feedback and update of the report, we presented the final report to the 9-1-1 board. The report included Statewide Network Call Routing Models, Consolidation Model, and Funding Analysis.





**Sheriff Emergency Communications Consulting Services** 

## WINNEBAGO COUNTY, ILLINOIS **Consolidation Study and ECC Technology Assessment**



**Project Dates: 2014—2020** 

#### Relevant Technologies

- Computer aided dispatch
- Mobile data
- Field-based reporting
- **LERMS**
- NG 9-1-1
- Communications center consolidation

#### **Project Contact**

Glenn Trommells IT Director, City of Rockford 425 East State Street Rockford, IL 61104 779-348-7341

Glenn Trommells@rockfordil gov

#### Project Snapshot

- Needs assessment
- RFP and functional specifications development
- Procurement support
- Vendor evaluations and selection
- Contract negotiations

- Implementation project management
- Shared services agreement
- ESInet governance framework

#### **Project Description**

FE completed a series of engagements with Winnebago County, including an in-depth consolidation study and development of a transition plan. Operational components of the plan included staffing and organizational development for a two-center consolidated organization under a single umbrella FE also worked with the County as part of the eleven County Northern Illinois Next Generation Alliance (NINGA) NG9-1-1 project, providing technical expertise in developing a shared services agreement and an RFP for a Next Generation IP infrastructure (ESInet) to interconnect existing PSAP sites throughout the NINGA region

In conjunction with the City of Rockford, Winnebago retained FE to identify and analyze user requirements for all facets of its public safety system, including CAD, NG9-1-1, and mapping. We developed a needs assessment and provided recommendations on whether to retain the current system or replace it with new systems FE developed functional specifications and RFP language for the procurement of a new suite of public safety systems

FE's scope of work also included procurement and implementation support, and development of an intergovernmental agreement





**Sheriff Emergency Communications Consulting Services** 

# ADDENDUM C—CONTRACT PROVISIONS AND INSURANCE REQUIREMENTS (RFP III.C)

Federal Engineering has reviewed and is not requesting any exceptions to the Washtenaw County's contract provisions and insurance requirements

"We selected Federal Engineering based upon their professional and knowledgeable presentation during the interview process. Once hired, FE far exceeded our expectations by sending a quality and experienced consultant team that delivered an exceptional and thorough report, making it easier for our agency to move forward with our project."

> ~ Major Johnny Beauchamp Northumberland County, Virginia

"Our County relied on consulting services in the past, but never really obtained any clarity, recommendations, or direction on how to evolve our system to meet user requirements. Through FE's assessment and recommendations, we now have our existing system thoroughly documented and clear recommendations on a path forward."

~Mike Simmons, Tioga County, New York

"FE and its staff exceeded performance in project management, technical expertise, adherence to schedule and budget, communications and responsiveness. FE was prompt and thorough in all requests for information or explanation. FE helped Oakland Police Department prepare thorough and compelling documentation to support budget and staffing requests. FE provided regional and national insight into best practices. FE was uniquely familiar with strategies on how to best transition to our new CAD system—the largest and most complex IT project in OPD's history. Their participation has already helped us make better decisions and crucial project junctures."

~Virginia Gleason, Former Deputy Director, Oakland Police Department





Sheriff Emergency Communications Consulting Services

# ADDENDUM D—LOCAL VENDOR PREFERENCE CERTIFICATION (RFP III.D)

FE is not requesting the Local Vendor Affidavit, therefore it is not necessary for us to resturn the requested Affidavit Form Federal Engineering is not a certified local vendor

"...On behalf of the Rochester Fire Department, thank you for your time and effort put into the overlay study you conducted for Monroe County. I believe the solution found will serve us well, and the depth and scope of the study surprised me. I've never been involved with a study of this type before and had concerns about the outcome given the multitude of issues that needed to be fully understood to grasp this topic. You put in the time with your interviews and follow-up questions to understand the different issues at hand fully before coming to a decision. It was nice to have both a technical radio expert as well as someone with both dispatch and fire service experience involved in this project, as you could see things from every angle involved, allowing you to make the best decision for all involved agencies.

On behalf of the Rochester Fire Department thank you again, and please don't hesitate to reach out should you ever need anything."

~Kevin Ryan, Rochester (New York) Fire Department

"In my opinion FE has the best consultants in police communications. The professionalism, the technical expertise, and the knowledge of national standards and trends is above reproach. Under their guidance we underwent a \$1.2 million remodel of our communications center. They provided a staffing study that allowed us to address issues with call answering standards, this study also allowed us to do a deep dive on our internal processes and was a catalyst for changing many that were antiquated. FE was also very involved in assisting our Communications Center during software upgrades and were of great assistance in holding vendors accountable for delivery of appropriate products. FE would be the first consultants that I would call for any future projects.

~Lt. George Bray, Operations Manager, Communications Division, Seattle Police Department

