

LFC STAFF HEARING BRIEF

AGENCY: Secretary of State

DATE: July 17, 2009

PURPOSE OF HEARING:
To report on the status of
SOS's information
technology.

WITNESS: Francisco Trujillo,
Deputy Secretary; AJ Salazar,
Director Bureau of Elections

PREPARED BY: Aurora B.
Sánchez, LFC IT Program

Evaluation Manger *AS*

EXPECTED OUTCOME:
Improved project planning;
Successful project
implementation; Improved
customer satisfaction

Recommendations:

- Interview and hire or contract with either a qualified IT manager or project manager.
- Provide training to IT staff on new technologies.
- Avoid starting any new IT projects until qualified staff or contractors are in place.
- Develop, approve and test a disaster recovery plan for all system.
- Complete a gap analysis and user requirements for CFIS.
- Avoid developing systems in-house.
- Select mature, proven technologies that are state standards.
- Assess what it will cost to convert the remaining commercial filing functions into the new document management and imaging system.

BACKGROUND INFORMATION

Evaluation Purpose. This evaluation is in response to a legislative request to determine the status of information technology (IT) at the Secretary of State (SOS) following numerous newspaper articles regarding the inaccessibility of the SOS website. Due to time constraints, the evaluation is limited to reviewing documents requested from SOS and the Department of Information Technology (DoIT) on the agency's three mission-critical systems, past IT Plans, and other documentation internally available to Legislative Finance Committee (LFC) staff.

Outcome. The evaluation found that SOS

- Does not have the technical capability or capacity to manage IT projects;
- IT staff supports infrastructure or legacy applications;
- Has outdated hardware, software and systems; and
- Does not have a disaster recovery plan for all its mission-critical systems.

Agency Background. The SOS is a constitutionally created, elected office responsible for elections and ethics administration and commercial recordings. The SOS mission is to administer elections and government ethics. The agency has three General Appropriation Act (GAA) measures that directly relate to successful IT system implementation.

Table 1. FY10 GAA Measures

Percent of campaign reports filed electronically

Number of users electronically filing legal documents or receiving educational materials

Percent of partnership registration requests processed within the three-day statutory deadline in Article V Section 1

Source: GAA 2009

Bureau of Elections. Section 8-4-5 NMSA 1978 created the Bureau of Elections to carry out administration of all elections as assigned by the Secretary of State pursuant to state and federal election and ethics laws. Duties include instruction and training on election administration and preparation of instructional materials and manuals to promote uniform administration of state election laws.

- Address all recommendations in the security assessment.
- Assess if all SOS servers should be moved to DoIT to ensure proper backup and security.
- Inventory all IT hardware and develop a replacement cycle that is built-in to the operating budget.

Commercial Recordings. The Operations Division files and maintains records vital to the interests of commerce and industry such as partnership registrations, trademark/service mark registrations, Uniform Commercial Code (UCC) filings, service of process on corporations, and agricultural liens, and makes the records available to the public. It also administers the substitute address for victims required by the Domestic Violence Act; Secured Interest Act; Notary Public Act; public utility filing; facsimile signatures of public officials; and acts of the Governor.

Mission-critical Systems. The SOS has three mission-critical systems: the voter registration and elections management system (VREMS), the political (campaign) financial reporting system (PFRS), and the Secretary of State Knowledgebase (SOSKB) for commercial recordings.

Voter Registration and Elections Management System. In 1999, SOS requested funding to replace 34 separate voter registration and election systems with a single unified statewide system. VREMS cost \$6.6 million to implement. Annual costs for the Oracle licenses and VREMS software are \$364.6 thousand. The system has always been housed at the state’s data center operated by DoIT at an annual cost of \$21.9 thousand. Initially the redundant site for disaster recovery was in Nebraska, but it has since been moved to Oso Grande’s facility in Albuquerque at an annual cost of \$27.9 thousand. SOS has no disaster recovery plan that has been tested to ensure that the disaster recovery site can indeed be used if an emergency should occur.

The Help America Vote Act of 2002 (HAVA) was enacted to assist states with federal election administration and to “establish minimum standards for states and units of local governments with responsibility for the administration of federal elections.” A key requirement of HAVA is to have a computerized statewide voter registration list in place by January 2004. However, SOS, along with 37 other states, was unable to meet this deadline and obtained a waiver from the federal Election Assistance Commission to extend the completion date until January 2006.

The system was upgraded in 2005 after the 2004 elections because it had insufficient capacity to handle voter volume. In 2006, additional Oracle processors and licenses were added to support the 2008 elections. In 2008, the system was upgraded to version 9.4. Since the system’s implementation in 2003, SOS used federal funds from HAVA to pay for annual maintenance. Maintenance expenses were not gradually built into the agency’s operating budget, and today,

VREMS Annual Expenses
(in thousands)

	Amount
Software Maintenance & Support	\$246.3
Oracle License	\$118.3
DoIT Hosting	\$21.9
Oso Grande Hosting	\$27.9
Total	\$414.4

Source: LFC Analysis

Disaster recovery for VREMS needs to be tested before the 2010 elections.

supplemental or special appropriations are requested to pay for annual maintenance costs. The table below shows the special and supplemental appropriations received for system development and implementation and for annual maintenance.

Table 2. Voter Registration and Elections Management System Appropriations
(in thousands)

Year	Laws	Amount	Purpose
2000	GAA	\$600.0	VREMS Procurement
2001	GAA	\$1,450.0	VREMS Procurement
2003	GAA	\$400.0	VREMS Procurement
2004	HAVA	\$2,841.4	HAVA Requirements
2005	HAVA	\$868.8	HAVA Requirements
2006	GAA	\$160.0	VREMS Upgrade
-	Unknown	\$300.0	VREMS
2008	GAA	\$150.0	VREMS Upgrade
2009	GAA	\$289.1	VREMS Maintenance
Total		\$7,059.3	

Source: LFC Analysis

In 2005, LFC staff conducted a follow-up review of a September 2004 independent security assessment. The follow-up review found network and Windows-based network vulnerabilities and VREMS database communication issues were still a risk. SOS had hired a consultant to assist with the remediation of the identified risks.

At a November 19, 2008, meeting with DoIT and LFC staff, SOS was asked to provide the VREMS maintenance contract to DoIT's contract review staff so that DoIT could help with the approval process before it expired on December 31, 2008. As of July 16, 2009, SOS does not have a valid contract with the VREMS vendor because according to the deputy secretary, the vendor does not agree with the state's requirement for indemnification and limiting (the state's) liability.

Political Financial Reporting System - Current. Section 1-19-27 D NMSA 1978 requires SOS to develop or contract for services to develop an electronic reporting system for receiving and public inspection of expenditures and contributions reports and statements of exception to the Campaign Reporting Act. The system should allow on-line completion of forms over encrypted transmissions. SOS received \$70 thousand in Laws 2002, Chapter 110 to address the searchable database. In 2003, the Campaign Reporting Act was amended to include on-line reporting and a searchable database of public campaign expenditures and contributions.

In 2004, as part of the continued implementation of the consortium of states' SOSKB (discussed in more detail later), the political financial reporting system (PRFS) was implemented to add functionality allowing candidates for political office, political committees, and lobbyists to file campaign and contribution reports on-line.

The PRFS, along with some others for commercial reporting, cost \$420 thousand. In 2008, an additional \$112 thousand from a 2005 general fund appropriation was used for 12 enhancements as a stopgap measure until a new system could be implemented. Since initial implementation of SOSKB in 2002, the company that developed the system was bought by FileOne. Annual maintenance costs have increased to \$100 thousand, and changes that are not part of annual maintenance are charged at a fixed hourly rate of \$175 regardless of complexity. In addition to increased maintenance costs, the system has frustrated candidates that many have opted for a hardship status to avoid filing electronically.

Campaign Finance Information System – Work-in-Progress. Because of poor system performance, missing functionality, and increased maintenance costs, in 2008, the agency decided to replace PRFS with an in-house-developed campaign finance information system (CFIS). SOS did not seek or receive certification of its project before starting any programming. In its FY10 IT Plan, SOS states that developing a system internally is not an option because its IT staff is ill equipped to manage such a project and, any system should be acquired in the open market.

In November 2008, LFC and DoIT staff met with SOS staff to discuss legislative concerns about project viability. SOS reported that the intent was to have the base CFIS with legacy system data migrated complete by December 31, 2008 and a fully functional system in production by the end of the fiscal year (June 30, 2009).

The agency made all these assurances without a project management plan or certification of available funds to ensure successful project management and without technical documentation of core system requirements to guide system development. Formal and structured project management practices require, at a minimum, the documents shown in **Appendix A**. It is clear from a review of project management and technical documents that SOS does not have the internal capability to manage IT projects. An assessment of project management and technical documents submitted for this and the Uniform Limited Liability Partnership Act project is at **Appendix B**.

The campaign finance information system project is on hold pending a gap analysis, user requirements and review by Washington Secretary of State staff.

CFIS Appropriations
(in thousands)

Year	Laws	Amount
2002	Capital	\$70.0
2008	GAA	\$176.5
Total		\$246.5

Source: LFC Analysis

From March 2009 through June 2009, DoIT had numerous meeting with SOS staff on project deliverables, technical architecture, project management and planning for a security assessment. E-mail communications between the DoIT-assigned oversight consultant and SOS staff on architecture and project management show that DoIT was acting in a dual role: oversight and project and technical assistance since at least April 2009. When DoIT's oversight staff provides technical assistance, it is no longer totally objective.

On May 26, 2009 DoIT's technical architecture review committee approved SOS's proposal with contingencies. The four items the architecture committee reviewed are shown in the table below.

Table 3. Results of DoIT's Technical Architecture Review for CFIS and ULP

Architecture Review Component	System	
	Campaign Finance Reporting	Unlimited Liability Partnership
Infrastructure (Network Impact)	Passed	Passed with contingency: work with DoIT on accurate diagrams
System Architecture (Software and Hardware Definition)	Passed with contingency: have vendor work with DoIT before implementation and migration into production	Passed with contingency: Update Change of Scope diagrams
Security Plan	Passed with contingency: Contract with a qualified contractor to conduct an application and system security assessment	Passed with contingency: Update Change of Scope diagrams
Business Continuity and Disaster Recovery Plan	Passed with contingency: Update plan presented	Passed with contingency: Update plan presented

Source: DoIT

SOS updated the diagrams before presenting to DoIT's project certification committee on May 27, 2009. The project certification committee approved the project based on SOS meeting the contingencies and its representation that the system was 70 percent complete because it started the project long before it was approved.

A contract for a security assessment was executed on June 12, 2009. The results of the assessment are confidential and should not be discussed in a public forum as that may encourage others to attempt to exploit identified vulnerabilities. SOS, through its contractor and DoIT, has assured LFC staff that vulnerabilities are being addressed.

In mid-June the SOS website went down for public access it also lost all network connectivity. The Environment Department loaned SOS its chief information officer (CIO) to help. The Environment Department CIO will

- Help them through the system development lifecycle,
- Assess high level IT needs,
- Interview and select an IT manager,
- Match CFIS requirements to potential public domain software (Washington SOS),
- Report periodically to DoIT and LFC,
- Review the IT organizational structure and reorganized it to ensure proper segregation of duties, and
- Ensure they get back on track.

The vendor is onsite and running the project.

SOS is preparing a contingency plan in case CFIS is not operational by the new deadline of October 2009. DoIT will then conduct another technical architectural review.

SOS has approximately \$161.6 thousand available to complete this project based on an analysis of actual expenditures and active contracts.

Table 4. Campaign Finance Information System Project Revenues, Expenditures, and Available Balance As of July 10, 2009
(in thousands)

Revenue	Capital (Laws 2002, Chapter 110)	\$70.0
	GAA (Laws 2008, Chapter 3)	\$176.5
	Total Revenues	\$246.5
Expenditures & Encumbrances	Oracle Licenses	(\$10.0)
	Data Migration	(\$6.4)
	Infrastructure	(\$23.3)
	Security Assessment	(\$15.0)
	Changes to Legacy System	(\$30.3)
	Total Expenditures	(\$85.0)
Balance Available	\$161.5	

Source: LFC Compilation

SOSKB Appropriations
(in thousands)

Year	Laws	Amount
2002	GAA	\$320.0
2005	GAA	\$112.0
Total		\$432.0

Source: LFC Analysis

Secretary of State Knowledgebase. The North Carolina Secretary of State initially developed SOSKB with Office Automation Solutions. New Mexico implemented it in 2003. A consortium of states developed additional modules, paying for the modules they wanted and making them available to the other states at no cost. Funding was requested during the 2002 legislative session to initially consolidate stand-alone systems for Uniform Commercial Code, notary, partnership, and trademark filings. Future years were to include other commercial filings accepted by SOS. In 2005, SOS requested and received \$112 thousand to add trademarks, agricultural liens, and campaign reporting modules to SOSKB. In 2006, Office Automation

Solutions was bought by ES&S (supplier of VREMS), now known as FileOne. Since FileOne's purchase, SOSKB has become a proprietary system with increasing annual maintenance costs (about \$100 thousand) and fixed fee hourly rates to address any issues encountered or enhancements needed. The 2005 appropriation was extended three times until it was used in FY08 to implement 12 enhancements, all dealing with campaign finance reporting. The total appropriations for SOSKB from inception to date are \$420 thousand. It is unclear how a system developed with public funds became proprietary.

Commercial Recording System – Work-in-Progress. The SOS has embarked on replacing all commercial filing software with a new product. In its FY10 IT Plan, SOS proposed replacing SOSKB over a two-year period, including associated hardware and software. In FY09, the first module scheduled for replacement is limited liability partnership. On May 27, 2009, DoIT's project certification committee certified the project and approved the release of funds. SOS proposed to have this system in production by July 1, 2009 even though

- Project certification and release of funds was not granted until May 27, 2009,
- The contract with the vendor was not effective until June 9, 2009, and
- The appropriation expired on June 30, 2009.

In SOS's favor is that Laws 2009, Chapter 181 amended the Uniform Limited Partnership Act making certain sections effective January 1, 2010 giving them an additional six months to successfully implement this project and that the vendor has taken the lead.

The Legislature has appropriated \$150 thousand which SOS has used for a document management and imaging system, including hardware. According to the SHARE "CAFR Budget Status Report" for July 2009, the unexpended unencumbered balance is 96 cents.

Information Technology Planning. Every year the State makes substantial investments in IT projects and spends hundreds of millions of dollars to support and maintain existing systems. The LFC and the legislature recognize the value of information systems and information technology as a worthwhile investment of public funds. Well-developed information systems should quickly become assets for State operations resulting in improved efficiency, program outcomes and worker morale. LFC uses transparent, clearly defined, and published evaluation criteria developed in 1996 that continue to represent best

practice to evaluate requests for IT project funding. The LFC bases its evaluation criteria on five funding principles that allow effective allocation of limited financial resources. Agencies are required to submit funding requests for new system development or major enhancements to an existing system by September 1st of each year. The request must follow the Annual IT Plan Guide published by DoIT and meet LFC's evaluation criteria posted on its website. Too often, agencies seek funding through other sources that do not require the rigorous evaluation process. As demonstrated in this report, funding for SOS IT projects came from capital, special and IT appropriations. Only the IT appropriations require a structured evaluation process.

Best practices in IT include using mature, proven, and reliable technology versus bleeding edge technology; buying off-the-shelf software versus building a customized system (in-house or by a contractor). Because in-house developed systems high as risk, high cost, and proprietary in nature, the legislature does not support this type of development.

Secretary of State IT Plan. A review of nine years of SOS IT plans provided the basis for the following discussion.

IT Staff. SOS IT capability is significantly lacking in staffing and technical skills. Expectations are far greater than the ability of the people resources to deliver the results required and to provide the necessary and required processes to protect the assets of the SOS and the people of the State of New Mexico. SOS has seven IT positions of which six are filled. All the positions are infrastructure as follows:

- Three network and operations (desktop) support;
- One web developer; and
- Two legacy support (COBOL-base systems).

Hardware and Software Infrastructure. SOS currently has installed 22 servers. Of the 22 servers, 11 are over five years old and five are over 7 years old. The SOS office is wired with both copper (Cat 5) and fiber to desktop cabling. An assessment of the existing wiring and cabling has been done to ensure all cabling is consistent with the State Wiring Standard. New switch and firewall technology has been completed with the recommendations and the assistance of DoIT.

Because, both the equipment and the applications are outdated, a deterioration level has been realized and the effectiveness of SOS operations and its ability to support the public is being impacted. Outages are more frequent with the outage prior to the one in June 2009 lasting five business days due to both a corrupt data file and a total server failure.

Disaster Recovery and Business Continuity. There is no viable disaster recovery and business recovery plan for SOS. Outside of the fact that all operational applications are backed up on a daily basis, there is no place, no hardware, and no process for recovery of those applications should a major disaster occur within the agency. A disaster recovery plan was developed for all systems except VREMS in 1999 and updated in 2003. For all intents and purposes, there is no documentation and what was written is very limited and completely out of date. There has never been a disaster recovery test of the applications within the SOS. Since SOS has no disaster recovery and business continuity plans and processes in place, the most viable alternative available is to start at the beginning.

Plans, policies and work-flow process documentation have not been kept current. A revived focus on developing standard operating procedures and training manuals for each division within SOS has been realized. Adequate documentation is lacking but needs to be established to ensure business continuity and cross-training.

While VREMS has the technology and equipment to support disaster recovery and business continuity processing at Oso Grande, formal procedures are lacking that will allow SOS to cut over within 15 minutes of the outage. When procedure are developed and adopted they must be tested on regularly. The need to test the disaster recovery site was proved during the June 3, 2008 primary election when DoIT lost communications to the 33 counties for one hour, and SOS and the vendor had to figure out how to switch to the alternate site.

Although SOS operational application data and programs are backed up on a nightly basis, there is no process, no location, no procedures or plan or guidelines available that will allow SOS to move this work to an alternate location to resume business processing. Although, DoIT can provide that alternate location, there is no equipment available on which to resume that processing at either a hot or cold site.

In summary, the evaluation found that SOS:

- Does not have the technical capability or capacity to manage IT projects;
- IT staff support infrastructure or legacy applications;
- Has outdated hardware, software and systems; and
- Does not have a disaster recovery plan for all its mission-critical systems.

APPENDIX A

Project Management and System Documents

Document	Purpose
Project Charter	Documents the project manager's authority and responsibility, to identify managers and line personnel on the project, and to document the approved project scope. The DoIT template requires information to fulfill the purpose of the charter. Since the project charter and the project management plan are usually not created and submitted at the same time, DoIT also requires more extensive information about how the project will be managed.
Project Management Plan	Serves as a guideline for the lifetime of the project that may be revised as needed, is a standard from which performance can be measured and can facilitate communication among stakeholders
Risk Management Plan	Identifies and analyzes project risks, quantify the risks identified and develop a risk response or mitigation strategy. The plan is a subcomponent of the Project Management Plan. Risk management is a continuous process that should be a proactive undertaking to be successful.
Issue Management Plan	Describes the project's process for managing project issues that arise in all project phases and may have a negative impact if not addressed properly. Issue management is a continuous process that adds and resolves issues through a formal documented process.
Testing Plan	Describes unit, integration, functional, technical and user acceptance testing, roles and responsibilities of project team and testers; test environment, problem reporting and tracking and test deliverables.
Communications Plan	Describes how and when project information will be communicated or exchanged with team members, users, executive sponsors, and oversight authorities.
Training Plan	Identifies approach, delivery methods, training requirements, and goals and critical success factors as they pertain to the training the project team, system users and technical staff to achieve an acceptable level of productivity and proficiency.
Requirements/Design Document	Translates business needs into information requirements
Architecture Plan	Documents in a pictorial format the network, software, hardware, and system design.

Source: LFC Compilation

APPENDIX B

Assessment of Submitted and Approved Project Documents. The discussion below encompasses both the campaign finance reporting and the uniform limited liability partnership projects. For illustrative purposes only, the focus is on the campaign finance reporting project, but the issues apply to both projects.

A successful project is well planned, overseen by an experienced project manager, and supported by executive management. According to charters for both the campaign finance information system (CFIS) and the uniform Limited Partnership projects, the assigned project manager has either 20 or 40 years project management experience. However, neither SOS personnel records nor prior employment records substantiate 20 years of project management experience, let alone 40 years, and actual campaign finance reporting project management and outcomes do not reflect 20 years of experience. Project document development required excessive oversight agency (DoIT) assistance and clearly indicates little to no relevant in-house project management expertise.

Project Communication. Communication management, an essential element of project management, is the process of conducting or supervising the exchange of information across a project. The project management plan states that the project manager will provide weekly updates; however, SOS was unable to provide written status reports. Communications from April through June 2009 are e-mails from the Bureau of Elections Director to the Secretary or project team or from the DoIT consultant to the project staff or Bureau of Elections Director. Critical communications as shown in the examples below are not from the project manager. A more detailed list is at **Appendix C**.

Table 5. e-Mail Correspondence Regarding IT Projects

Date	From	To	Message
5/13/2009	Ron Martinez	AJ Salazar	Although it appears you are backing up daily, not sure if work in progress is not at risk. You are not using versioning or version control and the development computer may not be backed up. Use technical or business to identify what need to be developed. There is a lot of apprehension that SOS can deliver this project successfully without planning documents and a very short timeframe.
5/28/2009	AJ Salazar	Francisco Trujillo	We have a short timeframe and given PCC's concerns I still feel uncomfortable that the developer has all the data associated with the program. Need a plan of action to demonstrate progress.
6/9/2009	AJ Salazar	Secretary Herrera	We are not on schedule. We should have started internal training. Have forwarded information to State of Washington for their review. They are willing to share source code at no cost should we fail.
6/10/2009	AJ Salazar	Secretary Herrera	Brad reports 60 - 70% done. DoIT consultant believes more like 5%
6/15/2009	AJ Salazar	Secretary Herrera	We need a contractor immediately to help Brad.
6/16/2009	AJ Salazar	Secretary Herrera	Candidate side is not very user friendly. Project is no where near completion. I do not recommend having anyone from the outside the organization look at the system in its current state.

Source: Excerpts of SOS-provided e-mail

Performance Measures versus Objectives. SOS confused performance measures with objectives and did not address how the agency's performance measure, "percent of

campaign reports filed electronically,” would be achieved. In its FY09/10 Strategic Plan, one strategic goal is to “increase compliance with provision requiring complete and accurate financial disclosures, campaign reports, lobbyist reports that require filing by due date.” However, project documents do not address how this system will help SOS achieve this or any other strategic goal. With respect to technical objectives, SOS’s singular focus on replacing the campaign finance information system and using Oracle streaming technology is myopic, since technical objectives should address broader issues (platform independence; mature, proven and reliable hardware and software) and the ongoing ability to maintain and support the system with current resources. The “transition to operations” section of the document allows the agency to focus on what will be required to move from development and testing to operations. Instead of addressing where the system will be housed and who will support it, SOS focuses on getting resources from DoIT and legislators for independent validation and verification. Data security and business continuity are addressed, but must be reassessed based on security assessment results and current staffing. SOS must also determine if the system can be maintained internally or if contractors must be hired. SOS states that there are no consolidation opportunities; however, if done correctly, the new application will consolidate the COBOL- (Liberty Imaging/Pervasive) and Visual Basic-based (SOSKB) systems.

System Documentation. The requirements, design, and system-specifications documents are all interrelated because they define user, legal, procedural, and technical requirements. With regard to the requirements document, SOS remains rooted on a singular requirement, “an Oracle database design and data converted from the FileOne database,” instead of viewing the project more holistically and addressing all system legal, procedural and user requirements. The design document is not a testing plan, but a design of the system based on defined requirements. Those requirements are then tested against established criteria. System specifications relate to hardware and software components and cannot be couched in terms of a “statement of work.”

Assumptions, Constraints, and Dependencies. Project managers are required to identify assumptions, constraints and dependencies under which the project will operate. All three should encompass broader categories than project certification and completion. SOS makes no assumptions about business or technical staffing, sufficient funding, selection of technical platform, and receipt and setup of hardware.

Constraints usually apply to scope, schedule, and cost, all of which affect quality if not properly managed. Change to one element has a direct impact on the other two. For example, if the schedule is shortened, the cost will increase or the scope will decrease. The SOS-identified constraints relate to untimely approval of project certification documents and release of funds, missed developer and bi-annual report deadlines, and adequate user training (not sure if that means none or not enough). SOS does not identify how the identified constraints will affect scope, schedule, or cost.

Dependencies are elements or modules that rely on other modules. SOS limited dependencies to project certification and release of funds dependent on submission of completed project management documents. SOS did not identify other system dependencies even though this is not a standalone system that interacts with nothing.

Project Risks and Risk Management. Risk assessment is the process of identifying what can go wrong with the project and then developing strategies to mitigate the impact of, or avoid, the risk. Since mitigation or avoidance is not always possible, some risks must simply be accepted. However, risks must first be identified so decisions can be made to mitigate, avoid or accept. SOS identified preparation of certification documents, untimely approval by DoIT and the Department of Finance and Administration, participation by legislators and media, and in-house system development as risks. Critical technical risks are not identified, such as lack of development standards, competing projects, short timeframe, insufficient funding or staffing, scope change, or schedule slippage. The majority of the risks identified are external to the agency. The greatest risks to successful mission-critical system implementation are internal. Yet, the majority of the self-identified risks are external to the agency: developing the system in-house, to which SOS assigned a 10 percent probability of occurring, and a small inexperienced IT staff, as documented in two previous IT plans.

Change Control Process and Issue Management. Change control is a formal process to manage changes in a project so the project will remain on time and within budget. Changes could include new features or legislative requirements. The project manager is responsible for keeping the project on track. However, if there is a change that affects the schedule, budget, quality or risk and, depending on project process, a steering or executive committee should be involved. SOS states that legislative changes will be incorporated, but does not describe the process to ensure the project remains on time and within budget.

Issue management is similar to change control. Issues are usually identified by the project team, logged, prioritized, assigned for analysis, and resolved. All projects should have a structured methodology to identify, report, and analyze problems, as well as to approve and implement solutions. SOS does not have a structured, formalized process to manage issues as they arise, but rather refers to the governance flowchart as the issue-resolution method.

Critical Success Factors. The campaign finance reporting project should support the SOS mission, objectives and goals of the SOS. To achieve the agency's mission of administering elections and government ethics, critical inherent success factors need to be achieved.—These factors should include product quality and customer (legislator and media) satisfaction. Although completing the project by July 1, 2009, is a factor, meeting the date does little to support either the project or the agency's mission if the product is of poor quality or the customers are not satisfied. Likewise, if all project management documents are completed, but system documents are missing, then quality or satisfaction will be affected.

APPENDIX C

e-Mail Correspondence Regarding IT Projects

Date	From	To	Message
4/30/2009	Ron Martinez	Jose Hernandez	It appears I can avoid your firewall by routing to Simms or Oso Grande; Organizational structure appears weak. Brad seems independent of everyone.
5/3/2009	AJ Salazar	Jose Hernandez	DoIT kicked back corrections
5/6/2009	Ron Martinez	Jose Hernandez	Risks identified are quite weak. You are not likely to get a waiver on IV&V given the limited planning. You need to work on 95% of the errors before sending them to me to review.
5/11/2009	Ron Martinez	AJ Salazar	You will need to additional documents: ongoing agency projects and IT resources that are used to determine if an agency maybe over extended. You should be okay since ULP is vendor driven.
5/12/2009	AJ Salazar	Secretary Herrera	On track with both projects. Ron from DoIT will be coordinating an update of documents, progress on CFIS and a demo of CFIS capabilities
5/13/2009	AJ Salazar	Ron Martinez	Working to articulate in writing Brad's SRS, SDS and UAT documents
5/13/2009	Ron Martinez	AJ Salazar	Although it appears you are backing up daily, not sure if work in progress is not at risk. You are not using versioning or version control and the development computer may not be backed up. Use technical or business to identify what need to be developed. There is a lot of apprehension that SOS can deliver this project successfully without planning documents and a very short timeframe.
5/14/2009	Ron Martinez	Jose Hernandez	Change of Scope needs lots of work
5/20/2009	AJ Salazar	Secretary Herrera	Both project approved by TARC
5/20/2009	AJ Salazar	Brad Allen	Contact Srinivas at CAANES for the security assessment
5/26/2009	AJ Salazar	Jose Hernandez	As the project manager I need you to make sure remaining contingencies are resolved/handled
5/28/2009	AJ Salazar	Francisco Trujillo	We have a short timeframe and given PCC's concerns I still feel uncomfortable that the developer has all the data associated with the program. Need a plan of action to demonstrate progress.
6/2/2009	AJ Salazar	Brad Allen	CFIS should be up and running by July 1, 2009. The media is aware of our new system and our representation that they will be allowed to test the system and provide feedback
6/9/2009	AJ Salazar	Secretary Herrera	We are not on schedule. We should have started internal training. Have forwarded information to State of Washington for their review. They are willing to share source code at no cost should we fail.
6/10/2009	AJ Salazar	Secretary Herrera	Brad reports 60 - 70% done. DoIT consultant believes more like 5%
6/15/2009	AJ Salazar	Secretary Herrera	We need a contractor immediately to help Brad.
6/16/2009	AJ Salazar	Secretary Herrera	Candidate side is not very user friendly. Project is no where near completion. I do not recommend having anyone from the outside the organization look at the system in its current state.
6/17/2009	AJ Salazar	Kelli Fulgenzi	Brad did not make a back up tape of CFIS.

Source: SOS