Jacobs

Proposal for:

AMI PLANNING AND IMPLEMENTATION

SOLICITATION NO.2020-2-60

August 20, 2020 2:00 PM Central



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City of Allen Purchasing Division 305 Century Parkway Allen, TX 75013

Re: Proposals for Solicitation No.2020-2-60, Advanced Metering Infrastructure (AMI) Planning and Implementation, August 20, 2020

Dear Purchasing Division:

We are pleased to provide the enclosed proposal for Allen's AMI Planning and Implementation Project. You will find in our proposal that we are putting forward key project members that are both **local** and deeply **experienced** in AMI and Meter to Cash (M2C) Operations. By selecting Jacobs, you will be partnering with a trusted advisor that brings a team with both AMI and actual **utility billing operations experience.** This combination makes our team the best suited for navigating the challenges of a very public AMI project.

Our approach to Allen's AMI Project will address all required tasks and meet the goal of **enhancing customer service** and **building trust** with your citizens. Applying quality controls that leverage **tried and true project management practices**, Jacobs' AMI team has an extensive track record of meeting cost and schedule objectives. With Allen recently wrapping up an internal audit on meter reading and billing practices and citizens questioning the efficacy of billing, a Jacobs partnership is Allen's **best opportunity for AMI implementation success**.

At Jacobs we know one of the more critical pieces to success in AMI projects is the integration of applications. Our **experience with Munis and Cityworks** in other client technical projects combined with a deep understanding of Customer Information Systems (CIS) and Work Order Management Systems (WOM) are key differentiators for us. Our project team is also prepared to guide you in **learning** about AMI, **defining** needs, **selecting** the best value system, and leading a **successful implementation.** Our support does not stop there as we are committed to a lasting relationship that will assist Allen in realizing the **data driven benefits** of the new AMI system.

As your Project Manager, I will commit to the Allen team: sound project management; extensive communication; completion of the project **on schedule and in budget**; to build a team that is **unified and committed** to success; and that **our partnership will engage the community** appropriately to take the first step in building confidence.

Sincerely,

Conce

Tommy McClung Jacobs, Vice President South - Central

Approach

We employ a comprehensive client-centric approach to the development of AMI programs based on leading industry knowledge and insight. Through our experience representing utilities, we maintain our industryleading position and up-to-date technical knowledge regarding communication networks, system functionality, and device-specific capabilities. This knowledge is invaluable as we work with our clients to determine their specific functional objectives for AMI, evaluate proposals to select the best value system for Allen, successfully implement the system, and ensure proper organizational transformation to realize benefits. We understand that for Allen, AMI implementation is not just a technology project, so **we take a holistic approach to deliver an AMI solution that enhances customer service and utility operations**. Further, as your trusted advisor, we will **not walk away after the AMI system is installed, something no other AMI consultancy with our global experience can provide.**

Phase 1 – Preparation of Technical Specs

Task 1 – Program Kickoff

At the project kickoff meeting the Jacobs team will meet the City's AMI Committee to establish a common understanding between the teams and define the chain of command and communication methods. The kickoff meeting will include a review of the draft Phase 1 schedule that will lead to issuance of the AMI RFP.

Task 2 – Evaluation of Existing Systems, Infrastructure, and Organizational Structure Development of Technical Requirements

Jacobs will lead discussions with City stakeholders on various differentiators that may impact the RFP process, such as mechanical vs. static metering technologies, replacement vs retrofits, and implementation pace. See Figure 1 for the list of topics requested by the City that Jacobs will cover. The discussions and subsequent recommendations will be documented and summarized in a consolidated presentation along with formal meeting minutes as deliverables. The deliverables will then be used to inform the City stakeholders of key recommendations and to customize the proven Jacobs template in the procurement

Presentation Topics AMI Technology Fixed Network Communication Technologies Head End Software/Systems MDMS MDA Endpoint Installation Hosting Staffing

Figure 1 Presentation Topics

of key recommendations and to customize the proven Jacobs template in the procurement phase. *Evaluation of existing systems*

The Jacobs team will conduct, review, and identify technology options that deliver key functional requirements for the City, including review of the wireless communications, network service level agreements (SLAs), AMI system data, AMI software applications, meters (mechanical/static), and meter interface units. We will also review pricing and ownership models to recommend innovative approaches to delivering metering services, such as capital vs. O&M offsets, insourcing vs. outsourcing, and Network as a Service (NaaS). We understand how to compare traditional fixed network solutions against the rise of NaaS offerings, ensuring true total life cycle cost is calculated to accurately compare the two pricing models.

The outcome of this evaluation will be, 1) a compilation of data required for the AMI vendor to propose, such as meter population and infrastructure availability, 2) an understanding of the City's ability to integrate data into Munis and Cityworks applications to leverage the benefits of AMI, 3) the City's interest in different ownership and maintenance models over the life of the solution, and 4) a recommended AMI solution that will meet the City's business requirements, offer long-term viability, and is suited to the City's infrastructure and the operating environment. The solution will not be vendor-specific, but rather functionally-based to allow for a competitive procurement process.

Presentation on current state of the technology

The deliverable of the assessment will be a presentation in Power Point to the Allen AMI Committee on the state of the AMI technologies available today. The presentation will include discussion on network ownership models, metering technologies, battery life and warranties, and advanced features such as remote disconnection and integral sensors.

Task 3 – Projected Schedule

Jacobs anticipates completing this project in 21 months. Figure 2 shows the project schedule by task, Jacobs has further detailed the schedule by subtask and is included as Attachment 1. Success with any projected schedule is dependent on several variables such as procurement. To mitigate any potential schedule slippages, Jacobs will maintain an early and often communication philosophy with the Allen AMI Committee.



Figure 2 Projected Schedule: Reduced Duration from Expectation of 24-48 Months

Task 4 – Program Strategy and Cost Range

Implementation Program Strategies and Recommendations

Performance-based specifications | Our recommended approach to procurement for AMI projects is to develop performance-based language that protects the City throughout the project. For example, network performance language requiring 100% coverage with 72-hour read success of 98.5% and 24-hour interval data availability of 95% are typical industry standards that become the minimum for vendors to meet or possibly exceed. This approach places the risk and responsibility on the vendor to propose explicitly how their solutions will achieve required performance levels thereby, protecting the City in this long-term investment.
Evaluation criteria | We will develop and recommend evaluation criteria, criteria definitions, criteria weights, and scoring methodology for the City's selection committee. These criteria will be discussed and adjusted through workshops with the selection committee prior to the request for proposal (RFP) being released.
Contractor teaming structure | Our recommendation on proposer teaming agreements is to require that the AMI vendor or meter supplier be identified as the prime contractor or head of a consortium. Other entities that provide installation services, meters parts, integration/software services will all be subcontracted to the prime for the duration of the contract period. This approach has been proven to mitigate conflict, reduce risk of integration errors, and places the risk on the vendor for meeting scope requirements.

Budgetary Cost

Jacobs has a master pricing database from past procurements that is organized by utility size, region, and procurement date. We will use average equipment and labor pricing across similar utilities to develop the

budgetary pricing for the City based on feature functionality identified in task 2. We include the initial capital cost for equipment such as meters, radios, collectors, installation, project management, IT system integration and contingency as well as the ongoing operations and maintenance costs for services such as software, licenses, hosting, back-haul and collector maintenance. The outcome of this assessment will be a budgetary cost that includes both the initial capital and ongoing annual costs through the full life of the system.

Phase 2 Preparation of RFP and Selection of AMI Bidder

Tasks 1 & 2 – Prepare Bid Documents

We will develop an RFP with performance-based specifications and evaluation criteria described in Task 4 of Phase 1 to support competitive pricing while meeting defined functional objectives. We will prepare the draft RFP language for each requirement and desired feature. We will use our proven RFP template as a starting point and incorporate custom Allen requirements. We will then review the draft document in detail with staff and make revisions as necessary. Standard contract language, clauses, and legal wording will be the requirement of the Procurement Department. The existing meter population (quantity and sizes), and customer addresses will be produced via desktop analysis and validated in conjunction with city staff. Specific locations/height of city facilities will be asked to be provided by Allen. Once we provide the draft RFP, the Procurement Department will finalize and approve the solicitation prior to posting and publicizing it in accordance with City standard contracting process. As part of developing the RFP, we will also provide a potential list of vendors likely to respond so that the City can send the RFP to them at the appropriate time.

Task 3 - Vendor Selection

We will review questions submitted in writing prior to the deadline and provide (1) suggested responses for functional/specification related questions and (2) an itemized list of questions that pertain to legal or contractual issues for the Procurement Department to address. The final response to proposers and/or posting of the addendum will be the requirement of the Procurement Department.

Once proposals are received, we will review submissions in detail (including verifying propagation study results) and develop highlights, questions based on industry expertise, and knowledge of each vendors' specific technology. We will then facilitate a scoring workshop where the Jacobs scoring tool will be shared



Figure 3 Sample Selection Results: Consensus scoring results in vendor differentiation

with staff to tabulate the individual technical scores and a consensus is reached per the evaluation criteria. Based on the results of the scoring workshops and a review of initial costs, a shortlist of vendors will be invited to present their project team, proposed technology, and give a demonstration of their software.

We will be on-site during the vendor presentations to ask questions and hold each vendor accountable for both the positive and negative aspects of their solution. We will prepare a list of interview questions and topics for discussion resulting from the technical scoring workshop. After the presentations, vendors will be requested to submit best and final price quotes. We will evaluate the best and final cost proposals to ensure an apples-to-apples cost comparison. Points will be assigned to costs and a sensitivity analysis will be performed during a cost review workshop to provide confidence in the outcome. Once the evaluation is complete, we will recommend the highest ranked vendor to enter negotiations. We will be available to make presentations, as necessary, explaining evaluation results and recommendations.

Task 4 - Vendor Negotiations

We will examine the highest ranked vendor's proposal to aid the City in developing a statement of work and develop topics for negotiations, including wish list and other concerns. We will attend an initial workshop to review the list and negotiate action items as an intermediary between the City and vendor teams. We will be available for one additional meeting to support Allen during close out and to seek clarification on technical and price details, implementation timeline, contract terms, and performance requirements.

Task 5 - Review of the draft and final contract

When negotiations are complete, we will provide a review of the draft and final contract documents on behalf of the City to verify all open items have been addressed as intended.

Phase 3 – Integration & Implementation

Task 1 - Provide overall management

Once the negotiations are complete, Allen will issue the final contract documents and the notice to proceed and we will manage the Contractor's preparations for deployment. For this part of the program to succeed, effective program management and individual project management must go hand in hand. The AMI project will

ID	Name	Notes	L	С	Risk Score	Owner	L - Updated	C - Updated	Risk Score Updated
20	Competing Internal Resources/Projects	Resources aren't actively involved	4	4	16	Mark, Lisa	2	4	8
3	Increased Call Wait Times	Duration of calls will go up. Increase in calls is very likely. Based on CC&B experience it is a big deal if it happens in the past.	5	3	15	Laura and Data Security	5	3	15
1	No Change to Operations or Procedures	History of happening in past with CC&B.	2	5	10	Megan H.	2	5	10
7	Loss of Customer Confidence	some customers staying on AMR. Lots of QA/QC lots of checks on the data.	2	5	10	Eric	2	5	10
9	Lack of Employee Buy- In	If global it's a big deal, linked it 'No Change to Operations or Procedures'	3	3	9	Barbara	3	3	9
12	Integration Issues - Public Facing	there will be integration issues, impossible to test everything.	2	4	8	Barbara	2	4	8
14	Natural Disasters - Impact to Installation	Not everywhere floods but happens all the time. Other places work if needed	4	2	8	Barbara	4	2	8

Figure 4: Sample Risk Matrix: Thorough project reporting from experts who have "been there and done that"

consist of thousands of small customer service transactions as well as thousands of work orders. The work orders must be executed with quality and on schedule to maintain progress and budget. Information must be handled properly to ensure accuracy, minimize follow-up, and mitigate oversights. Project management documents including project plans, project schedules, risk matrix (See Figure 4), and supporting plans (including testing, training, communications, integration, field deployments, cutover, etc.) will be routinely shared with Allen. We will also actively manage and provide status reports for the project team (e.g., project decisions, changes, issues, and risks), executive staff, and other stakeholders. Please refer to Attachment 2 for the sample workplan from Louisville Water demonstrating our proven program management tools.

The AMI installation schedule will be made a part of the contract documents, since unanticipated changes to the schedule can disrupt project management and utility operations. The AMI installation contractor(s) will be required to meet construction schedules through their contract term. Of most importance is the quality and accuracy of the AMI data. There is one chance—at the time of installation—to get the data right. A robust program control and monitoring system that considers AMI data quality is critical to project success. Therefore, we will require installers to provide bar codes and scanners, handheld computers, and digital photographs of old meter registers and installation settings to help to minimize handwritten information and ensure a more foolproof data management procedure system.

Installation work will be released route by route to avoid the poor productivity associated with scattered meter readings on the same street. We will establish criteria for the completion of old routes before allowing the contractor to move into new areas to prevent the contractor from avoiding more difficult installations, enable us to manage inspections, minimize meter reading coordination efforts, minimize disruption to the public and City customers, and minimize manual reads on routes that have been converted to AMI.

Tasks 2 & 3 – Integration with financial system

The next task after notice to proceed for the vendor is to work with the City to build the interfaces between the software applications that are needed (meter data management and customer portal) and the existing City systems (Munis, Cityworks, etc.) to share AMI data. Through a workshop with the City and vendor personnel, system specific integration methodology will be identified and confirmed to assure alignment between each interface. The vendor solution(s) will also be reviewed for hardware and software architecture, platform, integration, design, configuration, functionality, and scalability that are in alignment with Allen needs. This will be accomplished through Jacobs leading the systems integration requirements gathering with the AMI vendor team. Progress will be briefed through weekly technical review meetings with all project personnel.

Once the interfaces are designed and in place, user acceptance and testing activities will be conducted using Jacobs developed test plans and test scenarios with results documented. The intent is to have the system interfaces designed, developed, and tested prior to deployment. This is streamlined through our experience with multiple different Customer Information Systems (CIS) and work Order Management (WOM) applications including Munis and Cityworks.

Task 4 – Organization change management

Leveraging our Project Team's operational and process knowledge will be the key to Allen's AMI implementation success. Our experience and methodology will assist Allen in building an appropriate organizational structure that adequately operates and collaborates across functions to deal with emerging issues at their source. A successful AMI program requires attention to organizational issues such as process improvement, staffing levels, policy changes, performance expectations, training, and more. Having a trusted advisor guiding you, that has been there and done that, mitigates risk associated change management.

Our change management framework is founded in a proactive, collaborative, participatory identification and adjustment of current processes that will be influenced by AMI. This effort is aligned with a concerted communications process that ensures people are aware of changes to be made and given the impetus, knowledge, and ability to adopt the required changes; sustainability is achieved through appropriate rewards and recognition. An initial workshop will be held to discuss impacts to common Meter-to-Cash processes and provide input into how those processes will change. We will provide an overview of the key benefits associated with AMI to further help inform the change management plan. A communication plan will also be developed to help keep both internal and external stakeholders informed of the implementation program. The execution of that plan will be the requirement of the City and its public relations office.

Task 5 – Training

Most of the AMI-related training will be provided by the vendor following the training plan incorporated in the contract statement of work. We will develop the overall training plan strategy including objectives and competencies to be addressed, approach, curriculum and equipment requirements. The training plan will be incorporated into the project schedule.

Task 6 – Implementation Management & QA/QC Plan

At the start of the implementation phase, we will begin our Project Management and Quality Assurance approach by holding a kickoff meeting with the selected vendor to review and finalize their proposed solution architecture, design, and configuration. This will also include a review of the proposed meter locations and network deployment plan. To minimize disruption to the M2C process, a blackout schedule will be created that defines the period for each cycle and route when installations are not permitted to occur. Factoring this requirement into the deployment process allows for the maximum amount of time to complete routes in between blackout periods. After defining the blackout schedule, the first routes for upgrades can be identified to serve a strategic purpose by testing the system and its capabilities as well as to achieve some operational or customer-focused benefits, such as reducing tough to read or unsafe meter reading conditions. After the initial routes have been identified to start deployment and the network plan has been developed, the ongoing release of routes is a controlled and well-defined process to prevent the installers from only doing the easy jobs and to ensure routes are fully upgraded which frees up resources to do other things beyond supporting meter reading.

Before beginning full-scale installation, we will require the contractor to conduct a "slow-start" installation on several hundred meters (and network devices, if applicable) so that system performance can be verified. These procedures include appointment scheduling, logistics, inspection, data audit, installation acceptance, the handling of anomalies (such as inaccurate data or shutoff valves that need replacing), and the data interface to Munis. After a short evaluation period, we will recommend any immediate corrective actions or, at the City's direction, allow the contractor to continue with full deployment. Jacobs will provide ongoing tracking and reporting of progress, will schedule new routes for release after successful completion of installations, will approve payment for installations based on system acceptance criteria, and will provide support for issue resolution throughout deployment. Similar test periods will be established for any other applications involving interfaces to the AMI system. We understand the critical nature of this data to the City and will ensure that all components function properly before bringing them online.

Task 7 – Post-Implementation Support

Effectively transitioning from project to operations requires experienced resources that have "been there, done that." In our experience, a successful cutover and readiness plan includes the following elements: 1) Documentation on training, job aids, and how-to guides for self-help tools; 2) Training of utility users for their appropriate roles; 3) Conducting post-training assessment; 4) Identification of and performing advanced training for an internal SME to be the first point of escalation for internal users; 5) Retraining for new users (new to the organization) and existing users requiring refresher training; 6) Documenting lessons learned for future projects, and 7) providing advisory services in monitoring system and business process performance.

Task 8 – Unforeseen future work

Significant unforeseen work will be mitigated by our issue resolution process run through the Program Manager. Work such as meter installations that require specialized equipment or unique scheduling concerns will have a mitigation plan developed and executed. In the rare case that unforeseen work becomes tangible, we will work with Allen to address the requirements and lead the resolution as mutually agreed upon.

Innovative Concepts

Begin with the End in Mind | Our holistic approach to technology selection is based on our extensive experience and understanding your objectives and specific use cases for AMI. We strive to ensure that the technology is matched with near-, mid-, and long-term functional requirements without overpaying for unnecessary options.

Best and Final Pricing | We recommend allowing for vendors to provide revised pricing after the presentation and interview process. During the presentation and interview, we encourage vendors to ask clarifying questions about the project, enabling them to clarify and reduce certain risk pricing that may have been included in their initial cost proposal.

Single Accountability | Our recommendation on proposer teaming agreements is to require that the AMI vendor be identified as the prime contractor or head of consortium. This approach has been proven to mitigate conflict and the risk of integration errors by placing risk on the vendor as opposed to the City for meeting the scope requirements.

Independent Bidding of Customer Portal | Instead of requiring AMI vendors to propose with their preferred customer portal, we recommend an independent procurement of a Customer Portal. This allows the City to select the Customer Portal that best satisfies their functional requirements.

Slow Start | Prior to full-scale installation, we will require the contractor to conduct a slow-start installation on several hundred meters so that all parties can verify system performance as well as all installation and quality control procedures, including inspection, logistics, data audit, installation acceptance, the handling of anomalies (such as inaccurate data or shutoff valves that need replacing) and the data interface to the CIS. **Benefits Realization** | We understand how to use AMI interval data to improve customer satisfaction and operational efficiency, and we want to be a long-term partner with the City to ensure that when the project is installed there is a focus on organizational transformation to realize the benefits of AMI data.

Background & Experience

Founded in 1947, Jacobs has more than 50,000 professionals worldwide nearly 2,900 right here in Texas. Our Dallas based Headquarters, leads a full-service design, build, operate engineering firm ranked in the tops spots of 19 ENR market sectors. With key project leaders in Houston and just 25 miles from Allen, your AMI project will be led by local resources.

AMI Experience

At Jacobs, smart metering (AMI) is a globally recognized technology within our Intelligent Systems group. Our AMI team provides full-service strategic consulting, economic modeling, procurement and program management services in the smart metering space and are strictly vendor independent. Our team's deep domain expertise and broader relevant experience in the water sector sets us apart from our peers, providing our clients with tools to manage project risks. More details on the team are provided in Figure 5 and resumes can be found as Attachment 3.

Table 1 outlines our experience in delivering tasks specific to the City of Allen's RFP and provides relevant experience for water-specific AMI projects that we have delivered over the past 5 years.

To accommodate space constraints, we have provided the RFP requested detail on three projects that also represent our references. Further details and project descriptions for our work in Columbia, SC, Fort Wayne, and Delaware, OH are described below. Upon request, we can provide similar detail on any of the projects in Table 2.

Start Date	End	Date	Project Name	Customers	Vendor	Strategy & Requirements	Proc	urement	Integration	Implementation
	Referenced Projects									
2018	Active	Fort V	Nayne, IN	105,000	lt	ron	✓	✓	✓	✓
2016	Active	Colur	nbia, SC	150,000	Ba	dger	✓	✓	✓	✓
2015	2017	17 Delaware, OH		12,000	Mueller		✓	✓	✓	✓
Other Relevant Projects										
2020	Active	The V	/illages, FL	110,000	1	N/A	√			
2020	Active	Cincir	nnati, OH	240,000	1	N/A	√			

Table 1 2015–2020 Water AMI Project Experience: Extensive project experience in utilities of all sizes

2020	Active	Fayetteville, AR	43,000	N/A	✓			
2019	Active	Hunter Water (AU)	185,000	N/A	✓			
2018	Active	Forsyth County, GA	62,000	Neptune	✓	✓		
2018	Active	Santa Cruz, CA	28,000	Sensus/ Badger	✓	✓		
2017	Active	Aurora, CO	85,000	Badger	✓	✓	✓	✓
2014	Active	Louisville, KY	285,000	Itron/ Neptune	✓	✓	✓	✓
2018	2019	Gwinnett County, GA	250,000	Neptune	✓			
2018	2019	Cocoa, FL	90,000	Neptune	✓			
2017	2018	Montgomery, AL	90,000	Neptune	✓			
2017	2018	Pembroke Pines, FL	43,000	Neptune	✓			
2016	2018	Okaloosa, FL	35,000	Sensus	✓	✓		
2015	2016	Bellevue, WA	40,000	Sensus	✓			
2008	2016	Cleveland, OH	425,000	Itron/ Badger	✓	✓	✓	✓

References and Relevant Experience

Columbia Water	Project Reference:	Project Dates:	AMI Vendor: Badger
1339 Main Street,	Jason Shaw, Project Manager	August 2016 - Present	CIS Integration: Yes
Columbia, SC	Utility Operations	Number of	(WaterSmart)
29201	803-528-7677	Connections: 150k	Customer Portal: Yes
	jashaw@columbiasc.net	Fielding Cost: \$45M	Integration with CIS/WOMS: Yes

Project Description: Columbia Water hired Jacobs to prepare an assessment of existing water metering system, develop a business case model, prepare a feasibility study, assist in the acquisition of the selected technology, and provide project management services through the implementation phase. During the competitive procurement process, six vendor technical proposals were received. The selection team used those proposals and the defined evaluation criteria to identify a shortlist of the three highest ranked proposals. The third and final stage included the evaluation of the life cycle costs, which combined the interview scores resulting in the selection of the strongest and most cost-efficient solution for the City, Badger Meter's Orion solution. After a vendor selection and negotiation phase, the implementation phase is now underway with over 50,000 meters installed through July 2020

Fort Wayne City	Project Reference:	Project Dates:	AMI Vendor: Itron (Neptune meters)
Utilities	Ben Groeneweg, Project Manager	October 2018 - Present	CIS Integration: Yes
200 E. Berry Street,	City Utilities Engineering	Number of	(WaterSmart)
Suite 470	260-427-1365	Connections: 105k	Customer Portal: Yes
Fort Wayne, IN	ben.groeneweg	Fielding Cost: \$20M	Integration with CIS/WOMS: Yes
46802	@citvoffortwavne.org		

Project Description: In 2018, we were selected to lead the AMI project including vendor procurement, vendor negotiations, and implementation management and oversight. During the competitive procurement process, eight vendor technical proposals were received. The selection team used those proposals and the defined evaluation criteria to identify a shortlist of the three highest ranked proposals. Itron was selected as the AMI vendor in early 2019 with Neptune meters. FWCU has executed a contract with Itron and the initial deployment activities have begun, with a target for full rollout beginning in early 2021.

City of Delaware	Project Reference:	Project Dates:	AMI Vendor: Mueller
225 Cherry Street	Perry Mickley, Project Manager	June 2015 to Jul 2017	CIS Integration: Yes
Delaware, OH	Public Utilities Department	Number of	(WaterSmart)
43015	740-816-7329	Connections: 12,000	Customer Portal: Yes
	pmickley@delawareohio.net	Fielding Cost: \$1.2M	Integration with CIS/WOMS: Yes

Project Description: Jacobs (formally CH2M) was retained to assist the City of Delaware with the procurement and implementation of a fixed network AMI system for their 12,000 customers. We performed a series of interviews with key stakeholders, such as meter reading, customer service, billing, engineering, and IT, to identify issues and opportunities that would be presented by an AMI system. We prepared the draft RFP for each requirement and desired feature and also determined which assets needed to be replaced and/or migrated to the new system based on age, condition, and compatibility. We also participated on the evaluation panel and facilitated the selection committee meeting. The City began implementation with the selected system in 2016. We were tasked with overseeing the implementation piece which is on track for completion within four months.

Fee

Jacobs proposes a lumpsum cost for each phase as described in our approach and scope of work. Each phase will be billed monthly on a percent complete basis, with travel expenses as incurred. We have estimated travel to be \$15,950 at current prices and consistent with our approach. The total inclusive of estimated travel cost is \$821,708 as detailed in the Table 2.

Proposed Fee				
\$	87,720			
\$	103,093			
\$	614,945			
\$	15,950			
\$	821,708			
	Pro \$ \$ \$ \$ \$			

Table 2 Fee

Figure 5 Org Chart and Team Bios

Deputy PM Jordan Buescher, PE

Jordan has over 5 years of experience working with water utilities as a project manager. He currently serves as a project manager in Jacobs' Dallas office.



Project Manager System Integration **Tommy McClung**

Tommy is our Project Manager and Systems Integration Lead. Tommy has more than 15 years of experience with advanced metering, meter data management and analytics applications and data integration.

Project Director

Jaason Englesmith



Jaason Englesmith currently serves as Jacobs' Global Technology Leader for smart metering and more than 20 years of experience.



Implementation Advisor Josh Braman, PE

Josh Braman has served as Jacobs' water AMI implementation lead for nearly 10 years. Josh has led the most aggressive AMI implementation program in the country, for the City of Cleveland, with over 425,000 metered accounts.

Procurement Lead Joe Ball

Joe Ball serves as Jacobs' solution architect and technology subject matter expert (SME) for Smart Metering. He works alongside utility personnel to select the right technology through feasibility studies, cost benefit analysis, procurement, vendor evaluation, and negotiations.

Communications & Outreach Joy Swenson

Joy Swenson has 30 years of experience creating and implementing effective business strategies to strengthen the operational performance, employee commitment. customer focus, and public policy clout of municipal utilities throughout the U.S.



Steve Sauder is the business intelligence lead. He has seven years of experience as a water professional. He focuses on generating actionable insight with project data.