

Preparing a Business Case for Developing an Accessible, Open Source Voting System

For



City and County of San Francisco

Submitted By:

6 Head Corp, LLC Neil McClure, Manager 8053 Anchor Drive Longmont, CO 80504 (303) 594-9989 nmcclure@comcast.net

July 12, 2017

1. Introduction and Executive Summary

July 12, 2017

City and County of San Francisco Department of Elections 1 Dr. Carlton B. Goodlett Pl, #48 San Francisco, California 94102

RE: REG RFP #2017-01: Proposal for Preparing a Business Case for Developing a Highly Accessible, Open Source Voting System.

Dear Sir/Madam:

The City and County of San Francisco (City) desire to analyze the feasibility of an Accessible, Open Source Voting System is a bold and forward thinking effort that will arguably contribute to creation of the next generation of voting systems in the United States. Having been personally involved in the last step-wise change in voting system technology in the United States around the turn of the century, I can attest to the fact that an end-to-end analysis of the factors associated with creating a new voting system is a critical first step for the City to undertake. But moving to an open source approach is more than just development of a new voting system, it also includes the creation of a new business model for voting systems, moving away from the model of captive, proprietary systems that currently exists in the country. To accomplish this, your RFP award needs to go to a team that has a history of creativity and innovation, and knowledge of the unique voting systems requirements. We hope as you review our proposal, you recognize that our team possesses these qualities, along with excellent analytical skills with broad experience in product and business development.

The City's RFP outlines deliverables that requires analysis of the entire product life-cycle, cradle-to-grave. These informational needs are very similar to those of a business plan for a start-up company, which requires 'system-level' thinking. Our team has experience with creating successful business plans and, more importantly, for the election industry, we have experience with the five different customer segments in election market: voters, pollworkers, election officials, State and Federal, and the media/academia. The ability to recognize these distinct user demographics and address their needs is lost on most people. This, coupled with the variety of State requirements, accessibility and multiple languages, makes voting systems a very challenging problem to solve. While the deliverables do not generally require analysis down to the individual user demographic, these groups should always be kept in mind during the feasibility assessment.

We are proposing a team that brings a diverse set of experience and expertise necessary to address the analytical range of the deliverables.

- As the project lead, I possess the expertise needed to address the content of the deliverables. However, in my opinion the start and delivery date for the business case results in a compressed schedule. Even though I'll be able to commit 75% of my time to this project beginning August 1, 2017, I still felt the schedule was at risk. This should serve as an acknowledgement that I understand the content and is the reason we are proposing additional resources.
- Ralph Wieland, who I've worked with for over 25 years, brings additional technical expertise with voting system development experience. Ralph wrote half of all the firmware for Hart InterCivic's eSlate product and served as my technical advisor throughout the development of that product. He also wrote all the ballot logic, including straight party, fractional voting and implementation of California's complicated ballot rotation algorithm. He and I also worked on ranked choice voting although that algorithm never made it to market for eSlate.
- Edie Snyder Gilboy is an Excel wizard with a tremendous background in financial modeling. Rather
 than just generating simple spreadsheets, Edie can produce cost modeling tools that allow 'what if'
 scenarios to be conducted.

REG RFP #2017-01 Response

As mentioned previously, the RFP requires a compressed schedule and requires focused, directed efforts with well-defined output requirements. This project does not permit a 'learn as you go' approach and we have proposed the first month of the project being spent on defining the system boundary, understanding the City's capabilities to accurately assess 'feasibility' and organize the deliverables into logical components to support efficient development of information to support the business case. I would be suspect of any proposal that does not launch the project with this first effort, as it demonstrates a lack of understanding of the content. Furthermore, our project schedule begins on August 1, 2017, which is ideal. To maintain the required delivery date of the business case, we're able to slip the start date 15 days and still deliver the business case by January 26, 2018. If the start date is after August 15, we will either need to slip the delivery date proportionally or reduce the scope of the business case. Since the RFP requests expedited delivery of the business case, I urge you to treat the proposal evaluation and award timeframes expeditiously as well.

Lastly, the RFP seeks confidence in the proposer's ability to deliver the business case by the stated deadline. This is a lot of work and our seriousness about the deadline is communicated above. In addition, most of our team has grown up in the election business and, unlike other industries, election dates don't change. I don't believe there's a better qualified team to meet the requirements of the RFP and we are willing and able to perform the commitments contained in our proposal. Thank you for your continued attention.

Neil McClure

6 Head Corp, LLC

2. Project Plan

a. Deliverable Information development

The City and County of San Francisco (City) is requesting contract services to develop a business case that analyzes the feasibility of the City's options for developing a highly accessible, open source voting system (System), and the costs and time frames associated with those options. The business case requested in the RFP outlines an effort that is more commonly referred to as a 'systems analysis' that results in identifying various options to achieve an objective, where the options are differentiated by cost, time and scope. A key success factor for any systems analysis is the clear definition of the system boundary that is mutually agreed to by the interested parties. In order to meet the objectives as specified in the RFP, a more detailed definition of the system boundary is required. We are proposing the first month of the project be spent detailing the boundary and refining the deliverables that collectively results in production of the business case. This detailed planning period is essential to ensure a successful project outcome.

The system boundary we seek to define is multi-disciplinary and cuts across all business functions. The first month of project is spent developing additional system specifications through review of historical information given in Section 1-C, interviewing City stakeholders and developing a representative voting system architecture. Our team is familiar, or has experience with, half the listed documents in Section 1-C but a refresh review in the context of this project is warranted, along with extracting relevant requirements from the new material. Following the historical information review, we recommend the City stakeholders be interviewed by one of our team members as one of the critical system boundaries abuts the City boundary. Time with City stakeholders is also used to add detail to the scope and definition of the deliverables.

In parallel with the system boundary definition effort, our team will develop a system architecture diagram representative of the target voting system. The diagram defines the major system components, the relationship between components and, most importantly, alternative processes that can be used by voters to cast ballots. There are many different methods possible that can be employed to make selections and cast a ballot in a polling location. The selected ballot casting process can have a significant impact on the development, certification, operation and system acceptance by citizens. It is expected that this component of the system architecture diagrams will result in trade-offs and drive alternatives to be addressed in the deliverables. The system architecture diagrams will be developed based on current and proposed ballot casting processes, including potential novel approaches, and will be footnoted with any intellectual property concerns. The system architecture will not identify a specific recommended design, but the components will be representative of several alternative possibilities. In our opinion, recommending a voting system architecture is out of scope of this project and will not be provided in the final business case but will provide the feasibility of possible solutions that requires future product research in a follow on Phase.

The final task of the first month of the project is an analysis and organization of the deliverables based on the results of the previously described scoping efforts. The list of deliverables in RFP Section II, and specifically paragraphs D through G, outline a wide range of topics that intermingles everything from product concept through end of life. We recommend that the list of deliverables be reorganized to account for the relationships and dependencies between the deliverables to provide an efficient order for the development of the supporting information. Our initial analysis suggests the deliverables can be reorganized into a new set of categories as follows:

- City Options
- Feasibility
- Development
- Operations
- Schedules
- Cost
- Risks

REG RFP #2017-01 Response

The listed categories are in order of priority such that subsequent categories build on prior work. Each of the deliverables listed in Section II D-G generally fits within one of these categories and with details added from the scoping effort, will be made part of one of the scheduled, monthly deliverables.

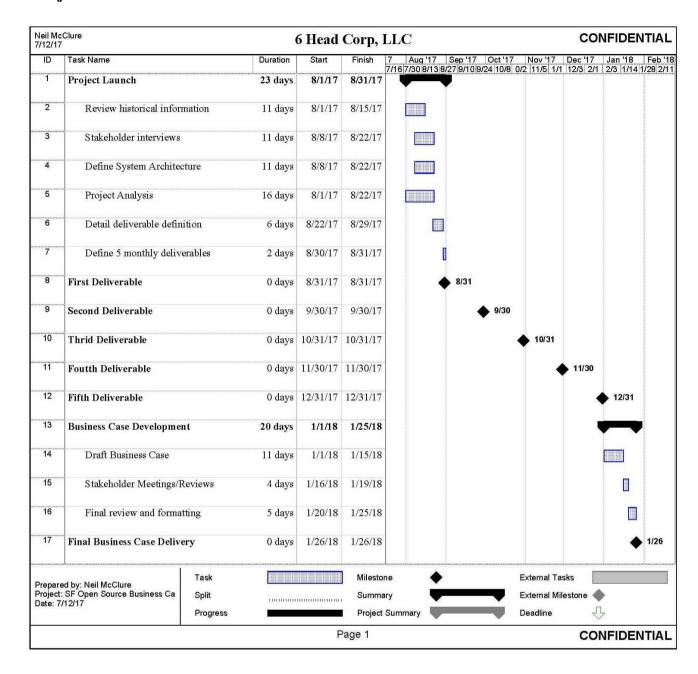
The effort outlined above and the resulting documentation serves as the first deliverable and consists of:

- Representative voting system architecture diagram, with alternative processes;
- Well-defined and agreed to deliverables;
- The deliverables grouped by category; and,
- First draft of each category assigned a delivery date, e.g. deliverable 2, 3,4, or 5

With completion of the first deliverable, the remaining project is well-defined and the parties mutually agree to the remaining activities with aligned expectations.

Deliverables 2 through 5 are intended to demonstrate and communicate to the City that the project is on track and provide incremental updates for review. It is expected that deliverable 2 will include information regarding various City options and a framework of feasibility. We expect review and feedback on each of the deliverables from the City. As subsequent deliverables are completed, previously provided deliverables may be updated based on new information and feedback from the City and the updates re-submitted for review. This iterative, Agile-like process ensures each of deliverables is kept current throughout the project. When deliverable 5 is completed, all categories are expected to be 90% complete and the project moves into the Business Case development phase, integrating the categories that generate specific conclusions and recommendations, which are supported by the information developed throughout the project.

b. Project schedule and milestones



REG RFP #2017-01 Response

c. Overall approach

Our overall approach will follow a combination of a practiced model for corporation-level business development and business plan development for a start-up company, both of which are supported by the experience of our team members. Given the level of experience of our team members, each is an expert in their fields and able to support multiple roles, which include:

- Executive Management
- Project Management
- Business Analyst
- Financial Analyst
- Certified Public Accountant
- Researcher (all disciplines)
- Engineering Management
- Hardware/software Engineering

- Systems Engineering
- Technical Analyst
- Intellectual Property Analyst
- Product Management
- Process Analyst
- Production Management
- Elections Subject Matter Expert
- Voter Registration Subject Matter Expert

Some aspect of each of these roles is required to address the content of the wide ranging requirements of the deliverables.

d. Task Assignment

The Project Lead will assume the roles of executive and project management, working collaboratively to identify project tasks for assignment to individual team members. Tasks are assigned to individual team members based on expertise and experience, which are provided in the following sections.

Response

Neil McClure: Project Lead

- Over 25 years of professional product related experience; hardware and software
- Experience ranges from technology discovery to product end-of-life retail to aerospace
- Management experience with all operational disciplines
- Focus on business development, end product delivery and intellectual property
- Extensive software licensing experience with all levels of government
- Experience with a multitude of standards; ISO, IEEE, NIST, MIL-SPEC, CMMI, FDA
- Excellent analytical, written and oral presentation skills.

Education

M.S. Systems Management: University of Denver -- 1991

B.S. Physics: California State University at Chico -- 1986

B.S. Electronic/Electrical Engineering: California State University at Chico -- 1986

Mathematics, minor: California State University at Chico -- 1986

Work Experience

• TKO Enterprises, Inc.: 2010-Present

- Technology development and marketing start-up company: Image Sensor System
- Experience with a variety of image processing algorithms for object and event detection
- Canada Goose deterrent: Detects and triggers hazing device to scare geese from protection area
- Deer Deterrent: development funded by NSF SBIR Phase I grant
- ◆ Three US patents for Image Sensor System: Patent Numbers 8,780,198; 9,293,017 and; 9,299,231

• OKT Enterprises, LLC: 2013-Present

- ♦ Wholly owned by TKO Enterprises, Inc.
- ♦ Formed to commercialize Bed Exit Detection product for healthcare facilities using Image Sensor System
- Research project with University of Denver through NSF I/UCRC
- 40 person study to differential between bed exit and bed mobility; working module of Bed Exit Detection
- Staging for "In Situ" video collection of actual patients to re-train algorithms
- ◆ Exclusive license of TKO's Bed Exit Detection patent: Patent Number 9,277,878; CIP pending

• 6 Head Corp, LLC, Technical consulting: 2013-Present

♦ Medtronic; Strategic Products/Technologies; 5yr Roadmap, Image-based monitoring: 2016-Present

- Clinical Decision Support (CDS) application specification
- 5-year Product/Technology Roadmap development, years 3 through 5
- Business Development and Licensing due diligence support
- HIPPA compliant data de-identification research and specification
- Non-Contact Patient Monitoring infrastructure development

♦ Hawaii State Office of Election; Statewide Voter Registration System: 2013-Present

- Project Manager, Project Advisor, Software Requirements
- Contract 1: Developed technical and functional requirements for Request For Proposal
- Contract 2: Vendor Selection, Software Development Project Manager, Requirements Author
- Contract 3: Software Development Project Manager, Requirements Author
- Added Project Requirements GIS-based addressing system for voter registration; managed development

◆ Travis County, Texas Clerk and Recorder: Open Source electronic voting system: 2/2016-Present

- Project Director; Requirements, technical architecture, testing and deployment
- Specification and development of open source software/COTS hardware polling place system
- Structure RFP, vendor selection, manage phased development and implementation

Virtual/Augmented Reality Project: Technology/Markets/Products: 1/2016-Present

- Investigating various technology platforms and techniques for Virtual/Augmented Reality product(s)
- Particular focus on Augmented Reality for user interaction with physical environment
- Target applications are for medical, emergency response and user product training
- ♦ Voting Systems Expert: Retained by Presidential Campaign (2012) and National Party (2014 & 2016)

Response

♦ Helena Chemical Company; Precision Agriculture consultant (2009)

- Introduced software requirements and development processes to multi-billion dollar company
- Reported to senior executives to establish requirements and development working groups
- Developed software requirements to manage Precision Agriculture functions for customer base
- Budgets, schedules and contractual agreements
- Identified intellectual property and prescribed protective processes

• Hart InterCivic, Inc.: 1999-2008

- ♦ Corporate Officer, Vice President, General Manager, Chief Technology Officer
 - Managed the Colorado Engineering/Production Division for Hart InterCivic; grew to 55 employees
 - Successfully launched the voting system in 2000; Top-rank accessible DRE and Digital Ballot Imaging
 - Built an installed base of over 350 counties and states in 6 years; Over \$300 million in sales
 - Developed strategic corporate business initiatives
 - Managed Intellectual Property portfolio and related legal matters

Significant Projects

- Nationally recognized expert providing testimony at Federal, State and local levels
- Negotiated software license agreements with Federal, State and local governments
- Managed large system installation/integration projects: Harris Co, TX, Orange Co CA, State of HI
- Initiated/managed relationships with large integrators (IBM, Accenture, etc.)
- Subject Matter Expert and Program Manager for DOD/FVAP internet voting project
- Developed/implemented statewide voter registration system for the State of Texas
- Developed/implemented first automated absentee mail system election data to addressed envelop
- Participant/Contributor for national and state standards efforts, including NIST and IEEE
- Reviewer for National Academy of Science book on Electronic Voting
- 10 US patents for election equipment and systems

• Worldwide Election Systems, Inc.: 1996-1999

- ♦ Founder, President & CEO
 - Launched company to design, develop & manufacture an electronic voting system
 - Raised \$1.7 million to fund development and initial sales
 - Built an organization to support the goals of the company
 - Successfully negotiated sale of the company to Hart InterCivic, Inc.

• Ohmeda Medical System: 1989-1995

- ◆ Test Engineer Managed \$20 million/year circuit board production,
- ◆ Principal Engineer Special research projects
- Product line manager -- Cradle to grave product experience, including FDA submissions

• TKO Enterprises, Inc.: 1995-1996

- ♦ Founder, President
 - Technology license from Vanderbilt University Performed experimental work for infrared emitter
 - Negotiated release from Ohmeda
 - Negotiated license for Chemical Vapor Deposition Conductive Diamond
 - Performed experimental work for infrared emitter

• Martin Marietta Aerospace: 1987-1989

- ♦ Manufacturing Engineer Flight hardware for the Titan space launch vehicle
- ◆ Test Engineer Flight hardware for the Titan space launch vehicle
- ♦ U.S. Air Force Liaison for space flight hardware

Intellectual Property

- Issued Patents: 22
- Pending Patent Applications: 2
- Extensive legal experience with patents, patent litigation, copyrights, trademarks and licensing agreements including written and oral testimony.

Response

Ralph Wieland: Technical Expert

- Over 25 years of experience in software and hardware development.
- Development of embedded systems, desktop application and cloud based web applications.
- 10 years of experience with development and certification of electronic voting system
- Expertise in modern software development tools and practices.
- Proven ability to complete professional product development projects.

Skills

Programming Languages: C#, Javascript, C/C++, Java

Operating Systems: Linux, Windows, WinCE, WinXPE, MQX, uCOSII

Cloud: Amazon Web Services, Microsoft Azure

Recent Activities

The focus of the past several years has been with implementation Cloud based solutions for business applications. Developed Web application hosted with Amazon Web Services Elastic Beanstalk with a server using Google's GO programming language and client using HTML/Javascript. Both server and client use open source components extensively including Gorilla Mux, jQuery, Semantic UI, Vue, MySql and Handlebars.

Software/Hardware Accomplishments

- C#/.NETCF implementation support for release of WinCE based pulse oximeter.
- Took responsibility for completion of user interface for laboratory in vitro diagnostic device.
- Design and implementation of API for custom digital fluorescence microscope.
- Senior Software role for development of continuous glucose monitor with C#/C++ multiprocessor environment.
- Primary developer of C++ software/firmware electronic voting platform that received certification and is widely used in federal and state elections.
- Developed unique user interface software that is both easy to use and complies with the Americans with Disabilities Act.
- Developed highly reliable embedded software for WinCE/C++ based optical ballot scanner.
- Modified optical ballot scanner software for state wide use in Oklahoma.
- Senior Software Engineer for development of a low cost digital retinal photography system for fundus photo imaging.
 - System included custom optical hardware and electronics including motors, multiple Aptina digital image sensors and power controllers.
 - Software was developer for the embedded Texas Instruments AM35XX series running Sitara Embedded Linux.
- Digital hardware designer for handheld pulse oximeter that received FDA, UL and IEC approvals.
- Hold three US patents with both hardware and software applications.
- Designed and implemented CCD timing controller for medical spectrograph.
- Principal engineer for development of EEG monitor that received FDA approval.
- Designed and managed installation of industrial controls for US automaker.
- Principal firmware developer for Class I home healthcare monitor.

Communication and Management Experience

- Performed requirements analysis with election officials to develop electronic voting system and procedures.
- Provided technical support for election data and early voting sites including Travis County TX, Jefferson County CO, Tarrant County and Orange County.
- Authored Software Project Plans, Functional Requirements, Design and Architecture Specifications
- Participated in development of software hazard analysis.
- Responsible for hiring and management of software and hardware teams.
- Technical representative to FDA during a successful 510K approval process and on-site audit.

Response

- Instructor for undergraduate engineering classes at state university and community college.
- Produced product documentation including service manuals, procedures, functional specifications and design documentation.

Education

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- Bachelors of Science in Electrical Engineering Kettering University, MI.
- Training Unix, C++, Java, ESRI

Employment History

Devco Labs LLC, CO	2007 - Present
Engineering Consultant, Luminous Medical, CA	2007 - 2010
Engineering Consultant, KAZ, CA	2007 - 2008
Senior Software Engineer, Hart Intercivic, Inc.	1999 - 2007
Instructor Front Range Community College	2002 - 2004
Engineering Manager, Sievers/Ionics Inc.	1998 - 1999
Software Engineering Manager, Sievers/Ionics Inc.	1997 - 1998
Project Manager, Ohmeda Medical Systems, CO	1995 - 1997
Instructor University of Colorado, Denver	Spring 1995
R&D Engineer IV, Ohmeda Medical Systems, CO	1992 - 1995
Product Development Manager, Lexicor Medical Inc, CO	1989 - 1992
R&D Software Engineer, Soricon/Alden Research, CO	1987 - 1989
Project Engineer General Motors Corporation, MI	1980 - 1987
	Engineering Consultant, Luminous Medical, CA Engineering Consultant, KAZ, CA Senior Software Engineer, Hart Intercivic, Inc. Instructor Front Range Community College Engineering Manager, Sievers/Ionics Inc. Software Engineering Manager, Sievers/Ionics Inc. Project Manager, Ohmeda Medical Systems, CO Instructor University of Colorado, Denver R&D Engineer IV, Ohmeda Medical Systems, CO Product Development Manager, Lexicor Medical Inc, CO R&D Software Engineer, Soricon/Alden Research, CO

Response

Edie Snyder Gilboy: Financial Expert

Accomplished, action-oriented professional with comprehensive accounting, finance, planning, project management and teaching experience

- > Superior analytical and problem-solving skills
- > Effective relationship builder and team leader
- Excellent communication, organization and presentation skills
- ➤ Proficient with MS Office products (Excel, Word, PowerPoint, Outlook, Visio) and PDWare resource planning products; experienced with financial database systems.

WORK EXPERIENCE

Medtronic – Respiratory and Monitoring Solutions Senior Planner / R&D Program Resource Analyst Boulder, CO

June 2008-present

- Implemented business unit-wide resource planning applications for 500-person new product development organization. Provide ongoing management of resource planning process and tools and Level 1 user support.
- Led project team to improve financial planning and reporting process for Project Managers. Led project team to streamline and automate non-production purchasing process. Both projects utilized Lean techniques.
- Provided financial support to research and development organization, including financial analysis, planning/forecasting, reporting, accounting, and process/tool improvements.
- Coordinated R&D metric reporting and product/technology roadmap harmonization efforts.

Front Range Community College

Adjunct Faculty

Longmont, CO

January 2008-August 2013

• Taught accounting, tax and personal finance courses. Technical lead for Volunteer Income Tax Assistance program. Consistently rated "superior" instructor by students. Part-time position.

Gary Jacobs & Associates

Boulder, CO

Tax Accountant

February-April 2007-2017

• Prepared and reviewed individual Federal and state income tax returns for high net worth individuals. Seasonal, part-time employment.

Storage Technology Corporation and Sun Microsystems

Louisville, CO

Tax/Treasury/Financial Analyst, Finance Manager, Finance Director

Dec 1991-March 2006

- Supported the post-acquisition integration activities for the Sun/StorageTek merger, including financial modeling and analysis and Finance employee training.
- Developed and managed \$200M annual budget for research and development organization. Directed staff activities in cost controls, financial analysis, planning/forecasting, and reporting.
- Led the creation and consolidation of annual budget for \$2B high technology company. Generated monthly financial forecast for executive management. Participated in development of corporate finance strategy. Responsible for budget, forecasts and reporting for headquarters G&A and marketing functions (120 cost centers, \$110 M annual spending).
- Managed consolidated financial analysis and reporting for the strategic plan and product portfolio
 management. Instrumental in improving strategic planning models and processes, resulting in reduced
 cycle time and increased analytical and reporting capabilities.
- Created business cases for new product offerings in a business group with \$1B in annual sales. Performed financial analysis on marketing initiatives and partnership arrangements.
- Administered domestic treasury functions, including debt, capital structure and cash management.
 Participated in negotiation of \$350M syndicated credit facility. Negotiated lease contracts with lessors and managed equipment leasing program.
- Coordinated and supervised preparation of worldwide income tax provision for SEC reporting. Participated in preparation of corporate Federal income tax returns. Served as Tax Department consultant to StorageTek Foundation.

6 Head Corp, LLC July 12, 2017

Response

Waidler & Associates, P.C.

Boulder, CO

Tax Accountant

March 1989-October 1991

• Prepared and reviewed individual, partnership, fiduciary and corporation federal, state and local tax returns. Seasonal, part-time employment.

Coopers & Lybrand

Knoxville, TN and Chicago, IL

Tax Manager

July 1980-June 1988

- Progressed from tax staff to tax manager during public accounting career.
- Managed all facets of client service, including tax compliance, tax research, special projects and client billing.
- Managed recruiting, supervision and training of professional staff, engagement budgeting and administration, and tax practice development.

EDUCATION

The University of Tennessee, Knoxville, TN

B. S. in Business Administration

Accounting major; graduated with Highest Honors

Continuing professional education (minimum 20 hours/year) in taxation, accounting, finance, planning, project management, treasury, computer applications and management.

ACCREDITATIONS AND MEMBERSHIPS

Certified Public Accountant

Member of American Institute of Certified Public Accountants (AICPA)

Member American Association of Daily Money Managers (AADMM)

3. Contractor/Sub-Contractor Qualifications

Provide information on the Contractor's and, if applicable, each subcontractor's background and qualifications, which addresses the following:

a. Proposing Entity

6 Head Corp, LLC Neil McClure, Manager 8053 Anchor Drive Longmont, CO 80504 (303) 594-9989 nmcclure@comcast.net

b. Description of Services

6 Head Corp, LLC (6 Head) provides consulting services to public and private entities across a variety of industries that involves hardware and software solutions, business process improvement and intellectual properties. 6 Head's most typical engagements are at the very early stage of a project and require realization of technology or products that result in the production of project scope, product requirements or some form of work plan to achieve an objective or solve a problem. 6 Head specializes in system level engagements that must be documented and broken down into actionable and logical components with sufficient detail to create assignable tasks for other resources.

c. Relevant projects

One or more of 6 Head's team members brings the following project experience that applies directly to the deliverables stated in Section II, Scope of Work:

STAR-Vote: Travis County's Open Source Voting System Project

State of Hawaii SVRS: Statewide voter registration system

eSlate Voting System: Design, development, testing, certification, manufacture, sale, support

- Includes implementation of two of the largest Counties in the country: Harris, Orange
- Certification in 22 States, including California
- Ranked #1 accessible voting system by Access Magazine in early 2000's
- The nation's first digital ballot imaging system, Ballot Now
- 12 related U.S. Patents

eRegistry: Statewide voter registration system for the State of Texas: Design, development, implementation, deployment.

FVAP Internet Voting project: Program director, Subject Matter Expert

Automated Ballot Packaging system: Orange County, CA

Precision Agriculture Application: Development of software specification for an enterprise-wide application for one of the largest agriculture chemical distributors in the U.S.

Five-Year Product Objective and Roadmap: Development of product architecture and 5-five year development plan for a business unit that is part of the 3rd largest medical device manufacturer in the world.

Other projects references available upon request

d. Voting systems and voting equipment development, implementation and support

One or more of 6 Head's team members brings the following experience relating to voting systems and equipment:

eSlate Voting System: Responsible for all aspects of bringing Hart InterCivic's eSlate Voting System to market, including;

- Development of the User Interface, including accessible and multi-language components
- Engaged in direct user interaction for User Interface development
 - Voters
 - Pollworkers

Response

- o Election Officials
- Design of all ballot logic algorithms, including California ballot rotation
- Authored firmware for all embedded devices
- Directly managed all certifications Federal and State
- Managed all manufacturing
- Responsible for all system security requirements, including CA top-down evaluation
- Otherwise directly involved in maintenance, testing, upgrading, the providing of training to poll workers and elections officials, or evaluating the effectiveness of voting systems.

e. Voting System model analysis

One or more of 6 Head's team members brings direct experience in analyzing the business, technical, and operational models for voting systems, including Hart's eSlate, STAR-Vote and other vendor systems to support national elections.

f. Software Development Experience

One or more of 6 Head's team members brings direct software development experience as the project lead or project manager for the following projects:

- **eSlate Voting System:** Eleven (11) Federally certified software products
- **eRegistry:** Statewide voter registration system for the State of Texas: Design, development, implementation, deployment, included on- and off-line counties.
- FVAP Internet Voting project: Program manager, system architect
- Automated Ballot Packaging system: Orange County, CA
- Goose Guardian: Inventor, Start-up founder, Principal Investigator for NSF SBIR
- Precision Agriculture Application: Enterprises wide software requirements development

g. Advising public sector entities

- Please see references in Paragraph 4 below.
- Presidential campaign (2012)
- National Political Party for national elections (2014, 2016)

h. Similar Projects

Please see references in Paragraph 4 below.

i. The attached Appendix E, Minimum Qualifications Worksheet.

See attached Appendix E.

4. References

6 Head Corp, LLC References

Client: Medtronic

Term: August 1, 2016 – Present

Description: Provide advice and work product related to strategic products and technologies, 5-year product

roadmap, Clinical Decision Support protocols, non-contact patient monitoring.

Contact: Scott Hunsaker

Vice President, R&D

Health Informatics and Monitoring

MDT Engineering and Innovation Center

6135 Gunbarrel Avenue Boulder, CO 80301 (303) 350-9318

Scott.hunsaker@medtronic.com

Client: Travis County

Term: February 1, 2016 – Present

Description: Provide professional consulting services to assist the County with the design, build,

implementation and procurement of a new voting system.

Contact: Dana Debeauvoir

Travis County Clerk Elections Division 5501 Airport Boulevard Austin, TX 78751-1410

Client: State of Hawaii, Office of Elections

Term: May 1, 2013 – Present

Description: Provide professional services to assist the State of Hawaii, Office of Elections in developing a

voter registration system and in addressing any other election industry or technical requirements as

deemed appropriate.

Contact: David Rosenbrock

Supervisor - Computer Services Office of Elections, State of Hawaii

802 Lehua Avenue

Pearl City, Hawaii 96782 (808) 453-VOTE (8683)

David.Rosenbrock@hawaii.gov

Client: Helena Chemical Company

Term: April 2009- September 2009

Description: Retained as a consultant to develop the user and functional requirements for a precision agriculture software application. Met with practice managers, documented precision agriculture processes and procedures and reduced them into software development requirements. Assembled a development team and quoted a development schedule and timeline.

Contact: Joan Murphy

Assistant General Council Helena Chemical Company 225 Schilling Blvd., Suite 300

Collierville, TN 38017

(901) 537-7216

MurphyJ@helenachemical.com

REG RFP #2017-01 Response

5. Disclosures

6 Head Corp, LLC: Disclosures

- **a.** There are no pending investigations, enforcements, or disciplinary actions of the Contractor or subcontractors by any regulatory body.
- **b.** 6 Head Corp has an active engagement with Travis County for services to support efforts related to STAR-Vote and all 6 Head work product is a matter of public record and therefore no potential conflict of interest exist.

REG RFP #2017-01 Response

6. Fee Proposal

The total cost of this project is not to exceed \$175,000. All proposals must include the following information: **a.** A listing of the type of expected fees and costs associated with preparing the business case.

Consulting Fees: \$170,000.00

Expenses: \$5,000.00

b. A summary of expected costs in the attached Appendix D, Fee Worksheet.

See attached Appendix E, Fee Worksheet

REG RFP #2017-01 Response

Appendix A

Based on Addendum - #1 for REG RFP #2017-01, the City's Contract Monitoring Division (CMD) has waived the City's subcontracting goals for this RFP and therefore, CMD Forms 2A, 3, 4 and 5 are not required to submitted as part of this response..

MINIMUM QUALIFICATIONS WORKSHEET

SECTION IV. A.	REQUIREMENT	RESPONSE
1.	Experience in three or more large projects within the last ten years for which the proposer evaluated options for developing or implementing technologies or software to meet specific operational requirements.	Number of Projects: 4 Year began such projects: 2009
2.	Experience within the last ten years in preparing three or more written assessments of development models for large technical and/or software development projects, which included costs and timelines.	Number of Projects: 4 Year began such projects: 2009

Fee Worksheet

ITEM	QUALIFICATION	RESPONSE
E.1	Provide one-time cost for Phase 1, Preparing Business Case	\$175,000.00