

CORPORATE EXPERIENCE SUMMARY AND REFERENCES **(Page 1 of 4)**

Applicants are required to complete each field in this Attachment and include the Attachment in their Application.

CORPORATE EXPERIENCE SUMMARY (M) (pass/fail)

To be responsive, the Corporate Experience Summary must provide enough detail to permit the State to assess and clearly determine the responsibility and experience the Contractor has for consideration in future AcMod or category awards that will be issued off this eVAQ. This will be scored as pass/fail. DO NOT LEAVE ANY ITEMS BLANK.

REFERENCES (MS) (points)

To be responsive:

- 1) All information must be completed on this Attachment. A blank or Not Applicable (N/A) response is not acceptable.
- 2) Projects referenced shall be projects that have been completed *within the past 5 years from the date of this Application*.
- 3) Applicants are required to submit three (3) references.
- 4) The client/customer used for the reference purposes must be a paying client/customer and not affiliated to the Applicant's organization.
- 5) At least one (1) reference must be from a government agency – local, municipal, federal, or publicly funded entity.
- 6) There are seven (7) questions per reference that may be verified. The reference rates each Applicant, using a scale of one (1) to five (5). Applicant must receive a minimum score of three (3) for each reference question.
- 7) The California Department of Technology cannot be used as a reference.
- 8) List the three projects below:

The State will contact the listed reference(s) to obtain the information provided by the Applicant and determine the customer's satisfaction with the outcome of the project and/or personnel. The references may be interviewed to confirm the information provided and a pass/fail will be provided. If the State cannot make contact with the reference, the State will reach out to the applicant to refresh the references or collaborate on further attempts.

Reference #1

Contact Name: Marine Mandoyan	Title: Sr. Communications Engineer	
Phone #: 414-646-7384	Email Address: mmandoyan@lawa.org	
Project Title & Summary:	LAWA Police CAD O&M	
BSI was responsible for the maintenance and upkeep of the Police Computer Aided Dispatch system (CAD) at LAX. The system was complex and included multiple interfaces including those with ACAMS, Net-Motion, VIPER, Situator, 800Mhz backbone radio and operating systems including Linux, Microsoft, VAX, and a complicated database environment that included both Oracle on RAC and SQL Server. In addition, BSI supported 219 mobile computers, 75 PCs, 16 mobile and 7 fixed Automatic License Plate Recognition (ALPR) units, and 11 servers. BSI provided three (3) technicians and one (1) database administrator for 24/7 support. BSI's CAD support included a combination of daily issue response and scheduled preventative maintenance actions as well as special supplemental actions.		

Reference #2

Contact Name: Timothy Lue	Title: Sr. Communications Engineer	
Phone #: 310-795-4013	Email Address: tlue@lawa.org	
Project Title & Summary:	On-Call Information Technology Infrastructure Operations	
The contract scope focused on IT infrastructure support services, including networks, systems administration, troubleshooting, help desk, user training and assistance, cyber security, configuration and programming, and testing.		

Reference #3

Contact Name: Juan Lopez	Title: Jail Administration	
Phone #: 818-548-3139	Email Address: JuLopez@Glendaleca.gov	
Project Title & Summary:	Glendale Jail System Upgrade	
BSI provided project management and design-build services to deliver a complete replacement of the Jail Control System for the Glendale Police Department. BSI installed Video Surveillance System with 200+ high resolution digital IP Cameras with video and audio storage of 777 days. At Glendale Jail, BSI's technicians were responsible for Video Visitation System Camera Replacement and Systems Integration for all cabling and low voltage infrastructure. BSI worked with technicians and systems engineers to create a comprehensive, integrated solution to meet the Glendale Jail's specific needs.		

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Scoring:

The References provided may be contacted by the State to validate submitted responses and to ask the client reference questions indicated below. Points will be assessed based on the reference response rating.

For questions 2-7 of the Client Reference Questions Table, circle only one (1) number for each question and use the following key for the scoring/rating:

0 = Unsatisfactory; 1 = Poor; 2 = Partially Satisfactory; 3 = Satisfactory; 4 = More than Satisfactory; 5 = Excellent, n/a = Not applicable to this project

Client Reference Questions

Question #	M or MS	Question	Scoring/Rating
1	M	Can you verify the following information? 1. Project Name and Description 2. Timeframe/Duties and Responsibilities	Pass / Fail
2	MS	How would you rate this firm's ability to professionally manage overall in projects?	n/a 0 1 2 3 4 5
3	MS	How would you rate the resources and staff provided ability to manage the project on time, in scope, and on budget?	n/a 0 1 2 3 4 5
4	MS	How would you rate this firm's ability in managing implementation, transition of products and services and/or maintenance operation support to ensure the continuity of services? Answer as applicable.	n/a 0 1 2 3 4 5
5	MS	How would you rate this firm's professionalism and ability to supervise teams on a project?	n/a 0 1 2 3 4 5
6	MS	How would you rate the firm's ability to address customer concerns or project issues, risks, or conflict?	n/a 0 1 2 3 4 5
7	MS	How would you rate this firm's ability to manage the technical and security solutions of different information technology and/or telecommunications hardware and/or services? Answer as applicable.	n/a 0 1 2 3 4 5

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****To Be Completed by the Applicant****

Describe the core corporate experience and competency offerings. The description of the corporate profile must be detailed and comprehensive enough to permit the State to assess the corporate abilities, core competencies, types of products, projects, or services anticipated to be provided in the approval of this eVAQ application.

In addition to the above, the summary shall include all of the following information:

1. Corporate Structure
2. Management Structure
3. Organizational Chart
4. Years in Business
5. Products and Services Offered

INTRODUCTION:

Birdi Systems, Inc. (BSI) is an award-winning, full-service systems engineering consulting and contracting corporation with a core emphasis in security, communications, and controls systems. We were founded on **October 25, 2006**, and currently have approximately 96 Southern California-based employees. Our headquarters/main office is in Pasadena, California. Our other California branch offices are located in Los Angeles, San Francisco, and San Diego. We also have other nationwide branch offices in Washington, D.C. and Jacksonville, Florida. The following table shows the address of each location.

CITY	ADDRESS
PASADENA, CA (HQ)	723 East Green Street, Pasadena, CA 91101
LOS ANGELES, CA	8400 Crenshaw Blvd., Inglewood, CA 90305
SAN DIEGO, CA	701 Palomar Airport Road, Suite 300, Carlsbad, CA 92011
WASHINGTON, D.C., CA	745 Warrenton Road, Ste. 113-251, Fredericksburg, VA 22406
JACKSONVILLE, FL	4640 Sub Chaser Court, Ste. 106, Jacksonville, FL 32244

BSI has presented our clients – Los Angeles World Airports (LAWA), Glendale City Jail, Pasadena City Jail, Port of Los Angeles (POLA), Beverly Hills City Jail, among others – with innovative design and on-time, on-budget execution on long-term projects that have integrated and developed new system components within existing networks. We have consistently demonstrated the ability to support live, heavily trafficked, complex infrastructure sites without unscheduled interruptions while ensuring the safety and security of the public. Through this experience, BSI has grown to become a leader in systems engineering, design, and consulting across the country.

MANAGEMENT STRUCTURE:

BSI uses an innovative organization structure methodology to manage our corporate divisions. We use a layer-based, full-service approach that facilitates productivity, inter-department coordination, and technological innovation for complex systems programs:

Table 1 – BSI's Layer-Based Program Management & Corporate Organization Approach

1. User Layer
The User Layer represents the client base and stakeholder base within a program; in the case of this project, this would include the DHHS Program Manager for the CIO-SP4. This layer also involves any other individuals interacting with systems daily, such as engineers providing installation, configuration, and testing services. The DHHS Program Manager's satisfaction with the level of service provided by Team BSI to the users, under the DHHS's direction and leadership, shall be the ultimate goal.
2. Application (Software & User Interface) Layer
The Application Layer contains the functional business logic which drives an application's core capabilities, as well as all software programs that may be used across program departments. The User Interface and Application Layer is the portal through which system problems become evident to the users and it will be the BSI Team's goal to prevent these issues from occurring. The User Interface Layer includes all user-end devices including workstations, monitors, and all accessories associated with these systems. It allows secured access to users and administration of applications, systems, and system functions.
3. Database Layer
The Database Layer provides an object view of database information by applying schema semantics to database records, thereby isolating the upper layers of the directory service from the underlying database system. The database layer is an internal interface that is not exposed to users. No database access calls are made directly to the Extensible Storage Engine; instead, all database access is routed through the database layer. A major function of the database layer is to translate each distinguished name into an integer

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structure called the distinguished name tag, which is used for all internal accesses. The database layer is responsible for the creation, retrieval, and deletion of individual records, attributes within records, and values.

4. Operating System Layer

The Operating System (OS) manages all hardware resources for use by databases and applications. It manages users, processes, memory management, printing, telecommunication, networking. It provides a layer of abstraction between the user applications, databases and bare machine. An Operating System takes care of all input and output in a computer system. It manages users, processes, memory management, printing, telecommunication, networking etc. It provides a layer of abstraction between the user and the bare machine. Users and applications do not see the hardware directly, but view it through the operating system.

5. Server Layer

Client-server computing or networking is a distributed application architecture that partitions tasks or workloads between service providers (servers) and service requesters, called client (workstations, MDCs). Often clients and servers operate over a computer network on separate hardware. A server machine is a high-performance host that is running one or more server programs which share its resources with the client computers. A client does not share any of its resources, but requests a server's content or service function. Clients therefore initiate communication sessions with servers which await (listen to) incoming requests.

6. Network Layer

The Network Layer in any organization is a critical part of the communications process as it is the connecting point between all the devices that the business entity relies on to complete its objectives. Keeping the networking components at optimum functioning levels is the key to long life and lasting communications for the organization at peak levels. These devices need to be checked regularly to ensure that any anomalies can be averted or detected early to avoid partial or complete outages.

7. Infrastructure Layer

The Infrastructure Layer is the physical secure mounting and connecting points of equipment, end devices, racks and other physical components that allow devices to function in the way they have been designed. The end devices are devices that are used in the system for data collection. BSI designs and maintains this layer by ensuring that all end devices meet functionality and service requirements.

ORGANIZATIONAL CHART:

BSI's President, Moninder Birdi, manages technology, innovations, and business development. Rick McAlpin, the Executive Vice President, oversees our execution departments (design, implementation, software, and systems integration). The following table lists our departments, their functions, and how they will integrate into the project organization.

Table 2 - BSI Corporate Organizational Chart

BSI Department	Layer	Program Elements
Business Operations <i>Moninder Birdi, President Rick McAlpin, Executive VP</i>	User	HR Management, Recruiting, Accounting, Estimating, Contract Administration, ISO 9001:2015 Quality Management, Reports
Design <i>Garry Wood, Vice President</i>	User & Infrastructure	Design Engineering (A&E and Systems), Engineering Drafting (CADD, BIM, Revit), Shop Drawings, Business Requirement, System Requirements, Component Selection, Concept of Operations
Implementation <i>Frank Vargas, Project Management Director</i>	Infrastructure	Installation, Construction, Field Technicians, Foreman, Superintendents, Systems End Devices, System Operations, Maintenance & Repairs
Project Management <i>Rick McAlpin, Executive VP</i>	User	Requirements Traceability Matrix (RTM) Packages, Internal Department Task Orders, Integrated Plans, Cost & Scope Management, Schedule Management, Project Management, Communications, Risk Management
Systems Integration <i>Slava Khusid, Systems Integration Director</i>	Network, Operating System, & Server	System & Subsystem Testing, Acceptance Testing, Systems Servers, Disaster Recovery, Systems Administration, Concept of Operations,

		Integration/Transition Plan, Technical Inspections, Surveys, Recommendations
Software <i>Anmol Nagpal, Software Director</i>	Application & Database	Software Products, Software as a Consulting Service, User Interface Development, Applications, Database Migration, Testing, Configuring & Programming, Training, Systems Administration, Troubleshooting
Business Development <i>Moninder Birdi, President</i>	User	Prospect Development, Risk Management, Estimating, Capture Management, Proposal Development, Marketing, Technological Innovations, Research

PRODUCTS AND SERVICES OFFERED:

Established by a diverse group of industry leaders, BSI abides by certain tenets and principles. We are fully vested in our slogan, “From Solutions to Service.” As system engineers, we are experts in developing the right solutions for our clients, always making sure that before we deploy the solution, all elements are in place so that the solution provides service to the client from the first day of operation. Common and unchanging across all of these is our dedication to optimal service. The principles that all of our abilities and efforts are channeled toward is the fulfillment of our client’s goal as well as serving the client’s best interest. As engineers we specialize in finding solutions. The solution, however, is only one aspect of what we believe we are responsible to provide. The ultimate goal at BSI is to provide our clients with superior, unwavering service.

BSI's is a leading provider of the following service lines:

- Commissioning & Activation: Through our Systems Facilities Operations Readiness (SFORT™) project facilitation process, BSI is an expert at identifying and mitigating risks, delays, and other unexpected challenges to a project’s success.
- Systems Integration: We specialize in custom approaches to security and communication systems, as well as IT and network infrastructure for use in corporate, commercial, and public spaces.
- Project Management: Across a broad range of security and low-voltage projects, BSI delivers quality service on-time, on-budget, and with minimal complications.
- Software Development: We provide both COTS and custom-developed software, with a focus on understanding a client’s challenges before we start writing code.
- Energy & Utility: BSI provides turnkey solutions ranging from energy and load management to the integration of renewables and microgrid systems.

BSI's full-service capability, and our comprehensive understanding of our clients' built environments, enables us to provide exceptional, personalized service that responds to the specific challenges of their unique project settings. Our full-spectrum competency provides customers and partners with the following benefits:

- A firm with the technical resources to comprehensively understand all layers of a system and develop innovative solutions.
- A self-performing team that provides the advantages of:
 - A single point of contact;
 - Personalized experience;
 - Reduced overhead;

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- Reduced execution risks; and
- A prime contractor with a strong background in design/build and project management.
- A best-value proposition that minimizes costs and markups by reducing third-party dependencies and execution risks. This increases the probability of project success, rapid response, and quality of work.

The diagram that follows illustrates the full-service capabilities, systems expertise, and software development resources that have enabled BSI to successfully complete projects:

SYSTEMS ENGINEERING	PM/CM	DESIGN-BUILD	SYSTEMS INTEGRATION	TECHNICAL SUPPORT
Services	Low Voltage Systems		Software Solutions	
Award Winning	Innovative		Turnkey Design-Build Maintenance	
Technical Support Services	CCTV & Video Management		Systems Commander <i>(Systems Monitoring & Management)</i>	
Systems Integration	Access Control Systems		Access Post Access Control System <i>(Protects your Perimeter)</i>	
Operations & Maintenance	Intrusion Detection Systems		Access Post Access Control System <i>(Protects your Perimeter)</i>	
Systems Design & Engineering	Police Systems (CAD, RMS, MDC)		Access Post Access Control System <i>(Protects your Perimeter)</i>	
Implementation & Activation	Wireless Communications		Capital Project Planner <i>(Manage Projects, Pre-Construction)</i>	
Testing & Commissioning	Command & Control Centers		Capital Project Planner <i>(Manage Projects, Pre-Construction)</i>	
Risk Analysis & Management	Business Information Systems		Risk Mgmt. Information System <i>(Manage your Claims & Broker)</i>	
Concept of Operations	Jail Control Systems		Risk Mgmt. Information System <i>(Manage your Claims & Broker)</i>	
Quality Management	Electronic Personal Protection Systems		Federal I/F Services for Credentialing <i>(Automated Integration with TSC)</i>	
Project/Construction Mgmt.	Radio Systems		Federal I/F Services for Credentialing <i>(Automated Integration with TSC)</i>	
Interface Management	Energy/Building Management		Airport Security Assessment Tool <i>(Ensure Regulatory Compliance)</i>	
Vulnerability Assessments	Flight & Baggage Information Display		Airport Security Assessment Tool <i>(Ensure Regulatory Compliance)</i>	
Strategic Planning	GMS/CUPPS/AODB		Consulting/Development/COTS	
Financing Development	Parking Revenue Control Systems		Consulting/Development/COTS	
IT Support Services	Automation Processes & Systems		Flight Information on the Cloud <i>(Cloud Based FIDS)</i>	
Energy & Utility Division	Network / Telecomm / Fiber Optics		Flight Information on the Cloud <i>(Cloud Based FIDS)</i>	

BSI has an in-house development team who have built custom software applications to meet our clients' unique technical needs. These products are as follows:

Access Post Access Control System (APACS)	
APACS is a specialized solution that caters to the specific needs of controlling access to secured areas at airside perimeter Access Posts. It can be integrated into the campus wide security system and used remotely.	BSI implemented the APACS to replace Los Angeles World Airport's ineffective legacy system. The APACS is fully operational since its deployment and continues to support LAWA's unique needs of managing access of vehicular traffic onto the airside through all the perimeter gates. APACS has been operational 24/7/365 with zero downtime.
Federated and Integrated Solutions for Credentialing (FiSC)	
FiSC centralizes and automates credentialing, identity, and access profile management processes by providing a central platform that integrates with other security systems. BSI has integrated FiSC with the DHS, TSA, and the FBI using the Security Clearance Module (SCM).	BSI innovated the credentialing process at LAWA by developing the first fully automated integration between an airport credentialing system and the Transportation Security Clearinghouse. FiSC was able to reduce the badge approval timeline down to only 2-4 days from 3-4 weeks. Our efforts were recognized with LAWA's prestigious Wings of Achievement Award in 2013.
Systems Commander (SC)	

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SC is a monitoring capability that improves service response times and problem isolation by tracking the health of mission critical systems. It monitors all system layers using three modules: SC-Notifier for health, fault monitoring capabilities, alert notification and status; SC-Service Manager for service ticket functionality, scheduling, and storage; and SC-Reporting Server for data reporting	SC currently monitors the LAWA access control system. In one incident, a backup server had a corrupted database and stopped functioning. SC autonomously generated a fault notification and updated the system dashboard, automatically issuing an alert notification. This functionality enabled an immediate response and repair solution. Soon after the resolution of the backup server, the primary server went offline and there was a successful switchover to the backup server. SC will also be deployed at Santa Barbara International Airport (SBA) to monitor all security systems.
Flight Information on the Cloud (FIC) FIC is a straightforward, easy to deploy system that provides the mission critical function of flight and gate status information. This cloud-based system facilitates rapid system deployment, and customized interfaces.	In response to an urgent request, BSI developed a complete cloud-based FIDS system, FIC, for Long Beach Airport (LGB) in ten days. BSI successfully overcame the challenges, delivering on schedule and within budget. We received the American Association of Airport Executives (AAAE) Corporate Cup of Excellence Award.
Risk Management Information System (RMIS) RMIS helps manage claims and policies on a single, secure solution, while supporting the important business functions of reducing financial exposures to claims. It records unexpected incidents, mitigates annual insurance costs, and has a risk management dashboard.	The RMIS was developed to facilitate the modernization of LAWA Risk Management Group's business risk management processes, establishing a more automated, current, and accurate information base. We transferred 15 years of legacy data to the new database structure and reengineered business processes, designs, development, and commissioning.
Airport Security Assessment Tool (ASAT) The ASAT helps engage security and public safety stakeholders at airports, eliciting information critical to assessing any gaps in regulatory compliance. ASAT has a repository of aviation standards, regulations, and data with 539 modules that contain 7,500 information points.	The ASAT was an invaluable tool used to support the assessment process for the development of a seminal security program at LAWA. ASAT helped organize the assessment and drive the execution around regulatory compliance and risk management. ASAT was updated and enhanced to support the assessment process for the Santa Monica Airport (SMO) Security Enhancements Program.
Capital Project Planner (CPP) The CPP is comprehensive project controls tool for establishing baseline budget, schedule, and scope. It manages positions/rates, edits portfolios, assigns project managers, drives role-based security, and allows users to generate reports, and worksheets.	BSI developed CPP to aid capital project planning processes at airports by ensuring the effective use of resources. It allows clients to effortlessly track, manage, and plan for numerous current projects and future expansions. We have implemented CPP for many projects within the Capital Improvement Program (CIP) at LAWA.