California State
Board of Equalization

Special Project Report #2

Project Number 0860-094

Centralized Revenue Opportunity System (CROS)

Prepared by:
CROS Project Team
Board of Equalization
Sacramento, California

Prepared For:
California Technology Agency
Sacramento, California

Version 1.0

December 20, 2013

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Table of Contents

1. Executive Approval Transmittal 1
2. Information Technology: Project Summary Package 3
2.1 Section A: Executive Summary 3
2.2 Section B: Project Contacts 5
2.3 Section C: Project Relevance to State and/or Departmental Plans 6
2.4 Section D: Budget Information 7
2.5 Section E: Vendor Project Budget 8
2.6 Section F: Risk Assessment Information 9
3. Proposed Project Change 10
3.1 Project Background/Summary 10
3.2 Project Status 13
3.3 Reason for Proposed Change 14
3.4 Proposed Project Change 15
3.4.1 Accessibility 16
3.4.2 Impact of Proposed Change on the Project 16
3.4.3 Feasible Alternatives Considered 16
3.4.4 Implementation Plan 16
4. Updated Project Management Plan 17
4.1 Project Manager Qualifications 17
4.2 Project Management Methodology 17
4.3 Project Organization 18
4.4 Project Priorities 18
4.5 Project Plan 19
4.5.1 Project Scope 19
4.5.2 Project Assumptions 19
4.5.3 Project Phasing 19
4.5.4 Project Roles and Responsibilities 20
4.5.5 Revised Project Schedule 22
4.6 Project Monitoring and Oversight 23
4.7 Project Quality 23
4.8 Change Management 23
4.9 Authorization Required 23
5. Updated Risk Management Plan 24

5.1 Risk Register 24
6. Updated Economic Analysis Worksheets (EAWs) 25
7. Attachments 26

1. Executive Approval Transmittal

Information Technology Project Request

Special Project Report

Executive Approval Transmittal

Department Name			
California State Board of Equalization			
Project Title (maximum of 75 characters)			**Project Acronym**
Centralized Revenue Opportunity System			**CROS**
FSR Project ID	**FSR Approval Date**	**Department Priority**	**Agency Priority**
0860-094	**09/07/2011**	**1**	**1**

I am submitting the attached Special Project Report (SPR) in support of our request for the California Technology Agency's approval to continue development and/or implementation of this project.

I certify that the SPR was prepared in accordance with the State Administrative Manual Sections 4945-4945.2 and that the proposed project changes are consistent with our information management strategy as expressed in our current Agency Information Management Strategy (AIMS).

I have reviewed and agree with the information in the attached Special Project Report.

I also certify that the acquisition of the applicable information technology (IT) product(s) or service(s) required by my department that are subject to Government Code 11135 applying Section 508 of the Rehabilitation Act of 1973 as amended meets the requirements or qualifies for one or more exceptions (see following page).

APPROVAL SIGNATURES

Chief Information Officer		**Date Signed**
D F Fleming		12/19/13
Printed name:	Brenda Fleming	
Budget Officer		**Date Signed**
Larry Norris		12/19/13
Printed name:	Larry Norris	
Program Directors		**Date Signed**
		12-19-13
Printed name:	Jeffrey McGuire, Sales and Uses Taxes	
David Gau		12/19/13
Printed name:	David Gau, Property and Special Taxes	
Executive Director		**Date Signed**
Cynthia Bridges		12/20/13
Printed name:	Cynthia Bridges	

Executive Approval Transmittal
IT Accessibility Certification

Yes or No

Yes	**The Proposed Project Meets Government Code 11135 / Section 508 Requirements and no exceptions apply.**

Exceptions Not Requiring Alternative Means of Access

Yes or No	Accessibility Exception Justification
N/A	The IT project meets the definition of a national security system.
N/A	The IT project will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment (i.e., "Back Office Exception.)
N/A	The IT acquisition is acquired by a contractor incidental to a contract.

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
N/A	Meeting the accessibility requirements would constitute an "undue burden" (i.e., a significant difficulty or expense considering all agency resources). Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No commercial solution is available to meet the requirements for the IT project that provides for accessibility. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No solution is available to meet the requirements for the IT project that does not require a fundamental alteration in the nature of the product or its components. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.

2. Information Technology: Project Summary Package

2.1 Section A: Executive Summary

1.	Submittal Date	December 20, 2013

		FSR	SPR	PSP Only	Other:
2.	Type of Document		X		
	Project Number	0860-094			

			Estimated Project Dates	
3.	Project Title	Centralized Revenue Opportunity System	Start	End
	Project Acronym	CROS	09/01/2010	06/1/20
4	Submitting Department	Board of Equalization		
5	Reporting Agency	N/A		

6.	Project Objectives
	The BOE has developed long range business and strategic plans which include a technology component. This project will decrease the tax gap through increasing voluntary compliance, improving customer online services, and improving audit, collection and return processing activities. A key factor to achieving BOE's long range goals is to create an expanded and responsive tax infrastructure by moving to a functional organizational structure and creating a customer-centric automation system. BOE will use a systematic approach to change and be more responsive to the needs of its customers. A new system will allow the BOE to reengineer current program processes, adopt tax administration best practices, and obtain an effective case management system. This will enhance the efficiencies of BOE employees by streamlining and automating current program processes, reducing paper, and providing the ability to work securely anytime and from anyplace. An intuitive and easy to use system will also

8.	Major Milestones	Est. Complete Date
	Obtain CTA approval of FSR	09/07/2011
	SPR Approval	03/30/2012
	Release RFP to vendor pool	07/01/2013
	Receive final Bid Proposals	8/25/2014
	Notification of Award	12/16/2014
	Project Start Date	3/6/2015
	Project completion	6/1/2020
	PIER	12/31/2021
	Key Deliverables will be identified in SPR	

	reduce staff training time and will improve shared access to internal and external data for BOE employees and federal, state, and local tax partners. Obtaining flexible, agile, expandable, and sustainable technology will support program changes that will allow the timely implementation of legislative changes. The replacement of current standalone support systems and utilization of component based architecture of re-usable and shared services will allow the BOE to grow with new technology. This project will allow the BOE to meet the expectation of all of its customers into future years.			

7.	**Proposed Solution**
	The BOE expects the solution to generate additional revenue into the State General Fund. The CROS Project will replace the Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS) and develop an enterprise data warehouse. The proposed system will provide an integrated and automated solution that will use up-to-date tax collection, storage, account management, and data retrieval technologies to maximize the effectiveness of BOE's operations and staff. The proposed system will also provide efficiencies to businesses reducing the time and effort needed to interact with the BOE. BOE proposes a solution involving a performance-based, benefits-funded procurement of a vendor contract and BOE in-house development of specific components. The vendor contract will be for the purchase of an existing software product, necessary hardware, and vendor resources to customize the software according to BOE's needs. This software will provide the primary functionality for supporting program activities and generation of management reports. The vendor will be responsible for the overall project integration and assist in project change management activities. BOE staff will work with the vendor to provide legacy system data migration and modifications needed for ancillary systems to accommodate the new system and functionality. This project will be funded by increased revenue from implementation of the proposed system. Vendors must agree to provide the initial funding for hardware, software, and custom development and be paid by a portion of the revenue the proposed solution generates. The vendor contract will contain a maximum dollar cap for the vendor and the vendor will not receive full compensation if sufficient revenue levels are not met or if business program process deliverables are not provided**.**

2.2 Section B: Project Contacts

Project #	0860-094
Doc. Type	SPR

Executive Contacts								
	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
Executive Director	Cynthia	Bridges	916	445-4380		916	324-2586	Cynthia.Bridges@boe.ca.gov
Program Directors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Budget Officer	Larry	Norris	916	323-5128		916	322-3184	Larry.Norris@boe.ca.gov
CIO	Brenda	Fleming	916	445-8677		916	327-3483	Brenda.Fleming@boe.ca.gov
Project Sponsors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Project Director	Eric	Steen	916	322-9918		916	322-3391	Eric.Steen@boe.ca.gov
Direct Contacts								
	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
Primary Contact	Eric	Steen	916	322-9918		916	322-3391	Eric.Steen@boe.ca.gov
Technical Project Manager	Chris	Kahue	916	323-4333		916	322-3391	Chris.Kahue@boe.ca.gov
Business Project Manager	Michael	Skikos	916	322-5994		916	322-3391	Mike.Skikos@boe.ca.gov

2.3 Section C: Project Relevance to State and/or Departmental Plans

1.	What is the date of your current Operational Recovery Plan (ORP)?	Date	04/15/10
2.	What is the date of your current Agency Information Management Strategy (AIMS)?	Date	07/2010
3.	For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.	Doc.	Information Management Strategy (AIMS)
		Page #	6

Project #	0860-094
Doc. Type	SPR

		Yes	No
4.	Is the project reportable to control agencies?	X	
	If YES, CHECK all that apply:		
X	a) The project involves a budget action.		
	b) A new system development or acquisition that is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.		
X	c) The estimated total development and acquisition cost exceeds the departmental cost threshold and the project does not meet the criteria of a desktop and mobile computing commodity expenditure (see SAM 4989 – 4989.3).		
	d) The project meets a condition previously imposed by Technology Agency.		

2.4 Section D: Budget Information

Project #	0860-094
Doc. Type	SPR

Budget Augmentation Required?											
	No										
	Yes	X	If YES, indicate fiscal year(s) and associated amount:								
			FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
			$0	$0	$3,529,396	$8,866,656	$8,856,440	$64,624,062	$53,399,653	$59,519,498	48,552,824	7,001,607

	PROJECT COSTS												
1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	TOTAL
2.	One-Time Cost	$547,059	$2,677,177	$4,242,642	$8,866,656	$8,856,440	$58,176,560	$40,905,566	$46,990,655	$35,015,021	$0	$206,277,775
3.	Continuing Costs	$0	$0	$0	$0	$0	$11,694,292	$18,850,569	$19,463,358	$22,818,513	$29,705,847	$102,532,579
4.	TOTAL PROJECT BUDGET	$547,059	$2,677,177	$4,242,642	$8,866,656	$8,856,440	$69,870,852	$59,756,135	$66,454,013	$57,833,534	$29,705,847	$308,810,355
	PROJECT FINANCIAL BENEFITS											
5.	Cost Savings/ Avoidances	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6.	CROS Revenue Increase	$0	$0	$0	$0	$0	$75,000,000	$90,000,000	$120,000,000	$191,939,376	$200,000,000	$676,939,376
7.	Support Effort Revenue Increase	$0	$0	$38,745,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$504,448,000

2.5 Section E: Vendor Project Budget

Project #	0860-094
Doc. Type	SPR

Vendor Cost for FSR Development (if applicable)	N/A
Vendor Name	

VENDOR PROJECT BUDGET

1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	TOTAL
2.	Primary Vendor Budget	$0	$0	$0	$0	$0	$20,826,350	$28,115,573	$31,239,525	$23,950,303	$0	$104,131,750
3.	Independent Oversight Budget	$0	$13,744	$89,099	$175,000	$175,000	$175,000	$175,000	$175,000	$175,000	$0	$1,152,843
4.	IV&V Budget	$0	$0	$113,828	$175,000	$175,000	$674,700	$674,700	$674,700	$674,700	$0	$3,162,628
5.	Other Budget	$0	$622,092	$1,294,437	$1,675,400	$1,658,200	$1,665,400	$1,665,400	$1,165,400	$1,045,400	$0	$10,791,729
6.	TOTAL VENDOR BUDGET	$0	$635,836	$1,497,364	$2,025,400	$2,008,200	$23,341,450	$30,630,673	$33,254,625	$25,845,403	$0	$119,238,950

---------- (Applies to SPR only) ----------

PRIMARY VENDOR HISTORY SPECIFIC TO THIS PROJECT

7.	Primary Vendor	
8.	Contract Start Date	
9.	Contract End Date (projected)	
10.	Amount	$

PRIMARY VENDOR CONTACTS

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
11.									

2.6 Section F: Risk Assessment Information

Project #	0860-094
Doc. Type	SPR

RISK ASSESSMENT

	Yes	No
Has a Risk Management Plan been developed for this project?	X	

General Comment(s)
All identified risks **will be included in the** detailed Risk Management Plan in accordance with the BOE Project Management Methodology (PMM). The project manager will have primary day-to-day responsibility for managing risks and will conduct a risk analysis for the project. Risks will be analyzed, classified and prioritized to reflect probability of occurrence and impact. The project manager will be responsible for tracking risks, determining status relative to risk triggers and implement risk responses as necessary. Identified risks will be escalated to the appropriate levels as necessary in order to properly mitigate the risks. An update on the condition of these risks will be included in the on-going status report to management.

3. Proposed Project Change

This Special Project Report (SPR) addresses a nine-month change in the procurement schedule and extends the implementation approach by one year. The year extension is based on vendor feedback to a Request for Information submitted in August 2012 and interactions with the Department of General Services and the Department of Technology. This one-year extension is consistent with lessons learned from other State-wide projects such as Franchise Tax Board's (FTB) *Enterprise Data to Revenue*. Allowing for additional time during implementation, as did FTB, mitigates unanticipated risks. This SPR reports actual costs to date and updates estimated costs based on the timeline changes. It also summarizes progress made to date.

3.1 Project Background/Summary

Program Overview

The Board of Equalization (BOE) administers more than 34 tax and fee programs which provide approximately 35% of the State's annual revenue. These taxes and fees generated $53.7 billion in revenue during Fiscal Year (FY) 2010-11. Collected revenue supports public safety, transportation, housing, health and social services, and natural resources management. Of the sales and use tax revenues $13.3 billion are allocated to local tax jurisdictions. To carry out the mission and goals of the agency, the BOE employs more than 4,700 employees in its Sacramento headquarters and 26 field offices, including three out-of-state offices.

As a principal revenue-generating agency of the State, the BOE is often required to interpret and implement statutory changes mandated by the Legislature. In the current budgetary environment, the Legislature has sought new revenue sources and passed legislation that changed the number of tax/fee programs, expanded the number of customers required to register with BOE, and modified existing tax/fee rates. Accommodating such mandates significantly impacts workload for program and information technology staff. Impacts include, but are not limited to, modifying and creating tax forms, developing new policies and procedures, notifying customers, reprogramming existing systems, and adding system applications.

To meet the needs of the Legislature, public, and our staff, BOE has undertaken a business-transformation and information technology modernization effort to accomplish the following:

- Decrease the tax and fee gap.
- Improve service to tax and fee payers and other customers.
- Reengineer and improve business processes.
- Provide ability to work securely anytime and from anywhere.
- Develop intuitive and easy–to-use-system for internal and external parties.
- Improve access to data and data sharing.
- Obtain flexible, agile, expandable and sustainable technology to support business changes.
- Replace legacy systems such as the Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS).
- Develop an enterprise data warehouse.

Project Background

On May 23, 2011 the BOE submitted a Feasibility Study Report (FSR) in support of the CROS Project. On March 15, 2012, the CROS Project submitted an SPR to initiate the parallel initiatives, also known as pre-implementation activities, described below. On July 1, 2013, with approval from the Department of Technology, formerly the California Technology Agency, the BOE released the CROS RFP. The release of the CROS RFP initiated the solicitation phase.

Pre-implementation activities prepare the organization for implementation, mitigate risk, lessen dependency on the prime contractor by engaging BOE staff, and generate increased revenue. The teams undertaking pre-implementation activities were renamed from titles in the previous SPR to better communicate their purpose. Team descriptions and duties are provided below. Team accomplishments are outlined in *Section 3.2 Project Status*.

1. Program Area Readiness (PAR). The BOE's PAR team consists of BOE employees with program-area expertise, primarily to ensure that solution requirements are sufficient. This team's responsibility is as follow:

- Document business rules that govern CROS functionality.
- Assist with crafting a data dictionary that explains legacy systems' data.
- Identify and analyze ancillary systems (i.e., workarounds) to IRIS, ACMS, and Timber Tax.
- Provide subject matter expert (SME) support.

2. Data Readiness. The Data Readiness team comprises individuals with expert knowledge of BOE's data and business functions. This team prepares the organization for data conversion and supports early revenue wins through the following activities:

- Assess legacy data quality.
- Cleanse data in legacy systems.
- Implement a repeatable strategy for cleansing existing and new data.
- Develop a comprehensive data dictionary that explains legacy systems' data.
- Furnish cleansed data to collectors and auditors to support revenue generation.

3. External Interfaces. The Interface team facilitates data exchange with external parties. The team's primary duties are as follows:

- Catalogue all data exchanges within the scope of CROS.
- Provide an online catalog of interfaces.
- Centralize and streamline the automation of the data exchanges.
- Provide better access to third-party data, enabling data analytics.

4. Business Intelligence (BI). The BI team comprises legacy data experts that perform analytics to support the project's benefits-funded procurement. Its duties are as follow:

- Create a repeatable process to generate the ten revenue stream reports that comprise the CROS compensation model.

- Assess the BOE's data analytics capabilities and make recommendations. The assessment includes identifying data sources, evaluating analysis methods, and reporting requirements.
- Analyze data (furnished by the Data Readiness and External Interfaces teams) to identify CROS revenue increases.

Department of Technology approved the CROS Special Project Report on May 18, 2012 subject to conditions. The following table outlines conditions and steps taken to adhere to them.

Condition	Adherence
Approval of the SPR is limited to the planning, request for proposal (RFP) development, and procurement phases. Total approved cost for these phases of the project will not exceed $22,734,168.	BOE is managing to the approved cost amount.
During the RFP development phase, the State Board of Equalization (BOE) will coordinate with the Department of Finance (Finance) to validate the proposed revenue collection and vendor compensation model to be contained in the RFP before its release to the vendor community.	BOE worked with the Department of Finance and received approval of the compensation model on March 27, 2013.
BOE will engage the services of an Independent Verification and Validation vendor in reviewing requirements before the RFP is released and will retain the services for requirements validation and traceability through the implementation phase of the project.	BOE hired a company to perform Independent Verification and Validation (IV&V) in August 2012 and continues to utilize its services.
BOE will continue to work with the Franchise Tax Board (FTB) and the Employment Development Department (EDD) on the procurement strategy so as to leverage their lessons learned from recent IT procurements. BOE will continue to consult with FTB and EDD on opportunities to coordinate and collaborate on various aspects of the business processes affected by CROS and seek to avoid unnecessary duplication and incompatibility of systems and business methods. BOE will work with FTB and EDD to identify opportunities to share data and processes between the agencies' IT systems as part of the ongoing IT project efforts of the three agencies, including CROS, the Enterprise Data to Revenue and the Accounting and Compliance Enterprise System projects, to the extent feasible without significant disruption or risk to those projects.	BOE stays in regular contact with FTB and EDD and receives project updates. Through these contacts, BOE has addressed the subjects of vendor compensation, vendor management, communications, data conversion, data exchange, and other topics. CROS team members are part of the Joint Agency Data Sharing Team, which consists of BOE, FTB, and EDD. This team handles topics such as data format standards and exchange opportunities. The CROS Project has defined the data exchange between the BOE, FTB, and EDD and is working on ways to streamline and automate exchanges. Recently, BOE won an award for collaborating with FTB and EDD on the Financial Institution Record Match (FIRM) program which identifies delinquent debtor accounts through a record match process.

Condition	Adherence
Prior to contract award, BOE must receive in writing Finance's concurrence with the proposed vendor's revenue collection and compensation model, as well as associated contract language.	BOE will obtain Finance's concurrence with the vendor's revenue collection and compensation model before awarding the contract.
BOE will provide a CROS Project governance plan within 60 days from the date of this approval which will include responsibilities, processes, and a strong communication plan including the CROS Project Director, the Chief Information Officer and the Chief Technology Officer.	CROS submitted a governance plan to CTA in June 2012 describing the specific roles and responsibilities of the project team and its stakeholders.

3.2 Project Status

Two significant changes occurred since the March 21, 2013 SPR. First, on July 1, 2013, the authority for the procurement transferred from the Department of General Services to Department of Technology. Second, the solicitation methodology changed from a traditional procurement to a procurement governed by PCC 6611.

The project has achieved the following accomplishments:

Procurement

- Released the CROS RFP on July 1, 2013.
- Developed the Evaluation Plan.
- Developed training modules for the CROS evaluator training on the procurement and key solicitation milestones and deliverables.
- Delivered a Procurement Orientation training module to all CROS Evaluators on July 30, 2013.
- Conducted a Bidder's Conference on August 22, 2013 which included a presentation of key sections in the RFP.
- Released Addendum #1 on August 16, 2013.
- Released Addendum #2 on September 23, 2013.
- Developed processes and tools to track bidder interactions and RFP change control items.

Program Area Readiness

- Completed a pilot to test process and tools for gathering, documenting, validating and obtaining approval of business rules related to the requirements listed in the RFP.
- Developed, reviewed, and received approval of 45% of the Business rules.

Data Readiness

- Extracted all data from the core legacy system (IRIS) and placed data into a staging environment.
- Established data quality tools to assess IRIS data.
- Created a data governance team to evaluate and resolve data errors.
- Established data replication between the production and the staging environments to reduce the cost of data extraction, support data analytics, and facilitate conversion.
- Assisted with the collection of an additional $20.8 million using cleansed data.

External Interfaces

- Identified and fully defined 127 interfaces to date.
- Coordinated with various organizations within BOE to automate the acquisition and delivery of data between BOE and external parties.

Business Intelligence

- Automated five of ten revenue stream reports that comprise the CROS compensation model.
- Established a foundation for improved data analytics and reporting to assist with revenue collection and management decision making.

3.3 Reason for Proposed Change

BOE has encountered two issues which necessitated a revised SPR due to changes in Schedule and Cost.

Schedule

The RFP release date was delayed about 9 months, thus impacting the key action dates and procurement deliverables for the CROS solicitation. This variance exceeded the 10% threshold.

Cost

The CROS Project is about $5 million ($5,000,000) dollars **less than** the March 2012 SPR1 budget to date (FY 2010/11 – FY 2012/13). Most of the shortfall between actual and planned expenditures is related to Staff Costs (Salary and Benefits) $2.7 million ($2,700,000). The CROS Project is also under budget in other areas: Hardware Purchase $731K, Software Purchase $846K, and Other Contract Services $1.2 million.

The cause for this cumulative shortfall is as follows: First, the SPR planned for 48.2 PY resources during the FY 2012-13, but the BCP was approved for only 24 PYs. Second, the CROS Project achieved unanticipated savings in one-time hardware and software purchases. For example, the Project budgeted $500K to acquire data-cleansing software. Bearing this cost proved unnecessary because the contractor hired to assist with data cleansing brought its own tools. Third, the process of hiring qualified contractors that specialize in legacy data conversion, interfaces, and data analytics took longer than expected.

FY 2010/11(Project Start) - FY 2012/13	Actual	Budget	Difference
Staff (Salaries & Benefits)	$4,455,442	$7,157,919	($2,702,477)
Hardware Purchase	$209,215	$940,570	($731,355)
Software Purchase/License	$190,793	$1,037,658	($846,865)
Telecommunications	$0	$429	($429)
Contract Services - Software Customization	$0	$0	$0
Contract Services - Project Management	$519,980	$413,120	$106,860
Contract Services - Project Oversight	$102,843	$220,000	($117,157)
Contract Services - IV&V Services	$113,828	$0	$113,828
Contract Services - Other Contract Services	$1,396,549	$2,612,587	($1,216,038)

FY 2010/11(Project Start) - FY 2012/13	Actual	Budget	Difference
Data Center Services	$289,689	$57,767	$231,922
Agency Facilities	$0	$0	$0
Other	$188,538	$394,626	($206,088)
Total One-Time IT Project Costs	$7,466,876	$12,834,676	($5,367,800)

3.4 Proposed Project Change

The CROS Project is proposing to re-baseline the schedule and costs based on the new key action dates provided in the CROS RFP 086-094 released on July 1, 2013. The planning involved re-evaluating the planned resources and expenditures for the project.

Schedule

The schedule was revised based on an RFP release date of July 1, 2013. Additionally, feedback received from the vendors to an RFI was taken into account. Key changes in the overall schedule include:

- Release of the RFP and follow-on key action dates slipped nine months.
- The CROS Implementation is now planned to start March 2015.
- Implementation of the CROS Solution was increased from 3 years to 4 years (based on vendor feedback to the RFI).

The assumptions, milestones, activities and deliverables supporting the key solicitation action dates remain unchanged. The timing of these activities has been adjusted to align with the new solicitation timeline.

Cost

The timeline changes increased cost projections by $39,393,086. Although the length of the implementation increased cost projections, the estimated costs for the primary vendor budget did not change.

	Dec 2013 SPR2	Mar 2012 SPR1	Difference
Total One-Time Costs	$206,277,775	$185,137,502	$21,140,273
Total Continuing Costs	$102,532,579	$84,279,765	$18,252,814
Total Project Costs	$308,810,355	$269,417,269	$39,393,086

See Attachment B for a detailed cost comparison. Most increases are due to the following:

- Base Salary Costs increased by 3% beginning July 1, 2013 and Benefits by 8.25%. Staff (Salary and Benefits) account for sixteen (16) million of the increase in Total One-Time Costs and six (6) million in Total Continuing Costs.
- Data cleansing costs increased based on the need to perform more data extractions than originally planned. Data resides in the IRIS Adabas environment housed on the mainframe at OTech. OTech charges its customers based on mainframe processing, and extraction results in significant process utilization. BOE executive leadership requested reduced rates to support the CROS Project, but OTech was unable to adjust rates on a per customer basis.
- Due to the complexity of legacy data, interfaces, and business rules, the BOE plans to retain current staff and contractors dedicated to the parallel initiatives. The former SPR only planned

these resources and associated costs through procurement. The justification for the revised approach is as follows:

1. The effort is more substantial than originally understood. (The BOE always maintained that it would adjust its plan for these efforts once analysis was complete.)
2. If the BOE does not handle these tasks, then the prime contractor will.
3. The cost for the current resources is likely significantly lower than the cost for the prime contractor to perform this work.
4. Existing team members know BOE's data, systems, and business. Due to the steep learning curve, existing resources will be more effective than a contractor unfamiliar with the existing legacy environment. (Evidence for this assertion is the challenge faced when developing revenue-stream reports supporting the cost and compensation model.)

3.4.1 Accessibility

The RFP's contract requires compliance with the accessibility requirements of Government Code 11135/Section 508, and BOE will evaluate proposed solutions accordingly. BOE's IV&V consultant will ensure that the implemented solution conformance with Section 508.

3.4.2 Impact of Proposed Change on the Project

The schedule delay impacts the resource need, project costs and contract award date. The impact is the delay in the contract award date and the start and end of the implementation period.

3.4.3 Feasible Alternatives Considered

There are no feasible alternatives available to address the issues identified beyond the proposed changes. The changes identified in this document are primarily being implemented based on the thresholds in the reporting requirements required by the California Technology Agency.

3.4.4 Implementation Plan

The CROS Project Implementation approach identified in the CROS FSR and subsequent SPR will not change other than a revision to the projected implementation start date and a realignment of project costs.

4. Updated Project Management Plan

The BOE is committed to the success of the CROS Project. To this end, BOE has developed a project management plan that uses the CTA's Project Management Methodology (CA PMM), as presented in the State Information Management Manual (SIMM).

This project management plan is presented in the following sections:

4.1 Project Manager Qualifications

4.2 Project Management Methodology

4.3 Project Organization

4.4 Project Priorities

4.5 Project Plan

4.6 Project Monitoring

4.7 Project Quality

4.8 Change Management

4.9 Authorization Required

4.1 Project Manager Qualifications

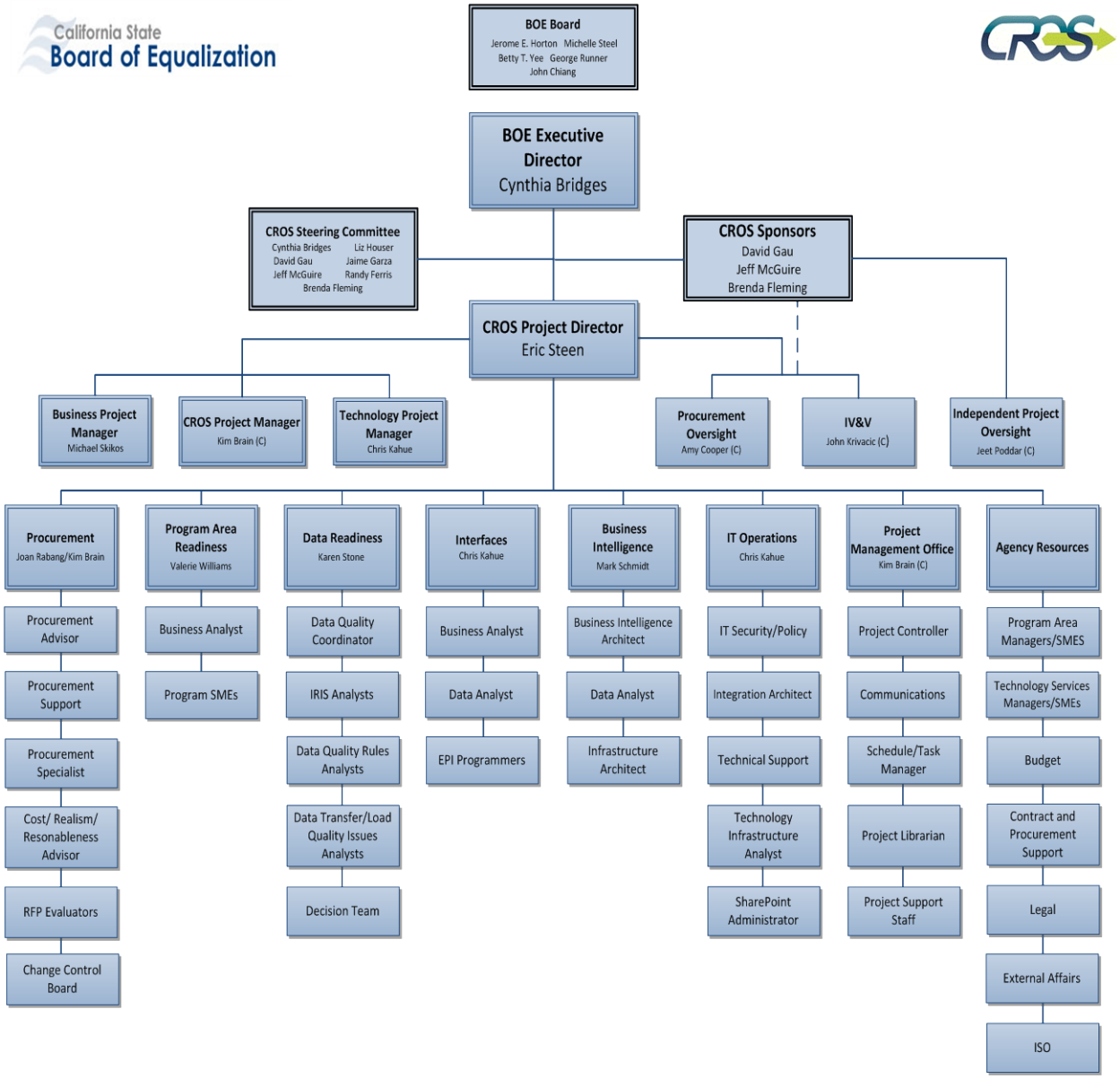
Eric Steen continues to be the Project Director as well as Kim Brain, Project Manager and Chris Kahue as the Technical Project Manager. Mike Skikos is the new Business Project Manager, replacing Larry Bergkamp.

4.2 Project Management Methodology

The project management methodology described in the FSR Project Management Methodology, Section 6.2, continues to be followed, and is aligned with the California Project Management Methodology (SIMM section 17).

4.3 Project Organization

A revised Project Organization Chart is provided below.



4.4 Project Priorities

The project trade-off matrix shows the priority of project schedule, scope, resources and quality, and uses a factor of 1 (highest) to 4 (lowest) for each of the categories. The project priorities have not changed from those provided in the FSR.

Schedule	Scope	Resources	Quality
4	1	3	2

4.5 Project Plan

4.5.1 Project Scope

The CROS Project was approved to:

- Replace the IRIS and ACMS systems.
- Provide an enterprise data warehouse.
- Expand customer online services.
- Provide assistance with Organizational Change Management.
- Acquire a new system through the use of a performance-based, benefits-funded vendor contract.

There has been no change to the Project Scope.

4.5.2 Project Assumptions

The major assumptions outlined in the FSR remain the same in addition to the following.

- The CROS Solution will be located at the State Data Center at OTech.
- BOE Data Readiness team will extract and cleanse the legacy system data to the fullest extent possible prior to the bidder selection and arrival. BOE will provide the data to the vendor in SQL Server for conversion to new CROS system.
- BOE will provide the technical and data subject matter experts to catalogue and automate external data exchanges.
- BOE will provide program and functional subject matter experts to define business rules.

4.5.3 Project Phasing

The CROS project implementation approach identified in the FSR will not change. Implementation phases will be addressed in a subsequent SPR once a vendor is selected.

4.5.4 Project Roles and Responsibilities

The project organizational structure was realigned functionally. The roles and responsibilities of the major participants in the project have not changed and are listed in the table below; in addition to the major participants, we addressed the changes that have occurred since the last SPR.

SPR Position	Roles & Responsibilities
Project Director	• Direct the planning, execution of all project activities, teams, and resources toward project success. • Decision maker regarding issues that affect minor milestones with the project including changes to scope, schedule, and budget. • Resolve issues that cannot be resolved by the project team. • Elevate issues as necessary to the Steering Committee as needed. • Report project status to the Board Members, Project Steering Committee, Department Head Committee, and all external stakeholders.
Business Project Manager	• Liaison to BOE program managers. • Final review of all business deliverables and ensures development and quality of business project deliverables. • Provide updates and escalates issues as needed to the Project Director and Project Manager. • Work with project manager to update schedule and ensure business activities are executed and updated to reflect project needs. • Review project risks; establishes and implements mitigation and contingency procedures. • Fulfill project business resource needs. • Approve routine (office supplies, etc.) project expenditures. • Handle administrative needs of the business team members.
Technical Project Manager	• Liaison to BOE technical managers. • Final review of all technical deliverables and ensures development and quality of business project deliverables. • Provide updates and escalates issues as needed to the Project Director and Project Manager. • Work with project manager to update schedule and ensure technical activities are executed and updated to reflect project needs. • Review project risks; establishes and implements mitigation and contingency procedures. • Fulfill project technical resource needs. • Handle administrative needs of the technical team members.

SPR Position	Roles & Responsibilities
Project Manager	• Plan, initiate, execute, control, and close the CROS Project. • Manage and direct procurement. • Coordinate execution of business and technical deliverables with Business and Technical Project managers. • Develop and implement project plans. • Develop and implement plans, standards, processes for managing project schedules, risks, resources, costs. • Track project risks/issues and costs and escalates issues to the Project Director. • Prepare CTA monthly report and other project status reports as needed. • Recommend responses to oversight findings. • Provide status to Project Director. • Prepare responses to CROS project inquiries/status reports as needed.
Program Area Readiness Team Lead	• Provide overall guidance for the Initiative. • Monitor and control execution. • Develop, train and implement the standards, procedures, communication channels, tools, repositories, reporting and tracking mechanisms, and key performance indicators to successfully deliver business rules and procedural data quality rules. • Identify and escalate risks and issues to the Project Manager and Project Director as appropriate. • Build relationships and inroad with BOE program stakeholders to ensure timely notification of changes in program area requirements within the scope of CROS. • Create Charter and Schedule.
Data Readiness Team Lead	• Ensure data across all legacy systems and subsystems are mapped, that data quality rules are well documented, that scripts to extract and transform data from legacy assets are developed. • Monitor and control execution of planned Data Readiness tasks for all systems. • Establish a process and the associated procedures that provides for a single point of authority for access to data environments. • Identify and escalate issues. • Maintain initiative schedule. • Identify and escalate risk and issues to the Project Manager and Project Director.
Interface Team Lead	• Deliver a catalogue of interfaces within the scope of CROS. • Provide overall guidance for the initiative. • Monitor and control execution. • Identify and escalate risks and issues to the Project Manager and Director. • Create Charter and schedule.

SPR Position	Roles & Responsibilities
Business Intelligence Team Lead	• Deliver a repeatable process for generating the 10 management performance reports within the scope of the CROS compensation model. • Provide overall guidance for the Initiative. • Monitor and control execution and progress toward milestones. • Identify issues and risks, and adjust plans accordingly. • Identify and escalate risks and issues to the CROS Project Manager and Project Director. • Create Charter and Schedule.

4.5.5 Revised Project Schedule

The most significant change in schedule is that the contract award is projected for March 5, 2015 instead of June 30, 2014, and due to the change from a procurement governed by 12100 to 6611, key action dates were revised to remove the public cost opening and the last day to protest the selection.

#	Action	March 2012 SPR1	December 2013 SPR2
1	Release of RFP	10/22/12	7/1/13
2	Bidders' Library is available	10/22/12	7/1/13
3	Last day to submit a Letter of Intent to Bid	11/19/12	8/30/13
4	Bidders' Conference	12/5/12	8/22/13
5	Last day to submit questions prior to Conceptual Proposals	12/5/12	9/20/13
6	Submission of Conceptual Proposals	1/22/13	10/2/13
7	Confidential discussions with individual bidders	2/4/13-2/20/13	10/21/13-12/6/13
8	Last day to submit questions prior to draft proposals	4/10/13	1/15/14
9	Last day to request a change to RFP requirements	10/4/13	1/16/14
10	Last day to file initial protest of requirements	10/18/13	2/6/14
11	Submission of Draft Proposals	7/22/13	2/20/14
12	Draft Proposal confidential discussions	7/29/13-8/2/13	3/10/14-5/23/14
13	Last day to submit questions prior to final proposals	9/6/13	6/13/14
14	Submission of Final Proposals	11/12/13	8/25/14
15	Public Cost Opening	3/13/14	N/A
16	Notice of Intent to enter into Negotiations	N/A	11/14/14

#	Action	March 2012 SPR1	December 2013 SPR2
17	Notification of Intent to Award Notification of Award	6/18/14 N/A	N/A 12/16/14
18	Last day to protest selection	4/16/14	N/A
19	Contract award and execution	6/30/14	3/5/15
20	Project Start Date	7/1/14	3/6/15
21	Project Implementation Date	6/30/17	6/1/20

4.6 Project Monitoring and Oversight

Department of Technology has assigned an Independent Project Oversight Consultant (IPOC) who attends key project meetings and reviews project management artifacts and deliverables.

The project has reviewed the complexity assessment, and there are no changes. The project's criticality/risk rating is high.

Project Status Reports are prepared monthly by the Project Management Office staff and submitted to the CROS Project Director for review. The Project Director approves the report and forwards to Department of Technology.

IV&V is being conducted to review and provide input on the technical deliverables of the project.

Recurring status meetings communicate:

- Tasks accomplished last month.
- Tasks that missed scheduled completion dates and the related impacts.
- Upcoming tasks planned for current month.
- Identification, progress or outcomes of problems/issues.
- Identification of new risks.
- Occurrence of risks.
- Risk mitigation.

4.7 Project Quality

The BOE's commitment to project quality continues, along with the established quality assurance processes approved in the FSR. The CROS initiatives have integrated quality reviews of key project deliverables into the development cycle.

4.8 Change Management

The change management methodology approved in the FSR remains in place and is being used to manage change throughout the duration of the Project. In addition, CROS initiatives involve all BOE giving them the opportunity to shape the future and the CROS solution.

4.9 Authorization Required

N/A

5. Updated Risk Management Plan

The CROS Project Management Risk Plan contains a methodology for identifying, classifying, quantifying, and tracking risk and issues.

5.1 Risk Register

See Attachment A for an updated risk log. This log contains the high and medium risks the CROS project is tracking. The log contains:

- risk id
- creation date – the date the risk was identified
- title - a brief summary of the risk
- description – an explanation of the risk event, consequence to the project, or negative impact on a project objective
- probability – the likelihood the risk event will occur
- impact – if the risk is triggered, the affect it will have on the CROS project
- affected areas – scope, schedule, cost, revenue, quality
- trigger – an event that will cause the risk to occur
- actions taken – the events, actions the project has taken to prevent the risk from occurring
- contingency plans/mitigations – course of action the project will take if the risk has been triggered

6. Updated Economic Analysis Worksheets (EAWs)

Attachment B – SPR1 to SPR2 Cost *Comparison* provides a detailed cost comparison between March 2012 SPR1 and this SPR2.

See Attachment C for the required SPR EAWs.

7. Attachments

Attachment A – CROS Risk Log

Attachment B– SPR1 to SPR2 Cost comparison

Attachment C – CROS Economic Analysis Worksheets (EAWs)

Attachment D – Approved SPR1 March 2012

Attachment E – Approved FSR May 2011

ID	Creation Date	Title	Description	Probability	Impact	Affected Areas	Trigger	Actions Taken	Contingency Plans/Mitigations
60	9/24/2012	Complexity of compensation model may deter bidder competition	If the compensation model is too complex for bidders to propose a solution, there may be little to no competition. Elements added to the BOE proposed compensation model that may be areas of concern to bidders: - growth factors to apply to revenue streams; - removal of growth factor threshhold criteria; - vendor to reimburse the State for start up and one-time project costs (50% of State project costs).	70.0%	4	Schedule, Cost, Quality	Receipt of the Letter of Intent to Bid; Receipt of Draf	12/3/12 Awaiting feedback from DGS on the comp model. KB 12/12/12 DGS and CROS may need to discuss comp model with DOF. KB 3/31/13 IPOC documented risk in IPOR; DOF receives copy of IPOR. KB 5/8/13 DGS and CTA (will be responsible for IT procurements effective 7-1-13) were provided walk-thru of comp model and participated in discussions regarding the issues with the model. CTA suggested CROS consider conducting RFI on comp model to solicit feedback/input from potential bidders. KB 9/16/13 Questions from bidders pertaining to the Comp Model will be addressed during confidential discussions. KB	9/24/12 provide detailed feedback/analysis on issues where a change DOF is requesting will put competition at risk to demonstrate why the changes would be detrimental to the project; 9/30/12 Solicit input from vendors who did not respond; discuss issues with DOF. KB 5/9/13 Release an RFI for Section VII (Comp Model) and Appendix E to solicit feedback/comments on the comp model from potential bidders. Based upon feedback, appropriate action plan will be developed; if appropriate, develop strategies to address potential that no bids will be received or only one bid will be received. KB
112	8/2/2013	Resource contention with other enterprise initiatives	If CROS needs to compete for resources due to other initiatives underway at BOE, the impact to the project will be the quality of the solution selected and implemented by BOE.	100.0%	3	Quality, Schedule, Scope, Cost	Ongoing	8/2/13 CROS management team reviewed the MRT list of projects and identified all the projects that overlap with the scope of CROS and created a recommendeddisposition to each (overlapping) project. KB 8/13/13 Project Director raised issue to Executive Director and CIO and recommended BOE add items that will help CROS succeed: 1) implement a B2B gateway that automates data exchange; 2) conduct a data warehouse and Business Intelligence (BI) initiative that assesses current BI practices and lays the groundwork for the CROS vendor; 3) conduct a technical and security audit to assist the ISO and TSD harden our environment. PD indicated this will be discussed at the next DHC. KB 8/31/13 CROS is able to get the resources required to perform CROS project activities. KB	8/2/13 Raise issue to Executive Director. KB 8/13/13 Assess impact to project timeline if BOE resources are not available when planned; adjust schedule accordingly. KB
22	9/16/2011	Contract negotiations are to be led by an outside department, not BOE	If BOE takes a back seat to contract negotiation with the vendor, this reality could impact the schedule, cost, quality and scope of the project.	90.0%	4	Cost, Quality, Schedule, Scope	Receipt of the draft proposals	7/15/13 Department of Technology's Procurment Offical ensured that the CROS Director will be able to participate in contract negoitations. 10/1/13 Procurement team is crafting the Negotiations Plan which addresses BOE participation and the negotiation team roles. KB	9/29/11 Appeal to procurement governance (Department of Technology, DOF). CK 10/15/11 Involve Department of Technology in the development of the negotiations plan. KB
30	6/11/2010	New legislation results in (legacy) system changes	If new legislation passes that mandates (legacy) system changes requiring BOE resources, it may impact and could result in changes to requirements, implementation delay, or additional costs.	70.0%	3	Cost, Schedule, Scope	Legislation	Impact to CROS is considered in analysis of proposed legislation. 12/1/12 BOE received funding to enable business and technical units to backfill behind required CROS positions. KB 6/4/12 The CROS project incorported a change control process into the RFP's SOW to accomodate unanticipated mandated changes. KB 5/15/13 Pulse points established and CROS is embedded in several processes within TSD to become aware of changes to legacy systems. KB	Adjust CROS schedule and scope to address additional requirements as imposed by legislative mandates. Adjust resource availability based on resource conflicts due to legislative changes. Develop change requests as necessary. Hire resources to address changes in legacy system.

ID	Creation Date	Title	Description	Probability	Impact	Affected Areas	Trigger	Actions Taken	Contingency Plans/Mitigations
39	6/11/2010	Lack of competitive procurement may result in higher cost	If the procurement process is not competitive, then the cost of the solution may be higher than anticipated (not the best value for the State).	10.0%	3	Quality, Cost, Scope	Receipt of final proposals	8/15/2011 CROS FSR available to public via CTA website and BOE website. KB 3/16/2012 RFI issued to bidders and CROS plans to incorporate feedback into RFP. KB 4/15/2013 Procurement process modified to include time for implementing mitigations strategies below: contract negotiations; bidder's conference; confidential discussions with bidders after conceptual, draft proosals; procurement model is solution based; Bidder's Library available to bidders. KB	Use PCC 6611 to negotiate best value for the State.
42	3/2/2012	Vendors revenue generation strategies at odds with BOE policy	IfCROS bidders rely on strategies to generate revenue that are at odds with BOE Policy, the impact may preclude innovation and impact vendor compensation and how much money CROS can realistically generate.	30.0%	4	Cost, Revenue	Draft Proposals	BOE proactively documented potential policy conflicts. BOE and vendors are discussing potential impacts.	10/11/13 Mitigation Strategies Provide feedback to bidders during draft proposal confidential discussions related to problems with their proposed strategies; Socialize BOE executives and board members.
70	6/8/2012	BOE staff may lack required skills and knowledge to effectively review and approve deliverables	If BOE staff lacks sufficient experience or skills to review all deliverables, then staff may approve deliverables that are inadequate, or it may overemphasize aspects of the solution that are sufficient, which forces the vendor to improperly focus its efforts, often neglecting areas in need of attention.	30.0%	3	Cost, Quality, Schedule, Scope		9/5/13 Planning for contract resources in the development of the SPR. KB	9/5/13 Mitigation strategies: - Identify staff members who are well qualified to review technical, functional, and management deliverables. - Follow through on the technical training plan proposed by vendor. An initial training plan is required at bid time to enable BOE to begin this process. CROS is leveraging industry standards (IEEE, PMI, and ITIL), which allow BOE to leverage training available in the marketplace. - Ensure that qualified reviewers possess the authority to evaluate and approve or deny deliverables. - Ensure that deliverable review is prioritized. (For example, the quality of the communication plan is less important than the quality of the data dictionary.) - Ensure that IV&V resources can shore up gaps in staff skills and knowledge
79	12/1/2012	Director leaves the CROS project	If the Director leaves the CROS Project, the vision and direction for the CROS solution and initiatives as well as the confidence the Board, BOE executive management, and the control agencies have in the project leadership may be impacted.	10.0%	4	Schedule	Leave Announcement		12/14/12 Succession planning. KB

Staff (Salaries & Benefits)

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	499,503	1,982,125	4,676,291	5,829,185	9,942,444	8,860,858	7,866,939	-	-	-	39,657,345
SPR2 - Dec 2013	499,503	1,719,639	2,236,300	6,402,342	6,340,742	11,083,063	9,741,206	9,066,963	8,974,552	-	56,064,310
Change	-	(262,486)	(2,439,991)	573,157	(3,601,702)	2,222,205	1,874,267	9,066,963	8,974,552	-	16,406,965

Explanation

FY 12/13- Staff costs were less due to vacant positions;
FY 13/14 - Overall Salary Costs increased: 3% Base Salary increase beginning 7/1/13 & 8.25% for Benefits; Revised staffing needs based on updated project implementation schedule;
FY 14/15 - Costs reduced due to revised implementation schedule; Changes in remaining FYs are due to revised staffing analysis;
FY 15/16 - Implementation begins fully in FY 15/16 and continues for 4 years.

Hardware Purchase

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	-	95,170	845,400	48,200	4,877,900	4,230,000	-	-	-	-	10,096,670
SPR2 - Dec 2013	-	20,893	188,323	-	48,200	5,406,400	39,100	4,230,000	-	-	9,932,916
Change	-	(74,277)	(657,077)	(48,200)	(4,829,700)	1,176,400	39,100	4,230,000	-	-	(163,754)

Explanation

FY 12/13 - Parallel Initiatives server, network and storage ($660,000) was less than estimated;
FY 14/15 - Documentum hardware purchase delayed from FY 14/15 to 15/16;
FY 15/16 - Hardware purchases $511,000 for vendor workstations;
FY 17/18 - Purchase of staff desktops/laptops to conform with new solution realigned with implementation schedule.

Software Purchase/License

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	-	155,160	882,498	23,582	15,968,940	-	-	-			17,030,180
SPR2 - Dec 2013	-	131,135	59,659	87,298	10,982	16,764,140	-	-	-	-	17,053,214
Change	-	(24,025)	(822,839)	63,716	(15,957,958)	16,764,140	-	-	-	-	23,034

Explanation

FY 12/13 - Planned data cleansing/quality software tool ($795,200) but contractor hired had a tool that is being used for CROS;
FY 14/15 - Delay of CROS implementation shifted costs from 14/15 to 15/16.

Telecommunications

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012			429	629	487,000						488,058
SPR2 - Dec 2013	-	-	-	429	23,129	487,000	-	-	-	-	510,558
Change			(429)	(200)	(463,871)	487,000	-	-	-	-	22,500

Explanation

Delay of implementation shifted telecom costs to a future fiscal year;
FY 14/15 - One-time purchase of network hardware ($487,000) shifted from FY 14/15 to 15/16; Added cost for telephone equipment purchase and installation for vendor workstations ($22,500).

Contract Services

Software Customization

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012					31,490,000	45,859,000	26,782,750				104,131,750
SPR2 - Dec 2013	-	-	-	-	-	20,826,350	28,115,573	31,239,525	23,950,303	-	104,131,750
Change	-	-	-	-	(31,490,000)	(25,032,650)	1,332,823	31,239,525	23,950,303	-	-
Explanation	FY 14/15 - Delayed selection of CROS Prime Contractor from FY 14/15 to FY 15/16 shifted software customization costs to future fiscal years; Implementation period was revised from 3 to 4 years.										

Project Management

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012		182,720	230,400	230,400	230,400	230,400	230,400				1,334,720
SPR2 - Dec 2013	-	291,080	228,900	230,400	230,400	230,400	230,400	230,400	230,400		1,902,380
Change	-	108,360	(1,500)	-	-	-	-	230,400	230,400	-	567,660
Explanation	Two additional years (FY 17/18 and FY 18/19) added due to change in length of implementation timeline.										

Project Oversight

-

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012		45,000	175,000	175,000	175,000	175,000	175,000				920,000
SPR2 - Dec 2013	-	13,744	89,099	175,000	175,000	175,000	175,000	175,000	175,000		1,152,843
Change		(31,256)	(85,901)	-	-	-	-	175,000	175,000	-	232,843
Explanation	Two additional years (FY 17/18 and FY 18/19) added due to change in length of implementation timeline.										

IV&V Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012					674,700	674,700	674,700				2,024,100
SPR2 - Dec 2013	-	-	113,828	175,000	175,000	674,700	674,700	674,700	674,700		3,162,628
Change		-	113,828	175,000	(499,700)	-	-	674,700	674,700	-	1,138,528
Explanation	FY 12/13 - IV&V added to the project during the procurement period at Department of Technology's request (FY 12/13 - FY 14/15) ($175,000 per yr); FY 15/16 - Additional IV&V staff will be hired to cover technical, functional and management deliverables review throughout the implementation period (FY 15/16 - FY 18/19) ($674,700 per year).										

Other Contract Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	-	713,387	1,899,200	2,652,800	2,600,000						7,865,387
SPR2 - Dec 2013	-	331,012	1,065,537	1,445,000	1,427,800	1,435,000	1,435,000	935,000	815,000	-	8,889,349
Change	-	(382,375)	(833,663)	(1,207,800)	(1,172,200)	1,435,000	1,435,000	935,000	815,000	-	1,023,962
Explanation	FY 11/12 and FY 12/13 - Actual costs were less than estimated; Revised Other Contract Services needs based on analysis and revised implementation period timeline; FY 13/14 - Added services to cover Department of Technology Procurement Official ($175,000) in 13/14 ,14/15 and $25,000 ongoing through project to be involved in contract amendments, etc.; FY 13/14 - Cost Realism consultant costs to conduce cost reasonableness/realism ($52,800) shifted from 13/14 to 14/15 to align with the new implementation timeline; Added costs to cover resources from the Parallel Initiative contracts to assist with data conversion to the new CROS solution - FY 13/14 - $1,270,000; FY 14/15 - $1,200,000; FY 15/16 - $1,410,000; FY 16/17 - $1,410,000; FY 17/18 - $910,000; FY 18/19 - $790,000.										

Data Center Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	4,877	2,890	50,000	50,000	74,840	55,520	50,000				288,127
SPR2 - Dec 2013	4,877	114,908	169,904	304,000	304,000	441,340	322,020	266,500	22,500	-	1,950,049
Change	-	112,018	119,904	254,000	229,160	385,820	272,020	266,500	22,500	-	1,661,922
Explanation	FY 12/13 - Costs increased in FY 12/13 and ongoing due to storage and processing costs at OTech to support Data Readiness data extractions and replication from legacy system.										

Agency Facilities

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012											-
SPR2 - Dec 2013											-
Change	-	-	-	-	-	-	-	-	-	-	-
Explanation	No change.										

Other

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	42,679	119,761	232,186	319,487	361,487	160,566	65,000				1,301,166
SPR2 - Dec 2013	42,679	54,766	91,092	47,187	121,187	653,167	172,567	172,567	172,567	-	1,527,779
Change	-	(64,995)	(141,094)	(272,300)	(240,300)	492,601	107,567	172,567	172,567	-	226,613
Explanation	FY 11/12 & 12/13 - Travel costs less than estimated; FY 13/14 - Training for TSD technical staff moved from FY 13/14 to FY 15/16; FY 14/15 - Documentum Training moved to FY 15/16; Out of state travel support for implementation & training (out of state districts offices) $12,000 in FY 14/15; $33,000 in FY 15/16 through FY 18/19; Added travel to support network upgrade ($32,000) from FY 14/15 to 18/19 (In/Out of State).										

Continuing IT Project Costs

Staff (Salaries & Benefits)

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012					1,145,968	1,193,433	4,584,409	11,055,092			17,978,902
SPR2 - Dec 2013	-	-	-	-	-	1,235,608	2,447,088	3,059,876	5,586,367	11,906,534	24,235,473
Change	-	-	-	-	(1,145,968)	42,175	(2,137,321)	(7,995,216)	5,586,367	11,906,534	6,256,571
Explanation	Overall Salary Costs increased - 3% Base Salary increase beginning 7/1/13 and 8.25% for Benefits; cost were shifted to future fiscal years due to change in implementation period; Continuing IT cost will be re-evaluated with selected solution.										

Hardware Lease/Maintenance

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012			3,600	174,600	1,111,711	2,088,011	2,934,011	2,934,011			9,245,944
SPR2 - Dec 2013	-	-	-	-	-	168,850	1,143,411	1,143,411	2,088,011	2,934,011	7,477,693
Change		-	(3,600)	(174,600)	(1,111,711)	(1,919,161)	(1,790,600)	(1,790,600)	2,088,011	2,934,011	(1,768,251)
Explanation	Costs shifted and revised to align with new implementation timeline; Standard PC, printer replacement and repair costs moved future Fiscal years to align with new timeline.										

Software Maintenance/Licenses

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012			6,993	229,620	633,372	5,613,187	5,611,966	5,611,966			17,707,104
SPR2 - Dec 2013	-	-	-	-	-	491,729	5,461,966	5,461,966	5,346,030	5,067,197	21,828,888
Change		-	(6,993)	(229,620)	(633,372)	(5,121,458)	(150,000)	(150,000)	5,346,030	5,067,197	4,121,784
Explanation	Software maintenance related to data warehouse and data cleansing effort ($209,040) reduced due to custom developed in-house solution in FY 13/14 and $150,000 ongoing; Standard PY software maintenance ($6,993) in FY 12/13; ($20,580) in FY 13/14 revised to future FY; Delayed solution implementation adds vendor costs to FY 18/19 and FY 19/20.										

Telecommunications

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012			5,100	5,200	2,213,908	2,213,908	2,213,908	2,213,908			8,865,932
SPR2 - Dec 2013	-	-	-	-	-	2,213,908	2,213,908	2,213,908	2,213,908	2,213,908	11,069,540
Change		-	(5,100)	(5,200)	(2,213,908)	-	-	-	2,213,908	2,213,908	2,203,608
Explanation	Delay of implementation timeline shifted costs to a future fiscal year and added costs to FY 18/19 and 19/20.										

Contract Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012											-
SPR2 - Dec 2013											-
Change		-	-	-	-	-	-	-	-	-	-
Explanation	No changes.										

Data Center Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012					7,433,809	7,433,809	7,433,809	7,433,809			29,735,236
SPR2 - Dec 2013	-	-	-	-	-	7,433,809	7,433,809	7,433,809	7,433,809	7,433,809	37,169,045
Change	-	-	-	-	(7,433,809)	-	-	-	7,433,809	7,433,809	7,433,809
Explanation	Costs were shifted to future fiscal years due to change in implementation period.										

Agency Facilities

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012											-
SPR2 - Dec 2013											-
Change		-	-	-	-	-	-	-	-	-	-
Explanation	No change.										

Other

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012			7,500	137,596	150,388	150,388	150,388	150,388			746,648
SPR2 - Dec 2013	-	-	-	-	-	150,388	150,388	150,388	150,388	150,388	751,940
Change		-	(7,500)	(137,596)	(150,388)	-	-	-	150,388	150,388	5,292
Explanation	Costs were shifted to future fiscal years due to change in implementation period.										

Total One-Time Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	547,059	3,296,213	8,991,404	9,329,283	66,882,711	60,246,044	35,844,789	-	-	-	185,137,503
SPR2 - Dec 2013	547,059	2,677,177	4,242,642	8,866,656	8,856,440	58,176,560	40,905,566	46,990,655	35,015,022	-	206,277,776
Change	-	(619,036)	(4,748,762)	(462,627)	(58,026,271)	(2,069,484)	5,060,777	46,990,655	35,015,022	-	21,140,273

Total Continuing Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	-	-	23,193	547,016	12,689,156	18,692,736	22,928,491	29,399,174	-	-	84,279,766
SPR2 - Dec 2013	-	-	-	-	-	11,694,292	18,850,570	19,463,358	22,818,513	29,705,847	102,532,579
Change	-	-	(23,193)	(547,016)	(12,689,156)	(6,998,444)	(4,077,921)	(9,935,816)	22,818,513	29,705,847	18,252,813

Total Project Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	Total
SPR1 - Mar 2012	547,059	3,296,213	9,014,597	9,876,299	79,571,867	78,938,780	58,773,280	29,399,174	-	-	269,417,269
SPR2 - Dec 2013	547,059	2,677,177	4,242,642	8,866,656	8,856,440	69,870,852	59,756,135	66,454,013	57,833,534	29,705,847	308,810,355
Change	-	(619,036)	(4,771,955)	(1,009,643)	(70,715,427)	(9,067,928)	982,855	37,054,839	57,833,534	29,705,847	39,393,086

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

EXISTING SYSTEM/BASELINE COST WORKSHEET
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 12/15/13

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information Technology Costs																						
Staff (salaries & benefits)	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,898,884	122.0	$11,898,884	122.0	$11,898,884	122.0	$11,898,884	122.0	$ 11,898,884	122.0	$ 11,898,884	122.0	$ 11,898,884	**1220.0**	**$116,407,684**
Hardware Lease/Maintenance		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		**$9,243,110**
Software Maintenance/Licenses		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		**$7,766,330**
Telecommunications		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		**$5,941,830**
Contract Services		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		**$0**
Data Center Services		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		**$82,962,230**
Agency Facilities		$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ -		$ -		**$0**
Other		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		**$2,140,070**
Total IT Costs	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**122.0**	**$22,704,241**	**1220.0**	**$224,461,256**
Continuing Program Costs:																						
Staff	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$204,636,482	2645.6	$204,636,482	2645.6	$204,636,482	2645.6	$204,636,482	2645.6	$ 204,636,482	2645.6	$ 204,636,482	2645.6	$ 204,636,482	**26456.0**	**$2,001,869,928**
Other		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		**$92,470,020**
Total Program Costs	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**2645.6**	**$213,883,484**	**26456.0**	**$2,094,339,948**
TOTAL EXISTING SYSTEM COSTS	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**2767.6**	**$236,587,725**	**27676.0**	**$2,318,801,204**

SIMM 20C30C, Rev. 08/2010

PROPOSED ALTERNATIVE: **Performance-Based CROS Project**

Date Prepared: 12/15/13

Department: Board of Equalization
Project: CROS

	FY 2010/11 *		FY 2011/12 *		FY 2012/13 *		FY 2013/14 **		FY 2014/15***		FY 2015/16***		FY 2016/17***		FY 2017/18***		FY 2018/19***		FY 2019/20***		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs																						
Staff (Salaries & Benefits)	7.1	$499,503	21.8	$ 1,719,639	35.0	$2,236,300	62.5	$ 6,402,342	62.0	$ 6,340,742	110.2	$ 11,083,063	97.3	$ 9,741,206	91.0	$ 9,066,963	89.2	$ 8,974,552	0.0	$ -	576.1	$56,064,309
Hardware Purchase		$0		$20,893		$188,323		$0		$ 48,200		$ 5,406,400		$ 39,100		$ 4,230,000		$ -		$ -		$9,932,916
Software Purchase/License		$0		$131,135		$59,659		$87,298		$ 10,982		$ 16,764,140		$ -		$ -		$ -		$ -		$17,053,214
Telecommunications		$0		$0		$0		$ 429		$ 23,129		$ 487,000		$ -		$ -		$ -		$ -		$510,558
Contract Services																						
Software Customization		$0		$0		$0		$0		$0		$20,826,350		$ 28,115,573		$ 31,239,525		$ 23,950,303		$ -		$104,131,750
Project Management		$0		$291,080		$228,900		$230,400		$230,400		$230,400		$230,400		$230,400		$230,400				$1,902,380
Project Oversight		$0		$13,744		$89,099		$175,000		$175,000		$175,000		$175,000		$175,000		$175,000				$1,152,843
IV&V Services		$0		$0		$113,828		$175,000		$175,000		$674,700		$674,700		$674,700		$674,700				$3,162,628
Other Contract Services		$0		$331,012		$1,065,537		$1,445,000		$ 1,427,800		$ 1,435,000		$ 1,435,000		$ 935,000		$ 815,000		$ -		$8,889,349
TOTAL Contract Services		$0		$635,836		$1,497,364		$2,025,400		$2,008,200		$23,341,450		$30,630,673		$33,254,625		$25,845,403		$0		$119,238,950
Data Center Services		$4,877		$114,908		$169,904		$304,000		$ 304,000		$ 441,340		$ 322,020		$ 266,500		$ 22,500		$ -		$1,950,049
Agency Facilities		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$ -		$ -		$0
Other		$42,679		$54,766		$91,092		$47,187		$ 121,187		$ 653,167		$ 172,567		$ 172,567		$ 172,567		$ -		$1,527,779
Total One-time IT Costs	**7.1**	**$547,059**	**21.8**	**$2,677,177**	**35.0**	**$4,242,642**	**62.5**	**$8,866,656**	**62.0**	**$8,856,440**	**110.2**	**$58,176,560**	**97.3**	**40,905,566**	**91.0**	**46,990,655**	**89.2**	**35,015,021**	**0.0**	**0**	**576.1**	**$206,277,775**
Continuing IT Project Costs																						
Staff (Salaries & Benefits)	0.0	$0	0.0	$0	0.0	$0	0.0	$0	0.0	$0	12.2	$1,235,608	25.2	$2,447,088	31.3	$3,059,876	55.0	$5,586,367	122.0	$11,906,534	245.7	$24,235,473
Hardware Lease/Maintenance		$0		$0		$0		$0		$0		$ 168,850		$ 1,143,411		$ 1,143,411		$ 2,088,011		$ 2,934,011		$7,477,693
Software Maintenance/Licenses		$0		$0		$0		$0		$0		$ 491,729		$ 5,461,966		$ 5,461,966		$ 5,346,030		$ 5,067,197		$21,828,888
Telecommunications		$0		$0		$0		$0		$0		$ 2,213,908		$ 2,213,908		$ 2,213,908		$ 2,213,908		$ 2,213,908		$11,069,540
Contract Services		$0		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$ -		$0
Data Center Services		$0		$0		$0		$0		$0		$ 7,433,809		$ 7,433,809		$ 7,433,809		$ 7,433,809		$ 7,433,809		$37,169,045
Agency Facilities		$0		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$ -		$0
Other		$0		$0		$0		$0		$0		$ 150,388		$ 150,388		$ 150,388		$ 150,388		$ 150,388		$751,940
Total Continuing IT Costs	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$0**	**12.2**	**$11,694,292**	**25.2**	**18,850,569**	**31.3**	**19,463,358**	**55.0**	**22,818,513**	**122.0**	**29,705,847**	**245.7**	**$102,532,579**
Total Project Costs	**7.1**	**$547,059**	**21.8**	**$2,677,177**	**35.0**	**$4,242,642**	**62.5**	**$8,866,656**	**62.0**	**$8,856,440**	**122.4**	**$69,870,852**	**122.5**	**59,756,135**	**122.3**	**66,454,013**	**144.2**	**57,833,534**	**122.0**	**29,705,847**	**821.8**	**$308,810,355**
Continuing Existing Costs																						
Information Technology Staff	122.0	$ 11,038,500	122.0	$ 11,038,500	122.0	$ 11,038,500	122.0	$ 11,038,500	122.0	$ 11,038,500	109.8	$ 9,802,892	96.8	$ 8,591,412	90.7	$ 7,978,624	67.0	$ 5,452,133			974.2	$ 87,017,560
Other IT Costs		$10,805,357		$10,805,357		$10,805,357		$10,805,357		$ 10,805,357		$ 9,163,774		$ 8,969,874		$ 8,697,374		$ 8,697,374		$ 1,903,200		$91,458,379
Total Continuing Existing IT Costs	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**109.8**	**$18,966,666**	**96.8**	**$17,561,286**	**90.7**	**$16,675,998**	**67.0**	**$14,149,507**	**0.0**	**$1,903,200**	**973.9**	**$178,475,940**
Program Staff	2645.6	$189,804,851	2645.6	$189,804,851	2750.9	$206,398,747	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	**27799.6**	**$2,063,939,452**
Other Program Costs		$ 9,247,002		$ 9,247,002		$ 10,716,168		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		**$93,939,183**
Total Continuing Existing Program Costs	**2645.6**	$199,051,853	**2645.6**	$199,051,853	**2750.9**	$217,114,915	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**2822.5**	$220,380,002	**27799.6**	**$2,157,878,635**
Total Continuing Existing Costs	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2872.9**	**$238,958,772**	**2944.5**	**$242,223,859**	**2944.5**	**$242,223,859**	**2932.3**	**$239,346,668**	**2919.3**	**$237,941,288**	**2913.2**	**$237,056,000**	**2889.5**	**$234,529,509**	**2822.5**	**$222,283,202**	**28773.5**	**$2,336,354,575**
TOTAL ALTERNATIVE COSTS	**2774.7**	**$221,442,769**	**2789.4**	**$223,572,887**	**2907.9**	**$243,201,414**	**3007.0**	**$251,090,514**	**3006.5**	**$251,080,299**	**3054.7**	**$309,217,520**	**3041.8**	**$297,697,423**	**3035.5**	**$303,510,013**	**3033.7**	**$292,363,043**	**2944.5**	**$251,989,049**	**29595.2**	**$2,645,164,930**
REVENUE INCREASE****		$0		$0		**$38,745,000**		**$66,529,000**		**$66,529,000**		**$141,529,000**		**$156,529,000**		**$186,529,000**		**$258,468,376**		**$266,529,000**		**$1,181,387,376**

* Project one-time and continuing costs reflect actual incurred costs.
** Project one-time and continuing cost reflect, fiscal year to date costs actually incurred plus projected expenditures through fiscal year-end.
*** Estimated costs, needs for these years will be re-evalated when proposal is selected.
**** Revenue increase includes both CROS Revenue and Support Effort Revenue estimates.

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ECONOMIC ANALYSIS SUMMARY
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 12/15/13

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM																						
Total IT Costs	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	22,704,241	122.0	22,704,241	122.0	22,704,241	122.0	22,704,241	122.0	22,704,241	122.0	22,704,241	122.0	22,704,241	1220.0	224,461,256
Total Program Costs	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	213,883,484	2645.6	213,883,484	2645.6	213,883,484	2645.6	213,883,484	2645.6	213,883,484	2645.6	213,883,484	2645.6	213,883,484	26456.0	2,094,339,948
Total Existing System Costs	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	236,587,725	2767.6	236,587,725	2767.6	236,587,725	2767.6	236,587,725	2767.6	236,587,725	2767.6	236,587,725	2767.6	236,587,725	27676.0	2,318,801,204
PROPOSED ALTERNATIVE	**Performance-Based CROS Project**																					
Total Project Costs	7.1	547,059	21.8	2,677,177	35.0	4,242,642	62.5	8,866,656	62.0	8,856,440	122.4	69,870,852	122.5	59,756,135	122.3	66,454,013	144.2	57,833,534	122.0	29,705,847	821.8	308,810,355
Total Cont. Exist. Costs	2767.6	220,895,710	2767.6	220,895,710	2872.9	238,958,772	2944.5	242,223,859	2944.5	242,223,859	2932.3	239,346,668	2919.3	237,941,288	2913.2	237,056,000	2889.5	234,529,509	2822.5	222,283,202	28773.5	2,336,354,575
Total Alternative Costs	2774.7	221,442,769	2789.4	223,572,887	2907.9	243,201,414	3007.0	251,090,514	3006.5	251,080,299	3054.7	309,217,520	3041.8	297,697,423	3035.5	303,510,013	3033.7	292,363,043	2944.5	251,989,049	29595.2	2,645,164,930
COST SAVINGS/AVOIDANCES	(7.0)	(547,059)	(21.8)	(2,677,177)	(140.3)	(22,305,704)	(239.4)	(14,502,790)	(238.9)	(14,492,574)	(287.1)	(72,629,795)	(274.2)	(61,109,698)	(267.9)	(66,922,288)	(266.1)	(55,775,318)	(176.9)	(15,401,324)	(1919.2)	(326,363,726)
Increased Revenues		0		0		38,745,000		66,529,000		66,529,000		141,529,000		156,529,000		186,529,000		258,468,376		266,529,000		1,181,387,376
Net (Cost) or Benefit	(7.0)	(547,059)	(21.8)	(2,677,177)	(140.3)	16,439,296	(239.4)	52,026,210	(238.9)	52,036,426	(287.1)	68,899,205	(274.2)	95,419,302	(267.9)	119,606,712	(266.1)	202,693,058	(176.9)	251,127,676	(1919.2)	855,023,650
Cum. Net (Cost) or Benefit	(7.0)	(547,059)	(28.8)	(3,224,235)	(169.1)	13,215,061	(408.4)	65,241,272	(647.3)	117,277,698	(934.3)	186,176,903	(1208.5)	281,596,205	(1476.3)	401,202,917	(1742.4)	603,895,975	(1919.2)	855,023,650	(1919.2)	855,023,650

PROJECT FUNDING PLAN

All Costs to be in whole (unrounded) dollars

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	**7.1**	**547,059**	**21.8**	**2,677,177**	**35.0**	**4,242,642**	**62.5**	**8,866,656**	**62.0**	**8,856,440**	**122.4**	**69,870,852**	**122.5**	**59,756,135**	**122.3**	**66,454,013**	**144.2**	**57,833,534**	**122.0**	**29,705,847**	**821.8**	**308,810,355**
RESOURCES TO BE REDIRECTED																						
Staff	7.1	499,503	21.8	1,719,639	11.0	713,246	0.0	0	0.0	0	12.2	1,235,608	25.2	2,345,299	31.3	2,923,332	55.0	5,269,527	122.0	11,898,884	285.6	26,605,038
Funds:																						
Existing System		0		0		0		0		0		4,011,183		4,011,183		4,011,183		4,011,183		10,805,357		26,850,087
Other Fund Sources		47,556		957,538		0		0		0		0		0		0		0		0		1,005,094
TOTAL REDIRECTED RESOURCES	**7.1**	**547,059**	**21.8**	**2,677,177**	**11.0**	**713,246**	**0.0**	**0**	**0.0**	**0**	**12.2**	**5,246,790**	**25.2**	**6,356,482**	**31.3**	**6,934,515**	**55.0**	**9,280,710**	**122.0**	**22,704,240**	**285.6**	**54,460,219**
ADDITIONAL PROJECT FUNDING NEEDED																						
One-Time Project Costs	0.0	0	0.0	0	24.0	3,529,396	62.5	8,866,656	62.0	8,856,440	110.2	58,176,560	97.3	40,905,566	91.0	46,990,655	89.2	35,015,021	0.0	0	536.2	202,340,294
Continuing Project Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6,447,501	0.0	12,494,088	0.0	12,528,843	0.0	13,537,803	0.0	7,001,607	0.0	52,009,842
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**0.0**	**0**	**24.0**	**3,529,396**	**62.5**	**8,866,656**	**62.0**	**8,856,440**	**110.2**	**64,624,062**	**97.3**	**53,399,653**	**91.0**	**59,519,498**	**89.2**	**48,552,824**	**0.0**	**7,001,607**	**536.2**	**254,350,136**
TOTAL PROJECT FUNDING	**7.1**	**547,059**	**21.8**	**2,677,177**	**35.0**	**4,242,642**	**62.5**	**8,866,656**	**62.0**	**8,856,440**	**122.4**	**69,870,852**	**122.5**	**59,756,135**	**122.3**	**66,454,013**	**144.2**	**57,833,534**	**122.0**	**29,705,847**	**821.8**	**308,810,355**
Difference: Funding - Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
FUNDING SOURCE*																						
General Fund (Redirection)	55%	301,430	55%	1,475,125	55%	392,999	55%	0	55%	0	55%	2,890,981	55%	3,502,421	55%	3,820,918	55%	5,113,671	55%	12,510,036	55%	30,007,581
General Fund (BCP)	55%	0	55%	0	55%	1,944,697	55%	4,885,527	55%	4,879,899	55%	35,607,858	55%	29,423,209	55%	32,795,244	55%	26,752,606	55%	3,857,885	55%	140,146,925
Federal Fund	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Special Fund (Redirection)	15%	84,247	15%	412,285	15%	109,840	15%	0	15%	0	15%	808,006	15%	978,898	15%	1,067,915	15%	1,429,229	15%	3,496,453	15%	8,386,874
Special Fund (BCP)	15%	0	15%	0	15%	532,939	15%	1,338,865	15%	1,337,322	15%	9,758,233	15%	8,063,348	15%	8,987,444	15%	7,331,476	15%	1,057,243	15%	38,406,871
Reimbursement (Redirection)	30%	161,382	30%	789,767	30%	210,408	30%	0	30%	0	30%	1,547,803	30%	1,875,162	30%	2,045,682	30%	2,737,809	30%	6,697,751	30%	16,065,765
Reimbursement (BCP)	30%	0	30%	0	30%	1,051,760	30%	2,642,263	30%	2,639,219	30%	19,257,970	30%	15,913,097	30%	17,736,810	30%	14,468,742	30%	2,086,479	30%	75,796,341
TOTAL FUNDING	100%	547,059	100%	2,677,177	100%	4,242,642	100%	8,866,656	100%	8,856,440	100%	69,870,852	100%	59,756,135	100%	66,454,013	100%	57,833,534	100%	29,705,847	100%	308,810,355

***Type:** If applicable, for each funding source, beginning on row 29, describe what type of funding is included, such as local assistance or grant funding, the date the funding is to become available, and the duration of the funding.

General Fund 001

Reimbursements 0995 (Sales & Use Tax, Hazard Waste, Tire Disoposal, Marine Inv. Species)

Special Funds: (TIMBER (0965), BREAST CANCER (0004), CIGARETTE & TOBACCO (0230), CALIFORNIA FAMILY TRUST (0623), CIG/TOBA COMP FD (3067), MVF ACCNT (0061), LEAD POISON (0070), INTEGRATED WASTE (0387). UNDERGROUND TANK (0439), OIL SPILL (0320, ENERGY RESOURCES (0465), WATER RIGHTS FUND (3058), CHILDHOOD LEAD (0080), EMER. TELEPHONE (0022), E-WASTE & RECYL ACCT (3065), GAS CONSUMP (3015)

Staff - Redirection of Staff Resources to One Time in Years 2010/11 & 2011/12.
Staff Redirection of IT Baseline Staff Resources to support the New Systems in Years 2014/15 through 2018/19
Existing System - Redirection of O.E.&E to pay the new Continuing O.E.& E. costs of the New System in Years 2012/13 through 2016/17.
Other Fund Sources -The Funds to pay for the one-time O.E.&E. costs in Years 2010/11 & 2011/12
Additional Project Funds Needed- Additional One-Time Projects Funds Needed
Additional Project Funds Needed - Additional Continuing Project Funds Needed

Date Prepared: 12/15/13

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

SIMM 20C30C, Rev. 08/2010

Department: Board of Equalization
Project: CROS

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20			
Annual Project Adjustments	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**		
One-time Costs																						
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	24.0	3,529,396	62.5	8,866,656	62.0	8,856,440	110.2	58,176,560	97.3	40,905,566	91.0	46,990,655	89.2	35,015,021		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**24.0**	**3,529,396**	**38.5**	**5,337,260**	**(0.5)**	**(10,216)**	**48.2**	**49,320,120**	**(12.9)**	**(17,270,995)**	**(6.3)**	**6,085,090**	**(1.8)**	**(11,975,634)**	**(89.2)**	**(35,015,021)**		
(B) Total One-Time Budget Actions	0.0	0	0.0	0	24.0	3,529,396	62.5	8,866,656	62.0	8,856,440	110.2	58,176,560	97.3	40,905,566	91.0	46,990,655	89.2	35,015,021	0.0	0	**536.2**	**202,340,294**
Continuing Costs																						
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6,447,501	0.0	12,494,088	0.0	12,528,843	0.0	13,537,803		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**6,447,501**	**0.0**	**6,046,586**	**0.0**	**34,755**	**0.0**	**1,008,960**	**0.0**	**(6,536,196)**		
(D) Total Continuing Budget Actions	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6,447,501	0.0	12,494,088	0.0	12,528,843	0.0	13,537,803	0.0	7,001,607	**0.0**	**52,009,842**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**0.0**	**0**	**24.0**	**3,529,396**	**38.5**	**5,337,260**	**(0.5)**	**(10,216)**	**48.2**	**55,767,622**	**(12.9)**	**(11,224,408)**	**(6.3)**	**6,119,845**	**(1.8)**	**(10,966,674)**	**(89.2)**	**(41,551,218)**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D] **536.2** **254,350,136**

Annual Savings/Revenue Adjustments

Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Revenue Increase*		0		0		38,745,000		66,529,000		66,529,000		141,529,000		156,529,000		186,529,000		258,468,376		266,529,000		1,181,387,376

* Revenue increase includes both CROS Revenue and Support Effort Revenue estimates.

PROGRAM FUNDING PLAN

SIMM 20C30C, Rev. 08/2010

All Costs to be in whole (unrounded) dollars

Department: Board of Equalization
Project: CROS

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROGRAM COSTS	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2645.6**	**217,114,915**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2,646**	**220,380,002**	**2,646**	**220,380,002**	**26456.0**	**2,157,878,636**
RESOURCES TO BE REDIRECTED																						
Staff	2645.6	199,051,853	2645.6	199,051,853	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2,646	208,083,384	2,646	208,083,384	26456.0	2,062,770,778
Funds:																						
Existing System		0				0		0		0				0		0						0
Other Fund Sources		0		0		0		0		0		0		0		0						0
TOTAL REDIRECTED RESOURCES	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**26456.0**	2,062,770,778
ADDITIONAL PROGRAM FUNDING NEEDED																						
One-Time Program Costs	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0					0.0	1,469,166
Continuing Program Costs	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	1343.6	93,638,691
TOTAL ADDITIONAL PROGRAM FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**0.0**	**0**	**105.3**	**9,031,531**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**1343.6**	**95,107,857**
TOTAL PROGRAM FUNDING	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2750.9**	**217,114,915**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**27799.6**	**2,157,878,635**
Difference: Funding - Costs	0.0	0	0.0	0	105.3	0	176.9	0	176.9	0	176.9	0	176.9	0	176.9	0	176.9	0	176.9	0	1343.6	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Date Prepared: 12/15/13

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19		FY 2019/20		FY TOTAL	
Annual Project Adjustments	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**
One-time Costs																						
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**1,469,166**	**0.0**	**(1,469,166)**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		
(B) Total One-Time Budget Actions	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	**0.0**	**1,469,166**
Continuing Costs																						
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**105.3**	**7,562,365**	**71.6**	**4,734,253**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		
(D) Total Continuing Budget Actions	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	**1343.6**	**93,638,691**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**0.0**	**0**	**105.3**	**9,031,531**	**71.6**	**3,265,087**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D]	**1343.6**	**95,107,857**

Annual Savings/Revenue Adjustments

Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Revenue Increase-- Program Support*		0		0		38,745,000		66,529,000		66,529,000		66,529,000		66,529,000		66,529,000		66,529,000		66,529,000		371,390,000

* - Revenue Increase -- Program Support includes revenue generated from additional auditor and collector PYs

Centralized Revenue Opportunity System (CROS) Project

VISION FOR A BETTER FUTURE

State Board of Equalization

Special Project Report

Project Number 0860-094

March 15, 2012

Prepared by:
CROS Project Team
California State Board of Equalization
Sacramento, California

Prepared for:
California Technology Agency
Sacramento, California

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Table of Contents

Table of Contents 3

1.0 Executive Project Approval Transmittal 5

2.0 Information Technology: Project Summary Package 7

2.1 Section A: Executive Summary 7

2.1 Section A: Executive Summary (Continued) 8

2.2 Section B: Project Contacts 9

2.3 Section C: Project Relevance to State and/or Departmental Plans 10

2.4 Section D: Budget Information 11

2.5 Section E: Vendor Project Budget 12

2.6 Section F: Risk Assessment Information 13

3.0 Proposed Project Change 14

3.1 Project Background/Summary 14

3.2 Project Status 15

3.3 Reason for the proposed change 16

3.4 Proposed Project Change 19

3.4.1 Accessibility 26

3.4.2 Impact of Proposed Changes on the Project 26

3.4.3 Feasible Alternatives Considered 26

3.4.4 Implementation Plan 26

4.0 Updated Project Management Plan 27

4.1 Project Manager Qualifications 27

4.2 Project Management Methodology 27

4.3 Project Organization 27

4.4 Project Priorities 27

4.5 Project Plan 28
4.5.1 Project Scope 28
4.5.2 Project Assumptions 28
4.5.3 Project Phasing 28
4.5.4 Project Roles and Responsibilities 28
4.5.5 Revised Project Schedule 30
4.6 Project Monitoring and Oversight 32
4.7 Project Quality 32
4.8 Change Management 32
4.9 Authorization Required 32
5.0 Updated Risk Management Plan 33
5.1 Risk Register 33
6.0 Updated Economic Analysis Worksheets (EAWs) 33
7.0 Attachments 33

1.0 Executive Project Approval Transmittal

Information Technology Project Request

Special Project Report
Executive Approval Transmittal

Department Name			
California State Board of Equalization			
Project Title (maximum of 75 characters)			**Project Acronym**
Centralized Revenue Opportunity System			**CROS**
FSR Project ID	**FSR Approval Date**	**Department Priority**	**Agency Priority**
0860-094	**09/07/2011**	**1**	**1**

I am submitting the attached Special Project Report (SPR) in support of our request for the California Technology Agency's approval to continue development and/or implementation of this project.

I certify that the SPR was prepared in accordance with the State Administrative Manual Sections 4945-4945.2 and that the proposed project changes are consistent with our information management strategy as expressed in our current Agency Information Management Strategy (AIMS).

I have reviewed and agree with the information in the attached Special Project Report.

I also certify that the acquisition of the applicable information technology (IT) product(s) or service(s) required by my department that are subject to Government Code 11135 applying Section 508 of the Rehabilitation Act of 1973 as amended meets the requirements or qualifies for one or more exceptions (see following page).

APPROVAL SIGNATURES		
Chief Information Officer		**Date Signed**
BF Fleming		3/22/12
Printed name:	Brenda Fleming	
Budget Officer		**Date Signed**
Larry Norris		3/22/12
Printed name:	Larry Norris	
Program Directors		**Date Signed**
		3/22/12
Printed name:	Jeffrey McGuire, Sales and Uses Taxes	
David J Gau		3/22/12
Printed name:	David Gau, Property and Special Taxes	
Executive Director		**Date Signed**
Kristine Cazadd		3/22/12
Printed name:	Kristine Cazadd	

Executive Approval Transmittal
IT Accessibility Certification

Yes or No

Yes	**The Proposed Project Meets Government Code 11135 / Section 508 Requirements and no exceptions apply.**

Exceptions Not Requiring Alternative Means of Access

Yes or No	Accessibility Exception Justification
N/A	The IT project meets the definition of a national security system.
N/A	The IT project will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment (i.e., "Back Office Exception.)
N/A	The IT acquisition is acquired by a contractor incidental to a contract.

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
N/A	Meeting the accessibility requirements would constitute an "undue burden" (i.e., a significant difficulty or expense considering all agency resources). Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No commercial solution is available to meet the requirements for the IT project that provides for accessibility. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No solution is available to meet the requirements for the IT project that does not require a fundamental alteration in the nature of the product or its components. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.

2.0 Information Technology: Project Summary Package

2.1 Section A: Executive Summary

1.	Submittal Date	March 15, 2012

		FSR	SPR	PSP Only	Other:
2.	Type of Document		X		
	Project Number	0860-094			

			Estimated Project Dates	
3.	Project Title	Centralized Revenue Opportunity System	Start	End
	Project Acronym	CROS	09/01/2010	06/30/17

4	Submitting Department	Board of Equalization
5	Reporting Agency	N/A

6.	Project Objectives
	The BOE has developed long range business and strategic plans which include a technology component. This project will decrease the tax gap through increasing voluntary compliance, improving customer online services, and improving audit, collection and return processing activities. Revenues from these activities will be achieved earlier in the procurement process than originally anticipated in the FSR. A key factor to achieving BOE's long range goals is to create an expanded and responsive tax infrastructure by moving to a functional organizational structure and creating a customer-centric automation system. BOE will use a systematic approach to change and be more responsive to the needs of its customers. A new system will allow the BOE to reengineer current program processes, adopt tax administration best practices, and obtain an effective case management system. This will enhance the efficiencies of BOE employees by streamlining and automating current program processes, reducing paper, and providing the ability to work securely anytime and from anyplace. An intuitive and easy to use system will also reduce staff training time and will improve shared access to internal and external data for BOE employees and federal, state, and local tax partners. Obtaining flexible, agile, expandable, and sustainable technology will support program changes that will allow the timely implementation of legislative changes. The replacement of current standalone support systems and utilization of component based architecture of re-usable and shared services will allow the BOE to grow with new technology. This project will allow the BOE to meet the expectation of all of its customers into future years.

8.	Major Milestones	Est. Complete Date
	Obtain CTA approval of FSR	09/07/2011
	SPR Approval	03/30/2012
	Release RFP to vendor pool	10/22/2012
	Receive final Bid Proposals	11/12/2013
	Obtain CTA approval of SPR for selected bid proposal	04/18/2014
	Procure RFP vendor and sign contract	06/30/2014
	Begin development and implementation	07/01/2014
	Project completion	06/30/2017
	PIER	1/31/2019
	Key Deliverables will be identified in SPR	

2.1 SECTION A: EXECUTIVE SUMMARY (CONTINUED)

7.	Proposed Solution
	The BOE expects the solution to generate additional revenue into the State General Fund. The CROS Project will replace the Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS) and develop an enterprise data warehouse. The proposed system will provide an integrated and automated solution that will use up-to-date tax collection, storage, account management, and data retrieval technologies to maximize the effectiveness of BOE's operations and staff. The proposed system will also provide efficiencies to businesses reducing the time and effort needed to interact with the BOE. BOE proposes a solution involving a performance-based, benefits-funded procurement of a vendor contract and BOE in-house development of specific components. The vendor contract will be for the purchase of an existing software product, necessary hardware, and vendor resources to customize the software according to BOE's needs. This software will provide the primary functionality for supporting program activities and generation of management reports. The vendor will be responsible for the overall project integration and assist in project change management activities. BOE staff will work with the vendor to provide legacy system data migration and modifications needed for ancillary systems to accommodate the new system and functionality. This project will be funded by increased revenue from implementation of the proposed system. Vendors must agree to provide the initial funding for hardware, software, and custom development and be paid by a portion of the revenue the proposed solution generates. The vendor contract will contain a maximum dollar cap for the vendor and the vendor will not receive full compensation if sufficient revenue levels are not met or if business program process deliverables are not provided.

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

2.2 SECTION B: PROJECT CONTACTS

Project #	0860-094
Doc. Type	SPR

Executive Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Executive Director	Kristine	Cazadd	916	445-4380		916	324-2586	Kristine.Cazadd@boe.ca.gov
Program Directors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Budget Officer	Larry	Norris	916	323-5128		916	322-3184	Larry.Norris@boe.ca.gov
CIO	Brenda	Fleming	916	445-8677		916	327-3483	Brenda.Fleming@boe.ca.gov
Project Sponsors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Project Director	Eric	Steen	916	322-9918		916	322-3391	Eric.Steen@boe.ca.gov
Direct Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Primary Contact	Eric	Steen	916	322-9918		916	322-3391	Eric.Steen@boe.ca.gov
Technical Project Manager	Chris	Kahue	916	323-4333		916	322-3391	Chris.Kahue@boe.ca.gov
Business Project Manager	Michael	Skikos	916	322-5994		916	322-3391	Mike.Skikos@boe.ca.gov

INFORMATION TECHNOLOGY PROJECT SUMMARY

2.3 SECTION C: PROJECT RELEVANCE TO STATE AND/OR DEPARTMENTAL PLANS

1.	What is the date of your current Operational Recovery Plan (ORP)?	Date	04/15/10
2.	What is the date of your current Agency Information Management Strategy (AIMS)?	Date	02/02/09
3.	For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.	Doc.	Information Management Strategy (AIMS)
		Page #	18

Project #	0860-094
Doc. Type	SPR

		Yes	No
4.	Is the project reportable to control agencies?	X	
	If YES, CHECK all that apply:		
X	a) The project involves a budget action.		
	b) A new system development or acquisition that is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.		
X	c) The estimated total development and acquisition cost exceeds the departmental cost threshold and the project does not meet the criteria of a desktop and mobile computing commodity expenditure (see SAM 4989 – 4989.3).		
	d) The project meets a condition previously imposed by Technology Agency.		

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

2.4 SECTION D: BUDGET INFORMATION

Project #	0860-094
Doc. Type	SPR

Budget Augmentation Required?		
No		
Yes	X	If YES, indicate fiscal year(s) and associated amount:

FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18
$0	$0	$9,014,597	$9,876,299	$74,414,716	$73,734,164	$50,177,689	$7,555,317

PROJECT COSTS

1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	One-Time Cost	$547,059	$3,296,213	$8,991,404	$9,329,283	$66,882,711	$60,246,044	$35,844,789	$0	$185,137,502
3.	Continuing Costs	$0	$0	$23,193	$547,016	$12,689,156	$18,692,736	$22,928,491	$29,399,174	$84,279,765
4.	TOTAL PROJECT BUDGET	$547,059	$3,296,213	$9,014,597	$9,876,299	$79,571,867	$78,938,780	$58,773,280	$29,399,174	$269,417,269

PROJECT FINANCIAL BENEFITS

5.	Cost Savings/ Avoidances	$0	$0	$0	$0	$0	$0	$0	$0	$0
6.	CROS Revenue Increase	$0	$0	$0	$0	$75,000,000	$90,000,000	$120,000,000	$191,939,376	$476,939,376
7.	Support Effort Revenue Increase	$0	$0	$38,745,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$66,529,000	$371,390,000

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

2.5 SECTION E: VENDOR PROJECT BUDGET

Project #	0860-094
Doc. Type	SPR

Vendor Cost for FSR Development (if applicable)	N/A
Vendor Name	

VENDOR PROJECT BUDGET

1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	Primary Vendor Budget	$0	$0	$0	$0	$31,490,000	$45,859,000	$26,782,750	$0	$104,131,750
3.	Independent Oversight Budget	$0	$45,000	$175,000	$175,000	$175,000	$175,000	$175,000	$0	$920,000
4.	IV&V Budget	$0	$0	$0	$0	$674,700	$674,700	$674,700	$0	$2,024,100
5.	Other Budget	$0	$896,107	$2,129,600	$2,883,200	$2,830,400	$2,830,400	$2,830,400	$0	$14,400,107
6.	TOTAL VENDOR BUDGET	$0	$941,107	$2,304,600	$3,058,200	$35,170,100	$46,939,100	$27,862,850	$0	$116,275,958

---------- (Applies to SPR only) ----------

PRIMARY VENDOR HISTORY SPECIFIC TO THIS PROJECT

7.	Primary Vendor	
8.	Contract Start Date	
9.	Contract End Date (projected)	
10.	Amount	$

PRIMARY VENDOR CONTACTS

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail

INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

2.6 SECTION F: RISK ASSESSMENT INFORMATION

Project #	**0860-094**
Doc. Type	**SPR**

RISK ASSESSMENT

	Yes	No
Has a Risk Management Plan been developed for this project?	X	

General Comment(s)
All identified risks **will be included in the** detailed Risk Management Plan in accordance with the BOE Project Management Methodology (PMM). The project manager will have primary day-to-day responsibility for managing risks and will conduct a risk analysis for the project. Risks will be analyzed, classified and prioritized to reflect probability of occurrence and impact. The project manager will be responsible for tracking risks, determining status relative to risk triggers and implement risk responses as necessary. Identified risks will be escalated to the appropriate levels as necessary in order to properly mitigate the risks. An update on the condition of these risks will be included in the on-going status report to management.

3.0 Proposed Project Change

This section provides an overview and background of the existing BOE tax collection system. This Special Project Report (SPR) is submitted to address the changes in schedule, cost and scope affecting the project.

3.1 PROJECT BACKGROUND/SUMMARY

Program Overview

The Board of Equalization (BOE) administers over 20 different tax and fee programs which provide nearly 35% of the State's annual revenue. These taxes and fees generated $50.7 billion in revenue during Fiscal Year (FY) 2010-11. Revenues collected by the BOE programs support public safety, transportation, housing, health and social services, and natural resources management. Of the sales and use tax revenues $13.3 billion are allocated to local tax jurisdictions. To carry out the mission and goals of the agency, the BOE employs more than 4,700 employees in its Sacramento Headquarters and 26 field offices, including three out of state offices.

As a principal revenue-generating agency of the State, the BOE is often required to interpret and implement statutory changes mandated by the legislature. With the current budgetary environment, the legislature has sought new revenue sources and passed legislation that changed the number of tax/fee programs, expanded the number of customers that are required to register with BOE and modified existing tax/fee rates.

Detailed analysis is required to evaluate the workload impact on existing programs and information technology prior to implementation of statutory changes. Significant resources from both program and information technology are needed to implement statutory changes that involve, but are not limited to, modifying and/or creating tax forms, developing new program policies and procedures, notifying impacted customers, reprogramming existing systems and adding system applications.

Project Background

On May 23, 2011 the BOE submitted a Feasibility Study Report (FSR) in support of the Centralized Revenue Opportunity System (CROS) Project, which will replace the Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS) and develop an enterprise data warehouse. The proposed system will provide an integrated and automated solution that will use up-to-date tax collection, storage, account management and data retrieval technologies to maximize the effectiveness of BOE's operations and staff.

The proposed system will also provide efficiencies to businesses by reducing the time and effort needed to interact with the BOE. BOE proposes a solution involving a performance-based, benefits-funded procurement of a vendor contract.

This State will ultimately be reimbursed for project costs by increased revenue from the implementation of the proposed system. Vendors must agree to provide the funding for hardware, software and custom development and be paid a portion of the revenue the proposed

solution generates. The vendor contract will contain a maximum dollar cap for the vendor, and the vendor will not receive full compensation if sufficient revenue levels are not met or if business program process deliverables are not provided.

- Long term revenues associated with this project are now estimated at over $476 million over the life of the project. The overall project revenue decreased from $640 million to $476 million primarily because of the delay from FY 13/14 to FY 14/15 in awarding the contract to the vendor. The revenue increase was originally planned in the FSR to start January 1, 2014 and is now projected to start on July 1, 2014. This delay does not change the anticipated on-going revenues from the projects implementation. However, the delay reduces the number of months the implemented solution revenues is displayed in the economic analysis worksheets, thereby appearing as a revenue decrease.

3.2 Project Status

Since the approval of the FSR several issues have arisen that necessitate the need to revise the project schedule, scope and cost. The revisions are due in part to the conditions placed upon the project by the California Technology Agency (CTA). The conditional approval of the FSR required that:

- BOE work with the Franchise Tax Board (FTB) and the Employment Development Department (EDD) on the procurement strategy so as to leverage their lessons learned from recent IT procurements.

- BOE consult with FTB and EDD on opportunities to coordinate and collaborate on various aspects of the business process affected by CROS and seek to avoid unnecessary duplication and incompatibility of systems and business methods.

BOE work with FTB and EDD to identify opportunities to share data and processes between the agencies' IT systems as part of the ongoing IT project efforts of the three agencies, including CROS, the Enterprise Data to Revenue (EDR) project and the Accounting and Compliance Enterprise Systems (ACES) project, to the extent feasible without significant disruption or risk to those projects.

Scope

To meet the conditional requirements of the FSR, BOE immediately met with representative of FTB and EDD and analyzed their respective projects. Additionally, BOE's analysis included lessons learned in reviewing other in-state and out-of-state enterprise projects. This analysis consistently identified areas of significant risk, discussed below, that must be addressed prior to the implementation of the new system.

Primarily, the analysis showed that the project must address data cleansing and conversion, external interfaces and significant backlogs resulting from impure data and insufficient data matching capabilities much earlier than initially planned.

Since the FSR was approved, BOE continues to see new tax initiatives and mandates which require system implementation and maintenance. The FSR plan to use redirected technology resources and freeze the existing systems is found to be impractical. Considering the lessons learned from other projects and the continued mandatory maintenance workload, existing

technology resources would be stretched to a breaking point, negatively impacting the ongoing support of the business programs and endangering the success of the project.

Schedule

The FSR schedule to award a vendor contract in January 30, 2014, has been delayed until June 30, 2014. This adjustment is due in part to a 3-month delay starting the Request for Proposal (RFP) pending approval of the FSR. Additionally, during the review of the Information Technology Project Plan (ITPP) timeline, the Department of General Services (DGS) felt that more time was needed for the vendors to prepare their responses to the conceptual draft, and final proposals, and to allow time for vendors to make adjustments to their proposals based upon feedback from the confidential discussions. This procurement requirement impacted the timeline by 4 months. The Revised Project Schedule is provided in Section 4.5.5.

Cost

The total project costs are now estimated to decrease by approximately $8.7 million over the life of the project. This decrease is primarily due to a shift in resource costs from the solution provider to BOE business and technology staff supplemented with contracted expertise to address two key lessons learned discovered when reviewing other enterprise projects – data conversion and external data exchange interfaces. However, increased revenues generated by augmenting the business program activities with auditors, collectors and support positions will cover overall project costs in addition to contributing to the success of the project. The augmented business program staff will provide the CROS project the opportunity to validate the success of the data cleansing and conversion prior to the implementation of the new system. Revenues from the expanded business operations are estimated at $38.8 million in FY 12/13 and $66.5 million in FY 13/14 and ongoing, in addition to the revenues originally projected from the project. The revenues attributable to the business backlog activities are separately identified in the Economic Analysis Worksheets. BOE is required by the Budget Act annually to report revenue information to the Legislature each December, and intends to include these new business revenues as a part of that report.

3.3 REASON FOR THE PROPOSED CHANGE

As discussed under Sections 3.1 and 3.2, there are 4 reasons for the proposed change:

- **Reduce Project risks from lessons learned** from government enterprise projects related to data cleansing and conversion, and external interfaces.
- **Provide adequate project technical resources** for implementation and maintenance reduces reliance on contractors at higher costs.
- **More clearly define RFP business rules** in preparation for system integration.
- **Backlogs - Improve data resulting in increased revenue** by addressing audit, collection and registration backlogs increase revenues through leads developed by improved data.

The proposed changes are the result of BOE adopting similar methodologies used by both the FTB and EDD in their respective projects. This includes obtaining addition resources to address ongoing workload issues and to pursue an early effort to clean and convert current system data prior to the implementation of the new system. Additionally, the BOE will address significant program area backlogs that could negatively impact the success of the new system. The

proposed changes will also allow the BOE to continue the CROS procurement process without excessively delaying statutory tax and fee program adjustments or ongoing program and technical activities resulting in revenue losses.

Project Approach

Originally the procurement phase was supported by redirection of internal resources and funds. Submitting a Budget Change Proposal (BCP) was envisioned during the implementation. Based on the need to place more emphasis on data conversion, external interfaces, and documenting business rules during procurement, the BOE has submitted a Spring Finance Letter, which will be revised to conform to an approved SPR.

Reduce Project risks from lessons learned - Data Cleansing, Conversion and External Interfaces

Both FTB and EDD noted the importance of having the existing data clean and properly converted prior to the implementation of a new system. Each agency expended resources resolving data issues prior to the implementation of their new systems. Addressing data cleansing and conversion issues early will:

- Format existing data using current industry standards.
- Reduce the time and cost needed for any vendor to transition the data to a new system.
- Reduce data errors prior to the implementation of the new system.
- Increase our ability to import data from external data sources (other state agencies and 3rd party businesses).
- Allow the BOE to validate the improved data through actual audit, collection, appeals and registration activities and generate additional revenues.

When the BOE implemented its current systems in the late 1990's, the data was not completely cleaned and converted to a state that eliminated inconsistencies. In the years following, standard data formats were not consistently used as new information was added to IRIS and ACMS. Data problems were increased because not all of the BOE tax and fee programs were transitioned to IRIS and ACMS at the same time. Many of the special tax and fee programs were not moved to the current systems until years later. This disjointed effort to combine tax and fee programs into IRIS and ACMS resulted in information that is difficult to locate or match internally between BOE tax and fee programs and with external data sources.

Provide adequate project technical resources and eliminate redirection of staff

As noted in the FSR, BOE must devote significant program and information technology resources to implement statutory changes that involve modifying and/or creating tax forms, developing new program policies and procedures, notifying impacted customers, reprogramming existing systems and adding system applications. This is in addition to numerous minor modifications and the ongoing routine maintenance work that takes place each year.

Many of the technical resources needed for CROS were anticipated to be redirected based on the assumption that BOE would freeze changes to the existing legacy systems while CROS was being brought up. This strategy has been deemed impractical and costly given BOE's historical tax/fee mandates and the amount of projected system down time. Manual workarounds have and will continue to delay the implementation of revenue generating system changes or updates. This critical change in project assumption recognizes the past 3 year trend in the number of legislative mandates BOE has been required to implement. BOE also recognizes the need to fund sufficient technology resources earlier than anticipated.

By accelerating efforts which were originally considered within selected vendor's scope, the BOE reduces the overall cost of CROS in three ways: 1) the BOE can undertake these activities for less than what a vendor would charge. 2) Putting off high-risk tasks such as these invites challenges and increased costs. Tackling risks early in the project life cycle enables the BOE to more effectively focus on unanticipated risks that will likely emerge later in the project. 3) As shall be demonstrated in the subsequent section, these tasks position the BOE to generate more revenue sooner.

More clearly define RFP business rules

Even though the scope of the effort to document the business rules was not clearly defined in the FSR, the business requirements within the CROS RFP refer to business rules, policy, or law. CROS plans to collect, document, and prepare these rules so that when the vendor is selected and engaged, the business rules are readily available to enhance configuration of these rules in the new system.

Backlogs - Improve data resulting in increased revenue

During the initial procurement phase of the CROS project, business program area workgroups were created to develop current business process flows, document system and business process deficiencies and identify areas for new system and business process improvements. The results of the business workgroups coupled with separate but related analysis showed a need to clean up several business program area backlogs to get ready for the reengineering and implementation of the new system, particularly in the area of data conversion. Better data will allow the BOE to reduce the amount of bad data to be converted in to the new system, at the same time improve its ability to select productive audits, collect on liabilities previously determined uncollectible, identify unregistered accounts and resolve appeals cases earlier. While reducing data conversion problems/risks, these actions will also generate additional revenue of approximately $38.8 million in FY 12/13 and $66.5 million in FY 13/14 and ongoing.

The backlog at BOE is the result of: 1) Collections - Accounts receivables have increased by 121% over the past 4 years exceeding $2 Billion, 2) Audits - Approximately 17,600 accounts have the potential to be productive audits, at the margin annually, and only 40% of those are audited with existing resources, 3) Statewide Compliance and Outreach Program (SCOP) - Over 100,000 new regular seller permits are issued each year with countless other businesses operating without a sellers permit, 4) Settlement and Offer in Compromise - due to technology limitations (i.e. reliance on paper audit work papers).

The FTB found a similar need to identify and clean up the current, ongoing return processing, and collections backlogs to get ready for the reengineering and implementation of the new return processes with the EDR solution. They found that the backlog would negatively impact the availability of data, revenue, and customer service. Deferring this cleanup effort to the

system development phase of the project would have deferred revenue, resulted in competing resources, and risked the timely completion and quality of both activities, adding further risk to the EDR project. In response to this need, additional business resources were authorized to reduce the backlog prior to the implementation of the new system and in turn generate additional revenue. Based on FTB's experience, BOE estimates that cleaning up the backlog now will be less costly than if this process was undertaken by the prime vendor. In addition, this will reduce the risk of project delays due to data/conversion issues.

Following the FTB methodology, BOE is requesting new auditor, collector and support resources to address the backlog assignments to ensure a successful implementation of the new systems. As stated above, this approach will result in increased revenues to the state. The additional resources are justified at this time to address the increase in audit, collection and registration leads that will be developed with the improved data.

3.4 PROPOSED PROJECT CHANGE

The following changes are described in Sections 3.2 and 3.3.

Schedule

The procurement approach is consistent with the FSR. BOE proposes to delay the award of the vendor contract from January 30, 2014 to June 30, 2014 as shown in Section 4.5.5. See Sections 3.2 and 3.3 for background.

Scope

Based on information discussed in Section 3.3, four significant scope changes proposed are outlined below.

This strategy includes bringing resources/positions to the project earlier to focus on cleansing and synthesizing data from multiple legacy assets in preparation for data conversion; and establishing a Managed File Transfer (MFT) solution that streamlines data sharing with external partners.

The analysis of the EDR and ACES projects in addition to ongoing discussions with FTB and EDD staff caused the BOE to reevaluate the early stages of the CROS project. To leverage the lessons learned from the other projects, the BOE choose to address the issues relating to data cleansing and conversion, external interfaces and backlog cases earlier in the procurement phase. The proposed changes are needed to ensure the success of CROS based on proven methods utilized in EDR and ACES. Additionally, these changes will allow the program and technical areas to address the impure data issues with validation by program staff (auditors and collectors) prior to the implementation of the new system.

Data cleansing and conversion

IT Projects encounter problems in two areas – data readiness and interfaces. Data readiness is the process by which data across legacy assets are cleansed and synthesized, and interfaces address the way data are shared internally and externally. Over the past few months, BOE has been analyzing legacy data and believes it will reduce risk and accelerate the implementation of the solution if CROS focuses on analyzing, converting and cleansing legacy system data. In

addition to an internal review of data assets, CROS has been meeting with FTB and EDD to share lessons learned and one of the lessons they both spoke about was the importance of data readiness. As stated in the FSR, BOE started data conversion/cleansing activities in parallel with the development of the RFP. As more was understood, CROS decided to enhance and accelerate work in this area. To that end, CROS plans to secure contracted expertise to supplement BOE technical staff to conduct data extraction, transformation tasks.

BOE is equipped to succeed on the data conversion rather than the prime vendor for several reasons:

- Expertise of the individuals hired to plan, lead and conduct these activities – the resources CROS hired to work on these activities have experience in the legacy database system CROS is converting from and converting to;
- Expertise of the individuals from BOE business and technology staff that are on the CROS project – CROS team members have knowledge of the logical and physical IRIS database structures;
- CROS has the time now to devote to this undertaking – CROS is starting a little over 2 years before the vendor is on board; any work done will be beneficial to the implementation;
- Off loading this significant activity makes it easier for the CROS solution provider to focus on delivering the core solution, the data warehouse and the internal and external customer interfaces.

The approach for data cleansing and conversion will begin by creating subject area data models driven by the business requirements. These subject areas will align with the business functional areas within the scope of CROS. The entities and data elements within the subject area model will be used to identify the data stores in the legacy source systems that will be analyzed, converted and cleansed. CROS plans to focus the initial data conversion efforts on the IRIS legacy system due to the fact that the underlying integrity of the data within IRIS is questionable, and the data that is stored within IRIS is in an older, non-relational format. CROS believes this system will be the most problematic of the legacy data stores to convert to the new platform.

The approach will be an iterative approach and will follow the high level steps below:

Planning

- Data migration strategy
- Environment set-up and readiness
- Standards and processes

Data Preparation

- Prepare data source
- Document data files/tables to be converted
- Develop data model for target database

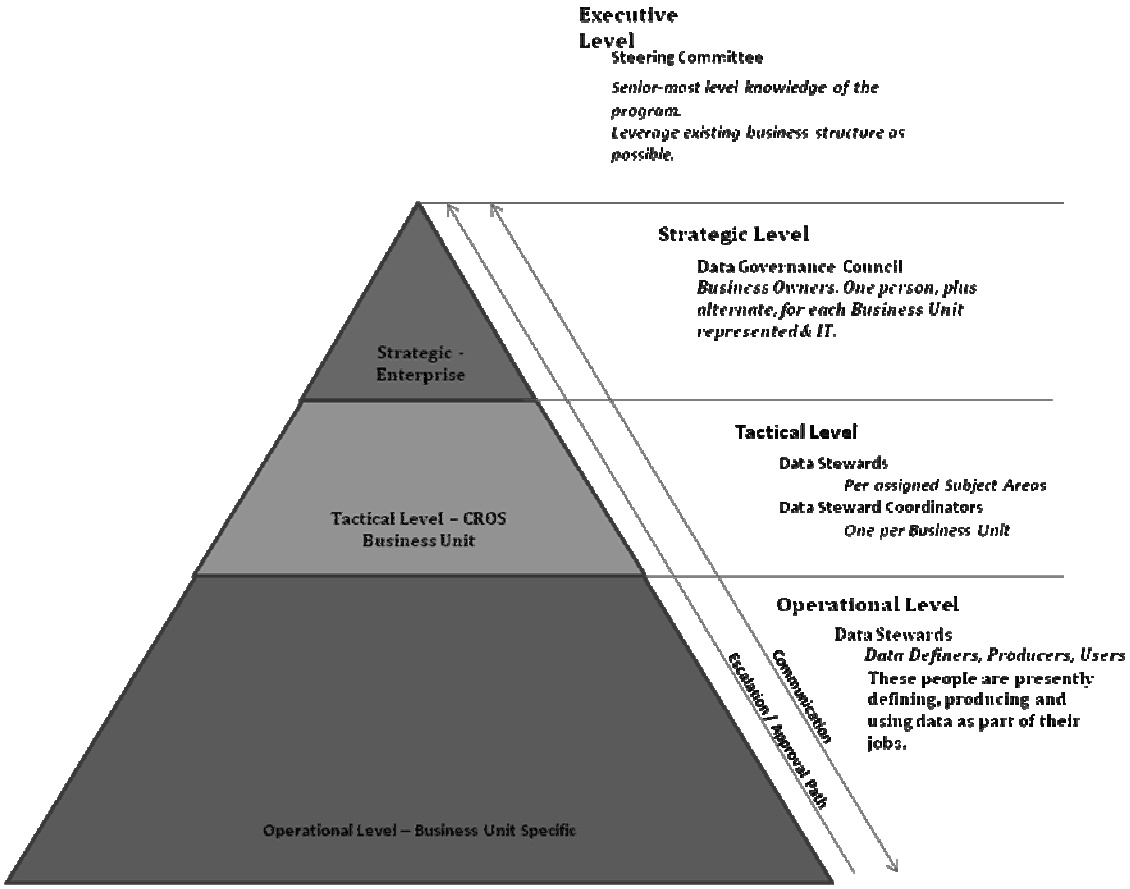
Enact data quality - iteration

- Update migration routines/ETL scripts
- Execute programs and scripts
- Develop initial data validation and data cleanup approach
- Data cleansing

CROS project management currently plans four-to-five overlapping iterations, each lasting approximately six months particularly due to the fact that until the data is analyzed, mapped and some quality profiling is completed, the current state and complexity of the data will be unknown. The iteration timeline may be adjusted once the state of the data and the scope and size of the cleanup effort is known.

Governance

One of the critical components of data cleansing and conversion is the authority and control over the management of the converted/cleansed data assets – data governance. The following chart depicts the structure under which CROS will facilitate and escalate decisions pertaining to data definitions and standardization issues that arise.



CROS understands the importance of involving business and technical staff and has incorporated business stewards and technical custodian resources to work on data conversion/cleansing activities. Data stewards and custodians will be empowered to weigh in on and make decisions pertaining to data, for example, data quality, security,

access, etc. Organizational decisions pertaining to standards, integration between different programs to accomplish one common set of data is facilitated through the Data Governance Council. The Data Governance Council and Steering Committee are comprised of manager and executive level members representing all business areas within the scope of CROS and the technology area. Roles supporting the data conversion/cleansing and the data governance structure can be found in Section 4.5.4.

External Interfaces

The CROS project plans to streamline and automate external data interfaces prior to the implementation. Currently, BOE provides and consumes numerous files with internal and external partners. While internal file sharing should be significantly reduced given the solution's centralized operational database, file exchange with external parties remains critical.

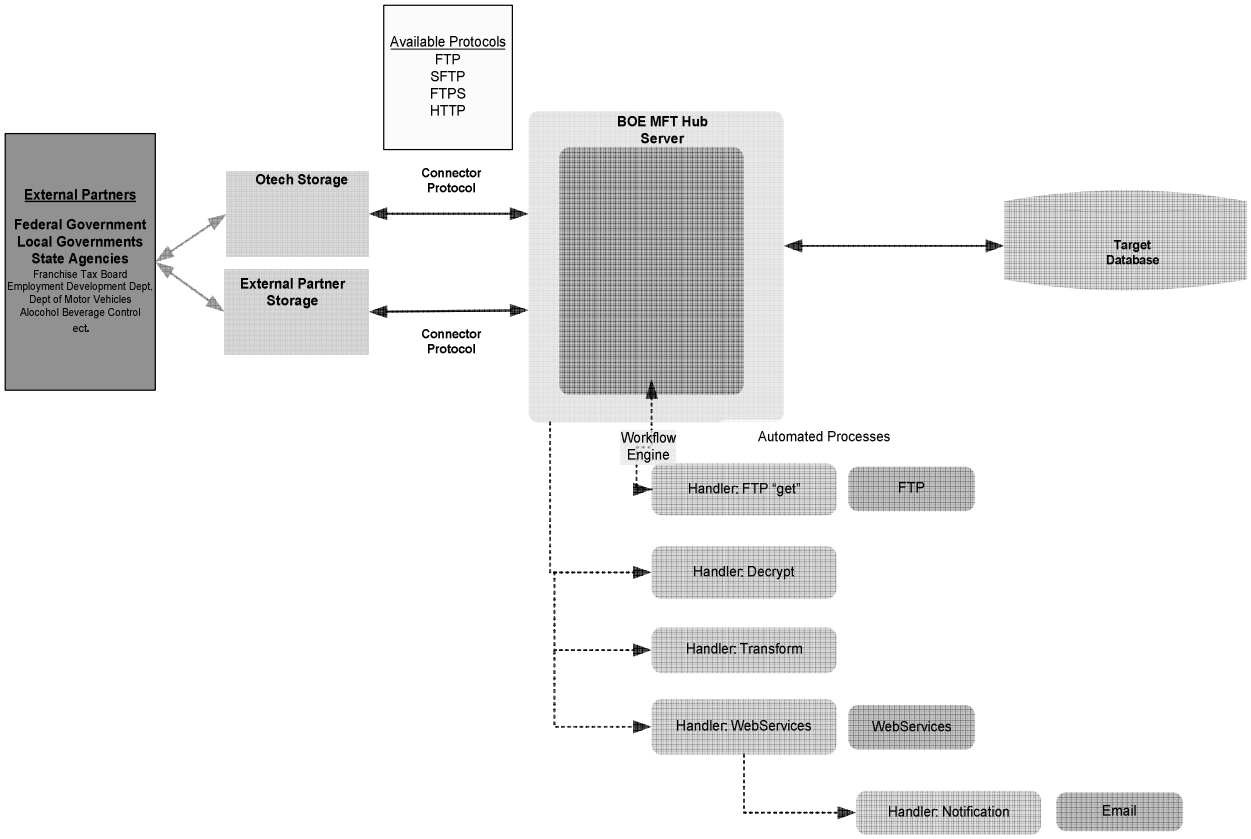
Currently files are shared using various mediums such as email, FTP, and even hand-delivered on CD, and so on. File formats are varied and inconsistent. Files may be imported, exported, exchanged (send & received) or directly accessed by BOE staff. When files are imported, they may be loaded to a database or the legacy system. Or the file could also be delivered to the program area where it is analyzed and manually cleansed before being loaded into legacy system. The reverse process occurs when a file is exported or exchanged. Direct access occurs when BOE is given permission to log into an external partner's system and view the data directly from within BOE.

Because BOE regularly shares large data files with partners, CROS plans to implement a facility to support managed file transfer (MFT) and data assimilation in a consistent and secure way, making it easy for external partners to automate file submission. The BOE envisions an MFT solution that functions as a centralized gateway for all file-based transactions. It also envisions a means by which data within files are transformed irrespective of format (e.g., fixed-length, comma delimited, pipe-delimited, XML) and appropriately applied to internal data stores. Implementing this aspect of the solution will require significant analysis of existing interfaces and working closely with external partners to modify the way files are shared. In some cases, agreements must be forged regarding security standards, protocols, and file formats. Some BOE partners may be willing to standardize on XML-based schemas that make it simpler to share data. Desirable is a solution that adheres to technical format standards instituted by the X12 subcommittee, Tax Implementation Group for Electronic Commerce Requirements Standardization (TIGERS).

In advance of selecting a prime vendor for CROS, the BOE intends to implement a managed file transfer solution to orchestrate file-based interfaces. The BOE embarked on this approach based on recommendations made by EDD, the experience of CROS management on similar projects, and based on the stipulations outlined within the CROS FSR approval letter that BOE explore ways to improve data sharing with the other revenue agencies.

The following diagram represents a conceptual view of the architecture the project is planning to implement related to the data exchange interfaces.

Managed File Transfer



The first step in this exercise is to catalog all file-based interfaces between BOE and external partners. CROS is creating an inventory of these interfaces documenting the format, frequency, source, medium, file layout, etc. There are over 100 documented interfaces; but only a small sample are found in Attachment A due to the sensitivity of some of the information documented in the inventory. External incoming, outgoing, batch, and file interfaces are within the scope of this effort; real time (transaction level) interfaces are out of scope. Once the inventory is complete, it will be analyzed and prioritized and CROS will conduct outreach activities to discuss ways to streamline and automate manual interfaces with the external entity. The effort required on the part of the external partner will depend on the approach decided to streamline/automate the interface. Roles and responsibilities for the resources conducting activities related to the external interfaces can be found in Section 4.5.4

Security of the interfaces will be addressed as required and methods such as secure file transfer protocols or data encryption utilizing public/private keys may be employed. When working on the SLA or contract with external partners, CROS will ensure procedures and contacts information has been defined for error situations such as a file that generates an error or a missed submission.

To allow maximum flexibility to bidding vendors and so that the project does not preclude a more streamlined, efficient interface solution, the CROS project plans to allow bidder's to propose how they would implement the data exchange interfaces within the constraints of their proposed solution. For example, the vendors could choose to integrate their solution with the CROS data mart (where interface data will be stored), the CROS MFT, or the vendor could integrate the (CROS developed) standard interfaces directly with their solution. In either scenario, the work the CROS project is doing to standardize and automate these interfaces will be valuable in implementing the proposed solution.

Business Rules

Many of the business rules needed for the new system are hardcoded in legacy programs. CROS Project Management plans to piggy back on the data conversion efforts to review and extract business rules from the legacy code as the data conversion team works its way through legacy systems.

Additionally, program SMEs will research and gather policy and business rule documents defining rules that are not stored in program code.

Integration

Once of the conditions of the CTA approval letter is for BOE to consult with FTB and EDD on opportunities to coordinate and collaborate on various aspects of the business processes affected by CROS and seek to avoid unnecessary duplication and incompatibility of systems and business methods. BOE has started a dialogue with FTB and EDD sharing lessons learned on their initiatives, discussing common data elements. To enhance these discussions, CROS plans to hire an Integration Architect (IA) to review system architectures, product capabilities, standards, and process compatibilities to better understand where synergies can be achieved. The IA is also responsible for improving the way BOE shares data with external and internal parties such as FTB, EDD, the Department of Motor Vehicles, the Internal Revenue Service, etc. The IA will be responsible for examining and making recommendations as it pertains to protocols (e.g., FTP, SFTP, FTPS, Web Services), security and encryption standards, file format standards, and data transformation capabilities and guiding the BOE in its ability to apply incoming data to operational data stores or staging areas for analytics.

The CROS and BOE TSD project management teams met with EDD on data conversion 3 times. EDD is implementing a data warehouse. Some of the specific lesson learned CROS gleaned from these meetings include:

- Plan for a staging area in between the source and target databases; EDD used the staging area (separate from the warehouse) to load the data and from which the vendor extracted and loaded into the target database; record counts were performed at the legacy extract, staging load, and target load;
- State employees must assist in the mapping of legacy data to target system;
- Make the vendor ultimately responsible for the data conversion;
- Allow as much time as possible for data conversion/cleansing activities; EDD took 14 months from start to finish; this was somewhat aggressive and required a great deal of overtime to complete on schedule;

- Plan a reasonable/realistic timeframe for these activities: to meet the 14 month timeframe, a lot of overtime was taken which became an issue for the project; some of the state staff who worked a lot of overtime got burnt out;

CROS and EDD also participate on a Joint Application Data Sharing Team. This collaborative effort resulted in EDD providing:

- a web tool they used to document the inventory of all data interface exchanges;
- input on what meta data to collect and manage.

Cost

BOE plans to add resources to address data cleaning and conversion and external interfaces and provide sufficient technical resources to avoid freezing changes to the existing legacy systems while CROS was being brought up, this SPR results in a decrease in the total project costs by approximately $8.7 million over the life of the project. This decrease is due mainly to the data conversion and cleansing, external interfaces and business rules activities being performed earlier in the project by BOE staff and selected contract staff at lower cost than could be completed by the system integrator during implementation phase. Some costs categories showed zero or minimal cost changes. The categories that account for the majority of the overall project cost increases and decreases are summarized below.

BOE plans to address backlogs that will result in better data in preparation for data conversion and in more program leads – which are projected to generate an estimated $66.5 million in increased revenue.

Hardware Purchases

One-time $1.1 M (Increase) -	Equipment for new staff; network and storage for scope change; delayed Documentum hardware purchase moves costs out one year.

Software Purchases/License

One-time $0.3 M (Increase) -	Data cleansing server software; software for new staff; and delayed CROS implementation software costs.
Continuing $3.8 M (Decrease) -	Effect of having six months less on-going costs due to project delay.

Software Customization

One-time $11.9 M (Decrease) -	Reduced software customization costs due to estimated effect of parallel initiatives.

Attachment B provides a detailed explanation of how the cost of the parallel initiatives of $10.2 Million achieves a $11.9 Million reduction in system integrator costs and a total net savings of 2.4 Million.

Contract Services

One-time $12.3 M (Increase) - Consultants to address the scope changes not anticipated in the FSR. Experts are being added to the project as compared to the redirection of technical staff.

Telecommunications

Continuing $1.1 M (Decrease) - Delayed vendor implementation cost.

3.4.1 Accessibility

The project plans to comply with the accessibility requirements of Government Code 11135/ Section 508 by specifying this compliance in the Request for Proposal (RFP), evaluating vendors for how well the proposed solution will comply with the accessibility requirement, and use our Independent Verification and Validation (IV&V) consultants to check the solutions actual conformance with Section 508.

3.4.2 Impact of Proposed Changes on the Project

The intended deliverables remain the same as stated in the FSR although full project implementation is delayed.

3.4.3 Feasible Alternatives Considered

There are no feasible alternatives available to address the issues identified beyond the proposed changes. The changes identified in this document are primarily being implemented based on the conditional requirements imposed by the California Technology Agency.

3.4.4 Implementation Plan

The CROS Project Implementation approach identified in the FSR will not change other than a revision to the projected implementation start date and a realignment of project costs.

4.0 Updated Project Management Plan

The BOE is committed to the success of the CROS project. To this end, BOE has developed a project management plan that uses the CTA's Project Management Methodology (CA PMM), as presented in the State Information Management Manual (SIMM).

This project management plan is presented in the following sections:

4.1 Project Manager Qualifications
4.2 Project Management Methodology
4.3 Project Organization
4.4 Project Priorities
4.5 Project Plan
4.6 Project Monitoring
4.7 Project Quality
4.8 Change Management
4.9 Authorization Required

4.1 Project Manager Qualifications

The full-time project manager continues to manage the CROS Project.

4.2 Project Management Methodology

The project management methodology described in the FSR Project Management Methodology, Section 6.2, continues to be followed, and is aligned with the California Project Management Methodology (SIMM section 17).

4.3 Project Organization

A revised Project Organization Chart is provided in Attachment C.

4.4 Project Priorities

The project trade-off matrix shows the priority of importance of project schedule, scope, resources and quality, and uses a factor of 1 (highest) to 4 (lowest) for each of the categories. The project priorities have not changed from those provided in the FSR.

Schedule	Scope	Resources	Quality
3	1	4	2

4.5 PROJECT PLAN

4.5.1 Project Scope

The CROS project was approved to:

- Replace the IRIS and ACMS systems,
- Provide an enterprise data warehouse,
- Expand customer online services,
- Provide assistance with Organizational Change Management, and
- Acquire a new system through the use of a performance-based, benefits-funded vendor contract.

While the final scope of the CROS project has not changed, the analysis of EDR and ACES showed that the project must pursue focused efforts earlier in the procurement process addressing data conversion, external interfaces and significant backlogs resulting from impure data and insufficient data matching capabilities.

4.5.2 Project Assumptions

The major assumptions outlined in the FSR will remain the same.

4.5.3 Project Phasing

The CROS project implementation approach identified in the FSR will not change.

4.5.4 Project Roles and Responsibilities

The roles and responsibilities of the major participants in the project have not changed; however, we have added the participants involved in data cleansing and conversion, external interfaces and business rules activities.

Position	Roles & Responsibilities
Infrastructure Architect	• Guide BOE to implement processes and tool(s) to manage data sharing in a unified way.
Conversion Specialist	• Provide strategic guidance, data quality and conversion tools, craft ETL scripts.
Data Architect	• Build comprehensive logical data models, data dictionaries, model BI schemas, and assist with ETL.
Data Steward	• Responsible for data content, context, and associated business rules. • Communicates the purpose, data needs, security level of data being stored, and the business reason for creating the data store.
Data Custodian	• Safeguards custody, transport, storage of the data and implementation of the business rules.

Position	Roles & Responsibilities
Data Owner	• The entity within BOE that can authorize or deny access to certain data, and is responsible for its accuracy, integrity and timeliness.
Data Governance Council	• Approves enterprise data definitions, data governance program decision-making and issue resolution.
External Agency Liaison (data exchange interfaces)	• A resource at the external agency that will work with BOE to reach agreement on the scope of changes to the interface, ensure updates to the SLA/contract are implemented. • Facilitate implementation of programmatic modifications to interfaces as required.
Procurement Advisor	• Provides guidance on procurement process and ensures that it satisfies legal and regulatory requirements while minimizing risks and identifying potential hazards. • Provides confidentiality training.
Procurement Lead	• Sole communicator with vendors pertaining to the RFP. • Prepares specifications, statements of work, and procurement related technical material for incorporation in the RFP document. • Ensures contractor performance objectives are established. • Serves on evaluation panels. • Coordinates with Procurement Advisor. • Liaison with DGS on all procurement matters.
Project Management Support	• Plans, manages and coordinates execution and integration of procurement, data conversion, external interfaces and business rule activities. • Develops and maintains project plans, schedule, risks, costs, and prepares monthly CTA report. • Works with Director to respond to control agency inquiries/issues/findings. • Manage project management documentation, processes and repositories. • Provides periodic status to project director.
Technology Project Manager	• Manages day-to-day tasks and provides direction to technical team members. • Conducts final review of all technical deliverables. • Works with project management support to update schedule and ensure technical activities are executed. • Provides periodic status of technical activities to the Project Director.

Position	Roles & Responsibilities
Business Project Manager	• Manages day-to-day tasks and provides direction to Business team members. • Conducts final review of all business deliverables. • Works with project management support to update schedule and ensure business activities are executed. • Provides periodic status of business activities to the Project Director. • Approves routine project expenditures.
Project Director	• Leads the Overall Project. • Directs the planning, execution, and evaluation of all project activities, managers, team, and resources toward project success. • Reports project status to the Board Members, Project Steering Committee, Department Head Committee, and all external stakeholders. • Accepts all project deliverables. • Approves all project requirements, project schedule and cost changes. • Approves all project contract terms, conditions, changes and all major project acquisitions. • Recommends project funding or staff resource augmentations. • Responds to all oversight findings.

4.5.5 Revised Project Schedule

The most significant change in schedule is that the contract award is projected for June 30, 2014 instead of January 30, 2014.

Task	Start	Finish
RFP/Solicitation		
Pre-Solicitation		
Release RFI and copy of draft RFP	7/20/2012	7/20/2012
Solicitation		
RFP Released	10/22/2012	10/22/2012
Bidders Conference	12/5/2012	12/5/2012
Compliance Phase		
Receive Conceptual Proposals	1/22/2013	1/22/2013
Confidential Discussions with Individual Bidders	2/4/2013	2/20/2013
Final Phase		
Receive Draft Proposals	7/22/2013	7/22/2013
Receive Final Proposals	11/12/2013	11/12/2013
Conduct Cost Opening	3/13/2014	3/13/2014

Task	Start	Finish
Select Bidder	3/24/2014	3/24/2014
Special Project Report (SPR)	4/3/2014	4/18/2014
Notify Joint Legislative Budget Committee (Section 11)	6/13/2014	6/30/2014
Board Members Approval of Contract	6/18/2014	6/18/2014
Issue Letter of Intent to Award	6/18/2014	6/18/2014
Award Contract	6/30/2014	6/30/2014
Start Development	7/1/2014	7/1/2014

Task	Start	Finish
Parallel Initiatives		
Planning and environment setup	3/1/2012	6/30/2012
Data Conversion/Data Exchange Interfaces - Iteration #1	**7/1/2012**	**1/1/2013**
Analysis Inventory data sources Document legacy data sources to be converted Establish data model Prepare source data Document data quality rules	7/1/2012	10/1/2012
Design Design prototype data migration maps Determine initial data validation and data cleanup approach	9/15/2012	11/15/2012
Development Develop ETL scripts Run programs/scripts Load data	11/1/2012	12/1/2012
Test Review data Test quality rules Refine data cleanup approach Ongoing data cleansing	12/1/2012	1/1/2013
Data Conversion/Data Exchange Interfaces - Iteration #2	**1/1/2013**	**7/1/2013**
Data Conversion/Data Exchange Interfaces - Iteration #3	**7/1/2013**	**1/1/2014**
Data Conversion/Data Exchange Interfaces - Iteration #4	**1/1/2014**	**6/30/2014**
Business Rules		
Planning Establish/organize document repository Communication/feedback loop	5/1/2012	7/1/2012

Task	Start	Finish
Business Rules - Subject Area #1 Identify rule references Review legacy system code Gather policies/tables/rules Update documentation	**7/1/2012**	**1/1/2013**
Business Rules - Subject Area #2	**1/1/2013**	**7/1/2013**
Business Rules - Subject Area #3	**7/1/2013**	**1/1/2014**
Business Rules - Subject Area #4	**1/1/2014**	**6/30/2014**

4.6 Project Monitoring and Oversight

The project monitoring processes described in the FSR continue, including the use of an experienced contract Independent Project Oversight Consultant (IPOC).

4.7 Project Quality

The BOE's commitment to project quality continues, along with the established quality assurance processes approved in the FSR.

4.8 Change Management

The change management methodology approved in the FSR remains in place and is being used to manage change throughout the duration of the Project.

4.9 Authorization Required

N/A

5.0 Updated Risk Management Plan

A Risk Management Plan was identified in the FSR, and it documents the process and procedures that BOE is using to manage project risks.

5.1 Risk Register

See Attachment D for an updated risk log.

6.0 Updated Economic Analysis Worksheets (EAWs)

Attachment E - FSR to SPR Cost *Comparison* provides a detailed cost comparison between the FSR and the SPR. The costs shown in the Attachment E, FSR to SPR Comparison, only includes the CROS project specific costs. The business resources to address the backlogs will not be shown in this SPR but have been included in a related Spring Finance Letter. The additional business resources will augment the existing business program staff and results of this effort will be tracked and reported along with other program area resource augmentations consistent with BOE's current Budget Supplemental Report Language requirements.

See Attachment F for the required SPR EAWs.

7.0 Attachments

Attachment A – Data Interfaces
Attachment B – Parallel Initiatives Costs & Savings
Attachment C – Revised Organizational Chart
Attachment D – Risk Log
Attachment E - FSR to SPR Cost comparison
Attachment F – EAWs
Attachment G – Approved FSR

Attachment A - Data Interfaces*

Data Asset Provider	External Entity receiving BOE Data (if applicable)	Description	Import, Export, Exchange, or Direct Access	Data Owner	Frequency
Name of the entity that is providing the asset data	*If the data is exported to or exchanged with an outside agency or vendor, specify here. Don't list if the data is for import only.*	*Brief description of Scope and purpose of the work per the agreement*	*Defines if BOE is receiving, sending, exchanging (both receive and send), or direct access.*	*The responsible unit and division that maintains ownership of the business operations of a particular data source.*	*Identifies how often the asset data is received or sent by BOE.*
BOE Excise Tax Division	Alcoholic Beverage Control	ABC and ETD work together to license and regulate the manufacture, sale, purchase, possession and transportation of alcoholic beverages within California	Export	Excise Tax Division	Other (not listed)
BOE Motor Carrier Section	All IFTA Jurisdictions	BOE furnishes information to other government agencies, data that is essential for enforcement of motor fuel tax laws.	Export	Fuel Tax Division	Upon request
Secretary of State		Legal Entity Ownership Program - Identify change in control of legal entities.	Direct Access		Continuously/ Ongoing
Department of Motor Vehicles		DMV to provide the collection of vehicle/vessel and special taxes for BOE.	Import	Consumer Use Tax Section	
BOE Motor Carrier Section	IFTA Member Jurisdictions	To facilitate the administration of the International Fuel Tax Agreement (IFTA) as mandated by the provisions of the Intermodal Surface Transportation Efficiency Act of 1991, and to provide the basis for the processing of participant jurisdiction (base state) fuel tax returns subject to IFTA.	Exchange	Motor Carrier Section	Continuously/ Ongoing
CA County Assessors	CA County Assessors	Maintain statewide file of claims that have been filed to transfer base year value from properties that have been taken by governmental action.	Exchange	Property Tax Division	Continuously/ Ongoing

**Sample data - Information is incomplete and not verified*

	Rate	FY 2011-12 Hours	FY 2011-12 Cost	FY 2012-13 Hours	FY 2012-13 Cost	FY 2013-14 Hours	FY 2013-14 Cost	FY 2014-15 Hours	FY 2014-15 Cost	TOTAL Hours	TOTAL Cost	
Data Architect	$ 130	875	$ 113,750	2,000	$ 260,000	2,000	$ 260,000	2,000	$ 260,000	6,875	$ 893,750	
Integration Architect	$ 130	875	$ 113,750	2,000	$ 260,000	2,000	$ 260,000	2,000	$ 260,000	6,875	$ 893,750	
Interface Architect	$ 130					2,000	$ 260,000	2,000	$ 260,000	4,000	$ 520,000	
Business Analyst	$ 130	875	$ 113,750	2,000	$ 260,000	2,000	$ 260,000	2,000	$ 260,000	6,875	$ 893,750	
Data Conversion Specialists*	$ 130	1,414	$ 183,820	4,000	$ 520,000	4,000	$ 520,000	4,000	$ 520,000	13,414	$ 1,743,820	
Subtotal		4,039	$ 525,070	10,000	$ 1,300,000	12,000	$ 1,560,000	12,000	$ 1,560,000	38,039	$ 4,945,070	
Security Tech Lead (SSS III)				1,800	$ 109,647	1,800	$ 109,647	1,800	$ 109,647	5,400	$ 328,941	
Data Architect (SSSIII)				3,600	$ 219,294	3,600	$ 219,294	3,600	$ 219,294	10,800	$ 657,882	
Database Administrator (SSS II)				1,800	$ 98,361	1,800	$ 98,361	1,800	$ 98,361	5,400	$ 295,083	
Data Conversion/Interface (AISA)				1,800	$ 91,674	1,800	$ 91,674	1,800	$ 91,674	5,400	$ 275,022	***
Data Quality &Interface Business Analysts (SISA)				5,400	$ 268,820	5,400	$ 268,820	5,400	$ 268,820	16,200	$ 806,460	***
Enterprise Architect (SSS III)				1,800	$ 109,647	1,800	$ 109,647	1,800	$ 109,647	5,400	$ 328,941	
Infrastructure Architect (SSS II)				1,800	$ 98,361	3,600	$ 196,722	3,600	$ 196,722	9,000	$ 491,805	***
Interface Architect (SSS II)						1,800	$ 98,361	1,800	$ 98,361	3,600	$ 196,722	
Server Lead (SSS II)				1,800	$ 98,361	3,600	$ 196,722	3,600	$ 196,722	9,000	$ 491,805	
											$ 3,872,661	
Equipment Costs												
Server, Network and SAN					$ 660,000						$ 660,000	
Software					$ 795,200						$ 795,200	
										Additional Cost	$ 10,272,931	

	Contractor	State Staff		Total
Number of Hours Spent on Data Conversion/Integration	38,039	30,600	***	68,639
Effectiveness (85% Contractor/50% State Staff)	(5,706)	(15,300)		(21,006)
	32,333	15300		47,633

Estimated System Integrator Blended Rate	$ 250	
Estimated Contract Savings-- Customization	$ 11,908,250	(Software Customization- 14/15, 15/16, 16/17)
Estimated Software Revitalization**	$ 795,200	(FY 14/15 Software Costs)
	$ 12,703,450	

Estimated Savings	$ (12,703,450)
Net Cost/ (Savings)	$ (2,430,519)

* 2 Positions Adjusted for Partial Year 11/12.

** It is estimated that the software purchased by BOE during the Parallel initiatives will reduce the need for the proposed solution, however the hardware will be nearing end of life and is assumed to be in a hosted solution and therefore not a reduction in costs for the purchased hardware.

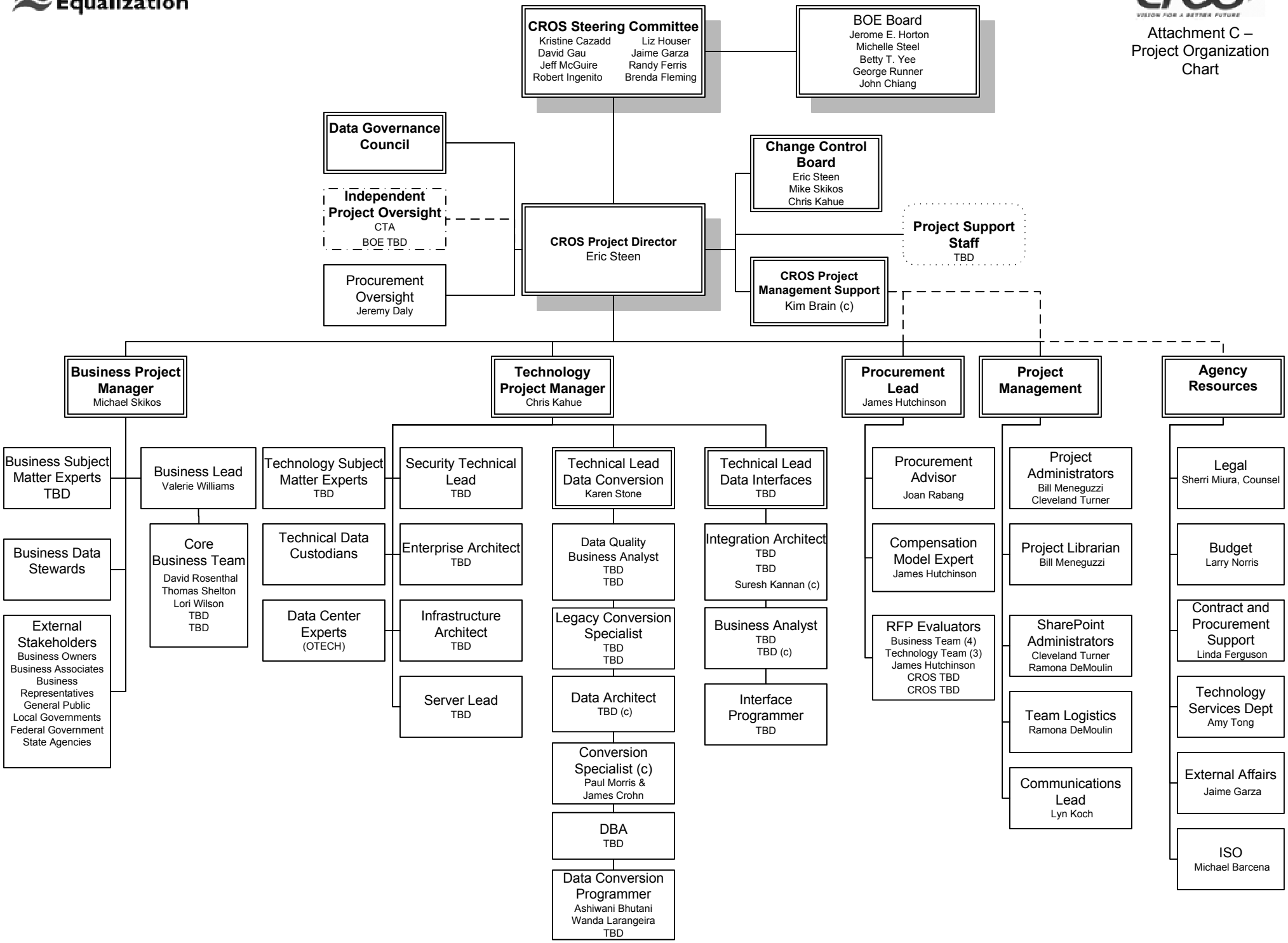
*** These positions are expected to have a direct reduction to the System Integrator Costs.

California State BOARD OF Equalization

Centralized Revenue Opportunity System (CROS) Project

CROS

Attachment C – Project Organization Chart



Attachment D - CROS Risk Log

Risk/ Issue	Id No	Date Created	Source	Category	Risk Description	Affected Areas	Trigger	Trigger Date	Probability	Impact	Exposure	Severity	Owner	Status	Actions Taken	Contingency Plans/ Mitigations
Risk	31	6/11/2010	FSR	Requirements	Data cleansing, data validation, and data mapping activities result in IRIS and ACMS data being converted incorrectly into the CROS solution.	Quality Schedule Cost	Implementation starts	7/1/2014	70.00%	5	3.5	Medium	Eric	Open	6/11/10 Form knowledgeable business workgroups and include SMEs to define data cleansing and data validation rules. Form knowledgeable team of programming staff to develop the programming codes to clean and validate. Develop a comprehensive testing plan which includes comprehensive test files for conversion testing. Ensure that backup files are retained and a process is in place to recover backup data in the event of data being converted incorrectly. 2/6/12 Parallel Initiatives charter being developed; planning underway. KB	Revert back to old data and system and redefine system requirements. Implement data that converted correctly and review and analyze incorrectly converted data for re-implementation.
Risk	34	6/11/2010	FSR	Project Management	Contractor's system design for the CROS solution, its implementation, and/or its execution fails resulting in the business not being able to perform their critical processes.	Schedule Cost	Implementation starts	7/1/2014	30.00%	5	1.5	Low	Eric	Open	Involve SMEs and other key stakeholders in system design meetings and walk-throughs. Employ rigorous unit testing, Require the Contractor to perform rigorous system integration testing (SIT) prior to unit testing. Ensure CROS is incorporated in the BOE Business Continuity / Disaster Recovery (BCDR) Plan.	Implement BCDR Plan.
Risk	35	6/11/2010	FSR	Project Management	Selected Contractor is not able to produce the solution as defined in the contract.	Cost Schedule	Implementation starts	7/1/2014	30.00%	5	1.5	Low	James	Open	Ensure that penalties for non-performance are stipulated in the RFP and the contract. Engage IV&V and IPOC.	Work with Contractor to identify solution elements that will not fulfill the objectives of the SOW. Investigate alternative solutions and/or alternative third party vendors that may be able to supplement Contractor's deficiencies. Impose penalties for non-performance of contract.
Risk	37	6/11/2010	FSR	Project Management	The Revenue estimate is lower than required to support payment to the vendors; the project scope will be impacted.	Scope Cost	Cost opening	3/14/2014	30.00%	4	1.2	Low	Eric	Open	Develop statistical models and trending analyses to base estimates from. 12/15/12 Level4 conducted independent analysis of comp model; BOE developed, ball park revenue estimates confirmed. KB	Determine the impact of the lower revenue to the scope of the project. Remove non-critical functionality from project scope for future inclusion.

Attachment D - CROS Risk Log

Risk/ Issue	Id No	Date Created	Source	Category	Risk Description	Affected Areas	Trigger	Trigger Date	Probability	Impact	Exposure	Severity	Owner	Status	Actions Taken	Contingency Plans/ Mitigations
Risk	39	6/11/2010	FSR	Procurement	Lack of a competitive procurement process will result in the selection of a solution that is not the best value for the State and may not be approved and funded.	Quality	Final Proposals	11/12/2013	10.00%	5	0.5	Low	Eric	Open	Make approved CROS FSR available to the public. Contract terms and conditions for room to negotiate. Make comprehensive bidders' library available to prospective vendors. Conduct general and technical bidders' conferences. Establish Q&A forum for vendors. Use Solution Based Procurement model (emphasize problems, objectives and partnering).	Designate the RFP as a draft RFP and revise requirements based on the responses to the draft RFP. Issue a Final RFP based on the revisions.

Attachment E - FSR to SPR Cost comparison

Staff (Salaries & Benefits)

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	3,434,616	5,208,103	3,510,340	6,567,233	8,856,317	6,588,737	6,467,632		40,632,978
SPR	499,503	1,982,125	4,676,291	5,829,185	9,942,444	8,860,858	7,866,939		39,657,345
Change	(2,935,113)	(3,225,978)	1,165,951	(738,048)	1,086,127	2,272,121	1,399,307		(975,633)

Explanation: Revised staffing needs based on project implementation schedule and the emphasis on parallel initiatives.

Hardware Purchase

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	-	-	-	4,723,000	-	4,230,000	-	-	8,953,000
SPR	-	95,170	845,400	48,200	4,877,900	4,230,000	-	-	10,096,670
Change	-	95,170	845,400	(4,674,800)	4,877,900	-	-	-	1,143,670

Explanation:
Standard Equipment (computer, printer, monitor) for PYs of $95,170 in 11/12; $184,400 in 12/13; $40,213 in 13/14; $154,900 in 14/15;
Parallel Initiatives server, network and storage $660,000 in 12/13;
Documentum hardware purchase delayed from FY 13/14 to 14/15.

Software Purchase/License

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	-	-	-	8,036,812	8,653,890	-	-	-	16,690,702
SPR		155,160	882,498	23,582	15,968,940	-	-	-	17,030,180
Change	-	155,160	882,498	(8,013,230)	7,315,050	-	-	-	339,478

Explanation:
Data cleansing server software $795,200 in 2012/13;
Standard software related to PYs $87,298 in 12/13; $23,582 in 13/14; $73,438 in 14/15;
Delay of CROS implementation shifted costs from 13/14 to 14/15 and reduced by data cleansing software puchased in 12/13.

Telecommunications

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR				487,000					487,000
SPR			429	629	487,000				488,058
Change			429	(486,371)	487,000				1,058

Explanation:
One-time Telecomunications of $429 in 12/13; $629 in 13/14;
Delayed CROS implementation delays the one-time purchase of network hardware $487,000 from 13/14 to 14/15.

Attachment E - FSR to SPR Cost comparison

Contract Services

Software Customization

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR				12,104,000	29,010,000	51,218,000	23,708,000		116,040,000
SPR					31,490,000	45,859,000	26,782,750		104,131,750
Change				(12,104,000)	2,480,000	(5,359,000)	3,074,750		(11,908,250)

Explanation: Delayed selection of CROS Vendor from 13/14 to 14/15 shifts costs to future fiscal years;
Parallel Initiatives data cleansing and integration work estimated to reduce cost of system integrator effort by 40,433 hours at an estimated blended rate of $250 per hour, resulting in a contract reduction of by 11,908,250. See Attachment B for additional details.

Project Management

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	75,000	187,500	187,500	187,500	187,500	187,500	187,500		1,200,000
SPR		182,720	230,400	230,400	230,400	230,400	230,400		1,334,720
Change	(75,000)	(4,780)	42,900	42,900	42,900	42,900	42,900		134,720

Explanation: Project management started later than planned and costs estimated $42,900 more per FY based on actual contract rate.

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Project Oversight

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	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR		95,000	190,000	190,000	190,000	190,000	190,000		1,045,000
SPR		45,000	175,000	175,000	175,000	175,000	175,000		920,000
Change		(50,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)		(125,000)

Explanation: Project oversight delayed in FY 11/12 and estimated IPOC cost reduced by $15,000 per FY.

IV&V Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR				674,700	674,700	674,700	674,700		2,698,800
SPR					674,700	674,700	674,700		2,024,100
Change		-	-	(674,700)	-	-	-		(674,700)

Explanation: IV&V was initially planned to start 6 month before selection and end 6 months after implementation. New plan has IV&V starting when implementation begins and ending when implementation is complete.

Other Contract Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	188,500	585,513							774,013
SPR	-	713,387	1,899,200	2,652,800	2,600,000				7,865,387
Change	(188,500)	127,874	1,899,200	2,652,800	2,600,000	-	-		7,091,374

Explanation

Technical advisor cost reduced from $175,000 to $64,000 Delayed from 10/11 to 11/12.
Project advisor consultant $223,500 cost reduced to $159,525.
IT consultant cost reduced from $272,750 to $115,851.
Contract negotiation and legal review cancelled as DGS will perform this function.
Cost/benefit realism consultant added $79,200 in 12/13; $52,800 in 13/14 to provide expertise for assessing vendor proposal.
Parallel Initiatives contract services (2,000 hours per year @ $130/hr). Includes Integration Architect (beginning 13/14), Data Architect (1), Business Analyst (1), Conversion Architect (1), Conversion specialists (2). Added $525,070 in FY 11/12; $1,300,000 in 12/13; $1,560,000 in 13/14 thru 15/16 for consultants. See Attachment H for additional detail.
TSD Backfill contractors: 2 positions 12/13 and 4 positions in 13/14 and 14/15; (2,000 hours each @ $130/hr) adds $520,000 12-13 and $1,040,000 in 13-14 and 14-15.

Data Center Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR		150,000	50,000	67,020	57,820	55,520			380,360
SPR	4,877	2,890	50,000	50,000	74,840	55,520	50,000		288,127
Change	4,877	(147,110)	-	(17,020)	17,020	-	50,000		(92,233)

Explanation

Data conversion processing of $150,000 in 11/12 due project delay and a revised approach based on the Parallel Initiatives.
Data cleansing $50,000 extended through FY 16/17 with revised implementaion schedule.

Agency Facilities

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR									-
SPR									-
Change		-	-	-	-	-	-		-

Explanation

No change

Other

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR		32,360	32,186	336,487	296,487	95,566			793,086
SPR	42,679	119,761	232,186	319,487	361,487	160,566	65,000		1,301,166
Change	42,679	87,401	200,000	(17,000)	65,000	65,000	65,000		508,080

Explanation

Increased costs of $42,679 in 10/11; $119,761 in 11/12 related to revised travel for outreach and workgroup travel
FY 12/13 $200,000 one-time training effort for TSD technical staff.
In-state travel for project mgmt team for board status reporting activities $15,000 in FY 13/14; $45,000 in 14/15 through 16/17.
Extend network travel support $20,000 from FY 14/15 to 16/17.
Out of state travel support for implementation & training (out of state districts offices) $24,000 in 14/15; $33,000 in 15/16.

Continuing IT Project Costs

Staff (Salaries & Benefits)

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR					1,145,968	1,193,433	4,584,409	11,055,092	17,978,902
SPR					1,145,968	1,193,433	4,584,409	11,055,092	17,978,902
Change		-	-	-	-	-	-	-	-
Explanation	No change; Continuing IT cost will be re-evaluated with selected solution.								

Hardware Lease/Maintenance

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR					1,868,911	1,868,911	2,714,911	2,714,911	9,167,644
SPR			3,600	174,600	1,111,711	2,088,011	2,934,011	2,934,011	9,245,944
Change		-	3,600	174,600	(757,200)	219,100	219,100	219,100	78,300
Explanation	Standard PY - PC, printer and replacement and repair costs: $3,600 in 12/13; $42,600 in 13/14; $55,400 in 14/15; $87,100 in 15/16 and ongoing. Parallel Initiatives storage, server and network maintenence costs $72,000 in 13/14 and ongoing.								

Software Maintenance/Licenses

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR					5,366,227	5,366,227	5,366,227	5,366,227	21,464,908
SPR			6,993	229,620	633,372	5,613,187	5,611,966	5,611,966	17,707,104
Change		-	6,993	229,620	(4,732,855)	246,960	245,739	245,739	(3,757,804)
Explanation	Software maintainence related to data warehouse & cleansing effort $209,040 in 13/14 and ongoing. Standard PY software maintence $6,993 in 12/13; $20,580 in 13/14; $29,563 in 14/15; $37,920 in 15/16; $36,699 in 16/17 and ongoing. Delayed vendor implementation eliminates estimated implementation need of $4,971,478 in FY 2014/15.								

Telecommunications

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR				1,134,339	2,208,708	2,208,708	2,208,708	2,208,708	9,969,171
SPR			5,100	5,200	2,213,908	2,213,908	2,213,908	2,213,908	8,865,932
Change		-	5,100	(1,129,139)	5,200	5,200	5,200	5,200	(1,103,239)
Explanation	Ongoing telecommunications of $5,100 in 12/13; $5,200 in 13/14; and ongoing Delayed vendor selection delays need for enhanced network reducing costs by $1,134,339 in FY 13/14.								

Attachment E - FSR to SPR Cost comparison

Contract Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR									-
SPR									-
Change		-	-	-	-	-	-		-
Explanation	No changes								

Data Center Services

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR				987,688	7,433,809	7,433,809	7,433,809	7,433,809	30,722,924
SPR			-	-	7,433,809	7,433,809	7,433,809	7,433,809	29,735,236
Change		-	-	(987,688)	-	-	-	-	(987,688)
Explanation	Delays of selected vendor shifts estimated CROS implementation cost at OTECH of $987,688 in 13/14.								

Agency Facilities

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR									-
SPR									-
Change		-	-	-	-	-	-	-	-
Explanation	No change								

Other

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR								214,007	214,007
SPR			7,500	137,596	150,388	150,388	150,388	150,388	746,648
Change		-	7,500	137,596	150,388	150,388	150,388	(63,619)	532,641
Explanation	PY driven - office supplies and misc equipment $5,396 in 13/14; $6,188 in 14/15; TSD training cost $7,500 in FY 12/13; $132,200 in 13/14 and ongoing. In-state travel in support of enhanced CROS network of $12,000 in 14/15 and ongoing								

Total One-Time Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	3,698,116	6,258,476	3,970,026	33,373,752	47,926,714	63,240,023	31,227,832	-	189,694,939
SPR	547,059	3,296,213	8,991,404	9,329,283	66,882,711	60,246,044	35,844,789	-	185,137,503
Change	(3,151,057)	(2,962,263)	5,021,378	(24,044,469)	18,955,997	(2,993,979)	4,616,957	-	(4,557,436)

Total Continuing Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	-	-	-	2,122,027	18,023,623	18,071,088	22,308,064	28,992,754	89,517,556
SPR	-	-	23,193	547,016	12,689,156	18,692,736	22,928,491	29,399,174	84,279,766
Change	-	-	18,093	(445,872)	(5,339,667)	616,448	615,227	401,220	(4,134,551)

Total Project Costs

	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	Total
FSR	3,698,116	6,258,476	3,970,026	35,495,779	65,950,337	81,311,111	53,535,896	28,992,754	279,212,495
SPR	547,059	3,296,213	9,014,597	9,876,299	79,571,867	78,938,780	58,773,280	29,399,174	269,417,269
Change	(3,151,057)	(2,962,263)	5,039,471	(24,490,341)	13,616,330	(2,377,531)	5,232,184	401,220	(8,691,987)

California State Board of Equalization
Centralized Revenue Opportunity System (CROS) Project

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

EXISTING SYSTEM/BASELINE COST WORKSHEET
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 03/8/12

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information Technology Costs																		
Staff (salaries & benefits)	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	**976.0**	**$88,307,998**
Hardware Lease/Maintenance		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		**$ 7,394,488**
Software Maintenance/Licenses		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		**$6,213,066**
Telecommunications		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		**$ 4,753,464**
Contract Services		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		**$ -**
Data Center Services		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		**$ 66,369,784**
Agency Facilities		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		**$ -**
Other		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		**$ 1,712,056**
Total IT Costs	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**976.0**	**$174,750,856**
Continuing Program Costs:																		
Staff	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	**21164.8**	**$1,518,438,808**
Other		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$9,247,002	0.0	$9,247,002		$9,247,002		$9,247,002		**$73,976,016**
Total Program Costs	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**21164.8**	**$1,592,414,824**
TOTAL EXISTING SYSTEM COSTS	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**22140.8**	**$1,767,165,680**

California State Board of Equalization
Centralized Revenue Opportunity System (CROS) Project

SIMM 20C30C, Rev. 08/2010

PROPOSED ALTERNATIVE: **Performance-Based CROS Project**

Date Prepared: 03/8/12

Department: Board of Equalization
Project: CROS

	FY 2010/11 *		FY 2011/12 **		FY 2012/13		FY 2013/14		FY 2014/15***		FY 2015/16***		FY 2016/17***		FY 2017/18***		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs																		
Staff (Salaries & Benefits)	7.1	$499,503	21.8	$ 1,982,125	48.2	$4,676,291	63.0	$5,829,185	110.2	$ 9,942,444	92.9	$ 8,860,858	82.0	$ 7,866,939	0.0	$ -	425.2	$39,657,344
Hardware Purchase		$0		$95,170		$845,400		$48,200		$ 4,877,900		$ 4,230,000		$ -		$0		$10,096,670
Software Purchase/License		$0		$155,160		$882,498		$23,582		$ 15,968,940		$0		$0		$0		$17,030,180
Telecommunications		$0		$0		$ 429		$ 629		$ 487,000		$ -		$ -		$ -		$488,058
Contract Services																		
Software Customization		$0		$0		$0		$0		$31,490,000		$45,859,000		$26,782,750		$0		$104,131,750
Project Management		$0		$182,720		$230,400		$230,400		$230,400		$230,400		$230,400		$0		$1,334,720
Project Oversight		$0		$45,000		$175,000		$175,000		$175,000		$175,000		$175,000		$0		$920,000
IV&V Services		$0		$0		$0		$0		$674,700		$674,700		$674,700		$0		$2,024,100
Other Contract Services		$0		$713,387		$1,899,200		$2,652,800		$ 2,600,000		$ -		$ -		$ -		$7,865,387
TOTAL Contract Services		$0		$941,107		$2,304,600		$3,058,200		$35,170,100		$46,939,100		$27,862,850		$0		$116,275,958
Data Center Services		$4,877		$2,890		$50,000		$50,000		$ 74,840		$ 55,520		$ 50,000		$ -		$288,128
Agency Facilities		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$0
Other		$42,679		$119,761		$232,186		$319,487		$ 361,487		$ 160,566		$ 65,000		$0		$1,301,167
Total One-time IT Costs	**7.1**	**$547,059**	**21.8**	**$3,296,213**	**48.2**	**$8,991,404**	**63.0**	**$9,329,283**	**110.2**	**$66,882,711**	**92.9**	**$60,246,044**	**82.0**	**35,844,789**	**0.0**	**0**	**425.2**	**$185,137,502**
Continuing IT Project Costs																		
Staff (Salaries & Benefits)	0.0	$0	0.0	$0	0.0	$0	0.0	$0	11.7	$1,145,968	12.2	$1,193,433	47.5	$4,584,409	122.1	$11,055,092	193.5	$17,978,902
Hardware Lease/Maintenance		$0		$0		$3,600		$174,600		$ 1,111,711		$ 2,088,011		$ 2,934,011		$ 2,934,011		$9,245,944
Software Maintenance/Licenses		$0		$0		$6,993		$229,620		$ 633,372		$ 5,613,187		$ 5,611,966		$ 5,611,966		$17,707,104
Telecommunications		$0		$0		$5,100		$5,200		$ 2,213,908		$ 2,213,908		$ 2,213,908		$ 2,213,908		$8,865,932
Contract Services		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$0
Data Center Services		$0		$0		$0		$0		$ 7,433,809		$ 7,433,809		$ 7,433,809		$ 7,433,809		$29,735,236
Agency Facilities		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$0
Other		$0		$0		$7,500		$137,596		$ 150,388		$ 150,388		$ 150,388		$ 150,388		$746,648
Total Continuing IT Costs	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$23,193**	**0.0**	**$547,016**	**11.7**	**$12,689,156**	**12.2**	**$18,692,736**	**47.5**	**22,928,491**	**122.1**	**29,399,174**	**193.5**	**$84,279,765**
Total Project Costs	**7.1**	**$547,059**	**21.8**	**$3,296,213**	**48.2**	**$9,014,597**	**63.0**	**$9,876,299**	**121.9**	**$79,571,867**	**105.1**	**$78,938,780**	**129.5**	**58,773,280**	**122.1**	**29,399,174**	**618.7**	**$269,417,269**
Continuing Existing Costs																		
Information Technology Staff	122.0	$ 11,038,500	122.0	$ 11,038,500	122.0	$ 11,038,500	122.0	$ 11,038,500	110.3	$ 9,892,532	109.8	$ 9,845,067	74.5	$ 3,008,222			782.6	$ 66,899,820
Other IT Costs		$10,805,357		$10,805,357		$10,805,357		$10,805,357		$ 9,163,774		$ 9,163,774		$ 8,969,874		$ 1,903,200		$72,422,048
Total Continuing Existing IT Costs	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**122.0**	**$21,843,857**	**110.3**	**$19,056,306**	**109.8**	**$19,008,841**	**74.5**	**$11,978,096**	**0.0**	**$1,903,200**	**782.3**	**$139,321,869**
Program Staff	2645.6	$189,804,851	2645.6	$189,804,851	2750.9	$206,398,747	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	2822.5	$211,133,000	22154.6	$1,641,673,452
Other Program Costs		$ 9,247,002		$ 9,247,002		$ 10,716,168		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 75,445,179
Total Continuing Existing Program Costs	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2750.9**	**$217,114,915**	**2822.5**	**$220,380,002**	**2822.5**	**$220,380,002**	**2822.5**	**$220,380,002**	**2822.5**	**$220,380,002**	**2822.5**	**$220,380,002**	**22154.6**	**$1,717,118,631**
Total Continuing Existing Costs	**2767.6**	**$220,895,710**	**2767.6**	**$220,895,710**	**2872.9**	**$238,958,772**	**2944.5**	**$242,223,859**	**2932.8**	**$239,436,308**	**2932.3**	**$239,388,843**	**2897.0**	**$232,358,098**	**2822.5**	**$222,283,202**	**22936.9**	**$1,856,440,500**
TOTAL ALTERNATIVE COSTS	**2774.7**	**$221,442,769**	**2789.4**	**$224,191,923**	**2921.1**	**$247,973,369**	**3007.5**	**$252,100,158**	**3054.7**	**$319,008,175**	**3037.4**	**$318,327,623**	**3026.5**	**$291,131,378**	**2944.6**	**$251,682,376**	**23555.5**	**$2,125,857,768**
INCREASED REVENUES ****		$0		$0		$38,745,000		$66,529,000		$141,529,000		$156,529,000		$186,529,000		$258,468,376		**$848,329,376**

* Project one-time and continuing costs reflect actual incurred costs.
** Project one-time and continuing cost reflect, fiscal year to date costs actually incurred plus projected expenditures through fiscal year-end.
*** Estimated costs, needs for these years will be re-evalated when proposal is selected.
**** Revenue increase include both project and program support revenue estimates.

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ECONOMIC ANALYSIS SUMMARY
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 03/8/12

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM																		
Total IT Costs	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	122.0	21,843,857	976.0	174,750,856
Total Program Costs	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	21164.8	1,592,414,824
Total Existing System Costs	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	2767.6	220,895,710	22140.8	1,767,165,680
PROPOSED ALTERNATIVE	**Performance-Based CROS Project**																	
Total Project Costs	7.1	547,059	21.8	3,296,213	48.2	9,014,597	63.0	9,876,299	121.9	79,571,867	105.1	78,938,780	129.5	58,773,280	122.1	29,399,174	618.7	269,417,269
Total Cont. Exist. Costs	2767.6	220,895,710	2767.6	220,895,710	2872.9	238,958,772	2944.5	242,223,859	2932.8	239,436,308	2932.3	239,388,843	2897.0	232,358,098	2822.5	222,283,202	22936.9	1,856,440,500
Total Alternative Costs	2774.7	221,442,769	2789.4	224,191,923	2921.1	247,973,369	3007.5	252,100,158	3054.7	319,008,175	3037.4	318,327,623	3026.5	291,131,378	2944.6	251,682,376	23555.5	2,125,857,768
COST SAVINGS/AVOIDANCES	(7.0)	(547,059)	(21.8)	(3,296,213)	(153.5)	(27,077,659)	(239.9)	(31,204,448)	(287.1)	(98,112,465)	(269.8)	(97,431,913)	(258.9)	(70,235,668)	(177.0)	(30,786,666)	(1414.7)	(358,692,089)
Increased Revenues		0		0		38,745,000		66,529,000		141,529,000		156,529,000		186,529,000		258,468,376		848,329,376
Net (Cost) or Benefit	(7.0)	(547,059)	(21.8)	(3,296,213)	(153.5)	11,667,341	(239.9)	35,324,552	(287.1)	43,416,535	(269.8)	59,097,087	(258.9)	116,293,332	(177.0)	227,681,710	(1414.7)	489,637,287
Cum. Net (Cost) or Benefit	(7.0)	(547,059)	(28.8)	(3,843,271)	(182.3)	7,824,070	(422.1)	43,148,623	(709.2)	86,565,158	(978.9)	145,662,245	####	261,955,577	####	489,637,287		

SIMM 20C30C, Rev. 08/2010

Department: Board of Equalization

Project: CROS

California State Board of Equalization
Centralized Revenue Opportunity System

PROJECT FUNDING PLAN

All Costs to be in whole (unrounded) dollars

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	**7.1**	**547,059**	**21.8**	**3,296,213**	**48.2**	**9,014,597**	**63.0**	**9,876,299**	**121.9**	**79,571,867**	**105.1**	**78,938,780**	**129.5**	**58,773,280**	**122.1**	**29,399,174**	**618.7**	**269,417,269**
RESOURCES TO BE REDIRECTED																		
Staff	7.1	499,503	21.8	1,982,125	0.0	0	0.0	0	11.7	1,145,968	12.2	1,193,433	47.5	4,584,409	122.1	11,038,500	222.4	20,443,938
Funds:																		
Existing System		0		0		0		0		4,011,183		4,011,183		4,011,183		10,805,357		22,838,905
Other Fund Sources		47,556		1,314,088		0		0		0		0		0		0		1,361,644
TOTAL REDIRECTED RESOURCES	**7.1**	**547,059**	**21.8**	**3,296,213**	**0.0**	**0**	**0.0**	**0**	**11.7**	**5,157,151**	**12.2**	**5,204,616**	**47.5**	**8,595,592**	**122.1**	**21,843,857**	**222.4**	**44,644,486**
ADDITIONAL PROJECT FUNDING NEEDED																		
One-Time Project Costs	0.0	0	0.0	0	48.2	8,991,404	63.0	9,329,283	110.2	66,882,711	92.9	60,246,044	82.0	35,844,789	0.0	0	396.3	181,294,231
Continuing Project Costs	0.0	0	0.0	0	0.0	23,193	0.0	547,015	0.0	7,532,005	0.0	13,488,120	0.0	14,332,900	0.0	7,555,317	0.0	43,478,550
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**0.0**	**0**	**48.2**	**9,014,597**	**63.0**	**9,876,299**	**110.2**	**74,414,716**	**92.9**	**73,734,164**	**82.0**	**50,177,689**	**0.0**	**7,555,317**	**396.3**	**224,772,782**
TOTAL PROJECT FUNDING	**7.1**	**547,059**	**21.8**	**3,296,213**	**48.2**	**9,014,597**	**63.0**	**9,876,299**	**121.9**	**79,571,867**	**105.1**	**78,938,780**	**129.5**	**58,773,280**	**122.1**	**29,399,174**	**618.7**	**269,417,269**
Difference: Funding - Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
FUNDING SOURCE*																		
General Fund (Redirection)	55%	301,430	55%	1,816,213	55%	0	55%	0	55%	2,841,590	55%	2,867,743	55%	4,736,171	55%	12,035,965	55%	24,599,112
General Fund (BCP)	55%	0	55%	0	55%	4,967,043	55%	5,441,841	55%	41,002,509	55%	40,627,525	55%	27,647,906	55%	4,162,980	55%	123,849,803
Federal Fund	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Special Fund (Redirection)	15%	84,247	15%	507,617	15%	0	15%	0	15%	794,201	15%	801,511	15%	1,323,721	15%	3,363,954	15%	6,875,251
Special Fund (BCP)	15%	0	15%	0	15%	1,361,204	15%	1,491,321	15%	11,236,622	15%	11,133,859	15%	7,576,831	15%	1,140,853	15%	33,940,690
Reimbursement (Redirection)	30%	161,382	30%	972,383	30%	0	30%	0	30%	1,521,359	30%	1,535,362	30%	2,535,700	30%	6,443,938	30%	13,170,123
Reimbursement (BCP)	30%	0	30%	0	30%	2,686,350	30%	2,943,137	30%	22,175,585	30%	21,972,781	30%	14,952,951	30%	2,251,484	30%	66,982,289
TOTAL FUNDING	100%	547,059	100%	3,296,213	100%	9,014,597	100%	9,876,299	100%	79,571,867	100%	78,938,780	100%	58,773,280	100%	29,399,174	100%	269,417,269

***Type:** If applicable, for each funding source, beginning on row 29, describe what type of funding is included, such as local assistance or grant funding, the date the funding is to become available, and the duration of the funding.

General Fund 001
Reimbursements 0995 (Sales & Use Tax, Hazard Waste, Tire Disoposal, Marine Inv. Species)

Special Funds: (TIMBER (0965), BREAST CANCER (0004), CIGARETTE & TOBACCO (0230), CALIFORNIA FAMILY TRUST (0623), CIG/TOBA COMP FD (3067), MVF ACCNT (0061), LEAD POISON (0070), INTEGRATED WASTE (0387). UNDERGROUND TANK (0439), OIL SPILL (0320, ENERGY RESOURCES (0465), WATER RIGHTS FUND (3058), CHILDHOOD LEAD (0080), EMER. TELEPHONE (0022), E-WASTE & RECYL ACCT (3065), GAS CONSUMP (3015)

Staff - Redirection of Staff Resources to One Time in Years 2010/11 & 2011/12.
Staff Redirection of IT Baseline Staff Resources to support the New Systems in Years 2013/14 through 2016/17
Existing System - Redirection of O.E.&E to pay the new Continuing O.E.& E. costs of the New System in Years 2012/13 through 2016/17.
Other Fund Sources -The Funds to pay for the one-time O.E.&E. costs in Years 2010/11 & 2011/12
Additional Project Funds Needed- Additional One-Time Projects Funds Needed
Additional Project Funds Needed - Additional Continuing Project Funds Needed

California State Board of Equalization
Centralized Revenue Opportunity System

Date Prepared: 03/8/12

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18			
Annual Project Adjustments	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**		
One-time Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	48.2	8,991,404	63.0	9,329,283	110.2	66,882,711	92.9	60,246,044	82.0	35,844,789		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**48.2**	**8,991,404**	**14.8**	**337,879**	**47.2**	**57,553,428**	**(17.3)**	**(6,636,667)**	**(10.9)**	**(24,401,255)**	**(82.0)**	**(35,844,789)**		
(B) Total One-Time Budget Actions	0.0	0	0.0	0	48.2	8,991,404	63.0	9,329,283	110.2	66,882,711	92.9	60,246,044	82.0	35,844,789	0.0	0	**396.3**	**181,294,231**
Continuing Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	23,193	0.0	547,015	0.0	7,532,005	0.0	13,488,120	0.0	14,332,900		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**23,193**	**0.0**	**523,822**	**0.0**	**6,984,990**	**0.0**	**5,956,115**	**0.0**	**844,779**	**0.0**	**(6,777,583)**		
(D) Total Continuing Budget Actions	0.0	0	0.0	0	0.0	23,193	0.0	547,015	0.0	7,532,005	0.0	13,488,120	0.0	14,332,900	0.0	7,555,317	**0.0**	**43,478,550**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**0.0**	**0**	**48.2**	**9,014,597**	**14.8**	**861,701**	**47.2**	**64,538,418**	**(17.3)**	**(680,552)**	**(10.9)**	**(23,556,476)**	**(82.0)**	**(42,622,372)**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D] **396.3** **224,772,781**

Annual Savings/Revenue Adjustments

Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Revenues		0		0		38,745,000		66,529,000		141,529,000		156,529,000		186,529,000		258,468,376		848,329,376

California State Board of Equalization
Centralized Revenue Opportunity System

SIMM 20C30C, Rev. 08/2010

Department: Board of Equalization

Project: CROS

PROGRAM FUNDING PLAN

All Costs to be in whole (unrounded) dollars

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROGRAM COSTS	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2645.6**	**217,114,915**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**2645.6**	**220,380,002**	**21164.8**	**1,717,118,632**
RESOURCES TO BE REDIRECTED																		
Staff	2645.6	199,051,853	2645.6	199,051,853	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	2645.6	208,083,384	21164.9	1,646,604,010
Funds:																		
Existing System		0				0		0		0				0		0		0
Other Fund Sources		0		0		0		0		0		0		0		0		0
TOTAL REDIRECTED RESOURCES	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**2645.6**	**208,083,384**	**21164.9**	**1,646,604,010**
ADDITIONAL PROGRAM FUNDING NEEDED																		
One-Time Program Costs	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,469,166
Continuing Program Costs	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	0.0	69,045,455
TOTAL ADDITIONAL PROGRAM FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**0.0**	**0**	**105.3**	**9,031,531**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**176.9**	**12,296,618**	**989.8**	**70,514,621**
TOTAL PROGRAM FUNDING	**2645.6**	**199,051,853**	**2645.6**	**199,051,853**	**2750.9**	**217,114,915**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**2822.5**	**220,380,002**	**22154.6**	**1,717,118,631**
Difference: Funding - Costs	0.0	0	0.0	0	105.3	0	176.9	0	176.9	0	176.9	0	176.9	0	176.9	0	989.8	0
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

California State Board of Equalization
Centralized Revenue Opportunity System

Date Prepared: 03/8/12

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18			
Annual Project Adjustments	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**	**PYs**	**Amts**		
One-time Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**1,469,166**	**0.0**	**(1,469,166)**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		
(B) Total One-Time Budget Actions	0.0	0	0.0	0	0.0	1,469,166	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	**0.0**	**1,469,166**
Continuing Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**105.3**	**7,562,365**	**71.6**	**4,734,253**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		
(D) Total Continuing Budget Actions	0.0	0	0.0	0	105.3	7,562,365	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	176.9	12,296,618	**812.9**	**56,748,837**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**0.0**	**0**	**105.3**	**9,031,531**	**71.6**	**3,265,087**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D]	**812.9**	**58,218,003**

Annual Savings/Revenue Adjustments

Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Increased Revenues-- Program Backlog		0		0		38,745,000		66,529,000		66,529,000		66,529,000		66,529,000		66,529,000		371,390,000

Feasibility Study Report

Centralized Revenue Opportunity System (CROS) Project

State Board of Equalization

Project Number 0860-094

May 23, 2011

Prepared by:

CROS Project Team
California State Board of Equalization
Sacramento, California

Prepared for:

California Technology Agency
Sacramento, California

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Table of Contents

Table of Contents **3**

1.0 Executive Project Approval Transmittal **5**

1.1 IT Accessibility Certification 6

2.0 Information Technology Project Summary Package **7**

2.1 Section A: Executive Summary 7
2.2 Section B: Project Contacts 10
2.3 Section C: Project Relevance to State and/or Department Agency Plans 11
2.4 Section D: Budget Information 12
2.5 Section E: Vendor Project Budget 13
2.6 Section F: Risk Assessment Information 14

3.0 Business Case **15**

3.1 Business Program Background 15
3.2 Business Program Problem or Opportunity 24
3.3 Business Program Objectives 32
3.4 Business Program Functional Requirements 32

4.0 Baseline Analysis **35**

4.1 Current Method 35
4.2 Technical Environment 51

5.0 Proposed Solution **58**

5.1 Solution Description 58
5.2 Rationale for Selection 65
5.3 Other Alternatives Considered 66

6.0 Project Management Plan **69**

6.1 Project Manager Qualifications 69
6.2 Project Management Methodology 70
6.3 Project Organization 70
6.4 Project Priorities 72
6.5 Project Plan 72

6.6 Project Monitoring 80
6.7 Project Quality 80
6.8 Change Management 81
6.9 Authorization Required 81

7.0 Risk Management Plan 82

7.1 Risk Management Approach 82

8.0 Economic Analysis Worksheets (EAWS) 84

Attachment A - Organizational Change Management Plan 109

Attachment B - Risk Management Worksheet 111

Attachment C - BOE Procurement Capacity 113

1.0 EXECUTIVE PROJECT APPROVAL TRANSMITTAL

Information Technology Project Request

Feasibility Study Report
Executive Approval Transmittal

Department Name		
Board of Equalization		
Project Title (maximum of 75 characters)		
Centralized Revenue Opportunity System		
Project Acronym	**Department Priority**	**Agency Priority**
CROS	**1**	**1**

I am submitting the attached Feasibility Study Report (FSR) in support of our request for the California Technology Agency's (CTA) approval to undertake this project.

I certify that the FSR was prepared in accordance with State Administrative Manual Sections 4920-4930.1 and that the proposed project is consistent with our information technology strategy as expressed in our current Agency Information Management Strategy (AIMS).

I have reviewed and agree with the information in the attached Feasibility Study Report.

I also certify that the acquisition of the applicable information technology (IT) product(s) or service(s) required by my department that are subject to Government Code 11135 applying Section 508 of the Rehabilitation Act of 1973 as amended meets the requirements or qualifies for one or more exceptions (see following page).

APPROVAL SIGNATURES		
Chief Information Officer		**Date Signed**
Anna Marie Brannen		5/23/11
Printed name:	Anna Brannen	
Budget Officer		**Date Signed**
Kathy A Booher		5-23-11
Printed name:	Kathy Booher	
Department Directors		**Date Signed**
		5/23/11
Printed name:	Jeffrey L. McGuire	
		5/23/11
Printed name:	David J. Gau	
Agency Chief Information Officer		**Date Signed**
Printed name:	N/A	
Interim Agency Director		**Date Signed**
Kristine Cazadd		5/23/11
Printed name:	Kristine Cazadd	

1.1 IT Accessibility Certification

Yes or No

Yes	**The Proposed Project Meets Government Code 11135 / Section 508 Requirements and no exceptions apply.**

Exceptions Not Requiring Alternative Means of Access

Yes or No	Accessibility Exception Justification
N/A	The IT project meets the definition of a national security system.
N/A	The IT project will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment (i.e., "Back Office Exception.)
N/A	The IT acquisition is acquired by a contractor incidental to a contract.

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
N/A	Meeting the accessibility requirements would constitute an "undue burden" (i.e., a significant difficulty or expense considering all agency resources). Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No commercial solution is available to meet the requirements for the IT project that provides for accessibility. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
N/A	No solution is available to meet the requirements for the IT project that does not require a fundamental alteration in the nature of the product or its components. Explain: Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.

2.0 INFORMATION TECHNOLOGY PROJECT SUMMARY PACKAGE

2.1 Section A: Executive Summary

1.	Submittal Date	May 23, 2011

		FSR	SPR	PSP Only	Other:
2.	Type of Document	X			
	Project Number				

			Estimated Project Dates	
3.	Project Title	Centralized Revenue Opportunity System	Start	End
	Project Acronym	CROS	09/01/2010	07/30/17

4.	Submitting Department	Board of Equalization
5.	Reporting Agency	N/A

6.	Project Objectives
	The BOE has developed long range business and strategic plans which include a technology component. A key factor to achieving BOE's long range goals is to create an expanded and responsive tax infrastructure by moving to a functional organizational structure and creating a customer centric automation system. BOE will use a systematic approach to change and be more responsive to the needs of its customers. This project will decrease the tax gap through increasing voluntary compliance, improving customer online services, and improving audit, collection and return processing activities. A new system will allow the BOE to reengineer current program processes, adopt tax administration best practices and obtain an effective case management system. This will enhance the efficiencies of BOE employees by streamlining and automating current program processes, reducing paper and providing the ability to work securely anytime and from anyplace. An intuitive and easy to use system will also reduce staff training time and will improve shared access to internal and external data for BOE employees and federal, state and local tax partners. Obtaining flexible, agile, expandable and sustainable technology will support program changes that will allow the timely implementation of legislative changes. The replacement of current standalone support systems and utilization of component based architecture of re-usable and shared services will allow the BOE to grow with new technology. This project will allow the BOE to meet the expectation of all of its customers into future years.

8.	Major Milestones	Est. Complete Date
	Obtain CTA approval of FSR	**06/20/2011**
	Release RFP to vendor pool	**02/13/2012**
	Receive final Bid Proposals	**08/23/2012**
	Obtain CTA approval of SPR for selected bid proposal	**01/02/2014**
	Procure RFP vendor and sign contract	**01/30/2014**
	Begin development and implementation	**02/25/2014**
	Project completion	**07/30/2017**
	PIER	**01/31/2019**
	Key Deliverables will be identified in SPR	

7.	Proposed Solution
	The BOE expects the solution to generate additional revenue into the State General Fund. The CROS Project will replace the Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS) and develop an enterprise data warehouse. The proposed system will provide an integrated and automated solution that will use up-to-date tax collection, storage, account management and data retrieval technologies to maximize the effectiveness of BOE's operations and staff. The proposed system will also provide efficiencies to businesses reducing the time and effort needed to interact with the BOE. BOE proposes a solution involving a performance-based, benefits-funded procurement of a vendor contract and BOE in-house development of specific components. The vendor contract would be for the purchase of an existing software product, necessary hardware, and vendor resources to customize the software according to BOE's needs. This software would provide the primary functionality for supporting program activities and generation of management reports. The vendor will be responsible for the overall project integration and assist in project change management activities. BOE staff will work with the vendor to provide legacy system data migration and modifications needed for ancillary systems to accommodate the new system and functionality. This project will be funded by increased revenue from implementation of the proposed system. Vendors must agree to provide the initial funding for hardware, software and custom development and be paid a portion of the revenue the proposed solution generates. The vendor contract will contain a maximum dollar cap for the vendor and the vendor will not receive full compensation if sufficient revenue levels are not met or if business program process deliverables are not provided**.**

2.2 Section B: Project Contacts

Project #	0860-094
Doc. Type	FSR

Executive Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Interim Agency Director	Kristine	Cazadd	916	445-4380		916	324-2586	Kristine.Cazadd@boe.ca.gov
Dept. Directors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Budget Officer	Kathy	Booher	916	323-5128		916	322-3184	Kathy.Booher@boe.ca.gov
CIO	Anna	Brannen	916	445-8677		916	327-3483	Anna.Brannen@boe.ca.gov
Project Sponsors	Jeffrey	McGuire	916	445-1441		916	322-7175	Jeffrey.McGuire@boe.ca.gov
	David	Gau	916	445-1516		916	323-8765	David.Gau@boe.ca.gov
Direct Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Doc. prepared by	Valerie	Williams	916	323-6347		916	322-3596	Valerie.Williams@boe.ca.gov
Primary contact	Chris	Kahue	916	323-4333		916	322-3596	Chris.Kahue@boe.ca.gov
Project Manager	Larry	Bergkamp	916	322-7281		916	322-3596	Larry.Bergkamp@boe.ca.gov

2.3 Section C: Project Relevance to State and/or Department Agency Plans

1.	What is the date of your current Operational Recovery Plan (ORP)?	Date	04/15/10
2.	What is the date of your current Agency Information Management Strategy (AIMS)?	Date	02/02/09
3.	For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.	Doc.	Information Management Strategy (AIMS)
		Page #	18

Project #	0860-094
Doc. Type	FSR

		Yes	No
4.	Is the project reportable to control agencies?	X	
	If YES, CHECK all that apply:		
X	a) The project involves a budget action.		
	b) A new system development or acquisition that is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.		
X	c) The estimated total development and acquisition cost exceeds the departmental cost threshold and the project does not meet the criteria of a desktop and mobile computing commodity expenditure (see SAM 4989 – 4989.3).		
	d) The project meets a condition previously imposed by Finance.		

2.4 Section D: Budget Information

Project #	0860-094
Doc. Type	FSR

Budget Augmentation Required?									
	No								
	Yes	X	If YES, indicate fiscal year(s) and associated amount:						
			FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18
			$0	$0	$0	$30,478,199	$52,724,723	$68,588,906	$37,513,820	$3,270,536

PROJECT COSTS

1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	One-Time Cost	$3,698,116	$6,258,476	$3,970,026	$33,373,752	$47,926,714	$63,240,023	$31,227,832	$0	$189,694,939
3.	Continuing Costs	$0	$0	$0	$2,122,027	$18,023,623	$18,071,088	$22,308,064	$28,992,754	$89,517,556
4.	TOTAL PROJECT BUDGET	$3,698,116	$6,258,476	$3,970,026	$35,495,779	$65,950,337	$81,311,111	$53,535,896	$28,992,754	$279,212,495

PROJECT FINANCIAL BENEFITS

5.	Cost Savings/ Avoidances	$0	$0	$0	$0	$0	$0	$0	$0	$0
6.	Revenue Increase	$0	$0	$0	$50,000,000	$90,000,000	$120,000,000	$190,000,000	$190,000,000	$640,000,000

2.5 Section E: Vendor Project Budget

Project #	0860-094
Doc. Type	FSR

Vendor Cost for FSR Development (if applicable)	N/A
Vendor Name	

VENDOR PROJECT BUDGET

1.	Fiscal Year	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	Primary Vendor Budget	$0	$0	$0	$12,104,000	$29,010,000	$51,218,000	$23,708,000	$0	$116,040,000
3.	Independent Oversight Budget	$0	$95,000	$190,000	$190,000	$190,000	$190,000	$190,000	$0	$1,045,000
4.	IV&V Budget	$0	$0	$0	$674,700	$674,700	$674,700	$674,700	$0	$2,698,800
5.	Other Budget	$263,500	$773,013	$187,500	$187,500	$187,500	$187,500	$187,500	$0	$1,974,013
6.	TOTAL VENDOR BUDGET	$263,500	$868,013	$377,500	$13,156,200	$30,062,200	$52,270,200	$24,760,200	$0	$121,757,813

---------- (Applies to SPR only) ----------

PRIMARY VENDOR HISTORY SPECIFIC TO THIS PROJECT

7.	Primary Vendor	
8.	Contract Start Date	
9.	Contract End Date (projected)	
10.	Amount	$

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail

2.6 Section F: Risk Assessment Information

Project #	**0860-094**
Doc. Type	**FSR**

RISK ASSESSMENT

	Yes	No
Has a Risk Management Plan been developed for this project?	X	

All identified risks **will be included in the** detailed Risk Management Plan in accordance with the BOE Project Management Methodology (PMM).

The project manager will have primary day-to-day responsibility for managing risks and will conduct a risk analysis for the project. Risks will be analyzed, classified and prioritized to reflect probability of occurrence and impact. The project manager will be responsible for tracking risks, determining status relative to risk triggers and implement risk responses as necessary. Identified risks will be escalated to the appropriate levels as necessary in order to properly mitigate the risks. An update on the condition of these risks will be included in the on-going status report to management.

3.0 BUSINESS CASE

3.1 Business Program Background

The Board of Equalization (BOE) is one of California's oldest administrative agencies. Established by a constitutional amendment in 1879, BOE's original responsibility was to ensure that county property tax assessment practices were equal and uniform throughout the state.

Today, the BOE administers 29 different tax/fee programs which provide nearly 35% of the State's annual revenue. These taxes and fees generated $48.4 billion in revenue during Fiscal Year (FY) 2008-09[1]. Revenues collected by BOE support hundreds of state and local government programs and services including transportation, education, healthcare, public safety, parks, social services, housing and natural resource management. Of the sales and use tax revenues $13.4 billion are allocated to local tax jurisdictions. More than one million businesses are registered with the agency.

The BOE consists of four elected board members, each representing an Equalization District, and the State Controller, an ex officio member representing the State at large. Under the policy guidance from board members, the Executive Director directs the activities of the staff in the Sales and Use Tax, Property and Special Taxes, Technology Services Legal, External Affairs and Administration Departments, and four divisions that report to the Executive Director.

The mission of the Board of Equalization is to serve the public through fair, effective, and efficient tax administration. The agency's goals are to:

- Improve the Customer Experience
- Maximize Voluntary Compliance
- Invest in a Skilled, Motivated and Diverse Workforce
- Enhance Operational Effectiveness

To carry out the mission and goals of the agency, BOE employs a staff of nearly 4,000 people in its Sacramento headquarters and 25 district offices which includes three out-of-state offices (New York, Chicago, and Houston). Out-of-state staff serves customers that conduct business in California, but maintain their main offices and records outside the State.

As a principal revenue-generating agency of the State, the BOE is often required to interpret and implement statutory changes mandated by the legislature. With the current budgetary environment, the legislature has sought new revenue sources and passed legislation that changed the number of tax/fee programs, expanded the number of customers that are required to register with BOE and modified existing tax/fee rates.

Detailed analysis is required to evaluate the workload impact on existing programs and information technology prior to implementation of statutory changes. Significant resources from both program and information technology are needed to implement statutory changes that involve, but are not limited to, modifying and/or creating tax forms, developing new program policies and procedures, notifying impacted customers, reprogramming existing systems and adding system applications. BOE has recently implemented five major statutory changes:

- 1% Sales Tax Increase

1 State Board of Equalization, 2008-09 Annual Report

- In-State Businesses Reporting Use Tax
- Fuel Tax Swap
- Collection Cost Recovery Fee (effective April 2011)
- 1% Sales Tax Decrease (effective July 2011)

3.1.1 Tax Programs

The tax/fee programs administered by the BOE are concentrated in four general areas:

Sales and Use Tax

The Sales and Use Tax Department (SUTD) is responsible for administering the sales and use tax in California. California's business tax laws are based on a system of self-assessment and the BOE assists customers in the correct preparation of tax returns while encouraging their voluntary compliance with the various tax/fee laws. SUTD generated $39.9 billion in revenue during FY 2008-09.

Sales tax is imposed on retailers for the privilege of selling tangible personal property at retail in California, except those specifically exempted by law. Use tax is imposed on the purchaser for storing, using, or otherwise consuming in this state tangible personal property, purchased at retail, upon which the sales tax is not imposed or is not otherwise exempt by law. The department also ensures that business customers comply with permit requirements, assists in interpreting tax laws and regulations, and provides classroom instruction and individual assistance in the correct preparation of tax returns. BOE assists in and encourages voluntary cooperation from customers in filing their tax returns.

Special Taxes and Fees

The Special Taxes and Fees Division administer 28 tax/fee programs, which include fuel taxes, excise taxes, and environmental fees. The division also ensures that customers comply with registration requirements, assists in interpreting tax laws and regulations, and provides advisory services and individual assistance in the correct preparation of tax and fee returns. With the exception of insurance, alcohol and a portion of cigarette tax receipts which are deposited into the General Fund, special tax program revenues are used to finance specific State services, activities or programs from highway construction to hazardous waste cleanup and breast cancer research to studying invasive species in California's waters. Several special tax programs are administered in cooperation with other State agencies. The division generated $7.7 billion in revenue during FY 2008-09.

Property Taxes

The Property Taxes Division oversees the assessment standards and practices of the State's 58 county assessors, who are charged with assessing most property. In addition, BOE assesses the property of railroads and privately owned public utilities, enabling counties to use those values to collect local property tax. The program area also administers and collects the timber yield tax and private railroad car tax, and is responsible for maintaining all property tax-rate area maps and for maintaining special revenue district boundaries.

Tax Appellant

The Tax Appellant program oversees the appeals process. Customers, who disagree with staff decisions regarding taxes or fees they owe, may seek resolution through the BOE's

administrative appeals process. The formal appeals process generally begins with filing a written appeal. The appeal may progress through a series of steps to a hearing before the Board. The Board also serves as the administrative appellate body over final actions by the Franchise Tax Board (FTB). In that capacity, the Board interprets and applies the State's franchise and income tax laws. The Board hears appeals filed under the Bank and Corporation Tax Law, Personal Income Tax Law and the Homeowner and Renter Assistance Law. The Board hears appeals concerning the assessed values of state-assessed properties, private railroad cars, and taxable properties owned by local governments but that are located outside their boundaries. The Board also hears appeals of timber tax decisions and welfare exemption claim denials. While disputes may be resolved through discussion with BOE staff, the Board makes the ultimate decision on all property tax appeals.

3.1.2 Primary Business Program Functions

The main functions for the tax/fee programs are registration, return processing, cashiering, collections, audits, and appeals. Information technology for these functions is provided by the Integrated Revenue Information System (IRIS) and the Automated Compliance Management System (ACMS). The existing systems prevent the BOE from providing new state of the art online services to businesses causing them to spend a significant amount of time away from their primary revenue activities to complete tax and fee reporting requirements. The existing systems also limit changes to current program processes that will improve efficiencies making it easier for business customers to comply with permit requirements, assist in interpret tax laws and regulations, and receive classroom instruction and individual assistance in the correct preparation of tax returns.

Registration

The BOE registers over 500,000 new businesses, individuals and government agencies each year. Registration applications are received by mail, facsimile, in person and beginning in 2012 electronically over the Internet. Applications are processed separately for each of the 29 programs the BOE administers. Staff manually verifies registration information with the Employment Development Department (EDD), Franchise Tax Board (FTB), Department of Motor Vehicles (DMV), Secretary of State (SOS), Alcoholic Beverage Control (ABC), and other external State/Federal agencies (based on the program registration requirements) by initiating contact over the telephone or by mail. Once the applicant is registered, BOE provides the registrant an information packet consisting of the account number, permit/license, filing requirements, and publications applicable to their operations or activities for each tax/fee program. To update account information, customers or their authorized representatives must contact the specific tax program to have staff make changes to ownership information, reporting basis, mailing/business address, local tax allocation codes, security deposits and other account data.

For example, a new business owner of a single gas station with a convenience store selling gasoline, diesel fuel, groceries, cigarettes and alcohol is required to register separately with the BOE for a Seller's Permit (Sales and Use Tax), a Retailer's Cigarette and Tobacco Products License, and in certain instances, an Underground Storage Tank Maintenance Fee account. A separate information packet including the account number and permit or license for each of the individual tax/fee program is provided to the business owner. The owner is then responsible to report taxes and fees on separate returns for each tax/fee program that likely have different due dates. To change the mailing address for the business, the owner must contact each tax/fee program separately.

SUTD processes the Seller's Permit application and issues an account number allowing the owner to report sales and use tax for the sale of tangible personal property; such as, fuel, groceries, cigarettes and alcoholic beverages. The information on the application is reviewed and the owner's identification is verified using DMV information. The owner's reporting frequency (i.e. quarterly, quarterly prepayment) and security deposit requirements are currently based on the applicant's estimated projection of monthly taxable sales. To ensure the correct allocation and distribution of local taxes, it is important to identify the correct tax area code for each permit issued. Business addresses are manually verified with Thomas Guide books, Rand-McNally webpage, and by contacting the headquarters' Local Allocation section staff for assistance. Staff in the headquarters Local Allocation section perform daily manual reviews of permits issued throughout the State to verify that each account has the correct area code. Seller's Permit registration can usually be completed the same day the application is received but can take as long as 60 days for incomplete applications.

Special Taxes and Fees Division's Compliance Branch is responsible for the licensing of retailers for the Cigarette and Tobacco Products Licensing Act. A separate license is required for each location from which cigarettes or tobacco products are sold at retail. The registration for these licenses requires a one-time $100 licensing fee for each location where product is sold. In addition to ownership verification, and various background checks, staff manually verifies the licensing fee is paid in full. If the payment is not on the master license account in the BOE's Integrated Revenue Information System (IRIS), a search is made to locate the payment using the effective date and/or the remittance identification number. This entire licensing process may take from 1 to 3 days or up to two weeks depending on any delays in verifying the registration or background information. Once the verification has been completed and the payment is applied, the license is activated in IRIS and a license is issued.

Most sellers of fuel use underground tanks to store these products. Owners of underground storage tanks are required to register with the Special Taxes and Fees Division's Fuel Tax program for an Underground Storage Tank and Maintenance Fee account. In many instances the business owner/operator of a gas station is not the owner of the underground storage tank because they are not the owner of the land upon which the gas station is located. The ownership of the underground storage tank is manually verified with the appropriate local agency where the tanks are located. The responsible agencies where this information can be verified are not consistent throughout the State. For example, in Los Angeles County their Public Works Department regulates the underground storage tanks and in Sacramento County their Environmental Management Department regulates underground storage tanks. In other areas, the regulating agency may be a city or district within a city or county. Once the owner of the underground storage tank has been verified, an account is created or the applicant is notified that the owner of the tank needs to apply for a permit.

Currently, each tax/fee program separately maintains information on their accounts. Requests to make changes to account information are received by mail, over the telephone, or in person. It is the responsibility of the tax program staff that receives the change request to communicate the change to staff of other tax programs that are related to the account. Due to delegation of authorities and/or IRIS constraints, several staff in various units within a tax program may be needed to update account information.

To expand on the previous example, the owner of a single gas station mails in a *Notice of Business Change* form to a SUTD district office notifying the BOE they are purchasing a second gas station. The taxpayer is requesting a certificate of sales tax clearance to confirm that there is no outstanding tax liability owed by the seller of that location. In certain situations the purchaser of a business can be held responsible for a tax liability of the previous owner. The

district office will contact the current owner of the second gas station either by mail or telephone to obtain details of the sale or purchase and to verify the ownership and business type. The district office will then close the location from the current owner's account and then add the new location to the new applicant's account and mail the new owner a Seller's Permit for the purchased location. The district office will coordinate with collection and audit staff to either issue the certificate of sales tax clearance or mail a notice to the purchaser noting the amount that must be paid as a condition of issuing the tax clearance document. If a liability exists, a purchaser or escrow company generally withholds the amount equal to the outstanding tax liability from the seller for payment to the BOE for the tax owed by the seller.

Upon notification from SUTD the Special Taxes and Fees Division staff will independently initiate contact with the seller or buyer either by mail or telephone to obtain details of the sale and purchase to process the changes as they relate to their programs.

Return Processing

Over 3.6 million returns are processed by BOE annually, generating more than $46.8 billion in revenue for the State and local jurisdictions. Currently, returns are received by mail and electronically filed (efiled). The BOE's efiling program is currently limited to Sales and Use Tax, Motor Fuels, and International Fuel Tax Agreement (IFTA) accounts. The Sales and Use tax participation rate grew from 5% efiled returns/prepayments in fiscal year 2007-08 to over 80% in the current fiscal year. The remaining 20% of Sales and Use Tax accounts continue to file paper returns. It should also be noted that approximately 40% of efiled returns are paid with paper checks.

Returns received by mail are opened and hand delivered to the Cashiering Unit. The opened returns are batched by return type and the amount of money received with each return is verified manually with the amount due on the return. Batch numbers are assigned, checks are endorsed, and batches totaled to ensure the dollar amounts on the checks and returns match. The checks are then encoded and prepared for daily deposit. The returns are individually perforated with the batch number and are sent for key data entry. Return information is entered into a PC-based data entry system. The data files are then electronically transmitted to the Office of Technology Services (OTech), to be loaded into IRIS.

Efiled returns are completed online by the customer using a web browser interface. However, the web application only provides minimal validation of information and online help services such as numerical and alpha character recognition or verifying that information on sub schedules are transferred to the main schedule correctly. Return information is automatically loaded to IRIS without the key data entry process.

Paper and efiled returns are subject to a variety of automated and manual steps to identify errors. Based on edit rules in IRIS a report is created that identifies errors found on all returns. Efiled returns with errors must be printed, from a separate desktop application, and grouped with the paper returns. Errors are then sorted by tax program and routed to the verification teams in the applicable department for further processing. "Clean paper returns" (returns without errors) are micro filmed or scanned. The remaining returns with identified errors must be reviewed in detail by program staff. Obvious computation/data entry errors are manually corrected; the corrections are noted on the paper document and keyed into IRIS. Returns with more complex errors or questionable items are routed to other units within the program area for resolution that generally requires contacting the customer. These errors could include zero or partially paid returns, dishonored checks and underpayments of tax which result from errors in computation on tax returns. If an error cannot be resolved based on a review of the return the customer is contacted to address the issue. If it is necessary for the customer to amend their

return, a corrected paper copy of the original return (efilers will print their confirmation page) must be mailed to the BOE for manual input into IRIS. On average, BOE resolves over 1.3 million returns with errors annually.

The efiling program was developed based on BOE's paper returns, because of this; issues have developed that require workaround processes. If a taxpayer efiles the Sales and Use tax return and claims a non specified deduction, an edit is created that requires staff to manually review the return. Staff will mail an inquiry letter to the taxpayer requesting clarification of the deduction. Once the response is received and reviewed by staff, the deduction is either approved or denied. When a request is denied an adjustment is processed by staff to remove the deduction from the return and a billing is manually created by staff for the difference and mailed to the taxpayer. If the deduction is approved the return is processed and the account is flagged in IRIS for future return verification. However, all future returns will continue to trigger an error message in IRIS for this deduction and requires a manual review to clear the return.

In addition to resolving errors on returns, the BOE is responsible for the timely and accurate allocation of the local tax to 481 cities, 58 counties and 131 Special Taxing Jurisdictions. On average, BOE reviews 61,000 returns each quarter to validate the local tax allocation is correct. The review includes verifying with the taxpayer the location address to confirm the accuracy of their tax area codes, obtaining missing schedules, correcting ineligible entries, and correcting taxpayer errors. This process is important because small misallocations can have a significant impact on budgets of local jurisdictions over time. Despite BOE's best efforts to accurately identify the business location, on average BOE still reallocates $35 million in local taxes for 3,740 accounts annually.

Cashiering

BOE processes payments and deposits funds received by mail for all tax/fee program returns and other billing documents. Each paper return received is perforated with pinholes showing the batch number and date. Staff encodes checks manually by keying in the dollar amount of each check. Documents and receipts sent by courier from field offices are verified, reconciled and balanced by headquarters staff by comparing fiscal reports to money deposited. All checks are sorted by bank depository, micro filmed and batched with deposit documents for armored car transportation to BOE's bank.

Checks received by mail without supporting documentation are assigned to staff to be manually searched by the name and address in IRIS to locate a possible account match. Obvious matches to a liability are applied to the account; others are applied to a tax program as an unidentified payment and routed to the tax program staff to determine the correct payment application. Errors in payments can go unnoticed for months or years requiring businesses to provide documentation to support the proper allocation of the funds.

Collections

BOE has the responsibility to collect all outstanding amounts due under the tax/fee programs it administers. Liabilities that remain unpaid are assigned to collection staff for resolution through BOE's Automated Compliance Management System (ACMS). While the case assignment rules utilized by ACMS vary based on several factors (e.g., liability amount, tax/fee program), a liability is generally assigned to staff after it remains unpaid for approximately 90 days and after sending at least three automated notices. A collector's first attempt to obtain compliance begins via a telephone call and/or with a customized letter to the customer. When it is determined that a case cannot be resolved by phone or mail, a collector will make a field (onsite) visit to the customer's business or home location to gain compliance.

If initial collection efforts are not successful, external agency information searches are performed by staff to locate the customer and/or assets. Staff creates and mails notification letters of BOE licenses, suspensions, and permit revocations to external control agencies such as ABC. Collectors complete these requests in ACMS including requests for liens and/or levies and mailing the hard copies to the appropriate parties such as counties and banks. Collectors negotiate installment payment plans by mail, over the telephone or in person, issue subpoenas for records, analyze customer-submitted Offers in Compromise, recommend seizures of property, and write-off cases if they are determined to be uncollectible. In the event that a customer files for bankruptcy, staff must routinely monitor the US Bankruptcy Court records to ensure that timely claims are filed. Cases that require legal action to collect the liability are referred to the Attorney General's Office.

To obtain resolution with the BOE for account liabilities under different tax/fee programs the customer may be required to work with multiple collectors. Customers with accounts in multiple tax/fee programs are often deficient on more than one account. ACMS will send collection notices and assign collectors separately for each tax program.

Audits

The BOE audits accounts, as authorized by law, to assure that taxes and fees are being reported accurately, to deter tax evasion and carelessness in self-assessments, and to promote voluntary compliance. BOE completes on average 12,500 audits annually. In most instances, the audit will cover a three year reporting period. However, in some cases the audit period can be extended beyond three years due to other factors such as fraud or failure to file returns. Generally, an audit assignment results in one of the following:

- Office Waiver – assignment is completed with no examination of the customers books and records, no assessment or refund and with minimal, if necessary, contact with the customer
- Field Waiver – assignment is completed with a cursory examination of the customers books and records concluding the audit is not warranted and no assessment or refund is due
- No Change – assignment is completed with an examination of the customers books and records concluding no assessment or refund is due
- Field Billing Order – assignment is completed with a tax liability or refund from procedures other than those used in regular audits
- Deficiency Audit – assignment is completed with an examination of the customers books and records concluding a tax/fee assessment is due
- Refund Audit – assignment is completed with an examination of the customers books and records concluding a tax/fee refund is due

Audits are selected based on multiple factors including, but not limited to, sales volume, deductions, prior audit history, time since last audit, age of business, leads obtained from the public, type of business, BOE field staff observations, external or third party data (IRS returns, US Customs, EDD) and special areas of concern (i.e. businesses that change ownership frequently with related entities). Headquarters and district office audit staff are involved in the audit selection process. A portion of the audits are selected using a new linear regression software model; however the majority of the audits are currently selected manually. On average BOE selects more audits than can be completed.

After an audit has been selected it is assigned to a supervisor, who in turn, assigns it to an auditor. The audit process may vary between tax programs but generally begins with a review of the customer's central file and/or audit file and uses various IRIS subsystems to identify any potential underreporting issues. Based on the preliminary review of the customer information, the auditor may determine that an audit is not warranted. However to begin an audit, the auditor will contact the customer to schedule an appointment to review their books and records. During the scheduling process, the auditor will ask questions regarding the business, the availability of the books and records, potential related entities, and when an appointment can be made to begin the audit. The auditor will then create an initial audit plan that can be finalized later with input from the customer. In preparation for the audit, the auditor reviews law sections, regulations, and publications to become familiar with the customer's specific business.

The auditor will meet with the customer and/or their representative to begin the audit field work that will include an entrance conference to validate the information previously provided to finalize the audit plan, and to develop the audit time line. Based on the complexity of the customers' electronic records it may be determined that a Computer Audit Specialist (CAS) is needed to convert the data into a format that can be used by the auditor.

The customers' records will be reviewed and analyzed to determine if the correct amount of taxes and fees have been reported. Auditors primarily use the Start21 program (BOE developed Excel spreadsheets) to document the information from the customers' records. The information is captured in audit workpapers (spreadsheets) to record taxable transactions, exemptions and/or deductions. Based on the complexity of the business being audited, the audit workpapers may range from a few pages to several hundred pages.

After the audit has been completed, the auditor will provide a copy and discuss the audit findings with the customer. The customer will be given the opportunity to review the results and can provide additional documentation that may clear items identified in the audit findings. If additional information is provided, the auditor will review the information and make adjustments as necessary. Once the auditor has reviewed all pertinent information provided they will ask the customer if they agree or disagree with the audit findings. The discussion with the customer will be documented and included as part of the audit workpapers.

The formal review process of an audit has many steps. The auditor combines the workpapers with required forms to create an audit packet. The number of forms included in the audit packet can range from two to twenty. The completed audit packet is submitted to the audit supervisor to review and to add additional comments as necessary. The audit supervisor then submits the completed audit to staff who re-computes each audit page to ensure there are no calculation errors; most audits are completed using Excel spreadsheets (Start21). Selected audit data is then uploaded into IRIS for the billing process.

The audit is then submitted to an audit reviewer to determine if the audit packet is accurate and complete with regard to the application of law, BOE policies and procedures and mathematical accuracy. If questions arise during the review process, an audit will be returned to the auditor, through their supervisor, for problems or comments/issues to be addressed. Once the corrections are made, the auditor resubmits the audit packet to their supervisor for review. If the changes are approved the audit results are uploaded again to IRIS and the audit package is returned to the audit reviewer who completes the review process. Once determined to be correct, the audit reviewer signs off on the audit packet and forwards it to the Principal Auditor for approval. After approval a letter is sent to the customer notifying them of the final audit results and when they should expect to receive the Notice of Determination (billing). Portions of the audit packet are forwarded to headquarters for billing.

The billing process includes a manual review of the local tax allocation, the audit packet, the waiver of statute of limitation, credits and claims for refunds. If everything is determined to be sufficient, a Notice of Determination is printed the following business day and is mailed, completing the audit process.

Appeals

If a customer disagrees with the final audit findings or believes they overpaid the taxes or fees they can file an appeal. There are several different ways to appeal the audit findings depending on the customer's specific situation including a Petition for Redetermination, Claim for Refund and Administrative Protest.

Notwithstanding the form of appeal, the process generally includes the following steps:

1. Receipt and acknowledgement of the letter/form from the customer
2. Review the appeal to determine the reason for the petition or claim for refund
3. Contact the customer to either:
    a. Resolve the issue based on the additional information provided by the customer,
    b. Provide notification that the appeal is being referred to the district office for further action. The referral may result in the following:
        i. Issue is resolved without further action
        ii. Appeal is returned to headquarters without resolution
    c. Furnish a summary of the issues in preparation for the appeals conference
4. Schedule an appeals conference to discuss the reasons for the customer's areas of contention
5. Issuance of a "Decision and Recommendation" by the appeals officer, and
6. Schedule a hearing before the Board for determination and an official write up of the Board's decision

Although there are six steps as noted above, an appeal can go through certain steps more than once. However, upon consent by all parties, the appeals process can terminate at any step in the process. Upon exhausting BOE administrative remedies, a customer may pay their liability and pursue a claim for refund through the California Superior Court.

During the appeals process, tax and fee payers may apply to participate in the BOE's Settlement Program. Settlement is an alternative to the formal appeals process by which a customer can negotiate a settlement of the tax/fee liability based on factual or legal grounds in support of the offer. The Settlement and Petition/Refund processes occur concurrently and are completely independent of each other. If a settlement offer is accepted, it must be reviewed and approved by the BOE and/or the Attorney General. Payment of the agreed upon settled amount is due within 30 days of the proposal being approved.

The appeals process can potentially occur multiple times but only once for each process. For example if a customer filed a *Petition for Redetermination* with the BOE on a liability and the petition is denied, then the customer could pay the liability and subsequently appeal this decision by filing a *Claim for Refund*. On average BOE processes 3,000 petitions and 22,000 claims for refunds annually.

3.2 Business Program Problem or Opportunity

In 2009, the BOE evaluated its current automation systems in response to a number of events, such as recent statutory changes, legislatively mandated new tax/fee programs, a reduction in funding to implement program efficiency projects (i.e. Digital BOE - Return Process Efficiencies sub-project), and an increase in data center costs. The evaluation's main focus was centered on the Integrated Revenue Information System (IRIS) and the Automated Compliance Management System (ACMS). The results of the evaluation showed that BOE's processes for all tax and fee programs are operating on legacy systems architected with 1980's technology. Technologies have improved significantly over the past years and the BOE has not been able to meet the demands of its business customers for state of the art services.

3.2.1 Problems

These legacy systems impact the program as follows:

- Systems are inflexible
  - Unable to easily adapt to new or expanding requirements resulting in substantial revenue delay or loss for the state
    - It took five months to implement the 1% tax change, if BOE could have completed the project sooner, the state could have gained millions of dollars in revenue per month
  - Many manual workarounds and shadow systems are needed
    - A detailed summary of payments made by a customer cannot be viewed or requested in IRIS on demand; various IRIS screens must be copied and placed in a Word document to manually compile a summary
- Limits program functionality and new technologies for staff
  - Currently limits the ability for staff to work expanded hours
    - ACMS is currently shutdown Monday through Friday from 7 p.m. until 6:30 a.m. the next morning to allow batch jobs with IRIS
  - Limits the ability to utilize current technologies in the field such as Global Information Systems (GIS), Global Positioning Systems (GPS) and mobile devices
- Systems are difficult to navigate
  - Data fields on screens are labeled with non-intuitive abbreviations, acronyms and codes that are difficult to remember
  - Program still significantly relies on paper
    - System screens are difficult to view so staff routinely print copies of the screen
    - Because customers do not have access to their information in IRIS staff must print copies upon request
  - Program data is fragmented across many screens

        - IRIS contains over 1,750 screens
        - In many cases staff must view many screens to obtain a single piece of information
        - The screen that shows the original partial payment received with a return is never updated with subsequent payments made by the customer. These subsequent payments are shown on an entirely different screen
    - IRIS does not use a Graphical User Interface (GUI) which most customers and staff are familiar with
    - Complex system access rules
        - Auditors don't have access to all of the collection data and collectors don't have access to all of the audit data
- The system is not organized around the customer
    - A user cannot view comments, collection activity and return information for a single customer across multiple programs
    - Updating customer information that have multiple accounts requires redundant efforts since the update is managed separately by each tax program
- Limits online services and new technologies for customers
    - Customers must mail, call, or physically walk in requests for changes to their accounts
    - To change the mailing address for the business, the owner must contact each tax/fee program separately
    - Customers are primarily limited to conducting business with the BOE Monday through Friday from 8 a.m. to 5 p.m., excluding holidays
- Long learning curves for existing and new staff
    - Screen navigation short cuts (Jump codes) are difficult to memorize
    - Difficult to know which screen to use to obtain information
    - Changing staff responsibilities requires them to learn new jump codes and screens
- Difficult to fully utilize external data sources
    - Unable to automatically validate customer information with Federal, State and Local agencies which delays program processes
    - Unable to fully utilize commercial third party data sources to enhance registration, collection and audit selection capabilities
- Does not fully provide the ability to quickly identify current workload imbalances, predict future resource needs or effectively monitor daily activities for example, being able to prioritize and redirect workload to staff that are determined to have a lull in their workload
- Lacks ability to automatically reassign cases when staff is on extended vacation or leave
- Lacks the ability to track Outreach efforts to businesses

- Lacks the ability to track time spent by staff on various cases
- Lacks modeling and analytics to support program intelligence and strategic planning
    - It is very difficult for BOE to answer questions such as:
        - What revenue impact will proposed legislation have?
        - What would be the impact of a proposed program process change and can we truly measure the results?
        - What is the best collection strategy for this delinquent taxpayer?
        - How many auditors should we hire and where should they be located to get the best revenue potential?
- Requires technology staff to obtain data extracts for reports which can be costly and time consuming
    - The cost and delay makes it difficult for operational staff and managers to ask "what if" questions about their areas such as return processing, audits and collections
    - After receiving the extracts, a significant amount of time is spent manipulating the data rather than having the questions answered
- Lacks true automation to assist in production activities
    - Paper files such as audit packages, returns in need of correction, and other documents on microfilm must be physically passed around to be worked on rather than centrally accessible to staff which increases program process delays, opportunities for misfile or loss and increasing need for file storage etc.
    - Difficult to work on production issues or audit/collection/appeal cases concurrently as a team without all of the information available
    - Limited capability to pre-populate data fields for customers or, for auditors, to pre-populate their audit working papers
    - Lacks proactive reminders– For example, collectors should be notified automatically if bankruptcy filings occur or be reminded by the system of key dates to ensure BOE meets legal requirements and other constraints
- Program processes are dictated by the existing system
    - Lack of integration or interfacing of systems force electronic filers to print and mail copies of the electronic return in order for it to be amended
    - Requires appeals staff to re-input auditor data into the appeals sub-system
    - Older technologies such as perforating machines and microfilming are reinforcing older inefficient program methods
- Causes inaccuracies and processing difficulties due to data quality issues
    - The system cannot assist staff in validating customer business location which causes local fund allocation errors
    - Allows the same business to be entered into the system more than once

Accordingly, the BOE's legacy systems significantly hinder the agency's ability to efficiently and effectively implement, administer and evaluate its tax/fee programs.

3.2.2 Opportunities

BOE is in a unique position to:

- Work with our business customers to obtain input for the development of a new system to reduce BOE's impact on their business operations.
    - Provide real time information and tools to assist in making business decisions to improve and grow their operations
    - Reduce the time and resources needed to comply with tax and fee programs
    - Simplify and streamline registration and return processes
- Improve customer satisfaction by offering more online services, streamlining processes and increasing transaction accuracy and security
    - Provide dependable easy-to-use online services such as
        - Tax/fee information filing and payment
        - Calculate and fill in data automatically
        - Real time updates and immediate confirmations
        - Archive customer history of transactions including those items submitted on paper (i.e. outstanding bills, return history, scheduled payments and processed payments)
        - Registrations for all tax/fee programs
        - Address changes for multiple locations
        - Account summary data
        - Industry profile information
        - Third party bulk filing
        - Payment vouchers with a scan line that has encoded data to identify the customer information
        - Preview mode for demonstrations
        - Save work for completion at a later date
        - Upload supporting materials
        - Print copies of customer information
        - Pay electronically
        - 24 hour access
    - Provide a secure environment to ensure that customers interactions are fast, reliable, stable, scalable and secure

- Save customers time and money by eliminating unnecessary trips to the district offices or phone calls through the use of the online services
- Provide shorter wait times for customers whose business must be conducted in person or over the telephone

- Improve program efficiency and utilize best practices from other tax agencies
  - Increase annual revenues in an amount between $40 million and $190 million
    - Audit - Increase annual revenue in an amount between $10 million and $42 million
      - Improve the audit selection process
      - Automate components of the audit reports and processes
      - Provide improved productivity tracking systems
      - Utilize standard audit data
      - Provide access to 3rd party data
      - Improve data matching capabilities
      - Reduce the number of non-productive audits (no-changes)
      - Increase the number of desk audits
    - Collections- Increase annual revenue in an amount between $26 million and $130 million
      - Automate collection of smaller dollar or un-worked cases
      - Improve collection of aged accounts receivable
      - Provide improved productivity tracking systems
      - Provide access to third party data
      - Improve data matching capabilities
      - Centralize collection for all tax programs
      - Automate review of written off accounts for assets to levy
      - Identify jeopardy cases (customers dissipating assets) earlier through automation
    - Return Analysis – Increase annual revenue in an amount between $2 million and $9 million
      - Automate
        - Unapplied payments
        - Amended returns
        - Local tax revenue billings

        - Return edits by NAICS
        - Gasoline reconciliation process
    - Improve productivity tracking systems
    - Improve ability to search bank account information
    - Provide access to third party information
    - Streamline the Electronic Fund Transfer process
    - Provide online validation of banking information
    - Improve ability to communicate with district office staff
- Consumer Use Tax – Increase annual revenue in an amount between $600,000 and $3 million
    - Provide instant access to other agencies information (County Assessors, HCD, DMV, FAA, USCG)
    - Reduce liability write-off thresholds
    - Automate
        - Communication processes with taxpayers
        - Communication with other states
        - Portal for the public to report possible use tax liabilities
        - Release of liability compensation
- Other Compliance Activities – Increase annual revenues in an amount between $900,000 and $6 million
    - Improve productivity tracking systems
    - Access to 3rd party data (Rail yard and airport cargo shipments)
    - Eliminate stand alone systems

Table 3.1: Range of Annual Revenue Estimates

REVENUE PROGRAM	LOW ESTIMATE	EXPECTED ESTIMATE
Audit	$10,000,000	$42,000,000
Collections	$26,000,000	$130,000,000
Return Analysis	$2,000,000	$9,000,000
Consumer Use Tax	$600,000	$3,000,000
Other Compliance Activities	$900,000	$6,000,000
Total	**$39,500,000**	**$190,000,000**

The actual increased revenue will be dependent on the selected vendor and the implementation plan. Revenues are expected to be achieved at a discounted level in the initial years after implementation and grow each subsequent year as new components are brought online until the system is complete.

- Include program intelligence capability for improved tax administration decisions
  - Provide the ability for program staff to independently develop self generated analytical reports without creating stand alone databases
  - More accurately forecast the impacts of proposed legislation and policy changes related to revenue, costs and workflows
- Support concurrent enhancements including implementing new tax/fee programs or change tax/fee programs without delaying existing project timelines
- Allow program staff to utilize system tables to make process rule changes
- Configure flexibility to minimize programming changes or special customization
- Reduce the time for new and existing employees to become fully productive

- Meet or exceed Internal Revenue Service (IRS) or other external or internal security requirements
- Learn from other revenue agencies' successful implementation of performance-based, benefits-funded procurements
  - Plan for change management to ensure success of the system implementation
  - Evaluate other State agencies' projects such as FTB, EDD, and other similar projects in other states such as Arizona
- Take advantage of the increased number of proven technology options for integrated tax administration systems
  - Pre-qualify all vendors to ensure they have the capabilities of implementing a successful system

  - Obtain a system that allows real-time computing access for customers and BOE staff
  - Use industry standard development tools utilizing a modular distributed architecture
    - Compartmentalizes the impact of technical changes and provides more options
  - Reduce paper usage
  - Provide a customer-centric system that allows a consolidated view of all their tax program information
  - Utilize one comprehensive tax/fee service system instead of two separate existing systems
- Develop data warehouse capabilities
  - Provide modeling and analytics to support program intelligence and strategic planning
  - Provide integrated data warehouse functions across all tax/fee programs
  - Decrease the cost and duration of generating routine production reports
  - Decrease the cost and duration of generating an ad hoc report
- Improve BOE's automated capability to share data with federal, state and local agencies
- Provide improved services to local tax jurisdictions
  - Provide online access to pertinent local tax data
    - Relating to local tax revenues
    - Improve accuracy of information
    - Relating to BOE registrations
- Utilize mobile and web based technologies
  - Provide increased remote access
  - Have the ability to integrate existing and new mobile devices
  - Provide more interfaces to use online services
- Provide intuitive interfaces available
  - Use a Graphical User Interface (GUI) or better technology
  - Customizable screens for customers and BOE staff
- Allow for a continuous work flow instead of grouped document processing
  - Reduce return processing verification hours
  - Reduce program processing steps
  - Reduce the number of manual processes through automation or elimination
  - Reduce review time and approval processes

3.3 Business Program Objectives

The CROS Project program objectives will include the following:

A. Develop and deploy an integrated and automated tax/fee system that increases revenue in an amount between $40 million and $190 million per year when the system is fully implemented.
B. Improve service to customers by expanding online services beyond return filing, payments, registration, and request for extensions and relief of penalties. Develop customer centric records which will result in reducing the number of customer contacts to staff by no later than July 30, 2017.
C. Reengineer and improve program processes by 25% by reducing paper, streamlining manual program processes, automating program processes, and developing an effective case management system by no later than July 30, 2017.
D. Provide the ability to work securely anytime and from anywhere utilizing the latest mobile devices and allowing real-time information access to field staff and to pass a third party IT security audit by no later than July 30, 2017.
E. Obtain an intuitive and easy to use system, as measured by reducing system training time from on average six months to three months, the ability to personalize user interfaces and screens and utilize the most current technology by no later than July 30, 2017.
F. Improve access to data and data sharing to support real-time transaction updates, reduce the number of requests for system fixes by 90% (currently there are over 2,000 help desk tickets), support program generated reports, improve data matching capabilities and improve access to third party data by no later than July 30, 2017.
G. Obtain flexible and sustainable technology to reduce the time needed to implement legislative changes, allow program to easily change system rules, accept concurrent system changes, reduce standalone support systems and use component architecture of re-useable shared components by no later than July 30, 2017.

3.4 Business Program Functional Requirements

Project requirements are documented below as well as requirements that apply to all aspects of the project. The letters in parentheses show how the requirements map to the Business Objectives above.

1. Replace IRIS and ACMS and develop a program process workflow solution (**C,D,E, F**)
2. Reengineer current program processes (**B,C,D,E,F,G**)
3. Develop rules-based workflows (**B,C,E,G**)
4. Automate workflows (**B,C,E**)
5. Develop an Enterprise Data Solution
    a. Provide Data Warehouse capabilities to make data available to the enterprise as required by program (**A,B,E,F,G**)
    b. Provide program intelligence and data mining (**A,B,C,F,G**)

   c. Support and maintain the data solution (**C,F,G**)

6. Develop and maintain common services

   a. Design and implement a service-oriented architecture (SOA) and infrastructure including service composition, service orchestration, event-driven services, and process integration to enable enterprise program and data services that are shared and exposed (**D,F,G**)

   b. Develop and implement infrastructure to align customer self-services with a common internal and external view (**B,D,E,F**)

   c. Implement a user authentication service to increase security and to reduce risk for all program required systems (**D,F**)

   d. Implement a single sign-on service to facilitate automatic log-on (**B,D,E**)

   e. Develop and implement a new notification service to replace current processes used to print and send customer distributions such as notices and forms (A,B,C,F)

7. Maintain and/or establish internal and external interfaces (**A,B,D,F,G**)

8. Provide project management functions that include integration, scope, schedule, project cost, quality, human resource, communications, and risk management that are executed consistent with industry best practices and standards and comply with all reporting requirements pertinent to the project as defined in SIMM Section 45 (**A,C,D,E,F,G**)

9. Provide all necessary testing efforts, including unit, system, integration, regression, end-to-end, and performance and usability testing, and support state acceptance testing to ensure the highest quality product within the given timeline for the project, consistent with industry standards and best practices (**E,F,G**)

10. Provide a general test plan that includes test cases, business scenarios, requirements traceability, defect reports, user acceptance test scripts, and user acceptance documents, consistent with industry standards and best practices (**A,E,F,G**)

11. Provide comprehensive development, training, and test environments that encompass all aspects of CROS (**C,E**)

12. Develop and execute user acceptance test scripts and once issues are resolved, approve and sign acceptance documents prior to accepting transfer of ownership (**All**)

13. The new system must be supported by the BOE's service desk (**G**)

14. Adhere to BOE's Enterprise Architecture (**C,G**)

15. Meet or exceed BOE's security requirements as described in the agency's information security policy (**B,C,D**)

16. Adhere to BOE's policy relating to the disclosure and confidentiality of customer and IRS data (**D,F**)

17. Adhere to all legal and licensing issues related to procurement and use of all hardware and software products and any other applicable areas (**All**)

18. Adhere to BOE's organizational policies and procedures (**C,D,F,G**)

19. Provide comprehensive training to BOE staff (**E**)
20. Provide the ability to utilize alternative data sources, when possible, to capture all necessary customer information to limit their burden (**B,F**)
21. Develop a customer-oriented approach to all customer communications, and transactions to improve customer service and enhance compliance (**B**)

4.0 BASELINE ANALYSIS

4.1 Current Method

CROS will replace the legacy Integrated Revenue Information System (IRIS) and Automated Compliance Management System (ACMS) systems. IRIS is the mainframe-based system that supports the BOE's tax administration mission and has over 2,600 users not including view only users. ACMS is a UNIX based application that tracks outstanding liabilities and the associated collection activities and has over 2,000 users.

IRIS interfaces with ACMS through a nightly batch process which updates delinquency, revocation, audit, and balance information on ACMS and returns lien status information to IRIS. IRIS also interfaces to online web services through a mid-tier component for eServices, providing customers the online capability to file BOE tax returns over the Internet. In addition to the legacy applications of IRIS and ACMS, there are multiple desktop applications which utilize data extracts from IRIS and place that data into silos for statistical analysis and program process evaluation.

IRIS was built over a 10 year period. The IRIS application was the result of a strategic technology planning process that began in late 1989 when BOE was still processing on an overextended, in-house mainframe computer and had many stand-alone systems. Rather than procuring a new mainframe, the BOE decided to create a mainframe-based integrated tax system hosted at OTech. To ensure an integrated comprehensive tax system, thousands of business and technical requirements were specified in great detail over a three year period. The project was implemented in various phases and rollouts. The initial rollout did not include a collection subsystem or support the Property and Special Taxes Department's (PSTD) programs. The collection staff continued to use ACMS and the PSTD staff continued to use a standalone system called Special Taxes Automated Revenue System (STARS). The project funding used General Funds and required a number of Budget Change Proposals throughout its lifecycle to complete. Key milestones include:

- Timber tax pilot to prove the technology completed in 1991
- Request for Proposal (RFP) released April 1994. Software AG was chosen as the main tool provider and system integrator
- IRIS implemented May 1999
- Since 1999, major updates were made to IRIS
    - 2004: the Revenue Database Consolidation (RDC) project was implemented incorporating over twenty-four Special Tax/Fee programs that were previously supported by the STARS application
    - Dozens of legislative changes, including the addition of new tax/fee programs, have occurred since implementation (See Section 3 for a recent listing)

The BOE desired a tax system that was comprehensive, cross-functional and could meet the security, performance, reliability, and scalability needs of a large scale, mission critical financial transaction processing system. The BOE selected the technology tools and methods that were available in 1989 to 1990 to best meet BOE's needs.

IRIS is built on many mainframe-based components.

- Its database uses Software AG's Adabas product. Though not a relational database, BOE designed and implemented the file structure in a relational manner to ensure data was stored once and not scattered in multiple silos databases and to gain other benefits of the relational database design. However, application developers must deliver code to ensure these concepts are enforced and effective since they are not native to Adabas.
- The application was coded entirely "from scratch" using Software AG's Natural programming language along with other sets of tools and utilities. There are over 4.5 million lines of code for IRIS.
- To navigate the application, users must type in jump codes – 2 to 5 letter acronyms - to get to the screens they need. Though the underlying database was integrated, over time the numbers of screens have increased to support various program processes and control access. Multiple screens may have very similar information. Over 1,750 jump codes and screens have been created to date. BOE units generally use a small fraction of all the jump codes to support their work processes.
- The mainframe server and the IRIS application are hosted at OTech. OTech staff maintain the server, data storage, the operating system, the Software AG licensing and the other mainframe tools used by BOE staff and contractors. OTech provides backup and disaster recovery services as well. BOE's cost to OTech for their services is over $6.8 million per year.
- The system was primarily built by Software AG and BOE staff and is currently supported by over 65 state application developers and 15 contractors.
- IRIS supports statistical and work activity reports and exchange through data batch interfaces and extracts coded by developers.

IRIS has become technically complex and cumbersome to maintain.

- As an integrated tax system, multiple projects proposing major or even moderate updates will often impact the same subsystems or technology component in the same time period. This requires careful coordination and development practices to avoid conflicts and requires increased involvement of IT staff to assess impact and make the updates.
- IRIS has a large number of components to operate and maintain:
    - Over 4.5 million lines of code
    - Over 1,750 screens
    - 290 physical data files and hundreds of views
    - Hundreds of routine reports
    - Over 240 ad hoc reports annually
- Since IRIS is a custom developed application, BOE staff and consultants must be familiar with the system and write the code to maintain and enhance almost every aspect of the application.
- Deviations from the core system design concepts were needed to accommodate program exceptions, making it harder to plan for future enhancements.

  - Changes were “hard coded” into applications rather than changed by updating a table.
  - System standards that were originally put in place to ensure data was consistent and accurate were relaxed.
- Documentation for the IRIS system is extensive and has become unorganized, requiring technical staff with in-depth system experience to maintain the system.
- The system is not designed to easily exchange data with external agencies or other internal systems. Therefore, data exchange is time consuming, inefficient, and most often does not take advantage of the protocols available with today’s technology.
- Data is generally not directly accessible by the program for reporting – initially it requires extraction by an application programmer. This is often an iterative process that is labor intensive and causes delay utilizing the data for program issues.
- There are a number of data issues with IRIS
  - Existing system includes data from previous mainframe systems that contains errors
  - No significant purge of the program data has occurred since IRIS implementation
  - The system contains approximately 1.5 billion records

IRIS presents many strategic risks for the BOE that include the following:

- Unable to effectively reduce the Tax Gap due to:
  - Delayed implementation of legislation
  - Inefficient automation
  - Inability to easily adapt to new or expanding program requirements
  - See other problems listed in Section 3.2
- There are a diminishing number of state mainframe programmers available to support the system
  - The Natural programming language is outdated. BOE must conduct its own training of the language
  - The rate of retirement of technical experts is outpacing the long learning duration of those that can replace them
- Shrinking market share of Adabas/Natural results in fewer third party support options
- Cost increases due to:
  - The monolithic nature of a mainframe based system that limits technology options
  - Increasing reliance on contract programmers to maintain and enhance the current system
  - Ongoing maintenance of supporting mainframe systems are expensive compared to other options

In 1989-90 integrated tax systems and data warehousing technologies were custom built with minimal modular capabilities. Modern relational databases, web technologies, desktop PC’s

and graphical user interfaces were in their infancy. Mainframes were the only proven server platform with the processing power to handle millions of returns and financial transactions reliably.

Over the last 20 years, revenue administration solutions, enabled by technology have evolved. In the 1980s and 1990s, there were only a few vendors available to provide the systems necessary to administer the BOE's more than 25 tax/fee programs. Today there are many proven tax administration enterprise solutions currently available that manage government revenue, provide a customer-centered view and support online services and modeling/forecasting systems. Non-mainframe hardware and databases are far more powerful and robust and can handle enterprise-level mission-critical program transactions. As existing systems became outdated and rigid, agencies began implementing new solutions, from custom-built and transfer solutions, to commercial off-the-shelf solutions, and now to service-oriented architecture (SOA) solutions.

In 2011, many vendors feature built-for-government solutions that support the full spectrum of program processes managed by tax and revenue departments. Today's technology provides two powerful benefits: the power of data and the power of tying technology more closely to business. Secure, near real-time data sharing, data warehousing, and detailed reporting options provide agencies with more information to serve customers. Users can more quickly and cost-effectively respond to changes so that process improvements become the norm, rather than a special initiative. Solutions use leading-edge technology to support flexible configuration, customization, deployment, and interoperability that include:

- Collections and recovery which enables tax organizations to significantly improve revenue collections while reducing the associated costs and increasing customer service; supports the collection of delinquent tax and non-tax receivables and assists agencies with financial management and recovery of revenues owed through a wide variety of solutions, including collections, and revenue maximization.
- Decision management whereby tax agencies can collect more revenues by automatically identifying the best decision matrix for the treatment of delinquent collections, the most productive audit cases, and the discovery of tax cases with the highest likelihood of non-compliance.
- Transaction processing with the implementation of an integrated tax system that supports customer identification and registration, return processing, and customer revenue accounting.
- Channel management that allows tax agencies two-way communication with customers, businesses, and with federal, state and local agencies through a variety of channels.
- State tax online that allows for the calculation, filing, and paying of tax/fees online, which will reduce errors and improve customer satisfaction.

The advancement of web-based technologies has introduced many new ways of doing business, and staff and customers are more technologically savvy than ever before. A large percentage of today's sales take place via the world-wide web, which is accessible from hand-held mobile devices as well as laptop and desktop computers. As the private sector continues to offer solutions that raise customer expectations, tax agencies will be expected to keep pace and do the same.

Vendor solutions are now developed to accommodate:

- Additional tax types
- New tax/fee programs
- Changes in state or federal technology and security standards

New technology can provide automated functionality that is currently performed manually. For example, with the advent and widespread availability of Global Information Systems (GIS) and Global Positioning Systems (GPS) mapping, errors due to local tax allocation/reallocation could be minimized.

The following is a description of the major program areas that will be impacted by this project including a description of the current applications' functional areas, end users, data sources, and external interfaces.

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
Customer Information **Customer information is established during the registration process and maintained for the collection and administration of tax programs.**	**Customer** Name, address, and personal information regarding persons required to be registered for a tax program and any person for whom BOE needs to keep a name and address record for any purpose. i.e., accountant, lawyer	Users: Employees throughout BOE as well as FTB and EDD have view access. Data: Manually entered by compliance staff from information received from the customer or other state or federal agencies. New eServices are currently being developed so that customers can register online – availability in mid-2012.	Department of Motor Vehicles Franchise Tax Board Secretary of State Employment Development Department *Extracts received from or provided to the following upon contractual authorization when requested:* Housing and Community Development Federal Aviation Administration United States Coast Guard United States Customs Dept of Toxic Substances Control Secretary of State Dun & Bradstreet California Highway Patrol Public Utilities Commission Department of Public Health Department of Fish and Game Other States

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
	Taxable Activity Information about a customer for specific tax program; reporting basis for filing of periodic or non-periodic tax obligations, type of industry for the business, and requirements for posting security.	Users: Employees throughout BOE. Data: Manually entered by staff from information received from the taxpayer.	All of the above plus: Department of Resource Recovery and Recycling (Cal Recycle) Environmental Protection Agency Department of Alcoholic Beverage Control
	Security Deposits Information to track mandatory, or voluntary required security deposits for a customer within a tax program according to the requirements and time frames for that tax program.	Users: District Office Tax Technicians, Auditors, and Supervisors. Headquarters Staff Accounting, Auditors, and Collections Specialists. Data: Created by the application and dependent upon the tax program, the customer and the taxable activity for that customer.	Department of Alcoholic Beverage Control State Controller's Office

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
	Legal Status Maintain and track the legal status and/or liens on customers where there is a court case or internal BOE review, usually with an outstanding uncollectable account balance. Includes Bankruptcy, Probate, Collection assignments, Receivership, Attorney General, Board hearings, Liens, Sundry withhold, and other miscellaneous legal statuses.	Users: Business Taxes Representatives and Specialists, Auditors, and Supervisors. Headquarters Special Operations, Collections, Petitions, Appeals, and Audit Determination and Refund staff. Data: Manually entered or in some instances created by the application.	Department of Alcoholic Beverage Control State Controller's Office Employment Development Department Franchise Tax Board County Tax Collector Internal Revenue Service Federal Aviation Administration Coast Guard
	Tax Program Calendar Defines the proper calendar that each application uses for its respective processes based on tax program requirements.	Users: Maintained by headquarters staff in Technology Services Department. Data: Derived from program rules for each tax program.	No external interfaces

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
Return Processing **Sending and receiving tax revenue information for all tax programs administered by the BOE.**	**Financial Obligation** Establishes the parameters for an expected or required action by a customer, including the filing of periodic tax returns, posting of security deposits, filing and making payment of a non-period tax obligation, and the establishment of an audit obligation or compliance assessment.	Users: Employees throughout BOE. Data: Derived from the taxable activity and the calendar for each tax program.	Department of Motor Vehicles Federal Aviation Administration U.S. Customs Office U.S. Coast Guard Various other agencies for Consumer Use Taxes and Special Taxes and Fees Department of Alcoholic Beverage Control State Controller's Office
	Return Processing Receive, store, and maintain tax return information on every line item on a return provided by the customer. Calculate, compute or adjust tax return information. Compare, compute and create records/billings of differences between the reported taxes and calculated or computed.	Users: District Office Tax Technicians, Representatives, and Auditors and Supervisors. Headquarters Return Analysis Verification, and Tax Auditors. Data: Return information is entered online by customer or entered manually from paper forms. Other data is automatically calculated or derived from the customer provided information.	State Controller's Office Various Other State Agencies for Special Taxes and Fees

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
	Delinquency For unfulfilled financial obligations, this system establishes the cycle for sending delinquency notices based on the rules of the Tax Program Calendar for specific tax programs to schedule citation hearings, and send notices of revocation or suspension.	Users: District Office Tax Technicians, Representatives, Supervisors, and Auditors. Headquarters Account Technicians. Data: Invoked automatically when a customer fails to file a return by the due date or manually by district office personnel when an obligation is not met or a balance is not paid.	State Controller's Office Regional Processing Center
	Payment Processing Records payments made by customers and ensure proper application to the specific customer's account. Includes all payments whether sent with a return, in response to an accounts receivable billing, or in fulfillment of security.	Users: Employees throughout BOE. Data: Entered manually by key data operators in the Cashiers section, district office staff when receiving a payment in the district office or through electronic funds transfers or online payment directly from the customer.	Department of Motor Vehicles Franchise Tax Board Internal Revenue Service State Controller's Office Various Other State Agencies for Special Taxes and Fees
	Fund Allocation Calculates the funding of payments to various governmental jurisdictions according to revenue information details.	Users: Headquarters and District review staff involved in accuracy of payments and revenue allocation.	Local government jurisdictions State Controller's Office State Treasurer's Office Department of Finance Various Other State Agencies for Special Taxes and Fees

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
Accounts Receivable & Payable **Accounting of customer revenue totals due to or payable from BOE, statistical reporting, billing, refunds, and the accrual of applicable interest and penalties.**	**Difference** Maintains information about debit and credit differences between the amount of revenue reported and the amount of revenue subsequently found to be due, or the debit and credit differences between the revenue due and payments received.	Users: Employees throughout BOE. Data: Derived from Payment and Revenue information. Adjustments can be maintained manually by district and headquarters staff.	State Controller's Office Various Other State Agencies for Special Taxes and Fees Regional Processing Center
	Document Management Produces notices, statements, bills and other official forms of notification to the customers. Maintains history of all documents produced.	Users: Employees throughout BOE. Data: Billings and statements derived from Customer and Difference information. Notices also generated by staff on demand.	State Controller's Office
Case Management **Provides the ability to track the status of cases as they progress through audit, legal activities, claims for refund, petitions, appeals, settlements etc.**	**Audits** Used when validating the accuracy of the customer's tax revenue information as reported. The Audits sub-system records the information about customer's accounts that have been selected for audit, tracks district office audit responsibilities, audit selection criteria, and audit assignments. Progresses an audit through a lifecycle of activities depending on the tax program and type of audit.	Users: District Office and Headquarters Audit staff. Data: Generated from interface with Financial Obligation functions and through periodic Audit Selection. Audit findings are entered by district office and headquarters Audit staff.	Franchise Tax Board Internal Revenue Service Other States Various Other State Agencies for Special Taxes and Fees

Program Area / Objective	System Functional Area Description	Users and Data Source	Interfaces
	Appeals Records the request of a customer for a petition for redetermination, claim for refund, property tax assessment, settlement, etc. Tracks the phase status of each case, meeting schedules, conferences, decisions and recommendations, hearings, and Board decisions affecting the customer appeals.	Users: Headquarters and district staff involved in the appellate process. Data: Entered manually to establish the Appeals case upon request of a customer.	Franchise Tax Board Department of Toxic Substances Control Other state agencies as needed
	Assignment / Workflow Tracks work assignments from initiation to completion, provide approval mechanism when higher level authority is required before specific processes are allowed to proceed, automatically route assignments based on program process and workgroups.	Users: Employees throughout BOE. Data: Created automatically from information contained in and actions performed by other IRIS applications.	No external interfaces
ACMS **The ACMS system manages customer accounts that have delinquent financial obligations or outstanding accounts receivables**	**Collections** Selects and prioritizes collection cases according to preselected standards, maintains a tracking system and produces reports.	Users: District Office and Headquarters collection and audit staff. Data: Automatically generated from the Difference application and may be input from various other sources included manual entry by district or headquarters staff.	Franchise Tax Board Internal Revenue Services Many other State Agencies as needed.

The following chart displays the technical characteristics and operating environments for the IRIS (including eServices), ACMS, and Desktop Application systems. This list does not provide all the software utilized in the silo data marts.

Figure 4.1.0: Integrated Revenue Information System (IRIS) and eServices

Application Development Software		
Mainframe	**Mid-Tier**	**Desktop / Workstation**
Software AG (SAG) Natural v4.2.4	SAG EntireX 8.0	Extra! X-treme v9.0 Service Pack 2
SAG Natural Studio (SPoD) v6.3.5 PL 0	Merant PVCS 6.8	
SAG Construct v4.5.2	Entire Connection	Altova XMLSpy
SAG Predict Application Control v2.5.1		
COBOL		
SSANAME3 v2.7 (Informatica)		
Finalist		
PEEK v3.0.2 (Computer Associates)		
Profiler v4.2.1 (Treehouse Software)		
APAS/Insight v5.1		
Compare (ASCII DIF)		
Dialog Manager		

Operating System and OS Software		
Mainframe	**Mid-Tier / Server**	**Desktop**
z/OS v1.11	MS Windows Server 2003	Windows XP
TSO	MS IIS 6.0	
ISPF v6.1		
CICS/TS v3.1	**LAN OS / Server**	
JCL	Windows Server 2003	
EntireX		
Entire Network		
Natural Development Server		

Database Management Systems and Utilities		
Mainframe	**Mid-Tier / Server**	**Desktop / Client**
SAG ADABAS v8.1	SAG Tamino XML 4.4.1.1	ApexSQL Diff
SAG Predict	MS SQL Server 2005 Cluster	MS SQL Server Management Studio
SAG Natural Engineer v6.1.1		MS SQL Server Profiler
SAG Fastpath		SAG System Management Hub (4.1.1.425)
SAG Event Replicator		
ADAREORG v300		

Figure 4.1.1: Automated Compliance Management System (ACMS)

Application Development Software		
Mainframe	**Mid-Tier**	**Desktop**
COBOL	Visual Studio .NET C#	Microsoft Visual Studio 6.0
	C compiler 5.7 (SUN Studio 10)	PVCS
Operating System and OS Software		
LAN Server OS	**Mid-Tier**	**Desktop**
Unix	Windows Virtual Server	Windows XP
	SUN Solaris 10 on SPARC	Hummingbird Exceed 9.0
	SSH	
	SUN Common Desktop Environment	
	Serena PVCS 8.1.4	
	IBM CICS TXSeries 6.1.0.2	
	X-Direct 11.9 (3270 Emulation)	
Database Management Systems and Utilities		
	Mid-Tier / Server	**Desktop / Client**
	Sybase Adaptive Server Enterprise 15.0.3	Sybase Adaptive Server Anywhere
		MS Access
		Sybase Central 6.0
		Sybase Interactive SQL

Figure 4.1.2: Desktop Applications interfacing with IRIS and ACMS

Application Development Software		
Mainframe	**Mid-Tier**	**Desktop**
SAS	Visual Studio .NET C#	Delphi 6 Enterprise
		Delphi 2010 Enterprise
		FastReports
		Help & Manual
		ISTool/Inno Setup
		NexusDB
		Microsoft Visual Studio 2005
		Mercurial
		ColdFusion
Operating System and OS Software		
LAN OS	**Mid-Tier**	**Desktop**
Windows Server 2003	MS Windows Server 2003 on Intel	Windows XP
	MS Internet Information Services (IIS 6.0)	
Database Management Systems and Utilities		
	Mid-Tier / Server	**Desktop / Client**
	MS SQL Server 2005 Cluster	MS Access
	MS SQL Reporting Services 2005	ApexSQL Diff
	MS SQL Integration Services 2005	MS SQL Server Management Studio
	MS SQL Replication Services 2005	MS SQL Server Profiler

4.2 Technical Environment

The following section identifies assumptions and constraints that will impact implementation of an acceptable solution. It also identifies agency or statewide technical standards that will narrow the range of reasonable technical alternatives.

Expected Operational Life of Proposed Solution

No fixed end date exists for de-commissioning the proposed solution. It will have to be flexible enough to accommodate unforeseen future changes, including changes in organizational structure, the addition of new tax/fee programs and/or changes in the technology environment. BOE is seeking an adaptable, flexible, expandable application and data framework for a system or collection of systems that can grow and change over time, without major program disruptions for 10+ years to meet the goals of BOE's Strategic Technology Plan (Published April 2009).

External System(s) Interface(s)

The proposed solution must be implemented so that secure external system interfaces are maintained and future interfaces can be easily created. Key existing external interfaces must continue to be available and automated with State Controller's Office, Franchise Tax Board, Employment Development Department, Department of Motor Vehicles and the Secretary of State. Furthermore, data within the system must continue to be available for existing data marts utilized in key BOE program processes and management reporting, with end user capabilities for extracting data as needed.

State-level information processing policies (enterprise system strategy)

BOE has adopted an Enterprise Architecture (EA) strategy in order to create sustainable improvements in IT efficiency and agility. The proposed solution should include a SOA which increases BOE's capability to address new business requirements quickly through reusable program logic and data models. In addition, the SOA will benefit BOE in terms of agility because it provides a long-term strategy to increase the flexibility of the CROS solution in BOE's overall IT infrastructure. BOE is committed to adopting, maintaining, and adhering to a set of open industry standards and best practices. SOA will provide this comprehensive set of system standards to support sharing and exchanging of information both within the BOE and with local, state and federal entities.

The proposed solution will be hosted at the OTech data center and it must adhere to both OTech and BOE's information and technology policies and strategies. Refer to the "Board policies and procedures related to information management" section below for information regarding BOE's EA principals.

Financial Constraints

By implementing a solution that will replace IRIS and ACMS, BOE expects the CROS system to increase collection capabilities and reduce system overhead. BOE will utilize the Department of General Services' RFP process to select a vendor that will act as primary contractor responsible for all system development and integration. As a performance-based, benefits-funded procurement, the project vendor will be funded by increased revenues that result from utilizing the CROS system. Vendors must agree to provide the initial funding for hardware, software and custom development and to be paid by a percentage of the revenues that the CROS solution generates. The vendor contract will contain a maximum dollar cap for the vendor and the vendor will not receive full compensation if sufficient increased revenues and cost savings levels are not met.

Legal & public policy constraints

IT systems must be implemented in adherence with applicable internal and external security, confidentiality, privacy policies, and laws. The proposed solution must meet statutory and regulatory requirements and must be flexible enough to introduce new tax law legislation with ease.

The proposed solution will include both public domain information and confidential data, which require restricted access and a greater level of system security. Any information that relates to the identity of specific customers is strictly confidential and must conform to the BOE policy for protection of information assets documented in the State Administrative Manual (SAM) management memo MM 06-12 (dated 9/1/2006) which references California Government Code section 11019.9, California Civil Code section 1798 (et seq), SAM sections 4841 and 4841.1, and Statewide Information Management Manual (SIMM) Section 70C.

Board policies and procedures related to information management

BOE recently established its Enterprise Architecture (EA) program which defines the program information necessary to operate the program, the technologies necessary to support program operations, and transitional processes necessary for implementing new technologies in response to changing program needs.

As an integrated enterprise-wide system for the BOE, the proposed CROS solution will replace the largest IT systems implemented at BOE. Its design and development must adhere to applicable domain principles as presented in BOE's EA program. The Business Foundation and Technical Architecture of the Enterprise Architecture at BOE establish the principles that represent specific guidance for each of five technical domains represented in BOE's Technical Reference Model (TRM). The technical domains include Data, Applications, Infrastructure, Integrity and Governance.

Following is a list of the applicable EA domain principles that will be used to evaluate solution alternatives.

Data Domain Principles:

- Physically separate online transaction processing (OLTP) data from data warehouse (aka decision support services) data
- Data elements must maintain a consistent meaning and purpose across the enterprise
- Data names will be standardized to the extent possible between applications and across database platforms
- Data in electronic format must be preserved and maintained, and remain accessible for their designated retention period
- Electronically capture data once, as close to the source as possible, to be shared and reused where applicable

Application Domain Principles

- All program logic will reside in a middle tier, separated from the database access and presentation services

- Document, maintain and manage application component information in a shared enterprise repository
- Use common application modules for sharing and reuse in development projects within platforms
- Architect systems to be program event driven
- Develop and deploy applications to utilize a common and shared set of server, network and middleware services
- Utilize a standard system development methodology
- Design data access to be independent of physical data location
- Applications and data will be engineered to optimize performance while maintaining consistency, integrity and accuracy
- Minimize the effect of elaborate or complex program processes by making the user interface as simple and easy to use as possible
- Use applications and tools that will present a common look and feel
- Design systems so program rules, security and integrity rules control the update and access to data

Infrastructure Domain Principles

- Employ communications protocols that span multiple platforms and operating systems
- Regardless of where an employee connects to the infrastructure, once authenticated, provide access to all appropriate system resources
- Limit, to the extent possible, the amount of “unique” performance tuning to individual network components – particularly servers and clients

Integrity Domain Principles

- Ensure that all mission critical data will be backed-up and recoverable
- Implement security to ensure that applications and data are protected from unauthorized access
- Design for a “single sign-on” user authentication process
- Design for centralized management of user authorizations for all applications and enterprise services
- Privacy of data will be enforced at all times through adherence to BOE security policies and procedures
- There must be accountability for security, which includes the appropriate design and use of audit functions and system monitoring tools
- Allow for delegated security authority

Governance Domain Principles

- All software development efforts shall include a Project Management Plan

- Formal methodologies for IT change management must be established and followed

Anticipated changes in Equipment, Software, or the Operating Environment

All vendor proposals that meet the above EA domain principles will be considered. BOE anticipates that a great deal of its equipment, software and operating environment components which support IRIS and ACMS will change based on the vendor's proposed solution for CROS.

Availability of IT Personnel

BOE provides primary technical support for the current IRIS and ACMS applications and information technology environments. There are approximately 225 positions in the Technology Services Department dedicated to the support of IRIS, ACMS and their interfacing applications as well as the IT infrastructure. Services provided by BOE IT staff include application development and maintenance, testing and implementation, database maintenance and infrastructure support, configuration/change management and system security.

BOE expects the selected vendor to complete the design, development, and implementation of the proposed solution while working side by side with staff that has been redirected from BOE's IT section. The vendor will be responsible for training selected BOE IT staff in the technology solution, application software language and utilities, database management tools and utilities, and security infrastructure. The vendor will also deploy new or interface with existing testing methodologies and tools, and configuration and change management processes and tools.

BOE staff will work with the vendor to provide access to existing legacy system data, data migration, data purification and technology architecture modifications needed to accommodate the new system and functionality.

While a portion of the current IT positions will be redirected to assist with development and implementation of the new solution, a majority of the programming and support staff will continue to maintain the existing systems until the cutover (system transfer). Training will be required for both the redirected technical staff and staff who are assigned later to the new systems maintenance and support once it is implemented.

4.2.1 Existing Infrastructure

This section briefly describes BOE's existing infrastructure and technical architecture to provide a context for the proposed solution.

Desktop Workstations

Listed below are the minimum hardware configurations for a standard desktop computer at the BOE.

Figure 4.2.0: Minimum PC Configurations

Component	Specification
Base Unit:	Dell Optiplex Ultra Small Form Factor,Core 2 Duo E6400/ 2.13GHz,2M,1066FSB (222-5922)
Processor:	NTFS File System,Factory Install (420-3699)

Component	Specification
Memory:	2.0GB,Non-ECC,667MHz DDR 2x1GB,OptiPlex 745 (311-5042)
Keyboard:	Dell USB Keyboard,No Hot Keys English,Black,Optiplex (310-8010)
Monitor:	Dell UltraSharp 1907FPV Flat Panel with Height Adjustable Stand,19.0 Inch VIS,Optiplex, Precision and Latitude (320-4976)
Video Card:	Integrated Video,GMA3000,Dell OptiPlex 745 (320-5169)
Hard Drive:	80GB SATA 3.0Gb/s and 8MB DataBurst Cache,Dell OptiPlex 320 and 745 (341-4214)
TBU:	RoHS Compliant Lead Free Chassis and Motherboard,Dell OptiPlex (464-1131)

Notebook Workstations

Listed below are the minimum hardware configurations for a standard notebook computer at the BOE.

Figure 4.2.1: Minimum Notebook PC Configurations

Component	Specification
Base Unit:	Dell Latitude E6410 [224-7936]
Processor:	Intel Core i5-520M (2.4GHz, 3M cache) with Turbo Boost Technology
Memory:	3GB DDR3-1333MHz SDRAM, 2 DIMMS [317-3589]
Keyboard:	Internal English Keyboard [330-0836][330-1652]
LCD:	14.1” WXGA (1280x800) Anti-Glare LED [320-8792]
Graphics and Expansion Slot:	512MB NVIDIA NVS 3100M discrete graphics with PC Card [320-8794]
Hard Drive:	160GB 5400rpm Hard Drive, No RAID [342-0477]
Removal Media:	8X DVD+/-RW [313-6513]
Energy Efficient:	Energy Star/EPEAT Gold [468-6005]

Component	Specification
Primary Battery:	9-cell (90Wh) Lithium Ion Battery [312-0909]
AC Adapter:	90W A/C Adapter (3-pin) Energy Star [330-0879]
Wireless LAN (802.112):	Intel Centrino Advanced-N 6200 802.11 a/b/g/n Half Mini Card [430-0755]

LAN Servers

The BOE currently maintains most of the Servers at headquarters, but every district office has a Server for software and patch distribution as well as storage for Home/Group drives.

The main Application Servers are housed at headquarters: Exchange, SQL, Web Servers and all other Application Servers.

The BOE has standardized on HP ProLiant Servers.

Mainframes

Mainframe computers are used at BOE for enterprise-critical, high-availability processing, and require facilities support currently provided by OTech Data Center. The BOE standards are aligned with OTech Data Center standards.

Network Protocols

The Technology Services Division (TSD) at BOE serves nearly 4,000 staff in both Sacramento headquarters and in district offices located throughout the state and in New York, Chicago and Houston.

The BOE district offices are connected to headquarters via Point to Point T1 lines; however, due to the bandwidth demand some offices use dual T1 lines.

The BOE offices located at 400 Capitol Mall, Sacramento and 621 Capitol Mall, Sacramento are connected via 100 Opteman.

The BOE is connected to OTech Data Center via dual 50 MB Opteman for redundancy.

The BOE Internet connection is DS3 45MB.

There are multiple protocols in use at the BOE due to the complexity of systems and there is a need for a common language to communicate between systems. The following is the list of protocols in use at the BOE:

- Routed Protocols – TCP/IP and all traffic between offices is encrypted via VPN tunnels
- Email communication – Simple Mail Transport Protocol (SMTP)
- eCommerce transport and communication – Hypertext Transfer Protocol (HTTP), Hypertext Transfer Markup Language (HTML), and Extensible Markup Language (XML)

Application Development Software

The enterprise architecture vision for the applications deployment environment at the BOE is a heterogeneous, multi-tiered, distributed computing environment.

To support this complex environment, the various development and management tools should integrate their capabilities in order to simplify development tasks.

Personal Productivity Software

The BOE standard productivity software is MS Office 2003. Currently, the BOE is in process of transitioning to MS Office 2007.

Operating System Software

The BOE standard mainframe operating system is z/OS, developed by IBM. Standard server operating systems are Solaris, and Windows. Windows is the BOE standard operating system for desktops, notebooks and laptops, the current version running is XP, SP 3. Currently, the BOE is in process of transitioning to Windows 7, 32 bit.

Database Management Software

The BOE has not yet published its Relational Database Management Software standards; however, BOE is currently using MS SQL Server and Sybase ASE.

Application Development Methodology

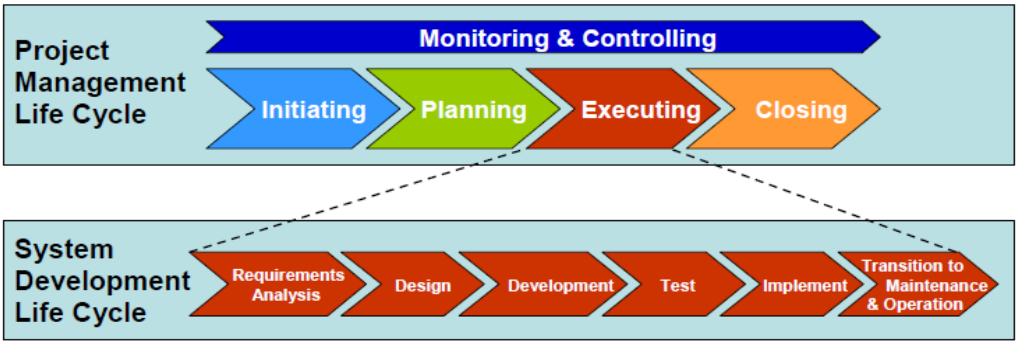
The BOE application programmers currently follow a System Development Life Cycle similar to the traditional waterfall style of application development — Analysis, Design, Develop, Test, Implement and Maintain.

Project Management Methodology

The BOE Project Management Methodology was developed by leveraging global best practices and is aligned with the California Project Management Methodology (SIMM section 17). CROS Project management will ensure that the selected vendor's approach addresses the activities recommended in the SIMM.

See below illustration for the relationship of Project management and System Development Life Cycle at BOE.

Figure 4.2.2: Relationship of Project Management and System Development Life Cycle



5.0 PROPOSED SOLUTION

To solve its current program problems and to meet this FSR's objectives, BOE proposes to acquire a total replacement of its core tax/fee systems. This replacement effort will be accomplished through the use of a performance-based, benefits-funded procurement method.

5.1 Solution Description

Specifically, the proposed solution will:

- Replace the IRIS and ACMS systems.
- Provide an enterprise data warehouse.
- Expand customer online services.
- Provide assistance with Organizational Change Management

The proposed system must provide an integrated and automated solution that will use current tax collection, storage, account management, and data retrieval technologies to maximize the effectiveness of BOE's operations and staff resources.

BOE will acquire this new system through the use of a performance-based, benefits-funded vendor contract. The vendor contract will include: the purchase of an existing software product, necessary hardware, and vendor resources to modify or customize the software to meet BOE's program goals. The vendor will be responsible for the overall project integration and will assist in organizational change management activities. The BOE staff will work with the vendor to provide legacy system data migration and modifications needed for ancillary systems to accommodate the new system and functionality.

The new system should result in improved audit and collection activities ultimately resulting in new or accelerated revenues to the State. A portion of these new revenues would fund the vendor contract. For this reason, this project will be funded by increased revenues from implementation of the proposed system. This type of method is commonly called a performance-based, benefits-funded procurement. Vendors must agree to provide the initial funding for the hardware, software, and customization/modification. These components will then be paid for through a portion of the revenue the proposed solution generates. The vendor contract will contain a maximum dollar cap and the vendor will not receive full compensation unless sufficient revenue levels are met and program deliverables are provided.

Compensation Principles

Vendor compensation will consist of the following major principles:

- Vendor compensation will be based upon the contractor delivering quality service and support and delivery of a system that achieves the required revenue and business goals of BOE
- Payments to the contractor will be a percentage of new revenues produced by their solution up to a maximum of the contract amount
- Failure to achieve the required revenues will result in a proportionate loss of vendor compensation
- State project costs will be recovered from the new revenue stream prior to compensation to the contractor

- The State standard 10% hold back will be retained until final acceptance of all deliverables and full acceptance of the system and standard bonding and liability will be required

A comprehensive set of rules defining compensation details will be developed and included as part of the CROS RFP document. The finalized compensation principles will be discussed during vendor contract negotiations.

The BOE estimates the solution will generate in an amount between $40 million and $190 million annually in revenues once the system is fully implemented.

Hardware

The proposed hardware solution will be determined as part of the performance-based, benefits-funded procurement and must meet or exceed current BOE, CTA, and OTech standards.

Software

The proposed software solution will be a combination of the vendor's software which may be off-the-shelf, customized or modified application, and an assortment of software products such as a data base management system, operating system, middleware, or utility packages. The solution may include an integrated tax system, a data warehouse, a case management and customer relationship system.

Technical Platform

The technical platform will be determined following the evaluation of vendor proposals during the procurement process.

Development Approach

The proposed solution will require the vendor to work closely with BOE to develop a comprehensive approach that will ensure successful design, integration, configuration, testing, implementation, and staff training for the project. Methodologies used by the vendor must comply with CTA and BOE standards. BOE will require the vendor to work side-by-side with BOE staff to ensure knowledge transfer so that BOE staff will be able to maintain the CROS system after implementation.

The CROS Project will be developed in two major phases.

<u>Phase I – Planning and Procurement</u>

This phase involves project planning and procurement of a prime contractor to meet the scope of this project. This phase consists of the following major activities:

- Development and approval of this FSR
- Development of a Request for Proposal (RFP)
- Procurement of a vendor contract
- Preparation for the data conversion
- Development and approval of a Special Project Report (SPR)
- Legislative notification of estimated future revenues and potential contract amount
- Award of the vendor contract

The procurement activities in this phase will be overseen by an Independent Project Oversight Consultant (IPOC) provided by the CTA.

Phase II – System Development and Implementation

This phase involves the development and implementation of the proposed solution that will use current tax collection, storage, account management, and data retrieval technologies to maximize the effectiveness of BOE's operations and staff. This phase will consist of the following major activities:

- Replacement of IRIS and ACMS
- Implementation of an enterprise data warehouse
- Conversion of BOE's data to the replacement system
- Implementation of online customer services
- Network upgrade and/or modification

This phase will be overseen by an Independent Verification and Validation (IV&V) vendor.

Integration Issues

It is BOE's intent that the vendor will be the system integrator and will be responsible for developing and integrating the new system.

The proposed solution will require the vendor to work closely with BOE to resolve integration issues, which may include:

- BOE and OTech network security firewalls
- Network bandwidth
- Electronic payment option security and account validation
- State Internet standards
- Compliance with State and Federal laws and regulations
- Data storage, retrieval, archive and purge
- Data interfaces with other entities
- System overall performance

Procurement Approach

The BOE will prepare an Information Technology Procurement Plan (ITPP) which will describe the procurement approach and major activities.

As part of the RFP process, BOE plans to:

- Advertise for vendor participants
- Pre-qualify vendors
- Develop a vendor compensation model
- Issue RFP to qualified vendors

- Work with vendors to develop draft and final proposals through reviews and confidential discussions
- Select winning proposal based on a "best value" selection process

In addition, BOE plans to include small business and/or disabled veteran-owned businesses that meet vendor selection criteria. At this time, BOE does not plan to pursue any sole source procurements for the CROS Project.

As needed, BOE may use consultant expertise to advise on RFP development, review RFP technical specifications, development of the bidder's library, and to participate in the review process of the vendor's technical proposals. BOE's IV&V consultant may review the vendor's application code.

Only BOE-owned computers, media, and software will be used to receive, process, access, and store FTI. BOE must retain ownership and control, for all hardware, software, and endpoint equipment connecting to public communication networks, where these are resident at all alternate work sites.

Technical Interface

The new CROS solution must integrate with BOE's remaining or non-replaced architecture and OTech's current architecture. Depending on the selected vendor's proposed solution, BOE may be required to develop technical interfaces with BOE's remaining systems. The BOE staff will work with the vendor to provide access to legacy system data, data migration, and modifications needed to accommodate the new system and functionality. Unless the vendor proposes replacement systems, the new system must interface with the following:

- Documentum
- Interactive Voice Response
- Call Center Network
- Clementine
- Elixir (document composition software for forms and publications)
- Xerox DocuSP (batch printers)
- eServices
- Other mainframe applications remaining after CROS is implemented

Accessibility

The new system must be developed in accordance with the State Administrative Manual Section 4833. In addition, the new system must be in compliance with laws, regulations, and policies regarding accessibility to digital content and to IT applications for state employees and the public. The new system must meet accessibility requirements pursuant to Section 508 of the Rehabilitation Act (29 U.S.C. 794d) (hereafter, Section 508) and California Government Code section 11135. Further, the BOE will measure the vendor's compliance with the accessibility requirements using the following methodology:

- During the procurement phase, require the vendor to certify that their solution meets Section 508 and California Government Code section 11135.

- During the project, ensure that appropriate test scripts are developed and executed to be in compliance with Section 508 and California Government Code section 11135 requirements.

Testing Plan

The selected vendor must provide detailed written test plans for all system components and usage permutations that pertain to their portions of the solution. Testing plans must address usability, unit, integration, system, performance, program processes and benefit determination. Test plans shall include test scenarios which shall be designed for all customer use cases to ensure system performance under realistic conditions. Test scripts shall be used to test functionality for all customer scenarios.

BOE intends that its program and IT testing staff shall work with the vendor throughout the testing processes. Vendor shall be responsible for training BOE's testers. In addition, all test data, test scripts, results, program use cases and documentation must be packaged and delivered to BOE staff for subsequent reuse.

Resource Requirements

The vendor will provide the resources for developing the solution. Changes that need to be made to any remaining legacy systems in order to provide input to the new system and accept output from the new system will be made by BOE staff. Specific BOE and vendor tasks must be included in the selected vendor's proposal. In addition, BOE recognizes that the new system will require IT and program staff support based on the experience of other departments that have implemented such systems. Those estimates are included in the Economic Analysis Worksheets included in this FSR.

Training Plan

The vendor shall provide a strategy that addresses the training needs of BOE's staff. It will be BOE's responsibility to identify and approve the staff that will attend the training and ensure their availability for that training. The vendor shall also train, including knowledge transfer, BOE's program and technical staff in order to maintain the new CROS applications. The training plan will be consistent with the overall Organizational Change Management Plan.

Ongoing Maintenance

The vendor will be responsible for maintaining the system until the system is accepted by BOE. After the system is accepted, any maintenance costs of the hardware, software, and the application will be updated in the SPR. All developed custom code must be fully documented by the vendor during the project and will be wholly owned by BOE.

Information Security

The CROS system must be designed to comply with BOE's information security policies, including BOE' s Information Security Policy and External Customer Access Policy. BOE's Information Security Policy identifies applicable State and Federal laws by which BOE is bound. These include but are not limited to IRS Publication 1075, Safeguards for Protecting Federal Tax Returns and Return Information, and applicable sections of NIST 800-53. The document also identifies two policy guidelines: (1) security requirements, and (2) a matrix assigning specific responsibilities for information security and customer access.

The External Customer Access Policy details requirements for user access, data classification, data integrity, system design, and audit trails for the three defined categories of data

classification--Confidential, Sensitive, and Public Information. The responsibility matrix within the External Customer Access Policy associates responsibilities for information security and responsibilities for external customer access that apply to five defined functions: Data Owner, Internal User, External Customer, Information Technology, and Stewardship.

The BOE has drafted security-related policies, processes, standards, and guidelines and has been driving towards development of security architecture at both management and technical levels. The new system shall not compromise any of the security measures currently in place (or planned) at OTech.

Confidentiality

The proposed solution will deal in large part with sensitive information for BOE's customers. Significant efforts will be made within CROS to ensure the privacy of the customers and the integrity of the data as it passes to and from the system. Through compliance with BOE's security requirements, the CROS system will ensure the confidentiality, availability, and integrity of the information it internally processes. CROS will be consistent with current state and federal laws and regulations with respect to confidentiality and privacy of customer information. These include but are not limited to IRS Publication 1075, Safeguards for Protecting Federal Tax Returns and Return Information, and applicable sections of NIST 800-53.

In order to protect the privacy of BOE's customers, all non- BOE personnel that are involved with the CROS development shall be required to sign and adhere to the BOE Confidentiality Statement. In addition, BOE and the selected vendor must adhere to all third party security and confidentiality requirements for data accessed and used as part of the CROS solution.

Impact on BOE staff

The proposed solution will have a major impact on most BOE staff. It is the intent of this project to replace old automated tools and manual processes that are currently managed and used by most of BOE's staff. The vendor shall provide organizational change management and training plans for BOE staff and stakeholders who will have access to the new system. The Organizational Change Management Plan shall include all tasks and activities that are designed to ensure the organization successfully transitions to the new environment as well as concurrent operations of the new and the legacy systems. This may include: developing program procedures, training plans, and communication strategies. Attached is BOE's initial Organizational Change Management Plan. (Attachment A)

Impact on Existing System

The proposed solution will replace BOE's two major tax applications – IRIS and ACMS systems and most other tax-related systems at BOE. Depending on the selected vendor's proposal, ancillary systems could also be impacted.

Impact on Customers

A comprehensive outreach plan will be developed to ensure the BOE works cooperatively with its customers to enhance the customers' capabilities to grow and expand business opportunities. Business owners, associations, representatives, city and county governments are encouraged to provide input for the development of the new system. The outreach plan will include several methods for customers to provide input on the project, including but not limited to, surveys, CROS email and interested parties meetings held throughout the state.

Consistency with Overall Strategies

The proposed solution must be consistent with BOE's strategic program and IT goals. The proposed solution will improve the way BOE administers, processes, and collects information and tax/fees from customers.

Impact on Current Infrastructure

The cost of the expanded network has been included in our estimates based on the responses received from a vendor survey. During the review of vendor proposals, BOE will determine the impact to its existing network. BOE will make a determination to either upgrade its current network or consolidate its network into OTech's. This decision will be reflected in the SPR.

Details supporting these cost estimates can be found in Section 8.0 Economic Analysis Worksheets.

Impact on Data Center

The hardware and software purchased to support a variety of environments will be hosted at OTech, such as, test, development, pre-production, and production. In addition, the Internet components will be hosted at OTech. The selected vendor will identify whether current BOE OTech servers are adequate or require replacement or upgrade. The new system will make use of the firewalls, authentication services, and other security services available at OTech and BOE.

Data Center Consolidation

Under current state law, BOE is not required to participate in CTA consolidation efforts. However, all new application production systems will be located at OTech. The new production system will be developed in a manner consistent with OTech architectures.

Backup and Operational Recovery

All critical systems will be backed up via the current OTech back-up system. This system performs incremental daily back-ups and full weekly back-ups of all critical servers to ensure server recoverability in case a disaster occurs. All systems will have complete redundancy with no single point of failure. Data retention will follow BOE's established standards. Documentation and its data will be backed up and retained offsite.

Public Access

Customers with common internet tools will be able to access the new online services. The online environment must be "user-friendly" with intuitive graphical user interface. It will provide the capability to obtain BOE access at time and locations convenient to the customers. Although the customers will be providing information to or accessing information from State databases, they will never have direct access to any production system databases. The BOE database servers will be located within a secure environment behind OTech and BOE firewalls.

Costs and Benefits

The costs and revenue presented here are estimates only. Once a vendor has been selected through the procurement process, BOE will submit a detailed Special Project Report (SPR) containing the proposed solution, finalized one-time and ongoing costs, and revenue estimates for approval prior to entering into a contract with the selected vendor.

At this time, BOE estimates the following costs over nine years:

- One-time costs to be $189.7 million
- Ongoing costs to be $89.5 million

Revenues are estimated to increase in an amount between $40 million and $190 million by the final year of the project. Details supporting these cost and revenue estimates can be found in Section 8.0 Economic Analysis Worksheets.

Source of Funding

All funding to cover redirected and other required resources will be requested through the Budget Change Proposal process. See Section 8.0 Economic Analysis Worksheets (EAWs) for funding details.

5.2 Rationale for Selection

Of all the alternatives examined, only the selected alternative can objectively meet the full range of program goals and objectives of the BOE. Using the solution based approach and basing vendor payments on generating new revenues and meeting program process deliverables creates an environment that best ensures overall project success.

The selected alternative provides for several significant advantages over the other alternatives including:

- **Timely implementation**

  By securing a single experienced vendor with proven success in tax administration and revenue production, BOE will realize increased revenues for the State while maximizing program results.

- **Reduced financial risk to the State**

  Because the payments for building the system will be made only if additional revenues are achieved and program deliverables are obtained, significant financial risk is shifted from the State to the vendor.

- **Leverages expertise**

  Using a solution based procurement, BOE will act as the program experts, defining the program functionality required to meet the States objectives, and the vendors will provide the technical expertise to propose the best technical solution to meet those program needs.

- **Provides best value to BOE and the State**

  The evaluation process will use “best value” as the primary approach to vendor selection. This will consider not only which proposal provides the best solution for program and customer needs, but also maximizes revenue generation at an optimum cost over its entire lifetime.

- **Places increased responsibility on the vendor for performance**

  Since the vendor is responsible to define and provide the technical solutions that solve BOE’s program problems, the vendor can only be paid by delivering the required program functions which result in additional revenues. This requires the vendor to have “skin in the game” and provide the technology and systems necessary for success.

5.3 Other Alternatives Considered

BOE considered the following two other alternatives, which are described in more detail below:

1. Incrementally replace BOE's tax/fee legacy systems and functions using a combination of BOE technical staff and vendor specialists.
2. Adopt and utilize only the tax systems either in place or under development at FTB or EDD.

5.3.1 Description of Alternatives

Alternative # 1 – Incrementally replaces BOE's tax/fee systems and functions.

Description

This alternative proposes to use a combination of BOE staff and contractors to phase in the replacement of all tax/fee systems necessary to achieve the program objectives described in this FSR. Specialized vendor support would be used as needed to supplement the State staff. In this alternative, IRIS and ACMS would be replaced over an extended timeframe as staff and consultant resources became available. In addition, at some time in the future, an enterprise data warehouse would be developed and implemented.

Costs

This alternative was not estimated since it failed to solve BOE's program problems and does not address the goals, objectives, and functional requirements mentioned in earlier in Section 3.

Benefits

- No General Fund budget augmentations would be required.
- No legislative or control agency approvals would be required since the solution would likely be implemented in small incremental projects over many years that built upon the success of the previous efforts.

Advantages

- All project components would be completely under BOE's control.
- BOE would be able to select the specific hardware and software replacement products.
- BOE would select the development and implementation of the various components as resources became available.
- BOE would not have to conduct a large IT system procurement.
- BOE would not have to seek budget augmentations or legislative approvals since the schedule would be based on current staff and funding availability.
- OTech would be minimally impacted since the hardware growth would occur over many years on a small incremental basis.

Disadvantages

- This alternative does not solve BOE's program problems quickly and it does not meet most of this FSR's business functional requirements.
- BOE does not currently have the expertise to select the necessary hardware and software products since BOE's knowledge is limited to those products in use at BOE today.
- The system would not be fully functional for many years so it is unclear when and if, new revenues would ever be realized.
- BOE would have to train its staff with its existing limited training funds on the new hardware and software products.
- Statutory or policy changes would impact the project schedule since project staff would have to be diverted to implement the mandated changes.
- Based on BOE's Data Warehouse Master Plan, it is not clear if BOE would be able to implement a data warehouse on its own since BOE does not have the expertise, skills, or products to implement such a system.
- The new system may not be fully integrated since there would be multiple implementation phases and components.
- Risk of project failure would be borne by the State alone.
- Organizational change management would either not exist or become fragmented since the new system would take many years to implement as funds became available.

Alternative #2 – Adopt and utilize only the tax systems either in place or under development at FTB or EDD.

Description

BOE is open to using the new systems similar to that being implemented by EDD and being considered by FTB. However, this alternative would implement only those systems already in use or under development at FTB or EDD. Since both FTB and EDD have major revenue generating projects currently underway, BOE would delay planning for CROS for at least three years or until such time that EDD or FTB is ready to begin planning for incorporating BOE's program needs into their new or modified systems. Since none of the state's tax agencies are currently resourced to incorporate new functionality into the new or existing systems, budget augmentations would likely be required for the partnering tax agency. Also, due to the lack of staff resources, this alternative would still require a large procurement to acquire one of the two system integrators currently under contract to complete the modifications of those new and existing systems at EDD or FTB.

Costs

Since EDD and FTB are not currently staffed to incorporate BOE's functions into their existing systems, the partnering tax agency may need additional staff resources to manage the new functionality. This need could either be met with shifting resources from BOE to the partnering tax agency, through budget augmentations, or through the proposed new revenues.

Benefits

- The state would have only two separate tax systems instead of three separate tax systems.

Advantages

- Selected vendor has experience with other California's tax programs.
- Contract costs may be somewhat less than the proposed alternative since it is possible that EDD or FTB has excess hardware or software capacity.
- There would be no OTech impact, besides additional hardware, since these systems currently reside at those tax agencies.
- The solution would generate additional General Fund revenues similar to the proposed alternative but could be delayed based on EDD and FTB implementation schedules.

Disadvantages

- The systems developed at EDD and FTB have not yet completed stabilization so it is unclear if those new systems will meet those tax agencies needs let alone BOE's program needs.
- The projects already underway at EDD and FTB could be impacted by having to incorporate BOE's program needs into those developing new systems.
- Solving BOE's program problems may be delayed until such time that EDD or FTB is ready to begin the planning for incorporating BOE's needs into their new systems.
- EDD or FTB would likely require additional state staff to plan and manage incorporating BOE's program needs into their new systems.
- Since BOE is not authorized to use all of the same collection and audit techniques as FTB, FTB's system integrator may have to "turn off" those functions for BOE's tax programs.
- This alternative would limit competition to only those vendors currently developing those two new tax systems.
- By restricting competition, the State may not receive a proposal which generates the most revenues, has the lowest one-time and ongoing costs, and best solves BOE's program needs.
- The project's one-time and ongoing costs may be higher since competition would be limited and additional staff resources would be required.

6.0 PROJECT MANAGEMENT PLAN

BOE recognizes the importance of a sound project management plan in order to have a successful project. The CROS Project will utilize the BOE Project Management Methodology (BOE PMM) and establish a dedicated CROS Project management team.

6.1 Project Manager Qualifications

The CROS management team will be made up of a Project Director (PD) and two project managers: one Business Development Project Manager and one Technical Project Manager. Two consultants will be hired as advisors to the project.

The PD leads the overall project and is responsible for its successful completion. This individual reports to the CROS Leadership team who are the sponsors of the project. The Project Director position is currently vacant but BOE is taking the steps to fill the vacancy.

The PD must have the vision to clearly understand the scope of the project. The PD must also understand the program processes to be improved by CROS. The PD will work with staff to mitigate risk and ensure stakeholder's support. The PD must have strong management and communication skills and experience in managing large, complex cross-functional organizations. The Project Director must also:

- Track and monitor overall project success
- Track, monitor and mitigate project issues and risks
- Work with the Project Leadership team to resolve issues and monitor the project
- Work to remove project barriers
- Be the department's liaison to external stakeholders
- Manage vendor relationships
- Oversee the administration of the vendor contracts

BOE has chosen to split the Project Manager duties into a Business Development and Technical Project Manager. These two individuals will work together to achieve the project goals.

Larry Bergkamp will be the Business Development Project Manager for the CROS Project. Having worked for the BOE for over 24 years, Larry brings a wealth of program experience to the project. He has led many large projects within BOE due to his extensive knowledge and abilities. Larry has worked for various program areas including Environmental Fees, Fuels, Settlement, Investigations, Centralized Audit Review, and Audit Evaluation and Planning. Larry has served as a California representative for Streamlined Sales Tax and as an advisor for Board Member Betty Yee. For the past three years, Larry served as the Technical Advisor in the Tax Policy Division.

Chris Kahue will be the Technical Project Manager for the CROS Project. Chris is new to BOE but has worked the last several years at State Lottery where he was the manager of the Project Management and the Enterprise Architecture offices. Previously, Chris was the PD for the Statewide Email Project at OTech.

The Business Development and Technical Project Managers possess the knowledge, education, and experience necessary to successfully complete this project.

- Five (5) years experience successfully managing two or more large projects or managing large information technology (IT)-related projects, including IT project management and application development methodologies
- Understand the state's budget processes and the project's objectives
- Understand the state's procurement and contract processes
- Skilled in communicating, both written and oral, goals, objectives and status with management, stakeholders, and staff
- Skilled in resolving conflicts with stakeholders, vendors, and program staff
- Experienced in working with vendors to accomplish IT and program process change goals
- Personal characteristics of integrity, tact, sound judgment, initiative, adaptability and dependability

The CROS Project Organization chart and Roles and Responsibilities further describe the Project Manager duties. BOE will determine staffing needs as the project progresses and fill positions as warranted.

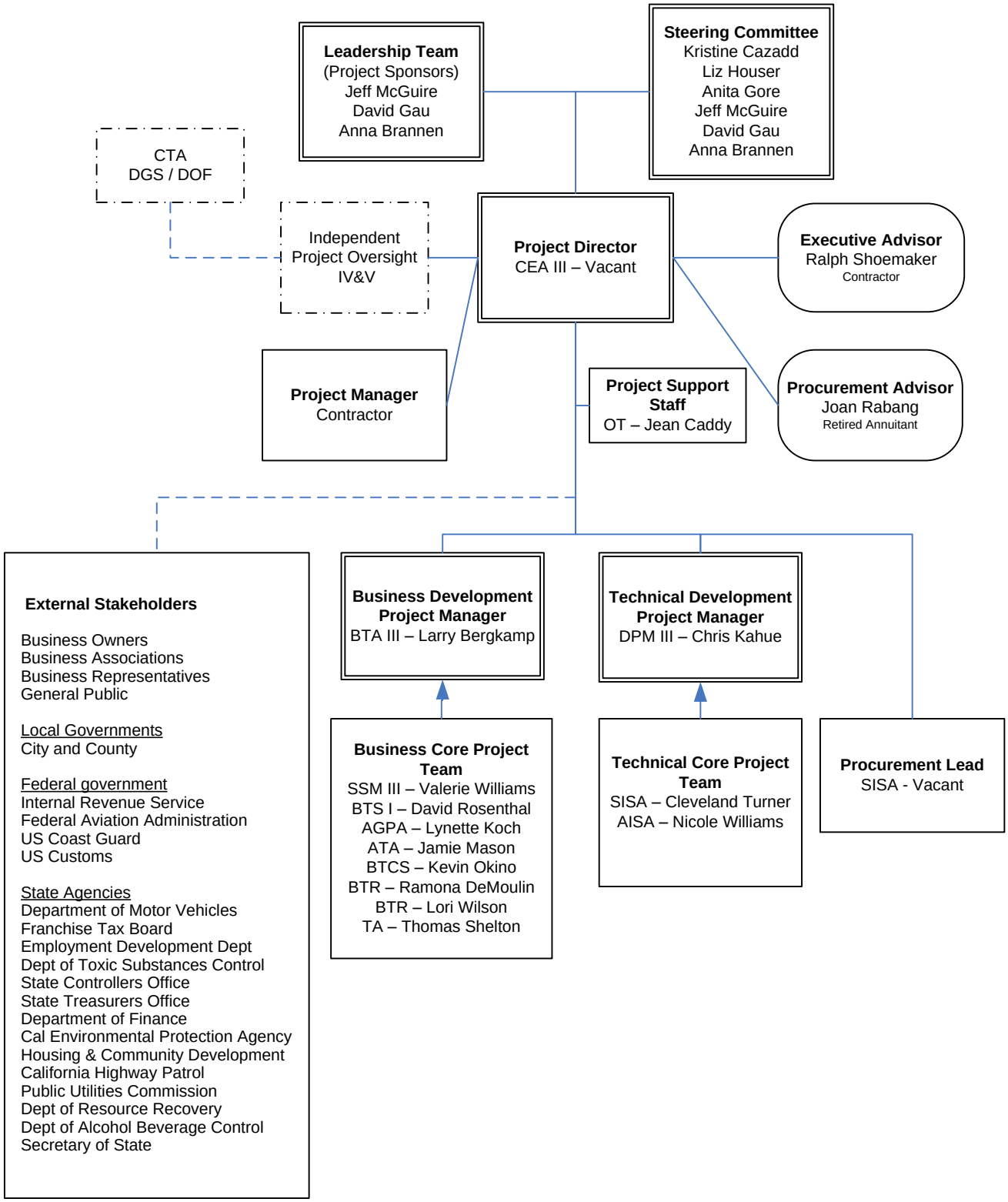
6.2 Project Management Methodology

CROS will employ the BOE's Project Management Methodology (PMM). As discussed earlier, BOE's PMM was developed by leveraging global best practices and is aligned with the California Project Management Methodology (SIMM section 17).

6.3 Project Organization

The proposed project organization chart is similar to that used successfully for other state agency solution-based procurements. Project team members will be selected based on their program and technology knowledge and prior experience on projects.

Figure 6.1: Project Organization



6.4 Project Priorities

The project trade-off matrix shows the priority of importance of project schedule, scope, resources and quality, and uses a factor of 1 (highest) to 4 (lowest) for each of the categories.

Figure 6.4 Project Trade-Off Matrix

Schedule	Scope	Resources	Quality
3	1	4	2

6.5 Project Plan

The Project Manager will follow BOE's Project Management standards and guidelines to develop the project plan. Microsoft Project will be used to develop the timeline, identify tasks involved, assign resources and monitor task completion within the schedule and resources allocated.

6.5.1 Project Scope

CROS is an organizational transformation project that will leverage technology to change the way BOE does business in the future. The project scope will encompass BOE's Sales and Use Tax programs, Special Taxes and Fee programs and the Timber Tax program.

CROS will:

- Replace BOE's legacy systems, IRIS and ACMS
- Add data warehousing, analysis, and enterprise reporting capabilities
- Provide expanded electronic services
- Reengineer BOE's program processes in the registration, return processing, cashiering, audits, collections, and appeals areas to improve efficiencies and services to customers
- Provide core processing needs of the tax/fee program functions
- Establish better capabilities to managing cases
- Provide better capabilities to manage customer relationships and contacts

Systems that be replaced or interfaced with the new system

- eFile system
- eRegistration system (in development)
- Digital Audits (in development)
- Clementine software - Identify potential audits and collection modeling
- START 21 – Audit program
- Current Call Center solution
- Elixir (document composition software for forms and publications)

- Xerox DocuSP (batch printers)

The following programs are out of scope:

- Board Roll
- Legal Entity Ownership Program (LEOP)
- Private Railroad Car system
- Voter Registration System
- Homeowners Exemption System

6.5.2 Project Assumptions

1. The department will use a performance-based, benefit-funded procurement model.
2. Management will maintain the project as high priority throughout the System Development Life Cycle (SDLC).
3. Substantial benefits will be derived from the CROS Project solution to fund the procurement and implementation.
4. There will be sufficient interest from qualified vendors for CROS Project bidding.
5. Higher priority projects will not impact the schedule or resource requirements.
6. The scope of the project is limited to that described in the Project Compact.
7. The State's existing tax/fee structures will remain relatively constant.
8. Customers will continue to be able to file electronically or by paper return.
9. Project implementation and deployment activities will not negatively impact program activities.
10. BOE project management will provide staff, with the required skills, and program resources as they are needed.
11. BOE management will make decisions quickly and consistent with the project schedule.
12. Vendor resources will be utilized during SDLC phases.
13. The project will adhere to a formal project management methodology and project schedule. Proactive risk, issue, and change management strategies will be employed.
14. A rigorous change management program is developed and in place to manage resistance to change and to encourage BOE staff and other stakeholders to participate and 'adopt' the new system and processes.
15. Agencies will negotiate timely interagency exchange agreements as required to successfully develop, implement, and test system interfaces and data exchange processes.
16. All CROS Project tasks will be completed as planned.

6.5.3 Project Phasing

The phasing in of deliverables will be encouraged as a way to manage risk and impact on production. The phase schedule for this project will be decided upon consultation and discussion with the approved vendor so as to reduce risk and ensure that program processes are not negatively impacted.

BOE will conduct several subprojects, as necessary, which will assist in determining business and data requirements. The subprojects will run concurrently providing for prerequisites and milestones needed for timely completion.

1. Review and reengineering of program processes
2. Data Cleansing, Archive and Purge for data conversion

After a contract is awarded, vendor discussions will be held to discuss phasing implementation of the data warehouse and replacement of IRIS and ACMS.

The following represents the stages of the project lifecycle that have been completed:

- Initiation Phase
- Concept

The following represents the stages of the project lifecycle that will be conducted post-FSR:

- Planning Phase
- Executing Phase including SDLC phases
    - Requirements
    - Design
    - Development
    - Test
    - Implementation
    - Operation and maintenance
    - Disposition or retirement of IRIS and ACMS
- Monitoring and Controlling Phase
- Closing Phase

6.5.4 Roles and Responsibilities

Title	Role/Responsibility
Steering Committee	• Decision-makers regarding issues that affect the overall project including changes to scope, schedule, budget and pass/fail points to move between major phases • Provides guidance to project on strategic issues • Resolves issues that cannot be resolved at other levels of the governance structure • Approves or elevates policy changes • Elevates issues as necessary to the Executive Director • Identifies funding or staff resources from within their organizations based on approved changes • Visibly supports the project to their organizations and keeps them informed • Follows the Governance and Vendor Partnership Principles
Leadership Team **(Project Sponsors)**	• Decision-makers regarding issues that affect major phases within the project including changes to scope, schedule, and budget • Removes obstacles and provides guidance to project • Resolves issues that cannot be resolved by the Project Director • Approves policy changes affecting their organizations • Elevates issues as necessary to the Steering Committee • Identifies funding or staff resources from within their organizations based on approved changes • Visibly supports the project to their organizations and keeps them informed • Follows the Governance and Vendor Partnership Principles
Project Director	• Leads the overall project • Directs the planning, execution, and evaluation of all project activities, team, and resources toward project success • Decision-maker regarding issues that affect minor milestones within the project including changes to scope, schedule, and budget • Resolves issues that cannot be resolved by the Project

Title	Role/Responsibility
	Team • Recommends policy changes affecting one or more organizations • Project contact for vendor partner executive management team and external organizations • Elevates issues as necessary to the Project Leadership Team • Reports project status to the Project Steering Committee, Leadership Team and all external stakeholders • Accepts all project deliverables
Business and Technical Project Managers	• Works with the Project Leadership Team and appropriate SMEs to develop the Project Compact • Provides status updates and escalates issues as needed to the Project Leadership Team, Project Director, and Steering Committee • Works with the Project Team and Project Leadership Team to develop a detailed Project Management Plan and project schedule and ensures that they are executed and updated to reflect project needs • Ensures the development and quality of all project deliverables • Manages day-to-day tasks and provide direction to team members performing work on the project • Evaluates overall project performance on a regular basis • Meets and communicates with key stakeholders on a regular basis per the Communication Management Plan • Assists in the change management process and responds to change requests and escalates when needed • Ensures that the vendors meet the contractual agreements specified within their contracts • Reviews project risks; establishes and implements mitigation and contingency procedures • Verifies that control agencies, BOE and IRS policies are followed
Executive Advisor	• Assists the Project Director and Steering Committee • Provides guidance on solution based procurement process • Reviews and comments on project planning and direction

Title	Role/Responsibility
Prime Vendor	• Provides system design and development • Provides product solution which may include new hardware and software • Oversees testing and implementation of project solution • Provides training • Provides project management support • Implementation quality control • Provides operational support and maintenance
Procurement Lead	• Ensures procurement satisfies legal and regulatory requirements • Ensures contractor performance objectives are met • Ensures contractor remains on schedule and within budget • Conducts market research • Assesses technical and acquisition alternatives and assist in conducting benefit-cost analysis • Prepares specifications, statements of work, and technical material for incorporation in the RFP document • Verifies that user-written statements of work and functional specifications are technically feasible and not unduly restrictive • Serves on evaluation panels • Supports acceptance testing and inspection procedures Assists in monitoring contractor performance • Measures actual performance against projected performance

Project Governance

Several guiding principals will govern the CROS Project. The project will take a BOE wide perspective to fully explore policy, funding, program and statutory implications in making program driven decisions. BOE will communicate decisions effectively to the Board, vendors, staff, and stakeholders. BOE will ensure that the vendor is accountable for their work and communicates regularly with the agency.

The CROS governance process has four approval levels. Decisions may be elevated and approved at one of the levels. We strive to make decisions at the lowest possible level to minimize delays. The levels in ascending order are the Business Project Manager and Technical Project Manager, the Project Director (PD), Leadership Team and the Steering Committee. The level at which a decision is authorized is outlined within the project compact and is determined by various factors involving scope changes, vendor contract compensation, project expenditures, schedule changes, or process and policy changes.

Some highlights:

- The Business and Technical Project Managers are authorized to make scope changes which don't impact budget or schedule but may modify tasks dates.
- The PD will have ultimate responsibility for the success of overall project. PD may approve decisions which impacts BOE expenditures up to a certain threshold, minor schedule milestone changes, small contract updates or changes which impact a single area of the organization.
- Leadership Team may approve impacts to BOE expenditures up to a certain threshold, major schedule milestone changes, moderate contract changes or changes which impacts the member's areas.
- Steering Committee makes itself available for critical decision. Committee operates by consensus with Executive Director having final authority. They will approve any impacts to project goals or major stakeholders, significant contract changes, project level schedule changes, or impacts across the board.

The project will reach out to other State agencies and local jurisdictions utilizing our existing MOU's and agreements to obtain input for the new system.

6.5.5 Project Schedule

Task	Start	Finish
Feasibility Study Report (FSR) Submittal to California Technology Agency (CTA)	3/25/11	3/25/11
FSR Re-Submittal to CTA	5/23/11	5/23/11
FSR Approved	6/20/11	6/20/11
Pre-Solicitation	**6/14/11**	**2/13/12**
BOE Information Technology Procurement Plan (ITPP) Review & Approval	6/21/11	6/27/11
Department of General Services (DGS) ITPP Review	6/29/11	7/26/11
DGS ITPP Approval	7/26/11	7/26/11
BOE Request for Proposal (RFP) Review & Approval	10/25/11	11/21/11
CTA RFP Approval	1/30/12	1/30/12
DGS RFP Approval	2/13/12	2/13/12
Qualify Vendors	11/22/11	1/11/12
Advertise Request For Information (RFI)	12/6/11	12/26/11
Establish Pool of Vendors	1/11/12	1/11/12
Solicitation	**2/13/12**	**2/5/14**
RFP Released	2/13/12	2/13/12
Bidders Conference	2/28/12	2/28/12
Receive Conceptual Proposals	5/10/12	5/10/12
Receive Draft Proposals	6/28/12	6/28/12
Receive Final Proposals	8/23/12	8/23/12
Conduct Cost Opening	10/5/12	10/5/12
Select Bidder	11/5/12	11/15/12
Issue Notice of Intent to Enter into Contract Negotiations	2/6/13	2/6/13
Negotiate Contract	2/7/13	5/22/13
Conceptual Contract Language for Board Members' Approval	6/4/13	6/21/13
Special Project Report (SPR)	6/24/13	2/5/14
BOE SPR Review	7/22/13	8/20/13
Board Members Review SPR	8/28/13	10/8/13
Board Members SPR Approval	10/8/13	10/8/13
Control Agency SPR Approval	1/2/14	1/2/14
Notify Joint Legislative Budget Committee	1/3/14	2/5/14
Board Members Review of Contract	1/2/14	1/21/14
Board Members Approval of Contract	1/22/14	1/22/14
Issue Notice of Intent to Award	1/22/14	1/22/14
Sign Contract	1/30/14	1/30/14
Start Development	2/25/14	2/25/14

This schedule represents the high-level project management milestones which occur during the planning phase. The schedule for the remaining project and SDLC phases including design, development and implementation will be provided after discussions with contracted vendor.

6.6 Project Monitoring

This project will use BOE's Project Management Office's existing methodology for tracking, controlling and reporting on the status of the project performance in relation to the project baselines of scope, schedule, cost, and quality.

The oversight team comprised of an Independent Project Oversight Consultant (IPOC) provided by the CTA and, an Independent Verification and Validation (IV&V) vendor will ensure that the project is on target and managed in accordance with the approved contract.

Due to the size and complexity of the CROS Project, oversight will include an independent review and analysis of specific project activities. The independent review will evaluate the project schedule and will assist with identifying issues, quantify issues and evaluate risks affecting key project components. The members of the oversight team must have experience as participants in, and reviewers of, similar projects. The team must possess subject matter expertise in project management, procurement, risk management, communications and systems engineering. In addition to the independent oversight and monitoring, monthly (or as otherwise determined by the CROS Project Steering Committee) project status reports will be compiled by the CROS Project Team and submitted to the Project Steering Committee for review and assessment.

The Business and Technical Project Managers will schedule recurring status meetings to communicate:

- Tasks accomplished last month
- Tasks that missed scheduled completion dates and the related impacts
- Upcoming tasks planned for current month
- Identification, progress or outcomes of problems/issues
- Identification of new risks
- Occurrence of risks
- Risk mitigation

6.7 Project Quality

The Business and Technical Project Managers are responsible for the project's system quality management. Quality assurance and quality control will be performed using existing procedures outlined within BOE's PMM Quality Management Procedures. Procedures include the separation of duties, product reviews, verification that requirements are being met through unit, system and acceptance testing results, version control tools, requirements traceability and customer walk-through. BOE and the vendor will work together to establish quality standards for deliverables completed by the vendor.

The Business and Technical Project Managers are responsible for assuring the quality of the project. These include assurance that risks are adequately identified and mitigated with the necessary and appropriate plans. The Business and Technical Project Managers will confirm that all project expectations and goals are met.

The CROS Project Team will create the Quality Assurance Plan (QAP) during project planning. The Business and Technical Project Managers and IV&V will monitor plan compliance. They will initiate corrective actions and initiate process improvements as needed.

6.8 Change Management

CROS will experience both organizational change management and project change management. Change management must address the organizational issues and will begin during project planning.

The scope of the CROS Project will change how business is done at BOE. This will require a comprehensive change management process that includes effective workforce planning, communication and organizational change management.

6.8.1 Organizational Change Management

Organizational change management must address the organizational issues and will begin during project planning.

BOE's initial Organizational Change Management Plan is provided in Attachment A.

6.8.2 Project Change Management

The CROS Project Team will utilize BOE's existing Change Management Procedures to control changes when managing the project. Change management will include project costs including vendor compensation, schedule and scope. The Project Compact outlines the level of management authorized to approve specific changes.

6.9 Authorization Required

N/A

7.0 RISK MANAGEMENT PLAN

7.1 Risk Management Approach

The CROS Project will follow the Risk Management Procedures established by the BOE's Strategic Project Office PMM and SIMM. The plan will document the processes and procedures used to identify risks associated with the project and how they will be managed. This plan will encompass the entire structure of the project and its deliverables, providing a comprehensive framework for assessing each aspect of the project for potential risk.

Risk Management Worksheet

High-level project risks are identified in the Risk Management Log. A copy of the log is included in Attachment B.

Assessment

The high-level risk assessment is an initial broad view of the risk associated with the project. The risk assessment process includes a review and determination of whether the identified risks are acceptable. Risk assessment is not a one-time event; CROS will assess the risks identified monthly or more frequently if required throughout the project.

Risk Identification

During the initiation phase of the project, high level risk information is gathered in an initial meeting of the Business and Technical Project Managers and the CROS Project Team members. Each CROS Project Team member will identify and provide a list of potential risk items. As the project progresses, the team will identify and assess additional risks which will result in a complete list of potential risks for the project. The CROS Project Team will not be able to identify all project risks until a vendor and solution is selected.

The following tools were used to aid in the identification of risks:

- BOE PMM categories and examples of risk
- Historical information
- CROS Project Team brainstorming
- Interviews with stakeholders
- Work Breakdown Structure

The characteristics of each identified risk are captured on the Risk Identification Form.

Risk Analysis and Quantification

After identifying the potential risks, the project team reviews each risk to classify and prioritize the risk, and seeks to assess the probability of occurrence and impact to the project. This risk analysis and qualification process will lead to creation of the Risk Management Log. The team will manage and accept those risks deemed most likely to have a negative impact to the project.

Risk Prioritization

The prioritization of a risk is based upon the potential impact of the risk on the project and the probability of occurrence, which computes the risk exposure. The team will assess the risk mitigation timeframe and apply some expert judgment to determine the overall prioritization

order for the risks. The probability is based on the likelihood of the risk occurring (10%-Remote, 30%-Unlikely, 50%-Likely, 70%-Highly, Likely, 90%-Nearly Certain) while the risk impact is based on either the effect to cost, schedule and/or performance to determine the rating 1-5.

Risk Response

The project team has identified the risk mitigation response to each of the risks listed in the project Risk Management Log. The response can consist of one of the following responses.

Mitigate – Used to reduce the probability and/or impact of an adverse risk event to an acceptable threshold. Taking early action to reduce the probability and/or impact is often more effective than trying to repair damage if the risk occurs.

Avoid – Involves changing the project plan to eliminate the threat posed by the adverse risk.

Transfer – Requires shifting the negative impact of a threat along with ownership of the response to a third party. Transferring the risk simply gives another party responsibility for its management.

Acceptance – Risk acceptance involves simply accepting the risk event and its consequences. Project team will monitor the risk and deal with the event if it occurs.

For each response that is accepted, a contingency plan has been developed and is summarized on the Risk Management Log for that risk.

Risk Tracking and Control

The objective of risk tracking and control is to ensure that all steps of the Risk Management Procedures are being followed, and as a result, risks are being mitigated and contingency plans are followed as necessary. Risk tracking and control involves the oversight and tracking of risk mitigation action plan execution, contingency plan execution, reassessment of risks, reporting risk status, and recording risk information changes in the project Risk Management Log. (Attachment B)

Risk Tracking

The Business and Technical Project Managers are responsible for the high-level oversight of the execution of mitigation and contingency strategies for all risks identified in the project Risk Management Log. The Business and Technical Project Managers are also responsible for updating the Project Sponsor and Steering Committee via email and status reports and obtaining their approval as needed.

Risk Control

The Business and Technical Project Managers will reassess the risk information in the project Risk Management Log to determine if any changes are needed. The risk probability or impact could change based upon project events or other information. Reassessment of risk information will be performed on a monthly basis; but it may be performed more frequently if needed. Risk status is included as part of the project status meetings. Risk status reporting will focus on the highest ranked risks. Information presented will include the status of risk mitigation plans, changes in risk prioritization for known risks, and any new risks identified.

8.0 ECONOMIC ANALYSIS WORKSHEETS (EAWS)

Methodology

The Economic Analysis Worksheets (EAWs) included in this section provide the costs associated with the proposed solution and the viable alternatives for developing and implementing a CROS solution at the BOE. The assumptions made while creating the EAWs, as well as the descriptions of the costs that are included in the EAWs, appear in the following sections.

Existing Costs

This section presents the IT costs associated with the current IRIS and ACMS systems. It also describes the program-related costs that are incurred to support the administration, processing and collection functions for the tax/fee programs administrated by the BOE. To calculate existing Personnel Year (PY) costs, mid-range salaries and a benefit rate of 37.21% were used.

The annual existing costs total $224,774,071 which is comprised of IT and BOE program costs that are described below.

Information Technology Costs

The Technology Service Department (TSD) supports the IRIS and ACMS systems. The costs are comprised of staffing, hardware/software, telecommunications, contract services, data center, and other costs at an annual cost of $25,722,218 as described below.

Staffing

A total of 122.0 PYs currently perform the application programming, database maintenance, testing and network support for the IRIS and ACMS systems. This equates to an annual staffing cost of $11,038,500. A breakdown of these costs is provided in Table 8-1: Breakdown of Existing IT Staffing Costs below:

Table 8-1: Breakdown of Existing IT Staffing Costs

ORGANIZATION	PYS	ANNUAL COST
Technology Service Department		
Application Development		
Registration Unit	15.0	$1,433,592
Financial Obligation Unit	13.0	$1,232,717
Audit, Appeal & Differences	10.0	$945,720
Data Administration	2.0	$208,779
Corporate Support	5.0	$480,965
Database Administration	4.0	$407,917
ACMS	7.5	$730,977
E-Services/PT Unit	8.6	$803,840
Customer Support		
Enterprise System Support	8.5	$790,276
Enterprise System Test Execution	6.5	$570,317
Production Services & Support Unit	23.0	$1,700,040
Network Servers & Infrastructure	6.3	$563,151
LAN Administration & PC Support	11.2	$1,010,355
Network Analyst	1.4	$159,854
Total	**122.0**	**$11,038,500**

Hardware

The annual cost for hardware lease/maintenance is $924,311. A breakdown of these costs is provided in Table 8-2: Breakdown of Existing Hardware Lease/Maintenance Costs below:

Table 8-2: Breakdown of Existing Hardware Lease/Maintenance Costs

COST ITEM	ANNUAL COST
Visara - Leased Printers	$901,861
Documentum HP Hardware Maintenance	$21,046
Tumbleweed SecureTransport FTP Hardware	$1,404
Total Hardware Costs	**$924,311**

Software

The annual cost for software maintenance/licensing is $776,633. A breakdown of these costs is provided in Table 8-3: Breakdown of Existing Software Maintenance/Licensing Costs below:

Table 8-3: Breakdown of Existing Software Maintenance/Licensing Costs

COST ITEM	ANNUAL COST
Software AG	$82,026
Tealeaf	$108,999
Altova	$1,649
BEA Workshop	$1,274
Certify	$26,411
LoadRunner	$15,578
Documentum Licenses	$69,574
Documentum Software	$13,930
Elixir	$15,796
Exceed	$2,148
Finalist DB Software	$22,030
IBM CICS Transaction	$40,525
IBM Passage Advantage	$1,405
IBM TX Series	$19,257
Adobe	$71,000
JBOSS	$36,666
SRVR XORS V5.0.01	$12,701
PowerBuilder	$2,040
Rational	$6,438
RSA	$11,600
SPOOL – NT	$524
Sun Studio Compiler	$1,421
ASE ENT EDTN SOL 32	$114,807
Verisign	$2,450
Tumbleweed Secure Transport FTP Software	$96,384
Total Software Costs	**$776,633**

Telecommunications

The annual cost for telecommunications for WAN Network is $594,183.

Contract Services

The annual cost for contract services is $3,878,361. A breakdown of these costs is provided in Table 8-4: Breakdown of Existing Contract Services Costs below:

Table 8-4: Breakdown of Existing Contract Services Costs

COST ITEM	ANNUAL COST
Automated Schedule Process contract programmers	$413,686
IRIS contract programmers	$1,858,546
JAVA/JSP contract programmers	$348,878
System Analyst contractors	$761,819
Project Management/Support contractors	$495,432
Total Contract Services Costs	**$3,878,361**

Data Center

The annual cost for data center services is $8,296,223. A breakdown of these costs is provided in Table 8-5: Breakdown of Existing Data Center Services Costs below:

Table 8-5: Breakdown of Existing Data Center Services Costs

COST ITEM	ANNUAL COST
IRIS CPU	$5,645,674
ACMS CPU	$129,204
Disaster Recovery (IRIS, ACMS)	$328,800
IRIS Storage	$290,449
Entire X Broker	$479,988
ACMS (5 Servers)	$448,188
E-Services (30 Servers)	$905,745
Network	$60,000
Iron Mountain (Storage)	$8,175
Total Data Center Costs	**$8,296,223**

Other

The annual cost for Other Costs is $214,007. A breakdown of these costs is provided in Table 8-6: Breakdown of Existing Other Costs below:

Table 8-6: Breakdown of Existing Other Costs

COST ITEM	ANNUAL COST
In-State Travel	$55,818
Out-of-State Travel	$13,730
Training	$144,459
Total Other Costs	**$214,007**

Program Costs

Program costs associated with the current IRIS and ACMS system are comprised of staffing costs and other program costs as described below.

Staffing

A total of 2,645.6 PYs currently perform the administration, processing and collection functions for the tax/fee programs administrated by the BOE. This equates to an annual staffing cost of $189,804,851. A breakdown of these costs is provided in Table 8-7: Breakdown of Program Staffing Costs below:

Table 8-7: Breakdown of Program Staffing Costs

ORGANIZATION	PYS	ANNUAL COST
Board of Equalization		
Sales & Use Tax Department (SUTD)		
Centralized Collections	171.7	$12,230,706
Field Operations Division - Dist 1, 2 & Out-of-State Offices	828.0	$62,117,778
Field Operations Division - Dist 3 & 4 Offices	798.1	$58,637,733
Return Analysis & Allocation	245.7	$15,413,807
Headquarters Operation	145.1	$10,683,315
Property and Special Taxes (PSTD)		
Special Taxes and Fees	369.1	$26,937,124
Administration Department		
Financial Management	87.9	$3,784,388
Total	**2,645.6**	**$189,804,851**

Other Program Costs

Other program costs total $9,247,002 per year, which is primarily comprised of printing, postage, and communications, costs. A breakdown of these costs is provided in Table 8-8: Breakdown of Other Program Costs below:

Table 8-8: Breakdown of Other Program Costs

ACTIVITY	ANNUAL COST
Printing	$1,299,539
Postage	$3,708,179
Communications	$4,239,284
Total	**$9,247,002**

Proposed Solution Assumptions

The estimated one-time cost for the proposed solution is $189,694,939. The estimated ongoing annual cost is $89,517,556. Assumptions that were made in developing these costs are presented below.

One-time IT Project Costs

The development of the one-time IT project costs for the CROS solution assumes that project funding will be approved and that the procurement documents will be released in February 2012. It also assumes that the BOE will sign the contract with the selected solution vendor by January 2014. IRIS and ACMS data cleansing activities will occur prior to the selection of the solution vendor. To calculate one-time Personnel Year (PY) costs, mid-range salaries and a benefit rate of 37.21% were used.

The one-time costs for the CROS Project are comprised of costs in the following areas:

- Staffing
- Hardware Purchases
- Software Purchases
- Telecommunications
- Contract Services
- Data Center
- Other

Staffing

The one-time staffing costs assume that BOE staff will be needed to support the procurement effort as well as the configuration, testing, training and implementation of the CROS solution.

Procurement Staff

The BOE will need 127.1 PYs for the development of Request of Proposal and procurement activities during Fiscal Years (FY) 2010/11, 2011/12, 2012/13, 2013/14. Attached is the BOE Procurement Capacity which identifies the capabilities of the core procurement team (Attachment C). The total one-time cost of these PYs is $11,950,802. A breakdown of these costs is provided in Table 8-9: Breakdown of Procurement Staff Costs below:

Table 8-9: Breakdown of Procurement Staff Costs

PROJECT TEAM	PY	FY 2010/11	PY	FY 2011/12	PY	FY 2012/13	PY	FY 2013/14
Project Management & Core Team	9.4	$879,412	12.0	$1,132,353	12.0	$1,132,353	6.0	$566,176
Program SMEs	18.5	$1,689,591	33.6	$3,069,947	13.2	$1,205,127	0.0	$0
Technical Team	6.4	$661,781	6.4	$661,781	7.2	$724,449	0.0	$0
Technical SMEs	0.8	$75,944	0.8	$75,944	0.8	$75,944	0.0	$0
Total Procurement Staff	**35.1**	**$3,306,728**	**52.8**	**$4,940,025**	**33.2**	**$3,137,873**	**6.0**	**$566,176**

The Project Management & Core Team represents 12 staff working at various levels over a 39 month period, responsible for the management, coordination and development of all of the procurement documents required throughout the procurement phase of the project. In addition, they will participate in all the procurement activities including the evaluation of vendor proposals and preparation of the required evaluation reports. This effort totals 39.4 PYs and $3,710,294.

The Program SMEs represents 90+ staff (3.4% of the program baseline staff) working part time over a 19 month period, attending workshops to develop the business requirements, participating in responding to vendor questions, attending vendor discussions, evaluating and scoring the vendor proposals. The CROS Project involves functionality for all the BOE business units supporting the processing, reviewing, auditing and collection of California's Sales, Use and Special taxes. In order to ensure the new solution will meet BOE business needs it is essential that working staff are involved in all aspects of the project. This effort totals 65.3 PYs and $5,964,665.

The Technical Team and Technical SMEs represents an estimated 30 application development, database, testing, and network staff working part time over a 19 month period, to develop the technical requirements, technical sections of the RFP, participating in responding to vendor questions, attending vendor discussions, evaluating and scoring the vendor proposals. This Technical Team totals 20 PYs and $2,048,011 and the Technical SMEs total 2.4 PYs and $227,832.

Data Cleansing Staff

The BOE will redirect 11.4 PYs to the development and implementation BOE's data cleansing applications for IRIS and ACMS systems, during Fiscal Years (FY) 2010/11, 2011/12, 2012/13, 2013/14. The total one-time cost of these PYs is $1,049,597. A breakdown of these costs is provided in Table 8-10: Breakdown of Data Cleansing Staff Costs below:

Table 8-10: Breakdown of Data Cleansing Staff Costs

CLASSIFICATION	PY	FY 2010/11	PY	FY 2011/12	PY	FY 2012/13	PY	FY 2013/14
Senior PA	0.0	$0	0.0	$0	1.0	$104,389	0.5	$52,195
Staff PA	0.8	$75,944	1.0	$94,930	1.0	$94,930	1.5	$142,395
APA	0.6	$51,944	2.0	$173,148	2.0	$173,148	1.0	$86,574
Total Data Cleansing Staff	**1.4**	**$127,888**	**3.0**	**$268,078**	**4.0**	**$372,467**	**3.0**	**$281,164**

Development and Implementation Staffing

The BOE will need 311 PYs for the development and implementation phases of the CROS Project during Fiscal Years (FY), 2013/14, 2014/15, 2015/16, 2016/17. The total one-time cost of these PYs is $28,479,919. A breakdown of these costs is provided in Table 8-11: Breakdown of Development and Implementation Staff Costs below:

Table 8-11: Breakdown of Development and Implementation Staff Costs

PROJECT TEAMS	PY	FY 2013/14	PY	FY 2014/15	PY	FY 2015/16	PY	FY 2016/17
Project Management & Core Team	12.0	$1,132,353	12.0	$1,132,353	12.0	$1,132,353	12.0	$1,132,353
Program SMEs	22.5	$2,054,781	45.0	$4,108,271	22.5	$2,054,781	22.5	$2,054,781
Technical Team	29.1	$2,817,771	31.8	$3,053,366	30.6	$2,930,027	30.3	$2,899,674
Data Conversion Team	6.0	$562,328	6.0	$562,328	5.0	471,576	4.0	$380,824
Total Project Staff	**69.6**	**$6,567,233**	**94.8**	**$8,856,317**	**70.1**	**$6,588,737**	**68.8**	**$6,467,632**

Hardware Purchase

The selected vendor will provide the hardware for the proposed solution which will include the servers for the enterprise document management system that will be housed at the BOE's headquarters and district office locations, the laptop, desktop and monitors for BOE

staff. The total one-time hardware purchases are $8,953,000. A breakdown of these costs is provided in Table 8-12: Summary of Hardware Costs below:

Table 8-12: Summary of Hardware Costs

HARDWARE	FY 2013/14	FY 2015/16
Documentum		
Remote Servers - 44 @ $17,000 each	$748,000	$0
Scanners - 50 @ $9,000 each	$450,000	$0
Headquarter Servers (18 production, 9 dev & test environment)(10 @ $60,000, 17 @ $35,000)	$1,195,000	$0
Headquarters – SAN	$500,000	$0
Headquarters – Certera	$200,000	$0
Irvine Hotsite Servers	$930,000	$0
Irvine – SAN	$500,000	$0
Irvine – Center	$200,000	$0
CROS		
Laptops - 1,800 @ $2,200 each (software included)	$0	$3,960,000
Dual Monitors - 900 @ $300 each	$0	$270,000
Total Hardware Costs	**$4,723,000**	**$4,230,000**

Software Purchase

The selected vendor will provide the software for the proposed solution which will include CROS application(s), data warehouse and enterprise document management system software. The total one-time software purchases are $16,690,702. A breakdown of these costs is provided in Table 8-13: Summary of Software Costs below:

Table 8-13: Summary of Software Costs

SOFTWARE	FY 2013/14	FY 2014/15
CROS Program Application(s) Software/Licenses	$2,717,000	$7,283,000
CROS Solution Third Party Software	$129,110	$1,370,890
Documentum		
Enterprise User Licenses	$4,323,865	$0

SOFTWARE	FY 2013/14	FY 2014/15
Developer Tool Licenses	$237,500	$0
Infrastructure Software Licenses	$589,337	$0
Site Recovery Manager (VM Ware Backup) 2 @ $20,000 each	$40,000	$0
Total Software Costs	**$8,036,812**	**$8,653,890**

Telecommunication Costs

The one-time costs for BOE's network upgrade are $487,000 which includes $242,500 for routers/switches, $205,000 for fiber optic and $39,500 for circuit installation. These costs will occur in FY 2013/14.

Contract Services

The estimated one-time cost for contract services totals $121,707,813 over seven fiscal years. A breakdown of these costs is provided in Table 8-14: Summary of Contract Services Costs below:

Table 8-14: Summary of Contract Services Costs

SERVICES	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Software Customization							
Software Configuration	$0	$0	$0	$2,196,000	$5,490,000	$9,882,000	$4,392,000
Prime Vendor	$0	$0	$0	$1,500,000	$2,500,000	$3,500,000	$2,500,000
Requirements Validation	$0	$0	$0	$612,000	$1,530,000	$2,754,000	$1,224,000
Custom Development	$0	$0	$0	$1,380,000	$3,450,000	$6,210,000	$2,760,000
Testing	$0	$0	$0	$1,212,000	$3,030,000	$5,454,000	$2,424,000
Data Conversion	$0	$0	$0	$756,000	$1,890,000	$3,402,000	$1,512,000
Implementation/ Deployment	$0	$0	$0	$1,692,000	$4,230,000	$7,614,000	$3,384,000
Training	$0	$0	$0	$636,000	$1,590,000	$2,862,000	$1,272,000
Interfaces	$0	$0	$0	$1,920,000	$4,800,000	$8,640,000	$3,840,000
Documentum	$0	$0	$0	$200,000	$500,000	$900,000	$400,000
Project Management	$75,000	$187,500	$187,500	$187,500	$187,500	$187,500	$187,500
Project Oversight	$0	$95,000	$190,000	$190,000	$190,000	$190,000	$190,000
IV&V Services	$0	$0	$0	$674,700	$674,700	$674,700	$674,700
Other Contractor Services							

SERVICES	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
Vendor Financial Status Assessment - Task-based	$36,000	$16,763	$0	$0	$0	$0	
Technical Advisor – Task-based	$52,500	$122,500	$0	$0	$0	$0	
Contract Negotiation and Legal Review -- Task-based		$50,000	$0	$0	$0	$0	
Project Advisor Consultant		$223,500	$0	$0	$0	$0	
IT Consultant	$100,000	$172,750	$0	$0	$0	$0	
Total Contract Services	**$263,500**	**$868,013**	**$377,500**	**$13,156,200**	**$30,062,200**	**$52,270,200**	**$24,760,200**

The contract services costs are based on the following assumptions:

The estimated one-time contract services cost for software customization of the CROS solution totals $116,040,000, which is based on the market survey results. These services occurs FY 2013/14 through FY 2016/17, includes:

- The vendor system configuration services are estimated at $21,960,000 based on the market survey results.
- The vendor project management services are estimated at $10,000,000 based on the market survey results.
- The one-time contract services cost for requirements validation is estimated at $6,120,000 based on the market survey results.
- The one-time contract services cost for custom development is estimated at $13,800,000 based on the market survey results.
- The one-time contract services cost for testing is estimated at $12,120,000 based on the market survey results.
- The one-time contract services cost for data conversion is estimated at $7,560,000 based on the market survey results.
- The one-time contract services cost for implementation/deployment is estimated at $16,920,000 based on the market survey results.
- The one-time contract services cost for training is estimated at $6,360,000 based on the market survey results.
- The one-time contract services cost for interfaces is estimated at $19,200,000 based on the market survey results.
- The one-time contract services cost for expansion of Documentum enterprise document management system is estimated at $2,000,000 based on the market survey results.

The State project management is estimated at 500 hours at $150 per hour for FY 2010/11 and 1,250 hours at $150 per hour for each year for the remainder of the project a total of $1,200,000.

The one-time contract services cost for Project Oversight is estimated at $1,045,000 based on the California Technology Agency providing a Data Processing Manager III half time in FY 2011/12 and full time June 2012 through June 2017 at a cost of $190,000 annually.

The one-time contract services cost for IV&V services is estimated at $2,698,800 based on the EDD's ACES Project IV&V costs.

State Other Contract Services totals $924,163, which occurs in FY 2010/11 and FY 2011/12, includes:

- The one-time contract services cost for Vendor Financial Status Assessment - Task-based is estimated at $52,763 based on the CMAS rates.
- The one-time contract services cost for Technical Advisor - Task-based estimated at $175,000 based on the CMAS rates.
- The one-time contract services cost for Vendor Contract Negotiation and Legal Review -- Task-based is estimated at $50,000 based on the CMAS rates.
- The one-time contract services cost for Project Advisor Consultant is estimated at $223,500 based on the CMAS rates.
- The one-time contract services cost for IT Consultant is estimated at $272,750 based on the CMAS rates.

Data Center Services

The estimated one-time cost for data center services totals $380,360. A breakdown of these costs is provided in Table 8-15: Summary of Data Center Services Costs below:

Table 8-15: Summary of Data Center Services Costs

SERVICES	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
Non-Production Environment Set-up			$7,820		
Production Environment Set-up			$9,200	$7,820	$5,520
Data Conversion – Data Cleansing	$150,000	$50,000	$0	$0	$0
Data Conversion processing	$0	$0	$50,000	$50,000	$50,000
Total Data Center Services	**$150,000**	**$50,000**	**$67,020**	**$57,820**	**$55,520**

Other

The estimated one-time cost for travel and training totals $93,086. A breakdown of these costs is provided in Table 8-16: Summary of Other Costs below:

Table 8-16: Summary of Other Costs

OTHER	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
Travel					
Network Upgrade					
In State Travel			$20,000		
Out of State Travel			$12,000		
Documentum Expansion					
In State Travel			$20,000		
Out of State Travel			$12,000		
CROS Project Team					
In State Travel	$20,020	$12,520	$12,520	$12,520	$7,500
Out of State Travel	$12,000			$24,000	$24,000
CROS Staff Travel		$19,666	$19,667	$19,667	$19,666
CROS Training Travel					
In State Travel					$35,000
Out of State Travel					$9,000
Training					
CROS Technical Team Training			$187,500	$187,500	
Documentum Technical Training			$52,800	$52,800	
Total Data Center Services	**$32,360**	**$32,186**	**$336,487**	**$296,487**	**$95,566**

Continuing IT Project Costs

The development of the continuing IT project costs for the CROS solution assumes that project will be phased in beginning in FY 2013/14 and the deployment of the solution will be completed by July 2017.

The continuing existing "Other IT Costs" for telecommunications costs were to Continuing IT Project Costs in FY 2013/14 and the hardware, software, and data center services costs required to support the new solution were moved to Continuing IT Project Costs in FY2014/15. The continuing existing costs for travel and training were moved to Continuing IT Project Costs in FY 2017/18. To calculate one-time Personnel Year (PY) costs, mid-range salaries and a benefit rate of 37.21% were used.

The one-time costs for the CROS Project are comprised of costs in the following areas:

- Staffing
- Hardware purchases
- Software purchases
- Telecommunications
- Data Center
- Other

Staffing

The continuing staffing costs assume that BOE staff will be responsible for the ongoing support of the CROS solution including the data warehouse and the enterprise document management system. The redirection of TSD staff will begin in FY 2014/15.

TSD has estimated a 10% reduction in application development staff that will be redirected to support the expended enterprise document management system. Once a vendor has been selected through the procurement process, BOE will submit a detailed SPR containing the proposed solution, finalized one-time and ongoing costs including estimated staff savings and redirection of those savings.

The BOE will need 193.5 PYs for continuing support of the CROS Project during Fiscal Years (FY) 2014/15, 2015/16, 2016/17, 2017/18. The total continuing cost of these PYs is $17,978,902. A breakdown of these costs is provided in Table 8-17: Breakdown of Continuing IT Staff Costs below:

Table 8-17: Breakdown of Continuing IT Staff Costs

SUPPORT TEAMS	PY	FY 2014/15	PY	FY 2015/16	PY	FY 2016/17	PY	FY 2017/18
Documentum Application Support	0.0	$0	0.5	$47,465	0.5	$47,465	1.6	$151,888
Documentum	5.0	$493,569	5.0	$493,569	5.0	$493,569	5.0	$493,569

SUPPORT TEAMS	PY	FY 2014/15	PY	FY 2015/16	PY	FY 2016/17	PY	FY 2017/18
Server Support								
CROS Application Support	6.7	$652,399	6.7	$652,399	42	$4,043,378	58.6	$5,614,576
CROS Infrastructure Support	0.0	$0	0.0	$0	0	$0	56.9	$4,795,059
Total Project Staff	**11.7**	**$1,145,968**	**12.2**	**$1,193,433**	**47.5**	**$4,584,409**	**122.1**	**$11,055,092**

Hardware Leasing/Maintenance

The continuing hardware leasing/maintenance include maintenance for the new Documentum and CROS hardware and existing hardware leasing/maintenance for Visara and Tumbleweed Secure Transport FTP. The new hardware maintenance is estimated at 20% of the one-time costs per year. The total continuing hardware leasing/maintenance costs are $9,167,644. A breakdown of these costs is provided in Table 8-18: Summary of Hardware Leasing/Maintenance Costs below:

Table 8-18: Summary of Hardware Leasing/Maintenance Costs

	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Documentum Server & Storage	$965,646	$965,646	$965,646	965,646
CROS Laptops	0	0	$792,000	$792,000
CROS Monitors			$54,000	$54,000
Existing Hardware				
Visara - Leased Printers/ Tumbleweed SecureTransport FTP Hardware	$903,265	$903,265	$903,265	$903,265
Total Hardware Leasing/Maintenance	**$1,868,911**	**$1,868,911**	**$2,714,911**	**$2,714,911**

Software Maintenance/Licenses

The continuing software maintenance/licenses include software maintenance and licenses for the new Documentum and CROS Applications and existing software maintenance/ licenses for Tealeaf, Altova, BEA Workshop, Certify, LoadRunner, Elixir, Adobe, JBOSS, Rational, RSA, SPOOL – NT, Verisign and Tumbleweed Secure Transport FTP. The Documentum and CROS continuing software maintenance/licenses costs are based on the responses to the vendor surveys. The total continuing software maintenance/licenses costs are $21,464,908. A breakdown of these costs is provided in Table 8-19. Summary of Software Maintenance/Licenses Costs below:

Table 8-19: Summary of Software Maintenance/Licenses Costs

	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Documentum Application	$1,691,458	$1,691,458	$1,691,458	$1,691,458
CROS Program Application	$3,000,000	$3,000,000	$3,000,000	$3,000,000
CROS Third Party Software	$280,000	$280,000	$280,000	$280,000
Existing Software listed above	$394,769	$394,769	$394,769	$394,769
Total Software Maintenance/Licenses	**$5,366,227**	**$5,366,227**	**$5,366,227**	**$5,366,227**

Telecommunication Costs

The continuing costs for BOE's upgraded network are $9,969,171. The continuing costs increase to $1,134,339 in FY 2013/14 and $2,208,708 annually beginning in FY 2014/15.

Data Center Services

The estimated continuing cost for data center services totals $30,722,924. A breakdown of these costs is provided in Table 8-20: Summary of Continuing Data Center Services Costs below:

Table 8-20: Summary of Continuing Data Center Services Costs

SERVICES	FY 2013/14	FY 2014/15	F6 2015/16	FY 2016/17	FY 2017/18
Non-Production Environment	$341,912	$469,032	$469,032	$469,032	$469,032
Production Environment	$645,776	$5,722,056	$5,722,056	$5,722,056	$5,722,056
Existing Environment	$0	$1,242,721	$1,242,721	$1,242,721	$1,242,721
Total Data Center Services	**$987,688**	**$7,433,809**	**$7,433,809**	**$7,433,809**	**$7,433,809**

Other

The continuing cost for travel and training will remain the same is the existing system totals $214,007 beginning in FY 2017/18. A breakdown of these costs is provided in Table 8-21: Summary of Continuing Other Costs below:

Table 8-21: Breakdown of Continuing Other Costs

COST ITEM	ANNUAL COST
In-State Travel	$55,818
Out-of-State Travel	$13,730
Training	$144,459
Total Other Costs	**$214,007**

Continuing Existing IT and Program Costs

IT Costs

TSD's existing IT staffing will transition from supporting the current IRIS and ACMS systems to supporting the CROS system. A breakdown of the transition of these IT staffing costs is provided in Table 8-22: Summary of Existing IT Staff Costs Transitioning to Support CROS below:

Table 8-22: Summary of Existing IT Staff Costs Transitioning to Support CROS

SUPPORT TEAMS	PY	FY 2014/15	PY	FY 2015/16	PY	FY 2016/17	PY	FY 2017/18
Documentum Application Support	0.0	$0	0.5	$47,465	0.5	$47,465	1.6	$151,888
Documentum Server Support	5.0	$493,569	5.0	$493,569	5.0	$493,569	5.0	$493,569
CROS Application Support	6.7	$652,399	6.7	$652,399	42	$4,043,378	58.6	$5,614,576
CROS Infrastructure Support	0.0	$0	0.0	$0	0	$0	56.9	$4,795,059
Total Project Staff	**11.7**	**$1,145,968**	**12.2**	**$1,193,433**	**47.5**	**$4,584,409**	**122.1**	**$11,055,092**

The current system's hardware maintenance, software maintenance/licenses, telecommunication and data center services necessary to support the CROS system will be transitioned as outlined above in the Continuing IT Project Costs section. The redirected staff costs are shown in the Project Funding Plan.

The remaining existing hardware maintenance, software maintenance/licenses, and contract services will be discontinued and the savings will be redirected to fund the Continuing IT Project Costs for the CROS Project. The redirected O.E&E. savings are shown in the Project Funding Plan. A breakdown of transition/redirection of these current system O.E. & E. costs is provided in Table 8-23: Summary of Existing System O.E&E. Costs Transitioning/Redirected to Support CROS below:

Table 8-23: Summary of Existing System O.E.&E. Costs Transitioning/Redirected to Support CROS

SERVICES	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Hardware	$0	$924,311	$924,311	$924,311	$924,311
Software	$0	$672,577	$672,577	$672,577	$776,633
Telecommunication	$594,183	$594,183	$594,183	$594,183	$594,183
Contract Services	$0	$3,102,689	$3,102,689	$3,102,689	$3,878,361
Data Center Services	$0	$1,820,112	$1,820,112	$1,820,112	$8,236,223
Other	$0	$0	$0	$0	$214,007
Total Data Center Services	**$594,183**	**$7,113,871**	**$7,113,871**	**$7,113,871**	**$14,623,718**

The program costs will remain the same, a total of 2,645.6 PYs for the administration, processing and collection of the tax and fee programs administered by the BOE. This equates to an annual staffing cost of $189,804,851 and annual operating expenses of $9,247,002.

Increased Revenues

A breakdown of the increased revenues is provided in Table 8-24: Summary of Increased Revenues below:

Table 8-24: Summary of Increased Revenues

Revenues	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Hardware	$50,000,000	$90,000,000	$120,000,000	$190,000,000	$190,000,000

See Section 3.2.2. Opportunities: for detailed revenue projections.

It is difficult to predict with a performance-based, benefits-funded procurement what the solution will look like and how the vendor will want to implement that solution over the life of the project. That said, the following assumptions were made to develop the EAW's and is provided to help provide context to the numbers and why they change over time. These assumptions do not indicate a BOE preference; the BOE is open to different solutions and approaches.

Fiscal Year	Major Activity Assumptions
10-11	• Project approval & Procurement: Develop FSR and prepare RFP
11-12	• Procurement phase: Release RFP, vendors develop proposals
12-13	• Evaluate and select Vendor
13-14	• Vendor begins work in February • Begin to implement quick win, revenue generating components and likely involves data warehousing and program intelligence solutions • Vendor begins design, development and testing of the tax processing system • Most legacy systems are still in operation and still need maintenance and legislatively mandated enhancements
14-15	• Development of remaining tax processing functions • Implementation of tax core processing to a subset of customers • Legacy system functionality is being migrated to new system
15-16	• Continued development of functionality and implementation of tax processing system to second group of customers • Continued migration of the legacy systems
16-17	• Implementation of tax processing system to remainder of customers • Use of legacy system is discontinued • New system is in production and being supported by BOE staff

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

EXISTING SYSTEM/BASELINE COST WORKSHEET
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 05/13/11

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information Technology Costs																		
Staff (salaries & benefits)	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	122.0	$11,038,500	**976.0**	**$88,307,998**
Hardware Lease/Maintenance		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		$ 924,311		**$ 7,394,488**
Software Maintenance/Licenses		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		$ 776,633		**$6,213,066**
Telecommunications		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		$ 594,183		**$ 4,753,464**
Contract Services		$ 3,878,361		$ 3,878,361		$ 3,878,361		$ 3,878,361		$ 3,878,361		$ 3,878,361		$ 3,878,361		$ 3,878,361		**$ 31,026,888**
Data Center Services		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		$ 8,296,223		**$ 66,369,784**
Agency Facilities		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ -		**$ -**
Other		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		$ 214,007		**$ 1,712,056**
Total IT Costs	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**122.0**	**$25,722,218**	**976.0**	**$205,777,744**
Continuing Program Costs:																		
Staff	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	2645.6	$189,804,851	**21164.8**	**$1,518,438,808**
Other		$9,247,002		$9,247,002		$9,247,002		$9,247,002		$9,247,002	0.0	$9,247,002		$9,247,002		$9,247,002		**$73,976,016**
Total Program Costs	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**2645.6**	**$199,051,853**	**21164.8**	**$1,592,414,824**
TOTAL EXISTING SYSTEM COSTS	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**2767.6**	**$224,774,071**	**22140.8**	**$1,798,192,568**

SIMM 20C30C, Rev. 08/2010

PROPOSED ALTERNATIVE: **Performance-Based CROS Project**

Date Prepared: 05/13/11

Department: Board of Equalization
Project: CROS

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs																		
Staff (Salaries & Benefits)	36.5	$3,434,616	55.8	$ 5,208,103	37.2	$3,510,340	69.6	$6,567,233	94.8	$ 8,856,317	70.1	$ 6,588,737	68.8	$ 6,467,632	0.0	$ -	432.8	$40,632,978
Hardware Purchase		$0		$0		$0		$4,723,000		$ -		$ 4,230,000		$0		$0		$8,953,000
Software Purchase/License		$0		$0		$0		$8,036,812		$ 8,653,890		$0		$0		$0		$16,690,702
Telecommunications		$0		$0		$0		$487,000		$ -		$0		$0		$0		$487,000
Contract Services																		
Software Customization		$0		$0		$0		$12,104,000	$0	$29,010,000	$0	$51,218,000		$23,708,000		$0		$116,040,000
Project Management		$75,000		$187,500		$187,500		$187,500		$187,500		$187,500		$187,500		$0		$1,200,000
Project Oversight		$0		$95,000		$190,000		$190,000		$190,000		$190,000		$190,000		$0		$1,045,000
IV&V Services		$0		$0		$0		$674,700		$674,700		$674,700		$674,700		$0		$2,698,800
Other Contract Services		$188,500		$585,513		$0		$0		$ -		$ -		$ -		$ -		$774,013
TOTAL Contract Services		$263,500		$868,013		$377,500		$13,156,200		$30,062,200		$52,270,200		$24,760,200		$0		$121,757,813
Data Center Services		$0		$150,000		$50,000		$67,020		$ 57,820		$ 55,520		$ -		$ -		$380,360
Agency Facilities		$0		$0		$0		$0		$ -		$0		$0		$0		$0
Other		$0		$32,360		$32,186		$336,487		$ 296,487		$ 95,566		$0		$0		$793,086
Total One-time IT Costs	**36.5**	**$3,698,116**	**55.8**	**$6,258,476**	**37.2**	**$3,970,026**	**69.6**	**$33,373,752**	**94.8**	**$47,926,714**	**70.1**	**$63,240,023**	**68.8**	**31,227,832**	**0.0**	**0**	**432.8**	**$189,694,939**
Continuing IT Project Costs																		
Staff (Salaries & Benefits)	0.0	$0	0.0	$0	0.0	$0	0.0	$0	11.7	$1,145,968	12.2	$1,193,433	47.5	$4,584,409	122.1	$11,055,092	193.5	$17,978,902
Hardware Lease/Maintenance		$0		$0		$0		$0		$ 1,868,911		$ 1,868,911		$ 2,714,911		$ 2,714,911		$9,167,644
Software Maintenance/Licenses		$0		$0		$0		$0		$ 5,366,227		$ 5,366,227		$ 5,366,227		$ 5,366,227		$21,464,908
Telecommunications		$0		$0		$0		$1,134,339		$ 2,208,708		$ 2,208,708		$ 2,208,708		$ 2,208,708		$9,969,171
Contract Services		$0		$0		$0		$0		$ -		$ -		$ -		$ -		$7,433,809
Data Center Services		$0		$0		$0		$987,688		$ 7,433,809		$ 7,433,809		$ 7,433,809		$ 7,433,809		$30,722,924
Agency Facilities		$0		$0		$0		$0		$ -		$0		0		0		$0
Other		$0		$0		$0		$0		$ -		$ -		$ -		$ 214,007		$214,007
Total Continuing IT Costs	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$0**	**0.0**	**$2,122,027**	**11.7**	**$18,023,623**	**12.2**	**$18,071,088**	**47.5**	**22,308,064**	**122.1**	**28,992,754**	**193.5**	**$89,517,556**
Total Project Costs	**36.5**	**$3,698,116**	**55.8**	**$6,258,476**	**37.2**	**$3,970,026**	**69.6**	**$35,495,779**	**106.5**	**$65,950,337**	**82.3**	**$81,311,111**	**116.3**	**53,535,896**	**122.1**	**28,992,754**	**626.2**	**$279,212,495**
Continuing Existing Costs																		
Information Technology Staff	117.1	$ 10,552,888	115.5	$10,412,699	114.4	$10,297,871	83.9	$7,359,655	80.8	$ 7,083,849	83.0	$ 7,297,941	37.1	$ 3,008,222	0.0	$ -	631.8	$ 56,013,126
Other IT Costs		$14,683,718		$14,683,718		$14,683,718		$10,986,846		$7,569,846		$7,569,846		$ 7,569,846		$ -		$77,747,537
Total Continuing Existing IT Costs	**117.1**	**$25,236,606**	**115.5**	**$25,096,416**	**114.4**	**$24,981,589**	**83.9**	**$18,346,501**	**80.8**	**$14,653,696**	**83.0**	**$14,867,787**	**37.1**	**$10,578,068**	**0.0**	**$0**	**631.5**	**$133,760,663**
Program Staff	2645.6	$189,804,851	2635.9	$ 188,914,567	2635.8	$ 188,913,057	2642.2	$ 189,496,634	2642.2	$ 189,496,634	2642.2	$ 189,496,634	2642.2	$ 189,496,634	2645.6	$ 189,804,851	21131.7	$1,515,423,863
Other Program Costs		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 9,247,002		$ 73,976,013
Total Continuing Existing Program Costs	**2645.6**	**$199,051,853**	**2635.9**	**$198,161,568**	**2635.8**	**$198,160,059**	**2642.2**	**$198,743,636**	**2642.2**	**$198,743,636**	**2642.2**	**$198,743,636**	**2642.2**	**$198,743,636**	**2645.6**	**$199,051,853**	**21131.7**	**$1,589,399,876**
Total Continuing Existing Costs	**2762.7**	**$224,288,459**	**2751.3**	**$223,257,985**	**2750.2**	**$223,141,648**	**2726.1**	**$217,090,137**	**2723.0**	**$213,397,332**	**2725.2**	**$213,611,423**	**2679.3**	**$209,321,704**	**2645.6**	**$199,051,853**	**21763.2**	**$1,723,160,540**
TOTAL ALTERNATIVE COSTS	**2799.1**	**$227,986,575**	**2807.1**	**$229,516,460**	**2787.4**	**$227,111,674**	**2795.7**	**$252,585,916**	**2829.5**	**$279,347,669**	**2807.5**	**$294,922,533**	**2795.6**	**$262,857,600**	**2767.7**	**$228,044,607**	**22389.4**	**$2,002,373,035**
INCREASED REVENUES		$0		$0		$0		$50,000,000		$90,000,000		$120,000,000		$190,000,000		$190,000,000		**$640,000,000**

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ECONOMIC ANALYSIS SUMMARY
All costs to be shown in whole (unrounded) dollars.

Date Prepared: 05/13/11

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM																		
Total IT Costs	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	122.0	25,722,218	976.0	205,777,744
Total Program Costs	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	2645.6	199,051,853	21164.8	1,592,414,824
Total Existing System Costs	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	2767.6	224,774,071	22140.8	1,798,192,568
PROPOSED ALTERNATIVE	Performance-Based CROS Project																	
Total Project Costs	36.5	3,698,116	55.8	6,258,476	37.2	3,970,026	69.6	35,495,779	106.5	65,950,337	82.3	81,311,111	116.3	53,535,896	122.1	28,992,754	626.2	279,212,495
Total Cont. Exist. Costs	2762.7	224,288,459	2751.3	223,257,985	2750.2	223,141,648	2726.1	217,090,137	2723.0	213,397,332	2725.2	213,611,423	2679.3	209,321,704	2645.6	199,051,853	21763.2	1,723,160,540
Total Alternative Costs	2799.1	227,986,575	2807.1	229,516,460	2787.4	227,111,674	2795.7	252,585,916	2829.5	279,347,669	2807.5	294,922,533	2795.6	262,857,600	2767.7	228,044,607	22389.4	2,002,373,035
COST SAVINGS/AVOIDANCES	(31.5)	(3,212,504)	(39.5)	(4,742,389)	(19.8)	(2,337,603)	(28.0)	(27,811,845)	(61.8)	(54,573,598)	(39.8)	(70,148,462)	(28.0)	(38,083,529)	(0.1)	(3,270,536)	(248.6)	(204,180,467)
Increased Revenues		0		0		0		50,000,000		90,000,000		120,000,000		190,000,000		190,000,000		640,000,000
Net (Cost) or Benefit	(31.5)	(3,212,504)	(39.5)	(4,742,389)	(19.8)	(2,337,603)	(28.0)	22,188,155	(61.8)	35,426,402	(39.8)	49,851,538	(28.0)	151,916,471	(0.1)	186,729,464	(248.6)	435,819,533
Cum. Net (Cost) or Benefit	(31.5)	(3,212,504)	(71.0)	(7,954,894)	(90.8)	(10,292,497)	(118.9)	11,895,658	(180.7)	47,322,060	(220.6)	97,173,598	(248.5)	249,090,068	(248.6)	435,819,533		

SIMM 20C30C, Rev. 08/2010

Department: Board of Equalization

Project: CROS

PROJECT FUNDING PLAN

All Costs to be in whole (unrounded) dollars

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	**36.5**	**3,698,116**	**55.8**	**6,258,476**	**37.2**	**3,970,026**	**69.6**	**35,495,779**	**106.5**	**65,950,337**	**82.3**	**81,311,111**	**116.3**	**53,535,896**	**122.1**	**28,992,754**	**626.2**	**279,212,496**
RESOURCES TO BE REDIRECTED																		
Staff	36.5	3,434,616	55.8	5,208,103	37.2	3,510,341	45.5	4,423,397	63.3	6,111,743	58.2	5,638,333	92.2	8,908,205	122.1	11,038,500	510.9	37,234,738
Funds:																		
Existing System		0		0		0		594,183		7,113,871		7,113,871		7,113,871		14,683,718		21,935,797
Other Fund Sources		263,500		1,050,372		459,685		0		0		0		0		0		1,773,557
TOTAL REDIRECTED RESOURCES	**36.5**	**3,698,116**	**55.8**	**6,258,475**	**37.2**	**3,970,026**	**45.5**	**5,017,580**	**63.3**	**13,225,614**	**58.2**	**12,752,205**	**92.2**	**16,022,076**	**122.1**	**25,722,218**	**510.9**	**60,944,093**
ADDITIONAL PROJECT FUNDING NEEDED																		
One-Time Project Costs	0.0	0	0.0	0	0.0	0	24.1	28,950,355	43.2	42,960,940	24.1	58,795,122	24.1	26,904,036	0.0	0	115.5	157,610,454
Continuing Project Costs	0.0	0	0.0	0	0.0	0	0.0	1,527,843	0.0	9,763,784	0.0	9,763,784	0.0	10,609,784	0.0	3,270,536	0.0	31,665,194
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**24.1**	**30,478,199**	**43.2**	**52,724,723**	**24.1**	**68,558,906**	**24.1**	**37,513,820**	**0.0**	**3,270,536**	**115.5**	**189,275,649**
TOTAL PROJECT FUNDING	**36.5**	**3,698,116**	**55.8**	**6,258,476**	**37.2**	**3,970,026**	**69.6**	**35,495,779**	**106.5**	**65,950,337**	**82.3**	**81,311,111**	**116.3**	**53,535,896**	**122.1**	**28,992,754**	**626.2**	**279,212,495**
Difference: Funding - Costs	0.0	0	0.0	0	0.0	(0)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	(0)
Total Estimated Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
FUNDING SOURCE*																		
General Fund (Redirection)	55%	2,037,662	55%	3,448,420	55%	2,187,484	55%	2,764,687	55%	7,287,313	55%	7,026,465	55%	8,828,164	55%	14,172,942	55%	33,580,195
General Fund (BCP)	55%	0	55%	0	55%	0	55%	16,793,488	55%	29,051,322	55%	37,775,957	55%	20,670,115	55%	1,802,065	55%	104,290,882
Federal Fund	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Special Fund (Redirection)	15%	569,510	15%	963,805	15%	611,384	15%	772,707	15%	2,036,745	15%	1,963,840	15%	2,467,400	15%	3,961,221	15%	9,385,390
Special Fund (BCP)	15%	0	15%	0	15%	0	15%	4,602,208	15%	7,961,433	15%	10,352,395	15%	5,664,587	15%	493,851	15%	28,580,623
Reimbursement (Redirection)	30%	1,090,944	30%	1,846,250	30%	1,171,158	30%	1,480,186	30%	3,901,556	30%	3,761,900	30%	4,726,512	30%	7,588,054	30%	17,978,507
Reimbursement (BCP)	30%	0	30%	0	30%	0	30%	9,082,503	30%	15,711,968	30%	20,430,554	30%	11,179,118	30%	974,620	30%	56,404,143
TOTAL FUNDING	100%	3,698,116	100%	6,258,476	100%	3,970,026	100%	35,495,779	100%	65,950,337	100%	81,311,111	100%	53,535,896	100%	28,992,754	100%	250,219,741

***Type:** If applicable, for each funding source, beginning on row 29, describe what type of funding is included, such as local assistance or grant funding, the date the funding is to become available, and the duration of the funding.

SIMM 20C30C, Rev. 08/2010
Department: Board of Equalization
Project: CROS

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

Date Prepared: 05/13/1 0

	FY 2010/11		FY 2011/12		FY 2012/13		FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18			
Annual Project Adjustments	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts		
One-time Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	0	24.1	28,950,355	43.2	42,960,940	24.1	58,795,122	24.1	26,904,036		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**(0)**	**24.1**	**28,950,355**	**19.1**	**14,010,584**	**(19.1)**	**15,834,182**	**(0.0)**	**(31,891,086)**	**(24.1)**	**(26,904,036)**		
(B) Total One-Time Budget Actions	0.0	0	0.0	0	0.0	0	24.1	28,950,355	43.2	42,960,940	24.1	58,795,122	24.1	26,904,036	0.0	0	**115.5**	**157,610,454**
Continuing Costs																		
Previous Year's Baseline	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,527,843	0.0	9,763,784	0.0	9,763,784	0.0	10,609,784		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**1,527,843**	**0.0**	**8,235,941**	**0.0**	**0**	**0.0**	**846,000**	**0.0**	**(7,339,248)**		
(D) Total Continuing Budget Actions	0.0	0	0.0	0	0.0	0	0.0	1,527,843	0.0	9,763,784	0.0	9,763,784	0.0	10,609,784	0.0	3,270,536	**0.0**	**31,665,194**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**0.0**	**0**	**0.0**	**(0)**	**24.1**	**30,478,198**	**19.1**	**22,246,525**	**(19.1)**	**15,834,183**	**(0.0)**	**(31,045,086)**	**(24.1)**	**(34,243,284)**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D]	**115.5**	**189,275,648**

Annual Savings/Revenue Adjustments

Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Increased Program Revenues		0		0		0		50,000,000		90,000,000		120,000,000		190,000,000		190,000,000		640,000,000

ATTACHMENT A - ORGANIZATIONAL CHANGE MANAGEMENT PLAN

Attachment A – Organizational Change Management Plan is provided on the following pages.

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Centralized Revenue Opportunity System (CROS) **Organizational Change Management Plan**	BOE Technology Services Department Strategic Project Office

VISION FOR A BETTER FUTURE

Table of Contents

Table of Contents **2**

1. Introduction **3**

1.1. Organizational Change Management Planning 3

1.2. Principles of Organizational Change Management 3

1.3. Translating Organizational Change Management Principles into a Structured Approach 4

2. Organizational Change Management Participants Roles and Responsibilities **4**

3. Organizational Change Management Scope **6**

3.1. CROS Project Stakeholders 8

3.2. Communications/Stakeholder Objectives 8

4. Marketing Organizational Change **8**

4.1. Engaging Stakeholders in the Progress of the Project 8

4.2. Methodology and Tools for Communication 9

4.3. Building Acceptance to Change 10

4.4. Monitoring the Effectiveness of the Change Management Program 10

5. Training and Knowledge Transfer **11**

1. Introduction

The Board of Equalization (BOE) is embarking on a significant automation project which will result in the replacement of its two current automation systems – the Integrated Revenue Information System (IRIS) and the Automated Compliance Management System (ACMS).
The Centralized Revenue Opportunity System (CROS) is the intended replacement for IRIS and ACMS. The CROS Project will impact virtually all processing areas within the organization and will introduce new technologies and tools to provide increased efficiency, augment revenue production, and incorporate "best practices" to significantly reengineer how work is currently performed at BOE.

The purpose of the Organizational Change Management Plan is to actively design, develop, and execute a strategy for preparing all employees and stakeholders for business, technical and cultural changes that occur as the result of the CROS Project initiatives. Embracing and magnifying the positive aspects of changes will help employees and stakeholders align themselves with the long term success in BOE's newly defined "desired future state" through CROS.

A well thought out and responsive Organizational Change Management Plan significantly mitigates business disruption and facilitates the time it takes to adopt change. Employees and stakeholders are better prepared for and involved in achieving and sustaining those changes. The greatest threat to successful organizational change management is the failure to address stakeholder concerns, provide good communication, and assure adequate training and staff acquisition planning in preparation of organizational change. Without this attention to detail, the results can lead to a lack of acceptance of business process changes and poor end user performance.

1.1. Organizational Change Management Planning

BOE's organizational change management planning will encompass the activities BOE needs to successfully accept, adopt, and support the new business model, strategy, and technologies resulting from the CROS project. Understanding and effectively implementing change allows transformation of strategy, business process, and technology, enables employees to achieve higher levels of performance, and enhances continuous improvements in a changing environment. A structured approach to organizational change management is critical for any project which brings about significant change.

1.2. Principles of Organizational Change Management

Some key underlying organizational change management principles that will be applied to the CROS project are:

- Committed project sponsorship – organizational change management objectives have the support and resources of key decision-makers within the organization.
- Effective project planning – planning is structured and methodical and all plans are agreed to with regard to organizational change management objectives, roles, resources, and risks.

- Measurable objectives – organizational change management objectives are realistic and measurable and progress toward their achievement is shared with all major stakeholders.
- Engaged stakeholders – project stakeholders are encouraged to openly participate in dialogue, with mutual respect, regarding organizational changes and their impacts.
- Resources and support – organizational change management implementers and recipients receive the resources and support throughout the change process.

1.3. Translating Organizational Change Management Principles into a Structured Approach

Below are a number of elements that, when understood and adopted, can help communicate and gain acceptance of the need for complete and timely organizational change.

- Identify changes that will impact the organization and who will be impacted as a result of the CROS implementation. Explain why the changes are important and when changes need to occur.
- Gather support by assembling CROS project and program decision makers, resource owners and stakeholders who will be impacted by the changes. Ensure that the changes and their impacts are properly understood by all and that there is a comprehensive outreach plan to address stakeholder concerns.
- Put organizational change management goals in specific and defined terms for achieving desired outcomes.
- Assign staff to specific activities and tasks, in specific and defined terms, and make them responsible for organizational change management goals and desired outcomes.
- Facilitate action by removing obstacles and listening for constructive feedback, recognizing and rewarding success. Build the structure and staff with the right skills to affect the change.
- Identify and mitigate potential risks that accompany organizational change management.
- Institutionalize the changes to make them permanent and eventually part of the culture.

2. Organizational Change Management Participants Roles and Responsibilities

This section describes the roles and responsibilities of the project staff with regard to organizational change management. There are various staff resources and stakeholders involved in managing various aspects of the project. In some cases, one individual may perform multiple roles in the process. These roles will be assigned and further defined as the CROS project progresses. The Technology Services Department may additionally assign a separate Organizational Change Manager as needed.

Name	Role	Responsibilities
TBD	Organizational Change Manager	▪ Develops/executes the Organizational Change Management Plan. ▪ Monitors the effectiveness of organizational change management activities and recommends actions to resolve issues. ▪ Guides CROS organizational change management staff in providing timely communication with project stakeholders. ▪ Serves as the single point of contact for organizational change management activities.
TBD	Lead Organizational Change Management Coordinator	▪ Facilitates CROS organizational change management activities. ▪ Outlines options and makes recommendations for courses of action and priorities for changes. ▪ Delivers organizational change management communications and leads activities involving CROS executives and stakeholders. ▪ Tracks and facilitates timely decisions on changes. ▪ Ensures appropriate levels of review and approval. ▪ Approves key communications.
TBD	Organizational Change Management Team Members	▪ Identifies changes and their impacts, performing analysis functions such as planning for and assessing impacts of change. ▪ Participates in evaluating proposed changes. ▪ Monitors the effectiveness of organizational change management activities and making recommendations to resolve issues. ▪ Develops and scheduling outreach activities (i.e. workshops, demos, etc…). ▪ Develops written

Name	Role	Responsibilities
		communications materials (i.e. newsletters, fliers, Web content, e-mails, posters, etc…).
▪ Application Developers ▪ Infrastructure staff ▪ Board members ▪ IRIS and ACMS users ▪ Tax/Fee payer ▪ Tax/Fee partners (State and local jurisdictions, state agencies) ▪ BOE Executive Management ▪ Employee Union Representatives	Change Management Stakeholders	▪ Evaluates options and recommended courses of action for changes. ▪ Provides input on organizational change actions. ▪ Proposes alternative courses of action for organizational change impacts.
TBD	Project Training Coordinator	▪ Develops/implements the Organizational Change Management Training Plan. ▪ Develops/implements the project's Knowledge Transfer Plan. ▪ Establishes mechanisms for gathering information on training and knowledge transfer activities feedback. ▪ Oversees and assists in documenting the results of training and knowledge transfer.
Lyn Koch	Communications Coordinator	▪ Point of contact for communications and escalation of issues and concerns ▪ Answers questions ▪ Disseminates information

3. Organizational Change Management Scope

One of the best ways to deal with organizational change is to identify and document root causes and resulting impacts. A project's goals and objectives provide information on how change may influence the organization at a high level.

BOE's current automation systems were developed in the 1990s. The legacy hardware and software required to support the systems are dated and more costly to maintain than newer technologies. Additionally, BOE's systems have required continuous modifications over the past decade, putting a burden on staffing resources and increasing the cost of maintenance to the systems.

As a result of recent legislative mandates, BOE has been directed to implement several new tax/fee programs and other statutory changes. These changes will require significant modifications and thousands of hours of programming to the existing systems. Furthermore, due to a desire for more quantitative data and transparency, there is an increased need for more comprehensive reporting that the current systems are not capable of producing easily without significant modifications. In short, BOE's current automation systems no longer allow BOE to effectively administer its tax/fee programs and they fall short of positioning BOE for the future.

In response to the need for technological advances to better position BOE for the future, BOE has developed long range business and strategic plans which have included advanced technology improvements. The goals and objectives of the CROS project include acquiring and deploying a new state-of-the-art centralized revenue opportunity system. BOE's vision for this system is one that:

- Is robust and nimble
- Can adapt easily to changing organization and business environments
- Has the ability to access more data
- Utilizes the most advanced technologies
- Increases the use of and streamlines automated processes
- Allows for joint program applications
- Is driven by and developed to address business needs

Project Goals that have been defined for CROS include:

- Decrease tax/fee gap
- Improve service to tax/fee payers and other customers
- Reengineer and improve business processes
- Provide the ability to work securely any time and from anywhere
- Improve access to data and data sharing
- Obtain flexible, agile, expandable, and sustainable technology to support business changes

The CROS project will bring significant business and technological changes to affected BOE staff and stakeholders. Considerable changes to workflow will be realized through the increasing use of automated processes. As an example, one aspect of the business process will require moving away from using jump codes and to using graphical user interface (GUI) interfaces when inputting information into the new system. Technical changes including required technical skills and modifications to current roles and responsibilities will also be a result of the CROS project. As a result, it is critical to have a clear organizational change management plan that includes activities for the marketing and communication of change as well as sufficient activities for training and knowledge transfer.

3.1. CROS Project Stakeholders

Due to its agency-wide impact, stakeholders of the CROS project include not only internal BOE staff but also external users.

Stakeholders of the CROS Project include:

- Application Developers
- Infrastructure staff
- Board Members
- IRIS and ACMS users
- Tax/Fee payers
- Tax/Fee partners (State and local jurisdictions, state agencies)
- BOE Executive Management
- Employee Union Representatives

3.2. Communications/Stakeholder Objectives

Change must be understood and managed in such a way that stakeholders can effectively cope with the change(s). Constant and consistent communication with all organizational stakeholders helps to ensure that no significant change is overlooked or not responded to. Proactively understanding how certain stakeholders will be impacted by change and involving them in proposed outcomes helps reduce resistance to change. The greater the number of stakeholders who are "on board" with anticipated changes as champions for the change, the more likely it is that those changes will be accepted even by those who may otherwise resist them.

4. Marketing Organizational Change

A great deal of time, effort, and money are invested when major changes to an organization are attempted. Receptiveness to organizational change is required to keep pace with evolving technologies. Marketing these organizational changes is integral to the project's organizational management plan. Current CROS marketing activities are specifically designed to reach out to stakeholders, users, and groups who will be impacted by the changes.

4.1. Engaging Stakeholders in the Progress of the Project

Using lessons learned from the previous implementations of the IRIS and ACMS systems, the CROS Project is taking a proactive approach to marketing organizational change and engaging stakeholders in the progress of the project. In the previous implementations, marketing of many of the organizational change activities were performed too late in the process to be as effective as necessary. The CROS approach has focused on engaging stakeholders early in the process and leveraging the dissatisfaction from past design and implementation efforts to garner support and enthusiasm for CROS.

The following activities have been completed as part of the CROS effort:

- A unique project identity for CROS has been created through the use of a distinctive project name, logo, and project branding efforts.
- 110 interactive presentations led by executive sponsors were conducted to all BOE employees in-state and out-of-state to introduce CROS and the vision for the future. These presentations represent an agency-wide outreach effort.
    - All presentations have been posted to the internal BOE website (eBOE).
- A communication plan which includes internal and external stakeholders has been developed.
- Visioning meetings with executive management (July 2010 and January 2011).
- Outreach activities encouraging staff for suggestions for improvement and thoughts on the future of CROS have been conducted.
- Employees have been encouraged to develop creative visioning videos.
- A point of contact for all communications, escalation of issues and concerns, and suggestions has been identified.
- Liaisons have been identified for all offices and liaison meetings are being conducted regularly.
- Project recruitment and status updates are posted to eBOE.

CROS project activities for the marketing of organizational change is an ongoing effort to ensure continuous project branding, increased support, and garnered enthusiasm. Outreach activities will continue through liaison meetings, visioning meetings, and presentations. Survey plans are being developed and external stakeholders will be contacted to provide input on possible impacts to the project. Additionally, there will be iterative evaluations throughout the phases of the Request for Proposal (RFP) from concept, draft, to final in which stakeholders will be involved and engaged in the evaluation conversations.

4.2. Methodology and Tools for Communication

The CROS project has employed a comprehensive methodology and a variety of tools for communication of project information. Methods and tools include:

- Developing a project website.
- Using focus groups to explain project objectives as well as resulting changes and impacts to lessen user and stakeholder anxiety about changes to come.
- Providing formal presentations and informal sessions to share information and manage stakeholder expectations.
- System walkthroughs that focus on new business processes, applications, and features that reduce or streamline work tasks.
- Establishment of a CROS e-mail address for input and suggestions.

As described in the previous section on Marketing Organizational Change, significant efforts have been undertaken to disseminate CROS project information and engage stakeholders in the process. In addition to the presentations, liaison and visioning meetings, and staff creative visioning videos, information on CROS is posted on eBOE and a SharePoint site has been created to house project information as well as project documents.

Future efforts will include the development of workgroups and system walkthroughs. Approximately nine program area workgroups will be organized to discuss project goals and objectives, as-is and to-be processes, and process improvements. Additionally, as the project progresses, stakeholder involvement in system walkthroughs will be encouraged and promoted.

4.3. Building Acceptance to Change

Key to Organizational Change Management is building acceptance to change. To facilitate acceptance to the business and technological changes CROS will encompass, significant marketing and branding efforts as mentioned in the previous sections, are underway. Currently, the CROS Project has executive sponsorship support and the Steering Committee members, sponsors, and executive management serve as project champions. Furthermore, each office has a CROS Project liaison serving as the representative for CROS.

Ongoing efforts to ensure acceptance to change throughout the life of the CROS project will be conducted. Continued outreach activities will highlight the increased transparency in the business process through the use of presentations, workshops, focus groups, and the dissemination of project information in various formats throughout the course of the project. The idea of CROS bringing business change through business process reengineering will also be emphasized through various outreach efforts.

The resulting CROS Request for Proposal (RFP) will ensure that the selected vendor will be responsible for training and knowledge transfer as well as the development and implementation of a comprehensive Organizational Change Management Plan. Further details on training and knowledge transfer requirements are discussed in Section 5.

4.4. Monitoring the Effectiveness of the Change Management Program

To ensure the effectiveness of the organizational change management program, assessments will be periodically conducted to confirm progress toward achieving readiness to implement the project and to identify specific areas where a more concerted effort may be required to successfully make change occur. There are a number of factors that can be assessed and methods that will be employed for the CROS project.

For the CROS Project, BOE will utilize a procurement approach pioneered by the Franchise Tax Board (FTB) for large Information Technology (IT) procurements. The approach taken by FTB was to focus the procurement on the business or programmatic problems that the state was experiencing by allowing the vendor community to propose innovative solutions to those business problems. This revenue-based procurement leveraged the benefits that the selected vendor's solution provided allowing for the vendor to share in the benefits (increased revenues). The vendor received payments when the solution provided the proposed benefits.

CROS will employ a similar benefit/business-based procurement which will fund the project by increased revenue from the implementation of the proposed system. The vendor fixed priced contract will contain a maximum dollar cap for the vendor and the vendor will not receive full compensation if sufficient revenue levels are not met or if business process deliverables are not provided. The vendor will be paid by a percentage of the revenue the proposed solution generates. Therefore, the RFP will function as one dashboard for a measure of effectiveness.

CROS will use program indicators to evaluate effectiveness. One such program indicator may evaluate the reduction of non-revenue generating work hours due to increased automation. Another program indicator may evaluate the amount of projected revenue that is generated.

Other measures of effectiveness will include the use of training and training evaluations and oversight activities. The need for Independent Verification and Validation (IV&V) and/or Independent Project Oversight Consultant (IPOC) consultants will be assessed and engaged as necessary for the project. Additionally, training evaluations as well as follow-up activities will be conducted. Supervisors and managers will be responsible for ensuring that staff follows newly implemented procedures.

5. Training and Knowledge Transfer

A crucial tool for change leadership is training. It is important to note that for any change initiative the objective of training has a two-fold focus. First, the project must plan for hands-on sessions to educate those who will lead and assist in integrating organizational change. The sessions should cover how change will be initiated, communicated, implemented, and managed. The sessions should also provide insight into what challenges the change management leadership and team can expect to encounter as the project moves through its full lifecycle. The second training focus is centered on BOE functional organizations that will be impacted as a result of project objectives. The project change leadership and team will work with BOE management and staff on a personal level to create and execute training plans that address and resolve organizational change management impacts.

An effective training plan should include:

- A detailed training needs assessment identifying all required changes, the training needed to meet those requirements, and who will be trained.
- A training curriculum and content that is developed based upon the needs assessment.
- Training documentation requirements and the development of training materials.
- Training facility requirements, venue, and scheduling.
- Assessment of the training's effectiveness.
- Post-training support and follow-up.

Knowledge is an important organizational asset. It is the acquisition of specialized skills, processes, unique abilities, and experiences by staff; developed over time. Knowledge and knowledge transfer is influenced by an organization's common culture, policies, goals and objectives, standards, use of tools, communications, collaborative efforts, infrastructure, and shared belief systems. Knowledge transfer is the process for communicating specialized knowledge created, developed or adopted by individuals. Successfully accomplishing knowledge transfer can be complicated by such things as the inability to identify and articulate intuitive competencies, language barriers, culture, management relations, motivational problems, incentives, and areas of expertise or lack of expertise.

Because it is anticipated that the CROS solution will be a significant departure from current business and technical processes, the CROS Request for Proposal (RFP) will include specifications and emphasize a need for a vendor with significant expertise and qualifications in tax programs to develop a complete solution with a comprehensive training and knowledge transfer plan. Training and knowledge transfer requirements will include on-the-job (OTJ)

training, train-the-trainer training, and post-implementation support. Additionally, the selected vendor will also be responsible for developing and implementing a comprehensive Change Management Plan which will further address training and knowledge transfer activities during and post-implementation. The Change Management Plan shall encompass the training needs and the change management issues of both BOE's business and technical staff.

ATTACHMENT B - RISK MANAGEMENT WORKSHEET

Attachment B – Risk Management Worksheet is provided on the following pages.

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Ranked No.	Risk Title	Risk Description	Probability	Impact	Exposure	Mitigation Strategy	Contingency Plan
01	**Enactment of Legislation**	Passage of legislation may mandate system changes and require resources which will impact CROS project objectives and result in changes to requirements, implementation delay, or additional costs.	70%	3	2.10	BOE Management will actively monitor legislative activity and keep the CROS Project Team apprised of resource conflicts. Request legislative impact analyses on CROS Project for any new pending legislation. Work with BOE Legislative unit to propose changes in draft legislation to minimize impact to CROS prior to the bill being adopted by the legislature.	Adjust CROS schedule and scope to address additional requirements as imposed by legislative mandates. Adjust resource availability based on resource conflicts due to legislative changes. Develop change requests as necessary.
02	**Data Conversion**	Data cleansing, data validation, and data mapping activities result in IRIS and ACMS data being converted incorrectly into the CROS solution.	70%	3	2.10	Form knowledgeable business workgroups and include SMEs to define data cleansing and data validation rules. Form knowledgeable team of programming staff to develop the programming codes to clean and validate. Develop a comprehensive testing plan which includes comprehensive test files for conversion testing. Ensure that backup files are retained and a process is in place to recover backup data in the event of data being converted incorrectly.	Revert back to old data and system and redefine system requirements. Implement data that converted correctly and review and analyze incorrectly converted data for re-implementation.
03	**Business Rules and Requirements are inadequate**	CROS Business Rules and Requirements for internal and external users are not adequately scoped, defined, documented and leveraged which will result in business needs not being met, project objectives including increased revenue not being realized, and an increase in planned costs.	50%	4	2.00	Form knowledgeable business workgroups and include SMEs to define Business Rules and Requirements. Prioritize Business Rules and Requirements for CROS Business Process Reengineering. Document As-Is and To-Be Business Process and Requirements. Obtain input from external users and perform outreach activities.	Develop change requests as necessary. Adjust project schedule, scope, and budget as necessary.
04	**Limited BOE Resources**	Limited BOE resources available to complete tasks required by project schedule.	50%	3	1.50	Monitor the schedule to ensure the timely start and completion of tasks. Identify backup resources to deploy if primary resources become impacted.	Redirect and assign additional staff as needed to complete required project tasks.

Ranked No.	Risk Title	Risk Description	Probability	Impact	Exposure	Mitigation Strategy	Contingency Plan
05	**Contractor's System Design and Functionality**	Contractor's system design for the CROS solution, its implementation, and/or its execution fails resulting in the business not being able to perform their critical processes.	30%	5	1.50	Involve SMEs and other key stakeholders in system design meetings and walk-throughs. Employ rigorous unit testing, Require the Contractor to perform rigorous system integration testing (SIT) prior to unit testing. Develop Business Continuity / Disaster Recovery (BCDR) Plan.	Implement BCDR Plan.
06	**Contractor Unable to Fulfill Contract**	Selected Contractor is not able to produce the solution as defined in the contract.	30%	5	1.50	Ensure that penalties for non-performance are stipulated in the RFP and the contract. Engage IV&V and IPOC.	Work with Contractor to identify solution elements that will not fulfill the objectives of the SOW. Investigate alternative solutions and/or alternative third party vendors that may be able to supplement Contractor's deficiencies. Impose penalties for non-performance of contract.
07	**Security of Confidential Information**	The CROS system does not contain adequate security measures for the identification of users (i.e. taxpayers, local jurisdictions, BOE staff, etc...) to verify, validate, and track user access and modifications to confidential information.	30%	5	1.50	Develop Agency security policy and procedures. Ensure that security rights and accesses are properly defined. Set up and test security groups. Test access rights for each level of the security groups. Ensure that the CROS system produces audit trail reports for user access and modification activities. Employ regular security testing and validation of audit trail reports.	Implement lockdown procedures. Review security rights and accesses and modify as necessary. Validate audit reports, investigate possible security breaches, and take corrective action as necessary.
08	**Estimated Revenue to Support Project Scope**	The Revenue estimate is lower than required to support payment to the vendors; the project scope will be impacted.	30%	4	1.20	Develop statistical models and trending analyses to base estimates from.	Determine the impact of the lower revenue to the scope of the project. Remove non-critical functionality from project scope for future inclusion.
09	**Future Expansion Needs**	CROS is not adequately designed to meet future business expansion and growth needs such as new tax or fee programs and integration of new technologies.	30%	4	1.20	Clearly define expectations for future expansion and growth needs in the FSR and RFP. Employ rigorous unit testing.	Work with Contractor to identify possible system enhancements or modifications to address additional expansion and growth needs.

Ranked No.	Risk Title	Risk Description	Probability	Impact	Exposure	Mitigation Strategy	Contingency Plan
10	**Competitive Procurement Process**	Lack of a competitive procurement process will result in the selection of a solution that is not the best value for the State and may not be approved and funded.	10%	5	0.50	Make approved CROS FSR available to the public. Contract terms and conditions for room to negotiate. Make comprehensive bidders' library available to prospective vendors. Conduct general and technical bidders' conferences. Establish Q&A forum for vendors. Use Solution Based Procurement model (emphasize problems, objectives and partnering).	Designate the RFP as a draft RFP and revise requirements based on the responses to the draft RFP. Issue a Final RFP based on the revisions.
11	**Lack of Executive Level Sponsorship**	Lack of sponsorship and support at the BOE executive level may result in a project that does not successfully meet its objectives.	10%	4	0.40	CROS Team continually reports to the executive level on project objectives and goals to ensure that the project is meeting the objectives and goals as envisioned by BOE executive management.	Re-assess and re-define the project's objectives, goals, and priority based on the direction from BOE executive management.
12	**BOE Network Upgrade/ Modification**	BOE's network capacity is insufficient for the CROS solution	10%	4	0.40	Work with vendor to determine appropriate network requirements Explore OTech as an option for a network migration	Upgrade BOE's network or migrate the network to OTech

ATTACHMENT C - BOE PROCUREMENT CAPACITY

Attachment C – BOE Procurement Capacity is provided on the following pages.

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BOE Procurement Capacity

Role	Responsibility	Experience and Expertise
Procurement Project Management • Manage and monitor the procurement team's activities • Consult and provide advice to rest of the procurement team • Mentor and train BOE staff in specialized procurement skills	Executive Advisor, consultant BOE Procurement Advisor Financial Compensation Advisor, consultant BOE Procurement Lead (vacant)	• Directed and managed over five successful revenue-based, solution based procurements ranging in size from $75 to $100M in eight years, all successfully fully paid back at FTB • Successfully delivered the delegated procurement of the $1B+ Child Support Project. • Each possess over 30 years experience with IT procurements. • 3 years experience working in DGS' Procurement Division as an Executive.
Contractual Agreements • Advise the team on the procurement documents and contract terms and conditions	BOE Attorney Specialist Technology Attorney, consultant	• Recently served for three years Staff Council on the DGS IT legal team to review procurement documents and contracts for project from a variety of agencies for costs that ranged from $22.9 million to $1.6 Billion • Specialized experience nationally and in California's IT procurements, particularly in revenue and solution based contracts and contract negotiations. • Experience negotiating contract termination on some of California's unsuccessful IT projects.
Request for Invitation (RFI) and Request for Proposal (RFP) • Review issued RFIs and RFPs from other states' and California revenue agencies • Develop CROS RFI and RFP • Develop RFI and RFP timeline. • Conduct RFI and RFP activities. • Develop and issue RFP addendums. • Evaluate RFI and RFP responses.	BOE staff including: • procurement analysts • headquarters' staff experts • field office staff experts • senior technology experts Consultant	• Extensive backgrounds in BOE business practices and IT systems to write and develop the procurement and administer the daily procurement activities and evaluate the vendors • Served as Project Director of EDD's TEAM project and has consulted over 6 years for a number of California agencies and in other states. Has authored or contributed to 15+ Feasibility Study Reports (FSR's) and many RFP's for California IT projects.
Procurement Authority Contact • Ensures procurements documents are packaged, processed, and executed	BOE Contracts Manager	• Leads and manages the BOE contracts unit that has the second highest delegation authority in the State under the direction of the Dept. of General Services (DGS) and the elected constitutional Board.
Oversight • Monitor, conduct, and issue independent assessment reports of project's activities. • Conduct financial assessment of RFI candidates.	California Technology Agency Auditing Firm, consultant	• Responsible for monitoring all state information technology projects – currently valued at $5.5 billion. • Currently conducts independent oversight on all medium to high risk Franchise Tax Board IT projects – including the EDR Project, SCO's 21st Century Project and FisCAL Project. • Retain a firm with CPA's that have experience in reviewing audited financial statements for stability.