

1.0 TRANSMITTAL LETTER

SAIC

10 December 2012

Deanna Santana
Office of the City Administrator
150 Frank H. Ogawa Plaza, 8th Floor
Oakland, CA 94612

Subject: SAIC Proposal # F00262.A.2013.114.000

Reference: 1) Joint Domain Awareness Center RFP – City Project #20710-1 dated 14 Oct 2012

Dear Ms. Santana,

Science Applications International Corporation (SAIC) is pleased to submit its proposal in response to the RFQ request received in Reference 1. SAIC has assembled an elite team comprised of domain knowledge, technical skills, and capabilities that will meet the Joint Domain Awareness Center requirements. Our on-site program manager will provide daily technical direction and clarification. Immediately following this signed transmittal letter cover page, we include an attachment that serves as our transmittal letter executive summary.

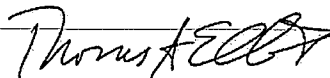
The subject proposal is submitted with ten (10) hard copies consisting of this transmittal letter and our proposal response. Our proposal will remain valid for sixty days (60) days from the date of this submission.

This proposal is predicated upon the issuance of a Time and Materials (T&M) contract with mutually agreeable terms and conditions. No other use of the information and data contained herein is permitted without the express written permission of SAIC.

In the meantime, should you have any questions, or require additional information, please contact the undersigned at (614) 473-8821, via facsimile at (614) 573-6396, or by email at thomas.a.elliott@saic.com.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Thomas Elliott
Contracts Manager

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
1710 SAIC DRIVE
MCLEAN, VA 22102
www.saic.com

1.1 Transmittal Letter Attachment: SAIC Executive Summary

The SAIC Team understands and has relevant capabilities supporting the national issues associated with Federal/State/Regional/Local Emergency Operations, Fusion Centers, Incident Response, and Maritime Domain Situational Awareness, as well as experience leveraging the use of advanced systems and technologies to support the goals and objectives of each initiative. As substantiated by our Team's successful installations of Physical Security Information Management (PSIM) solutions at [REDACTED]

[REDACTED] we are recognized as a technology-agnostic system integrator with paramount experience in the design-build, implementation, and maintenance of these solutions as well as the integration of external data systems and field sensors to realize the goals and objectives of the Joint Oakland City-Port Domain Awareness Center (DAC). Additionally, and specifically relevant to this project, SAIC's wholly-owned subsidiary, Benham, holds an active California Class-B General Building Contractor's License (#872860), offering the City-Port customer and stakeholders the unique capabilities associated with working under a single prime contractor to perform both the PART-A Technology Linkage System (TLS) and the PART-B Existing Building Improvements (EBI) work scope.

SAIC has assembled an experienced team that is uniquely qualified to support the design-build, implementation, commissioning, and maintenance of the DAC for the City and Port of Oakland. SAIC and its team members possess the necessary technical understanding, capabilities, and past experience to effectively execute this project. The SAIC Team's depth and breadth of experience enables it to provide the City-Port DAC with the lowest risk, highest quality, most capable solution available.

The SAIC Team provides the best value in delivering the goals and objectives of the DAC work scope, supported and based on our qualifications, experience, and talent, highlighted as follows:

- The SAIC Team has past experience in the design-build, system integration and implementation of PSIM solutions for Federal, State, and local government agencies, as well as maritime port authorities for domain awareness and incident management.
- SAIC has provided similar design-build system integration services for the [REDACTED]
[REDACTED]
[REDACTED]
- We have prior experience and the ability to work closely and collaborate with government, community groups, and other stakeholders to build consensus vital to realizing the DAC objectives.
- SAIC selected team members who have both previously worked together on similar projects and bring unique qualifications for this design-build work scope, addressing building infrastructure as well as system integration and solution delivery of a DAC-PSIM.
- SAIC has developed a structured its team organization to optimize the staff delivery focus for both PART-A and PART-B, while also facilitating collaboration across the different disciplines through the Project Manager, Mr. Taso Zografos.
- Mr. Zografos is a local Project Manager who knows the operational domain environment, is based in the Bay Area, and has the right qualifications and experience to ensure successful DAC delivery.
- Our proposed staff will be 100% dedicated to getting this job done right on time and within budget, with the flexibility to perform duties on short-term notice and under changing time constraints.
- Mr. Zografos will adhere to SAIC industry best practice cost control methods, leveraging tools and procedures for successful design-build delivery of the project.
- Our Team has a clear understanding of the DAC Concept of Operations, PART-A, and PART-B work scope, and we are ready to hit the ground running on day one to deliver the Oakland DAC.

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2.0 PROJECT TEAM

SAIC has a long history of performing a variety of work efforts in the construction of secure facilities, implementation of port surveillance infrastructure, and integration of multiple systems required for coordinated domain awareness and incident response operations. In the last 10 years, SAIC has designed and built 14 command and control centers and, more recently, implemented physical security information management (PSIM) products as part of integrated systems for access control and synchronized operations at the [REDACTED]

In order to conduct tasks associated with this scope of work for the City of Oakland-Port of Oakland (City-Port) Domain Awareness Center (DAC), SAIC has assembled a team of qualified firms and staff that fulfill the diversity of expertise required for completion of this effort. SAIC and many of its team members have successfully carried out previous contracts for the Port and City of Oakland, in addition to various other local stakeholders, and these existing relationships and collaborations will be invaluable to this project. SAIC understands that in order to carry out this scope of work, we need the following:

- | | |
|--|--|
| <ul style="list-style-type: none"> - A qualified systems integrator with a background in port security systems; multi-level government security initiatives; PSIM implementation and integration; and design-build construction. The company must be a local, certified Oakland local business enterprise (LBE) with experience in Bay Area traffic information systems, who has worked with the [REDACTED] and possesses a California Contractor's license | <ul style="list-style-type: none"> ✓ SAIC |
| <ul style="list-style-type: none"> - A premier PSIM solution vendor that offers technical support, solution enablement, and education services to see the project through | <ul style="list-style-type: none"> ✓ VidSys |
| <ul style="list-style-type: none"> - A local General Contractor (GC) with a [REDACTED] who possesses a Class A/Class B GC license in the State of California | <ul style="list-style-type: none"> ✓ BBI Construction |
| <ul style="list-style-type: none"> - A video display wall system specialist experienced in designing and installing emergency operations and command control center display systems | <ul style="list-style-type: none"> ✓ Anderson Audio Visual |
| <ul style="list-style-type: none"> - An architect with a local presence and experience in [REDACTED] facility design | <ul style="list-style-type: none"> ✓ MWA Architects |
| <ul style="list-style-type: none"> - Experts in GIS who have in-depth knowledge of the [REDACTED] | <ul style="list-style-type: none"> ✓ URS ✓ NorthSouth GIS ✓ TSG Solutions |

- A firm with experience in federating and providing video analytics and storage capabilities for the [REDACTED]
- A firm with expertise in [REDACTED] traffic camera, traffic management center, and closed-circuit television (CCTV) systems
- A pool of subject matter experts (SMEs) who offer emergency operations and domain awareness operational expertise

- ✓ Genetec
- ✓ Kimley-Horn
- ✓ Cosmo Perrone
- ✓ TEECOM
- ✓ CH2M Hill

Table 2-1 below introduces the key members of the SAIC Team and summarizes the responsibilities of each team member.

Table 2-1. SAIC PART-A Team Members and Responsibilities

Team Member	Responsibilities
Science Applications International Corporation (Prime) 1710 SAIC Drive McLean, VA 22102 Phone: 650.343.8276	<ul style="list-style-type: none"> • Program/Project Management • Systems Integration • Construction Management • Software Integration, Design, Maintenance • Training • Stakeholder Outreach
Cosmo Perrone & Associates, LLC (Subcontractor) 660 Havana Ave Long Beach, CA 90814 Phone: 562.481.2494	<ul style="list-style-type: none"> • On-call subject matter expert (SME) technical support
Genetec, Inc. (Subcontractor) 2280 Alfred-Nobel Blvd, Ste 400, Montreal, Quebec, Canada H4S 2A4 Phone: 949.742.2063	<ul style="list-style-type: none"> • Video Integration Support Services • Integration of CCTV, Intrusion Detection, Traffic Cameras, and ITS
Halcrow, Inc. a CH2M Hill Company (Subcontractor) 155 Grand Ave, Suite 800, Oakland, CA 94612 Phone: 510.251.2426	<ul style="list-style-type: none"> • On-call subject matter expert (SME) technical support
Kimley-Horn and Associates, Inc. (Subcontractor) 1300 Clay St, Suite 325 Oakland, CA 94612 Phone: 510.625.0714	<ul style="list-style-type: none"> • City of Oakland CCTV and Video Surveillance Integration
NorthSouth GIS (Subcontractor) 312 E. First Street, Suite 300 Los Angeles, CA 90012 Phone : (310) 606-2783	<ul style="list-style-type: none"> • GSMS/GIS Integration Support
TEECOM (Subcontractor, SLBE, MBE) 1333 Broadway St, Suite 601 Oakland, CA 94612 Phone: 510.250.6607	<ul style="list-style-type: none"> • On-call subject matter expert (SME) technical support
TSG Solutions, Inc. (Subcontractor, MBE) 2701 Loker Ave West, Ste 110	<ul style="list-style-type: none"> • GSMS/GIS Integration Support

Team Member	Responsibilities
Carlsbad, CA 92010 Phone: 909.725.7338	
URS (Subcontractor, LBE) 1333 Broadway St, Suite 800 Oakland, CA 94612 Phone: 510-893-3600	<ul style="list-style-type: none"> • GSMS/GIS Integration Support
VidSys, Inc. (Subcontractor) 8219 Leesburg Pike, Suite 250 Vienna, VA 22182 Phone: 703.883.3730	<ul style="list-style-type: none"> • PSIM Solution Vendor • Technical Support • Training • Solution Enablement

Table 2-2. SAIC PART-B Team Members and Responsibilities

Team Member	Responsibilities
Science Applications International Corporation (Prime) 1710 SAIC Drive McLean, VA 22102 Phone: 650.343.8276	<ul style="list-style-type: none"> • Construction Management • Program Management
BBI Construction (Subcontractor, LBE) 1155 3rd St, Suite 230 Oakland, CA 94607 Phone: 510.286.8200	<ul style="list-style-type: none"> • Design and Construction • Construction Management • Contractor Oversight to Beaman's and MWA Architects
Beaman's, Inc. (Subcontractor to BBI, SLBE) 3978 Piedmont Avenue Oakland, CA 94611 Phone : 510-658-0361	<ul style="list-style-type: none"> • Electrical Systems Engineering and Installation • Contractor Oversight to Anderson Audio Visual
Anderson Audio Visual East Bay, LP (Subcontractor to Beaman's) 904 Pardee Street Berkeley, CA 94710 Phone: 510.652.5030	<ul style="list-style-type: none"> • Video Wall and Display Design and Installation • Display Equipment Supplier Coordination
Michael Willis Architects (Subcontractor to BBI, LBE) 471 Ninth Street Oakland, CA 94607 Phone : 510-287-9710	<ul style="list-style-type: none"> • Architectural Design Engineering

2.1 Firm Descriptions

SAIC

SAIC is a FORTUNE 500® scientific, engineering and technology applications company that uses our deep domain knowledge to solve problems in information technology, national security, energy, environment, critical infrastructure, and health. Consistently ranked among the top federal systems integration contractors, SAIC is the company that "pulls it all together" for customers from Federal to local government. As the lead integrator for the Global Command and Control System (GCCS), for example, we help give customers an integrated picture of their operating space and commanders greater capability to deploy a U.S. fighting force around the globe at any time and provide it with the information and direction to complete its mission. Relevant to this proposed work, SAIC has designed and implemented regional, city-wide, and waterside security systems for the [REDACTED]

[REDACTED] in the last 5 years. Additionally, the SAIC Team's Project Manager, Mr. Taso Zografos, is an experienced local transportation information technology (IT) implementation expert who will lead a core staff of IT and system integration experts in the development of the DAC.

Anderson Audio Visual (Subcontractor)

With offices across the state, Anderson Audio Visual (AV) is a regional expert in audio visual system design, integration and support in a manner that facilitates information sharing and collaboration. From more than 14 years of industry experience, Anderson AV has established strong partnerships with industry leading manufacturers and suppliers that instill confidence in the reliability and warrantee of implemented equipment. Anderson AV's staff has established a practice of collaborating with architects, consultants, designers and other contractors in the earliest stages of architectural design through the final system integration to ensure seamless alignment with customers' business environments and technical needs.

For this project, Anderson AV will support SAIC for the installation of a video wall for advanced monitoring and display capabilities.

BBI Construction (Subcontractor)

BBI Construction is a mid-sized company with an established presence and service record in the Greater San Francisco Bay Area. In almost 40 years of operations, BBI Construction has managed and supervised over \$600 million in construction projects, including industrial, office, retail and special use projects. Relevant to this project, BBI Construction built a new, three story, 14,500 sq-ft Emergency Operations and Fire Dispatch addition to an existing firehouse, which required sophisticated electrical and electronic control systems to ensure continuity of operations in case of a citywide emergency.

Tom McCoy, co-founder of BBI Construction, will bring more than 35 years of industry experience to the project, and will lead his staff to support SAIC in the project building improvements.

Beaman's, Inc. (Subcontractor)

Located in Oakland, CA, Beaman's is a contracting firm serving all major industries, including commercial, industrial and residential applications. With over 60 years of experience, this firm has conducted work in partnership with BBI Construction. They will be delivering electrical system engineering and installation services for this opportunity.

Cosmo Perrone & Associates, LLC

Cosmo Perrone and Associates (CPA) will provide consulting services to SAIC as an SME for various elements of the overall DAC project. This subcontractor has a national reputation as an innovator and creative force in developing DACs, as well as experience in DAC construction. CPA will assist SAIC in validating the types of City, Port, and external stakeholder systems to be accessed in the DAC, incorporating stakeholder input and implementing best practices from first-hand experience.

Cosmo Perrone, founder and Principal of CPA, was the Director of Security at the Port of Long Beach from 2005 and 2011, and created a new approach to Maritime DACs that included concepts such as system and regional integration and virtual port models. These integration concepts received national and international recognition and were benchmarked by domestic (including the Port of Oakland) and international ports. EUCOM chose the Port of Long Beach model as a template to be applied to ports in the countries of the former Soviet Union. The concepts have received full Coast Guard support both at the local level and at Coast Guard Headquarters in Washington, DC.

Genetec, Inc.

Recognized in 2011 and 2012 as the North America Application Development Partner of the Year by Axis Communications, Genetec has a reputation for developing state-of-the-art video surveillance and access control solutions for both transportation and city-wide surveillance deployments. In just 15 years, Genetec has become an industry leader by working around the inherent limitations of analog security systems through development of multipoint to multipoint networked architectures. To promote integration of multiple solutions, Genetec's solutions maintain open architecture that allows customers to leverage investments and lower total cost of ownership.

Genetec will provide support to SAIC for video server integration and the installation of the Plan Manager GIS mapping solution as part of the Technology Linkage System (TLS). The subcontractor will provide highly feasible, low-risk solutions, including a base Enterprise Security Center system to integrate various Port systems, including the waterway surveillance system, Intrusion Detection System (IDS), Port Road Video Surveillance System (VSS) and Marine Terminal Perimeter Intrusion detection, using video plug-in architecture.

Halcrow Group, a CH2M Hill Company

Mr. Rob Andrews of Halcrow prepared the conceptual level scoping and design of the proposed DAC facility, which was the basis for gaining City and Port approval to proceed and securing Port Security Grant program grant money to pay for the implementation. Mr. Andrews brings significant project knowledge and subject matter expertise to the SAIC team and brings the important perspective of understanding the basis of the project and the objectives of the Port and the City in developing the DAC.

As part of the DAC SME Advisory Team, Halcrow will support SAIC in scoping and project development meetings with the City and the Port and will provide background information as needed from preliminary design development prepared during the grant application process. Halcrow will further provide specific consulting regarding compliance with the Marine Transportation Security Act and the Port Security Grant Program (PSGP) to assure that the project remains in compliance with the objectives of the Act and the PSGP as well as other national security guidelines, such as the National Infrastructure Protection Program.

Kimley-Horn and Associates, Inc.

Kimley-Horn and Associates, Inc. ("Kimley-Horn") is one of the premier design consulting firms in the country and delivers innovative solutions aimed specifically at cost savings. Their experience in the needs of security and safety awareness at large, critical seaports and other facilities includes access control, biometrics, video surveillance, automation, and command centers. Relevant to this work effort, their staff completed the plans, specifications, and estimates [REDACTED] and managed the integration of the [REDACTED] which required many of the same skills that will be necessary for the DAC and cultivated collaborative partnerships between Kimley-Horn and regional stakeholders.

Kimley-Horn will support SAIC to plan and scope, implement, and maintain the DAC TLS. This subcontractor will provide subject matter expertise support in reviewing the TLS requirements and Concept of Operations and will assist in the Proof of Concept design, ensuring stakeholder buy-in. They will further provide system integration support for the City's CCTV system infrastructure and support maintenance of the deployed solution.

MWA Architects

MWA Architects is a collaborative design practice located in Oakland, California with design expertise in emergency operation centers. In 1999, the firm completed renovation to the [REDACTED] and added the [REDACTED] to the complex. MWA has also done design work for the [REDACTED]. Designed to meet LEED Gold standards, this new 30,000 sq-ft facility will provide flexible office and emergency coordination space for a number of the [REDACTED] emergency management and security entities. It can also be used as a temporary location for the City Council. The nature of the building requires it to have a high level of self-sufficiency, allowing it to operate "off the grid" during emergency situations. MWA will provide architectural design work for the renovation of the DAC.

NorthSouth GIS, LLC

NorthSouth GIS (NSG) is part of an international GIS solution consultancy known for their innovative enterprise GIS solutions based on ESRI technology, the global leader for supplying GIS software. NSG LLC is a small, privately held company that specializes in geospatial technologies for ports and airports. Daniel Elroi has been the president of NSG LLC for more than 7 years, and has experience relevant to this

effort from several projects – notably the design and implementation of the Enterprise GIS for the [REDACTED], the largest container port in the U.S. NSG LLC has also supported the integration of GIS databases into servers, specifically to support PSIM software for two major projects in the last three years. Vikas Srivastava, NSG's project manager for the [REDACTED] Geospatial Security Mapping System (GSMS) project, has been managing the design and implementation of all the systems and software engineering and implementation on that project, managing as many as ten NSG staff for this purpose.

NSG will provide technical support related to GIS to SAIC for the DASTLS. This subcontractor will support SAIC in reviewing and revising the existing Concept of Operations based on identified stakeholder needs. NSG will further assist in the Proof of Concept design, working with City Staff to ensure owner approval, and will contribute to the TLS Implementation and systems integration, as well as provide management training on the configuration and maintenance of the GIS data connectivity.

TEECOM

TEECOM is a small, privately held company with diverse capabilities and project experience, including specific understanding of integrated technologies incorporating controls, security, audiovisual, and telecommunications systems. Staffed with accredited engineers from multi-disciplinary backgrounds, TEECOM has experience in project management, security engineering, surveillance, and video infrastructure. TEECOM is headquartered in Oakland and has direct knowledge of the flow of information from various facilities across the region to the [REDACTED]. Utilizing their familiarity with the regional IT network, SAIC will consult with TEECOM on various aspects of the TLS to ensure development is consistent with existing infrastructure and operations.

TSG Solutions, Inc.

TSG Solutions, Inc. is a private, veteran owned small business focused on security solutions for a broad range of industries and customers. They have both collaboratively and independently delivered a wide range of internet, desktop, enterprise and field-based GIS solutions, using cutting edge products for GIS data collection, integration and consulting, as well as programming and development services. Their staff has regional experience through the [REDACTED] Digital Mapping and GIS project that included integration of Digital Mapping data into the GIS for the [REDACTED], with additional experience from similar projects undertaken in the last five years at the [REDACTED].

TSG will provide support to SAIC for implementation of the DAS TLS, specifically system integration support, review of construction plans and design documentation.

URS Corporation

In 2008, URS was ranked the #1 Global Design Firm by the Engineering News Record and has appeared in the Top Three Design Firms for more than a decade. With more than a century of global project experience with ports and harbors, URS staff offers creative applications of GIS methods to develop innovative and practical solutions for port infrastructure development.

Christian Raumann, URS Senior GIS Analyst/Project Manager, will lead the GIS integration tasks for the DAC project. Mr. Raumann is currently the URS Team's project manager for the [REDACTED] Geospatial Security Mapping System (GSMS) Project.

Lee Rosenberg, URS Senior Homeland Security/Emergency Management Planner, will provide emergency operations center subject matter expertise to assist during the initial planning and scoping process to further refine and/or validate the Concept of Operations and/or TLS specs. Mr. Rosenberg has worked extensively with [REDACTED], providing security and emergency preparedness solutions such as contingency plans, emergency operations plans, and HSEEP-compliant exercises.

VidSys

The VidSys Professional Services Organization will provide project advisory and product expert services to assist SAIC with deployment of the VidSys PSIM Platform, VidShield and RiskShield applications, and designated subsystem connectors. VidSys will support the provision of situational awareness capabilities over the subsystems, cameras and other devices in place at its Security Operations Center (SOC). Additionally, this subcontractor will automate up to 20 situations as action plans managed by the RiskShield application, which will support up to 20 Standard Operating Procedures (SOPs) in place at the SOC. Finally, VidSys will facilitate knowledge transfer to City staff to independently expand its library of action plans to meet additional operating requirements post-deployment.

The PSIM solution will be implemented using a typical software development life cycle approach of requirements confirmation and system design followed by software installation, configuration, and testing in advance of cutover to production operations. Solution delivery will include operator and administrator training.

2.2 Support from Related Stakeholders

The SAIC Team has also received letters of support from stakeholders for future integration work with the DAC. Redflex has agreed to cooperate with the SAIC Team if the City-Port decides to integrate City photo enforcement systems into the DAC at a later date. Similarly, our letter of support details support from Iteris, the City of Oakland's traffic camera technology provider, to work with the SAIC Team in integrating these systems if the City-Port chooses to execute such a plan in the future. We are able to provide these letters upon request and are also able to discuss these integration efforts as possible extensions to the scope of work during the execution of the PART A scope of work.

2.3 Current Business Licenses for LBEs/SLBEs

BBI Construction

THIS DOCUMENT HAS A TRUE DOCUCHECK™ WATERMARK AND VISIBLE FIBERS DISCERNIBLE FROM BOTH SIDES

CITY OF OAKLAND
BUSINESS TAX CERTIFICATE

**ACCOUNT
NUMBER**

946133

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland and/or any other ordinance, law or regulation of the State of California, or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 85.04.190A, of the O.M.C. you are allowed a renewal grace period until March 1st the following year.

EXPIRATION DATE

12/31/2012

BUSINESS LOCATION

BBI CONSTRUCTION

1155 3RD ST STE 230

OAKLAND, CA 94607-2617

BUSINESS TYPE

H Construction Contractors



NAME

BBI-CON INC

MAILING ADDRESS

1155 3RD ST STE 230

OAKLAND, CA, 94607-2617



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Department of Contracting and Purchasing Division of Social Equity

Local Business Enterprise

Presented to:

BBI-CON, DBA BBI CONSTRUCTION

Services Provided:

B — General Building Contractor

4439

31-Mar-14

Certification Number

Expiration Date

Shelley Darenburg

3-27-12

Shelley Darenburg,
Senior Contract Compliance Officer

Date



CITY OF OAKLAND



Beaman's, Inc.

THIS DOCUMENT HAS A TRUE DOUCHECK® WATERMARK AND VISIBLE FIBERS DISCERNIBLE FROM BOTH SIDES

CITY OF OAKLAND
BUSINESS TAX CERTIFICATEACCOUNT
NUMBER

3570436

The issuing of a Business Tax Certificate is for no other purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland and of any other ordinance, law or regulation of the State of California, or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 8554.1503, of the O.A.C., you are allowed a renewal grace period until March 1st of the following year.

EXPIRATION DATE

12/31/2012

BUSINESS LOCATION

BEAMAN'S INC
3978 PIEDMONT AVE
OAKLAND, CA 94611-5352

BUSINESS TYPE

H Construction Contractors



NAME

MAILING ADDRESS

BEAMAN'S INC
3978 PIEDMONT AVE
OAKLAND, CA, 94611-5352



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Department of Contracting and Purchasing, Division of Social Equity

Small Local Business Enterprise

Presented to:

BEAMAN'S INC.

Services Provided:

C-10 — Electrical Contractor

6698

30-Nov-12

Certification Number

Expiration Date

Shelley Davensburg
Shelley Davensburg,
Senior Contract Compliance Officer11-02-10
DateFOR CITY OF OAKLAND

Kimley-Horn and Associates, Inc.

THIS DOCUMENT HAS A TRUE DOUBLED OCEAN WATERMARK AND VISIBLY EMBOSSED FROM BOTH SIDES

**CITY OF OAKLAND
BUSINESS TAX CERTIFICATE**

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland and/or any other ordinance, law or regulation of the State of California or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 2220.130A of the O.M.C., you are allowed a renewal grace period until March 1st the following year.

ACCOUNT NUMBER
1966499

BUSINESS LOCATION
URS CORPORATION AMERICAS
1333 BROADWAY STE 800
OAKLAND, CA 94612-1924

BUSINESS TYPE F Professional/Semi-Professional

EXPIRATION DATE
12/31/2012

NAME
MAILING ADDRESS
URS CORPORATION AMERICAS
PO BOX 201088
AUSTIN, TX 78720-1088

THIS DOCUMENT IS ALTERATION PROTECTED AND REFLECTS FLUORESCENT FIBERS UNDER UV LIGHT

Department of Contracting and Purchasing, Division of Social Equity

Local Business Enterprise

Presented to:

KIMLEY-HORN AND ASSOCIATES, INC.

Services Provided:


541330 Engineering Services

6449

31-Oct-12

Certification Number

Expiration Date

10/18/10
DateShelley Dfrensborg,
Senior Contract Compliance Officer

CITY OF OAKLAND

MWA Architects

THIS DOCUMENT HAS A TRUE DOGUECK™ WATERMARK AND VISIBLE FIBERS DISCERNIBLE FROM BOTH SIDES

**CITY OF OAKLAND
BUSINESS TAX CERTIFICATE****ACCOUNT
NUMBER**

1031007

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland and/or any other ordinance, law or regulation of the State of California, or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 85.04, 190A, of the O.M.C. you are allowed a renewal grace period until March 1st the following year.

MWA ARCHITECTS INC

EXPIRATION DATE

12/31/2012

BUSINESS LOCATION

471 9TH ST

OAKLAND, CA 94607-4047

BUSINESS TYPE

F Professional/Semi-Professional

**NAME**

MICHAEL WILLIS ARCHITECTS INC

MAILING ADDRESS

301 HOWARD ST STE 500

SAN FRANCISCO, CA, 94105-6603



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CITY OF OAKLAND



DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA, SUITE 3341 • OAKLAND, CALIFORNIA 94612

Department of Contracting and Purchasing

(510) 238-3970
FAX (510) 238-3363
TDD (510) 238-2007

16-Nov-11

Certification Number 7343

MWA Architects.comNan Warren
471 9th Street
Oakland, CA 94607RE: Recertification with the City of Oakland and Redevelopment Agency Local/Small Local
For Profit and Not For Profit Business Enterprise Program

Dear Nan Warren:

Based on our review of documents submitted, the City has determined that your firm qualifies for certification under the above Program as a:

- **Local Business Enterprise**

This certification will expire on **30-Nov-13**

Please refer to the attached certificate to determine your services and NAICS codes. The City reserves the right to reevaluate your company at any time during the certification period to determine if your firm continues to meet the City of Oakland and Redevelopment Agency programs and definitions. You are advised that it is your responsibility to initiate the re-certification process.

Should you have any questions, please contact Ernestine Nettles at (510) 238-6160, and refer to the Certification Number as it appears above.

Very truly yours,

Shelley Darensburg
Senior Contract Compliance Officer

TEECOM

THIS DOCUMENT HAS A TRUE DOCUCHECK™ WATERMARK AND VISIBLE FIBERS DISCERNIBLE FROM BOTH SIDES

**CITY OF OAKLAND
BUSINESS TAX CERTIFICATE****ACCOUNT
NUMBER**

1540394

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland and/or any other ordinance, law or regulation of the State of California, or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 85.04.190A, of the O.M.C. you are allowed a renewal grace period until March 1st of the following year.

TEECOM DESIGN GROUP

EXPIRATION DATE

12/31/2012

BUSINESS LOCATION

1333 BROADWAY STE 601
OAKLAND, CA 94612-1906

BUSINESS TYPE

F Professional/Semi-Professional



NAME

TEECOM DESIGN GROUP

MAILING ADDRESS

1333 BROADWAY STE 601
OAKLAND, CA, 94612-1906

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Department of Contracting and Purchasing, Division of Social Equity

Local Business Enterprise

Presented to:

TEECOM DESIGN GROUP

Services Provided:

517910 Other Telecommunications

561621 Security Systems Services (except Locksmiths)

6374

30-Nov-13

Certification Number

Expiration Date


Shelley Darensburg,
Senior Contract Compliance Officer11/9/11
Date

CITY OF OAKLAND

URS Corporation

THIS DOCUMENT HAS A TRUE ODD-TO-ODD WATERMARK AND VISIBLE FIBERS ON BOTH SIDES.

**CITY OF OAKLAND
BUSINESS TAX CERTIFICATE**

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the taxpayer from the responsibility of complying with the requirements of any other agency of the City of Oakland under any other ordinance, law or regulation of the State of California, or any other governmental agency. The Business Tax Certificate expires on December 31st of each year. Per Section 8326.190A of the O.M.C. you are allowed a renewal grace period until March 1st the following year.

ACCOUNT NUMBER 1966499

BUSINESS LOCATION URS CORPORATION AMERICAS
1333 BROADWAY STE 800
OAKLAND, CA 94612-1924

BUSINESS TYPE F Professional/Semi-Professional

EXPIRATION DATE 12/31/2012

NAME URS CORPORATION AMERICAS
MAILING ADDRESS PO BOX 201088
AUSTIN, TX 78720-1088

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A BUSINESS TAX CERTIFICATE IS REQUIRED FOR EACH BUSINESS LOCATION AND IS NOT VALID FOR ANY OTHER ADDRESS.

YOU MAY BE REQUIRED TO OBTAIN A VALID ZONING CLEARANCE TO OPERATE YOUR BUSINESS LEGALLY. RENTAL OF REAL PROPERTY IS EXCLUDED FROM ZONING.

PUBLIC INFORMATION ABOVE THIS LINE TO BE CONSPICUOUSLY POSTED!

CITY OF OAKLAND



DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA, SUITE 3341 • OAKLAND, CALIFORNIA 94612

Department of Contracting and Purchasing

(510) 238-3970
FAX (510) 238-3363
TDD (510) 238-2007

17-Nov-10

Certification Number 5400

URS Corporation Americas

Linda Pappas
1333 Broadway, Suite 800
Oakland, CA 94612

RE: Recertification with the City of Oakland and Redevelopment Agency Local/Small Local
For Profit and Not For Profit Business Enterprise Program

Dear Linda Pappas:

Based on our review of documents submitted, the City has determined that your firm qualifies for certification under the above Program as a:

- **Local Business Enterprise**

This certification will expire on **30-Nov-12**

Please refer to the attached certificate to determine your services and NAICS codes. The City reserves the right to reevaluate your company at any time during the certification period to determine if your firm continues to meet the City of Oakland and Redevelopment Agency programs and definitions. You are advised that it is your responsibility to initiate the re-certification process.

Should you have any questions, please contact Ernestine Nettles at (510) 238-6160, and refer to the Certification Number as it appears above.

Very truly yours,

Shelley Darenburg
Shelley Darenburg
Senior Contract Compliance Officer

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3.0 PROJECT PERSONNEL

The SAIC Team features talented, experienced, and well-qualified individuals who will execute this project as a cohesive team. We propose individuals with impressive credentials in the fields applicable and relevant to the work scope of the Oakland Joint Domain Awareness Center (DAC). Our team is committed to delivering a quality and robust solution designed and implemented by experts to integrate all relevant systems for efficient, reliable and coordinated operations. With multi-disciplinary backgrounds and diverse project experience, our team possesses the following qualifications, which will be essential to the completion of this effort:

3.1 Organization

Figure 3-1 below outlines the SAIC Team hierarchical structure, project leadership, and technical staff organized into teams. Figure 3-1 represents the anticipated staffing level for the technical portions of the project and establishes an "Integrated Project Team" for effective delivery of services during PART-B Existing Building Improvements (EBI) and PART-A Technology Linkage System (TLS) tasks. The SAIC Team has also proposed an on-call DAC subject matter expert (SME) team to aid all task teams by providing expert advice and guidance on carrying out the tasks associated with this scope of work. Project Manager, Mr. Taso Zografos will conduct general project team oversight and will closely coordinate with PART A & B Team Leads, Mr. Tom McCoy of BBI Construction and Mr. Neil Chung of SAIC in order to ensure on-time delivery of the DAC.

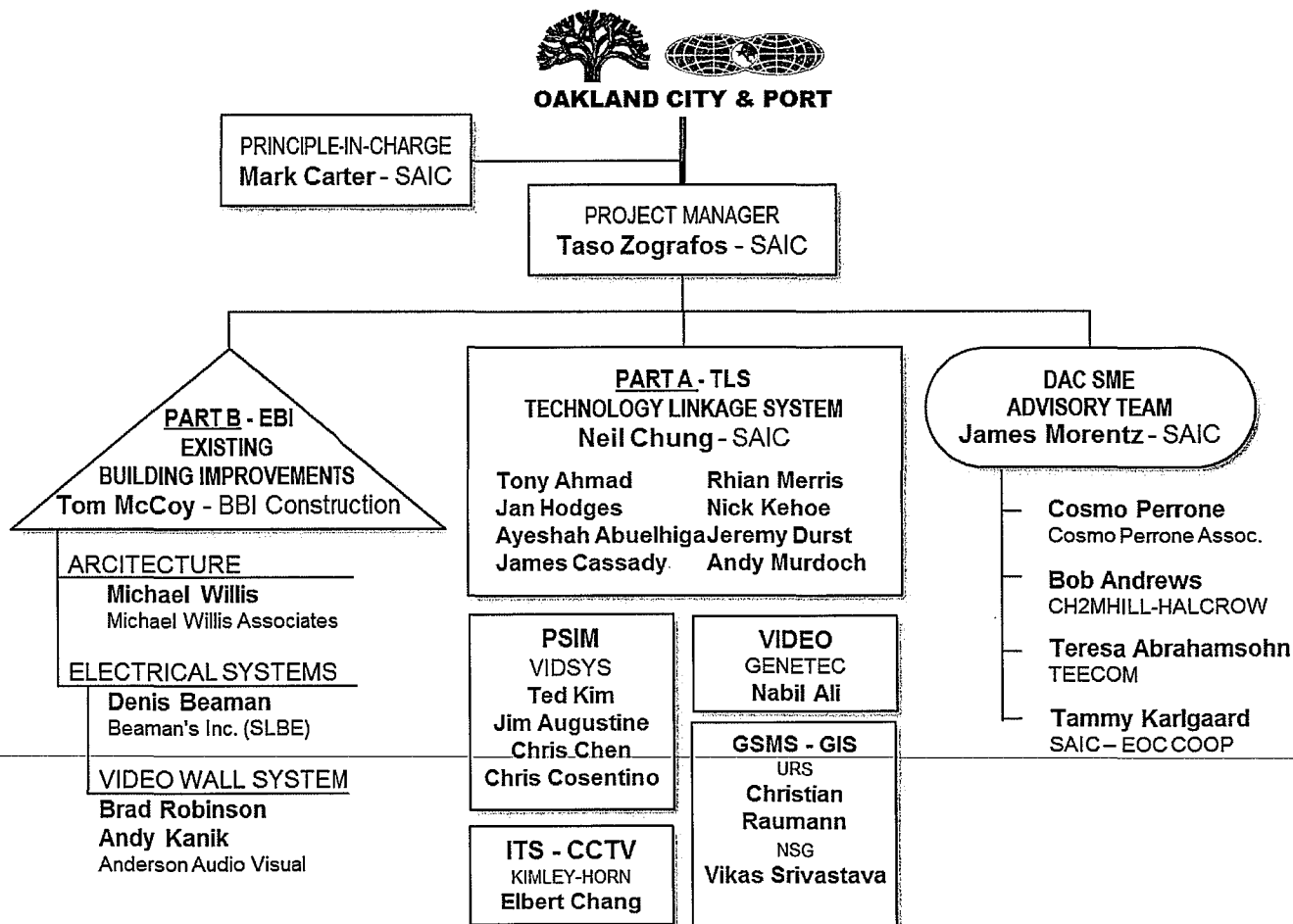


Figure 3-1. SAIC Team Organization Chart.

3.1.1 Current Workload, Available Staff and Resources

The SAIC Team carefully reviewed the requirements presented in the technical documents and request for proposal (RFP). We then considered our past experience in providing similar activities and derived the types, numbers, and level of effort required of staff to complete this scope of work successfully. SAIC Team managers also reviewed current staff workloads and available resources to determine the optimal staff to bid for this effort. From this exercise, we developed our basis of estimate and verified proposed staff availability to fulfill the level of effort assigned to them. We are confident that we have an adequate number of staff available for the work.

3.1.2 Capacity and Flexibility to Meet Schedules and Unexpected Work

SAIC has significant experience in providing staffing resources to complete complicated work efforts spanning multiple months of performance. In addition, we have assembled a large, diversified team of experienced and skilled personnel with significant reachback capabilities to respond to any unexpected task that may come up without causing an adverse impact to performance. Team members SAIC, VidSys, CH2M Hill, and URS alone offer more than 200 individuals who have directly supported similar emergency operations and transportation systems integration programs. Moreover, our proposed on-call SME Advisory Team offers additional insights into identifying efficiencies and suggesting more effective processes for getting baseline scope of work activities addressed in order to free up staff resources to address other unexpected tasks.

3.1.3 Ability to Perform on Short Notice and Under Time Constraints

The SAIC Team is adept at providing technical support and leading large integration tasks such as this under tight time constraints and with short notice. Most recently, the SAIC Team was successful in delivering (and praised by the [REDACTED] for timely, accelerated delivery of the [REDACTED] [REDACTED] Through careful schedule development, resourceful utilization of available resources and vendor relationships, and dedicated staff with multi-disciplinary skills, the SAIC Team was able to deliver a state-of-the-art laboratory environment complete with ITS system integration and live data feeds from external sources. The project involved a major design-build renovation, command control center lay-out design, network set-up and systems integration activities – all completed within 6 months despite the challenges of working through bureaucratic obstacles. The SAIC Team for this project consists of many of the same experts who worked on that project, including Principal-in-Charge, Mr. Mark Carter and network engineers Mr. Tony Ahmad and Mr. Rhian Merris.

Moreover, Project Manager, Mr. Zografos, was also responsible for delivering a wireless transportation systems integration project for the [REDACTED] Within days' notice, Mr. Zografos and his team of engineers, including Mr. Ahmad, Mr. Merris, and systems engineer, Mr. Jeremy Durst, were able to deliver a live "connected vehicle" network of roadside hardware and network solutions to run a number of live technology demonstrations – the equivalent of a 6 month level of effort in less than 3 months. Under his direction once again, this team promises to deliver the same resourcefulness and capability to this project.

3.1.4 Cost Control Procedures in Design and Construction

The SAIC Team's cost management and control process includes sound estimating and planning techniques to establish a realistic, time-phased baseline plan that includes all known contractual obligations and reflects our understanding of technical requirements. We will decompose this plan to the lowest work breakdown structure (WBS) level in which we will incur costs. Every company (prime contractor and subcontractors) will receive an authorized budget.

Ultimate responsibility and accountability for contract-level cost management will reside with our Project Manager, Mr. Zografos, who will delegate the responsibility for both PART-A and PART-B tasks' technical, cost, and schedule performance to a single Team Lead who will be responsible for delivering high-quality services and deliverables on time and within budget. SAIC dedicates a project controller (PC) to each Team Providing Professional Services to Design/Build/Maintain City of Oakland/Port of Oakland Joint Domain Awareness Center

Lead to help monitor and control costs. The PC will conduct thorough cost variance analyses to identify whether actual costs deviate from the baseline plan and the reasons for it, and will implement the appropriate corrective measures. The SAIC PC will adhere to the following cost control procedures:

- Develops a cost/schedule plan for project execution consistent with contract requirements.
- Monitors and tracks cost/schedule performance against the plan using performance metrics.
- Analyzes and reports variances and trends of actuals versus plan.
- Supports re-planning/re-baselining efforts.
- Provides timely and accurate project status information and projections to the Project Manager.
- Chairs or supports Mr. Zografos in chairing internal cost/schedule status meetings.
- Supports Mr. Zografos in developing a program management plan.
- Participates in the preparation of WBSs, WBS Dictionaries, Resource Loaded Networks (RLNs), BOEs, Bills of Materials (BOMs), work authorizations, and Project Authorization Notices (PANs), in coordination with other functions, such as Project Management, Systems Engineering, and Subcontracts/Procurement.
- Tracks actuals and open commitments.
- Manages the preparation of Estimates to Complete (ETCs) and Estimates at Completion (EACs) in accordance with Corporate policy.
- Maintains logs of changes in reserves, Contract Budget Base (CBB), etc.
- Maintains configuration control of the cost and schedule baseline.
- Performs critical path analyses, determines float, and tracks other Schedule Performance Indices (SPIs).
- Manages the preparation of Cost Performance Reports (CPRs), Cost/Schedule Status Reports (CSSRs), Contract Funds Status Report (CFSRs), and other contractual reporting requirements.
- Manages the preparation of relevant Contract Data Requirements Lists (CDRLs).

Mr. Zografos, Team Leads Mr. McCoy and Mr. Chung, and project controllers will review performance trends frequently and develop quarterly estimates at completion (EAC) for every task. This will ensure that problems are identified early and corrective actions are taken in time to avert any impact on delivery to the City-Port.

3.1.5 Ability to Perform Numerous Projects at the Same Time

The SAIC Team, as demonstrated in Section 4.0 Relevant Experience and Section 6.0's past related projects, has performed successfully on numerous large-scale systems integration projects of similar size and scope. We are ready to deliver the same level of service or better through our project organization. By dividing our multi-disciplinary staff into teams, we are able to focus the appropriate number of staff resources to all simultaneous tasks. With our reachback capabilities and strong project manager, we are also able to call upon back-up resources in the event that reinforcements are necessary.

3.2 Qualifications

Our staff provides the City-Port a level of proficiency within their respective disciplines that meets the explicit and implicit requirements for staffing with personnel qualified in multiple functional areas, thereby ensuring flexibility in selecting and assigning personnel required to perform the work.

The key features and capabilities of the SAIC Team's staffing include:

- ✓ A strong, qualified, and local Project Manager, Mr. Zografos, with large-scale, complex systems engineering and software development delivery expertise; proficiency in service-oriented architecture (SOA); and domain expertise in port environments and solutions, implementing advanced technology and design-build construction projects.
- ✓ PSIM integration/implementation experts, such as Mr. Chung and Mr. Chris Cosentino, with proven past performance experience in the State of California in port, local, and regional environments.
- ✓ A Construction Manager, Mr. McCoy, with local presence and a background in tenant improvements for both the City of [REDACTED].
- ✓ Deployment engineers with experience in advanced field traffic equipment integration as well as network infrastructure design, implementation, and testing.
- ✓ Geographic Information Systems (GIS) integration experts.
- ✓ CCTV, sensor, IT, and traffic infrastructure integration experts.
- ✓ The experience, technical competency, and infrastructure needed to successfully execute each task in the full spectrum of physical resources and optimized staff resources, as well as the depth to support ad hoc and urgent tasks.

3.2.1 Prime Contractor – SAIC Resumes

3.2.1.1 Principal-In-Charge – Mark Carter

Name: Mark R. Carter – Division Manager, Transportation Solutions Division

Qualifications/Experience/Skills:

Mr. Mark Carter brings 10 years of program management experience, including management of four large, transportation IDIQ contracts. As a program manager supporting the [REDACTED] Mr. Carter has successfully led the execution of more than 150 completed task orders (with as many as 70 active tasks at one time) while meeting or exceeding cost, schedule, and performance metrics. As SAIC Program Manager for Technical Support and Assistance to [REDACTED], Mr. Carter was entrusted to manage work totaling more than \$27.5 million across more than 130 tasks with support from a team including 20 subcontractors.

As a transportation systems engineer, he has developed and applied traffic simulation models, built experimental designs, provided technical assistance to State DOTs, co-authored reports to Congress, and conducted independent evaluations of dozens of operational improvements, providing critical benefits information and lessons learned that shaped subsequent deployments.

Credentials (Education, Training, and Certifications):

- M.S., Civil Engineering, Queens University, 1997
- B.S., Civil Engineering, Queens University, 1995

Dates Employed

Duties Performed

	<p>[REDACTED]</p> <p>Role: Program Manager (PM)</p> <p>Mr. Carter currently serves as the program manager for SAIC's support to the [REDACTED] previously provided oversight and resource management for the transition of the [REDACTED] connected vehicle test bed from the incumbent contractor to SAIC and continues to provide oversight for the ongoing operation and maintenance of this resource. He identified and applied the necessary resources to help ensure an aggressive, on-time opening for the lab and reviewed and aided in updating demonstration materials. He has and is working with support staff to increase the visibility of the lab (e.g. increased activity and reporting) and to assist in identifying and attracting potential customers and users (including connected vehicle development efforts).</p>
1996-Present	<p>[REDACTED]</p> <p>Role: PM</p> <p>As SAIC PM, Mr. Carter was entrusted by the [REDACTED] to manage work totaling more than \$40 million (funded) across more than 130 tasks with support from a team including 20 subcontractors. As SAIC PM for the [REDACTED] managed work totaling more than \$24 million across 85 tasks that involved a multi-disciplinary team with subcontractors located across the country. He consistently kept programs on schedule and within budget and provided high-quality products that met the sponsor's expectations. During the final review for IPAS-I, for</p>

example [REDACTED] provided ratings of Outstanding, Excellent, and Excellent for quality of service, cost control, and timeliness.

[REDACTED]
Evaluation of the Hazardous Materials Field Operational Test

Role: PM

For the [REDACTED] Mr. Carter led the independent evaluation and testing of a suite of technologies intended to provide improved security for the shipment of HAZMAT by commercial vehicles. The test involved 13 deployment scenarios across the United States and used a mix of tracking, theft deterrent, and vehicle disabling and access control technologies. As part of the evaluation effort, Mr. Carter developed a new economics-based security risk assessment model that facilitated the comparison of predicted security benefits with the expected economic impacts of nationwide deployment of the various technologies examined in the test.

USDOT: The Intelligent Transportation Systems (ITS) Research Program--ITS Applications for Traffic Incidents and Events Management ITS for Planned Special Events: A Cross-Cutting Study

Role: PM

For the USDOT, Mr. Carter provided oversight, review, and technical inputs for a cross-cutting study on the use of ITS for Planned Special Events (PSE). This study examined the practices of six agencies in five States and documented their experiences in managing planned special events using ITS technologies. The study resulted in guidance that can be used by the hundreds of local agencies across the country responsible for coordinating planned special events.

[REDACTED]
[REDACTED]
Role: PM

Mr. Carter led the evaluation of a national [REDACTED] project was intended to integrate information pertaining to road conditions (Pavement Management Application and Ice and Snow Routing System), construction project detours (Permits and Plan Review Application), and locations of moving Department of Public Services (DPS) maintenance crews (maintenance management system) into a single database and make it available, dynamically, to Wayne County DPS and the traveling public through use of an Internet application.

[REDACTED]
[REDACTED]
From 1997-2008, Mr. Carter served as PM for a series of two IDIQ programs with the [REDACTED] that focused on assessing the benefits (including impacts on security) of advanced transportation technologies, examining the systems engineering processes used to implement and integrate these experimental systems, and developing best practices and guidance for subsequent wide-scale implementations. During the final review [REDACTED] Carter's USDOT customer provided ratings of Outstanding, Excellent, and Excellent, for quality of service, cost control, and timeliness.

3.2.1.2 Project Manager – Taso Zografos

Name: Taso Zografos – Business Development Manager, Transportation Solutions Division**Qualifications/Experience/Skills:**

Mr. Zografos has nearly 30 years of diverse experience in managing people, processes and technology to deliver results with a proven industry and consulting track record. He is experienced in program management of IT and ground transportation systems, system engineering, and information technology development. Mr. Zografos is a seasoned and proven leader in mainstreaming advanced technologies for commercial application.

Credentials (Education, Training, and Certifications):

- M.S., IT Technology and Systems Management, University of Southern California, 1988
- B.S., Aeronautics Engineering, San Jose State University, 1982

Professional Licenses

- SAIC Program Management Certification

Security Clearance

- DoD Classified, SECRET, Special Access Required (SAR)

Dates Employed**Duties Performed**

October 2009 – Present	<p>[REDACTED]</p> <p>Role: Program Manager (PM)</p> <p>\$2.5M project to implement a new Secure Truck Enrollment Program (STEP) to register trucks servicing the [REDACTED] on an annual basis to verify safety and security at the [REDACTED]. Directed the design, development and implementation of new technologies to administer the program, including a Drayage Truck Registry and a Truck Management System (TMS); developed, commissioned, and managed a Customer Service Center to administer the program, including the issuance of registration certificates and vehicle decals; designed, developed and implemented a RFID truck location data collection, repository, and reporting capability; worked closely with the trucking industry and other stakeholders to ensure collaboration and acceptance of new business processes; and briefed and communicated progress to local leaders and other State and Federal officials.</p>
August 2010 – February 2012	<p>[REDACTED]</p> <p>Role: Program Manager</p> <p>Served as technical program manager for this project where SAIC provided Design-Build-Maintain and Operations support services for next generation advanced Roadside Equipment (RSEs) deployed on a roadway [REDACTED].</p> <p>Directed system upgrades, system integration and IT migration efforts of data systems and technology sensors to improve the mobility, safety, security, and environmental quality of roadway vehicles. Coordinated with stakeholders and partners alliances to further expand the infrastructure so as to offer more services to potential researchers.</p>
August 2005 – February 2008	<p>[REDACTED]</p> <p>Role: PM</p> <p>\$130M IT systems modernization and business transformation effort for the [REDACTED]. Directed activities of a matrix organization of nearly 35 FTE with work plan migration activity to deliver a Service Oriented Architecture (SOA). Managed multiple teams performing architecture design, system requirements definition, software design and development, system integration, testing, and deployment. Directed activities to successfully implement and deploy functionality for user single sign-on to existing legacy systems for 10,000 field enforcement personnel [REDACTED].</p>
March 2008 – February 2009	<p>[REDACTED]</p> <p>Role: Program Manager</p> <p>\$60M effort to design-build the infrastructure-facilities and implement advanced sensors at nine new safe and secure innovative truck weigh enforcement stations at the state-line borders to identify and verify regulatory compliance of commercial trucks entering the State. Directed the design, development and implementation of new technologies to aid in the operation of the new ports-of-entry; worked closely with the trucking industry and other stakeholders to ensure collaboration and acceptance of new business processes; briefed and communicated progress to senior legislative leaders and other State and Federal officials.</p>
September 2002 – February 2004	<p>[REDACTED]</p> <p>Role: Program Manager</p> <p>\$40M Regional Program to design, develop, deploy and maintain a uniform fare collection system that leverages smart card and wireless technologies for the [REDACTED]. Managed a multi-disciplinary team of contractors to define the program and system requirements, develop the system architecture, build, integrate, test and deploy system components to schedule, budget and requirements. Supported customer outreach and communications to various user communities. Reported progress to regional governing board, presented problems or areas of concern, formulated risk mitigation or remedy strategies, and provided recommendations and program guidance to transit agency senior leadership and elected officials.</p>

December 2000 – March 2002	<p>Role: Program Manager</p> <p>Directed program planning, system architecture, design and deployment activities, in cooperation with Federal and State agencies and industry stakeholders, to implement statewide Commercial Vehicle ITMS. Formulated operations concept, defined system requirements, assessed current ITS inventory, conducted stakeholder workshops and meetings, and gained consensus on deployment priorities to improve the State's transportation system ability to safely and efficiently move goods and services via commercial vehicles on the highway and arterial.</p> <p>Oversaw the integration of disparate legacy systems to exchange information amongst various jurisdictions. Directed team to evaluate traffic modeling results and assess performance of statewide corridor system and surrounding key ports and freight distribution centers.</p>
September 2000 – May 2001	<p>Role: Program Manager</p> <p>Directed efforts to implement [REDACTED] and worked to facilitate adoption of [REDACTED] program as a regional initiative with other neighboring states. Directed efforts to link State internal disparate legacy system data and information systems to link commercial vehicle safety information with Federal safety systems to ensure compliance of State and Federal regulations of heavy vehicles on highways. Trained various stakeholders on CVISN systems including the use of Commercial Vehicle Safety Exchange Window (CVIEW) and coordinated multi-state CVISN data sharing activities and cooperation amongst stakeholders.</p>
June 1999 – May 2000	<p>Role: Program Manager</p> <p>Led one of the pioneering efforts to implement "red-light camera" photo enforcement technology using license plate reader technology to capture offenders so as to reduce crashes; conducted technology research and business case analysis, evaluated market readiness, and formulated business strategy to deploy premier photo enforcement services in the U.S.; developed business plan, evaluated integration of technologies, coordinated perspective partners; established pricing/funding mechanisms; design-build implemented systems in several major cities nationwide [REDACTED]</p>
September 1998 – May 1999	<p>Role: Program Manager</p> <p>Managed \$30M implementation of FasTrak electronic toll collection solution in [REDACTED] leveraging California Title 21 compliant technology, license plate readers, traffic cameras, roadway sensors and CCTV. Responsible for contractor team oversight from operations concept, system requirements, and deployment efforts and transition to operations team in cooperation with local, regional and State authorities.</p>
July 1993 – June 1998	<p>Role: Program Manager</p> <p>Directed \$110M program to design, develop and implement a national commercial vehicle electronic pre-clearance system that leverages transponders, license plate reader technology, weigh-in-motion sensors, and State legacy system data to identify and verify operational compliance of commercial vehicles on highways. Established the governance of service operation via public/private partnership between State agencies, enforcement personnel, and trucking industry. Responsible for oversight of business activities, communication and outreach, engineering, operations, system maintenance and customer service center.</p>
January 1994 – May 1995	<p>Role: Program Manager</p> <p>Oversaw a \$50M Federally funded operations demonstration to employ intelligent system technologies to expedite the movement of goods and services transported via commercial vehicles through border stations. Technologies include weigh-in-motion sensors, retina scanners, smart cards, transponders, CCTV, and on-board computers with GPS.</p>
March 1988 – October 1991	<p>Role: Project Manager</p> <p>Managed \$30M, 3 year fixed price contract to design-build, integrate, test, and successfully deliver a contractor-operated, secure telecommunications command engineering support center for special access required military security programs. Contract was completed six months ahead of schedule with 18% budget surplus.</p>

3.2.2 Sub-Contractor Resumes

3.2.2.1 Anderson Audio Visual

Project Manager – Brad Robinson

Name: Brad Robinson – Partner / VP of Technical Operations - Principal

Qualifications/Experience/Skills:

With over 14 years of experience in the AV industry, Brad brings an extensive knowledge of all aspects of the system design and integration process. He manages a team of skilled engineers and technicians who all bring the same level of detail and care to each project. Mr. Robinson will provide technical oversight to the project to ensure that all systems are built to specification and with the highest level of quality.

Credentials (Education, Training, and Certifications):

- B.S., Electrical Engineering, Vanderbilt University, 1998
- Extron School of A/V Technologies
- Extron XTP-E Certified
- Crestron DMC-E Certified
- ClearOne Converge Certified
- Biamp Nexia Certified

Security Clearance

- Lawrence Livermore National Labs Security Clearance
- Oracle Security Clearance

Dates Employed	Duties Performed
2012	<p>Emergency Operations Center</p> <p>Role: System Designer</p> <p>3x3 NEC Video Wall with Extron Quantum Video Wall Processor for purposes of camera and emergency system monitoring.</p>
2010	<p>Role: Systems Designer</p> <p>4x1 Interactive Video Wall Display</p>
2010	<p>Role: Systems Designer</p> <p>2x2 Video Wall for Display Purposes</p>
2009	<p>Role: System Designer</p> <p>3x3 Video Wall for Network Operations Center</p>

3.2.2.2 BBI Construction

Project Manager – Tom McCoy

Name: Thomas McCoy, Principal**Qualifications/Experience/Skills:**

Mr. Tom McCoy is a Principal of BBI Construction, which he co-founded with Mr. Morris Wright in 1974. He has more than 35 years of experience in the construction industry and has managed over \$200 million in construction projects. During the last 35 years he has supervised the development of residential, office, and special use projects.

Credentials (Education, Training, and Certifications):

- Bachelor of Arts, Architecture, University of California Berkeley, CA

Dates Employed	Duties Performed
March 1998 - November 1999	<p>Role: Principal in Charge</p> <p>New construction of a three story, 14,500 square foot steel frame addition upgrade and remodel of an existing 21,000 square foot firehouse for the Emergency Operations and Fire Dispatch centers. Work included the installation of sophisticated electrical and electronic control systems to keep the facility operating at full capacity in the event of a citywide emergency.</p>
April 2007 – October 2007	<p>Role: Principal in Charge</p> <p>Tenant improvement of the 11,000 square foot [REDACTED] which includes rehearsal space for musicians. The entire scope of work included the demolition and rebuilding of the front section of the building, structural strengthening of the roof, and the installation of a new HVAC system. Special noise reduction measures were taken. The walls and ceiling of each studio space were constructed so that they were independent from the walls and ceilings of adjacent spaces, and have as many as six layers of sheetrock separating them.</p>
August 2006 – January 2008	<p>Role: Principal in Charge</p> <p>The work included major structural, seismic, and historic renovation. Extensive site work took place in the area around the Boathouse. The project added walkway paths, stairs, low retaining walls, and reconstruction of the lake edge wall to the north and south of the building.</p>
July 1999 – November 2000	<p>Role: Principal in Charge</p> <p>Construction and design-assist services for a new 50,000 square foot three-story steel structure. The building contains a full-service cafeteria, a company store, medical facilities, and corporate offices. The building also includes a unique landscape component, a parking lot, an upgrade of the underground communication systems, and re-surfacing of all surrounding streets.</p>
November 1995 – December 1996	<p>Role: Principal in Charge</p> <p>This design-build project consisted of a two-story addition to the electron microscopy building. The steel-frame structure included 4520 square feet of laboratory and office space. A complex concrete floor was built to isolate the lab floors from the foundation. In addition, the work included the installation of complex energy monitoring and controlling systems in order to maintain an optimum environment for the electron microscopes.</p>
November 1993 - March 1995	<p>Role: Principal in Charge</p> <p>This 2,200 square foot laboratory renovation project was completed on a ten-week, fast-track schedule. Day and swing shifts were required to accomplish the scheduled completion date. Located adjacent to other labs involved in extensive research, the work area had limited access and required extensive containment of construction noise and dust materials. Scope included extensive mechanical control systems, including direct digital HVAC system with safety alarms.</p>
March 2006 - August 2009	<p>Role: Principal in Charge</p> <p>[REDACTED] is located in a former century-old, former orphanage building that is a candidate for local landmark designation. In addition to an accurate historic renovation, construction included a foundation-up structural reconstruction, seismic upgrade, and full accessibility upgrade.</p>

3.2.2.3 Beaman's, Inc.

Project Manager – Denis Beaman

Name: Mr. Denis Beaman – President, CEO

Qualifications/Experience/Skills:

Mr. Denis Beaman became a Journeyman Electrician in 1975 and since then has held a wide variety of both labor and management positions within the construction industry. He has led and supported various construction efforts for both public and private customers on various multimillion dollar projects. Currently, Mr. Beaman serves as the President and CEO of Beaman's, Inc., a certified small local business enterprise with City of Oakland, Alameda County, Port of Oakland, Oakland Unified School District, and State of California.

Credentials (Education, Training, and Certifications):

- Journeyman Electrician, 1975

Dates Employed	Duties Performed
2007 - Present	Beaman's, Inc. Role: President/CEO In this role Mr. Beaman has completed projects for various public and private sector customers. Mr. Beaman has completed multiple projects throughout the San Francisco Bay Area, including work on commercial office tenant improvements, commercial retail improvement projects, and community housing remodels projects.
2006	Beci Electric In this role, Mr. Beaman has supported various remodeling and security projects. For example, Mr. Beaman supported [REDACTED] with a conference room remodel and the [REDACTED] Laboratory with both an office and laboratory remodel. Furthermore, Mr. Beaman supported the [REDACTED]
2005	Jonas & Associates and Contra Costa Electric Mr. Beaman supported the development of the [REDACTED] data center power distribution project and [REDACTED]
2000 - 2004	Sasco Electric Role: General Foreman / Project Superintendent In this role, Mr. Beaman had responsibility for field operations of multi-million dollar projects, including a 250,000 square foot office space and data center for [REDACTED]. This project was a fast track project with 30 men, 2 shifts working 6 days a week on a 6 month schedule. Total project value: \$6M. Mr. Beaman oversaw the deployment of power, generation and transfer switches on a \$2M project for [REDACTED] in a 50,000 square foot central routing station using a 10 man crew. Also, he oversaw a \$2M effort for the complete electrical project on a rental car facility at the [REDACTED] Included main electric service, underground distribution, building power and lighting, car washes, and parking lot lighting.
1996 - 1999	Local 595 Journeyman/Foreman Role: Journeyman / Foreman Mr. Beaman worked in the field as a journeyman and foreman electrician for various companies. He worked on electrical construction sites, including the [REDACTED] throughout the greater [REDACTED] the [REDACTED] container refrigeration project, as well as office IT work.
1983 - 1995	Beman's Inc. Role: President Mr. Beaman assumed the day-to-day management responsibilities focusing on Residential/Commercial construction and remodeling, as well as electrical construction, service and repair. In 1988 he completed construction of his personal residence, which he designed and built with the help of an experienced craftsman. During his tenure he computerized operations and received a firsthand education in business finance.
1979 - 1983	Alameda County Electrical Joint Apprenticeship and Training Committee Role: Training Administrator He was hired to administrate the training activities of all apprentice and journeyman electricians within the local 595 union's jurisdiction (Alameda County). He was responsible for the day-to-day operations of all training activities. He monitored the progress of all participants, oversaw a teaching staff of 14 with 450 active participants, and created the first hands-on training center of its kind in the East Bay.

3.2.2.4 Cosmo Perrone & Associates, LLC

Project Manager – Cosmo Perrone

Name: Cosmo Perrone – Principal**Qualifications/Experience/Skills:**

Mr. Perrone is a results-driven homeland security professional with a focus on Maritime/Port Security and Business Continuity/Resiliency, and has extensive expertise in innovative, strategic security and emergency preparedness programs. He directed the Homeland Security Program for the 3,000 acre complex, including 24-hour patrols, anti-terrorism programs and the operation of security systems with a strong emphasis on resiliency. Mr. Perrone's security innovations at the Port of Long Beach led to his recognition by Security Magazine as a "Port Authority Visionary" and the "most aggressive change agent" in the port security sector.

Credentials (Education, Training, and Certifications):

- JD-Law, Western State University School of Law
- B.A., History, Northeastern University

Professional Licenses

- Member of the California Bar Association

Dates Employed	Duties Performed
July 2012 – Present	Cosmo Perrone & Associates Role: Principal <i>Conducted an assessment of the [REDACTED] and made recommendations regarding its Domain Center Operations. Recommendations are now being reviewed for possible implementation. The recommendations focus on a System and Regional Integration model used at Long Beach.</i>
April 2005 – April 2011	Port of Long Beach Role: Director of Security <i>Created the most advanced Domain Awareness Center in the maritime community and continued to build upon the framework to develop a System and Regional Integration concept that has now evolved into the Virtual Port Model. The center has become the benchmark for other ports, domestic and foreign, and has received the full support of the Coast Guard, both at the local and national level. The DHS Science and Technology (S&T) considered the center far more advanced than it could achieve and asked the Port of Long Beach to help them develop models for the Coast Guard. DHS S&T has also asked to partner with the Port to create new opportunities to further extend the Virtual Port Model.</i>
1990 – 2003	McDonnell Douglass and Boeing Role: Director of Security <i>Created a Domain Awareness Center for the commercial operations of McDonnell Douglas, Long Beach and integrated numerous functional security and fire systems, including fire protection for the airframe assemblies within one control center operation for multiple locations in Southern California. First company to use Wi-Fi for fire alarms on a moving assembly line.</i>

3.2.2.5 Genetec, Inc

Project Manager – Nabil Ali

Name: Nabil Ali – Sales Engineer, License Plate Recognition, Video Surveillance, Access Control

Qualifications/Experience/Skills:

Nabil Ali is an industry veteran with 14 years of experience, including 8 years in tech support and 6 years in technical training at Pelco. During this time he has worked on many large systems with thousands of cameras and has gained great insight into how systems are used. He understands how important the right user interface is to company operations. Nabil is NET+ certified, and had been certified by Cisco as CCNA.

Credentials (Education, Training, and Certifications):

- B.S., Business Management, 2009
- Cisco Certified Network Associate (CCNA) Certification
- Net+ Certification

Dates Employed	Duties Performed
June 2012 - Present	Genetec Role: Sales Engineer
October 2007 – June 2012	Pelco by Schneider Electric Role: Internal Trainer <i>Mr. Ali developed training programs, including classroom lectures, e-Learning courses, Webinars, and one-on-one training for both domestic and international end-users. He possesses a strong knowledge of IP and network principles, analog and IP cameras, video analytics, digital video recorders, matrix systems, and network based systems and an in depth knowledge of RAID configurations and storage devices, such as Storage Area Networks (SAN), and Network Attached Storage (NAS). Mr. Ali developed and maintained extensive knowledge of Pelco's hardware and software solutions, specializing in system configuration and troubleshooting. Finally, he designed creative and professional training programs and e-Learning simulation courses for IP cameras, digital recorders, network video recorders, and Enterprise systems using Captivate, PowerPoint 2003/2007, and Articulate.</i>
March 2004 – September 2007	Pelco by Schneider Electric Role: Senior Product Support Engineer <i>Mr. Ali participated as part of an elite design team to create high-end analog and IP cameras, DVRs, NVRs, and Enterprise systems. He collaborated with the design team to ensure that all product support needs have been met for customers. Mr. Ali has a strong experience with network hardware configuration and troubleshooting. He has assisted with on-site support (installation and troubleshooting) when requested by the Product Support Management team. He has trained service center staff on product service, repair procedures, and business processes. He maintained existing technical support programs as well as participated in the development of new and existing customer-oriented programs.</i>
July 2002 – October 2004	Pelco by Schneider Electric Role: International Technical Sales Representative <i>This role allowed Mr. Ali to work with customers in system design applications, ensuring customer satisfaction. He provided technical assistance to customers for the specifying, ordering, or troubleshooting of equipment and/or systems. He received telephone communications from customers, regarding sales orders, stock, and price checks, and provided order shipment information as requested. Mr. Ali verified the accuracy of all sales order write-ups, including content compatibility with the customer's existing system, and provided technical support for trade shows and conventions.</i>

3.2.2.6 Halcrow Group, a CH2M Hill Company**Project Manager – Bob Andrews****Name:** Robert Andrews, PE**Qualifications/Experience/Skills:**

Robert Andrews has more than 24 years of civil engineering experience as an engineer and Project Manager. He is experienced in project planning and design as well as construction of port development projects. Rob has directed diverse interdisciplinary teams responsible for initial project planning scheduling and budgeting, environmental documentation and permitting, as well as design and construction of a diverse range of projects including dredging, rail terminals, roadways, marine container yards, wharves and public shoreline access.

Based in CH2M HILL's Oakland, CA office, Rob has an extensive understanding of the Bay Area Tier 1 ports, their infrastructure, and their operations. He worked at the [REDACTED] for over 13 years, supervising and managing Port Maritime capital improvement projects for the Port's Engineering Division; including having been responsible for the planning, design and construction of such major maritime projects as the Vision 2000 Development Program. Since leaving the [REDACTED] he has expanded his knowledge of ports and developed expertise in maritime security. This experience includes managing the port-wide threat/vulnerability assessment for the [REDACTED], acting as FSO for an automobile importing facility, leading the design of site installation of RPM units at all of the [REDACTED] marine terminals and management of the [REDACTED] 24-hour call security consulting work.

Credentials (Education, Training, and Certifications):

- BS, 1985, Civil Engineering, University of California, Berkeley
- SkillPath Seminar of Successful Project Management Skills
- Management Development Series, UC Berkeley Extension

Professional Licenses

Professional Engineer (1990)
State of California, License# 45405

Security Clearance

TWIC

Dates Employed**Duties Performed**

2011 – Ongoing	<p>Halcrow Contract: [REDACTED]</p> <p>Role: Project Manager/Director</p> <p>Project Manager/Director for Port region-wide Risk Management Plan and Trade Resumption/Resiliency Plan Update for the entire marine transportation system covering the [REDACTED]. Performed all-hazards Risk Assessment, developed a metric for risk buy down, evaluated systemic gaps, and recommended mitigation measures. Revised 5 year strategic plan for mitigating all hazards risks to maritime cargo transport system in the region and commerce resumption.</p>
2009 – 2011	<p>Halcrow Contract: As-Needed Security Consulting Services, [REDACTED]</p> <p>Role: Project Director</p> <p>Project director for a multi-year contract for as-needed security consulting services, including risk and vulnerability assessments, grant writing and administration support.</p>
2008-2011	<p>Halcrow Contract: As-Needed Security Consulting Services, [REDACTED]</p> <p>Role: Project Director</p> <p>Project director for a multi-year contract for as-needed security consulting services, including risk and vulnerability assessments, grant writing support and regional security coalition development.</p>
2008-2009	<p>Halcrow Contract: [REDACTED]</p> <p>Role: Project Manager/Director</p> <p>Project Manager/Director for Port region-wide Risk Management Plan and Trade Resumption/Resiliency Plan for the entire marine transportation system covering the [REDACTED]. Developed 5 year strategic plan for mitigating all hazards risks to maritime cargo transport system in the region and commerce resumption.</p>
2004	<p>Halcrow Contract: Port Security Assessment, [REDACTED]</p> <p>Role: Deputy Project Manager</p> <p>Deputy project manager for a complete risk and threat assessment of the [REDACTED] and the various private terminal operations [REDACTED] within the [REDACTED] area consistent with the requirements of the Homeland Security Department. The work included conceptual recommendations for security enhancements to address the potential threat.</p>

3.2.2.7 **Kimley-Horn and Associates****Project Manager – Elbert Chang****Name: Elbert Chang, P.E., T.E. –ITS****Qualifications/Experience/Skills:**

Mr. Elbert Chang has extensive engineering and management experience in a variety of traffic engineering and ITS projects in both the private and public sectors. He has designed and implemented communication networks including interconnecting traffic controllers, CCTV systems, dynamic message signs, HARs, and the connection of central systems over local and wide area networks. His projects have included feasibility studies of current communication medium technologies and the preparation of preliminary design and PS&E documents for all types of networks, including wireless (different RF spectrum), copper, and optical fiber. Mr. Chang's public sector experience includes working at [REDACTED] County [REDACTED] City [REDACTED]

Credentials (Education, Training, and Certifications):

- Master of Science, Transportation Engineering, University of California, Berkeley, 1997
- Master of City Planning, Transportation Planning, University of California, Berkeley, 1997
- Bachelor of Science, Civil Engineering, University of California, Berkeley, 1992

Professional Licenses

- Professional Civil and Traffic Engineer
State of California, License# C61548 (Civil), TR2244 (Traffic)

Dates Employed	Duties Performed
June 2011 – present	<p>Role: Project Manager</p> <p>Kimley-Horn is working with the [REDACTED] to update their ITS Strategic Plan, identifying projects and priorities for the next 10-15 years. Project participants include the Transportation Services Division, Electrical Services Division, and Police Department. Capital projects identified include corridor improvements (communications infrastructure, upgraded traffic signal controllers, traffic monitoring PTZ cameras, and intersection video detection cameras), improvements to support existing hubs, installation of new hubs, and creation of parking management districts. In addition, the report will include a section with maintenance costs and requirements. The DRAFT Report is scheduled to be completed in December 2012 and the FINAL report (after City comments) completed in January 2013.</p>
July 2009 – present	<p>Role: Project Manager</p> <p>Kimley-Horn provided PS&E construction documents for improving the two major roads that provide access to [REDACTED]. Improvements include intersection vehicle detection cameras, upgraded traffic signal controllers, fiber-optic interconnect, wireless spread-spectrum backhaul, improvements for "mini-TMC" at [REDACTED] Maintenance Service Center, and installation of video management server at Emergency Operations Center (EOC) Data Center. Kimley-Horn also provided system integration services for connecting the field elements to the City network through existing firewalls. Field construction and system integration was completed in September 2012. Kimley-Horn developed traffic responsive signal timing plans for project corridors and will be assisting the City with implementing these plans in early 2013.</p>
September 2006 – present	<p>Role: Project Engineer</p> <p>Kimley-Horn prepared PS&E construction documents for a local arterial and transit improvement design package to install field elements integrating local roadways with [REDACTED] freeway corridor. Kimley-Horn coordinated with 10 local municipalities for review, approval and installation of improvements to build upon the previous [REDACTED] Smart Corridor Project. [REDACTED] improvements include the installation of fiber-optic network [REDACTED] PTZ CCTV cameras at 8 locations, arterial Changeable Message Signs (CMS), and traffic signal improvements. Local improvements are scheduled to be completed 2013, and the entire \$87M freeway-arterial project is scheduled for operation in 2014.</p>
July 2009 – September 2010	<p>Role: Project Manager</p> <p>Kimley-Horn provided system integration services for creating a new transportation network hub at the [REDACTED] Emergency Operations Center (EOC) Data Center and integrating it with the City network. The Kimley-Horn team coordinated with IT Divisions for design approval. The Kimley-Horn team installed new firewall, new switch, new virtualization server, and an upgraded traffic signal system central server, and provided direction regarding future expansion for new field channels and servers (VantageView intersection video detection camera, Video Management Server).</p>
September 2006 – December 2007	<p>Role: Project Engineer</p> <p>Kimley Horn provided PS&E construction documents for the Transportation Management Center (TMC) at the Transportation Services Division Offices. This new facility included the installation of video wall, and traffic signal workstations, and the relocation of existing traffic signal central server into the new TMC.</p>

3.2.2.8 MWA Architects

Name: Michael E Willis, FAIA NOMA. Michael Willis Architects

Qualifications/Experience/Skills: Architecture

Michael Willis, FAIA, has 36 years of experience in the industrial utility and public facilities environment. His firm has provided design leadership for a combined hundreds of millions of dollars in built projects. The firm is an Oakland Local Business Enterprise and was the architect for the Oakland Emergency Operations Center. MWA is in the best position to manage the documents through construction from its Oakland office, in support of the SAIC and BBI team.

Credentials (Education, Training, and Certifications):

- Masters in Architecture, Washington University in St. Louis, 1976
- Masters in Social Work, Washington University in St. Louis, 1976
- Bachelors of Art, Washington University in St. Louis, 1973

Professional Licenses

- Registered Professional Architect
- Arizona, 179791198
- California C-15140
- Hawaii 13616
- Louisiana 6539
- Michigan 1301044619
- Missouri 003628
- Nebraska A-3970
- Oregon 4255
- Washington 7868

Dates Employed	Duties Performed
1994-1999	<p>Role: Primary Project Oversight, Planning and Design Oversight In response to the 1989 [REDACTED]</p> <p>[REDACTED] The new Fire Dispatch Center handles fire and medical dispatch for the entire city. The EOC directs citywide crisis management in the event of an emergency. Linked by satellite and land lines with county and State emergency operations centers to coordinate efforts on a regional level, the center runs year-round as a training center. It holds offices for approximately 20 departments and agencies, including the Office of Emergency Services, Police and Fire Departments, the Mayor, City Manager, and City Attorney, Public Works, and Office of Communications and Information Services. Sleeping quarters, conference areas, and a room for the media are provided. Relevance to DAC: Good planning principles shown for staff workplaces and program efficiency for unique requirements.</p>
2005-2011	<p>Role: Primary Project Oversight, Planning and Design Oversight MWA's thoughtful design of this new laboratory building provides functional, intuitive, secure and comfortable space for the staff by integrating important sustainable elements of daylighting and views as well as ergonomic features into the specific programmed laboratory functions. The building was design to meet LEED silver Certification. Relevance to ODAC: Good planning principles shown for staff workplaces and program efficiency for unique requirements. Interior architecture.</p>
2007-2012	<p>Role: Primary Project Oversight, Community Outreach, Design and Documentation, Design Oversight This significant project is the City of [REDACTED] first water treatment plant, which has an initial capacity of 30 million gallons a day (mgd) and will ultimately be expanded up to 160 mgd. MWA Architects and CDM were responsible for the layout of the treatment plant site. The scope also includes slow sand filters, and administration/operations building, maintenance building, membrane building, ozone building and a treated water reservoir. Relevance to ODAC: Site planning and design for a large facility that features community "fit" and operational efficiency. Good and generous spaces for the staff, with natural lighting and access to outdoor views.</p>

3.2.2.9 North South GIS

Project Manager – Daniel Elroi

Name: Daniel Elroi – Senior Consultant

Qualifications/Experience/Skills:

Mr. Elroi has founded four GIS consulting firms and is currently the president of NorthSouth GIS, LLC. He is a GIS expert and consultant with more than 25 years of experience. Mr. Elroi manages the US operations of the NorthSouth GIS group, as well as key projects overseas, and is the chief architect for most of the technical work performed on US projects. In managerial roles, he maintains strong technical involvement and understanding of projects, and works directly with clients.

Credentials (Education, Training, and Certifications):

- B.S., Geography, University of California – Los Angeles, 1988 (Summa Cum Laude)

Dates Employed

Duties Performed

December 2011 – Present	<p>Project Name: Geospatial Security Mapping System (GSMS) and PortView Enterprise GIS Data Viewer</p> <p>Role: Principal in Charge and Senior Consultant</p> <p>NSG designed the GSMS for the [REDACTED], based on our expertise in GIS for their security sensitive application, and NSG led the design of the system, selection, installation and configuration of software, integration of other systems, databases, and live data feeds. Together with URS, the team created and delivered PortView, an intuitive and powerful GIS data portal built with Microsoft, Esri and Latitude Geographics off-the-shelf technologies, enhanced by NSG's own development of tools needed in a multi-user and security-sensitive port environment. NSG also took the lead in writing a five year strategic plan for the implementation of GIS at the maritime, aviation, and the commercial real estate divisions of the port, and finally, delivered all software training, and continues to assist URS and the port during the two year support and outreach phase of the project.</p> <p>Mr. Elroi's role was senior consultant to the project, leading most of the Needs Assessment and Requirement Specifications sessions with dozens of participants; making presentations and software demonstrations to Port staff and management; advising the Port's project manager on strategy for implementation of GSMS and its long-term success; and writing the majority of the five year strategic plan.</p>
December 2010 – December 2011	<p>Project Name: Integration of Airport GIS into Situitor PSIM Software in Airport Response Coordination Center</p> <p>Role: Principal in Charge and Senior Consultant</p> <p>Starting in 2010, NSG performed and supported the integration of [REDACTED] Engineering GIS databases into the Esri-based ArcGIS Server infrastructure necessary to support the NICE Situitor PSIM software at the heart of [REDACTED] Airport Response Coordination Center (ARCC), a multi-departmental and multi-agency high-technology command center at [REDACTED]. LUSAD and AVISOFT are Oracle Spatial based repositories for AutoCAD data that describe the exterior and interior spaces at [REDACTED] airports, primarily [REDACTED]. [REDACTED] focuses on utilities and exterior base mapping, such as roads, runways and fences. AVISOFT stores information about walls, staircases, doors and other interior features. While LUSAD and AVISOFT are accessed by either AutoCAD or a MapGuide based web viewer, it did not immediately lend itself to access by Situitor. NSG implemented an Esri based file geodatabase to store an extract of the LUSAD and AVISOFT data needed to support Situitor and wrote scripts for extracting GIS data from LUSAD and AVISOFT databases into the geodatabase on a scheduled basis. Mr. Elroi's role was to establish communications between the principal participants, the systems integrator, the client, the software vendor and NSG, and reach consensus on approach. He then directed the work and advised the integrator on best ways to leverage the GIS integration for the benefit of the client.</p>
2010	<p>Project Name: Integration of Enterprise GIS into NICE Situitor PSIM Software in Port Police Operations Center (subcontract to SAIC)</p> <p>Role: Project Manager</p> <p>NorthSouth GIS supported SAIC to integrate the Port's Enterprise GIS into the Physical Security Information Management (PSIM) and Situation Management software implemented at the Port Police Operations Center – NICE Situitor. At the onset of the project, Situitor could only read and display simple GIS file formats, principally a single satellite image. NorthSouth GIS facilitated design modifications to utilize the Port's Esri-based Enterprise GIS and automated the data transfer, while maintaining uniformity in the map display. NSG's enhancements enabled users to access the Port's own geographic information from within the Situitor, rather than resorting to separate software. As part of the project, Mr. Elroi visited NICE's development center in Israel and reviewed the integration methods between the [REDACTED] Esri implementation and NICE's Esri implementation. He recommended modifications, advised SAIC and the [REDACTED] and directed NSG staff in order to accomplish the required integration. Under Mr. Elroi's direction, NSG also developed a reverse data feed from the Situitor system into the Port-wide GIS viewer, [REDACTED] so that Exclusion Zones from the Operations Center can be rapidly distributed geographically to all Port employees, which had a particularly significant ROI for the Port, as this particular piece of information could then be distributed to 1,000 people without incurring additional software licenses.</p>

3.2.2.10 TEECOM

Project Manager – Teresa Abrahamsohn

Name: Teresa Abrahamsohn – Principal

Qualifications/Experience/Skills:

Ms. Abrahamsohn has 24 years of experience in the security systems industry and an educational background in both engineering and management. She began her career as an apprentice installer in a decade of service to a prominent security systems integrator, and worked up to her ultimate role as Engineering Manager/Systems Engineer. Consequently, Ms. Abrahamsohn has an unusually well rounded understanding of every level of security systems design, installation, and project management. As a principal for TEECOM, she goes beyond the scope of security systems and provides overall leadership across all disciplines within the firm.

Credentials (Education, Training, and Certifications):

- MBA, Management, University of San Francisco, 1999
- B.S., Electrical Engineering, Brown University, 1995
- Certified Protection Professional (CPP)
- Construction Document Technology Certification (CDT)
- Senior Professional in Human Resources (SPHR-CA)

Dates Employed

Duties Performed

June 2012 - Present	<p>██████████ CCTV Upgrade</p> <p>Role: Project Manager</p> <p>Utilizing a FAA ██████████ retained TEECOM to design upgrades and expansions of its CCTV system. Design included site survey, analysis of existing equipment and infrastructure, review of existing control center, integration options to Terminal 2, cost estimate, and design of a digital network recording system with intelligent video analytics capabilities for the entire airport. Engineering included development of full construction documents for upgrade of over 100 cameras equipment and infrastructure. TEECOM completed a threat assessment to provide recommendations to the ██████████ which integrate the new technology with the existing systems.</p>
August 2004 – Present (in-progress)	<p>██████████</p> <p>Role: Project Manager</p> <p>TEECOM provided security engineering from programming through construction administration for an access control, badging, alarm monitoring, and video surveillance system for the ██████████ and Maintenance Yard, located on ██████████. A digital video recording system will also be included in the design. The project was funded by the Transportation Security Authority and State of California. The security upgrade to the Ferry Terminal (Gang Plank & Float) and Maintenance Yard (580 acres) met Coast Guard and PVA (Passenger Vessel Association) Regulations and fulfilled approved US Government Grant proposal requirements.</p>
September 2008 – December 2012	<p>██████████</p> <p>Role: Project Manager</p> <p>TEECOM worked with the ██████████ to install a security system for six facilities in the Bay Area. The security system included a card reader system, video surveillance cameras, and security fences and gates. TEECOM also created an overall access control and monitoring system. The system allows local control capabilities, and in addition, the system will be constantly monitored at the Chief of Protective Services desk in the General Offices building.</p>

3.2.2.11 TSG Solutions, Inc.

Project Manager – Greg Rossler

Name: Greg S. Rossler – Business Development, Public Safety and Security

Qualifications/Experience/Skills:

Mr. Rossler brings a wealth of real world experience and education to the table that allow for a premium blend of security knowledge that is directly applicable to the Port of Oakland DAC project. Mr. Rossler has ten years of working experience with TSG Solutions, starting as an entry level technician with TSG's operations group, and working his way up into the operations management chain until settling into his current Business Development Role. Mr. Rossler has played a key role in several TSG projects, including but not limited to Digital Mapping, GIS and Integration projects at [REDACTED]

Credentials (Education, Training, and Certifications):

- BA, Spanish, California State University San Bernardino, 2001
- MBA, University of Phoenix, 2008

Dates Employed	Duties Performed
September 2010 – May 2012	<p>TSG Contract: [REDACTED] Role: Business Development</p> <p>Mr. Rossler's role on the [REDACTED] Digital Mapping and GIS projects has provided him experience with the following components: Digital Mapping of most interior and exterior areas of the [REDACTED] Headquarters Building, Digital Mapping of Critical Intersections at the [REDACTED], and integration of Digital Mapping data into the Geographic Information System for the [REDACTED] of [REDACTED]</p>
May 2011 – May 2012	<p>TSG Contract: [REDACTED] City GIS Mapping Role: Business Development</p> <p>Mr. Rossler supported the [REDACTED] Mapping project, and this effort provided him experience with: Digital Mapping of most interior and exterior areas of the [REDACTED], an understanding of a robust GIS system integrated into the Digital Mapping System, integration of security cameras into the Digital Mapping System, and software training.</p>
September 2008 – Present	<p>TSG Contract: Port of Hueneme Tasks 1-6 Role: Business Development</p> <p>The Port of [REDACTED] Tasks 1-6 encompassed the following components:</p> <ul style="list-style-type: none"> - Task 1 – Digital Mapping of all interior and exterior areas of the [REDACTED] - Task 2 – Digital Mapping of all interior and exterior areas of a RoRo Vessel and a Reefer Vessel, Conversion of all Digital Mapping data and imagery to a Dynamic (Live) System - Task 3 – Integration of security cameras into existing Dynamic Digital Mapping System - Task 4 – Configuration, Setup and Integration of a server for the Dynamic Digital Mapping System, others - Task 5 – One year Maintenance plan for existing data in the Dynamic Digital Mapping System - Task 6 – Collection of data at the port's primary and secondary Joint Operation and Security Centers for integration into the existing Dynamic Digital Mapping System - Software Training
November 2009 – April 2010	<p>TSG Contract: [REDACTED] Role: Business Development</p> <p>Through Mr. Rossler's experience with the [REDACTED] Digital Mapping project, he had firsthand experience with the Digital Mapping of most interior and exterior areas of the [REDACTED] Bay as well as Software Training.</p>

3.2.2.12 URS

Project Manager – Christian Raumann, GISP

Name: Christian Raumann – Senior GIS Analyst/Project Manager

Qualifications/Experience/Skills:

Mr. Raumann has 15 years of experience developing and applying geographic information systems (GIS) for a wide variety of projects while with the U.S. Geological Survey and with URS Corporation. His project management and technical experience has focused on the mapping and analysis of land-use/cover change, vegetation with an emphasis on forest dynamics, impervious surfaces, critical habitats, surficial geology, natural hazards, sea-level rise, levee failure and dam breach scenarios, and physiography using LiDAR data. His extensive remote sensing experience has come from manual image interpretation as well as digital image processing, including contemporary and historical image orthorectification and classification. He has also coordinated and led large data production efforts both in-house and through subcontractors. His team specializes in data management and systems integration using server GIS and web-GIS applications. He is also experienced in enterprise GIS needs assessment, implementation planning, and strategic planning. Mr. Raumann is a certified URS Project Manager and a Geographic Information Systems Professional (GISP).

Credentials (Education, Training, and Certifications):

- M.A., Geography, California State University, 2000
- B.S., Geography, California State University, 1995
- Flip7 LiDAR Processing and Analysis Software, 2007
- ERDAS IMAGINE Remote Sensing Software Training, 2000

Professional Licenses

- GIS Professional (GISP)
GIS Certification Institute, License# 00017566

Dates Employed	Duties Performed
2012	<p>Geospatial Security Mapping System (GSMS), [REDACTED]</p> <p>Role: Project Manager</p> <p>Mr. Raumann is leading a team in completing the Geospatial Security Mapping System (GSMS) Project. The objective of this team is to produce an Enterprise GIS comprised of comprehensive data, hardware, software, process documentation, training, and support that will be used by the [REDACTED] improve daily operations, preparing for and managing crisis events, and advising recovery efforts. The team is conducting a stakeholder needs assessment and IT systems analysis to determine the requirements for GSMS functionality, data, and system architecture. The system is based on ArcGIS for Server and SQL Server technology, and the team is converting, migrating, and collecting geospatial data from many sources using Safe Software FME Desktop to populate the Enterprise Geodatabase. New aerial imagery is also being acquired. The primary tool that the team is creating for GSMS users is a web-browser-based map viewer built using Latitude Geographics Geocortex Essentials and Microsoft Silverlight. Primary system integration includes the [REDACTED] intrusion detection system, Automatic Identification System (AIS) for vessels, Tactical Survey, and local weather and traffic. Secondary integration includes Oracle eBusiness Suite ERP. The team is implementing an outreach strategy and conducting formal training sessions for GSMS users. Upon GSMS implementation, the team is providing two years of on- and off-site support, maintenance, and enhancements.</p>
2011	<p>Sea Level Rise and Adaptation Study, [REDACTED]</p> <p>Role: Task Manager</p> <p>Mr. Raumann led the Coastal Inundation Study task with the goal of providing an estimate of the amount, extent and impact of sea level rise along the [REDACTED]. The team used LiDAR and other survey data to visualize inundation levels for the years 2010, 2050, and 2100 provided by their hydrodynamic model of coastal inundation. In order to characterize existing shoreline conditions, the team produced a photographic montage of the Port that included 4,000 photos taken from a boat for an on-the-water perspective of Port facilities. The team also created an interactive Google Earth-based application that allowed for streamlined navigation and viewing of the geo-tagged photos.</p>
2010	<p>Earthquake Evacuation Traffic Simulation Model Development Project, [REDACTED]</p> <p>Role: Project Manager</p> <p>Mr. Raumann's URS team worked with the transportation modeling software developer [REDACTED] produce evacuation travel demand and traffic simulation models for [REDACTED]. Utilizing URS's experience in emergency planning and seismic modeling, the team developed a set of tools for ArcGIS that allow a user to extract damage data generated by FEMA's HAZUS-MH model directly to a transportation model network and census tracts. Additionally, the team provided a direct crosswalk function that related HAZUS-MH's unique highway and bridge data layers to the model-specific transportation network. Resulting model functionality included transportation route deletion based on highway and bridge damage as well as transportation demands based on structure damage, human casualties, and commuting populations.</p>
2009	<p>Habitat Reserve Program Database, [REDACTED]</p> <p>Role: Task Manager</p> <p>Led the building and maintaining of a Habitat Reserve Program (HRP) database for the [REDACTED]. This database is used to track and catalog the various restoration and species conservation actions and their corresponding</p>

	<i>geospatial data layers on a site-by-site basis. After spatial database development, the database was migrated to a non-spatial RDBMS to provide an intuitive and dynamic tracking and reporting system for habitat compensation credits.</i>
2008	Crystal Springs-San Andreas Transmission System Upgrade Project, [REDACTED] Role: GIS Technical Lead <i>Coordinated project staff and developed techniques and standards for this civil engineering project. A great deal of this project's work involved analysis, manipulation, and visualization of LiDAR data and multi-beam bathymetric survey data. Analysis components included reservoir storage volume calculations, generation of topographic surfaces, and feature extraction from LiDAR and imagery.</i>

3.2.2.13 VidSys, Inc

Project Manager – Chris Cosentino

Name: Chris Cosentino – Video Solutions Architect

Qualifications/Experience/Skills:

Mr. Cosentino is an accomplished, results-driven Sales Application Engineer with nearly 20 years of experience. He actively manages the technology evaluation stage of the VidSys design process, and serves as the key technical advisor for VidSys products and emerging technologies. Mr. Cosentino can articulate technology and product positioning to both business and technical users, focused on establishing and maintaining strong customer relationships.

Credentials (Education, Training, and Certifications):

- A.A.S., Advanced Technical Studies in Avionics, Southern Illinois University, 1990
- Project Manager Certification
- Physical Security Network Associate Certification (PSNA)

Dates Employed	Duties Performed
February 2012 - Present	<p>Video Solutions Architect Role: Sales Application Engineer</p> <p><i>Actively manages the technology and evaluation stage of the VidSys design process, providing recommendations for VidSys products and developing prototype and proof-of-concept solutions. He frequently integrates 3rd party products into VidSys systems and forms strategic technology alliances. He has experience presenting the technology, as well as training users and providing technical support.</i></p>
October 2011 – February 2012	<p>Motorola Solutions Role: Video Solutions Consultant</p> <p><i>Selected and designed various types of video management systems, video storage, analytics and PSIM application, as well as cameras and pods complete with both wireless and fiber network connectivity elements. He assessed and analyzed customer environment to ensure developed solutions integrated with their existing systems and user needs. Evaluated vendors and selected installers to coordinate the creation of solution proposals for any specific implementation.</i></p>
August 2010 – October 2011	<p>Siemens Industries Role: Video Solutions Engineer – Security Division</p> <p><i>Designed large scale video systems and networks, working directly with customers to compare and tailor solutions for their video surveillance needs. He conducted post-implementation evaluations to ensure that video solutions functioned properly and provided on-site video design and technical support, as well as project management to ensure projects met completion goals. He assisted with testing and diagnostics of reported field problems through site visits, as necessary, to analyze application issues and facilitate problem resolution.</i></p>
2006 - 2010	<p>First Security Systems Role: Engineering Division Director</p> <p><i>Mr. Cosentino planned, scheduled and organized the installation team members and coordinated all installation staff, material, labor, documents, drawings, and training from project inception to turnover. He was responsible for \$2-4 million annually with minimal deviation and increased division profitability by reducing engineering design time and errors through targeted design strategies.</i></p>

3.2.3 Selected Staff Bios

3.2.3.1 Prime Contractor Bios – SAIC

Ayeshah Abuelhiga has more than 8 years of experience in the planning, implementation, and management of transportation programs, policies, and outreach campaigns. Her technical background in transportation planning has led to practical experience in conducting stakeholder engagement and outreach programs and campaigns resulting in increased participation in target transportation programs. Her work experience includes leading the development of and administering transportation-related policy compliance and regulation programs, conducting transportation policy and regulatory analysis, rule-making support, public outreach, communications, facilitation, training, and conference and event planning. Ms. Abuelhiga has a firm understanding of connected vehicle technologies and has spent the last year conducting an extensive outreach effort in support of connected vehicle technology.

Tony Ahmad has 17 years of relevant experience in implementing electronic identification systems for vehicles on roadway and at controlled access points. He served as systems engineer and deployment manager for the [REDACTED] project to design-build nine new highway weigh stations, installing technology to identify commercial trucks for electronic screening purposes. Mr. Ahmad has implemented electronic toll systems such as [REDACTED], international border crossing screening systems, and other ITS systems and applications. Mr. Ahmad has hands-on experience in fielding roadside equipment for the purposes of electronically identifying vehicles. His experience and practice knowledge of design-build and roadway permitting and install processes in California are invaluable.

Mr. Ahmad was assigned as the Project Engineer leading the technical design of the [REDACTED]

[REDACTED] He designed the overall system and subsystems for the [REDACTED] and worked closely with the facility designers on the team to coordinate system and network infrastructure and procurement of laboratory equipment to accommodate for a modern lab at the research facility. He is working with researchers and [REDACTED] operations staff to implement demonstration scenarios for research of ITS based applications and contribute ITS knowledge towards research and transportation studies that will be conducted at the [REDACTED].

James Cassady is a Software Systems Developer with SAIC's Transportation Solutions Division. He provides technical support and application development to the Government and the transportation industry in improving supply chain operations, freight movement, and security by reducing congestion and vulnerabilities in the transportation system. Specifically, his skills include developing Web applications, websites, and Web Services using programming languages and technologies such as Java/J2EE, HTML, and Java Script. He also has a strong background in database development with MS SQL, Oracle, MySQL, Sybase, and Teradata. He has expertise in the entire lifecycle of software and Web development including requirements gathering, architecture, design, development, and implementation.

He participates in transportation projects to provide technical expertise in support of requirements to include development of software applications to improve technologies in the transportation system and development of software to make intermodal freight and seafight processes more efficient. Mr. Cassady has also participated in the development of Connected Vehicle applications using the OSGI framework. Prior to joining SAIC, Mr. Cassady developed several applications for the [REDACTED]

Neil Chung is the Chief Systems Engineer for Physical Security Design and Integration and has more than 11 years of experience in the design, integration, test, and management of large scale, international, commercial and government technology projects. Mr. Chung has design expertise in system level

architectures combining multiple disciplines with an emphasis on major integration between varying products and organizations. He is currently the technical lead for the [REDACTED] [REDACTED] operated bridges, responsible for the design and implementation of the surveillance equipment and the software integration of physical security subsystems into a physical security information management (PSIM) common operating picture at the security operations center. His design work for the [REDACTED] was a key factor in the selection of SAIC to implement a similar security and information integration project for the [REDACTED].

Jeremy Durst is the Technical Operations Lead for the [REDACTED] where he maintains the information systems that process data from various safety and mobility applications through wireless communication. In support of the [REDACTED], Mr. Durst is a leading systems engineer responsible for development, deployment, and testing of wireless technologies and network systems. The [REDACTED] selected Mr. Durst for the team of experts to overcome the operational challenges of providing vehicles with batches of security certificates that expire every five minutes without disrupting the exchange, monitoring and storage of data being broadcast constantly at 10Hz from in-vehicle and roadside infrastructure. His success in these security projects has been a key component of the program's initiative to get approval of a new federal requirement by the [REDACTED] that will require all manufactured vehicles to contain new safety-critical communications equipment by 2020. Moreover, Mr. Durst served a critical role in delivering the 2011 [REDACTED] demonstration connected vehicle system in less than 3 months.

Jan Hodges has 30 years of experience in working with the world's leader in science applications to evaluate, develop, integrate, and implement past, existing, and horizon technologies for use in security, nuclear, transportation, and supply chain domains. He is nationally recognized as an RFID technology expert in Asset Management systems and applications. Mr. Hodges developed solutions for multiple RFID and data capture systems, including active and passive technology for train systems, parts, vehicles, electronics and food products. As the Chief Systems Engineer for the [REDACTED] Enrollment Program, Mr. Hodges oversaw the integration of the Natoma DTR solution with the Fluensee Asset Visibility Solution.

Tammy Karlgaard is an accomplished professional with ten years of communication, leadership, and emergency management experience. As a regional emergency management planner for the [REDACTED], she worked with emergency managers and mayors from 16 local governments as well as State and Federal agencies to address regional emergency management activities by researching and preparing planning reports, grant administration and management, and provided recommendations in all areas of emergency management and homeland security for the region and to the [REDACTED]. Ms. Karlgaard developed the Urban Area Security Initiative (UASI) program for the [REDACTED] region with a first year award of \$7 million, the highest amount for a first year UASI. She developed grant implementation guidance and practices and managed the \$7 million in grant funds for all phases of emergency management for grant initiatives in the region. Ms. Karlgaard also represented [REDACTED] regional interests to state and federal agencies during state level emergency planning activities and participated in multiple state task forces.

Nicholas Kehoe has over 4 years of experience providing technical support to public and private customers in roles ranging from data collection and analysis to outreach and meeting support. Specifically, Mr. Kehoe has supported data collection and analysis efforts including various formats of data sources, such as broadcast data from interstate variable message signs, participant driving behavior and in-vehicle video, and subjective data including surveys, focus groups, and interview results. Mr. Kehoe is skilled in project management and reporting, as demonstrated by his support to the [REDACTED] the form on on-site support, his role as a Peer Coordinator with [REDACTED] Peer-to-Peer Program, and his involvement with the [REDACTED] Road Fee Test.

Rhian Merris has worked as a systems and network administrator for more than 17 years. Starting with Netware and Windows NT, his experience includes VMware, Linux, all versions of Microsoft Windows, Cisco, as well as supporting myriad other network and server environments, including Microsoft Exchange. After working for a number of years for SAIC's internal IT support organization, Mr. Merris now supports the Connected Vehicle Test Bed back-end systems and network, including engineering, design, and planning for next-generation architecture.

James Morentz, Ph.D., has been an innovator in emergency management since 1975. He was the principal investigator for the landmark National Governors' Association (NGA) studies that produced the national strategy known as Comprehensive Emergency Management that was eventually implemented in all 50 states. He was a consultant to the President's Reorganization Project that created the Federal Emergency Management Agency (FEMA) in 1979. He was the lead developer of several training and exercise courses for FEMA and has taught in ten different government and university programs.

Andrew Murdoch is an application engineer with over 17 years of expertise in developing and implementing GIS applications. He has developed Silverlight and ASP.Net websites using ESRI GIS web APIs that interface with server-side web services linking to SQL Server database. Mr. Murdoch worked as part of a team of designers, developers and database administrators to test and deploy a GIS mapping website. He also created custom web services to enable the transfer of geographic database files using VB.NET, Oracle, XML and GML, and developed expert geo-spatial database export tools for government clients. Mr. Murdoch has extensive experience creating custom solutions tailored to meet stakeholder needs through user-friendly interfaces for seamless integration and application of developed tools.

3.2.3.2 Subcontractor Bios

Anderson Audio Visual

Philip Chan has more than 16 years of experience installing audiovisual systems and an impressive resume of projects that he has provided installation services for. He will manage the on-site installation team, provide day-to-day coordination with the general contractor, and ensure that quality of installation services are at the highest level.

James DeLeon has been in the audiovisual industry for over 8 years and brings a sharp attention to detail to the project process. Mr. DeLeon will oversee all aspects of the audiovisual construction process including coordination with the general contractor and client.

Andrew T. Kanik is a 16 year veteran of the audiovisual industry. He provides overall coordination of the Anderson AV Integrated Solutions Team. Mr. Kanik provides primary input during the programming, concept, and design development phases of the project. He serves as the administrative liaison between the contractor/end user team and Anderson AV staff throughout the project's schedule.

Brad Robinson has over 14 years of experience in the AV industry, and brings an extensive knowledge of all aspects of the system design and integration process. He manages a team of skilled engineers and technicians which all bring the same level of detail and care to each project. Mr. Robinson will provide technical oversight to the project to ensure that all systems are built to specification and with the highest level of quality.

BBI Construction

William Rogan has more than 17 years of experience in the construction industry. He specializes in pre-construction services for fast-track delivery systems; high end custom finishes; and adaptive reuse spaces. He is responsible for providing preconstruction services, including the preparation of preliminary budgets and construction cost estimates, contract negotiation and administration, project scheduling, and value engineering. Mr. Rogan also provides contract negotiation and administration, as well as purchasing and cost control for Construction Services.

Kimley-Horn and Associates

Kevin Aguigui is a Senior Systems Engineer with 19 years of extensive hands-on experience in Intelligent Transportation Systems, Traffic Engineering and Design, Traffic Signal Timing, Electrical Systems Design, Security and Surveillance Systems and Communication Networks. He also has extensive experience in Transit Management Systems, Adaptive Control Systems and Transit Signal Priority Systems. His wide range of skills focuses on the utilization of systems engineering for the planning, design, deployment and integration of advanced technologies and electrical systems for transportation management.

Kwasi Akwabi is an ITS engineer who works on freeway/arterial ITS and traffic signal design projects. His experience includes freeway ITS design, traffic signal modification work throughout various East Bay cities, network design and implementation, as well as traffic signal and ITS design in other states such as Arizona, Utah, Kansas, and Missouri.

Elbert Chang has extensive engineering and management experience in a variety of traffic engineering and ITS projects in both the private and public sectors. He has designed and implemented communication networks including interconnecting traffic controllers, CCTV systems, dynamic message signs, HARs, and the connection of central systems over local and wide area networks. His projects have included feasibility studies of current communication medium technologies and the preparation of preliminary design and PS&E documents for all types of networks including wireless (different RF spectrum), copper, and optical fiber. Mr. Chang's public sector experience includes working at the [REDACTED]

[REDACTED] (interim Traffic Engineer, 2001-2004).

Randal Durrenberger is a Senior Transportation engineer with nearly 20 years of experience in the planning, design, testing, and implementation of freeway and arterial based ITS projects. He has managed several major freeway management systems and Smart Corridors involving all facets of a project from planning to implementation. His experience includes planning (ITS strategic plans, system architecture, communications master plans, implementation plans), design (communications, conduit and cable, plan sets, general traffic, and field device locations), specifications (signal system, ITS devices), and field coordination of multiple contractors on various phases of implementation. Randy is also experienced in developing and implementing traffic signal interconnects and ITS applications on arterials.

NorthSouth GIS

Vikas Srivastava is a GIS expert with over 17 years of experience in all phases of enterprise GIS implementation and the integration of GIS with enterprise systems such as SAP ERP. His experience includes a multitude of projects in developing a GIS delivery organization, project management, as well as business development. Notably, Mr. Srivastava was the Project Manager for NGS's enterprise GIS deployment for the [REDACTED].

TeeCom

Andrew Gonzales brings a multi-faceted background in the A/E/C Industry to TEECOM, and prior to joining the TEECOM team, he worked at a construction consulting firm that specialized in work as expert witnesses. At TEECOM, he has spent the past 4 years becoming an expert in security systems, working closely with senior staff to design and oversee the design and construction of diverse systems.

TSG Solutions, Inc.

Paul Benne has more than 23 years of professional engineering experience in the security industry, and has been responsible for the design of sophisticated integrated security systems, including personnel and vehicle access control systems, various card access control technologies, biometric verification systems,

interior and exterior/perimeter intrusion detection systems, CCTV video surveillance systems, intercom and emergency telephone systems, turnstiles, fire and building code compliance, and systems integration.

Donald Brower has over 25 years of experience in management and operation of fleet cryptologic systems, military communications, intelligence, and computer security. He has systems engineering knowledge and experience in the installation, configuration, and testing of computer equipment and system networks accomplished through both formal and on-the-job training. Mr. Brower developed, administered, and maintained [REDACTED] and networks and operated small business for 4 years installing, repairing and upgrading computers and networks. He is a Certified Information Systems Security Professional (CISSP), Microsoft Certified Professional (MCP), and a recognized Information Systems Security (INFOSEC)/Information Assurance (IA) Subject Matter Expert.

Brian Hedges has managed and led a team of engineers responsible for Network Security, Certification and Accreditation, Information Assurance and Multi-Level Security/Cross Domain Solutions. He is the Chief Engineer evaluating the network and security solutions for the [REDACTED] [REDACTED] is the premier network for coalition interoperability in support of maritime operations using a certified security technology solution allowing for confidential, multi-level information sharing over a single network.

Thomas Newton has extensive experience in the design, planning, and implementation of various CCTV, Security and Building Automation Systems in Research and health care setting. Has also served as an IT and infrastructure liaison for two large Information Technology Departments. Former Sergeant in the Military Police, United States Army Reserve.

URS

Tomas Lopes is a seasoned geospatial and GIS integration developer with over seven years of experience in the Bay Area. As a GIS Developer with Farallon Geographics and now URS he has significant experience implementing Enterprise GIS systems and conducting GIS Strategic Plans. Mr. Lopes has managed the development of several mapping web portal projects, integrating ArcGIS Server with external systems and providing spatial intelligence to existing workflows. His education and experience includes ArcGIS Server implementation and administration, Web development, geodatabase design, and spatial data modeling.

Lee Rosenberg is the URS Oakland office Environmental Services Department Manager where he leads a diverse group of 45 staff that provides GIS, Cultural Resources, Air Quality and GHG, Economics and Emergency Management services for industrial and government clients. He has over thirty five (35) years of success managing increasingly complex organizations of up to seven hundred (700) employees. He has extensive experience leading people and executing a full range of business functions including budgeting, operational policy development, strategic planning, crisis planning, contingency operations and regulatory compliance. Prior to joining URS, Mr. Rosenberg served as a Federal Coordinating Officer for FEMA. He has an extensive background in emergency management operations, planning and exercises, the Incident Command System and coordinating the efforts of State and Federal agencies during disaster response and recovery. Mr. Rosenberg served 30 years on active duty in the Navy and retired as a Captain.

VidSys, Inc.

James R. Augustine has 25 years of experience, including various positions in project management, engineering sales support, as well as low voltage system design and implementation. Mr. Augustine has expertise in various types of systems including CCTV, IP Video, access control, fire alarm, perimeter intrusion, intercom, sound reinforcement, life-safety alerts, and GPS based video analytics platforms. He has also taught Basic CCTV classes for the International Brotherhood of Electrical Workers union as part of their Systems Installer apprenticeship program.

Chris Bledsoe has 16 years of experience and has held positions in professional service and solutions consulting, leading cross-functional teams in providing high quality services to government agencies and private enterprises. Most recently, these include the [REDACTED]

[REDACTED] Previously, Mr. Bledsoe has provided video and security services to [REDACTED] a national company with more than two hundred secure facilities in the United States, [REDACTED]

Ted Kim has held various positions in Professional Service and Solutions Engineering, providing subject matter expertise to local, state, federal government agencies, and private enterprises for over 15 years. [REDACTED]

[REDACTED] Mr. Kim managed and delivered the first and some of the largest and most complex VidShield and RiskShield project deployments for VidSys.

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4.0 RELEVANT EXPERIENCE

SAIC has more than 20 years of experience in the design, construction and maintenance of maritime surveillance and security systems for both local government operations and international clients and has designed and built 14 command and control facilities in the last 10 years. This experience, coupled with our established local presence and understanding of the Bay Area and its stakeholders, makes SAIC uniquely qualified to provide the services requested by the City of Oakland to implement the Joint Domain Awareness Center.

Our highly skilled personnel have cultivated the capabilities required to develop turn-key information technology solutions and implement integrated systems through extensive experience in the design and construction of facilities for advanced information processing, situation assessment, and event management. Our commercial integrated security projects have ranged from small video efforts at single ports to the integrated security sensor and management system for nine [REDACTED]

The base of SAIC's business is rooted in systems engineering and integration, and the following projects illustrate our ability to select and assemble cohesive security systems from high-quality, reliable products.

4.1 Relevant Project Experience Working With Local, State, and Regional Governments

4.1.1 [REDACTED] Waterside Security Surveillance System

SAIC was selected to implement a Security Surveillance System for the [REDACTED] that required a solution compliant with its conceptual design, in addition to which we bid a best-value option to provide substantial cost savings while maintaining or exceeding the performance requirements of the Request for Proposal (RFP). Using advanced closed-circuit video sensors and video analytic intelligent processing, SAIC reduced the threat of unauthorized waterside access to the [REDACTED] while supporting physical and logistical interfaces to video, alarm, and access control systems from other monitored locations in order to maintain compatibility with existing systems installed by major tenants at the Port and installed at the [REDACTED]

Our innovative application of layered intelligent video analytics provided for automated attendant functionality, as well as 3-D graphic mapping and alarm track visualization for advanced situational awareness with minimal long-term operational and maintenance labor requirements. SAIC combined conventional wired systems, point-to-point/multipoint licensed and unlicensed wireless systems, and fiber optic transmission nodes through an array of fixed hubs and relay points to provide the communications backbone system, with further

connectivity to remotely located sensor, alarm, and access control systems. Wrapped within an overarching enterprise-class video and network management platform, the system was completed by a command, control, and communications console that provided a uniform, sophisticated, and simplified user interface.

The final system our team implemented provided aids for event management and documentation in the case that any disruptive activities are perpetrated within the Port's facilities or properties; improved situational awareness; and increased the overall state of security. Successful completion of this project demonstrates SAIC's in-depth understanding of the technical, operational and programmatic issues and processes involved in providing the system tools necessary for improvements to the [REDACTED] security profile.

Project Details

Dates	11/2006 – 2/2010	Location	[REDACTED]
Firm Role	Prime contractor	Project Cost	\$12.6M

4.1.2 [REDACTED] Electronic Bridge Security System

The [REDACTED] selected SAIC to design, build and install an Electronic Security System (ESS) for [REDACTED]-operated bridges, including a warranty and maintenance agreement. In addition to the installation of security cameras and surveillance infrastructure, the project includes the provision of workstations and a central software package to fully integrate overall situation and event monitoring with system control activities at multiple locations. Our team developed a well-managed design and coordination plan at the onset of this project for individual bridge installations and subsequent incorporation into the centralized system to optimize completion of the work with minimal impact on traffic and other operations.

Reusing much of the existing equipment, our solution builds on current capabilities through the installation of advanced sensors (including CCTV cameras, video analyzers, and passive infrared sensors) and subsystems (e.g., digital recording systems, incident management systems, and fence protection systems). To effectively integrate the legacy systems with new assets and services into a common, easy-to-use operating platform, SAIC is implementing a PSIM system. Provided by VidSys, the PSIM product interfaces associated devices to a single ESS Central Software package, which employs a modular, plug-and-play approach to device adaptation and connectivity that will allow [REDACTED] to make any necessary device adjustments without modifying the software configuration or bringing down the system. SAIC's solution also provides an interface with the existing traffic routing system to allow for remote controls from any authorized workstation in the state and will provision a trouble ticket system to automate and document needed maintenance to support consistent operation of supplied equipment.

The selected ESS software aggregates information from several existing security systems for processing and secure dissemination to centralized and local operators through a web browser. Our solution allows [REDACTED] to create scripted scenarios for practice responding to virtualized events, and the system records responses for review by operators and management to promote continuous improvement. Additionally, the system incorporates a rules filter to reduce the incidence of false alarms and transmit only verified critical events to the operator, and uses redundant servers and VMware to provide high system resilience. The overall system architecture that SAIC developed for [REDACTED] provides the basis for a high performance and high reliability operation that will be easy to use during both normal and emergency operations and has expansion and extension capabilities beyond what [REDACTED] will likely require in the future.

Project Details

Dates	12/2010-11/2015	Location	[REDACTED]
Firm Role	[REDACTED]	Project Cost	\$11M

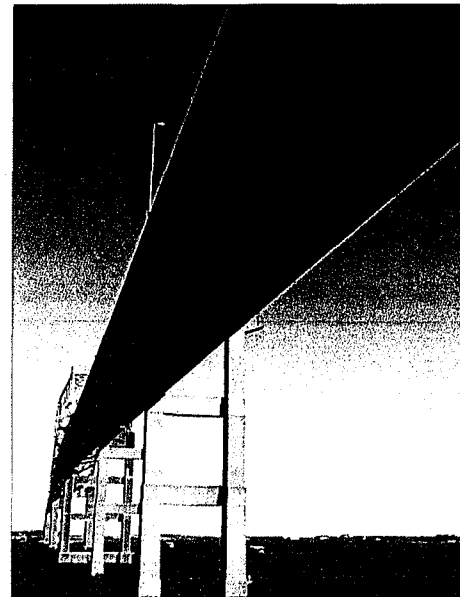
4.1.3

Bridge Video Security

Similar to the work being performed for [REDACTED], SAIC has designed and is currently implementing a bridge video security system for the [REDACTED] [REDACTED] [REDACTED] [REDACTED]

[REDACTED] SAIC conducted a design review with the [REDACTED] security team to assess the concept of operations and better understand [REDACTED] project goals. Our experienced project team and dedicated project manager are executing this complex and widespread effort on an accelerated timeframe, minimizing risk and maximizing performance by applying practices developed for the [REDACTED] project and leveraging a full staff of licensed professional engineers to oversee design and installation.

Our proposal for this effort focused on a phased installation approach in which the server systems and first bridge are completed in parallel, and the design/build of subsequent bridge installations in later phases. This approach allows [REDACTED] to start using the new system as quickly as possible and provides flexible financing options to accommodate the customer's pursuit of grant funding. Towards a similar end, our team also constructed an alternative design aimed at expediting delivery and reducing the customer's costs by approximately \$3.2 million by leveraging lessons learned from the [REDACTED] project.



Project Details

Dates	7/2012-12/2014	Location	[REDACTED]
Firm Role	Prime contractor	Project Cost	\$12M

4.2 Team Collaboration in Previous Work Efforts

We have assembled a team of industry leaders and process innovators to ensure that the completed Oakland DAC is equipped with state-of-the-art technology for seamless operations. Our team members have diverse project experiences and come from multi-disciplinary academic backgrounds, but have successfully collaborated on a number of previous work efforts – many for the City of Oakland.

The [REDACTED] implemented by BBI Construction, Michael Willis Architects, and Beaman's Inc., key members of the SAIC EBI team. Michael Willis Architects (MWA) and BBI Construction collaborated on the design and construction of the new 14,500 sq-ft addition to an existing firehouse. MWA completely renovated the [REDACTED] the complex, using Beaman's Inc. to implement sophisticated electrical and electronic control systems, including redundant emergency power and communications systems, uninterruptible power for computer systems, and structural strength in excess of essential service facility standards. Through established partnerships with each other's staff, as well as with regional partners and stakeholders, these companies will collaborate to design and build the sophisticated infrastructure necessary to support other technical components of the DAC.

Similarly, URS was selected to develop and implement the Geospatial Security Mapping Systems (GSMS) for the [REDACTED] and enlisted the assistance of NorthSouth GIS to provide a solution that would improve daily operations, prepare for and manage crisis events, and advise recovery efforts. Both team members were involved in a stakeholder needs assessment and IT systems analyses to ensure that all staff members had a clear understanding of the needs, goals, and objectives, and the team subsequently developed tailored solutions. The GSMS solution provides increased situational awareness of the physical Providing Professional Services to Design/Build/Maintain City of Oakland/Port of Oakland Joint Domain Awareness Center

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condition of the Port's emergency response infrastructure system and disseminates information that may affect daily operations in a user-friendly spatial interface. This project enhanced many of the skills and qualifications that URS and NorthSouth GIS bring to the SAIC team for application to the Oakland DAC.

NorthSouth GIS has also partnered with SAIC for a project delivered to the [REDACTED] SAIC hired NorthSouth GIS to integrate the [REDACTED] Enterprise GIS into their PSIM solution and Situation Management software implemented at the [REDACTED] Center. NorthSouth GIS will utilize both the experience from the product implementation and the partnerships created with SAIC staff during this work for the Oakland project.

Finally, SAIC and VidSys have established an effective partnership through work in developing security and surveillance systems in Maryland and Washington, D.C. that demonstrate our ability to collaborate effectively to create valuable products. Together, we are currently delivering an \$11 million security upgrade to five bridges operated by the [REDACTED] including a command center software upgrade to integrate nine disparate, existing technologies into a single, common operational picture for interagency video and event management sharing. Our successful cooperation on the Maryland project helped us team together again to win similar work in Washington, D.C., and consequently, SAIC has included VidSys as a key partner on our team to apply the same collaborative approach toward developing innovative solutions for the Joint DAC.

The high quality products delivered and successful partnerships developed for these projects made it easy to select partners for our team on this effort. SAIC has full confidence in our team members' performance and knows that they bring together the essential skills and qualifications that will make the Oakland DAC a success.

4.3 Experience and Ability to Work Effectively with Stakeholders

SAIC has a track record of uniting stakeholders with diverse perspectives, generating understanding and building consensus on recommended choices. All of the projects we work on are an opportunity to build a partnership with our clients, and SAIC places importance on complete coordination and collaboration with our clients to develop and implement innovative solutions. Through deliberate, continuous, and effective communication and outreach throughout every phase of our projects, we aim to produce valuable and meaningful results and to respect stakeholders' commitments and the demands on their time. The experience described previously in this section attests that SAIC understands the realities and technical issues relevant to situation awareness and incident response that are necessary for successful completion of this work.

Through our previous work with the [REDACTED] SAIC has established effective working relationships with many of the City's agencies and departments, which may be necessary for coordinating work schedules around concurrent operations. SAIC has successfully interfaced with local stakeholders to mitigate potential conflicts in previous projects; for example, our bridge crews planned work to avoid interference with a Caltrans paint crew and scaffolding contractor such that their scaffolding assembly, tenting, water and grit blasting, and painting did not disrupt scheduled structural inspections and the installation of new equipment. Similarly, SAIC has had to coordinate with [REDACTED] and other regional authorities to complete installation of the [REDACTED] minimal disruption to normal traffic and operations.

In 2011, SAIC worked with the [REDACTED] to update the Citywide Emergency Operations Plan (EOP). The EOP consists of a base plan, 17 emergency support function (ESF) annexes, and six incident-specific appendices. The base plan describes the coordination that occurs between the [REDACTED] departments, and other response agencies; reflects current emergency response and recovery capabilities; and describes the role of the [REDACTED] Center (EOC). The EOP also describes how the EOC serves as the focal point for the [REDACTED] in times of disaster. The ESF annexes group the [REDACTED] resources and capabilities into functional areas that are frequently needed in a response. The incident-specific appendices address the unique aspects of how to respond to

specific types of incidents. The EOP complies with the National Incident Management System (NIMS), in accordance with the National Response Framework (NRF), the California Standardized Emergency Management System (SEMS), the Incident Command System (ICS), and the California State Emergency Plan.

Additionally, SAIC is currently working with the [REDACTED] to design and develop a system to consolidate the City's asset management systems with its emergency resource management database. The project team conducted stakeholder interviews and utilized a prototype to help interviewees understand potential system capabilities in order to identify existing systems and to assess critical requirements. Using the stakeholder feedback, SAIC created a report that identifies the business process requirements for an effective resource management system. We are in the process of finalizing a requirements and recommendations report and will ultimately provide a final prototype that incorporates system requirements, business process flow charts, procedures, a final proof-of-concept, and recommended next steps.

SAIC is proud of our ability to effectively engage stakeholders on large urban area planning projects and looks to demonstrate our expertise in the Joint DAC project.

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