CALIFORNIA CONSERVATION CORPS

C^3 PROJECT

Feasibility Study Report

January 27, 2014

Document Revision History

Date Submitted to CTA	Version	Description	Author
7/15/2013	Original	First submitted version to CTA	CCC FSR Development Team
8/17/2013	V1	Revised FSR & EAW based on comments provided by CTA last 8/7/2013.	CCC FSR Development Team
10/7/2013	V2	Revised FSR & EAW to change the scope of the project to comply with FI$Cal requirements.	CCC FSR Development Team
10/23/2013	V3	Revised the FSR to include the language addressing CALSTARS requested by DOF.	CCC FSR Development Team
11/15/2013	V4	Updated Project Approval Transmittal with current signatures.	
1/27/2014	V5	Revised FSR, EAW and Transmittal based on comments provided by CalTech in 1/7/2014 and subsequent meeting with CalTech on 1/22/2014	Rita Gass and Mary Smith

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1. Executive Project Approval Transmittal

Information Technology Project Request

Feasibility Study Report
Executive Approval Transmittal

Department Name
California Conservation Corps
Project Title (maximum of 75 characters)
C³ Project

Project Acronym	Department Priority	Agency Priority
C³	1	3

I am submitting the attached Feasibility Study Report (FSR) in support of our request for the California Technology Agency's 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**
Printed name: Rita Gass	1-27-14
Budget Officer	**Date Signed**
Printed name: Brian Marshall-Winks	1/27/14
Department Director	**Date Signed**
Printed name: David Muraki for	1/27/14
Agency Chief Information Officer	**Date Signed**
Printed name: Tim Garza	1/27/14
Agency Secretary	**Date Signed**
Printed name: John Laird for	1/27/14

California Technology Agency
FSR Transmittal
SIMM Section 20A

1
March 2011

CALIFORNIA natural resources AGENCY

EDMUND G. BROWN JR., Governor
JOHN LAIRD, Secretary for Natural Resources

To: Department of General Services
Resources Agency Departments, Boards, Commissions, Conservancies
California Technology Agency

From: California Natural Resources Agency

Subject: Authority to Approve Information Technology and Administrative Documents

By virtue of my authority as Cabinet Secretary of the California Natural Resources Agency, effective October 1, 2011, I am delegating authority to Tim Garza, Agency Chief Information Officer, to approve and sign documentation and correspondence related to all information technology matters. This includes the approval of procurement documents, special project reports, reports, and all Department of General Services and California Technology Agency documents.

This delegation will remain in effect until further notice.

APPROVED:

John Laird

John Laird, Secretary
California Natural Resources Agency

cc: Patrick Kemp
Tim Garza
Resources Agency Legal Office

1416 Ninth Street, Suite 1311, Sacramento, CA 95814 Ph. 916.653.5656 Fax 916.653.8102 http://resources.ca.gov

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.

Exceptions Requiring Alternative Means of Access for Persons with Disabilities

Yes or No	Accessibility Exception Justification
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.	Re-Submittal Date	January 27, 2014

		FSR	SPR	PSP Only	Other:
2.	Type of Document	X			
	Project Number	3340-013			

			Estimated Project Dates	
3.	Project Title	C³ Project	Start	End
	Project Acronym	C³	4/14/14	10/31/16

4.	Submitting Department	California Conservation Corps
5.	Reporting Agency	California Natural Resources Agency

6.	Project Objectives

The following is a summary of the project objectives:

Objective 1. Develop and deploy an automated system (C^3) that will replace CCC's legacy system (CADCARS), implement the required system interfaces, eliminate 20 databases and 216 spreadsheets, and allow for the reengineering, improvement and automation of business processes no later than 8/1/2016, one month after Release II completion.

Objective 2. Reduce the number of inaccurate Sponsor Verification packages[1] by 80%, a total of approximately 320 packages no later than 4/1/2017, six months after Release III completion.

Objective 3. Reduce the average time to dispatch emergency crews from 180 minutes to 30 minutes no later than 4/1/2017, six months after Release III completion.

Objective 4. Provide the ability to work securely, to comply with state and federal security policies, and to implement an enterprise automated system that passes an IT Security audit no later than 4/1/2017, six months after Release III

8.	Major Milestones	Est Complete Date
	Project Initiation	4/14/14
	SaaS Vendor Contract Award Execution	1/2/15
	Quality Control Consulting Services Contract Award and Execution	11/21/14
	Independent Validation and Verification Contract Award and Execution	8/29/14
	Project Management Plans (Project Plan, Requirements Documents, Test Plan) Completed	2/13/15
	Interface and Operational Continuity Environment Established	6/23/15
	System Interfaces Deployment Completed	10/23/15
	Business Analytics/Reporting Deployment Completed	1/29/16
	Release I: M&O Transition Completed	3/30/16
	Projects and Personnel Final Data Migration Completed	3/29/16
	Release I: UAT Testing Completed	3/3/16
	Release I: User Training Completed	3/29/16
	Release I: Go-Live C³ M&O: Support for C³ and system interfaces provided by CCC IT staff Begins	3/30/16

[1] Information from the Sponsor Verification package is used to produce invoices. See Section 4.1.2 – Sponsor Verification for a description of the Sponsor Verification process.

completion.

Objective 5. Provide data analysis and reporting capabilities to allow for CCC performance management reporting and ad-hoc reporting to executive management, legislature, control agencies, etc. no later than 4/1/2017, six months after Release III completion.

Objective 6. Reduce the number of paper forms a Corpsmember enrollee must manually complete from 15 to 5 forms. The 15 paper forms are identified in Section 4.1.1: Corpsmember Enrollment by the end of Release II: 6/30/2016.

Objective 7. Establish policies, procedures and a mechanism to develop a comprehensive Job Hazard analyses (JHA) for projects and track Corpsmember injuries and illnesses by the end of Release III: 9/30/16.

Objective 8. Reduce the number of days to validate a Corpsmember's scholarship from 20 to 10 business days by the end of Release II: 6/30/16.

Objective 9. Establish policies, procedures and a mechanism to provide Corpsmembers with their educational transcripts, certifications and work related training accomplishments by the end of Release II: 6/30/16.

Objective 10. Establish policies, procedures and implement mobile

CMD Final Data Migration Completed	5/27/16
Release II: M&O Transition Completed	6/26/16
Release II: UAT Testing Completed	6/17/16
Release II: User Training Completed	6/29/16
Release II: CMD Go-Live	6/30/16
Legacy System Decommissioning Completed	8/1/16
Release III: M&O Transition Completed	9/29/16
Release III: UAT Testing Completed	9/23/16
Release III: User Training Completed	9/29/16
Release III: Mobile Interface Go-Live	9/30/16
Project Closure Completed	10/31/16
PIER Completed	
Key Deliverables	
Revised FSR re-submitted to CTA	1/27/14
SaaS Vendor Final Solicitation (for release)	7/1/14
Quality Control Consulting Services Solicitation	8/29/14
Independent Validation and Verification Solicitation	7/15/14
SaaS Vendor Contract Award	1/2/15
Quality Control Consulting Services Contract Award	11/21/14
Independent Validation and Verification Contract	8/29/14
Project Management Plan	1/23/15
Requirements Traceability Matrix	2/13/15

technology, which doesn't currently exist, to allow remote entry of time, time approval and daily accomplishment reporting by the end of Release III: 9/30/16.

Section 3.3.1: Business Objectives on pages 27-29 provides a comprehensive description of the business objectives.

Interface and Operational Continuity Environment	6/23/15
System Interfaces for FI$CAL, SCIF, SCO	10/23/15
System and End Users' Manual and Training Documents Release I: Release II: Release III:	 3/10/16 6/24/16 9/16/16
Release I: Project and Personnel Subsystems Deployment	3/30/16
Release II: CMD Subsystem Deployment	6/30/16
Release III: Mobile Interface Deployment	9/30/16
Project Closure Report	10/31/16
Pier Report	10/31/17

7. Proposed Solution

The California Conservation Corps (CCC) is planning to re-engineer its core business. This re-engineering effort will streamline manual processes, eliminate multiple redundant databases, spreadsheets and paper forms, and replace the legacy system (CCC Automated Data Collection and Reporting System). A key element of this re-engineering effort is the acquisition of an enterprise resource management system. The CCC proposes to design, procure and implement a Hybrid solution that is fully integrated, browser-based, zero client, leveraging the use of Software as a Service (SaaS) and on premise service solution. The Hybrid model provides the best value for the state, the maximum potential environment flexibility to support the current and future needs of the CCC and the lesser risk associated with project delivery of the new system.

2.2. Section B: Project Contracts

Project #	
Doc. Type	**FSR**

Executive Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Agency Secretary	John	Laird	916	653-5656				secretary@resources.ca.gov
Agency CIO	Tim	Garza	(916)	653-8364				Tim.garza@water.ca.gov
Dept. Director	David	Muraki	916	341-3177				David.muraki@ccc.ca.gov
Budget Officer	Brian	Marshall-Winks	916	341-3271				Brian.marshall-winks@ccc.ca.gov
CIO	Rita	Gass	916	341-3244				Rita.gass@ccc.ca.gov
Project Sponsor	Erin	Healy	916	341-3135				Erin.healy@ccc.ca.gov
Direct Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Doc. prepared by	CCC FSR Development Team		916	341-4400				Isb@ccc.ca.gov
Primary contact	Rita	Gass	916	341-3244				Rita.gass@ccc.ca.gov
Project Manager	Mary	Smith	916	653-9967				mary@water.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	1/15/2013
2.	What is the date of your current Agency Information Management Strategy (AIMS)?	Date	4/8/2013
3.	For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.	Doc.	2013 AIMS
		Page #	

Project #	
Doc. Type	FSR

		Yes	No
4.	Is the project reportable to control agencies?	**X**	

	If YES, CHECK all that apply:
X	The project involves a budget action.
	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	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).
	The project meets a condition previously imposed by the Technology Agency.

2.4. Section D: Budget Information

Project #	
Doc. Type	FSR

Budget Augmentation Required?						
	No					
	Yes	X	If YES, indicate fiscal year(s) and associated amount:			
			FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18
			$0.00	$1,410,810	$2,309,572	$1,379,586	$987,423

2.4.1. Project Costs

1.	Fiscal Year	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	One-Time Cost	$227,149	$1,770,850	$2,116,112	$496,624		$4,610,735
3.	Continuing Costs		$106,500	$660,000	$1,163,068	$1,163,068	$3,092,636
4.	TOTAL PROJECT BUDGET	$227,149	$1,877,350	$2,776,112	$1,659,692	$1,163,068	$7,703,371

2.4.2. Project Financial Benefits

5	Cost Savings/Avoidances	$0	$0	$0	$0	$0
6	Revenue Increase	$0	$0	$0	$0	$0

2.5. Section E: Vendor Project Budget

Vendor Cost for FSR Development (if applicable)	$
Vendor Name	

Project #	
Doc. Type	FSR

1.	Fiscal Year	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	TOTAL
2.	SaaS Vendor Budget		$388,900	$1,325,900	$790,000	$558,000	$3,062,800
3.	Independent Oversight Budget	$12,800	$76,800	$76,800	$25,600		$192,000
4.	IV&V Budget		$108,000	$108,000	$36,000		$252,000
5.	Project Management	$39,000	$156,000	$156,000	$65,000		$416,000
6.	Other Budget (Change Control, EA, Procurement Oversight)	$28,000	$211,688	$213,450	$33,562		$486,700
7.	TOTAL VENDOR BUDGET	$79,800	$941,388	$1,880,150	$950,162	$558,000	$4,409,500

----------(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	$

2.5.1. Primary Vendor Contracts

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
11.									
12.									
13.									

2.6. Section F: Risk Assessment Information

Project #	
Doc. Type	**FSR**

	Yes	
Has a Risk Management Plan been developed for this project?	X	

General Comment(s)
The Risk Register per the California Project Management Methodology (CA-PMM) SIMM 17 guidelines is provided in Section 7.0 of this FSR.

3. Business Case

3.1. Business Area Identification

The California Conservation Corps (CCC) was established in 1976, and is the oldest and largest state conservation corps program in the nation. The CCC's primary functions are to provide job, life skills and educational training and opportunities while teaching them how to conserve and develop natural resources; and enhance and maintain environmentally important lands and waters. The CCC strives to support and align with the California Natural Resources Agency's mission "To restore, protect, and manage the state's natural and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration and respect for all the communities and interests involved."

In addition, the CCC educates and trains California's young men and women to support the Department's mission "The young men and women of the Corps work hard protecting and restoring California's environment and responding to disasters, becoming stronger workers, citizens, and individuals through their service."

The CCC's mission is beneficial to the state's economy and its environment. The benefits to the state's economy are achieved through making young men and women employable after completion of the CCC curriculum and job training. The benefits to the state's environment are achieved by training Corpsmembers to respond to fires, floods and other emergencies, restoring California's environment, and implementing clean energy and energy conservation measures. Through their service, Corpsmembers gain life, work, and academic skills to become strong workers and citizens. To carry out the mission and goals of the Department, CCC enrolls approximately 3,000 Corpsmembers annually in its 25 field offices (Centers), which are supported by the CCC Headquarters office. The CCC has 7 residential Centers, where Corpsmembers live; the remaining 18 field offices are non-residential. The CCC operates under the California Public Resources Code (PRC) Sections 14000-14406 (see Appendix B). These PRC sections provide the focus for the CCC's mission establish the policies under which the CCC is required to operate. The majority of the CCC's resources are focused to support four operational areas:

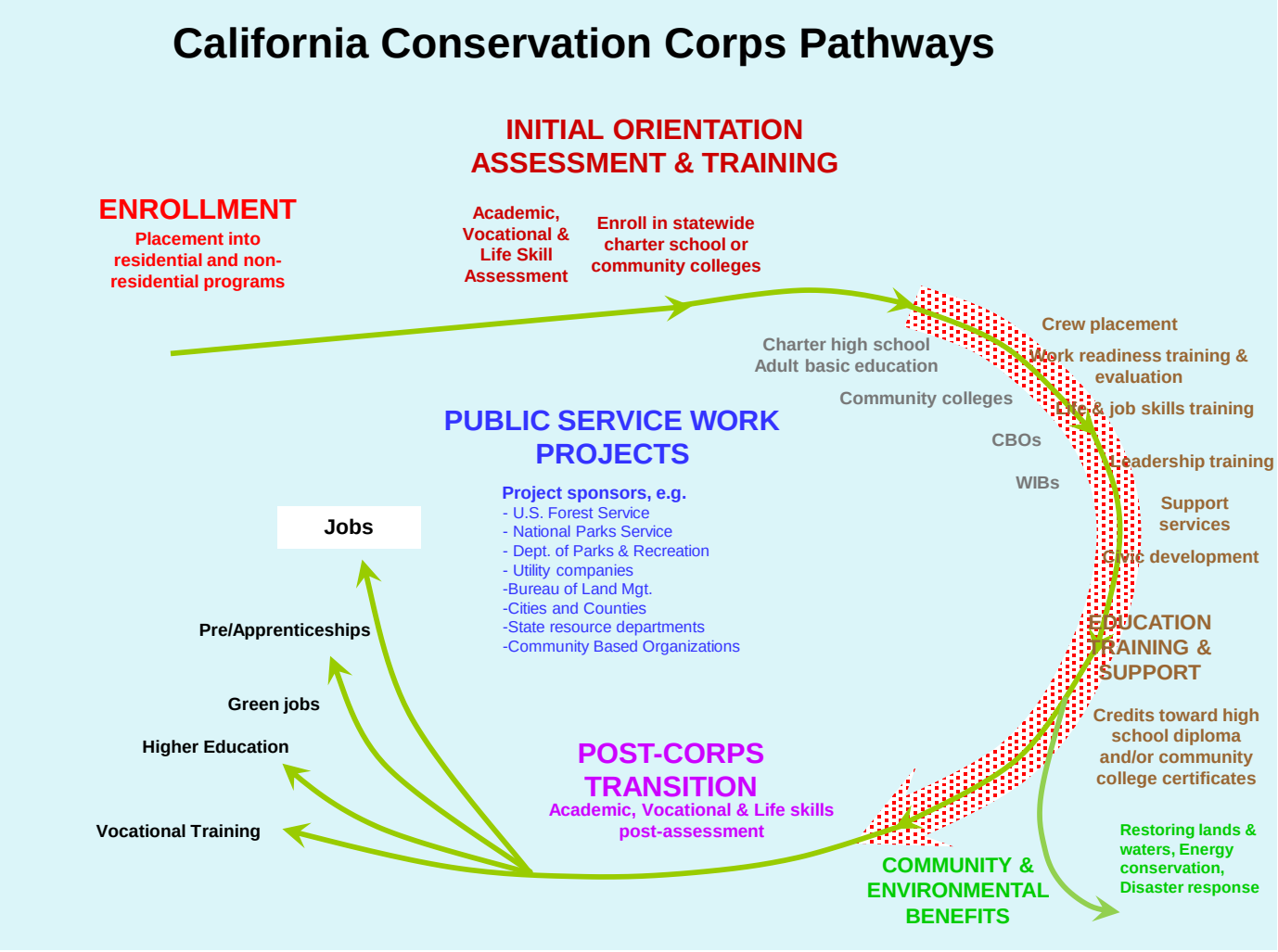
- Natural Resource work – Corpsmembers protect and enhance the state's natural resources through landscaping, park development, trail construction, tree-planting, fire hazard reduction, energy efficiency auditing and retrofitting, irrigation system installation, watershed improvement, wildlife habitat enhancement, removal of nonnative vegetation, fence construction and meadow restoration.
- Emergency Response – Corpsmembers are dispatched to fires (assisting in initial attack, mop-up and logistical support); floods (filling sandbags, reinforcing levees and stabilizing hillsides); earthquake response operations (removing hazards and staffing disaster assistance centers); oil

spill cleanups; snow removal assignments; search-and-rescues; pest infestations; and homeland security assistance programs.

- Corpsmember Education – Corpsmembers are provided opportunities to advance their academic skills while in the CCC through local adult and charter schools, and community colleges.
- Corpsmember Development and Training – The CCC stresses both work and service ethic, which includes teamwork, self-discipline, leadership, and giving back to California. Corpsmembers learn conservation principles and career planning. The CCC also offers training in, among other areas, trail building, first aid and firefighting certification, which can lead to internship opportunities with various employers in California.

The CCC's Pathways Model (Figure 1) illustrated below represents a graphical depiction of Corpsmember career pathways leading to related occupational options.

Figure 1: Corpsmember Pathways Model



To carry out the Department's mission and comply with its governing PRC sections, the CCC is required to actively seek reimbursable (fee-for-service) environmental work projects from state and non-state entities. The Collins-Dugan California Conservation Corps Reimbursement (CD) Account was created to support the functions of the CCC, and funds received from contracts awarded to the CCC are deposited into the CD Account. The CCC also receives an annual operating budget partially funded through the State's General Fund. Each year, more than $25 million in reimbursable revenue must be generated and deposited in the CD Account to ensure the CCC's base budget is made whole.

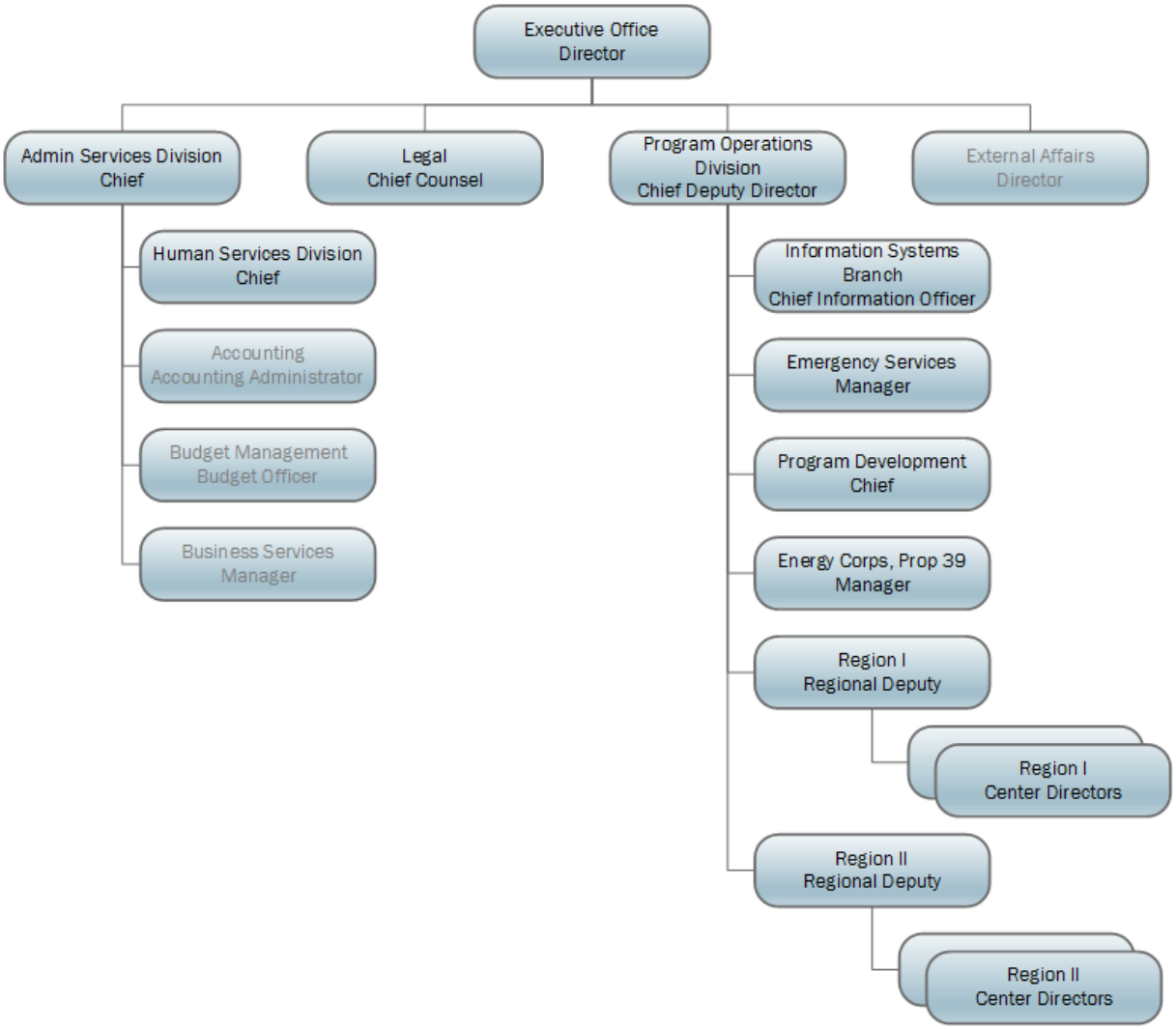
The CCC operates in a budget and operationally delegated Center system with Headquarters located in Sacramento. The CCC Headquarters serves in both program administration and program support roles. The Centers are strategically located throughout the State and offer both residential and non-residential programs. T Each Center's primary function is operational program delivery of the CCC mission, including development of Corpsmembers, restoring and enhancing natural environments for the State of California and emergency response to disasters.

The CCC Corpsmembers are not classified as civil service employees, but rather as enrollees in a job training and life skills program and thus they are considered exempt contract personnel. The CCC is required to manage, maintain, track, monitor, and report on all administrative, educational and functional activities related to the Corpsmembers.

Over the last two years, CCC has undertaken an extensive effort to perform business problem analysis. The analysis targeted CCC's Corpsmember information management, with particular focus on analyzing Corpsmember development, timekeeping, work projects, health and safety, and performance measurement metrics. The analysis' overall objective was aligning the CCC's goals and strategies with initiatives designed to deliver improvements at the enterprise level. In addition, the analysis defined business problems faced by the business areas that are obstacles to efficiently achieving the Department's mission and identified opportunities for solving the problems.

The CCC's organizational chart (Figure 2) illustrated in the next page represents a high level description of the Department's business structure.

Figure 2: California Conservation Corps Organizational Chart



The **in-scope** business functions for each Branch/Office depicted within the CCC's Organizational Chart in Figure 2 are as follows:

- Human Resources Branch:
  - Manages Corpsmember personal information for their payroll and benefits
  - program, including Health, Dental, Vision, Employee Assistance Program, Workers' Compensation, Family Medical Leave, Pregnancy Disability Leave and Life Insurance.
  - Assists Corpsmembers in navigating the Workers' Compensation injury claim reporting process, and ensures Corpsmembers receive the correct compensation for pay lost due to injuries.
  - Return-to-Work Coordinators' (RTWC) work with the Centers to bring injured Corpsmembers back into the program upon completion of treatment for their program-related injuries.

- Plans, conducts, and evaluates comprehensive occupational health and safety programs to promote a safe program environment for all Corpsmembers. The Health and Safety Officer ensures OSHA and Department of Labor reporting requirements are met, and laws and regulations relating to health and safety are followed.
- Negotiates Corpsmember health benefit contracts.

- Emergency Services Office:
  - The CCC is mandated by PRC Section 14300 and 14307 and the State Emergency Plan to respond, when requested, to any natural disaster or other emergency.
  - Dispatches and tracks crews and resources statewide.
  - Responsible for preparing and submitting accurate information to produce detailed statewide invoices or costs to varying agencies including FEMA, CalEMA, USFS, CalFire, BLM, CDFA, Water Resources, and Fish and Wildlife, National Park Services, and other federal, state and local entities.
  - Responsible for coordinating with other entities to maintain the necessary communication systems to ensure effectively and timely emergency response.

- Program Development:
  - Corpsmember Development Unit (CMD) – oversees development and maintenance of the Corpsmember training and education programs in the CCC.
    - Develops and revises CCC core curriculum, including the new Corpsmember Orientation on Program (COMET), Conservation Awareness Training, the Career Development and Transition Program, and the Corpsmember Leadership Training Program.
    - Coordinates with Charter school staff to ensure Corpsmembers receive high school preparation classes, and works with Center CMD staff to monitor achievements.
    - Oversees and approves CCC and AmeriCorps scholarships for qualified Corpsmembers.
  - Special Programs Unit (SP) - Oversees the administration of bond-funded programs and other special-funded programs.
    - Develops funding guidelines, application packages, provides technical assistance to field staff, and accepts proposals for local special-funded projects.
    - Tracks hours worked on approved projects and serves as a liaison between CCC Centers and Accounting.
    - Conducts site visits to ensure project work meets CCC funding criteria.

- Energy Corps, Proposition 39 Unit:
  - Develop a self-sustaining, highly technical training of energy efficiency crews that both assist Corpsmembers in energy career pathways and making a profound impact in energy reduction for the State of California.

- Provides field and administrative direction and support to 12 field crews in the performance of energy surveys and other energy efficiency projects in support of Proposition 39 goals and requirements.
- Development and coordination of initial and secondary technical trainings to Corpsmembers and staff. Attendees will start with basic level courses that go on towards more advanced skills and functions.
- Responsible for all phases of program definition, implementation, expenses, performance data tracking and metrics.

- Regions I and II:
  - CCC Field Centers (Centers) – strategically located throughout the State with primary functions of delivering the CCC's mission by providing vocational work, training, and educational opportunities to Corpsmembers; and assisting federal, state and local agencies, and non-profit entities with the conservation of California's natural resources.

    Centers are responsible for engaging and managing fee-for-service project works to meet reimbursement goals and maintaining Corpsmember FTEs.

- Information Systems Branch (ISB):
  - Responsible for overseeing and supporting CADCARS and all the associated IT infrastructure and systems that allow Field and HQ staff to access and use CADCARS.
  - Ensures that the Department's adhere to State, Agency and Department IT policies.
  - Supports and administers file storage, printers, desktops, laptops, Wi-Fi, LAN, WAN, W-LAN, electronic faxing, and telecom (both cell and hardline phones) for and between all CCC business areas and facilities.
  - Oversees the day to day operations of the Department's electronic communication activities.
  - Oversight of all IT equipment
  - Maintains security (anti-virus, etc.) of the Departments computing environment.
  - Monitors business value in terms of IT assets and processes.

The **out of scope** business functions for each Branch/Office within the CCC's Organizational Chart in Figure 2 are as follows:

- Budget Management Office[2]:
  - Prepares allotments for all CCC Centers/Units authorized to receive CD Account appropriation.
  - Monitors expenses and assists in preparing year-end expense projections to ensure expenses do not exceed both General and CD funds appropriation.

[2] Functions for these Branches/Offices will be implemented in FI$Cal, and will not be part of the SaaS solution.

  - Manages, monitors, reconciles, and tracks fee-for-service contracts from inception through completion, reviews contracts for compliance, answers questions from project sponsors and provides technical guidance on fulfillment of activities and resolving sponsor issues.

- Accounting Branch[2]:
  - Audits expense transactions from Centers/Units, and prepares expense claim schedules for payment by SCO.
  - Monitors the cash balance to assure there are adequate reserves in the CD Account to process anticipated expenses. The Accounting Branch and Budget Office continuously share information to assist with the monitoring of cash reserves and expense tracking.
  - Generates fee-for-service invoices for completed project work.
  - Processes fee-for-service invoices in compliance with contract terms, allowable costs and invoicing requirements to ensure proper payment.
  - Tracks receipt and collection of payments associated with fee-for-service contracts.
  - Initiates and performs collection processes for late or unpaid fee-for-service invoices.

- Business Services Branch (BSB):
  - Provides administrative support to operations covering areas such as Cal-card administration, commodity purchasing, payable contracts, vehicle and equipment asset administration, building lease development/management and centralized Center purchases.
  - The CCC is a delegated procurement system, in which each budgeted unit has the authority to procure services and goods. It is the responsibility of the BSCB to support this function through development and maintenance of policies and procedures that will govern procurement requirements in line with existing State rules and regulations. To accomplish this, BSCB provides consistent and ongoing trainings to internal procurement staff.
  - Actively audits purchase order, service order and contract transactions throughout each fiscal year.
  - Serves as the point of contact for the CCC with all responsibility areas to the appropriate control agencies such as Dept. of General Services and Office of Fleet and Asset Administration. All of these activities ensure that the Corpsmembers have the materials, equipment, vehicles and services needed to perform in the program, both through work projects and the training and development they receive.

- External Affairs:
  - Responsible for writing statewide, regional and local grants.
  - Acts as the media contact and communications liaison with the CA Resource Agency.
  - Responsible for approving CCC website content and publishing the Department's newsletters, center fact sheets and other hand-outs.

- Other responsibilities include: event planning, alumni liaison and media support for program activities such as recruitment, project dedications, emergencies, and CCC anniversaries.

3.2. Business Problem and/or Opportunity

The CCC evaluated its current business processes for managing Corpsmember information. The results of the evaluation showed the CCC's processes for managing Corpsmember information are operating under a legacy system architected with 1980's technology; multiple Access databases; and multiple manual processes and spreadsheets. Technologies have improved since the system was created, and the CCC has not been able to meet the evolving needs of its Corpsmembers.

The business problems/and or opportunities identified in Section 3.2 are experienced almost throughout the entire Department as well as by the Corpsmembers and the Sponsoring Agencies. The following Branches/Offices are hindered by the current processes and system's ability to support functions:

- HR – Human Resources
- ES – Emergency Services Office
- PD – Program Development
- P39 – Energy Corps, Proposition 39 Unit
- Centers – Region I and II

The problems are not isolated to a specific business unit, geographical location, or business function.

3.2.1. Business Problems

The bolded letters at the end of each problem correspond to business objectives that address the problem. The objectives are listed below in Section 3.3.1: Business Objectives:

Problem 1. System is unsupportable

a. The specific server hardware, operating systems and application platforms are obsolete, outdated and unsupported by State or vendor. Based on the current rate of system errors and programmer intervention, we believe that the probability of complete system failure in the near future is very high.
b. CADCARS is antithetical to modern distributed and layered architecture. It is extremely difficult or to the extent impossible to create an interface with FI$CAL and CCC Recruitment System. For this reason, CADCARS infrastructure cannot be moved to RADC as required by AB2408.

Impact of system failure:

- Catastrophic disruption of business operations. This will necessitate a temporary rebuilding of business functions through labor-intensive manual processing of Corpsmember and Project administration. Business continuity will be disrupted for a minimum of two months during the rebuilding process.
- Loss of critical data such as Corpsmember leave balances, work history, scholarships, certifications, and other important information that will assist the Corpsmembers after they leave CCC.
- The emergency hiring of temporary staff to help with the manual processing of Corpsmember and Project administration. Currently, CCC's Human Resources Transactions Unit has 7 FTE's and 2 part-time staff. This would have to be increased to a minimum of 18 FTE's to process monthly Corpsmember enrollment, transfer, separation and payroll.

Problem 2. System is non-compliant with State and Federal Security policies

a. The system is non-compliant with State Administrative Manual (SAM) security policies, regulatory laws defined in the National Institute of Standards and Technology (NIST) and the Health Insurance Portability and Accountability Act (HIPAA), because, among other things, it:

   - Does not have the ability to implement industry standard security measures such as the use of strong passwords, file access control schemes and secure protocols.
   - Vulnerable to viruses, hackers, or unauthorized use of confidential and/or sensitive information.
   - Does not have the ability to archive information in accordance with the State's retention criteria for the various types of data.

b. Lack of separation of duties in the Centers due to the extensive manual processes results in allocation of CCC resources to perform multiple duties in conflict with each other.

Impact:

- Increased risk of compromising Corpsmember personal identification and medical information.
- Unable to comply with the reporting requirements.
- Continue to be non-compliant with state and federal security laws.

Problem 3. System is inflexible

a. Limits the ability to perform business functions. The time consuming workaround and large number of manual and redundant processes has created a situation where workload has significantly increased, while staffing has not. CCC staff compensate

for the increased in workload by neglecting important job duties including updating Corpsmember development curriculum.

b. Unable to easily adapt to new or expanding requirements to meet the Department's business needs.
c. Requires manual processing of ad hoc reports requested by legislative, executive management, control agencies and other stakeholders.
d. Does not capture critical decision making data, resulting in incomplete and inaccurate Corpsmember data.
e. Does not provide the ability to identify Corpsmember workload imbalances, predict workload needs, and monitor daily project activities such as prioritizing and deploying Corpsmember to emergencies
f. Does not allow 24/7 hour access for dispatching and assigning emergency service responders thus compromising the ability to respond to emergencies timely.
g. System cannot be expanded to take advantage of mobile technology to improve the time entry approval and daily accomplishment reporting.

Impact:

- Manual Project Work Management processes by each Center to develop, monitor, and validate project status or completion, result in redundant effort and extensive time consumption for the Project Coordinators. Processes include development of estimates for project work hours, activities, resources, and costs associated with potential projects, monitoring of project activities, managing project budget, and project reconciliation activities.
- Manual processes performed by CCC staff to develop Corpsmember schedules aligned to project result in increased workload, over scheduling of resources, redundancy, and lack of ability to track location of Corpsmembers. This also leads to confusion for Corpsmembers and inaccurate time reporting.
- Important tasks will continue to be neglected as CCC staff time is directed towards unnecessary workloads created by the inefficiencies of the system.
- Requires time consuming manual validation of data output due to inaccuracies
- Causes system processing difficulties due to data quality issues.
- Inhibits CCC from leveraging new technology.

Problem 4. Lacks ability to capture, manage, and track Corpsmember injuries and Workers' Compensation status.

a. Manually processed field notifications of Corpsmember injuries cause delays in the completion of appropriate Workers' Compensation forms within the required timeframe, resulting in penalties being assessed to the Department.

b. Manual processes performed by CCC staff to develop job hazard analyses (JHA) for projects, result in lack of information sharing, which increases risks to Corpsmembers health and safety and increases Workers' Compensation claims.

Impact:

- Inability to track reportable Corpsmember injuries to the State Compensation Insurance Fund (SCIF). Software to replace this functionality would have to be purchased at an approximate cost of $5700 plus annual support costs.
- Loss of injury records compromising the ability of Corpsmembers to file injury claims, or to prevent Workers' Compensation fraud. This could result in incurring penalties up to $400,000.
- Unable to comply with the reporting requirements.

Problem 5. Does not allow Corpsmember Crew Supervisors to remotely enter and approve time reporting while out in the field.

a. Manual processes performed by CCC staff to complete, submit, and approve Corpsmember time reporting information result in increased workload and high error rates in reporting work hours performed by Corpsmembers, causing incorrect payroll and invoices to be generated which can result in the Department having to pay Labor Code penalties.

Impact:

- Compromising the CCC's ability to pay Corpsmembers in a timely manner. The monthly Corpsmember payroll is approximately $1,500,000, excluding overtime. The CCC would be assessed penalties of $100 - $250 per incident for late payment of Corpsmembers. The CCC pays approximately 1400 Corpsmembers each month (penalties would range between $140,000-350,000 per month). Further, other costs associated with late payment, such as legal fees, interest, deflated morale, and loss of good will would be incurred, and while they are difficult to quantify, they could place a great financial burden on the Department.

Problem 6. Lacks data analytics and reporting capabilities to support Corpsmember and Project Performance Metrics such as:

- Corpsmember separation trends
- Project Criteria to meet legislative mandate
- FTE Calculation
- Injury Analysis
- Reimbursement goal analysis
- Corpsmember Competency
- Corpsmember education progress

- Corpsmember Development

Impact:

- The lack of reporting capabilities result in manual report development, increased workloads, redundancies and errors, reporting delays to control agencies and inaccurate results in other areas such as the :
  - Monthly CMD Competency Summary
  - General Project Listing by Legislative District (Assembly, Congressional, and Senate)
  - Total Corpsmember Monthly Work Leave Hours by Type/Unit
  - Statewide Work Hours by Resource Category
  - Work History by Work Type
  - Average Length of Stay
  - Corpsmember FTEs by Program/Position

Problem 7. Inability to provide quality customer services to Corpsmembers through no fault of the program, but through the antiquated nature of the business operations.

a. Lack of Recruitment System interface, forcing duplicate entry of Corpsmember data, increasing likelihood of errors, manual corrections, and loss or compromise of personal information.
b. Corpsmember Enrollment requires that the CCC Corpsmember and Center staff manually complete and process enrollment packets containing approximately 15 documents. The packet must be completed each time a Corpsmember is enrolled into a CCC program or changes programs, causing redundancy in form completion and processing by Clerks.
c. Manual Corpsmember Separation processes increase the risk of not meeting federal and state Labor Code requirements, which can result in penalties to the Department.
d. Corpsmember separation justifications (violence, failed background check, use of alcohol/drug, insubordination to accept a new assignment, family emergencies, hardship, graduation, etc.), cannot be captured, hindering the CCC's ability to make Corpsmember reinstatement determinations, posing increased risk to the safety of other Corpsmembers and state staff.
e. Manual processes performed by CCC staff to capture, manage, monitor, track, and report Corpsmember education and training development activities, progress, status, and certifications, results in increased workload, redundancy, and delayed responses to scholarship validation requests, impacting college and vocational education admissions. This also impacts the ability to manage and monitor

Corpsmember specialized training before Corpsmembers can be deployed during emergency response situations.

Impact:

- Loss of critical security data regarding terminated Corpsmembers who have been separated for cause. In 2012, 100 Corpsmembers were separated for violent and/or inappropriate behavior that would bar them from returning to the CCC.
- Compromising the ability to pay Corpsmembers upon separation. Approximately 150 Corpsmembers separate per month. Penalties for missing separation pay are equal to the full pay of the individual per day, plus penalties and any leave balance accrued. For instance if the system were down for 14 days, penalties could be as high as $67,200 per month ((($8.00/hr x 8hrs/day) x 75 CM) x 14 days).
- Possible civil litigation and Department of Labor enforcement action.
- Compromising educational opportunities to deserving Corpsmember graduates.

Problem 8. Inaccurate forecasting of Cash Flow and delayed accounts receivables.

a. Sponsor Verification packages are used to produce invoices. Most of the data collection and analysis to prepare Sponsor Verification packages is performed manually through the use of duplicative paper forms and spreadsheets. As a consequence, this creates many opportunities for mis-keying information and producing high error rates thus requiring time consuming manual validation of data output due to inaccuracies. The inefficient Sponsor Verification processes delay invoice issuance and payment collection within CCC's billing cycle, resulting in funding issues to the CD Account, and impact the Department's cash flow and ability to meet its expenditure obligations.

Impact:

- Loss of the automated revenue collection process, thus creating cash flow problems affecting the Collins-Dugan Reimbursement Fund. The CCC generates approximately 800 or more Sponsor Verification packages per month which are used to produce invoices. Currently, the CCC has one FTE per Center processing Sponsor Verification packages. We estimate that number would increase to three FTEs per Center if Sponsor Verification becomes a manual process.

Problem 9. Limited staff are stretched to support and maintain the Emergency program.

a. One Emergency Analyst is responsible for dispatching emergency crews, reconciling timesheets, preparing Sponsor Verification packages for invoicing or applying for

grant payments (Governor declared state of disaster emergency). The manual Corpsmember Emergency dispatching processes that take approximately 180 minutes, result in increased workload, redundancy, and delays in coordinating Corpsmember information for deployment assignments and responding to emergencies.

Impact:

- The dependence on highly manual, error-prone and paper-intensive emergency response processes creates a great risk to CCC specifically during fire season. A system failure or even an unplanned absence by a critical employee can cause disruption to the process of responding to emergencies as well as delays in processing Sponsor Verification packages, which in turn causes cash flow problems for the CCC.

Table 1 provides a summary of interrelationships between Business Functions, Business Areas and Business Problems.

Legend:

✓ - indicates the branch/office performing the business function
X - indicates the business problem associated with the business function and the branch/office impacted.

Table 1: Business Areas, Functions and Problems Matrix

Sub-System	Business Function	Branch/Office					Business Problem (Section 3.2.1)								
		HR	ES	PD	P39	Centers	1	2	3	4	5	6	7	8	9
Personnel	Corpsmember Enrollment	✓				✓	X	X	X				X		
Personnel	General Corpsmember Administration • Transfers • Separations	✓				✓	X	X	X			X	X		
CMD	Corpsmember Development			✓		✓	X		X			X	X		
CMD	Scholarships			✓		✓	X		X			X	X		
Project	Project Management • Daily Work Accomplishment • Sponsor Verification • Job Hazard Analysis		✓		✓	✓	X		X	X	X	X		X	X

Project	Scheduling/Dispatching		✓		✓	✓	X		X	X	X	X		X	X
Project/ Personnel	Time Keeping	✓	✓		✓	✓	X	X	X	X	X		X	X	
Project/ Personnel	Health and Safety • Injuries	✓				✓	X	X	X	X		X			
Project/ Personnel /CMD	Performance Management	✓	✓	✓	✓	✓	X		X	X		X	X	X	

3.2.2. Business Opportunities

1. Take advantage of proven technology options for an enterprise resource management systems to, among other things:
    a. Obtain a system that allows real-time access for field and headquarter staff
    b. Reduce paper usage
    c. Provide a Corpsmember-centric system that allows a consolidated view of all project, performance, and development information

2. Utilize mobile and web based technologies to, among other things:
    a. Provide increased remote access
    b. Integrate existing mobile devices
    c. Provide more interfaces to use online services

3. Provide improved services to Corpsmembers that, among other things:
    a. Improves accuracy of information
        i. Relating to Enrollments and payroll
        ii. Relating to community service requirements to quality for scholarships
    b. Generates Corpsmember transcripts that include high school and vocational information
    c. Allows Corpsmember pay type and hours to be captured accurately
        i. Relating to pay-type, stipend versus hourly
        ii. Improving FTE calculation methodology, allowing CCC to better calculate enrollment levels

4. Develop data warehouse capabilities that, among other things:
    a. Provides data modeling and analytics to support business intelligence and strategic planning
        i. Relating to improving emergency response by leveraging an enterprise IT system with the capability of efficiently dispatching emergency crews
        ii. Accurate tracking and analysis of hours worked
        iii. Ability to store required documents online
        iv. Ability to plan and schedule projects and crews at a minimum of three months in advance

v. Ability to create relationships from JHA to the related work project tasks, to effectively gather and measure illness and injury data, and provide accurate trend analysis and corrective actions.

b. Provides integrated data warehouse functions across all business areas
c. Decreases time needed to generate routine and ad-hoc reports
d. Utilizes one comprehensive system instead of various systems, applications, and spreadsheets

5. Implement data security capabilities to ensure Corpsmember confidential, sensitive and medical information is properly safeguarded against involuntary or fraudulent disclosure
    a. Comply with the State Administrative Manual (SAM) security policies, and meet other security guidelines/regulatory laws defined in the National Institute of Standards and Technology (NIST) and the Health Insurance Portability and Accountability Act (HIPAA)
    b. Use current technology to identify Corpsmembers through assigned member identification numbers and mask confidential data such as social security number
    c. Obtain a system that allows user based roles to be created

6. Implement a system with an interface to FI$CAL that allows CCC staff to efficiently and effectively manage, monitor, and reconcile all fee-for-service information
    a. Improve response and resolution turnarounds for sponsor inquiries and issues
    b. Reducing invoice disputes and increase sponsor satisfaction.
    c. Provide estimation capabilities for more accurate planning, monitoring, and reconciliation

3.3. Business Objectives and/or Benefits

3.3.1. Business Objectives

The C³ Project objectives will include the following:

Objective 1. Develop and deploy an automated system (C^3) that will replace CCC's legacy system (CADCARS), implement the required system interfaces, eliminate 20 databases and 216 spreadsheets, and allow for the reengineering, improvement and automation of business processes by:

a. Replacing 90% of CADCARS functionality, [Projects and Personnel Subsystems] in Release I: 3/30/16;
b. Replacing the remaining 10% of CADCARS functionality [CMD Subsystem] in Release II: 6/30/16;
c. Implementing IOCS interfaces through bi-directional data replication with FI$CAL and SaaS, inbound transfers with SCO and SCIF, and internal recruitment system interface in Release I: 3/30/16;
d. Eliminating 20 Microsoft Databases in Release II: 6/30/16;

e. Eliminating 216 Excel Spreadsheets, identified in Section 4.1.1: Performance Management, in Release II: 6/30/16;
f. Reducing 100% of manual processes, described in Section 4.1.2 Current Business Processes, to 30% through automation in Releases I, II & III: 9/30/16;
g. Eliminating obsolete technology by no later than 8/1/16 (1 month after Release II completion).

See Figure 3. CADCARS Architecture for illustration of CADCARS Architecture and Section 6.4.4 for a detailed Project Schedule of Releases I, II & III.

Relevant Business Problem (s): Problems 1, 2, 3, 4, 5, 6, 7, 8, 9

Objective 2. Reduce the number of inaccurate Sponsor Verification packages[3] by 80%, a total of approximately 320 packages no later than 4/1/2017 (6 months after Release III completion).

Relevant Business Problem (s): Problems 3, 8

Objective 3. Reduce the average the average time to dispatch emergency crews from 180 minutes to 30 minutes no later than 4/1/2017 (6 months after Release III completion).

Relevant Business Problem (s): Problems 3, 9

Objective 4. Provide the ability to work securely, to comply with state and federal security policies, and to implement an enterprise automated system that passes an IT Security audit no later than 4/1/2017 (6 months after Release III completion).

Relevant Business Problem (s): Problem 2

Objective 5. Provide data analysis and reporting capabilities to allow for CCC performance management reporting and ad-hoc reporting to executive management, legislature, control agencies, etc. no later than 4/1/2017 (6 months after Release III completion).

The performance management that is in scope of this objective is detailed in Section 3.2.1 Business Problems – Problem 8. This Objective affects the following Branches/Offices:

- ✓HR - Human Resources
- ✓EO - Emergency Services Office
- ✓PD - Program Development
- ✓P39 - Energy Corps, Proposition 39 Unit
- ✓Centers – Region I and II

[3] Information from the Sponsor Verification package is used to produce invoices. See Section 4.1.2 – Sponsor Verification for a description of the Sponsor Verification process.

Relevant Business Problem (s): Problem 6

Objective 6. Reduce the number of paper forms a Corpsmember enrollee must manually complete from 15 to 5 forms. The 15 paper forms are identified in Section 4.1.1: Corpsmember Enrollment by the end of Release II: 6/30/2016.

Relevant Business Problem (s): Problems 7

Objective 7. Establish policies, procedures and a mechanism to develop a comprehensive Job Hazard analyses (JHA) for projects and track Corpsmember injuries and illnesses by the end of Release III: 9/30/16.

Relevant Business Problem (s): Problems 4, 6

Objective 8. Reduce the number of days to validate a Corpsmember's scholarship from 20 to 10 business days by the end of Release II: 6/30/16.

Relevant Business Problem (s): Problems 7

Objective 9. Establish policies, procedures and a mechanism to securely capture and provide Corpsmembers with their educational transcripts, certifications and work related training accomplishments by the end of Release II: 6/30/16

Relevant Business Problem (s): Problems3, 7

Objective 10. Establish policies, procedures and implement mobile technology, which doesn't currently exist, to allow remote entry of time, time approval and daily accomplishment reporting by the end of Release III: 9/30/16

Relevant Business Problem (s): Problems 3, 5

3.3.2. Business Benefits

The Department and the Corpsmembers are the beneficiaries of the new system. The benefits listed below will be realized within a year of successful implementation.

1. Improvement of the ability to respond to emergencies by
    a. Implementing a common statewide scheduling tool,
    b. Reducing crew dispatch time from the current from 180 to 30 minutes from receipt of a request, and
    c. C³ interface with FI$CAL reduces the completion and submission of Sponsor Verification packages to the Accounting Office from the current five business days to a maximum of two business days following receipt of Sponsor Verification packages from Centers.

2. Improved emergency response capabilities will allow the CCC's sole Emergency Analyst to focus on providing adequate emergency response training to CCC staff, and revise outdated emergency response policies and procedures.
3. Reduction of the number of inaccurate Sponsor Verification packages.
4. Provision of dynamic tools that furnish decision makers with near-time access to critical information necessary for timely data-driven decisions.
5. Expansion of Corpsmember FTE calculations to include stipend Corpsmembers.
6. Improvement of the CCC Health and Safety program by providing the ability to accurately track, measure, and report the number of injury trends and costs. This data will allow for the development of a comprehensive injury prevention plan to mitigate hazards, and create proactive steps to reduce injuries and related costs.
7. Improvement of the Report interface and allowing the generation of ad-hoc reports.

3.3.3. Project Performance Indicators Evaluation Plan

The table below specifies how each business objective will be measured, and allows the use of consistent evaluation criteria to measure the success of each objective. The recipients of the benefits of each business objective will be the Department (the CCC), the Corpsmembers, and Sponsoring Agencies.

Table 2: Performance Indicators Evaluation Plan

Business Objective	Metric	Baseline	Target	By Date	Methodology
1. Develop and deploy an automated system (C^3) that will replace CCC's legacy system (CADCARS), implement the required system interfaces, eliminate 20 databases and 216 spreadsheets, and allow for the reengineering, improvement and automation of business processes the by:					
a. Replacing 90% of CADCARS functionality, [Projects and	Functional Requirement Count	Functional Requirements included in CADCARS	Implementation of Personnel and Project Subsystems	Release I: 3/30/16	Ensure successful project delivery by applying Software Development Life Cycle (SDLC) and Project Body of Knowledge

Business Objective	Metric	Baseline	Target	By Date	Methodology
Personnel Subsystems]		Personnel and Project subsystems	Functional Requirements		(PMBOK) best practices and adhering to the CA Project Management Methodology (CA-PMM). Verify all functional requirements for the Projects, and Personnel subsystems are implemented successfully in Release I during the User Acceptance Testing (UAT) phase using the Requirements Traceability Matrix to be developed and finalized during the Project Planning Phase.
b. Replacing the remaining 10% of CADCARS functionality [CMD Subsystem]	Functional Requirement Count	Functional requirements included in CADCARS CMD subsystem	Implementation of CMD Subsystem requirement	Release II: 6/30/16	Ensure successful project delivery by applying Software Development Life Cycle (SDLC) and Project Body of Knowledge (PMBOK) best practices and adhering to the CA Project Management Methodology (CA-PMM). Verify all functional requirements for CMD Subsystem is implemented successfully in Release II during the User Acceptance Testing (UAT) phase using the Requirements Traceability Matrix to be developed and

Business Objective	Metric	Baseline	Target	By Date	Methodology
					finalized during the Project Planning Phase.
c. Implementing IOCS interfaces through bi-directional data replication with FI$CAL and SaaS, inbound transfers with SCO and SCIF, and internal recruitment system interface	Functional Requirement Count	Functional requirements identified in CADCARS analysis of interfaces with Fi$CAL, SCIF and SCO; and the internal recruitment system interface	Implementation of 3 External System interfaces and 1 Internal System Interface	Release I: 3/30/16	Ensure successful project delivery by applying Software Development Life Cycle (SDLC) and Project Body of Knowledge (PMBOK) best practices and adhering to the CA Project Management Methodology (CA-PMM). Verify all functional requirements for the interfaces to FI$Cal, SCIF, SCO and recruitment system are implemented successfully in Releases I during the User Acceptance Testing (UAT) phase using the Requirements Traceability Matrix to be developed and finalized during the Project Planning Phase.
d. Eliminating 20 Microsoft Databases	Number of MS Databases in production	20	0	Release II: 6/30/16	The C³ Project Management Plan will include a "CADCARS Decommission Plan" detailing the proper disposition of all CADCARS components. Execute the plan, perform appropriate audits and validate audit results.

Business Objective	Metric	Baseline	Target	By Date	Methodology
e. Eliminating 216 Excel Spreadsheets, identified in Section 4.1.1: Performance Management	Number of Excel Spreadsheets in production	216	0	Release II: 6/30/16	The C³ Project Management Plan will include a "CADCARS Decommission Plan" detailing the proper disposition of all CADCARS components. Execute the plan, perform appropriate audits and validate audit results.
f. Reducing 100% of manual processes, described in Section 4.1.2 Current Business Processes, to 30% through automation	Number of Automated Business Processes	100% of current manual business processes	70% of business processes are automated	Release III: 9/30/16	Verify all the functional and system requirements are successfully implemented in Releases I, II, and III during UAT using the Requirements Traceability matrix. Audit and validate that manual processes are no longer in use and provide compliance reporting to appropriate governing business area(s).
g. Eliminating obsolete technology by no later than 9/30/2016 (3 months after Release III completion).	Number of servers, desktops, Backup Hardware and Tapes, and WinBatch Software License	Novel Servers = $1200/year Report Writer Desktop = 1 Backup Hardware and tapes = $200/year Backup Software License = $ 100/year WinBatch Software =	Number of obsolete technology server and desktops = 0 Cost of Obsolete Technology = $0	CADCARS Decommissioning Date: 8/1/16	The C³ Project Management Plan will include a "CADCARS Decommission Plan" detailing the proper disposition of all CADCARS components. Execute the plan, perform appropriate audits and validate audit results, including: Two months after Release II: • Count the number of obsolete servers and

Business Objective	Metric	Baseline	Target	By Date	Methodology
		$150/year All the other no cost software listed in Section 4.9			workstation that were be retired. • Audit and Validate costs spent on obsolete technologies are $0. • Verify CCC no longer supports a Data Center in CCC HQ.
2. Reduce the number of inaccurate Sponsor Verification Packages	Number of returned inaccurate Sponsor Verification Packages	Average 400 returned inaccurate Sponsor Verification Packages per year	Maximum 80 returned inaccurate Sponsor Verification Packages per year	4/1/17 (6 Months after Release III completion)	Through the use of monthly performance reporting, the business area governing this criteria, will monitor returned inaccurate Sponsor Verification Packages and provide status reports and measures for further reductions for a period of twelve months after project completion.
3. Reduce the average time to dispatch crews	Crew Dispatch Time	180 Minutes	30 Minutes	4/1/17 (6 Months after Release III completion	Through the use of monthly performance reporting, the business area governing this criteria, will monitor crew dispatch time and provide status reports and measures for further reductions to meet target goals for a period of six months after project completion.

Business Objective	Metric	Baseline	Target	By Date	Methodology
4. Provide the ability to work securely, comply with state and federal security policies and to implement an enterprise automated system, that passes an IT security audit	Number of Audit Findings Usage of SSN for CM Identification	Several Audit Findings 100% usage of SSN	No Audit Findings 0% usage of SSN	4/1/17 (6 Months after Release III completion Release I: 3/30/16 Release II: 6/30/16	Verify all security requirements are implemented successfully in Releases I, II and III during Users UAT using the Requirements Traceability Matrix. Ensure compliance through auditing functions and ensure mandated reporting requirements are met.
5. Provide data analysis and reporting capabilities to allow for CCC performance management reporting and ad-hoc reporting to executive management, legislature, control agencies, etc.	Functional Requirement Count Report Development Time	Functional requirements included in the business requirements for business analytics and Reporting Ad-Hoc reports are created by the legacy programmer and generated on average, 3 business days	Implementation of Business Analytics and Reporting Requirements Ad-Hoc reports created by user and generated to 1 business day	4/1/17 (6 Months after Release III 4/1/17 (6 Months after Release III completion	Verify all Business Analytics and Reporting requirements are successfully implemented in Releases I and II during UAT using the Requirements Traceability Matrix Through the use of monthly performance reporting, the business area governing this criteria, will monitor development time of Ad-Hoc reports and provide status reports and measures for further reductions for a period of six months after project completion.
6. Reduce the number of paper forms a	Number of paper forms a Corpsmember	15 manual forms currently exist	Eliminate 4 paper forms Automate 6	Release II: 6/30/16	Verify all enrollment requirements are successfully implemented in Release I during

Business Objective	Metric	Baseline	Target	By Date	Methodology
Corpsmember must manually complete.	enrollee must manually complete		paper forms 5 paper forms requiring wet signatures remain as-is		UAT using the Requirements Traceability Matrix. Audit and validate that manual forms are no longer in use and provide compliance reporting to appropriate governing business area.
7. Establish policies, procedures and a mechanism to develop a comprehensive Job Hazard analyses (JHA) for projects and track Corpsmember injuries and illnesses by the end of Release III: 9/30/16.	Number of policies, Number of procedures and Number of comprehensive JHA and ability to track Corpsmember injuries and illnesses	0 – not currently monitored	Tracking of the number of comprehensive JHA and number of Corpsmember injuries and illnesses	Release III: 9/30/16	Verify JHA and Corpsmember injuries and illness tracking requirements are successfully implemented in Releases I, II and III during UAT using the Requirements Traceability Matrix
8. Reduce the number of days to validate a Corpsmember's scholarship request	Number of days to validate a scholarship request	20 business days from date of request	10 business days from date of request	Release II: 6/30/16	Through the use of periodic performance reporting, the business area governing this criteria, will monitor processing time for validating scholarship requests and provide status reports and measures for further reductions to meet target goals.
9. Establish policies, procedures and a	Number of policies, Number	N/A – currently not available	Established policies,	Release II: 6/30/16	Verify all the functional and system requirements are

Business Objective	Metric	Baseline	Target	By Date	Methodology
mechanism to provide Corpsmembers with their educational transcripts, certifications and work related training accomplishments	of procedures and Corpsmembers ability to access Education transcripts, certifications and training accomplishments		procedures and automated mechanism to track and make available transcripts, certifications and training accomplishments		successfully implemented in Releases II during UAT using the Requirements Traceability Matrix. Audit and validate that Corpsmembers can access their educational transcripts, certifications and training accomplishments. Provide reporting to appropriate governing business area for compliance and/or problem resolution.
10. Establish policies, procedures and implement mobile technology, which doesn't currently exist, to allow remote entry of time, time approval and daily accomplishment reporting	Number of policies, Number of procedures and remote entry ability for Time entry, time approval, and daily accomplishing reporting	0% unavailable	Application availability, based on functional requirement, for mobile devices (smart phones and tablets) except in situations when these devices are not available	Release III 9/30/16	Verify all the functional and system requirements are successfully implemented in Releases I, II and III during UAT using the Requirements Traceability Matrix. Verify that the mobile interface requirements are successfully implemented in Release III using the Requirements Traceability Matrix and that targeted users can successfully use mobile technology to enter and approve time and report daily accomplishments.

3.4. Business Functional Requirements

This section presents business functional and technical requirements traceability matrix.

The systems column in the table below was added to help the reader understand which "service" within the hybrid solution described in Section 5 of this FSR will be providing the stated requirement.

- **SaaS** = Software as a Service and is considered the primary application. The SaaS provider will support a majority of the Corpsmember Human Resources Management, Corpsmember Development, Timekeeping and Project Management functions.
- **IOCS** = Interface and Operational Continuity System is also further described in Section 5. The IOCS represents the services that will be provided by the Resource Agency Data Center (RADC) in support of C^3. The primary functions will be to:
    1. Provide data connectivity and transfer between the SaaS solution and Fi$Cal
    2. Serve as the backup and operational continuity databases

ID	Requirements Description	Business Objectives	Systems
1.0 System Requirements			
1.1	Implement a web-based with zero footprint enterprise resource management system.	1	• SaaS
1.2	Support the Projects and Personnel Subsystems and their workflows, based on reengineered business processes.	1	• SaaS
1.3	Accommodate evolving business requirements.	1	• SaaS • IOCS
1.4	Support a minimum of 300 concurrent CCC users.	1	• SaaS
1.5	Ability to access information across business divisions and programs.	1	• SaaS
1.6	Flexible and configurable data fields, workflow processes, rules, automated alerts, and email notifications.	1	• SaaS
1.7	Allow for the establishment of approvals and controls in the amendment process, including the ability to reactivate closed records with appropriate approval.	1	• SaaS
1.8	Allow users to save partially completed processes.	1	• SaaS
1.9	Ability to resize, save, upload and download system artifacts in defined formats. Artifacts must be linked to a system entity (e.g. Corpsmember, work project, etc.).	1	• SaaS
1.10	Support CCC's data retention policy, which states that data will be deleted only after being inactive: • 9 years for non-Bond related data • 30 Years for Bond related data	1	• SaaS • IOCS
1.11	Enable flagging and retention of data that is subject to litigation hold.	1	• SaaS • IOCS
1.12	Ability to batch transfer CCC data from and/or to the CCC MS SQL	1	• SaaS

ID	Requirements Description	Business Objectives	Systems
	Server databases hosted at the RADC daily. (The exact time will be determined during the requirements analysis phase).		• IOCS
1.13	Migration of clean active data into the new system from CCC's data source: CADCARS, Microsoft Access databases Excel spreadsheets and CCC MS SQL Server databases.	1	• SaaS • IOCS
1.14	Provide 24/7 support.	1, 10	• SaaS
1.15	Compliance with the California Government Code 1135 and 508 of the Federal Rehabilitation Act of 1973 for accessibility.	1	• SaaS
2.0 Security Requirements			
2.1	Meet Federal and State laws, policies, and regulations for security, privacy and confidentiality of data.	4	• SaaS • IOCS
2.2	Support Federated Identity single sign-on security controls, such as strong passwords, two-factor authentication, and restricted access to specific screens, fields and processes.	4	• SaaS
2.3	Allow the CCC to define and grant/revoke different levels of access to the system based on CCC defined user roles.	4	• SaaS • IOCS
2.4	Ability to track and report auditing, including the ability to track and monitor users access actions, changes and modifications.	4	• SaaS • IOCS
3.0 Projects Sub-system			
3.1	*Common Requirements*		
3.1.1	Collect, track, monitor, and report on work project data.	1	• SaaS
3.1.2	All Reimbursable work projects and bond projects must have start and end dates. Non-reimbursable work projects, emergency work projects, and non-paid work projects may not require an end date.	1,2,3	• SaaS
3.1.3	Reconcile and view current status of reimbursable work projects.	1,2,3,5	• SaaS
3.2	*Contact Information*		
3.2.1	Collect, maintain and manage Project Sponsor information.	1,2,3	• SaaS
3.2.2	Must include a centralized contact list organized into customizable groups, managed by each Center and shareable department-wide.	1,2,3	• SaaS
3.2.4	Assign Sponsor Representative, Project Manager, and/or Technical Supervisor from the contact list.	1,2,3	• SaaS
3.2.5	Integrate contact list with communication methods such as email, and text messaging.	1,2,3	• SaaS
3.3	*Work Project Management*		
3.3.1	Reimbursable work projects must be linked to either a task order, which is linked to a fee-for-service contract or to a fee-for-service contract if there is no task order (parent-child relationship). Task order and/or contract unique record identifier will be provided by FI$CAL	1,2,3	• SaaS
3.3.2	Assign, manage, track, and report on the following work project types:	1,2,3,5	• SaaS

ID	Requirements Description	Business Objectives	Systems
	• Reimbursable • Emergency • Bond • Public Services, Training and Support (non-reimbursable • Corpsmember non-paid hours		
3.3.3	Each work project type will have a separate template and work flow.	1	• SaaS
3.3.4	Link work site, spike and nearest medical facility locations to a work project.	1,3,7	• SaaS
3.3.5	Provide mapping capability to show worksite, spike and nearest medical facility locations with navigation.	1,3,7	• SaaS
3.3.6	Ability to use intersections, geo-location, etc. as a worksite or spike location, in lieu of an address.	1,3	• SaaS
3.3.7	Capture and report on Assembly, Senate, and Congressional Districts associated with project locations and Corpsmember addresses.	1,5	• SaaS
3.3.8	Track and report the extent to which projects meet legislative mandates by scoring Legislative Objectives. Assign weights to Legislative Objectives and item choices.	1,5	• SaaS
3.3.9	For each work project, collect, create trend analyses, and report on the following: • Scope of Work Activities. • CCC Resource Categories (e.g. tree planting, forest improvement, etc.). • Job Hazard Analysis (JHA)	1,5,7	• SaaS
3.4	*Emergency Services*		
3.4.1	Dispatch resources to an emergency incident using email and/or text message.	1, 3	• SaaS
3.4.2	Create, monitor and report on paid and unpaid emergency incidents.	1,3.5	• SaaS
3.4.3	Notification to the Emergency Unit of crew release time and date.	1,3	• SaaS
3.5	*Scheduling and Time Keeping*		
3.5.1	Create a time management tool to organize and manage work projects and Corpsmember scheduling, including education activities and volunteer work, at least three months in advance.	1,3,10	• SaaS
3.5.2	Ability to modify daily, weekly and monthly crew schedules (Crew Roster).	1,3,10	• SaaS
3.5.3	Ability to assign Corpsmembers to multiple crews.	1	• SaaS
3.5.4	Copy current or past schedules to create new schedules.	1	• SaaS
3.5.5	Display work project schedules in a calendar view by day, week, or month.	1,3	• SaaS
3.5.6	Provide anytime, anywhere ability to record Corpsmember time.	1,10	• SaaS
3.5.7	Collect and report on paid and unpaid hours for hourly and stipend Corpsmembers.	1,7	• SaaS

ID	Requirements Description	Business Objectives	Systems
3.5.8	Ability to enter time in two ways: • Enter time using start and end times (for Emergency Time Keeping). • Enter time using the number of hours worked.	1,3	• SaaS
3.5.9	Create workflows for online routing and electronic approval of daily time postings and monthly timesheets.	1	• SaaS
3.5.10	Reconcile scheduled and actual daily hours worked. Discrepancies and inconsistencies must automatically trigger notifications.	1	• SaaS
3.5.11	Create a time lockout feature ensuring no time information can be added, or modified after a specific date without appropriate approval. This will be either a one-time or a recurring event as defined by the CCC.	1,2	• SaaS
4.0 Personnel Subsystem			
4.1	*Common Requirements*		
4.1.1	Provide a centralized and cohesive solution for the entire Corpsmember lifecycle.	1,6	• SaaS
4.1.2	Automate human resources management functions.	1,6	• SaaS
4.1.3	Provide enrollment, time and attendance, pay, benefits, training, scholarship and Workers' Compensation modules.	1,6	• SaaS
4.1.4	Provide current Corpsmember population information through dashboards, reports, analytics, and comprehensive Corpsmember profiles.	1,5	• SaaS
4.2	*Corpsmember Administration*		
4.2.1	Administer the Corpsmember transition from enrollment to separation.	1,6	• SaaS
4.2.2	Consolidate enrollment documents and make them available as web forms.	1,6	• SaaS
4.2.3	Manage Corpsmember transitions within the CCC (e.g. transfers, promotions, and demotions).	1	• SaaS
4.2.4	Automate benefits events, including new enrollment, promotions, and transfers to special project positions, terminations and passive events.	1	• SaaS
4.2.5	Ability to capture more than one reason for Corpsmember separation.	1	• SaaS
4.3	*Time Keeping*		
4.3.1	Ability to calculate overtime, shift differentials, accrued vacation, sick leave, and other leaves, with pay-period and year-to-date totals.	1,7	• SaaS
4.3.2	Create configurable rules and automation of leave accrual rates and maximums.	1	• SaaS
4.4	*Health and Safety*		
4.4.1	Consolidate Workers' Compensation and injury related documents	1,7	• SaaS

ID	Requirements Description	Business Objectives	Systems
	and make them available as web forms.		
4.4.2	Automate the Workers' Compensation reporting process.	1,5,7	• SaaS
4.4.3	Notifications to Health and Safety Unit of program-related illnesses and injuries.	1,7	• SaaS
5.0	**Corpsmember Development (CMD) Subsystem**		
4.4.1	Ability to create and store Corpsmember individual development plans and evaluations.	1	• SaaS
4.4.2	Ability to link or add Corpsmember individual development achievements to performance reviews and support ratings, weights and comments.	1	• SaaS
4.4.3	Ability to collect, monitor, and report on Corpsmember attributes, such as education degrees, skills, and certifications.	1,9	• SaaS
4.4.4	Ability to monitor Corpsmember bonuses and scholarships, and provide notifications when a Corpsmember is eligible for these benefits.	1,8	• SaaS
4.4.5	Ability to track and report on Corpsmember volunteer hours and achievements.	1,8,9	• SaaS
4.4.6	Ability to generate Corpsmember transcripts of educational and vocational achievements	1,9	• SaaS
6.0 Business Analytics and Reporting			
6.1	Ability to embed analytics into business processes, providing evaluation of overall performance goals.	1,5	• SaaS
6.2	Ability to evaluate work projects in progress.	1,5	• SaaS
6.3	Ability to track annual reimbursement ("R") and budget ("B") goals for each Center.	1,5	• SaaS
6.4	Allow tracking of current progress (goal vs. earned/worked).	1,5	• SaaS
6.5	Provide an accurate calculation of Corpsmember FTEs using different types of measurements, including the ability to change the denominator.	1,5	• SaaS
5.6	Ability to search and sort objects by a variety of dimensions (e.g., status, contract number, Index number, fiscal year, etc.).	1,5	• SaaS
6.7	Allow the creation of ad-hoc reports.	1,5	• SaaS
6.8	Include several CCC defined standard reports.	1,5, 6	• SaaS
6.9	Provide key stakeholders with ability to view current Center performance.	1,5	• SaaS
6.10	Ability to analyze data across multiple dimensions.	1,5	• SaaS
6.11	Ability to create dashboards and reports with drill-downs. Dashboards must have multiple view options such as Executive Level view which shows the overall performance of the organization, and Center Level view to track individual Centers.	1,5	• SaaS
6.12	Allow the modification of document templates, or the creation of	1,5,6	• SaaS

ID	Requirements Description	Business Objectives	Systems
	additional templates, reports, or notifications that must be compatible with .docx and .pdf formats.		
6.13	For each project, must be able to view the following information: • Total current Corpsmember hours planned vs. total Corpsmember hours available. • Total current Corpsmember hours used vs. total Corpsmember hours approved. • Total current Corpsmember hours paid vs. total Corpsmember hours billed. • Total current Staff expense used vs. total Staff expense approved. Total current operating expense vs. total operating expense approved.	1,5	• SaaS
7.0 Interface Requirements			
7.1	Interface with the CCC Recruitment system to reduce duplicate data entry and prevent data entry errors.	1, 6	• SaaS • IOCS
7.2	Interface with SCO and SCIF systems by accepting inbound data transfer from these entities. C^3 will directly interface with IOCS servers at the RADC. These servers will act as the intermediary between the state owned systems (SCO and SCIF) and the C^3 SaaS provider.	1	• SaaS • IOCS
7.3	Interface with FI$Cal by accepting inbound and outbound data transfer. C^3 will directly interface with servers at RADC. These servers will act as the intermediary between FI$Cal and the C^3 SaaS provider.	1	• SaaS • IOCS •
8.0 Mobile Interface			
8.1	Must run on encrypted devices.	1,4,10	• SaaS
8.2	Ability to work offline and store application data locally.	1,10	• SaaS
8.3	Implement a data synchronization mechanism that keeps local and server data in sync.	1,10	• SaaS
8.4	Utilize the phone, email, text messaging, map, and camera functions of the mobile device.	1,10	• SaaS
8.5	Ability to take images (e.g., copies of receipts, before and after pictures of project worksite), annotate the image, record GPS coordinates and attach the images to system artifacts.	1,10	• SaaS
8.6	Allow retrieval of work site GPS coordinates, turn-by-turn directions, and special instructions for navigation.	1,3,10	• SaaS
8.7	Crew Supervisors must have access to JHA preventative measures associated with assigned work projects.	1,7,10	• SaaS
8.8	Ability to capture acknowledgement from Crew Supervisors upon viewing JHA.	1,7,10	• SaaS

ID	Requirements Description	Business Objectives	Systems
8.9	Ability to select a work project from a list of work projects assigned to the Crew Supervisor.	1,10	• SaaS
8.10	Ability to modify crew rosters.	1,10	• SaaS
8.11	Ability to enter and modify Corpsmember time.	1,10	• SaaS
8.12	Ability to enter and modify daily work accomplishments (completed work).	1,10	• SaaS
8.13	Ability to attach to CES active sync services.	1,10	• SaaS
9.0 Data Center Requirements: The Solution Service Provider:			
9.1	Must be a Tier III or better Data Center, or provide an uptime guarantee of 99.985% with dual-powered equipment, redundant capacity components and multiple uplinks.	1	• SaaS • IOCS
9.2	Must be SAS 70 Type II Certified, and supply the CCC with a copy of the certification on demand.	1, 4	• SaaS
9.3	Must be HIPAA compliant.	1, 4	• SaaS
9.4	Provide data encryption on data transfer.	1,4	• SaaS • IOCS
9.5	Provide data encryption at rest, using encryption technologies such as 256 bit AES.	1,4	• SaaS • IOCS
9.6	Must have all servers and containers housing CCC data, including backup servers and tapes, located within the United States of America.	1,4	• SaaS • IOCS
9.7	Must have all systems continually monitored for intrusion, malware, viruses, etc.	1,4	• SaaS • IOCS
9.8	Must conduct ongoing vulnerability assessments, scans and penetration tests, and supply the CCC with results of those tests on demand.	1,4	• SaaS
9.9	Maintain standard system updates and releases, including updated security features.	1,4	• SaaS • IOCS
9.10	Must provide separate development, test, and production environments	1,4	• SaaS

4. Baseline Analysis

4.1. Current Method

4.1.1. Objectives of the Current System

The current CCC system for managing Corpsmember information consists of the CCC Automated Data Collection and Reporting System (CADCARS). The CADCARS system is the primary data management system. CADCARS was originally designed and implemented in the 1980's to store Corpsmember and Project data and provide information for various analyses and reporting functions within the CCC. At the time of its development, CADCARS had the following objectives:

- Provide workload relief and eliminate duplicated effort.
- Provide more efficient and streamlined business processes.
- Increase accuracy of statewide data collection and reporting efforts.
- Provide all levels of staff and management with timely and accurate statistical information.
- Help the CCC comply with oversight/control agencies and certification laws.
- Provide performance based measurement and reporting.

NOTE: The California State Accounting and Reporting System (CALSTARS) is the Department's financial system of record until FI$Cal is implemented at the CCC. Contracts, invoices and accounts receivables data from CADCARS are manually entered into CALSTARS.

To supplement CADCARS, there are approximately 20 databases, at least 214 spreadsheets[4], paper forms, and manual processes. The CCC input, extracts, manipulates data, and develops reports using the processes described below to fulfill the Department's mission and Legislative mandate.

4.1.2. Current Business Processes

Corpsmember Enrollment

1) For each Corpsmember enrollee an enrollment packet consisting of the following 15 paper documents/forms is prepared by Clerks.
    a. CCC78 – Corpsmember Profile Form (eliminate)
    b. CCC41 – Intake Packet Cover Sheet (eliminate)
    c. CCC73A – Standard CM Enrollment (Hire) Agreement (no change))
    d. CCC1C – Trainee Agreement (eliminate)
    e. CCC105 – Emergency Notifications/Physician Designation (automate)
    f. CCC49 – Life Insurance Beneficiary Designation (automate)

[4] This count does not include personal spreadsheets that staff may have developed to help manage daily/monthly tasks.

g. STD680 – Personnel Action Request (automate)
h. STD686 – Employee Action Request (automate)
i. STD243 – Designation of Warrants (automate)
j. STD689 – Oath of Allegiance (no change)
k. Employee History (eliminate)
l. I-9 – Employment Eligibility Verification (automate)
m. Health Insurance Form (no change)
n. Corpsmember Standby Time (no change)
o. Decline Insurance Form (no change)

2) A CCC staff member works with the Corpsmember enrollee to fill out all paper documents/forms manually.
3) Filled paper documents/forms are given to the Clerk. The Clerk enters the Corpsmember enrollee information into CADCARS using the data from the CCC78.
4) Clerk makes copies of all the paper documents/forms. Copied documents/forms are kept at the Center for Corpsmember personnel file. The original documents/forms are overnighted to HQ-Human Resources for the Official Personnel File (OPF).
5) For each Corpsmember enrollee, HR staff creates a PAR record and enters information into the State Controller's Office (SCO) system for payroll.
6) END.

General Corpsmember Administration

- **Transfers**
  1) The Corpsmember (CM) requesting a transfer talks to Crew Supervisor and fills out a Request for Transfer form.
  2) The form is given to the Center Corpsmember Development (CMD) staff to fill out.
  3) The form is routed to the Clerk to fill out leave balances.
  4) The form is routed to the Project Coordinator for approval.
  5) After Project Coordinator approval, the form is sent to the Center Director for approval.
  6) After Center Director approval, the form is sent to the receiving Center Director for approval.
  7) The approved document is returned to the originating Center. The Center Director fills out Transfer Approval Notification Form.
  8) The Transfer Approval Notification form given to CM.
  9) The CM plans his/her transportation to new Center.
  10) The receiving Clerk changes CM's position number. (In CADCARS)
  11) The receiving Clerk prints out the CM's Enrollment History, fills out a CM position change number and personnel action request. The documents are mailed to Human Resources Branch.
  12) CM's previous center mails CM's personnel file to new center.
  13) END.
- **Separations - Voluntary**

1) The CM's Crew Supervisor prepares the Separation form.
   a) Identifies the reason for leaving (gradation, resignation).
2) The Clerk verifies "cash out", how much the CM is owed.
3) The Clerk verifies leave, vacation, and other benefits (CADCARS).
4) The Crew Supervisor collects CCC equipment and other assets assigned to CM and updates CADCARS with collected inventory.
5) The Clerk submits separation paperwork within five business days to HQ Transactions – manual process.
6) The HQ Transactions Unit processes in CADCARS and uploads to the State Controller's Office (SCO) database.
7) Final paycheck is issued following the standard Payroll Process.
8) CMD conducts exit interview.
9) END.

- **Separations - Involuntary**

1) The COMET Instructor informs the CM about rules and step of discipline.
2) Steps:
   a) Verbal Warning – paper (reminder)
   b) Note in Personnel file – paper
   c) Bad Mark in Monthly Evaluation – CMD Database
   d) Suspension – CADCARS and CMD Database
   e) Separation – CADCARS and CMD Database
3) If necessary – Crew Supervisor initiates steps.
4) The CM may dispute the disciplinary action – the CM fills out a dispute form and submits it to Crew Supervisor or Project Coordinator at any step.
5) The Project Coordinator holds a meeting with the Crew Supervisor and the CM.
6) If the Project Coordinator agrees with Crew Supervisor then steps are tracked in CMD Database.
7) If disciplinary Step 4 is reached – CM is suspended – CADCARS (can still attend classes; participate in non-paid activities unless otherwise noted.)
8) The schedule is adjusted to show CM is not working – CADCARS.
9) When the suspension ends – the CM returns to work projects and schedule is adjusted -- CADCARS.
10) If step 5 is reached – separation (if special circumstances, violence, drug or theft then a note to file to alert staff not to allow on campus.)
11) Begin separation process. – See standard separation process.
12) END.

Health and Safety

- **Injuries**

1) When CM is injured determine if the injury is:
   a) Minor
   b) Major
2) Minor – no hospitalization
   a) Crew Supervisor or other staff identifies injury.

b) Crew Supervisor or other staff treats the injury.
c) Crew Supervisor completes injury investigation form. – paper
d) Crew Supervisor collects witness statements. – paper
e) All notes and forms saved to personnel file.

3) Major – hospitalization
a) Crew Supervisor or other staff identifies injury.
b) Crew Supervisor or other staff treats the injury.
c) Crew Supervisor completes injury investigation form. – paper
d) Crew Supervisor collects witness statements. – paper
e) Crew Supervisor fills out State Compensation Insurance Fund (SCIF) forms.
f) All forms are sent to Health and Safety (H&S) at HQ <mail or fax>.
g) H&S reviews forms for accuracy.
h) SCIF forms are sent to SCIF.
i) H&S enters data into a spreadsheet.
j) H&S tracks case until release. CCC is given form by doctor on CM's status.
k) H&S ensures SCIF payments are made.
l) If necessary CM is placed on alternative work if available or Workers' Comp. (CADCARS)
m) H&S and Centers file in CM permanent file.

4) END.

Scholarships

- **Scholarships – CCC**
  1) CMD Center Staff updates CMD database and spreadsheet with CM data.
  2) The CM must complete five requirements:
     a) Serve 1700 hours and 358 days.
     b) Complete Conservation Awareness Program (CAP)
     c) Complete Corpsmember Development and Training Program (CDT)
     d) Complete Community and the Environment Competency (CEC), 48 volunteer hours.
     e) CM must have three positive evaluations.
  3) The CM and Crew Supervisor fill out the scholarship application – submits to HQ CMD.
  4) HQ CMD staff enters information into the HQ Scholarship spreadsheet.
  5) HQ staff verifies qualifications.
  6) The CMD manager approves.
  7) CM separation – following standard separation process.
  8) CM enrolls in college or vocational training.
  9) CM and Financial Aid Officer of college or vocational training organization complete payment request packet and sent to HQ CMD.
  10) CCC sends money directly to the college or vocational training organization.
  11) END
- **Scholarships – AmeriCorps Education Award Program (EAP)**
  1) CM creates a user account with My AmeriCorps Website.

2) CMD Center Staff updates CMD database and spreadsheet with CM project data.
3) CM is enrolled in EAP with paper forms and verification of citizenship.
4) CM must complete, 450 hours for quarter time award, 900 hours for part time award or 1700 hours for full time award. Only hours from specific activities will be counted.
5) CMD Center Staff performs a search on the National Sex Offender Website to verify Cm is not on the list and files a copy of the report in the CM's file.
6) CM's monthly timesheets are printed out.
7) Work/service and training hours are totaled and logged in a tracking spreadsheet by CMD Center Staff.
8) CMD Center Staff or Crew Supervisor and CM sign and date timesheet.
9) Mid-term evaluation is completed for CM.
10) CM exits program.
11) Final evaluation must be completed when CM leaves.
12) Exit Form is filled out with hours that match timesheets, signed by CM and CMD Staff.
13) CM accesses award through My AmeriCorps website.
14) END.

CMD - Individual Development and Education/Training

1) COMET staff works with the CM to identify educational needs and goals.
2) CMD Center Staff enters education information into CMD Database (Microsoft Access).
3) If high school is needed – CMD staff enrolls the CM in High School.
   a) When High School is completed, the CM receives High School Diploma.
4) CMD staff and CM plan training classes and register the CM in classes (fire, chainsaw, cooking etc.). Note in Quarterly Individual Development Plan (IDP).
5) The CM attends training.
6) Instructors notify CMD Center Staff of progress.
7) CMD Center Staff or Crew Supervisor track in CMD Database.
8) The CM receives course certifications when completed. – CMD Database and CADCARS are updated.
9) Crew Supervisor updates Quarterly IDP.
10) Monthly evaluation by Crew Supervisor with CM.
11) When the CM successfully completes the program the CM receives a certificate.
12) END.

Project Management

- **Job Hazard Analysis (JHA)**
  1) The JHA is performed before a work project contract is finalized.
  2) The Sponsor Representative and Project Coordinator walk project and identify hazards on paper, and notes nearest medical facility.
  3) A list of hazard mitigations is developed by Project Coordinator.
  4) The list of hazards and mitigations sent to H&S electronically.

5) H&S reviews all documentation.
   a) Is the list complete?
   b) Is the project too risky?
6) If the list and project are approved, the list is returned to Project Coordinator to continue contract development.
7) The contract approved (see contract management).
8) The Project Coordinator reviews JHA with Crew Supervisor prior to starting on project.
9) The Crew Supervisor reviews JHA with crew on a daily basis.
10) END.

- **Daily Work Accomplishment**
  1) The Project Coordinator and Sponsor Representative identify work to be done on the project.
  2) Project details are given to Crew Supervisor. – paper
  3) The Crew Supervisor instructs the crew to perform tasks.
  4) Work accomplishment is recorded daily. – paper
  5) The Crew Supervisor totals all daily work into a weekly work accomplishment report and signs paper form.
  6) The Weekly Work Accomplishment form is signed by the Project Coordinator and filed in project file.
  7) END.
- **Sponsor Verification**
  1) The Project Coordinator prepares the verification package for the Project Sponsor. Package includes:
     a) Timesheets (CADCARS)
     b) Weekly Work Accomplishment form (paper)
     c) Receipts, including itemized billing if applicable
     d) Pictures
     e) Project notes from Crew Supervisor
  2) The Clerk completes sponsor verification form in CADCARS.
  3) The Clerk forwards the invoice to accounting or, depending on agreement, go to Step 4.
  4) RCA reviews
     a) Sponsor Verification (CADCARS)
     b) Verification Package – paper
  5) RCA adds/updates packet as necessary, approves for invoicing.
  6) Accounting invoices. (CADCARS).
  7) END.

Scheduling/Dispatching

1) The Project Coordinator identifies the project for scheduling.
2) The Project Coordinator notes the time, cost, equipment, and labor needed to finish the project based on project information.
3) The Project Coordinator identifies the crew with appropriate skills and availability.
4) The Project Coordinator uses a spreadsheet to plan crew assignments each week.
5) Planned schedules are given to Clerk to enter into CADCARS.
6) END.

Timekeeping

1) The Project Coordinator schedules a crew for a project (see Scheduling).
2) The Project Coordinator hands the Daily Roster to the Clerk to distribute to Crew Supervisors.
3) The Crew Supervisors record CM time on project and signs off on sheet.
4) The Daily Crew Roster is sent to the Project Coordinator for review and signature and then given to the Clerk.
5) Time is entered into CADCARS by the Clerk
6) Daily time is rolled up into monthly time sheet. – CADCARS
7) At the end of the pay period, the monthly time sheet is printed out by the Clerk.
8) The Clerk distributes the timesheets to Crew Supervisors for review with the CM.
9) The CM and Crew Supervisor sign individual timesheets, and file in the CM personnel file.
    a) If there a dispute, documentation of changes must be sent to HQ Transactions for manual corrections to be made.
    b) The corrected timesheet is sent back to CM and Crew Supervisor for review.
10) END.

Performance Management

1) Center goals have been established at HQ (spreadsheet).
    a) Full time equivalent (FTE)
    b) Reimbursement goal
2) Center Director and Project Coordinator meet to review goals monthly.
3) The Center Director reports FTE and reimbursement metrics to HQ monthly in a spreadsheet.
4) Center Director sends a six month snapshot of Center performance to HQ.
5) If on target all is ok, if not Center Director creates an action plan.
6) END.

The following Excel spreadsheets are used as Performance Management tools by each Center.

- PM D1 - Emergency Camp Support Training FYXX-XX year-end template
- PM D4 - Flood Training FYXX-XX year-end template
- PM O1 & O2 - Budget & RGoals FYXX-XX year-end template
- PM O3 - FTE FYXX-XX year-end template

- PM O4 - H&S FYXX-XX year-end template
- PM O5 - Legislative Contacts FYXX-XX year-end template
- PM P1 - Competencies FYXX-XX year-end template
- PM P2C & P2D - Education FYXX-XX year-end template
- PM P5A & P5B – Crew leaders & Cook Specialists FYXX-XX year-end template

4.1.3. Abilities of the current system to meet current projected program and workloads requirements

Since the implementation of CADCARS in the 1980's, the CCC's business needs have expanded and evolved, resulting in the development of many manual processes to meet these evolving needs. Information processing, decision support, and the need for timely results have grown more complex. Although the original objectives of CADCARS remain intact, the system does not meet current CCC business needs. This resulted in the creation and use of over 20 Access databases and numerous spreadsheets outside of, and separate from CADCARS. Over the past 20 years, operational, legal and technical advancements have required new features that go well beyond the current capabilities of CADCARS. More functionality with modern capabilities (as described in the Functional Requirements Section of this document) such as web-based features, remote access via mobile devices, stipend Corpsmembers tracking, and availability of current data are required. It is not possible to add many of these features to a system that is technologically obsolete and when possible, modifying CADCARS is prohibitively expensive. Therefore, CADCARS is not able to meet the CCC's current business requirements without a complete replacement of the system as proposed by this FSR.

4.1.4. Level of user and technical staff satisfaction with the system

The perception among users is that CADCARS is functional, but does not mesh with the current CCC business model. The archaic screens and cumbersome navigation of CADCARS' DOS-based architecture have increased frustration levels in a user community much more familiar with web-based applications and systems. The constant system downtime, hung sessions, and printing issues have reduced user confidence in CADCARS. New users experience a prolonged period of training to become adept with the system.

Lack of functionality in support of current business processes, and inadequate reporting tools have resulted in users creating their own databases and spreadsheets. At the same time, users must solve problems resulting from decreased data accuracy, thus creating a general dissatisfaction with the system.

Maintaining CADCARS is exasperating to IT Staff. 100% of the CADCARS life cycle is attributed to maintenance activities. CCC IT staff has described CADCARS as old, heavily modified, difficult to maintain but a necessary evil. The CADCARS infrastructure is becoming increasingly cumbersome to maintain, because IT staff has to account for the system's obsolete technology. IT staff are forced to

find new and creative ways to keep CADCARS running while all other CCC technology systems continue to advance.

4.1.5. Data input and output characteristics

CADCARS primarily captures hourly Corpsmember work task data. Currently, Corpsmembers, Crew Supervisors, Project Coordinators, and Clerks fill out multiple paper forms with required information, which CCC staff must then manually entered into different CADCARS sub-systems. Each sub-system has a range of data validation processes and capabilities to identify data entry errors or invalid data. Extensive duplication of data exists across sub-systems. Stipend Corpsmember data is currently not captured in CADCARS but stored in paper-based files, other databases, and spreadsheets.

In addition to entering data manually into CADCARS, an upload/import of Corpsmember and Injury data in .txt file format using a specific data structure from State Controller's Office and State Compensation Insurance Fund occurs daily and monthly. These files are then displayed in a DOS window.

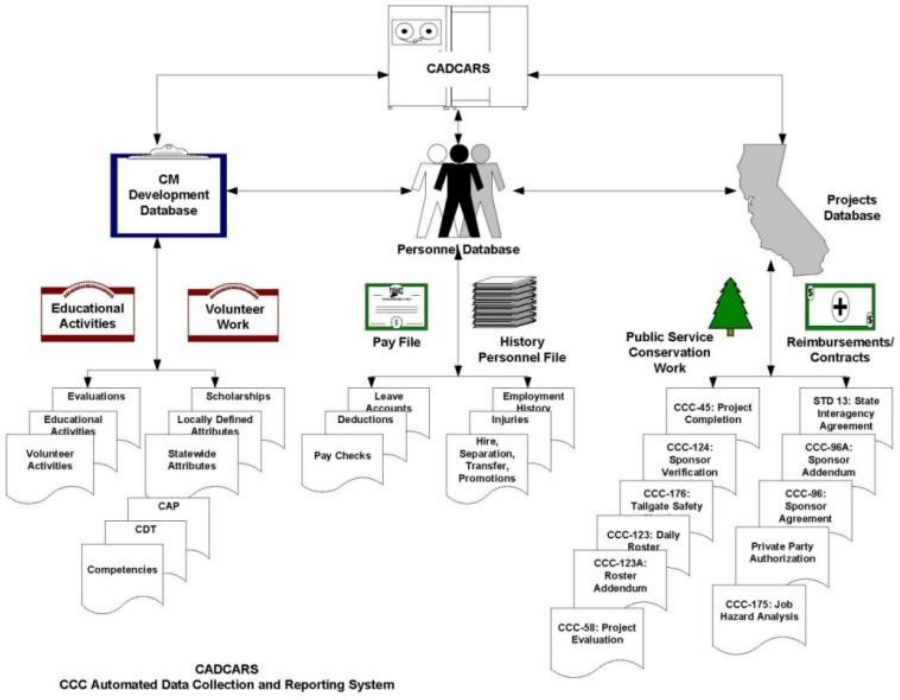
The only outputs are static and ad-hoc reports that can be generated by finite data sets. These reports are provided in paper format to program areas and external stakeholders. Data from CADCARS are manually entered into SCO and CALSTARS to process Corpsmember pay and Sponsor invoices respectively. In addition, CADCARS does not support the use of graphical charts, only text-based reports. Information from these reports is often entered manually into other systems where it is reprocessed by other tools for reports to support performance analysis.

4.1.6. Data characteristics

CADCARS is divided into three principal functional areas: personnel and payroll (PDS); project management (PRJ); and Corpsmember development (CMD). Each functional area consists of a number of system files known as "DBF files". DBF files contain one table with associated multiple files that contain indexes and memo fields. All DBF files use fixed-length fields. The three sections contain approximately 100 DBF files, including those used across all systems. Detailed descriptions of DBF files are available and can be provided to the implementation team.

Figure 3 in the following page provides additional information about each of the subsystems in CADCARS.

Figure 3: CADCARS Architecture



4.1.7. System provisions for security, privacy and confidentiality

One of the primary issues with CADCARS is the lack of adherence to current security standards. Due to the age of CADCARS and the inability to upgrade access or database protocols, the system does not provide adequate access controls to ensure data security. It does not meet State security standards as defined in the Statewide Information Management Manual (SIMM), National Institute of Standards and Technology (NIST) Guidelines, or the Health Insurance Portability and Accountability Act (HIPAA). Primary key functions utilize non-standard data elements that do not meet current security policy best practices. In addition, password standards do not meet current requirements as specified in SIMM.

4.1.8. Equipment requirements of the current system

Workstation

- Headquarters users gain access to CADCARS through their standard CCC desktops. CADCARS access requires Windows XP operating system with a specific version of Novell Client for Windows installed using IPX protocol. This presents an issue in that Microsoft ceased supporting Windows XP.

- Remote and Windows 7 users' access CADCARS through the CCC Citrix XenApp farm with Novell Client for Windows installed using IPX protocol. There are additional costs associated with Citrix access.

Server

- Server 1 – HP Proliant ML370 G3 with Novell Netware 5.1 sp6 Operating System providing Novell E-directory services for file level access to CADCARS and relating files. This server also hosts the scripts to launch the Clipper programs.
- Server 2 – HP Proliant ML370 G3 with Novell Netware 5.1 sp6 Operating System providing Advantage database services for CADCARS. This server also hosts the Clipper programs using a network share over IPX protocol.
- Tasker – Dell Optiplex GX110 workstation manufactured in 1999 running MS DOS operating system used for batch processing of various critical jobs such as indexing, calculating and auditing of data performed on a nightly basis.
- 24 Virtual Servers running Citrix XenApp 5.0 on Windows Server 2003 R2. This server farm is used by remote and Windows 7 users to gain access into CADCARS.

Network

CADCARS uses multiple protocols including TCP/IP and IPX. The IPX functionality is programmed into the Clipper application preventing migration to full TCP/IP access.

4.1.9. Software characteristics

A number of unsupportable applications and tools comprise much of CADCARS. These applications are no longer supported by the manufacturers or by CCC Information Systems Branch (ISB). They include the following:

- Novell Netware 5.1 – the primary server operating system that provides network access control and runs the Advantage Database server. Support for this product ceased October 31, 2005 as published in the manufacturer's website. CCC cannot upgrade beyond version 5.1 because it is not known whether versions newer than 5.1 are compatible with one or more other components of CADCARS.

- Advantage Database Server 6.11 – the database and database management system used to create the tables and data structure and ultimately store all applicable data. This software has been around since 1993 developed by Sybase. It currently runs on a Novell Netware 5.1 server under IPX protocol. The current CCC version was released on September 28, 2001 and is no longer supported. CCC cannot upgrade beyond version 6.11 because it is not known whether versions newer than 6.11 are compatible with one or more other components of CADCARS.

- Microsoft DOS 6.22 – is the workstation operating system that runs multiple applications to support CADCARS in performing the following functions.
    - Auditing
    - System maintenance
    - Indexing – Six3 – Successware Index Driver providing support for .idx and .fpt files on local (non-network) hard drives.
    - Creating data file backups (.dbf, .idx, .ini, .bat, .fpt, .dbv)
    - Executing Batch Files
    - Compiling Clipper program.

- CA Clipper 5.2 – the programming language used in the development and maintenance of CADCARS. Clipper was originally created in 1985 as a compiler for dBase III, a very popular language at the time. Manufacturer's support ceased when Computer Associates announced in January 2004, they have no remaining interest in CA-Clipper Software.

- Relational Report Writer – Runs outputs and generates reports for users.

- Blinker 7.0 – a third party 16 and 32 bit program that links the object files into a single executable using overlays. An overlay is a section or sections of code that load into memory at one time. When other code is needed that will not fit in memory, an overlay is written to disk and the new overlay is loaded. This allows programs to be larger than the 640k of memory used in DOS. In addition, Blinker provides a utility that releases the computer's processor when the Clipper program is not being used, which allows other programs in a Windows environment to work. Without a utility like this, a DOS program takes 100% of the processor's time.

- WinBatch – Provides batch file capability for Windows; includes compiler to create executable files. Used primarily for menus and Windows functions.

- Successware Index Driver– provides support for .idx and .fpt files on local hard drives.

- Grumpfish Spell Checking Engine – provides spell checking functionality.

- FlexFile – Library to provide extra functionality and tools for memo field files.

- Norton Guide – Proprietary file viewer for providing help files to users before Window help files were developed.

- PDC-e – Tool to convert EBCDIC files to ASCII files; used on files received from SCO system that are integrated into CADCARS.

4.1.10. Internal and external interfaces

CADCARS includes the following interfaces to other systems.

External

- State Controller's Office (SCO) - Each month, at the end of each pay period, three files are manually downloaded from SCO via File Transfer Protocol (FTP). These are the Pay file, Current Status report, and Transaction Log. The data in these files are merged into CADCARS which provide result lists that help in identifying errors in CADCARS records.
- State Compensation Insurance Fund (SCIF) – Three files are downloaded manually each month; one file in the middle of the month and two files at the end of the month. The mid-month and one end-of-month file are billing records, and the third file becomes the SCIF.DBF file. The billing records are integrated into CADCARS, and are converted to Excel files for the Health and Safety staff to use for checking SCIF invoices. The three files together provide detailed injury claim and cost information, which is tied to the injury transactions in the CADCARS personnel record.
- There are no interfaces between CADCARS and other CCC internal systems.

4.1.11. Personnel Requirements

The Governor's Budget for FY 13-14 includes provision for 351 CCC staff positions. Approximately 300 (three hundred) management and program employees execute the manual processes in CADCARS, the Access databases, and the numerous spreadsheets identified in this FSR.

As of the beginning of FY 13-14, support for CADCARS, Access databases and spreadsheets is provided by the CCC IT branch, which consists of 9.5 PYs (8.5 IT support staff and the Chief Information Officer).

Since 2002, support for the CADCARS application has been provided by a contractor. Effective FY 13-14, BCP was approved for two full-time civil service IT staff to replace the contractor:

- One (1) Staff Programmer Analyst responsible for fixing programming and data errors, performing required monthly updates, fixing reports, and creating ad-hoc reports
- One (1) Assistant Information Systems Analyst (AISA) responsible for help desk support specifically related to CADCARS, such as resetting user passwords, resetting field user's connection to the legacy servers, rebooting servers, clearing batch processing errors, etc.

Currently there is no programming support for the Microsoft Access Databases. The business area person responsible for developing and supporting these databases left the CCC in May 2013. The spreadsheets are supported by the management and program staff using them.

Table 3 in the following page provides a listing of IT staff with corresponding roles and responsibilities.

Table 3: IT Staff and Responsibilities

Role and Responsibility	PY Staff	Classification
CIO and IT Manager	1	Data Processing Manager II
ISO, Lead Infrastructure and Network Technical Specialist, 3rd Level Support	1	System Software Specialist II
Server Implementation and Support, Backup and Recovery, Email Liaison and Support, Content Filtering, 2nd Level Support	1	Staff Information Specialist
Network Implementation and Support, Virtual Desktop and Remote Access, Computer Lab Support, Wireless and 2nd Level Support	1	Systems Software Specialist I
Laptop Imaging and Support, HQ Telecom, IT Procurement and 2nd Level Support	1	Associate Information Systems Specialist
Primary Help Desk Support, Smartphone Support, IT Equipment Loaner Administrator	1	Associate Information Systems Specialist
SharePoint Administrator, IT Asset Manager, CoRe Administrator, Charter School Support, Fiscal System Support	1	Assistant Information Systems Analyst
1st Level Support	.5	Information Systems Technician
CADCARS Programmer	1	Staff Information Systems Analyst
CADCARS Support	1	Assistant Information Systems Analyst
Total IT PYs	**9.5**	

An ISB Organization Chart is included in Appendix D.

4.1.12. System documentation

End user hardcopy manuals are available to all CADCARS users. The document was last updated in June 1999, and so does not correspond to current business processes. There is no technical documentation.

CADCARS is built upon outdated and unsupported applications and tools for which little remaining system documentation and no vendor support exists. CCC relied on a sole contract programmer, with many years of expertise and experience, to perform technical system support. Starting in July 2013, the contractor began mentoring civil service staff as they learn to support the legacy system.

A "How To" document for end users is available for the CMD Access database. This database has been modified by Centers to suit their business needs, and has no system or programming documentation. The same can be said of the various spreadsheets, as users create multiple variations of an undocumented, existing spreadsheet template to meet their business needs.

4.1.13. Failures of the current system to meet the objectives and functional requirements of an acceptable response to the problem or opportunity

Failures and problems of the current system are described in Section 3.2: Business Problems and Opportunities.

4.2. Technical Environment

4.2.1. Expected Life of Proposed Solution

The proposed solution will be designed to be flexible and extensible so as to accommodate future business needs, including business process changes, program changes, the addition of new programs and/or technology environment changes. The solution is a hybrid of Software as a Service (SaaS) hosted in the cloud and on premise system hosted at the Resource Agency Data Center (RADC) with interfaces to State-owned systems, specifically, to the Financial Information System for California, FI$Cal. The C³ solution is an adaptable, flexible, expandable framework that can grow and change over time, without major business disruptions for at least five years.

4.2.2. Interface to other systems

The proposed solution will be implemented with the ability to easily create and maintain an interface with several external and internal systems to transfer and exchange data. These systems include:

- SaaS systems
- FI$Cal
- State Controller's Office (SCO) system
- State Compensation Insurance Fund (SCIF) system
- CCC Recruitment system

4.2.3. State-level information processing policies

C³ will be required to comply with state IT and Security policies and strategic objectives consisting of, but not limited to, the following:

- State Information Technology Strategic Plan (1/2012) Goals:
  - Goal 1: "Accessible and Mobile Government"
    - ✓ Expand online services, increase access from mobile devices and bridge the digital divide
  - Goal 3: "Efficient, Consolidated and Reliable Infrastructure and Services"
    - ✓ Use of Tier III Data Center to host critical enterprise systems

- ✓ Leverage the advantages of cloud computing

- Goal 4: "Information is an Asset"

  - ✓ Secure and safeguard sensitive and confidential data
  - ✓ Prepared to operate during and recover from times of disruption
  - ✓ Convert data into information and knowledge that Departments can use to make more informed policy decisions, administer programs, reduce cost, improve outcomes and better serve constituents.

- State administrative Manual (SAM). C³ will follow SAM policies and guidelines in the development of the new information systems, specifically SAM sections:

  - 1600 et seq. – Records Management
  - 4800-5180 – General IT
  - 5200 et seq. – IT Procurement
  - 5300 et seq. – Information Security
  - 6700 et seq. – IT Fiscal
- Statewide Information Management Manual (SIMM)
- Technology Letters (TL)

4.2.4. Financial Constraints

The CCC is striving to achieve the most cost effective use of funds for the C³ Project. Having limited internal funds to support this project, it is necessary for the CCC to submit a Budget Change Proposal (BCP). The request will include:

- An augmentation of expenditure authority to the CCC Collins-Dugan Reimbursement Account for the one-time project implementation cost.
- Ongoing position authority for 3.0 (three) IT positions for supporting the new solution. Section 5.1.10: Resource Requirements provides a detailed description of the three requested positions.
- Augmentation to the CCC's baseline combination funding to cover the ongoing project cost. This baseline combination funding consists of approximately 44.9% Collins-Dugan Reimbursement Account funds and 55.1% General funds.

Careful consideration for ongoing maintenance and licensing/subscription cost was taken in the selection of the proposed solution as it directly affect the CCC's reimbursement goals.

4.2.5. Legal and public policy constraints

C³ will contain confidential, personal and medical data, which requires restricted access and a greater level of system security meeting regulatory and legal requirements. Legal, regulatory, and public policy constraints to be considered during this project include the following laws:

- California Public Records Act
- Freedom of Information Act
- Information Practices Act
- Health Insurance Portability and Accountability act
- Confidentiality requirements for Personally Identifiable Information (PII)
- Security and Privacy requirements for PII

4.2.6. Department policies

C³ shall be implemented in compliance with Resource Agency and CCC IT policies and procedures.

4.2.7. Anticipated changes in equipment, software, or the operating environment

It is anticipated that the C³ solution will be compatible with the Resource Agency Data Center and the CCC network, equipment and software operating environments. CCC is leveraging the cloud computing environment of a SaaS provider. Only minor modifications to the existing CCC IT infrastructure will be necessary to implement the on premise environment, IOCS.

4.2.8. Staffing requirements

The proposed solution will be supported by a combination of existing and new CCC IT resources, RADC staff, CalTech staff for oversight and the SaaS vendor. Existing CCC IT staff is constrained in their ability to implement and support the C³ systems, therefore, additional IT resources will cover the project support activities at the state level as well as ongoing support for database administration, interface programming, mobile interface programming, training and supervision related activities. It is assumed that the civil service staff from CCC, Resource Agency, and CalTech, and consultants for Quality Control and Independent Validation and Verification services in addition to the selected SaaS vendor team, will participate as members of the project implementation team. It is also assumed that the selected SaaS vendor will be responsible for managing the SaaS infrastructure, including providing all system updates and upgrades of the primary system.

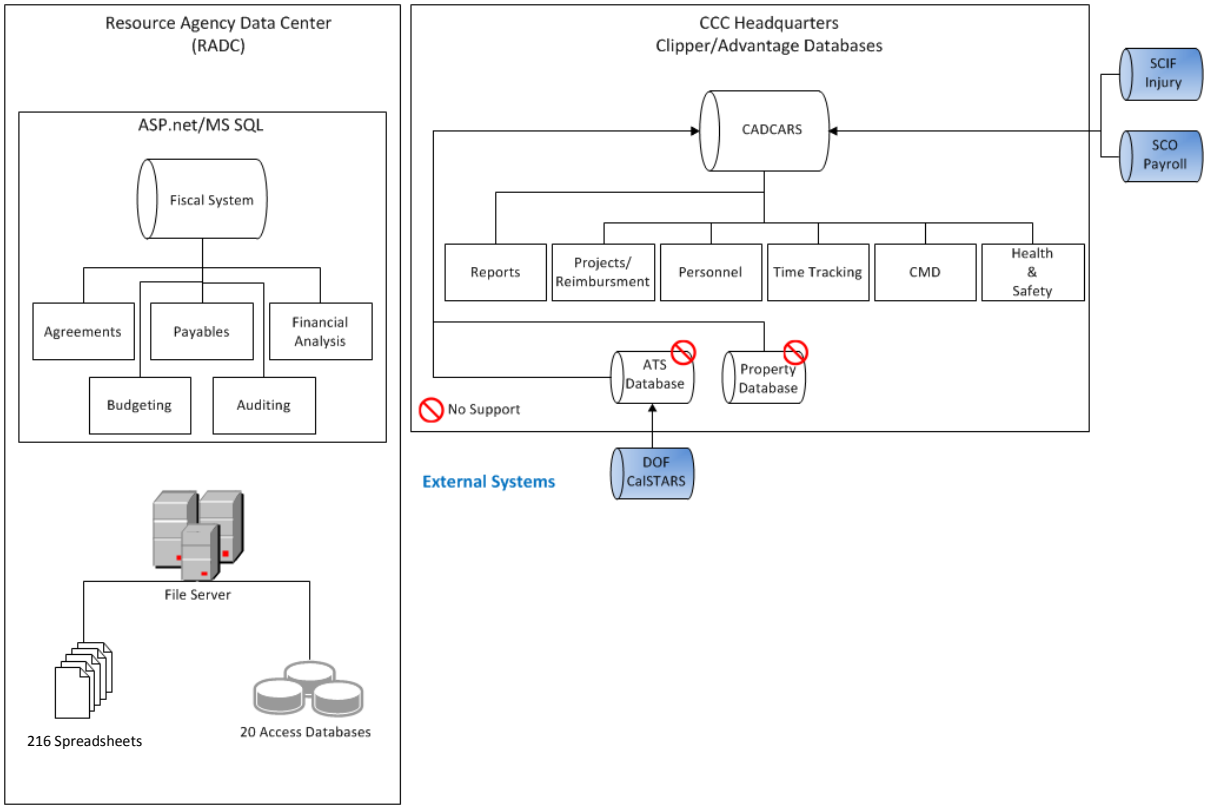
4.3. Existing Infrastructure

This section briefly describes CCC's existing IT infrastructure and technical architecture.

4.3.1. Existing CCC Systems

Figure 4 in the following page depicts CCC's current systems.

Figure 4: CCC Existing Systems



4.3.2. Network Infrastructure

CCC's network infrastructure consists primarily of Cisco switches and routers. Two EOL/EOS HP ProCurve switches are used to support the IPX network located in HQ. AT&T Multiprotocol Label Switching (MPLS) is used at thirteen locations for WAN connectivity. Ten locations use site-to-site VPN technology over the Internet. Internet connectivity is provided by local ISP's. In each of the 24 CCC locations, including CCC headquarters in Sacramento, the servers and PCs are connected to the LAN using Ethernet CAT5e/6 and TCP/IP protocol. In addition, headquarters still contains workstations with IPX connectivity. All CCC locations are connected to the Resources Agency Data Center through either AT&T MPLS WAN or site-to-site VPNs.

Most of the Centers, including HQ, have wireless capability to support Corpsmember education, Guest networks, and staff mobility. Currently, the CCC has over 1000 network nodes consisting of computers, servers, printers, switches, routers, wireless access points, and wireless bridges. Remote access is used to support all field locations as IT is centralized in Sacramento.

4.3.3. Desktop Infrastructure

The CCC's standard for desktop workstations is the State's California Strategic Sourcing Initiative (CSSI) purchase choice. Currently, the CCC has a mix of HP DC770 desktops, IBM Lenovo T60 laptops, HP

Elitebook 2760p laptops and thin-client computers. The CCC's desktop environment is currently Windows 2008 Server Active Directory integrated running Microsoft Windows 7 and Microsoft Windows XP to access legacy applications. The Department's standard office automation tools are Microsoft Office Professional 2010 suite. The standard communication protocol is TCP/IP. Additionally, the CCC is implementing a Virtual Desktop Infrastructure using Citrix XenDesktop. C³ will be accessible through any workstation using the following web browsers:

- Microsoft Internet Explorer, version 9 or higher
- Google Chrome, version 25 or higher
- Mozilla Firefox, version 14 or higher

4.3.4. Mobile Devices

The CCC's standard for mobile devices is a combination of encrypted smartphones and tablets with Android 4 or higher operating system. Selected modules of C³ will be accessible through any mobile devices having offline (non-persistent connection) capabilities using a web browser interface, Citrix Receiver or mobile application.

4.3.5. Server Infrastructure

CCC maintains a server environment that is 95% virtualized using primarily VMware's vSphere 5 in the Resource Agency Data Center. Field locations contain one physical server each for local file and print services that are replicated back to RADC. Field servers consist of Dell 2900 towers running Microsoft Server 2008 R2 or later operating systems. For email services, CCC uses Microsoft CES cloud based email.

4.3.6. Database Infrastructure

The Department standard for enterprise database supported applications is Microsoft SQL Server 2008 R2 running on virtual machines using VMware. Management of these databases is through Microsoft SQL Server Management Studio (SSMS) 2008.

4.3.7. Application Development Architecture

The standard CCC tools for application development and report generation are:

- Microsoft .NET Framework 3.5 or higher
- Microsoft Visual Studio 2008 or higher
- Microsoft SharePoint 2010
- Microsoft SQL Server Reporting Services 2008 R2

Production, development and test environments run on virtual machines with Microsoft Windows 7. CCC has not developed an Application Development Strategy. Application development at the CCC

focuses on small projects that meet the current need and align with the expertise of the CCC technical staff. Past application development projects were either outsourced to a contractor, were developed by CCC's sole programmer, or CCC program staff with Access database experience.

For the C³ Project, application development methodology will be based on the recommendation of the selected vendor, which will be reviewed and approved by the CCC during the procurement process. However, any approved solution must be compatible with CCC's infrastructure standards to ensure data portability.

4.3.8. Project Management Methodology

The CCC strives to align with project methodologies consistent with the SIMM guidelines and PMI Project Management Methodologies as stated in the Project Management Body of Knowledge (PMBOK).

For the C³ Project, strict adherence with the project management methodology defined in the CA-PMM /PMBOK will be required. Section 6.0 of this FSR provides a more detailed description of the methodology.

4.3.9. Internet Connectivity

The CCC is connected to the Internet through the shared connection located at the Resource Agency Data Center using the California Government Enterprise Network (CGEN) managed by the Office of Technology Services. The CCC maintains a virtual firewall instance co-located within the Data Center.

5. Proposed Solution

The CCC has assessed the implications of a proposed IT solution as it relates to the business problems and opportunities identified and defined in Section 3 of this report. Given the fact that augmenting the existing system, CADCARS, through application development is impossible, the CCC's analysis has shown that the Department's only viable option is to replace the existing obsolete legacy system with a completely new and updated system that fulfills the Department's business and technical functional needs.

The CCC analyzed two possible solutions for the new system:

Proposed Solution: Hybrid Solution

This proposed alternative calls for a combination of Software as a Service (SaaS) and on-Premise solution. The primary functions of C³ (Corpsmember Human Resources Management, Corpsmember Development, Timekeeping, Scheduling, Health and Safety, Project Management and Business Analytics) will leverage the, SaaS solution. Functions such as Contract Management, Project Fiscal Management, Invoicing, and Accounts Receivable will be implemented in FI$Cal, and will not be part of the SaaS solution. A middle tier environment called Interface and Operational Continuity System (IOCS) which is the on premise solution, will be established at RADC. The IOCS serves two purposes:

a) The on premise IOCS databases will effectively replicate all data generated and stored in SaaS and will serve as a backup repository. CCC data will be available at any time in the event the CCC decides to move from the SaaS provider to another technology, service provider, or application architecture. This middle tier environment will be supported by CCC IT staff in partnership with RADC.

b) In addition, IOCS environment will serve as the interface engine between the SaaS system and other state-owned systems that must interface with C³. Current plans call for interfaces with FI$Cal, State Controller's Office (SCO), and the State Compensation Insurance Fund (SCIF) systems. An interface to the CCC Recruitment system will also be developed. Data will transfer between the state-owned systems and the CCC databases hosted in RADC, which will then transfer data to and from the SaaS provider. Confidential and non- confidential data will be segregated into separate environments at RADC. The confidential data will be encrypted and at rest at all times, and will be used for archiving purposes.

Alternative Solution: Pure SaaS Solution

The system and associated data are centrally hosted in the cloud with one SaaS provider. One vendor will provide the infrastructure for the entire C³ system, including the computer hardware, software and personnel required to support the operation. Vendor supplied personnel will operate the computer hardware, install and maintain both infrastructure and system, support activities such as database updates, backups, etc., and ensure the infrastructure and the system meet all necessary security requirements. CCC IT staff will be responsible for user administration, minor system configuration to support business process changes, report creation, user support and user training.

Recommendation

After extensive review and careful consideration, the CCC recommends the Hybrid model. Collaborative analysis and due diligence evaluation of alternative approaches by CCC staff has determined that a Hybrid solution, using a combination of the SaaS and on premise services with interfaces to the internal and external systems will achieve the best alignment with the Department goals and objectives as well as State policies (FI$Cal, Data Center Consolidation, etc.) This approach provides the maximum potential environment flexibility to support current and future needs of the CCC. In addition, the CCC believes such a solution, configured to meet the needs of the CCC, would provide the following benefits:

- Provides the benefits of both SaaS and on premise models to create an environment that meets the business and functional needs of the CCC.
- Uses an on premise foundation combined with strategic use of SaaS solution.
- Decoupling contract, fiscal management, and accounting functions from the SaaS system and developing an interface with FI$Cal eliminates duplication of these functions.
- Provides high availability infrastructure and low risk of CCC data loss.
- Creates the best value for the state with the most flexible and secure environment.
- Increases portability allowing applications to change environments with minimal technical glitches and business disruption.
- Moderates initial investment while providing scalability with increased demand.
- Allows the CCC to develop internal professional expertise to administer C³.
- Reduces implementation risks and user acceptance failure by leveraging vendor line-of-business experience and the flexible and scalable technology services offered by a SaaS provider. The SaaS solution leverages a ready-made platform, which has already been provisioned, implemented, and tested by the SaaS provider, simplifying provisioning and reducing deployment complexities.
- Meets HiPAA and the State of California privacy and security requirements.
- Allows the CCC to control its data.

The efficiencies gained through the implementation of the C³ system will allow the redirection of CCC staff to focus on important responsibilities to include:

- Enhancing Corpsmember transition program and opportunities
- Increasing fire and suppression activities,
- Developing energy conservation projects

Currently, these important activities for Corpsmember development has not been given enough focus to due limited CCC resources.

1.1 Solution Description

To achieve the business objectives stated in Section 2.3, the proposed solution will:

- Replace the legacy system (CADCARS), Microsoft Access databases and spreadsheets,

- Comply with State and Federal security laws, regulations and policies,
- Streamline error prone and labor-intensive manual processes,
- Provide an enterprise and centralized data and document repository, and
- Allow the Department to track, monitor, analyze, share, and report information across all business functions, from human resources to project management, thus maximizing the effectiveness of CCC's operations and staff resources.
- Interface with FI$Cal, CCC Recruitment, and other State-owned systems.

It is CCC's goal to implement an enterprise resource management system that will have components of the following applications:

- Human Resource Management System (HRMS) or Human Capital Management (HCM) application that efficiently and accurately tracks, monitors, analyzes and reports Corpsmember:
    - Personal information
    - Benefits
    - Leave balances
    - Pay
    - Education, training and certifications
    - Bonuses
    - Scholarships
    - Program-related injuries (Workers' Compensation)

- Project Management application that efficiently and accurately tracks, monitors, analyzes, and reports data pertaining to:

    - Projects
    - Scheduling
    - Time Keeping
    - Legislative Objectives
    - Job Hazards related to a project

- Business Analytics application – allows the CCC to make better business decisions by providing the capability to:

    - Organize data and data sets
    - Analyze current and historical data
    - Create ad-hoc reports
    - Create advance graphical representation of data by simple user interfaces, dashboards and scorecards.

- IOCS – On premise solution comprising of database systems hosted at RADC.
    - Serves as a backup repository for all data generated and stored in the SaaS.

- Serves as the interface engine between the SaaS system and other state-owned systems that must interface with C³.
- Manages the daily batch transfer of data between SaaS system and other state-owned systems.

- Interface with FI$Cal – system of record for Contracts, Invoicing and Accounts Receivables. Until FI$Cal is available to the CCC, CALSTARS will be the official financial system of record. CCC continues to employ the current method of manually entering contracts, invoices and accounts receivable into CALSTARS.

1.1.1 Hardware

The hardware to develop, test, and operate the SaaS systems, including storage, will be provided, maintained and supported by the selected SaaS vendors and RADC for the on premise services. The only hardware CCC is anticipating to purchase is a "next generation firewall" to provide enhanced *application awareness*[5] security within the C³ database systems hosted at RADC.

1.1.2 Software

- **Software**
  No software is required as this solution will utilize cloud technologies. The SaaS vendors will be responsible for providing, hosting, updating and supporting the software that will comprise the enterprise resource management system.

- **Database Management System (DBMS)**
  CCC recognizes that a SaaS solution will use an existing DBMS to provide service to other clients. However, the proposed solution DBMS must be compatible with CCC database architecture, which is currently Microsoft SQL Server 2008 R2. Database administration will be the responsibility of the SaaS vendor.

  The CCC will require the SaaS vendor to provide the CCC with a daily replication of all CCC data in a format that is compatible with CCC database architecture. The data transfer will be stored at RADC, and will be maintained by CCC IT staff.

- **Web Browser**
  Users will access the system via a web browser, and the CCC will require that the successful SaaS vendor provide browser support for current and future releases, and at least the two immediately previous versions, of Microsoft's Internet Explorer, Mozilla Firefox, and Google

[5] Application awareness in this case means they can often identify, detect, defend or disrupt against attacks such as buffer overflows and SQL injections aimed at applications or databases.

Chrome. This will ensure that the new system will be accessible through the different types of endpoint hardware available in the CCC environment.

- **Office Productivity**
  All business functions of the selected SaaS solution must integrate with Microsoft Office 2010 and .PDF reader, and maintain compatibility as system upgrades of these software suites occur in the future.

- **E-mail System**
  The CCC uses Microsoft CES cloud based email. The CES hosted Exchange is a dedicated cloud-computing email environment for the State of California in which the email hardware and software are housed at Microsoft data centers. The new system's email functionality will be required to utilize SMTP.

1.1.3 Technical Platform

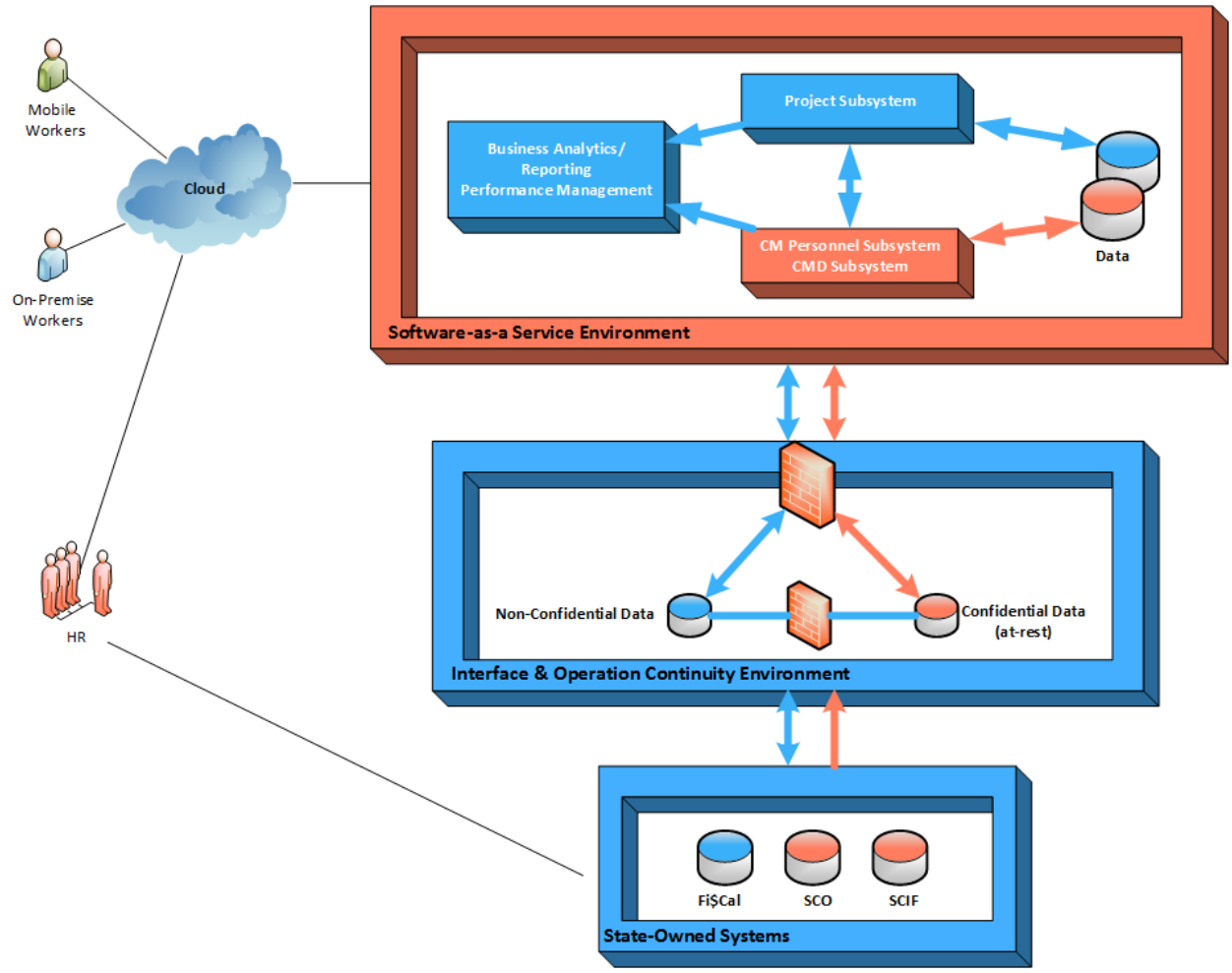
The SaaS vendors will be responsible for managing, administering, updating, and supporting, the underlying SaaS technical platform which includes the network, servers, operating systems, storage, security, and the platform providing the components of the new system. The CCC will require that the SaaS vendor utilize, at the minimum, a certified Tier III data center, and meet the following requirements:

- Bandwidth capacity that can support 300 concurrent CCC users.
- Network neutral, connects to all major carriers.
- Internal firewalls that segregate traffic between the application and database tiers.
- Intrusion detection sensors throughout the internal network, and report events to a security event management system for logging, alerts and reports.
- Connection to the SaaS vendor data center environment must be by SSL 3.0/TLS 1.0 using certificates from a leading trust mark on the internet.
- Individual user sessions are identified and re-verified with each transaction, using a unique token created at login.
- Third-party security assessments are conducted regularly for:
  - Application vulnerabilities
  - Network vulnerabilities
  - Selected penetration testing and code review
- SAS70 and ISO 27001 certified
- HIPAA compliant

The C³ databases hosted at RADC will operate on virtual infrastructure consistent with RADC enterprise architecture.

Figure 5 in the following page depicts the proposed solution.

Figure 5: Proposed IT Infrastructure and Technical Architecture



1.1.4 Development Approach

C³ will be a hybrid of SaaS and IOCS systems. The primary system will leverage the use of SaaS, hosted in the cloud and will be implemented without any modification to the vendor's baseline code. Implementation and modifications will be limited to configuration capabilities delivered as part of the core product. Although the CCC and the SaaS vendor will share management of the project, the prospective vendors will be required to include a development approach in their proposals. Through joint discussions, the CCC and the vendor will agree upon the appropriate methodology that ensures successful design, integration, configuration, testing, implementation, and staff training for the project. The CCC will require the chosen methodology to meet the following criteria:

- Familiarity: The SaaS vendor must be familiar with, and have adequate experience with, the chosen methodology.

- Optimized use of CCC resources: Most of the CCC resources involved with this project will also be responsible for performing their normal daily duties.
- Consistency: The same methodology must be used throughout the project. CCC project staff members are to be educated on the chosen methodology, and will be expected to utilize only the chosen approach.
- CCC Involvement: The CCC must be involved in all phases of the project, while striking a balance between confirming CCC's needs, minimizing CCC staff time, and ensuring that all needed functionality is provided.

Development of the IOCS environment to support the custom interfaces for FI$Cal, SCO, SCIF and SaaS systems will be accomplished using a methodology including, at a minimum: analysis; design; configuration; development; quality assurance; testing; and training. This methodology will be a key evaluation criterion when evaluating the Interface Programmer provided by the SaaS vendor. These custom interfaces will be initially developed by the SaaS vendor Interface Programmer. Knowledge transfer will be provided to CCC-IT staff who will assume the responsibilities of maintaining and supporting the interfaces.

The project will be developed and implemented in three releases:

Release I –Projects and Personnel Subsystems

Release I involves the development and implementation of the core components, the Projects Subsystem and the Personnel Subsystem. The primary goal is to replace and retire the legacy system, CADCARS. The major activities associated with Release I:

- Finalize the Fit-Gap analysis and system requirements
- Convert CCC data, and import into the new system
- Implement the IOCS environment
- Create interfaces for FI$Cal, SaaS systems, and other state-owned systems
- Implement the SaaS systems

Release I will achieve business objectives defined in Section 3.3.1 as noted.

Release II – Corpsmember Development (CMD) Subsystem

Release II involves the development and implementation of the CMD module. The major activities associated with Release II:

- Convert CMD data, and import into the new system
- Implement the CMD module
- Delete all copies of CMD Access databases
- Delete all copies of spreadsheets used for Performance Management
- Decommission CADCARS

Release II will achieve business objectives defined in Section 3.3.1 as noted.

Release III – Mobile Interface

Release III involves the development and implementation of the mobile application for field staff using smartphones, tablets and laptops. The major activities associated with Release III:

- Prototype the user workflow for the timekeeping and daily accomplishment functions
- Build, test and deploy the mobile application

Release III will achieve business objectives C and F as defined in Section 3.3.1

1.1.5 Integration Issues

There is no planned integration to internal and external systems.

1.1.6 Procurement Approach

a. Proposed SaaS Vendor Procurement Vehicle (s) – The Statewide Technology Procurement Division (STPD) of the Department of Technology will determine the appropriate vehicle to procure for the services of the SaaS Vendor.

b. Proposed SaaS Vendor Contract Type - The CCC plans to use a fixed-price contract for the SaaS vendor. The vendor will receive payments throughout the design, development and implementation phase based on state acceptance of the contractor's deliverables. For the SaaS subscription, the vendor will receive payments annually.

   Independent Verification and Validation Consultant – the cost for this service is within the $500,000 limit for CMAS solicitations, thus a CMAS solicitation will made for the service.

   Change Control Service Consultant – the cost for this service is within the $500,000 limit for CMAS solicitations, thus a CMAS solicitation will made for the service.

   Project Management and Enterprise Architecture consulting services – the CCC will utilize the existing Inter Agency Agreement (IAA) contract with the Resource Agency Data Center.

   Project and Procurement Oversight services – the CCC will utilize the existing IAA with OTECH.

c. Justification for Personal Services Contract - The C³ project calls for an enterprise resource management system that is ISO 27001, SSAE 16 SOC 1, and HIPAA compliant. Professional services with highly specialized skills, specific knowledge, experience and certifications are required on a limited basis for the configuration, deployment and training of the proposed solution. The CCC does not have the resources or access to state employees that possess the needed credentials either internally or through another channel. The timely, cost-effective, one-time acquisition of these resources is best achieved through contracts with private sector companies. For these reasons, the project meets the requirements of Government Code section 19130(b) (3).

d. The CCC's extensive market research and due diligence informal evaluation of different SaaS products and services for an enterprise resource management system showed that there are several commercial vendors such as Epicor, Microsoft Dynamics, NetSuite, Oracle products, Salesforce, SAP and Workday that could meet the needs of the CCC. Several responses received from the vendors indicated that the SaaS solution that they offered could support the proposed solution. Products such as Salesforce and Workday can deliver a solution without the contract management, project fiscal management, invoicing, and accounts receivable modules. This fulfills FI$Cal requirement of not duplicating those functions. The SaaS solution can be competitively procured and contracted.

e. The Department will make every effort to seek contracts with certified small business and certified Disabled Veteran Business Enterprises.

f. The estimated term of the SaaS Vendor contract is 5.5 years from January 5, 2015 to June 2020 with the option to extend the SaaS subscription for two years after June 2020.
   i. 1/5/15-3/30/16: Release I implementation (15 months)
   ii. 4/1/16-6/30/16: Release II implementation (3 months)
   iii. 7/1/16-9/30/16: Release III implementation (3 months)
   iv. 7/2015-6/2020: SaaS subscription/maintenance (60 months)
   v. 7/2020 – 6/2022: SaaS subscription extension (24 months)

Table 4: SaaS Vendor Costs by Phase

Total Cost by Phase	SaaS Vendor Project Management	Phase I Project & Personnel Subsystems	Interface Programmer	CMD Subsystem	Mobile Interface	Subscription	Total
SaaS Implementation	$118,400	$700,800	$233,500	$86,400	$203,200		$1,342,300
SaaS Subscription						$1,720,500*1 $1,116,000*2	$2,836,500

*1 – SaaS subscription costs from FY 14-15 through FY 17/18

*2 - Saas Subscription costs from FY 18/19 through FY 19/20

In addition, CCC plans to procure professional service contracts for Quality Control consultant and Data Conversion programmer. Interagency Agreements (IAA) with the Department of Technology for project and procurement oversight services and with the RADC for project management, enterprise architecture and data center services are required.

g. Contract Table

Table 5: Contract Table

Type of Contract	Planned/ Date of Award	Start – End Date of Contract	Total Value of Contract	Is it Performance Based?	Competitively Awarded
SaaS Vendor Implementation	1/2/2015	1/5/2015 – 10/31/2016	$1,342,300	N	Y TBD
Subscription		1/5/2015-6/30/2020	$2,836,500	N	Y TBD
Quality Control Service Contract	11/21/14	11/22/14-10/31/16	$347,700	N	Y CMAS
IV&V Contract	8/29/14	11/22/14-10/31/16	$252,000	N	Y CMAS
Dept. of Technology Contract	Existing	N/A	$296,000	N	N IAA
Resource Agency Contract	Existing	N/A	$691,000	N	N IAA

1.1.7 Technical Interfaces

The interface programmer consultant will be responsible for successfully creating all the interfaces required in the C³ solution. Below is a list of interfaces:

- Interface with the CCC Recruitment system to streamline the Corpsmember enrollment process.
- Interface with the State Controller Office (SCO) and the State Compensation Insurance Fund (SCIF) to accept inbound data transfer from these entities using the current existing process of uploading comma delimited text files.
- Interface with FI$Cal to support contract, project fiscal, invoice and accounts receivable data exchange.
- Interface with the Enterprise Resource Management cloud for the daily replication of data to the OICS environment
- Interface with Business Analytics to deliver outbound data transfer needed for performance management reporting.

All systems will directly interface with servers in the IOCS at RADC. These servers will act as the intermediary between state-owned systems (SCO, SCIF, FI$Cal) and the SaaS systems These interfaces may be accomplished through direct data links, export and import data functions or the use of Application Programming Interface (APIs). In addition, the solution must be flexible and scalable to allow for additional interfaces in the future.

1.1.8 Accessibility

The proposed solution must ensure accessibility requirements (California Government Code § 11135 and § 508 of the Federal Rehabilitation Act of 1973) are met. The CCC will measure the vendor's compliance with the accessibility requirements by requiring the vendor to certify during the procurement phase that their solution satisfies the requirements of Section 508 and California Government Code section 1135.

1.1.9 Testing Plan

The selected SaaS vendor will be required to conduct end-to-end application testing that demonstrates the SaaS solution meets CCC functional, technical and security requirements. Vendor Acceptance Testing (VAT) performed will include unit, system, regression testing, stress testing, performance testing, volume testing and security testing.

The SaaS vendor will be required to divide development efforts into phases and modules. Whenever a module is completed, and a VAT is conducted, it is expected that the module will be submitted to the CCC for evaluation, and to provide feedback on any issues that are discovered during the evaluation process. After the modules of a phase are completed, formal User Acceptance Testing (UAT) will be conducted and, when successful, the product will be accepted through a formal sign-off process.

User Acceptance Test plans with detailed test scenarios designed for all users will be developed by the vendor, approved by the CCC, and jointly executed. In addition, the vendor will be responsible for training CCC testers. Existing CCC technical and program subject matter experts (SMEs) will be involved and responsible for reviewing vendor deliverables, testing system usability and functionality and conducting UAT. All test data, test scripts, results, program use cases and documentation must be packaged and delivered to the CCC for subsequent reuse.

The Interface Programmer operating under the SaaS vendor in conjunction with CCC IT staff will be required to conduct end-to-end functional testing to validate that the interface requirements have been met. Each interface will follow a series of structured testing approach that will start at the lowest level of dependency (unit test) to user acceptance testing confirming that the product fulfills the business and technical requirements and is accepted

1.1.10 Resource Requirements

Resources required to procure, develop, and implement the proposed solution will be drawn from a combination of existing CCC program and IT staff, hiring of new IT staff (requiring a BCP), RADC staff, CalTech staff, contracted consultants and contracted SaaS vendor. The anticipated one-time human resources required for the C³ project are described in Table 6 – Required One Time CCC Resources for C³ Project, page 80.

CCC Resources:

- A total of 13 PYs will be redirected from CCC management, program and IT resources for one-time project activities over the life of the project, which is 31 months (See Table 6: Required One Time CCC Resources for C³ Project) cost breakdown.

    - 0.4 PY – Executive Sponsor *(.05 PY in FY 13/14, .15 PY in FYs 14/15 and 15/16, .05 in FY 16/17)*
    - 1.0 PY total from 4 existing CCC management staff will provide project oversight and support including legal counsel. *(.05 PY in FY 13/14, .45 PY in FYs 14/15 and 15/16, .05 in FY 16/17*
    - 7 PY total from 50 existing CCC program staff will provide subject matter expertise, and will be involved in requirements gathering, business process re-engineering, user acceptance testing, and training. *(3 PY in FYs 14/15 and 15/16, 1 PY in FY 16/17)*
    - 4.6 PY total from 4 CCC IT staff will fill the following roles:
        - 1.0 PY - Project Director *(.25 PY per year for 4 FYs)*
        - 0.6 PY – ISO *(.15 PY per year for 4 FYs)*
        - 0.5 PY – CCC Procurement Lead *(.5 PY for FY 13-14)*
        - 2.5 PY - Project Administrator *(.5 PY for FY13-14, 1 PY for FYs 13-14 and 14-15)*

- In addition to the 13 redirected PYs, the C³ project will require three new permanent IT PYs to support acquisition, system analysis, and project management activities, as well as working with the SaaS vendor to design, develop, test and implement the replacement system. The 3 new IT staff will fill the following roles:

    - 2.0 PY – Systems Software Specialist II (SSS II) Supervisor *(1 PY per Year for FYs 14/15 and 15/16)*
        - C³ Supervisor providing leadership to 4 IT staff supporting the C³ system
        - Technical Manager
        - Implementation Manager
        - Responsible for signing vendor invoices
    - 2.0 PY – System Software Specialist II (SSS II) Technical *(1 PY per Year for FYs 14/15 and 15/16)*
        - Interface Programmer,
        - SaaS Administrator
        - C³ Training Program Lead
    - 2.0 PY – Senior Programmer Analyst (Senior PA) *(1 PY per Year for FYs 14/15 and 15/16)*
        - CCC Database Administrator,
        - Change Control Lead

- A total of 5.0 annual PYs will be needed to support C³ maintenance and operations. See Table 7: Required On Going CCC Resources for C³ Maintenance and Operations cost breakdown.

- The 3.0 new IT PYs (from the 2014/15 BCP) will be retained as ongoing positions to support the C³ maintenance and operations. The 3 new IT staff will fill the following on-going support roles:
  - 1.0 PY - SSS II (Supervisor)
    - ✓ C³ Supervisor, providing leadership and direction to C³ support staff
    - ✓ Transition to be the C³ Contract Manager
    - ✓ Project and Change Manager for future C³ enhancements.
    - ✓ Oversees C³ support and maintenance
  - 1.0 PY – SSS II (Technical) –
    - ✓ CCC's database administrator responsible for the development, configuration, administration, maintenance and security of IOCS database systems hosted at RADC.
    - ✓ Responsible for data management activities related to the collection, storage, access and use, as well as archiving and disposal phases of the information cycle.
  - 1.0 PY - (Senior PA)
    - ✓ Provides ongoing technical leadership in the support and maintenance of the interfaces between the IOCS system, SaaS system and state-owned systems.
    - ✓ SaaS administrator responsible for configuring SaaS objects, tabs, fields and workflows.
- The 2.0 existing IT PYs will be redirected to fill the following on-going support roles:
  - 1.0 PY - Assistant Information Systems Analyst (Asst ISA)
    - ✓ User Administration
    - ✓ 2nd Level Support
  - 1.0 PY - Staff Programmer Analyst (Staff PA) - currently supporting CADCARS will be redirected and trained to
    - ✓ Provides ongoing technical support for mobile interfaces
    - ✓ Configures the Business Analytics module
    - ✓ Creates Forms, Dashboards and Ad-hoc reports

Appendix F provides the proposed ISB organizational chart and the BCP Workload Analysis for the three new IT positions.

External Resources:

- Resource Agency (RADC)
  - ✓ Project management services – Full Time
  - ✓ Enterprise Architect consulting services – as needed
- Department of Technology (CalTech)
  - ✓ Project Oversight - provide quality assurance of project processes

- ✓ Procurement Oversight - oversees and manages the generation of the procurement documents
- ✓ Cal Tech Enterprise Architect consulting
- ✓ State Information Security Office consulting

- SaaS vendor
  - ✓ Configure and implement the SaaS system with the required functionality,
  - ✓ Provide the interface programmer to develop the interfaces between the IOCS, SaaS, FI$CAL, SCO and SCIF and
  - ✓ Deliver the C³ solution.
- Independent Project Oversight vendor (IPOC)
  - ✓ Provide quality assurance of project deliverables and monthly reporting to CalTech.
- Quality Control Consulting Services
  - ✓ Create and ensure processes for quality assurance are present and executed
  - ✓ Develop metrics to monitor project quality
  - ✓ Oversee user acceptance testing
  - ✓ Data Conversion Programmer
  - ✓ Perform Quality Control function
- Partnering Agencies (FI$CAL), SCO, SCIF

The required CCC resources for the implementation and support of the C³ system are described in Tables 6 and 7.

Table 6: Required One Time CCC Resources for C³ Project

Classification	Organization/Role	One-Time Project Implementation									
		13/14		14/15		15/16		16/17		Total	
		PY	Cost	PY	Cost	PY	Cost	PY	Cost	PY	Cost
Re-directed Program Resources											
CEA	• Executive • SponsorChief Deputy Director	0.05	$7,046.33	0.15	$21,138.99	0.15	$21,138.99	0.05	$7,046.33	0.40	$56,370.64
Various	Steering Committee/ Chief	0.05	$6,560.51	0.45	$64,329.00	0.45	$64,329.00	0.05	$6,560.51	1.00	$141,779.02
Various	Subject Matter Experts			3.0	$254,216.00	3.0	$254,216.00	1.0	$40,986.00	7.00	$549,418.00
Re-directed IT Resources											
DPM III	• Project Director • CIO	0.25	$33,752.49	0.25	$33,752.49	0.25	$33,752.49	0.25	$33,752.49	1.00	$135,009.95
SSS II (Technical)	• Information Security Officer	0.15	$16,116.17	0.15	$16,116.17	0.15	$16,116.17	0.15	$16,116.17	0.60	$64,464.68
Associate ISA	• CCC Procurement Officer	0.5	$45,380.86							0.50	$45,380.86
Assistant ISA	• Project Administrator • User Administrator	0.5	$38,493.08	1	$76,986.17	1	$76,986.17			2.50	$192,465.42
	Total Re-directed CCC Resources	**1.50**	**$147,349.44**	**5.00**	**$466,538.81**	**5.00**	**$466,538.81**	**1.50**	**$104,461.50**	13.00	$1,184,888.57
New IT Resources											
SSS II (Supervisor)*	• C³ Supervisor • Contract Processor • Technical Mngr • Implementation Mngr			1	$112,363	1	$112,363			2.00	$224,726.99
SSS II (Technical)*	• Database Administrator • Change Control Lead • Data Conversion Lead			1	$107,441	1	$107,441			2.00	$214,882.25
Senior Programmer*	• Interface Programmer • SaaS Administrator • C³ Training Program Lead			1	$107,618	1	$107,618			2.00	$215,236.38
	Total New IT Resources			**3**	**$327,423**	**3**	**$327,423**			6.00	$654,845.63
	Total One-Time Project Staff Cost	***1.50***	***$147,349.44***	***8.00***	***$793,962***	***8.00***	***$793,962***	***1.50***	***$104,461***	***19.00***	***$1,839,734***

* New Position Requires a BCP

Table 7: Required On Going CCC Resources for C³ Maintenance & Operations

Classification	Ongoing Maintenance and Operations		
	Organization/Role	16/17…	
		PY	Cost
Re-directed IT Resources			
Staff Programmer Analyst	• Provides ongoing technical support for mobile interfaces. • Configures the Business Analytics module. • Creates Forms, Dashboards and Ad-hoc reports.	1	$ 98,658.77
Assistant ISA	• User Administration. • 2nd Level Support.	1	$ 76,986.17
	Total Re-directed CCC Resources	**2.0**	**$175,644.94**
New IT Resources			
SSS II (Supervisor)*	• C³ Supervisor, providing leadership and direction to C³ support staff. • Transition to be the C³ Contract Manager. • Project and Change Manager for future C³ enhancements. • Oversees C³ support and maintenance.	1	$ 112,363.50
SSS II (Technical)*	• CCC's database administrator responsible for the development, configuration, administration, maintenance and security of IOCS database systems hosted at RADC. • Responsible for data management activities related to the collection, storage, access and use, as well as archiving and disposal phases of the information cycle.	1	$ 107,441.13
Senior Programmer*	• Provides ongoing technical leadership in the support and maintenance of the interfaces between the IOCS system, SaaS system and state-owned systems. • SaaS administrator responsible for configuring SaaS objects, tabs, fields and workflows. • Oversees the C³ Training Program.	1	$ 107,618.19
	Total New IT Resources	**3.0**	**$327,422.81**
	Total On going IT Staff Cost	***5.0***	***$503,067.75***

* New positions, requires a BCP

1.1.11 Training Plan

Training is a key factor in the ultimate success of the new system. It is therefore critical that CCC personnel are properly trained in the usage and administration of the new system. The vendor will work with the CCC project team to develop a comprehensive training plan that addresses the training needs of CCC staff. The training plan identifies the training audience and content, methods of delivering the content, and the operational requirements to support the training. Training will consist of three phases:

1. Technical support training – will be provided to technical CCC IT staff, and will include knowledge transfer to support the new system and the mobile application.
2. System administration training – will be provided to CCC IT staff that will perform system administration such as adding users, changing user rights, updating system parameters, creating reports, etc.
3. Train the Trainer training – will be provided to CCC IT staff so they can provide initial and subsequent user training.

End-user training will be provided by CCC trainers. To improve information retention, training will be provided immediately prior to the final SaaS phase deployment at designated Centers.

The SaaS vendor will be responsible for producing user manuals, technical support manuals, user administration manuals and training materials, including self-directed web-based training modules for system use and capabilities consistent with the tools and techniques supported by the CCC.

The CCC IT staff responsible for ongoing maintenance and support of the OICS databases and interfaces will receive mentoring and training from the interface programming consultant during the implementation of the system. The CCC IT staff will work closely with the interface programming consultant during interface development and database implementation. This process is of critical importance to ensure CCC IT staff will be ready to take on all the responsibilities for technical support, maintenance and modifications of the databases and interfaces after consultant disengagement.

1.1.12 Ongoing Maintenance

SaaS System

The SaaS vendors, through the annual subscription, will maintain responsibility for ongoing maintenance and updates of the system and infrastructure. The SaaS ongoing maintenance is specified in the Service Level Agreement (SLA) and will include:

- Hardware and software maintenance and upgrades.
- Site connectivity for the production and development environments
- Infrastructure and system upgrades
- Backup and Operational recovery
- System performance

- Interfaces
- Implement system enhancements
- Perform “bug fixes”
- System security and the required security certifications
- Train IT staff with new system features/functions
- Help desk support for IT staff

The cost of maintaining the SaaS systems is included in SaaS yearly subscription and will begin after completion of Release I.

CCC IT staff will perform the following services as part of ongoing support for the SaaS systems:

- Perform User administration including security, roles, profiles, sharing rules, and groups
- Provide 1st level user support
- Provide end-user training
- Configure objects, tabs, fields, and workflow
- Configure business analytics
- Create ad-hoc reports and dashboards
- Maintain and support mobile interfaces
- Work with SaaS vendors in resolving system issues
- Maintain and support the current CCC network and telecommunication infrastructure and computing environment.
- SaaS vendor contract management

IOCS Environment

Support for the servers at RADC will be provided by data center staff. Support will include:

- Operating system updates and patches
- Data center hardware maintenance
- System monitoring services
- Backup and recovery services

CCC IT Staff will perform the following services as part of ongoing support for the IOCS systems:

- Database administration
- System interface programming
- Business analytics and reporting support and maintenance
- Administer and support scheduled batch jobs for file exchanges
- Administer and maintain system security including firewall management
- Coordinate with RADC on infrastructure support
- Coordinate with state department in resolving interface issues with state-owned systems.

1.1.13 Information Security

Enterprise Resource Management SaaS Environment

The proposed solution will house Corpsmember data, including both confidential personal identifying information and medical information, making information security a critical component in the selection of a SaaS solution. The CCC's approach to information security for this project will be consistent with federal and state data protection and privacy laws as well as Agency and Department information security policies, including compliance with the Secretary of State's regulations regarding the use of digital signatures. All confidential information will be encrypted in flight (transmission over the network), and at rest stored in the vendor and CCC secured sites. The proposed solution will require a browser - based zero footprint client to ensure user s' workstations will not maintain CCC confidential data.

The SaaS vendor will be responsible for providing security, and will be required to implement a solution that incorporates system security, confidentiality standards and data integrity as part of the overall architecture, in addition to being ISO 27001, SSAE 16 SOC 1, and HIPAA compliant. Throughout the contract duration the SaaS vendor will be required to produce security compliance certifications or third-party security audit reports during random audits conducted by the CCC.

It is imperative that the C³ solution implement a security system that ensures only authorized users have access to services that contain confidential and sensitive information. An identity management sign-on will be used in the system security framework and will provide the following services:

- Two-factor authentication - requires the presentation of two different kinds of evidence that someone is who they say they are.
- Single sign-on – users will not have to login multiple times in order to gain access to the various business applications and processes that they use in their jobs.
- Strong authentication – streamline requirements for password complexity and expiration, session timeouts, maximum number of failed login attempts.
- User provisioning and de-provisioning– Centralized user administration and automate the management of users in SaaS applications.
- Detailed audit reporting – provides insights into application security and usage.

OICS Environment

The database storing confidential Corpsmember data, hosted at RADC, will be encrypted and isolated with security threat mitigation solution. Advanced Encryption Standard (AES) is the proposed system specification for the encryption of confidential electronic data. Hypertext Transfer Protocol Secure (HTTPS) connections will provide encrypted communications between RADC, the SaaS and the state-owned systems.

Information Security Officer (ISO)

The ISO is an integral member of the project technical team. The ISO will develop information security technical requirements for the procurement process, and oversee security and security testing during the development, implementation, and transition to ongoing operations (maintenance).

1.1.14 Confidentiality

CCC staff will be limited to accessing information specific to their business. Strict security will be maintained, and only authorized staff, such as HR personnel, will be allowed access to personal identifiable and medical information

All system information stored in the SaaS data center remains the property of the State. As such, the SaaS vendor will agree not to scan, capture or view CCC information or data unless expressly authorized by appropriate representatives of the CCC. In addition, prior to the release of any CCC information or data to any law enforcement or third party, the SaaS vendor will be required to notify and receive express written approval from the CCC.

Upon conclusion/termination of the service, the SaaS vendor at no additional cost, will provide the CCC, within 5 (five) business days, a copy of all CCC data stored in the SaaS data center. This data will be provided in Microsoft Excel, comma delimited, or other such format agreed upon by the SaaS vendor and the CCC prior to the commencement of the service. The SaaS vendor will purge any and all CCC data from any and all of its systems within 10 (ten) business days of acknowledged receipt of the data by the CCC.

All data including backups and archived information owned by the State can only be stored in locations that are physically within the contiguous United States of America.

1.1.15 Impact on End Users

The proposed solution will have a major impact on current users of CADCARS, the Access databases, the spreadsheets, and the associated manual processes. Having to learn a new process, including the use of a mobile application, can be a trying experience for even the most seasoned users. Initial impact on the end users will involve technological, procedural, and behavioral changes. The most significant issue will arise from the automation of manual processes, and the elimination of spreadsheets and redundant data entry. Another significant change involves a different “look and feel” as the system transitions from the archaic screens and cumbersome navigation of the DOS-based CADCARS, to a browser-based and more efficient application.

As with any new technology implementation, there will be a difficult period of adjustment and an initially steep learning curve for end users. To address these challenges, the CCC will:

- Establish executive ownership of C³ to support its use throughout the Department.

- Involve users early in the process
- Continuously promote the benefits of C³
- Properly train users
- Implement an effective communication plan
- Establish a comprehensive change management process and utilize a change management committee, which as part of its focus, will work with end users to develop a plan to achieve successful adoption of the solution
- Provide help desk support for end-users

As users become familiar with the new system, the efficiency gains in performing daily job duties will become apparent to end users, leading to growing satisfaction with the new system. All improvements will provide the significant organizational benefits described in Section 3.

1.1.16 Impact on Existing System

C³ will completely replace the existing system, CADCARS. Since both systems cannot run simultaneously, data conversion of active records will be an issue with this project. The selected SaaS vendor will be responsible for ensuring that there are no disruptions to operations once the legacy system is decommissioned. A data conversion plan that establishes the conversion environment and outlines the strategies for both the automated and manual conversion of data for the new SaaS solution will be required in the procurement process.

1.1.17 Consistency with Overall Strategies

This project furthers both the CCC's overall strategy to improve efficiency and reporting capabilities of Corpsmember management and supports the State's IT strategic plan goals:

- Goal 1: "Accessible and Mobile Government"
- Goal 3: "Efficient, Consolidated and Reliable Infrastructure and Services"
- Goal 4: "Information is an Asset"

Furthermore, the proposed solution supports the Green IT initiatives outlined by the State.

1.1.18 Impact on Current Infrastructure

Obsolete technology supporting CADCARS will be decommissioned. The C³ Project Plan will include a "CADCARS Decommission Plan" detailing the proper disposition of all CADCARS components.

1.1.19 Impact on Data Center

By leveraging the SaaS for the primary system, the software and the infrastructure will be provided by a third party vendor and data hosted at the vendor site. As a result the Resource Agency Data Center

(RADC), CCC's primary state data center, will not be exposed to ISO 27001, SSAE 16 SOC 1, and HIPAA compliance requirements, and will not require infrastructure augmentation. For the OICS environment that will be hosted in RADC, existing shared services will be configured to support the data storage and database servers.

1.1.20 Data Center Consolidation

Because the legacy system, CADCARS is built on an obsolete platform, it must be hosted at the CCC. Once the legacy system has been decommissioned, the CCC will be compliant with AB2408, which directs the Department to close in-house data centers and consolidate IT services in a Tier III Data Center.

1.1.21 Backup and Operational Recovery

The SaaS service provider is responsible for providing system backup, disaster recovery, and operational recovery plans. C³ is a mission critical system and will require a minimum uptime availability of 99.9% and be available 24/7 to Emergency responders. In the event of a disaster, the system must be recovered within 48 (forty-eight) hours with a maximum data loss of one business day.

Backup and recovery services for OICS databases will be provided by RADC.

1.1.22 Public Access

The proposed solution will have no public access.

1.1.23 Costs

The one time IT project costs related to acquiring a Hybrid solution are estimated at $4,610,735 with an estimated implementation time of 31 months: a 9 month period for the planning and procurement phase and 22 month period for the project planning, development, implementation of Releases I, II and III and project closure. The yearly ongoing costs would be $1,163,068. Three new IT positions will be requested through the BCP process as part of the project team and will be responsible, in addition to two existing staff, for supporting and maintaining the C³ systems thereafter.

Table 8 in the following page shows the one-time and ongoing estimated costs associated with the Hybrid Solution, excluding CCC staffing resources identified in Section 5.1.10: Resource Requirements.

Table 8: Proposed Solution: C³ Cost Excluding CCC Staff Cost

Note	Description	Unit Cost	Quantity	13-14	14-15	15-16	16-17	17-18...
3	Hardware Purchase				$ 40,000	$ 8,000	$ 8,000	$ 8,000
	Sub Total			$ -	$ 40,000	$ 8,000	$ 8,000	$ 8,000
	Prime Saas Vendor							
4	• SaaS Implementation	$200/hr	5325 hrs		$ 342,400	$ 534,400	$ 28,800	$ -
5	• Interface Programmer	$175/hr	1868 hrs			$ 233,500		
6	• Mobile Interfaces	$200/hr	560 hrs			$ -	$ 203,200	
7	• SaaS Subscription				$ 46,500	$ 558,000	$ 558,000	$ 558,000
	Sub Total			$ -	$ 388,900	$ 1,325,900	$ 790,000	$ 558,000
	Quality Control Services							
8	• Quality Control Consultant	$125/hr	2148 hrs		$ 100,688	$ 134,250	$ 33,563	
9	• Data Conversion Programme	$125/hr	633 hrs			$ 79,200		
	Sub Total			$ -	$ 100,688	$ 213,450	$ 33,563	$ -
10	Independent Validation and Verification	$150/hr			$ 108,000	$ 108,000	$ 36,000	
					$ 108,000	$ 108,000	$ 36,000	
	Dept of Technology Services							
11	• Project Oversight	$12,800/mo	29 mos	$ 12,800	$ 76,800	$ 76,800	$ 25,600	$ -
12	• Procurement Oversight	$130/hr	800 hrs	$ 28,000	$ 76,000			
	Sub Total			$ 40,800	$ 152,800	$ 76,800	$ 25,600	$ -
	RADC Services							
13	• Project Management	$13000/mo	29 mos	$ 39,000	$ 156,000	$ 156,000	$ 65,000	$ -
14	• Enterprise Architect	$12000/mo	500 hrs		$ 35,000			
15	• Data Center Services				$ 60,000	$ 60,000	$ 60,000	$ 60,000
	Sub Total			$ 39,000	$ 251,000	$ 216,000	$ 125,000	$ 60,000
16	Training				$ 42,000	$ 34,000	$ 34,000	$ 34,000
	Sub Total			$ -	$ 42,000	$ 34,000	$ 34,000	$ 34,000
	Project Cost			**$ 79,800**	**$ 1,083,388**	**$ 1,982,150**	**$ 1,052,163**	**$ 660,000**

Summary of C³Implementation and Operations Cost excluding CCC Staff Cost

One Time Project Cost = **$2,771,001.00**

On Going Operation and Subscription Cost for FY 14-15 = **$106,500.00**

On Going Operation and Subscription Cost for FY 15-16 to FY 19-20= **$660,000.00/year**

Assumptions behind the one time and ongoing costs include:

1: The project is authorized, project funds are available, and work can begin in April 2014.

2: The project is based on a 31 month project, 9 months for procurement and 22 months for project planning, development, implementation, and project closure.

3: Hardware purchase for a next generation firewall.

4: $200 an hour rate is based on an average hourly rate provided by SaaS vendors that participated in the market survey. Vendor resources include SaaS programmers, vendor project/contract manager, and trainer for train- the-trainers.

5: $175 an hour rate is based on CMAS/MSA rate for senior developer.
6: $200 an hour rate is based on an average hourly rate for a mobile interface programmer provided by SaaS vendors that participated in the market survey. Vendor resources include mobile interface programmer.
7: The annual cost for SaaS subscriptions based upon a market survey of SaaS providers.
8: Cost based on 22 months of quality control services approximately 97 hours a month.
9: Rate for data conversion services was based upon the current CADCARS programmer consultant rate.
10: Cost based on 28 months of IV&V services approximately 60 hours a month
11: Rate is based upon a quote from the Department of Technology.
12: Rate is based upon a quote from the Department of Technology.
13: Rate is based on a full time Data Processing Manager III at maximum including benefits.
14: Rate is based on Systems Software Services III at maximum including benefits.
15: Data Center costs are based upon an approximate quote from RADC.
16: One-time training and travel costs for FY 2014-15 are broken down as follows:

- Formal technical training for CCC IT Staff is estimated at $5,000/each for 3 IT staff, a total of $15,000
- System Administration training for CCC IT staff is estimated at $2,500/each for 2 IT staff, a total of $5,000
- IT Training-related travel is expected to be between Headquarters and San Francisco, and is estimated at $4,000
- The vendor will provide system training to CCC IT staff through a Train-the-Trainer program, estimated to cost $8,000.
- CCC will facilitate Train-the-Trainer sessions with CCC HQ and field staff.
- User Training-related travel between HQ and field offices is estimated at $10,000.

Ongoing training, travel and new employee overhead costs

- Annual technical training for CCC IT staff is estimated at $5,000 each for e IT staff, a total of $15,000.
- Annual end user refresher training and travel (related to training) costs are estimated at $10,000.
- New employee annual overhead cost is $3,000 per employee, a total of $9,000 on going cost.

1.2 Rationale for Selection

The CCC has taken a two-step approach in determining its universe of potential "Alternatives." During the investigation of possibilities, a large number of "options" presented themselves. These included custom development, use of similar systems from other departments, procurement of COTS/MOTS products, procurement of a Hybrid solution and procurement of a SaaS solution. A cursory review of some of these "options" indicated that either the cost was prohibitive or the solution would not meet CCC's business requirements, and so those options are not included in the "Alternative" analysis. Only those options that fit within the CCC's functional and budgetary requirements have progressed to the "Alternative" step, and are included in the Alternative Analysis and associated EAWs and documentation. Several of the rejected options are listed below the alternative analysis.

The evaluation criteria used in assessing possible solutions are:

- **Operational continuity** – The ability to move applications and data from one cloud computing environment to another with minimal disruption.
- **Operational agility** – ability to decouple different elements of an application in different environments, whether internal or external.
- **Interoperability** – The ability of the solution to interface with and deliver bi-directional data exchanges with state-owned systems.
- **Level of risk** – Risks associated with the delivery of the new system such as delay, failure and cost overrun.

1.2.1 Proposed Alternative: Hybrid Solution

The Hybrid Solution (our proposed solution) is a combination of SaaS and on premise services, and is a timely approach to meeting immediate CCC business needs. While it is not the lowest cost alternative, it is the most complete solution, meets the full range of CCC goals and objectives, and is consistent with the long-term vision of the CCC and California Natural Resource Agency.

- Operational continuity – The Hybrid Solution ensures that CCC mission-critical data is locally available, and can be wholly controlled by the department for instant recovery and access. The on premise databases will mirror all data stored in the SaaS cloud, and will be available in the event the CCC must utilize different technologies, service providers, or application architectures.
- Operational agility – The Hybrid solution supports an agile architecture leveraging the use of SaaS and on premise solutions to support daily bi-directional data exchanges, thus providing greater portability in the even the CCC changes primary SaaS provider.
- Ability to interface with state-systems. The Hybrid Solution allows for the successful development and delivery of interfaces and bi-directional data exchanges with systems listed in Section 5.1.7: Technical Interface. Having the IOCS environment act as the intermediary between state-owned systems and SaaS systems eliminates interface incompatibility issues.

- Level of risk – The Hybrid Solution poses the lowest level of implementation and technological risks in that it leverages the benefits of both SaaS and on premise models to create an environment that meets the business and functional needs of the CCC.

Advantages:

Refer to Section 5: Proposed Solution

Disadvantages:

- Increased staff requirements of 3.0 PYs
- Creates data redundancy – CCC data is stored in multiple data centers
- CCC IT staff is required to manage complex interfaces with SaaS and state-owned systems.
- Requires increased oversight and tighter contract management

1.3 Other Alternatives Considered

1.3.1Alternative 1: Pure SaaS Solution

The SaaS solution differs from the proposed solution in that all services would be provided by one SaaS vendor, with no services residing in RADC.

- Operational continuity – The Pure SaaS solution calls for a monthly download of CCC data from the SaaS provider to the CCC databases. In this alternative, the data would reside in an archival state, rather than in an active database that mirrors the SaaS system. A high level of coordination and possible architectural change is needed in the event the CCC decides to move away from the primary SaaS vendor.
- Operational agility – The CCC is subjected to some degree of "Vendor Lock-in" with the Pure SaaS model since most functionality is provided by the one SaaS vendor.
- Ability to interface with state-systems. – In the Pure SaaS solution, the SaaS vendor is responsible for developing and deploying the interface for all the systems in Section 5.1.7: Technical Interface. With this model, building bi directional data exchanges is extremely complex, and has a greater risk of interface incompatibilities between the SaaS and state-owned systems.
- Level of risks – The Pure SaaS alternative poses a higher risk of project delay, failure or cost overrun due to the complexities associated with building the interface for all the systems identified in Section 5.1.7. In addition, this alternative has a high dependency on a single SaaS vendor, which increases the risk of business disruption resulting from technology or business-driven changes.

Advantages:

- Lowest cost sustainable technological solution requiring the least number of CCC IT resources.

Disadvantages:

- CCC's data will be solely hosted outside a State Data Center.
- Relinquishment of control – a single third-party vendor is entrusted with hosting CCC's mission critical system and invaluable data.
- Interface into other CCC and state-owned systems, specifically FI$Cal will be extremely difficult, highly complex, and possibly could over-exceed the estimated cost to implement the solution
- Increases the risk of business disruption, and requires a high level of coordination if the CCC decides to move into another technology, service provider, or application architecture.
- Low operational continuity.

The one time IT project costs related to acquiring a Pure SaaS solution are estimated at $4,417,303 with an estimated implementation time of 31 months: a 9 month period for the planning and procurement phase and 22 month period for the project planning, development, implementation of Releases I, II and III and project closure. The yearly ongoing costs would be $979,627. Two new IT positions will be requested through the BCP process as part of the project team and will be responsible for supporting and maintaining the C³ systems thereafter.

Tables 9, 10, 11 in the following pages show the required CCC resources, one time IT project costs and ongoing costs to implement and support the Pure SaaS solution.

Table 9: Alternative 1: One Time CCC Resources by Fiscal Year

Classification	Organization/Role	One-Time Project Implementation							
		13/14		14/15		15/16		16/17	
		PY	Cost	PY	Cost	PY	Cost	PY	Cost
Re-directed Program Resources									
CEA	• Executive • SponsorChief Deputy Director	0.05	$7,046.33	0.15	$21,138.99	0.15	$21,138.99	0.05	$7,046.33
Various	Steering Committee	0.05	$6,560.51	0.45	$64,329.00	0.45	$64,329.00	0.05	$6,560.51
Various	Subject Matter Experts			3.0	$254,216.00	3.0	$254,216.00	1.0	$40,986.00
Re-directed IT Resources									
DPM III	• Project Director • CIO	0.25	$33,752.49	0.25	$33,752.49	0.25	$33,752.49	0.25	$33,752.49
SSS II (Technical)	• Information Security Officer	0.15	$16,116.17	0.15	$16,116.17	0.15	$16,116.17	0.15	$16,116.17
Associate ISA	• CCC Procuremetnt Officer	0.5	$45,380.86						
Assistant ISA	• Project Administrator • User Administrator	0.5	$38,493.08	1	$76,986.17	1	$76,986.17		
	Total Re-directed CCC Resources	**1.50**	**$147,349.44**	**5.00**	**$466,538.81**	**5.00**	**$466,538.81**	**1.50**	**$104,461.50**
New IT Resources									
SSS II (Supervisor)*	• C³ Supervisor • Contract Processor • Technical Mngr • Implementation Mngr			1	$112,363.50	1	$112,363.50		
Senior Programmer*	• Interface Programmer • SaaS Administrator •Oversees the C³ Training Program			1	$107,618.19	1	$107,618.19		
	Total New IT Resources			**2**	**$219,981.69**	**2**	**$219,981.69**		
	Total One-Time Project Staff Cost	***1.50***	***$147,349.44***	***7.00***	***$686,520.50***	***7.00***	***$686,520.50***	***1.50***	***$104,461.50***

* New positions, requires a BCP

Table 10: Alternative 1: On Going CCC Staff Resources

Classification	Ongoing Maintenance and Operations		
	Organization/Role	16/17…	
		PY	Cost
Re-directed IT Resources			
Staff Programmer Analyst	• Provides ongoing technical support for mobile interfaces • Configures the Business Analytics module • Creates Forms, Dashboards and Ad-hoc reports	1	$ 98,659
Assistant ISA	• User Administration • 2nd Level Support	1	$76,986
	Total Re-directed CCC Resources	**2.0**	**$175,645**
New IT Resources			
SSS II (Supervisor)*	• C³ Supervisor, providing leadership and direction to C³ support staff • Transition to be the C³ Contract Manager • Project and Change Manager for future C³ enhancements. • Oversees C³ support and maintenance	1	$112,363
Senior Programmer*	• Provides ongoing technical leadership in the support and maintenance of the interfaces between the IOCS system, SaaS system and state-owned systems. • SaaS administrator responsible for configuring SaaS objects, tabs, fields and workflows. • Oversees the C³ Training Program	1	$107,618
	Total New IT Resources	**2.0**	**$219,982**
	Total On going IT Staff Cost	***4.0***	***$395,627***

*New positions, requires a BCP

Table 11: Alternative 1: C³ Cost Excluding CCC Staff Cost

Note	Description	Unit Cost	Quantity	13-14	14-15	15-16	16-17	17-18
3	Hardware Purchase				$ -	$ -	$ -	$ -
	Sub Total			$ -	$ -	$ -	$ -	$ -
	Prime Saas Vendor							
4	• SaaS Implementation	$200/hr	5325 hrs		$ 342,400	$ 534,400	$ 28,800	$ -
5	• Interface Programmer	$175/hr	2170 hrs			$ 379,750		
6	• Mobile Interfaces	$200/hr	560 hrs			$ -	$ 203,200	
7	• SaaS Licenses				$ 46,500	$ 558,000	$ 558,000	$ 558,000
	Sub Total			$ -	$ 388,900	$ 1,472,150	$ 790,000	$ 558,000
	Quality Control Services							
8	• Quality Control Consultant	$125/hr	2148 hrs		$ 100,688	$ 134,250	$ 33,563	
9	• Data Conversion Programm	$125/hr	633 hrs			$ 79,200		
	Sub Total			$ -	$ 100,688	$ 213,450	$ 33,563	$ -
10	Independent Validation and Verification	$150/hr			$ 108,000	$ 108,000	$ 36,000	
					$ 108,000	$ 108,000	$ 36,000	
	Dept of Technology Services							
11	• Project Oversight	$12,800/mo	29 mos	$ 12,800	$ 76,800	$ 76,800	$ 25,600	$ -
12	• Procurement Oversight	$130/hr	800 hrs	$ 28,000	$ 76,000			
	Sub Total			$ 40,800	$ 152,800	$ 76,800	$ 25,600	$ -
	RADC Services							
13	• Project Management	$13000/mo	29 mos	$ 39,000	$ 156,000	$ 156,000	$ 65,000	$ -
14	• Enterprise Architect	$12000/mo	500 hrs		$ -			
15	• Data Center Services				$ -	$ -	$ -	$ -
	Sub Total			$ 39,000	$ 156,000	$ 156,000	$ 65,000	$ -
16	Training				$ 42,000	$ 34,000	$ 34,000	$ 34,000
	Sub Total			$ -	$ 42,000	$ 34,000	$ 34,000	$ 34,000
	Project Cost			**$ 79,800**	**$ 948,388**	**$ 2,060,400**	**$ 984,163**	**$ 592,000**

Summary of C³ Implementation and Operations Cost excluding CCC Staff Cost

One Time Project Cost = **$2,842,250**

On Going Operation and Subscription Cost for FY 14-15 = **$46,500**

On Going Operation and Subscription Cost for FY 15-16 to FY 19-20= **$592,000/year**

Assumptions behind the one time and ongoing costs include:

1: The project is authorized, project funds are available, and work can begin in April 2014.

2: The project is based on a 30 month project, 9 months for planning and procurement and 20 months for development, implementation, and training.

3: N/A

4: $200 an hour rate is based on an average hourly rate provided by SaaS vendors that participated in the market survey. Vendor resources include SaaS programmers, vendor project/contract manager, and trainer for train- the-trainers.

5: $175 an hour rate is based on CMAS/MSA rate for senior developer.
6: $200 an hour rate is based on an average hourly rate for a mobile interface programmer provided by SaaS vendors that participated in the market survey. Vendor resources include mobile interface programmer.
7: The annual cost for SaaS subscriptions based upon a market survey of SaaS providers.
8: Cost based on 22 months of quality control services approximately 97 hours a month.
9: Rate for data conversion services was based upon the current CADCARS programmer consultant rate.
10: Cost based on 28 months of IV&V services approximately 60 hours a month
11: Rate is based upon a quote from the Department of Technology.
12: Rate is based upon a quote from the Department of Technology.
13: Rate is based on a full time Data Processing Manager III at maximum including benefits.
14: N/A
15: N/A
16: One-time training and travel costs for FY 2014-15 are broken down as follows:

- Formal technical training for CCC IT Staff is estimated at $5,000/each for 2 IT staff, a total of $10,000
- System Administration training for CCC IT staff is estimated at $2,500/each for 1 IT staff, a total of $5,000
- IT Training-related travel is expected to be between Headquarters and San Francisco, and is estimated at $3,000
- The vendor will provide system training to CCC IT staff through a Train-the-Trainer program, estimated to cost $10,200.
- CCC will facilitate Train-the-Trainer sessions with CCC HQ and field staff.

Ongoing training, travel and new employee overhead costs

- Annual technical training for CCC IT staff is estimated at $5,000 for 2 IT staff, a total of $10,000.
- User refresher training related travel between HQ and field offices is estimated at $10,000.
- Employee overhead cost is estimated at $3,000 for 2 new IT staff, a total of $6,000.

1.4 Recommendation

Both alternatives, the Hybrid Solution and Pure SaaS models are computing technology that provide dynamically scalable infrastructure for application, data, and file storage. Additionally both alternatives provide the following benefits:

- Introduce a new enterprise resource management system into the CCC's business environment with minimal disruption.
- Leverage vendor line-of-business experience and the flexible and scalable technology services offered by a SaaS service provider to support the CCC's business functions. SaaS solutions

leverage a ready-made platform which has already been provisioned, implemented and tested by the SaaS provider, which simplifies and reduces deployment complexities.

- Offer a dynamic approach to managing computing infrastructure and resources. The SaaS model offers flexible subscription pricing which can be scaled up or scaled down based on evolving needs. This model accommodates the CCC business need for temporary expansion without permanent commitment. In the event that some of the services offered by the SaaS solution become available through state systems, the CCC will have the ability to scale down the solution accordingly.
- Provide a reliable and secure infrastructure to meet varied customer needs, thus eliminating the need for the CCC to invest in, and commit, major resources needed to support a complex computing environment.
- Users can connect from anywhere, with any CCC standard device wherever there is internet access.

After extensive research and careful consideration, the CCC recommends the Proposed Alternative: Hybrid solution. Although Alternative I: Pure SaaS solution, offers similar benefits, is the least expensive and have the least amount of time needed to address the Department's immediate need, the Hybrid solution will achieve the best alignment with the Department goals and objectives as well State polices (FI$Cal, Data Center Consolidation, etc.). Collaborative analysis and due diligence evaluation of alternative approaches by CCC staff has determined that the Hybrid model provides the best value for the state, the maximum potential environment flexibility to support the current and future needs of the CCC and the lesser risk associated with project delivery of the new system.

1.4.1 Other Options

The following 5 options were not developed as alternatives:

Option 1: Do Nothing

This is not a viable option since CCC will continue to be at risk of:

- System failure that could result in the inability to pay Corpsmembers in a timely manner, and the loss of the automated revenue collection process, creating cash flow problems affecting the Collins-Dugan Reimbursement Fund.
- Compromising the security of Corpsmember personal identification and health information
- Penalties due to non-conformance with security, labor and Workers' Compensation laws.

In addition, the CCC will continue to be out of compliance with:

- Control agency mandates to house all mission critical systems in an approved Tier III Data Center
- State Administrative Manual (SAM) security policies
- Other regulatory and legal requirements for the protection of Corpsmember personal and health information.

Option 2: Upgrade the Existing CADCARS

This is not a viable option as it is currently not possible to upgrade a system that is this technologically obsolete.

Option 3: In-House Custom Development

The CCC considered the feasibility of building a custom solution. This alternative was dismissed because the IT resource requirements and system implementation requirements would be time and cost prohibitive.

Option 4: Similar Systems from Other Departments

Due to the unique nature and role of Corpsmembers in the CCC, no similar systems in other State Departments, including those in the Resource Agency, will accommodate the CCC's distinctive need to manage Corpsmembers.

Option 5: Commercial off the Shelf (COTS) or Modified off the Shelf (MOTS) Solution

This option, purchasing licenses for a COTS/MOTS software with data hosted in a State Data Center, was investigated quite thoroughly early in the development of this FSR. The support requirements (CCC estimated that 11 staff would need to be hired and trained) and additional costs for hardware, network infrastructure, and data center services indicated that the COTS/MOTS solution was not a cost effective solution. In addition, this option was dismissed since it duplicates FI$Cal functions for contract management, project fiscal management, invoicing, and accounts receivable. When purchasing an Enterprise Resource Management COTS/MOTS solution these functions are included and cannot be separated from the total package. This duplication of functionality is not allowed by FI$Cal.

6. Project Management Plan

Effective project management is essential to the successful implementation of C³. As such, this project is organized and conducted in conformance to the CA Project Management Methodology (CA-PMM) and the Project Management Body of Knowledge (PMBOK), as maintained by the Project Management Institute (PMI). These methodologies cover all PMBOK Process Groups, including project initiation, project planning, project execution, project monitoring and controlling and project closeout. The project will also incorporate to the appropriate extent the ten PMBOK knowledge areas: Integration, Scope, Time, Cost, Quality, Human Resources, Communications, Risk, Procurement and Stakeholder Management. The C³ Project Manager is responsible for the execution of the Project Management Plan and has been authorized in this position by the Project Sponsor. The Project Manager's roles and responsibilities are detailed in Section 6.4 below. Additionally, all IT vendors and consultants involved will be required to conform to these project methodologies and management product standards.

With regard to the C³ project, the Project Manager will operate as the Risk Manager and Contract Manager, working collaboratively work with the IT Project Directors and CCC contract management staff. The role of Procurement Manager is a collaborative effort to be filled by the Department of Technology, Procurement Division, the C³ Technical Manager and CCC support staff and the Project Manager.

6.1. Project Complexity Assessment

A preliminary CA-PMM Complexity Assessment was prepared for this project using the SIMM Section 17.D.1 template. The assessment rates the project as one of medium technical complexity (Zone II) due to:

- 99.9% system availability
- Complex security requirements
- State-wide communication

A copy of the assessment is included in Appendix C.

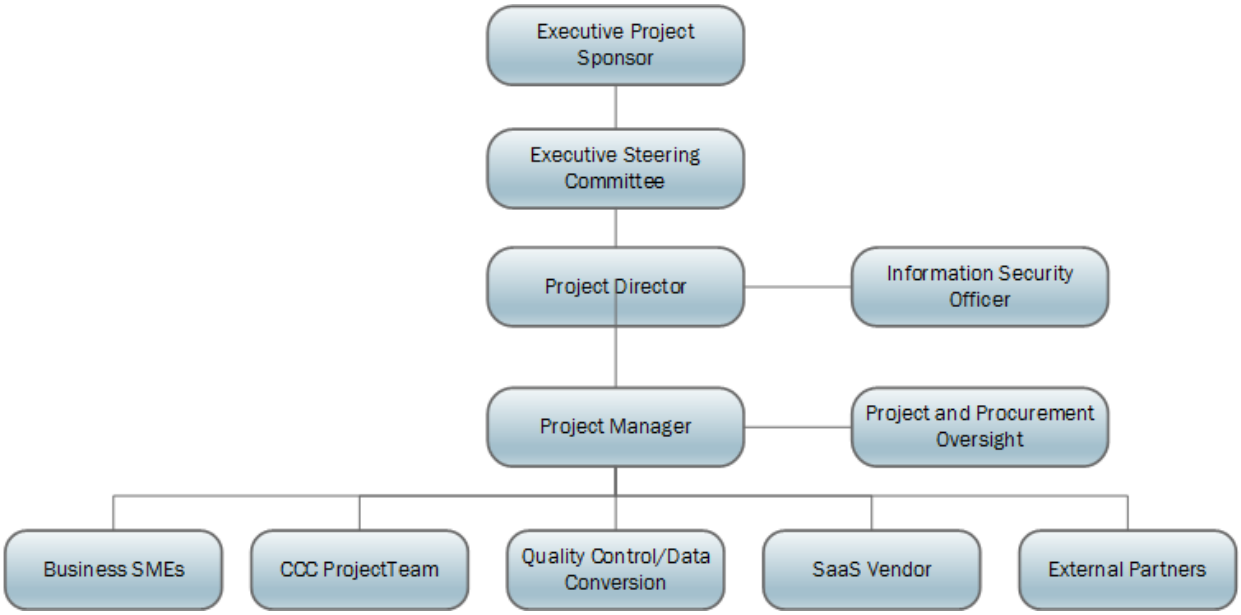
6.2. Project Organization

The following organizational chart reflects the staffing and managerial hierarchy for the project, which will include members of the CCC's Executive Team, management and staff from Program Units, IT staff from the Information Systems Branch (ISB), CNRA project management, CTA oversight, external partners from FI$CAL, SCO and SCIF, consultants, and the selected solution integration vendor.

6.3. Project Organization

The following organizational chart reflects the staffing and managerial hierarchy for the project, which will include members of the CCC's Executive Team, management and staff from Program Units, IT staff from the Information Systems Branch (ISB), CNRA project management, CTA oversight, external partners from Fi$CAL, SCIF and SCO, consultants, and the selected SaaS vendor.

Figure 6: Project Organization Chart



6.4. Roles and Responsibilities

This section defines the roles and responsibilities of the project participants as identified in the project organizational chart. The table below describes the general responsibilities of the key roles.

Table 12: Roles and Responsibilities

Participants	Roles and Responsibilities
Executive Project Sponsor	✓ Champions, owns and is accountable for the overall success of the project ✓ Sets and prioritizes project objectives ✓ Ensures project is adequately funded and available ✓ Ensures sustained buy-in at all levels ✓ Highest levels of escalation for issues/decisions and ensure

	resources are available for *risk* management as needed. ✓ Approves the Project Charter, Project Management Plan and significant changes in scope, cost or schedule ✓ Empowers the Project Director and Manager with the appropriate authority ✓ Ensures an appropriately skilled Project Manager is selected for the project. ✓ Provides final approval of project deliverables ✓ Chairs Steering Committee
Executive Steering Committee	✓ Primary stakeholders of the project with decision making authority regarding the project ✓ Members of the Executive Team and owners of the business units most impacted by the project ✓ Ensures that resources, both business and technical, are made available for the project team ✓ Monitors project progress and metrics from the enterprise perspective ✓ *Receives reports of all high severity risks and may be called upon to assist in risk mitigation.* ✓ Resolves issues and disputes regarding scope, cost, schedule and quality of the project <u>Chief Legal</u> ✓ A member of CCC's Executive Team and the Executive Steering Committee ✓ Provides legal resources to support the various activities necessary for implementation ✓ Ensures conformance to State and Federal laws ✓ Reviews project-related IT procurement documents and contracts ✓ Leads the effort to use electronic signatures where applicable
Project Director	✓ Provides oversight of the project ✓ Ensures deliverables and functionality are achieved as defined in the Project Charter and subsequent project plans ✓ Ensures effective management of all resources assigned to the project ✓ Serves as the primary liaison between the project and the Project Sponsor, Steering/Governance committee(s) ✓ Escalates decisions and issues, as needed, to the Project Sponsor ✓ Acts as the principal interface to the contractors ✓ Coordinates project related issues with other efforts ✓ Ensures that promised benefits are realized ✓ Communicates project status to Executive Project Sponsor, Steering Committee, and CCC Management ✓ Reviews and resolves significant issues that the Project Manager/Team cannot resolve ✓ Works directly with the Project Manager to ensure project management practices are being employed, *including risk*

	management as identified in the Risk Management Plan ✓ *Assists in resolving risks and/or issues that have been escalated to this level by the Project Manager*
Project Manager	✓ Plans the Project, including the creation and maintenance of the Project Management Plan ✓ Ensures deliverables and functionality are achieved as defined in the Project Charter and subsequent Project Management Plan ✓ Accountable to the Project Director and Project Sponsor for all project office management related activities ✓ Plans, directs, and oversees the day-to-day activities of the technical and program project teams ✓ Develops and/or oversees the master project schedule and all other project work plans. ✓ Principal point of contact for control agencies, project contractors, and stakeholders ✓ Ensures that the project is implemented within the budget constraints ✓ Directs and manages project work in conformance with project scope, schedule, cost and quality and all other subsidiary plans incorporated into the overall Project Management Plan, as well as the Staffing Plan. ✓ Accountable for the development, maintenance, and adherence to the Project Office infrastructure and support methodologies (e.g. processes, procedures, standards, and templates) that are in compliance with Best Practices and policies ✓ Responsible for the overall management of the consultants, in collaboration with the Technical Lead and other appropriate Project Team members.
Information Security Officer	✓ Reviews and analyzes security and privacy risks ✓ Responsible for all security requirements and design considerations ✓ Validates the adequacy of proposed security controls ✓ Ensures the proposed system development and implementation adheres to CCC, CNRA and State security policies and guidelines ✓ Ensures the proposed system complies with ISO 27001, SSAE 16 SOC 1, and HIPAA
Project Team	<u>Risk Manager</u> ✓ *Leads the effort to identify, documents, manage and track risks and risk mitigation/contingencies on the project, leading risk identification sessions, ensuring regular reviews and follows risk escalation process as identified in Section 6.4 of this FSR.* ✓ Monitors risk management efforts to ensure they do not adversely impact the project ✓ Maintains the risk management tools and documentation ✓ Modifies the risk management plan to include agreed actions to avoid or reduce the impact of risks

	✓ Responsible for ensuring risks that materialize are identified as issues are assigned, tracked, addressed and resolved in a timely manner ✓ Responsible for status reporting, risk management, and escalation of issues that cannot be resolved within the team ✓ Monitors contractor risk management efforts. <u>Procurement Manager: (CCC Procurement Officer and Procurement Oversight)</u> ✓ Oversees and manages the generation of the procurement documents. ✓ Integrates all of the pieces and ensures consistency and continuity throughout the entire procurement process and conformity to procurement standards, rules and regulations. ✓ Manages the procurement document development ✓ Prepares and maintains the procurement schedule ✓ Coordinates contract negotiations ✓ Manages evaluation of proposals or offers and the selection of vendors <u>Contract Manager/Contract Processor</u> ✓ Manages and tracks contract and vendor relations ✓ Negotiates amendments, reviews work authorizations and invoices, and ensures that all contractual terms and deliverables are met. <u>Technical Manager</u> ✓ Responsible for the day-to-day activities of state and vendor technical staff who are engaged in the technical management aspects of the project. ✓ Manages the technical disciplines of the project ✓ Partners with IT managers and staff to acquire appropriate technical assistance for such areas as enterprise architecture, database, software development, security, testing, configuration management, change management, release management, and other technical areas of the new system. ✓ Provides leadership and support to technical staff that are assigned to the project throughout the project life cycle. ✓ Provides technical support to the Project Director, Project Manager to establish and execute technical policies, processes and procedures. <u>Implementation Manager</u> ✓ Responsible for the implementation portion of the project ✓ Provide implementation management leadership through planning, organizing, coordinating and monitoring implementation activities ✓ Responsible for effectively managing all information technology resources assigned by the Project Manager, including implementation strategy, organizational change management, production support, IT training/knowledge transfer,

	Defect/problem tracking and Maintenance and Operations. Data Conversion Lead ✓ Responsible for the development and execution of the data conversion activities including the identification of data sources, owners, size, and required data scrubbing ✓ Oversees the execution of automated and manual data conversion ✓ Monitors data migration ✓ Oversees data validation Change Management Lead ✓ Assists in creating and implementing the change management plan ✓ Oversees and coordinates the change request process ✓ Develops and maintains the Change Management Logs and Request for Changes documents ✓ Schedules and chairs all Change Management meetings ✓ Produces regular change management reports ✓ Identifies resistance and performance gaps, and works to develop and implement corrective actions ✓ Conducts end user training ✓ Work with Interface Programmer consultant in the design and implementation of interfaces to ensure knowledge transfers occurs continuously through all the interface implementation phases. Database Administrator ✓ Responsible for validating the design of the new databases ✓ Responsible for the installation and implementation of the OICS databases hosted in RADC. ✓ Works with ISO and Interface Programmer consultant to implement a strong database level security. Project Administrator ✓ Provides administrative support to the Project Manager ✓ Responsible for the maintenance of the project plan ✓ Acts as the Project Librarian managing project documentation, and assists with administrative services support activities ✓ Reviews project activities for compliance with procedures and standards ✓ Assists in tracking and reporting the overall project progress User Administrator ✓ Provides administrative support for the SaaS software implementation such as adding users, modification to look up value tables, etc. C³ Training Lead ✓ Conducts training requirements evaluations ✓ Responsible for designing and developing user training materials to include manuals, handouts, exercises, etc. ✓ Coordinates user training schedules with Center Directors and

	Supervisors ✓ Prepares training environment and resources ✓ Conducts end user training
Subject Matter Experts	✓ Participants in business process re-engineering ✓ Identifies business rules and policies that must be enforced by the proposed solution ✓ Identifies required data for system tables ✓ Answers key business questions ✓ Primary responsibility for establishing business requirements ✓ Participates in the user acceptance testing activities to ensure the proposed system meets all business requirements
Partnering Agencies (SCO, SCIF, Fi$Cal)	✓ Participates in business processing reengineering and business requirements workshops as they pertain to the system interfaces identified to be in scope for this project ✓ Participate in the User Acceptance testing of the system interfaces to ensure they meet the business requirements and successfully support the business needs
Project Oversight	<u>Dept. of Technology Services</u> ✓ Evaluates the Project to ensure that it is following a structured and defined approach ✓ Prepares periodic project assessments and progress reports in coordination with the Project Manager ✓ *Collaborates with the Project Manager regarding project risks, and risk mitigation strategies as well as issue monitoring and resolution* ✓ Provides feedback and direction as needed
Quality Control Consulting Services	<u>Quality Assurance/Quality Control</u> ✓ Creates and ensures processes for quality assurance are present and executed ✓ Reviews the project system development documents and deliverables, to ensure accuracy and completeness ✓ Develops metrics to monitor project quality ✓ Oversees user acceptance testing
SaaS Vendors	✓ Participates in the design of C³ ✓ Configures and implements the SaaS solution in accordance with the stated functional, security and technical requirements ✓ Coordinates project scheduling with the Project Manager ✓ Conducts prototyping with the CCC project team ✓ Conducts end-to-end application (unit, system and regression testing), stress, volume, security, and performance tests ✓ Develops data conversion, rollout, and training plans ✓ Develop and implement the interfaces listed in Section 5.1.7 ✓ Conducts end-to-end interface application testing in conjunction ✓ Provides knowledge transfer to CCC IT staff responsible for ongoing support ✓ Provides the “train-the-trainer” training

	✓ Provides system, user, and training documentation ✓ Responsible for all System Integration activities and deliverables as defined in the Procurement documents and resulting contract. ✓ *Responsible for identifying risks to the project and risks to the successful completion of its contractual obligations.* ✓ *Responsible for managing risks internal to their activities and assisting with the mitigation and contingency activities for application project risks.*

6.5. Project Priorities

Managing C³ will require balancing three factors: resources, schedule and scope. A change in one of these factors may cause the other two to change. The following project trade-off summary shows the relative importance of each factor for this proposal:

- The top priority of this project is resources which include CCC staffing and funding. Resources are "Constrained". CCC has very limited staffing and funding and must maximize the use of resources.
- The second priority is schedule. This factor is somewhat flexible in that a shift in the project schedule will only delay and not prevent the achievement of the project objectives. It is marked as "Accepted".
- The project scope is most flexible. It is marked as "Improved". The project scope can be adjusted to accommodate major shifts in the project priorities.

These priorities must remain consistent throughout the project. Changes in priority can increase project risk significantly.

6.6. Project Plan

Project planning defines the activities that will be performed and the products that will be delivered, and describes how the activities will be accomplished. Following the approval of the project, the C³ Project Manager, in collaboration with the project team, will create and publish a Project Management Plan (PMP) that addresses the following:

- Project Management Plan
  - Scope Management Plan
  - Schedule Management Plan
  - Cost Management Plan
  - Quality Management Plan
  - Human Resources Plan
  - Communications Plan
  - Risk Management Plan
  - Procurement/Contract Management Plan
  - Stakeholder Management Plan

- Change Management Plan
- Configuration Management Plan
- Organizational Change Management Plan
- Transition to Maintenance and Operations Plan

The Plan based on CA-PMM guidelines will describe how the activities of the project will be managed throughout the project life cycle to ensure project objectives are met in a timely, efficient, and effective manner. Through progressive elaboration, the information contained within the PMP will evolve as the project progresses and will be updated as new information unfolds about the project.

6.6.1. Project Scope

The C³ project is an organizational transformation project that will leverage technology to fundamentally change the way CCC does business to effectively support the Corpsmembers. The business areas impacted by the project include all executive management (with the exception of External Affairs), Human Resources, Information Systems Branch, Emergency Services, Program Development, Prop 39 Delivery, Regions 1 and 2 and all of the 24 individual centers located throughout the state. It will also require close collaboration with the external partners (Fi$CAL, SCIF, and SCO), to ensure the system interfaces are properly analyzed, designed, implemented and tested. The scope of the C³ project includes:

- Replacing CCC legacy system, CADCARS, Access databases, and Spreadsheets
- Implementing the necessary system interfaces with Fi$CAL, SCIF, and SCO
- Re-engineering business program processes
- Streamlining manual processes
- Reducing paper forms (spreadsheets and documents)
- Implementing a web-based zero footprint SaaS solution that:
  - Meets the CCC's business, security and technical requirements.
  - Provides centralized electronic repository of documents
  - Add data analysis and enterprise reporting capabilities
- Establishing ongoing support of the proposed SaaS solution

The business processes impacted by this scope are detailed in Section 4.1.1 in this FSR.

In compliance with BL 08-05, the scope of this project will not include any functionality that would duplicate functionality that is being developed for the Financial Information System for California (Fi$Cal) Project. Compliance to this mandate was processed and has been approved by the Department of Finance. Specifically, the following business program functions are out of scope:

- Asset management (Property Database)
- Employee advance tracking (ATS Database)
- Accounting and Business Services functions (Fiscal System)
  - Accounts Payable

- Budgeting
- Cash Accounting
- Cash Management
- General Ledger
- Procurement
- Grants
- Vendor Management File

6.6.2. Project Assumptions

- CCC will have an approved FSR before proceeding.
- CCC will give full support and commitment to this project.
- The project one-time cost will be funded from the CCC Collins-Dugan Reimbursement Account and requested via the BCP process
- Approval of three additional IT positions to support this project, both one-time and ongoing requested via the BCP process
- Funding is available for this project.
- Staffing levels identified in the staffing plan of this report are met.
- The scope of this project is limited to that described in the Project Scope
- Vendor resources are utilized during the project implementation phases.
- All vendor, consulting and subscription contracts and procurements are accomplished within the planned timelines.
- Reviewers provide timely review and feedback on all project deliverables.
- Problem/issue resolutions are handled on a timely basis.
- A comprehensive change management program is developed and in place to ensure faster adaption of the new system and processes
- All C³ Project tasks are completed as planned.
- Security provisions are integrated into the solution

6.6.3. Project Phasing

To reduce project risk and stay within resource constraint, the C³ project will be implemented using a phased approach with three system releases. The following is an overview of the project phases

Table 13: Project Phases

Project Phase	Phase Deliverables
Procurement	• RFO document for Procurement support services • State-approved IFB document for SaaS vendor • Vendor contracts • Interagency contracts
Planning/Analysis	• Project Collaboration environment

	• Project Charter/Kickoff • Project Management Plan (Scope, Risk, Change, Contract, Communications, Issue, Quality, Staffing) • Project Schedule • Risk Register and Issue Logs • Work Breakdown Structure and subsequent detailed activities and durations • Project Budget • Re-engineered business processes • Finalized requirements documents with deliverables and acceptance criteria
Design, Development and Implementation (Iterative through Release Cycles)	• Detailed design documents • Prototypes • Modification to SaaS software completed and tested • Deployment of the IOCS • All custom-built business analytics and reporting, system interfaces and mobile technology interface completed and tested • Test plans and materials • Data conversion plan • Training materials • System and end user documentation
Deployment	• Staff trained • Data converted for production • New working system placed into production
Post-implementation	• Execution of the Decommissioning Plan • Contract closeout • Lessons learned • Project Artifact transition to permanent repository • PIER (12 months post implementation)

The three major system releases occurring in the project deployment phase are described in Section 5.1.4: Development Approach.

6.6.4. Project Schedule

This project will take approximately 31 months to procure and implement. The proposed project schedule is outlined in the following page.

Tasks/Milestones	Estimated Start Date	Estimated Completion Date
Procurement		
SaaS Vendor Development and Procurement	Mon 4/14/14	Wed 12/31/14
SaaS Vendor Selection	Fri 1/2/15	Fri 1/2/15
Independent Validation and Verification Procurement and Selection	Mon 5/5/14	Fri 8/29/14
Quality Control Consulting Services Procurement and Selection	Mon 8/4/14	Fri 11/21/14
Project Development, Implementation, and Deployment		
Project Planning		
C³ Project Kick Off Meeting	Mon 1/5/15	Mon 1/5/15
Master Project Plan	Tue 1/6/15	Fri 1/23/15
Requirements Document (Requirements Traceability Matrix)	Mon 1/26/15	Fri 2/13/15
Release I: Project & Personnel Subsystems		
Personnel Module	Tue 2/17/15	Fri 4/3/15
Reimbursement, Bonds, Non-Reimbursment and Non-Paid Project Modules	Mon 4/6/15	Fri 6/5/15
Emergency Module	Mon 6/8/15	Fri 7/24/15
Scheduling, Timekeeping, Daily Work Accomplishment and Sponsor Verification Modules	Mon 7/27/15	Fri 9/25/15
Health and Safety Module	Mon 9/28/15	Wed 11/25/15
Implement IOCS Environment	Tue 3/24/15	Tue 6/23/15
System Interfaces Programming	Wed 6/24/15	Fri 10/23/15
Busines Analytics/Reporting Module	Mon 11/30/15	Fri 1/29/16
Data Clean Up & Migration	Mon 11/30/15	Tue 3/29/16
Release I: UAT Testing	Mon 2/1/16	Thu 3/3/16
Release I: M&O Transition Planning/Training	Mon 2/1/16	Wed 3/30/16
Release I: Manuals, Documents & Training Materials	Fri 3/4/16	Thu 3/10/16
Release I: User Training	Fri 3/11/16	Tue 3/29/16
Release I Implementation (Go - Live)	Wed 3/30/16	Wed 3/30/16
Release II: CMD Subsystem		
CMD Module	Mon 4/4/16	Fri 5/20/16
Data Clean Up & Migration	Tue 5/24/16	Fri 5/27/16
Release II: UAT Testing	Mon 5/30/16	Fri 6/17/16
Release II: M&O Transition Planning/Training	Mon 5/30/16	Wed 6/29/16
Release II: Manuals, Documents & Training Materials	Mon 6/20/16	Fri 6/24/16
Release II: User Training	Mon 6/27/16	Wed 6/29/16
Release II Implementation (Go Live)	Thu 6/30/16	Thu 6/30/16
Release III: Mobile Interface		
Mobile Interface	Tue 7/5/16	Fri 9/16/16
Release III: UAT Testing	Mon 9/19/16	Fri 10/14/16
Release III: Manuals, Documents & Training Materials	Tue 9/13/16	Fri 9/16/16
Release III: M&O Transition Planning/Training	Mon 9/19/16	Thu 9/29/16
Release III: User Training	Mon 9/26/16	Thu 9/29/16
Release III Implementation (Go Live)	Fri 9/30/16	Fri 9/30/16
Post Go Live Activities: Legacy System Decommissioning	Fri 7/1/2016	Fri7/29/16
Project Closure	Mon 10/3/16	Mon 10/31/16
PIER Report	Tue 10/31/17	Tue 10/31/17

6.7. Project Monitoring

The C[3] Project Manager will continually monitor project progress during the life of the project. A detailed PMP will be established to develop baselines and tools to monitor changes to the baseline that recalculate tasks and milestones, effort, budget, and scope accordingly will be utilized during the course of the project. Project status will be communicated to stakeholders according to the methodologies and communication matrix identified in the subsidiary Communication Management Plan.

Project oversight services will be attained from CA Department of Technology. The oversight effort will include inspection, measurement, tracking, and observation activities to ensure that the project objectives are achieved within the approved project plan. Regularly scheduled meetings with the CCC and vendor project teams and relevant stakeholders will be held to discuss project status, issues and corrective actions.

6.8. Project Quality

To ensure that the project meets identified business and technical objectives and requirements, the Quality Assurance consultant in collaboration with the SaaS vendor will develop a Quality Assurance Plan based on the State's Project Management Methodology during the project planning phase. The plan, approved by the CCC, will have the following elements:

- Detailed deliverables by Phase and associated acceptance criteria
- Requirements traceability at various stages of the project
- Identification of quality assurance responsibilities
- Acceptance testing plan

6.9. Change Management

The scope of the C³ Project will change how business is done at the CCC. As such, CCC will experience significant organizational change management, in addition to the expected change requests throughout the project life cycle. The Implementation Manager will take lead responsibility for organizational change management, but every manager/supervisor at the CCC will take an active role as a change agent to promote the success of the C[3] project. A comprehensive Organizational Change Management Plan that addresses organizational will be developed during the project planning phase. In conjunction with the development of the Stakeholder Management Plan, stakeholder assessment activities will provide input this plan will identify the readiness and willingness of the organization to accept the proposed solutions. It will also dovetail with the Communications Management Plan and the project training plans.

Additionally, project Change Management Plan will be developed during planning and with the following elements:

- Identify the parties responsible for identifying, resolving, supporting, and making project changes.
- Define the processes and procedures for:
    - Reporting an identified need for change
    - How the change request will be analyzed and documented
    - How the change will be acted upon for review, approval or denial
- Develop a communication strategy that ensures stakeholders are continuously informed

The plan will be designed to:

- Minimize project risk
- Provide documentation for all changes
- Provide open disclosure of changes
- Communicate changes to stakeholders
- Minimize unanticipated impacts to schedule and or budget
- Ensures early buy in from stakeholders
- Project human resource management

6.10. Project Authorization

The cost of the C³ project exceeds the Department delegated cost threshold and requires a Budget Change Proposal, thus, becoming a reportable project requiring approval of the FSR from Control Agencies.

7. Risk/Issue Management Plan

This section documents the process and procedures that will be used to manage project risks and, if they materialize into issues, how these subsequent issues will be managed and resolved.

7.1. Purpose of the Risk Management Plan and Subsequent Issue Management

A risk is an area of concern on a project that, should the risk be realized and a problem occur, could have a negative effect on the project's objectives. Risk Management is the process of identifying, assessing, responding to, monitoring, controlling, and reporting risks. This Risk Management Plan is based on SIMM guidelines and defines how risks associated with the C^3 project will be identified, analyzed, and managed. The methodology of this Risk Management Plan is consistent with the State of California's Project Management Methodology and will be used on an ongoing basis throughout the life of the project. Sections 7.3 through 7.5 identify, in detail, the processes, flow, responsibilities, reporting and a current Risk Management Spreadsheet for the C^3 project.

Issues are defined as unanswered questions and/or differences in opinion and must be managed conscientiously and in a timely manner. An issue log is used to document and monitor the resolution of issues. It may be used to facilitate communication and ensure a common understanding of the issues. Broadly communicating resolution of issues keeps those affected informed. This written log documents and helps to monitor who is responsible for resolving specific issues by a target date. This issue "owner" is responsible for facilitating, not dictating, the resolution process. Issue resolution also addresses obstacles that can block the team from achieving its goals. The Issue Log is extremely using in controlling communications as it provides both a repository for what has already happened in the project and a platform for subsequent potential communications. Under the responsibility of the Risk Manager, the management of issue resolution has been assigned to the project manager.

7.2. Risk Management Processes

The Project Manager working with the project team, Project Director, and Steering Committee will ensure that risks are actively identified, analyzed, and managed throughout the life of the project. Risks will be identified as early as possible so as to minimize their impact on the project.

Risk management begins on the project start date. Several known key risks have been documented within this section, and where appropriate, the actions to be taken in response to the risk have been included. The risk management plan will be provided to and shared with the selected SaaS vendor. Periodic risk assessment sessions will be scheduled and conducted with project participants under the direction of the Project Manager. To achieve the desired outcome, risk identification and preventive activities will be considered routine activities, and will be integrated components of project management.

The C³ Project Risk Management involves implementation of five key processes:

1. **The identification of project risks** – Stakeholders or any member of the project team can raise risk at any time. When this occurs, the Risk Originator:
    - Identifies a risk applicable to a particular aspect of the project (e.g. scope, deliverables, timescales)
    - Informs the Project Manager, preferably through a written communication
2. **Evaluate and document Risk** – The Project Manager reviews all risks raised and determine whether or not each risk identified is applicable to the project. The decision will be primarily based upon whether or not the risks impacts the following:
    - Project Management Risk
        - ✓ Staffing
        - ✓ Schedule
        - ✓ Deliverables
        - ✓ Quality
    - Financial Risks
        - ✓ Cost
    - Technology Risk
        - ✓ Technical
        - ✓ Conversion Migration
    - Operational Risk/Business Change Management
        - ✓ Internal

If the risk is considered by the Project Manager to be "related to the project", then a formal risk is raised in the Risk Management Worksheet and a Risk ID assigned.

3. **Perform Risk Analysis**
    - Risk Quantification - Project risks will be tracked and analyze on an ongoing basis, and discussed as part of a regular risk management meetings. Risks will be analyzed based on the type of risk, probability of the risk occurring, impact of the risk, and ability to mitigate the risk and the potential effect of the risk.
    - Risk Prioritization – Each risk will be prioritized and ranked based on severity of the risk. A High severity risk will be considered a high priority and will receive the most attention from the Project Team. A Low severity risk is a low priority and will be monitored on an as needed basis.
    - Assign Risk Owner – The Project Manager will identify a risk owner responsible for determining the risk response strategy, developing and executing the detailed risk action plan(s) and tracking and reporting risk status and response activity.

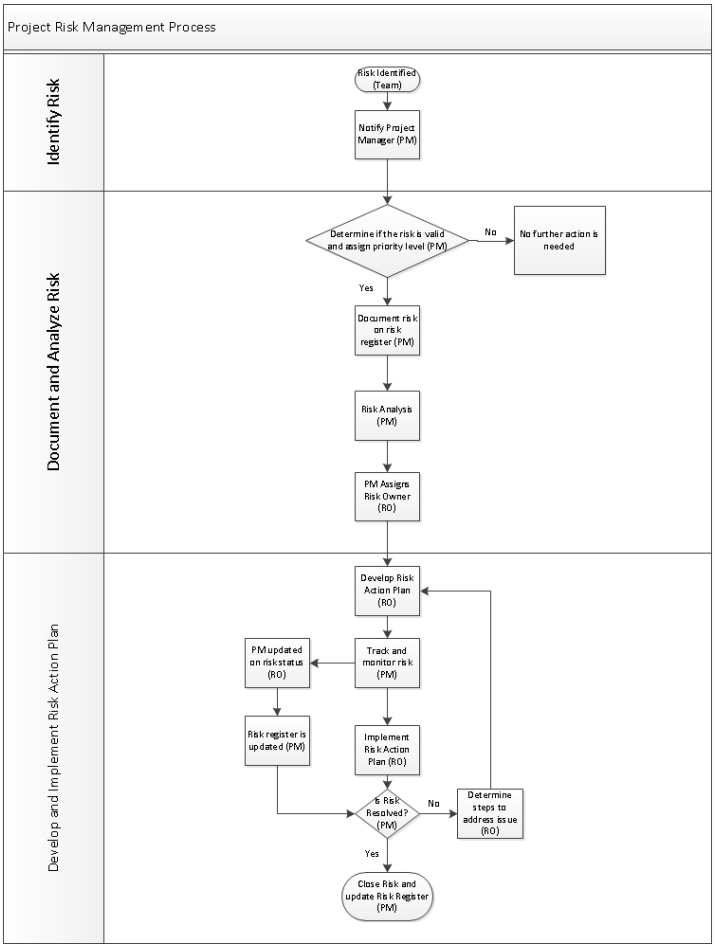
4. **Implement Risk Action Plan** – This process involves determining the response strategy for each risk and execution of the risk mitigation plan if necessary. The following response strategy for responding to a risk may be one of the following:

- ✓ Watch – No action taken at this time. Continue to monitor the risk area for changes.
- ✓ Accept – nothing will be done.
- ✓ Mitigate/Contingency – identify action plan(s) to reduce the impact of the problem.
- ✓ Transfer – shift the consequences of the problem to a third party together with the ownership of the response by making another party responsible for the solution to the problem.

5. **Risk Tracking and Control** - The Project Manager will monitor risk throughout the life of the project, and will include risk assessment as a component of the project status process for this project. As problems arise, the risk management worksheet will be re-prioritized based on severity, reflecting any and all changes to the risk(s), with the focus given to the highest priority problems.

Risk Management Process Flow

Figure 7: Risk Management Process



7.3. Roles and Responsibilities

Specific roles and responsibilities for risk management and issue resolution have been identified, in italicized font, in Section 6.4 Roles and Responsibilities - Table 11: Roles and Responsibilities. However, every participant in the C^3 project and employees of the CCC play a role in risk management.

Any individual that identifies a risk that may impact the C^3 project should be encouraged by management to report it and, in fact, has an obligation to notify the Project Manager. Additionally, any participant of the C3 project, whether part of the team or a member of the stakeholder community may be requested to execute risk mitigating actions as delegated by the Project Manager.

7.4. Risk Communication and Reporting

Communication regarding risks should occur among all stakeholders and project team members throughout the life of the project. Furthermore, Project Team Members must communicate and coordinate risks management activities delegated to them by the Project Manager. Risk owners are responsible for reporting the status of their respective risks on a regular and as needed basis. The Project Manager will escalate risks to the Project Director and Executive Steering Committee depending on risk severity, as indicated in the risk escalation matrix below.

	Risk Severity		
	High	Medium	Low
Steering Committee	X		
Project Director	X		
Project Manager	X	X	X

The status of high severity risks will be reported to CTA by The CTA Project Oversight manager. Any high or medium risks that include security concerns will also be reported to the CCC Information Security Officer.

7.5. Risk Management Worksheet

The Risk Management Worksheet illustrated in Table 13. Risk Management Worksheet, describes the risks associated with this project, the probability of the risk becoming a problem, the impact if a problem arises, and preventive (avoidance) and contingency measures (mitigation) that the CCC will utilize to address the risk/problem. There are five risks (high & medium risks) that are identified and included in the worksheet. Until the FSR is approved, the remaining risks are considered low and are not included in the worksheet.

The columns in the table are defined as follows:

- # - Risk number
- Risk – Identified risks associated with this project
- C (Probability) – The probability of the risk becoming a problem

Probability Scale	
1	20%
2	21-40%
3	41-60%
4	61-80%
5	<80%

D (Potential Impact) – size of the negative impact on the project.

Risk Potential Impact Scale	
1	Less than a 5% chance of impact to schedule, scope, budget, or quality
2	5-10% chance of impact to schedule, scope, budget, or quality
3	11-15% chance of impact to schedule, scope, budget, or quality
4	16-24% chance of impact to schedule, scope, budget, or quality
5	25% or greater chance of impact to schedule, scope, budget, or quality

- E – Risk Management Action Timing – time period within which the action must be taken to successfully respond to the risk.

Risk Timeframe Rating	
1	Within the next six months
2	Six months to a year from now
3	Over a year from now

- F- Risk Level rating from 1 -25

Risk Severity		
High	Red	20-25
Medium	Yellow	10-19
Low	Green	1-9

- Cause – Describe of the root cause of the risk
- Consequences – Consequences of the risk to the Department if left unmanaged
- Avoidance Plan – Describe the actions that can be taken to eliminate the risk altogether

Mitigation Plan – Describe the actions that can reduce the probability of the risks to occur or lessen the impact.

Table 14: Risk Management Worksheet

#	Risks	C	D	E	F	Cause	Consequences	Advoidance Plan	Mitigation Plan
1	Length of Control Agency approval process extends project schedule	4	5	Within the next six months	20	• FSR is unacceptable to Control Agencies and require extensive editing	• Project Schedule is extended	• Cannot be avoided	•Collaborate with Control Agencies to ensure quality of FSR
2	Inadquate or lack of project funding	4	5	Within the next six months	20	• The requested Budget Change Proposal is not approved	• May need to delay project • Worst case, will end the project	• Cannot be avoided	• Delay project until funding is available • Ensure project priority is as high as possible
3	Dependency on key project team members	4	5	Within the next six months	20	• Limited resources • Changes in staff availability for the project • Changes in management priorities • Personnel changes	• Failure to meet schedule deadlines • Loss of expertise • Delay or cancellation of project	• May be unavoidable	• Ensure project is a high priority for the CCC • Assign an executive as the project sponsor • Thoroughly define descriptions for the project team • Identify key person dependencies • Identify replacements for key person dependencies • Submit BCP for additional IT resources if needed
4	Duration of tasks were highly underestimated	4	4	Six months to a year from now	10.7	• Overly optimistic planning • Poor understanding of tasks to be completed • Unforseen obstacles	• Failure to meet schedule deadlines • Cost overruns	• May be unavoidable	• Redirect additional resources to problem areas. • Procure additional outside resources • Re-evaluate project scope • Closely monitor project • Develop a communication plan that provides the team and sponsor with regular updates about task progress • Develop a detailed project schedule clearly identifying critical path • CCC resources will be predefined and made available
5	FI$Cal is uanble to provide contract and accounting functions at the time of C³ implementation	4	5	Over a year from now	6.6	• Fi$Cal implementation is delayed • C³ implementation is ahead of schedule	• Change in scope, schedule and potentially cost.	• Cannot be avoided	• Advance CCC FI$Cal implementation to Wave 2 • Create a temporary modules in the SaaS system to perform these functions.

8. Economics Analysis Worksheet

EXISTING SYSTEM/BASELINE COST WORKSHEET

SIMM 20C30C, Rev. 03/2011

Department: California Conservation Corps

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

Date Prepared:1/27/2014

Project: C³ Project

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Continuing Information Technology Costs														
Staff (salaries & benefits)	9.5	921,376	9.5	921,376	9.5	921,376	9.5	921,376	9.5	921,376			**47.5**	**4,606,880**
Hardware Lease/Maintenance														**0**
Software Maintenance/Licenses														**0**
Contract Services														**0**
Data Center Services														**0**
Agency Facilities														**0**
Other														**0**
Total IT Costs	**9.5**	**921,376**	**9.5**	**921,376**	**9.5**	**921,376**	**9.5**	**921,376**	**9.5**	**921,376**	**0.0**	**0**	**47.5**	**4,606,880**
Continuing Program Costs:														
Staff	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249			**1437.5**	**108,346,245**
Other														**0**
Total Program Costs	**287.5**	**21,669,249**	**287.5**	**21,669,249**	**287.5**	**21,669,249**	**287.5**	**21,669,249**	**287.5**	**21,669,249**	**0.0**	**0**	**1437.5**	**108,346,245**
TOTAL EXISTING SYSTEM COSTS	**297.0**	**22,590,625**	**297.0**	**22,590,625**	**297.0**	**22,590,625**	**297.0**	**22,590,625**	**297.0**	**22,590,625**	**0.0**	**0**	**1485.0**	**112,953,125**

SIMM 20C30C, Rev. 03/2011 **PROPOSED ALTERNATIVE:** **Hybrid Solution**

Date Prepared:1/27/2014

Department: California Conservation Corps All Costs Should be shown in whole (unrounded) dollars.

Project: C³ Project

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs														
Staff (Salaries & Benefits)	1.5	147,349	8.0	793,962	8.0	793,962	1.5	104,462	0.0	0	0.0	0	19.0	1,839,735
Hardware Purchase				40,000				0		0		0		40,000
Software Purchase/License								0		0		0		0
Telecommunications								0		0		0		0
Contract Services														
Software Customization				342,400		767,900		232,000		0		0		1,342,300
Project Management		39,000		156,000		156,000		65,000		0		0		416,000
Project Oversight		12,800		76,800		76,800		25,600		0		0		192,000
IV&V Services				108,000		108,000		36,000		0		0		252,000
Other Contract Services		28,000		211,688		213,450		33,563		0		0		486,701
TOTAL Contract Services		79,800		894,888		1,322,150		392,163		0		0		2,689,001
Data Center Services										0		0		0
Agency Facilities										0		0		0
Other				42,000						0		0		42,000
Total One-time IT Costs	**1.5**	**227,149**	**8.0**	**1,770,850**	**8.0**	**2,116,112**	**1.5**	**496,624**	**0.0**	**0**	**0.0**	**0**	**19.0**	**4,610,735**
Continuing IT Project Costs														
Staff (Salaries & Benefits)							5.0	503,068	5.0	503,068	0.0	0	10.0	1,006,136
Hardware Lease/Maintenance						8,000		8,000		8,000		0		24,000
Software Maintenance/Licenses				46,500		558,000		558,000		558,000		0		1,720,500
Telecommunications										0		0		0
Contract Services										0		0		0
Data Center Services				60,000		60,000		60,000		60,000		0		240,000
Agency Facilities										0		0		0
Other						34,000		34,000		34,000		0		102,000
Total Continuing IT Costs	**0.0**	**0**	**0.0**	**106,500**	**0.0**	**660,000**	**5.0**	**1,163,068**	**5.0**	**1,163,068**	**0.0**	**0**	**10.0**	**3,092,636**
Total Project Costs	**1.5**	**227,149**	**8.0**	**1,877,350**	**8.0**	**2,776,112**	**6.5**	**1,659,692**	**5.0**	**1,163,068**	**0.0**	**0**	**29.0**	**7,703,371**
Continuing Existing Costs														
Information Technology Staff	8.1	695,862	8.1	794,521	8.1	794,521	7.1	597,203	7.5	745,731	0.0	0	38.9	3,627,838
Other IT Costs										0		0		0
Total Continuing Existing IT Costs	**8.1**	**695,862**	**8.1**	**794,521**	**8.1**	**794,521**	**7.1**	**597,203**	**7.5**	**745,731**	**0.0**	**0**	**38.9**	**3,627,838**
Program Staff	287.4	21,697,446	283.9	21,279,598	283.9	21,279,598	286.4	21,663,348	287.5	21,669,249	0.0	0	1429.1	107,589,239
Other Program Costs		0		0		0		0		0		0		0
Total Continuing Existing Program Costs	**287.4**	**21,697,446**	**283.9**	**21,279,598**	**283.9**	**21,279,598**	**286.4**	**21,663,348**	**287.5**	**21,669,249**	**0.0**	**0**	**1429.1**	**107,589,239**
Total Continuing Existing Costs	**295.5**	**22,393,308**	**292.0**	**22,074,119**	**292.0**	**22,074,119**	**293.5**	**22,260,551**	**295.0**	**22,414,980**	**0.0**	**0**	**1468.0**	**111,217,077**
TOTAL ALTERNATIVE COSTS	**297.0**	**22,620,458**	**300.0**	**23,951,469**	**300.0**	**24,850,231**	**300.0**	**23,920,243**	**300.0**	**23,578,048**	**0.0**	**0**	**1497.0**	**118,920,448**
INCREASED REVENUES		0		0		0		0		0		0		**0**

SIMM 20C30C, Rev. 03/2011 **ALTERNATIVE #1:** Pure SaaS Solultion

Date Prepared:1/27/2014

Department: California Conservation Corps

All Costs Should be shown in whole (unrounded) dollars.

Project: C³ Project

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
One-Time IT Project Costs														
Staff (Salaries & Benefits)	1.5	147,349	7.0	686,521	7.0	686,521	1.5	104,462	0.0	0	0.0	0	17.0	1,624,852
Hardware Purchase										0		0		0
Software Purchase/License										0		0		0
Telecommunications										0		0		0
Contract Services														
Software Customization				342,400		914,150		232,000		0		0		1,488,550
Project Management		39,000		156,000		156,000		65,000		0		0		416,000
Project Oversight		12,800		76,800		76,800		25,600		0		0		192,000
IV&V Services				108,000		108,000		36,000		0		0		252,000
Other Contract Services		28,000		128,688		213,450		33,563		0		0		403,701
TOTAL Contract Services		79,800		811,888		1,468,400		392,163		0		0		2,752,251
Data Center Services		0		0		0		0		0		0		0
Agency Facilities										0		0		0
Other				40,200						0		0		40,200
Total One-time IT Costs	**1.5**	**227,149**	**7.0**	**1,538,609**	**7.0**	**2,154,921**	**1.5**	**496,625**	**0.0**	**0**	**0.0**	**0**	**17.0**	**4,417,303**
Continuing IT Project Costs														
Staff (Salaries & Benefits)							4.0	395,627	4.0	395,627	0.0	0	8.0	791,254
Hardware Lease/Maintenance										0		0		0
Software Maintenance/Licenses				46,500		558,000		558,000		558,000		0		1,720,500
Telecommunications										0		0		0
Contract Services										0		0		0
Data Center Services										0		0		0
Agency Facilities										0		0		0
Other						26,000		26,000		26,000		0		78,000
Total Continuing IT Costs	**0.0**	**0**	**0.0**	**46,500**	**0.0**	**584,000**	**4.0**	**979,627**	**4.0**	**979,627**	**0.0**	**0**	**8.0**	**2,589,754**
Total Project Costs	**1.5**	**227,149**	**7.0**	**1,585,109**	**7.0**	**2,738,921**	**5.5**	**1,476,252**	**4.0**	**979,627**	**0.0**	**0**	**25.0**	**7,007,057**
Continuing Existing Costs														
Information Technology Staff	8.1	695,862	8.1	794,521	8.1	794,521	7.1	597,203	7.5	745,731	0.0	0	38.9	3,627,838
Other IT Costs										0		0		0
Total Continuing Existing IT Costs	**8.1**	**695,862**	**8.1**	**794,521**	**8.1**	**794,521**	**7.1**	**597,203**	**7.5**	**745,731**	**0.0**	**0**	**38.9**	**3,627,838**
Program Staff	287.4	21,697,446	283.9	21,279,598	283.9	21,279,598	286.4	21,663,348	287.5	21,669,249	0.0	0	1429.1	107,589,239
Other Program Costs										0		0		0
Total Continuing Existing Program Costs	**287.4**	**21,697,446**	**283.9**	**21,279,598**	**283.9**	**21,279,598**	**286.4**	**21,663,348**	**287.5**	**21,669,249**	**0.0**	**0**	**1429.1**	**107,589,239**
Total Continuing Existing Costs	**295.5**	**22,393,308**	**292.0**	**22,074,119**	**292.0**	**22,074,119**	**293.5**	**22,260,551**	**295.0**	**22,414,980**	**0.0**	**0**	**1468.0**	**111,217,077**
TOTAL ALTERNATIVE COSTS	**297.0**	**22,620,458**	**299.0**	**23,659,228**	**299.0**	**24,813,040**	**299.0**	**23,736,803**	**299.0**	**23,394,607**	**0.0**	**0**	**1493.0**	**118,224,135**
INCREASED REVENUES		0		0		0		0		0		0		**0**

SIMM 20C30C, Rev. 03/2011

ECONOMIC ANALYSIS SUMMARY

Date Prepared:1/27/2014

Department: California Conservation Corps

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

Project: C³ Project

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0		TOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
EXISTING SYSTEM														
Total IT Costs	9.5	921,376	9.5	921,376	9.5	921,376	9.5	921,376	9.5	921,376	0.0	0	47.5	4,606,880
Total Program Costs	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249	287.5	21,669,249	0.0	0	1437.5	108,346,245
Total Existing System Costs	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	0.0	0	1485.0	112,953,125
PROPOSED ALTERNATIVE	**Hybrid Solution**													
Total Project Costs	1.5	227,149	8.0	1,877,350	8.0	2,776,112	6.5	1,659,692	5.0	1,163,068	0.0	0	29.0	7,703,371
Total Cont. Exist. Costs	295.5	22,393,308	292.0	22,074,119	292.0	22,074,119	293.5	22,260,551	295.0	22,414,980	0.0	0	1468.0	111,217,077
Total Alternative Costs	297.0	22,620,458	300.0	23,951,469	300.0	24,850,231	300.0	23,920,243	300.0	23,578,048	0.0	0	1497.0	118,920,448
COST SAVINGS/AVOIDANCES	0.0	(29,833)	(3.0)	(1,360,844)	(3.0)	(2,259,606)	(3.0)	(1,329,618)	(3.0)	(987,423)	0.0	0	(12.0)	(5,967,323)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	0.0	(29,833)	(3.0)	(1,360,844)	(3.0)	(2,259,606)	(3.0)	(1,329,618)	(3.0)	(987,423)	0.0	0	(12.0)	(5,967,323)
Cum. Net (Cost) or Benefit	0.0	(29,833)	(3.0)	(1,390,677)	(6.0)	(3,650,282)	(9.0)	(4,979,900)	(12.0)	(5,967,323)	(12.0)	(5,967,323)		
ALTERNATIVE #1	**Pure SaaS Solultion**													
Total Project Costs	1.5	227,149	7.0	1,585,109	7.0	2,738,921	5.5	1,476,252	4.0	979,627	0.0	0	25.0	7,007,057
Total Cont. Exist. Costs	295.5	22,393,308	292.0	22,074,119	292.0	22,074,119	293.5	22,260,551	295.0	22,414,980	0.0	0	1468.0	111,217,077
Total Alternative Costs	297.0	22,620,458	299.0	23,659,228	299.0	24,813,040	299.0	23,736,803	299.0	23,394,607	0.0	0	1493.0	118,224,135
COST SAVINGS/AVOIDANCES	0.0	(29,833)	(2.0)	(1,068,603)	(2.0)	(2,222,415)	(2.0)	(1,146,178)	(2.0)	(803,982)	0.0	0	(8.0)	(5,271,010)
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	0.0	(29,833)	(2.0)	(1,068,603)	(2.0)	(2,222,415)	(2.0)	(1,146,178)	(2.0)	(803,982)	0.0	0	(8.0)	(5,271,010)
Cum. Net (Cost) or Benefit	0.0	(29,833)	(2.0)	(1,098,436)	(4.0)	(3,320,850)	(6.0)	(4,467,028)	(8.0)	(5,271,010)	(8.0)	(5,271,010)		
ALTERNATIVE #2														
Total Project Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Cont. Exist. Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Total Alternative Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
COST SAVINGS/AVOIDANCES	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	0.0	0	1485.0	112,953,125
Increased Revenues		0		0		0		0		0		0		0
Net (Cost) or Benefit	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	297.0	22,590,625	0.0	0	1485.0	112,953,125
Cum. Net (Cost) or Benefit	297.0	22,590,625	594.0	45,181,250	891.0	67,771,875	1188.0	90,362,500	1485.0	112,953,125	1485.0	112,953,125		

SIMM 20C30C, Rev. 03/2011

PROJECT FUNDING PLAN

Department: California Conservation Corps

All Costs to be in whole (unrounded) dollars

Date Prepared:1/27/2014

Project: C³ Project

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0		TOTALS	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
TOTAL PROJECT COSTS	**1.5**	**227,149**	**8.0**	**1,877,350**	**8.0**	**2,776,112**	**6.5**	**1,659,692**	**5.0**	**1,163,068**	**0.0**	**0**	**29.0**	**7,703,371**
RESOURCES TO BE REDIRECTED														
Staff	1.5	147,349	5.0	466,540	5.0	466,540	3.5	280,106	2.0	175,645	0.0	0	**17.0**	**1,536,180**
Funds:														
Existing System										0		0		**0**
Other Fund Sources		79,800								0		0		**79,800**
TOTAL REDIRECTED RESOURCES	**1.5**	**227,149**	**5.0**	**466,540**	**5.0**	**466,540**	**3.5**	**280,106**	**2.0**	**175,645**	**0.0**	**0**	**17.0**	**1,615,980**
ADDITIONAL PROJECT FUNDING NEEDED														
One-Time Project Costs			3.0	1,304,310	3.0	1,649,572		392,163	0.0	0	0.0	0	**6.0**	**3,346,045**
Continuing Project Costs				106,500		660,000	3.0	987,423	3.0	987,423	0.0	0	**6.0**	**2,741,346**
TOTAL ADDITIONAL PROJECT FUNDS NEEDED BY FISCAL YEAR	**0.0**	**0**	**3.0**	**1,410,810**	**3.0**	**2,309,572**	**3.0**	**1,379,586**	**3.0**	**987,423**	0.0	0	**12.0**	**6,087,391**
TOTAL PROJECT FUNDING	**1.5**	**227,149**	**8.0**	**1,877,350**	**8.0**	**2,776,112**	**6.5**	**1,659,692**	**5.0**	**1,163,068**	**0.0**	**0**	**29.0**	**7,703,371**
Difference: Funding - Costs	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	**0.0**	**1**
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**

FUNDING SOURCE*														
General Fund	55%	124,932	26%	488,111	29%	805,072	42%	697,071	55%	639687.4	0%	0	36%	2,754,874
Federal Fund	0%	-	0%	-	0%	-	0%	-	0%	0	0%	0	0%	-
Special Fund	45%	102,217	74%	1,389,239	71%	1,971,040	58%	962,621	45%	523380.6	0%	0	64%	4,948,498
Reimbursement	0%	-	0%	-	0%	-	0%	-	0%	0	0%	0	0%	-
TOTAL FUNDING	100%	227,149	100%	1,877,350	100%	2,776,112	100%	1,659,692	100%	1163068	0%	0	100%	7,703,371

***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. 03/2011

ADJUSTMENTS, SAVINGS AND REVENUES WORKSHEET

Department: California Conservation Corps

Date Prepared:1/27/2014

Project: C³ Project

Annual Project Adjustments	FY 2013/14 PYs	FY 2013/14 Amts	FY 2014/15 PYs	FY 2014/15 Amts	FY 2015/16 PYs	FY 2015/16 Amts	FY 2016/17 PYs	FY 2016/17 Amts	FY 2017/18 PYs	FY 2017/18 Amts	FY 0 PYs	FY 0 Amts	Net Adjustments PYs	Net Adjustments Amts
One-time Costs														
Previous Year's Baseline	0.0	0	0.0	0	3.0	1,304,310	3.0	1,649,572	0.0	392,163	0.0	0		
(A) Annual Augmentation /(Reduction)	**0.0**	**0**	**3.0**	**1,304,310**	**0.0**	**345,262**	**(3.0)**	**(1,257,409)**	**0.0**	**(392,163)**	**0.0**	**0**		
(B) Total One-Time Budget Actions	0.0	0	3.0	1,304,310	3.0	1,649,572	0.0	392,163	0.0	0	0.0	0	**6.0**	**3,346,045**
Continuing Costs														
Previous Year's Baseline	0.0	0	0.0	0	0.0	106,500	0.0	660,000	3.0	987,423	3.0	987,423		
(C) Annual Augmentation /(Reduction)	**0.0**	**0**	**0.0**	**106,500**	**0.0**	**553,500**	**3.0**	**327,423**	**0.0**	**0**	**(3.0)**	**(987,423)**		
(D) Total Continuing Budget Actions	0.0	0	0.0	106,500	0.0	660,000	3.0	987,423	3.0	987,423	0.0	0	**6.0**	**2,741,346**
Total Annual Project Budget Augmentation /(Reduction) [A + C]	**0.0**	**0**	**3.0**	**1,410,810**	**0.0**	**898,762**	**0.0**	**(929,986)**	**0.0**	**(392,163)**	**(3.0)**	**(987,423)**		

[A, C] Excludes Redirected Resources

Total Additional Project Funds Needed [B + D]	**12.0**	**6,087,391**

Annual Savings/Revenue Adjustments

	FY 2013/14		FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 0	
	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts	PYs	Amts
Cost Savings	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Increased Program Revenues		0		0		0		0		0		0

Index of Figures and Tables

FIGURES

TABLES

APPENDIX A

Business Acronyms/Definitions

Business Acronyms/Definitions

1.	634's	Monthly Work Records
2.	AmeriCorps	A program of the US Federal Government engaging adults in intensive community service work with the goal of "helping others and meeting critical needs in the community".
3.	Assembly District	Number of districts in a state, each represented by a member of the state legislature - used by the CCC to see how much work is being done in each district.
4.	Billing Contact	Sponsor's primary point of contact responsible for the billing.
5.	Billing Rates	For each fee-for-service (reimbursement) contract the CCC charges an hourly rate or a per-project amount throughout the duration of the contract.
6.	BLM	Bureau of Land Management
7.	Bond	Debt Investment – used by companies to finance a variety of projects and activities.
8.	BSB	Business Services Branch
9.	C³	CCC's proposed Project/Contract Management and CM Personnel Database.
10.	CADCARS	**C**CC **A**utomated **D**ata **C**ollection **A**nd **R**eporting **S**ystem
11.	CalEMA	California Emergency Management Agency
12.	CalFire	California Department of Forestry and Fire Protection
13.	California Public Records Act	California's statutory system (found at Government Code sections 6250-6260) regulating the mandatory disclosure of government records upon request by a member of the public.
14.	CALSTARS	California State Accounts Reporting System
15.	CA-PMM	California Project Management Methodologies
16.	CCC	California Conservation Corps
17.	CCC Headquarters	Located in Sacramento - provides program administration and program support for the Centers.
18.	CD	Collins-Dugan California Conservation Corps Reimbursement Account
19.	Center Clerks	Center staff personnel that assists in maintaining CM information
20.	Centers	CCC facilities, both residential and non-residential, located throughout the State through which the CCC Program is implemented.
21.	CGEN	California Government Enterprise Network
22.	Charter Schools	Schools that receive public money and private donations but with more flexibility than traditional public schools.
23.	CM(s)	Corpsmember(s)
24.	CMD	Corpsmember Development – refers to the portion of the CCC program addressing CM training and education
25.	CMD Unit	Corpsmember Development Unit - oversees development and maintenance of the Corpsmember training and education programs in the CCC
26.	COMET	Conservation Orientation, Motivation, Education & Training –

		Orientation course recruits take before becoming a Corpsmember.
27.	Con Sup	Conservation Supervisor
28.	Confidentiality requirements for PII	The requirements set by a number of distinct and overlapping state and federal laws, regulations and policies establishing how PII can and/or must be collected, stored, used and/or disseminated and how breaches of confidentiality must be handled.
29.	Congressional District	Number of districts in a state, each represented by a member of the House of Representatives - used by the CCC to see how much work is being done in each district.
30.	Contract Management Unit	Maintains outstanding contract balances & new billable hours on a monthly basis & closes out balances during year-end reconciliation.
31.	Contract Number	Each Contract has a unique number consisting of: **Fiscal Year-index-sequential number** (generated by the system and is the NEXT number for the Index).
32.	Billing Rates	For each fee-for-service (reimbursement) contract the CCC charges an hourly rate or a per-project amount throughout the duration of the contract.
33.	Corpsmember Development and Training	The CCC stresses both work and service ethics, which include teamwork, self-discipline, leadership, and giving back to California. Corpsmembers learn conservation principles and career planning. The CCC also offers training in, among other things, trail building, first aid and firefighting certification, which can lead to internship opportunities with various employers in California.
34.	Corpsmember Education	Corpsmembers are provided opportunities to advance their academic skills while in the CCC through local adult and charter schools, and community colleges.
35.	Corpsmember(s)	18 to 25 year old adults (and Veterans up to 29) that CCC serves by providing them education, work, life skills and work training experiences and opportunities.
36.	Crew Roster	Contains CM hours worked - daily, weekly, monthly
37.	Emergency	Any type of situation whereby CCC is called upon to help the public in some way; such as earthquakes, Mediterranean Fruit Fly, oil spills, floods, fires, etc. Usually CCC is called for emergency response by CALFIRE, Office of Emergency Services (OES), United States Forest Service (USFS), California Department of Food and Agriculture (CDFA) or the United States Department of Agriculture (USDA).
38.	Emergency Analyst	A position at CCC headquarters responsible for coordinating and dispatching CCC emergency crews for both State and Federal agencies.
39.	Emergency Response	Corpsmembers are dispatched to fires (assisting in initial attack, mop-up and logistical support, etc.); floods (filling sandbags, reinforcing levees and stabilizing hillsides, etc.); earthquakes (removing hazards, staffing disaster assistance centers, etc.); oil spill cleanup; snow removal; search-and-rescues; pest infestation;

		and U.S. Homeland Security assistance programs.
40.	Emergency Response Policies & Procedures	The Policy & Procedures outlining, among other things, how the CCC handles billing for Emergency responses.
41.	Emergency Response Training	Training provided to Corpsmembers providing the skills and explaining the duties that are required on an Emergency.
42.	Fee for Service	CCC charges Sponsors a fee for project work. This fee can be in the form of an hourly rate or a per-project amount.
43.	FEMA	Federal Emergency Management Agency
44.	Fiscal Details	Detailed account of how the funds for a project in a specific fiscal year are spent.
45.	Fiscal Summary	Summary of how the contract funds are divided into pre-defined expenses.
46.	Freedom of Information Act	Federal equivalent of the California Public Records Act (see above).
47.	FTE	Full Time Equivalent
48.	Health & Safety Officer	CCC Headquarters position that, among other things, is responsible for the CCC complying with Cal. OSHA and Department of Labor reporting requirements and following laws and regulations relating to health and safety.
49.	Health & Safety Program	Health & Safety Program encompasses the environmental and occupational health & safety of the CCC and its employees, participants, and volunteers in order to promote a safe and secure working, program and living environment. This includes a Return-to-Work Program, disaster prevention, health and safety related training programs, risk assessment & prevention of safety issues.
50.	HIPAA	Federal Health Insurance Portability and Accountability Act of 1996 – which includes, among other things, a Privacy Rule (protecting the privacy of individually identifiable health information); Security Rule (setting national standards for the security of electronic protected health information); and Breach Notification Rule (requiring covered entities and business associates to provide notification following a breach of unsecured protected health information).
51.	HRMS / HCM	Human Resource Management System / Human Capital management - application that efficiently and accurately tracks, monitors, analyzes and reports Corpsmember Personal Information, Benefits, Timekeeping, Pay, Education, Training & Certifications, Scholarships, and Program-related Injuries.
52.	Index Number	Unique identifying number assigned to each center.
53.	Information Practices Act	California statutory scheme found at Civil Code section 1798 et seq. that places specific requirements on State agencies in the collection, use, maintenance and dissemination of information relating to individuals.
54.	Injury & Illness Prevention Plan	The CCC's Injury and Illness Prevention Program (IIPP) was created in order to protect its employees, participants, and volunteers from harm by providing a safe and secure working, program and living environment while adhering to federal, state, and local law, ordinances and regulations. All employees, corpsmembers and

		volunteers are required to adhere to the guidelines, training requirements, processes and procedures as outlined in the IIPP.
55.	ITPL	Information Technology Letters
56.	JHA	Job Hazard Analysis – An analysis of hazards on the job and/or at work project sites.
57.	Legislative Objectives	CCC projects must meet established legislative mandates, as established in Operating Statutes, PRC 14000-14315 (Appendix B).
58.	MOTS	Modified off-the-shelf - Pre-built software from a 3rd party vendor with some modification to suit CCC's business needs
59.	Natural Resource work	Work performed by Corpsmembers that protects and enhances the State's natural resources, such as landscaping, park development, trail construction, tree-planting, fire hazard reduction, energy efficiency auditing and retrofitting, irrigation system installation, watershed improvement, wildlife habitat enhancement, nonnative vegetation removal, fence construction and meadow restoration.
60.	NIST	National Institute of Standards and Technology
61.	OSHA	Federal Occupational Safety & Health Administration within the United States Department of Labor. Not to be confused with Cal/OSHA the Division of Occupational Safety & Health within the California Department of Industrial Relations. Both entities oversee workplace health and safety in their respective jurisdictions.
62.	PMBOK	Project Management Body of Knowledge
63.	Program Management	The process of managing several related projects with the intention of improving the CCC's performance.
64.	Project Management	Managing resources to bring about a successful Project to completion – All projects, no matter how big or small, should have an official start and end date and should bring about beneficial change or added value.
65.	Project Manager	Person responsible for the planning, execution and closing of a project.
66.	Project Sponsor	Public or private entity that retains the CCC to perform a Work Project. Also known as Sponsor.
67.	Public Service Conservation Work or PSCW	Category of CCC Work Projects –specifically those projects that benefit the public and meet the CCC's Legislative mandates regarding Corpsmember education and environmental conservation.
68.	Recruitment System	System used by CCC recruiters to track and manage the efforts of young adults (ages between 18-25 and Veterans to age 29) to learn about the opportunities the CCC provides. These include learning new job skills while working as part of projects; responding to natural disasters; furthering their education, and learning the importance of volunteering and giving back to their community.
69.	Reimbursable Work Projects	Work Project where a Sponsoring Agency pays for the CCC's provision of services.

70.	Residential	A Center with living and dining facilities for Corpsmembers
71.	Resource Agency Data Center	Also known as RADC. Pursuant Government Code section 11546.2 State agencies were required to host all mission critical and public-facing applications and server refreshes in a Tier III or equivalent data center as designated by the California Technology Agency (CTA). Through ITPL 10-14, the Department of Water Resources Data Center serves as the Tier III-equivalent facility for the California Natural Resource Agency and its associated departments (including the CCC).
72.	Resource Category	A way to categorize and report on the types of projects being worked on by the resource being protected.
73.	RTWC	Return to Work Coordinator – Personnel within the CCC Headquarters' Human Resources Branch that works with the Centers to bring injured Corpsmembers back into the program upon completion of treatment for their program-related injuries.
74.	SaaS	Software as a Service - vendor provides the computing facility, including the computer hardware, software and personnel required to support the operation. Vendor supplied personnel will operate the computer hardware, install and maintain both infrastructure and system, support activities such as database updates, backups, etc., and ensure the infrastructure and the system meet all security requirements identified in this FSR.
75.	SAM	State Administrative Manual
76.	SCIF	State Compensation Insurance Fund
77.	SCO	State Controller's Office
78.	Security & Privacy requirements for PII	The requirements set by a number of distinct and overlapping state and federal laws, regulations and policies establishing how PII can and/or must be collected, stored, used and/or disseminated and how breaches of confidentiality must be handled.
79.	Senate District	Territorial district which a senator is elected to the state legislature- used by the CCC to see how much work is being done in each district.
80.	Shift Differential	Added pay for work performed at other than regular daytime hours.
81.	SIMM	Statewide Information Management Manual
82.	SME	Subject Matter Experts
83.	SPU or SP Unit	Special Programs Unit – CCC Headquarters unit that oversees the administration of bond-funded and special-funded programs.
84.	Spike	A project away from a Center which requires Corpsmembers and staff to stay at the site overnight, usually from five to fourteen days in duration. In the case of emergencies or special projects a spike can last much longer. **Remote Spike:** A spike in the Backcountry, hiking in and usually mule packs for gear are involved. **Vehicle** (or **Campground**) **Spike:** Spike at a campground, park or other location which one drives to. **Barracks Spike**: Spike at a Sponsor's or other barracks or housing facility

85.	Sponsor	Public or private entity that retains the CCC to perform a Work Project.
86.	Sponsor Representative	Individual authorized to act on behalf of the Sponsor – main contact person.
87.	Sponsor Verification	Form used by the Conservation Supervisors to verify work completed.
88.	Statewide Scheduling Tool	Allows for near time scheduling of Crews throughout the State.
89.	Stipend Corpsmembers	Certain CCC Corpsmembers are paid a predetermined amount of money that is provided periodically to help offset expenses. Stipends are often provided to those who are ineligible to receive a regular pay because of the nature of their program. Stipends or required in most AmeriCorps-funded programs.
90.	Task Order	Call for services placed against an established contract and are usually divided into smaller projects.
91.	Technical Supervisor	Representative of a Sponsor that provides technical oversight and assistance with CCC projects.
92.	Training and Support	Non-Reimbursable projects that train Corpsmembers or support Center functions.
93.	UAT	User Acceptance Testing
94.	USFS	United States Forest Service
95.	VAT	Vendor Acceptance Testing
96.	Work Project Sponsor	The Entity that defines and pays for the work to be done (unless it's free). They generally own the land that will be worked on or are legally empowered to have work done on the land.
97.	Work Projects	Activities performed by Corpsmembers.
98.	Workers' Compensation	Insurance that generally pays medical costs for injuries sustained as a result of work or program participation unless the injury is the result of willful negligence.

APPENDIX B

Public Resources Code

Public Resources Code
Section 14000-14406
December 2007

Findings and Declarations of Policy

14000. (a) The Legislature hereby finds and declares that every California youth should be encouraged to reach his or her full potential, but that many youths require guidance and support to reach their goals and make positive changes in their lives.

(b) The Legislature finds and declares that conserving or developing natural resources, and enhancing and maintaining environmentally important lands and waters through the use of California's young women and men, is beneficial not only to the youth of the state by providing them with educational and work opportunities, but also is beneficial for the state's economy and its environment.

(c) The Legislature further finds and declares that the California Conservation Corps continues to offer California a unique opportunity to meet both the goal of increasing understanding and appreciation of the environment and the goal of helping youths become productive adults.

(d) The Legislature therefore reaffirms its intent that the corps' mission includes increasing awareness of and improving our natural resources, but more importantly, includes instilling basic skills and a healthy work ethic in California youth, building their character, self-esteem, and self-discipline, and establishing within them a strong sense of civic responsibility and understanding of the value of a day's work for a day's wages.

(e) It is the further intent of the Legislature that corpsmembers graduate from the corps with good work habits, positive attitudes, and broadened professional horizons. It is the intent of the Legislature that the corps blend academic and job skills training with personal growth opportunities in order to develop productive youths who can make substantial contributions as California workers and citizens.

(f) It is the further intent of the Legislature, in memory of Brien Thomas "B.T." Collins and John E. "Jack" Dugan, and on behalf of their passion, support, and commitment to the mission of the corps, to ensure that the corps is an entrepreneurial and incentive-based program with stable and predictable funding. In pursuit of that goal, it is the intent of the Legislature that all state agencies look to the corps first to perform those projects that meet the mission of the corps.

14001. There is in the Resources Agency the California Conservation Corps, which shall be responsible for carrying out the purposes of, and implementing the findings and policies set forth in, this division.

14002. The Legislature finds and declares that the California Conservation Corps provides an invaluable service. The Legislature supports the corps' mission to enhance the educational opportunities and employability of corps members. To further this mission local community college districts and the corps are encouraged to enter into cooperative agreements so that corps members have access to equal educational opportunities.

Local community college districts are encouraged to recognize the unique needs and circumstances of the corps members and the corps' need for adequate facilities. Local community college districts should, to the extent possible, develop procedures to address these unique needs.

14003. (a) The Legislature finds and declares that the State of California has already established a model conservation corps program and that redundant federal and state programs to carry out resource protection and conservation within the state are not in the best interests of the state. Rather, it is in the best interests of the state that federal funds designated to be expended by federal agencies for this purpose be allocated, to the extent feasible, to the California Conservation Corps and local conservation corps.

(b) If federal funds are available for youth conservation corps or community service corps programs, excluding the federal Job Corps, the California Conservation Corps is hereby designated as the program recipient for the State of California, and the corps may distribute, as appropriate, any federal funds to other corps programs within the state. The director shall have the authority to adopt, amend, and repeal policies to implement the program consistent with the federal requirements and with this division.

14004. In memory of Brien Thomas "B.T." Collins, and on behalf of his passion, support, and commitment to the mission of the corps, the California Conservation Corps headquarters in Sacramento is hereby named the "B.T. Collins California Conservation Corps Building."

Definitions

14100. Unless context otherwise requires, the definitions set forth in this chapter govern the construction of this division.

14101. "Corps" means the California Conservation Corps.

14102. "Director" means the Director of the California Conservation Corps.

Program

14300. Young women and men participating in the corps program shall generally be engaged in projects which do the following:

(a) Preserve, maintain, and enhance environmentally important lands and waters.

(b) Accomplish useful and needed public works projects in both urban and rural areas.

(c) Conserve, maintain, improve, and develop natural resources in both urban and rural areas.

(d) Provide opportunities for public use of, or education in, the areas, projects, and resources described in subdivisions (a), (b), and (c).

(e) Assist in emergency operations, such as natural disaster relief and the rescue of lost and injured persons.

(f) Assist in fire prevention and suppression.

(g) Directly contribute to the conservation of energy.

(h) Contribute toward making public facilities accessible to persons with disabilities.

(i) Assist departments within the Resources Agency in developing, rehabilitating, and restoring parklands, recreational facilities, and historical resources; restoring salmon and steelhead spawning, nursery, and rearing habitat; restoring and preserving wildlife habitat; and enhancing reforestation in both urban and rural areas.

14301. The Governor shall appoint a director, who shall act as the administrative officer of the corps, and a deputy director. The appointment of the director is subject to confirmation by the Senate at the next regular or special session of the Legislature, and the refusal or failure of the Senate to confirm the appointment shall create a vacancy in the office. The director and deputy director shall be exempt from civil service, under subdivision (f) of Section 4 of Article XXIV of the California Constitution. The director shall employ, pursuant to the provisions of Article XXIV of the California Constitution and Part 2 (commencing with Section 18500) of Division 5 of Title 2 of the Government Code, such staff as is necessary to implement the provisions of this division.

14302. Young women and men shall be selected for participation in the corps program on the basis of motivation for hard work, personal development, and public service, and without regard to their prior employment or educational background. Participation shall be for a period of one year, which may be extended.

The corps, in conjunction with the Employment Development Department, shall place an emphasis on developing and executing plans to assist corpsmembers in obtaining employment following their participation in the corps program.

14303. The director may employ special corpsmembers without regard to their age so that the corps may draw upon their special skills which may contribute to the attainment of the objectives of the program. Special corpsmembers may be assigned to headquarters, as well as field positions.

14304. Projects shall be directed toward providing opportunities to the public for their education or the use of these natural resources and environmentally important public lands and waters, while at the same time providing young men and women with an opportunity for personal development in a variety of basic skills. Projects shall be undertaken in both urban and rural areas and shall be selected on the basis of the environmental and natural resource benefits each offers, the opportunities for public education or use each offers, and the on-the-job training value of each.

14305. In order to protect the rights of corpsmembers individually and the corps as a community, the director shall adopt a corpsmember bill of rights, corpsmember grievance procedures, and search and seizure guidelines.

These adopted rights, procedures, and guidelines shall serve to assist the director and corps staff in identifying problems and conflicts and resolving them with a minimum disruption of work and training, and shall be used by corps supervisors to interpret and consistently enforce policies and procedures of the corps.

14306. To implement the provisions of this division, the director may do all of the following:

(a) Recruit and employ corpsmembers and special corpsmembers.

(b) Adopt criteria for selecting applicants for employment in the corps' program.

(c) Execute contracts containing such terms and conditions as are deemed necessary and desirable for the employment of corpsmembers.

(d) Authorize utilization of the corps for emergency projects occasioned by natural disasters, fire prevention and suppression, rescue of lost or injured persons, and any other activity or project necessary or desirable to carry out the purposes of this division.

(e) Apply for and accept grants or contributions of funds from any public or private source.

(f) Purchase, rent, or otherwise acquire or obtain necessary property, supplies, instruments, tools, equipment, and conveniences.

(g) Execute contracts for furnishing the services of the corps to any federal, state, or local public agency; any local or statewide private organization concerned with the objectives of the corps' program, as specified in Sections 14000 and 14300; and any person, firm, partnership, or corporation concerned with these objectives.

(h) Procure insurance.

(i) Be reimbursed by the federal government, any state or local public agency, or any private organization for actual expenses incurred by the corps for any project undertaken for any such entity pursuant to subdivision (d) or (g) or pursuant to Section 14307.

(j) To the extent permitted by Article VII of the California Constitution, execute contracts with any person, natural or corporate, for the purpose of implementing the objectives of the corps, as specified in Sections 14000 and 14300.

(k) Utilize any services, material, or property of any agency of the state, and may make such agreements with any agency of the state or take such other actions as are reasonable and necessary.

(l) Contract with public or private nonprofit entities to provide services for the corps.

(m) Contract with the University of California, the California State University, the community college districts, and private institutions for the creation of special admission and tuition credit programs for corpsmembers.

14307. Fire prevention, fire suppression, and disaster relief including, but not limited to, flood, earthquake, pest infestation assistance measures, and search and rescue efforts shall be a major emphasis of the program. Certain corps centers designated by the director as fire centers in locations specifically needed to assure emergency capability and readiness for firefighting and natural disaster relief shall be administered and directed jointly by the director of the corps and the Director of Forestry and Fire Protection. The director of the corps shall be responsible for setting the policies under which these centers shall be operated and shall be responsible for the recruitment, orientation, job training, project planning, and educational and other services generally provided in the corps at its base centers. The Director of Forestry and Fire Protection, and his or her designee, shall be responsible for the supervision of corps members engaged in public service conservation

work and for the training, supervision, and direction of corps members engaged in fire prevention, fire suppression, and other emergency activities.

14308. In carrying out this division, the director may utilize any services, materials, or property of any agency of the state and may make any agreements with any agency of the state, or take any other actions, that are reasonable and necessary.

14309. In order to provide the best and most cost-effective training possible for corps members and other state employees, state agencies shall seek to combine or share training programs that provide related skills.

14310. Notwithstanding any other provision of law, corpsmembers and special corpsmembers, other than staff officers and employees, shall not receive state retirement benefits.

14311. In keeping with the corps' entrepreneurial nature and to expand the corpsmember population, the corps shall actively seek reimbursable work projects from state and nonstate entities that are in keeping with its mission. The corps shall use the following criteria in reviewing such a project offer:

(a) The project will provide opportunities to expand corpsmember population.

(b) The project will provide corpsmembers with education and training in employable skills.

(c) The project will attract community support, participation, and funding.

(d) The project conserves or enhances the state's natural resources, or has other public benefits.

14312. (a) The Collins-Dugan California Conservation Corps Reimbursement Account is hereby created in the General Fund in the State Treasury, for support of the corps.

(b) Funds received in payment for reimbursable work projects, excluding General Fund money, may be deposited in the Collins-Dugan California Conservation Corps Reimbursement Account.

(c) Notwithstanding Section 13340 of the Government Code, the money in the Collins-Dugan California Conservation Corps Reimbursement Account is hereby continuously appropriated to the corps for the following program activities:

(1) Program expansion to hire more corpsmembers.

(2) Enhancement of corpsmember education and educational support services.

(3) Enhancement of equipment used by corpsmembers in projects meeting the corps' mission.

(4) Program support when legislatively directed reimbursement targets are unmet in a given fiscal year.

14313. To assist the corps' operation as an entrepreneurial and incentive-based program, the director may seek and accept donations from private entities, foundations, or other sources outside of state government for purposes of accomplishing the corps' mission.

14315. (a) Subject to the availability of assistance from the corps, a state agency that is considering the use of contracted labor shall give priority to the corps when the mission of the corps and the nature of the state agency's project are substantially consistent.

(b) State agencies shall notify the corps of potential contracts for services that fit within the parameters of the legislative intent set forth in Section 14000 and shall use the corps to the maximum extent feasible to carry out projects that promote the legislative intent as set forth in Section 14000. Because of the corps' commitment to the state's youth, in the exercise of a state agency's discretion when considering contracts for services, strong consideration shall be given to the use of corpsmembers over the use of other contracted labor.

(c) The corps may contract with any state agency for the performance of activities consistent with this division.

(d) Upon appropriation by the Legislature and execution of a contract pursuant to subdivision (b), the Controller may transfer money to the Collins-Dugan California Conservation Corps Reimbursement Account from other funds under the control of the contracting state agency, including, but not limited to, the following funds and accounts:

(1) Hazardous Waste Control Account in the General Fund.

(2) State Highway Account in the State Transportation Fund.

(3) Transportation Planning and Development Account in the State Transportation Fund.

(4) California Environmental License Plate Fund.

(5) Fish and Game Preservation Fund.

(6) Public Resources Account in the Cigarette and Tobacco Products Surtax Fund.

(7) Unallocated Account in the Cigarette and Tobacco Products Surtax Fund.

(8) Habitat Conservation Fund.

(9) Motor Vehicle Fuel Account in the Transportation Tax Fund pursuant to Section 8352.6 of the Revenue and Taxation Code (OMV Fund).

(10) Oil Spill Prevention and Administration Fund.

(11) Integrated Waste Management Account in the Integrated Waste Management Fund.

(12) State Parks and Recreation Fund.

(13) Solid Waste Disposal Site Cleanup and Maintenance Account in the General Fund.

(14) Employment Training Fund.

(15) Harbors and Watercraft Revolving Fund.

(16) California Beverage Container Recycling Fund.

(e) Expenditures from the Collins-Dugan California Conservation Corps Reimbursement Account of amounts transferred pursuant to subdivision (d) shall be limited to purposes that are consistent with the requirements of each fund or account contributing each amount to the Collins-Dugan California Conservation Corps Reimbursement Account.

14316. The Department of Finance may make a loan from the General Fund to the Collins-Dugan California Conservation Corps Reimbursement Account, in an amount not to exceed a cumulative total of one million five hundred thousand dollars ($1,500,000) to meet cashflow needs due to delays in collecting reimbursements. Any loan made by the Department of Finance pursuant to this section shall only be made if the corps has a valid contract or certification signed by a client agency that demonstrates that sufficient funds will be available to repay the loan. All money so transferred shall be repaid to the General Fund as soon as possible, but not later than one year from the date of the loan, with interest at the average rate earned by the Surplus Money Investment Fund.

14317. (a) The Legislature finds and declares all of the following:

(1) By authorizing the Sacramento Local Conservation Corps to sell one of its existing buildings and purchase another building, the corps would be able to consolidate and improve its operations and ensure the safety of its members.

(2) The purpose of the purchase of another building is to provide a permanent residence for the Sacramento Local Conservation Corps.

(3) The purchase of another building is consistent with the intended purpose of the Proposition 40 (the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Bond Act of 2002) grant to the Sacramento Local Conservation Corps that was used to purchase the existing building.

(4) However, that grant required the Sacramento Local Conservation Corps to "use the property only for the purpose for which the grant was made and to make no other use, sale or other disposition of the property, except as authorized by a specific act of the Legislature."

(b) The Sacramento Local Conservation Corps, certified by the California Conservation Corps pursuant to this division, may sell APN 036-0181-011 located in the County of Sacramento, which was purchased with bond funds pursuant to paragraph (2) of subdivision (e) of Section 5096.650.

(c) The sale of APN 036-0181-011 shall be subject to all of the following conditions:

(1) The sale of APN 036-0181-011 shall be at no less than fair market value and shall be approved by the California Conservation Corps.

(2) The net proceeds from the sale of APN 036-0181-011 shall be used only towards the purchase of APN 036-0031-026 located in the County of Sacramento.

(3) The purchase of APN 036-0031-026 shall be at no more than fair market value and shall be approved by the California Conservation Corps.

(4) Any net proceeds from the sale of APN 036-0181-011, in excess of the purchase price of APN 036-0031-026, shall revert to the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Fund created pursuant to Section 5096.610, and are hereby appropriated from that fund to the California Conservation Corps for local assistance.

(5) The Sacramento Local Conservation Corps shall only use APN 036-0031-026 for corps purposes and shall not lease or rent APN 036-0031-026 to other occupants.

Training of County or City Members

14350. The director may establish a training program for members of county or city conservation corps. The program may be designed to provide the same training to members of county or city conservation corps as provided to corpsmembers of the corps and may be conducted in the same facilities. The program is authorized only to the extent that it does not adversely affect the ability of the California Conservation Corps to maintain 2,000 active corpsmembers.

14351. If the corps establishes a training program as described in Section 14350, the corps may contract with the county or city requesting the training, and the contract may require the corps to be fully reimbursed for all costs of the training program.

Nonresidential Program

14400. The corps shall develop nonresidential programs in urban communities, and may develop those programs in other than urban communities, which have high concentrations of ethnic-minority youths, which have high levels of youth unemployment, and which have a need for conservation work. Expenditures for programs in other than urban communities shall not exceed 15 percent of total funding for programs under this section.

14401. The corps shall develop procedures for recruiting high school dropouts from the neighborhoods in which these programs are located.

14402. The corps shall give priority to providing an educational component for corpsmembers who have not completed high school. The component shall be equal in content to a high school curriculum and provide course credits leading to a high school diploma or its equivalent, such as a California high school equivalency certificate. The work of the corps shall be structured to accommodate the educational component without significantly reducing the productivity of the corps.

14403. (a) The corps shall cooperate with, and seek the cooperation of state and local workforce investment boards and youth councils, designated pursuant to the federal Workforce Investment Act (29 U.S.C. Sec. 2801 et seq.) to secure employment and training services for corpsmembers.

(b) These employment and training services may include job search assistance, skills training, transitional employment, or any other services provided under the federal Workforce Investment Act that would lead to employment for the corpsmember.

(c) Employment and training services may be provided to corpsmembers as a component of their work with the corps or upon their termination from the corps.

14404. The corps shall assist corpsmembers who desire to return to school to develop plans to accomplish this goal.

14405. Implementation of the educational component of the nonresidental program established pursuant to this chapter shall be contingent on the California Conservation Corps receiving sufficient funding from any source, including the federal Job Training Partnership Act (P.L. 97-300).

14406. The corps may contract with public or private nonprofit agencies to provide services for a nonresidential program. The public or private nonprofit agency shall meet all of the following requirements:

(a) The agency shall submit a proposal which demonstrates that its program is consistent with the policies of the corps and with this chapter.

(b) The agency shall, to the extent possible, secure funding or services from the local service delivery area for necessary employment and training services.

(c) The agency shall secure reimbursements for a significant portion of the work performed.

(d) The agency shall secure a commitment from local educational institutions that appropriate educational services will be provided.

(e) The agency shall maintain, to the extent possible, the funding from foundations and other public and private organizations for a nonresidential program. If the agency does not have an existing nonresidential program, it shall secure at least a 25-percent match from other public or private organizations for the program.

APPENDIX C

Complexity Assessment

Business Complexity

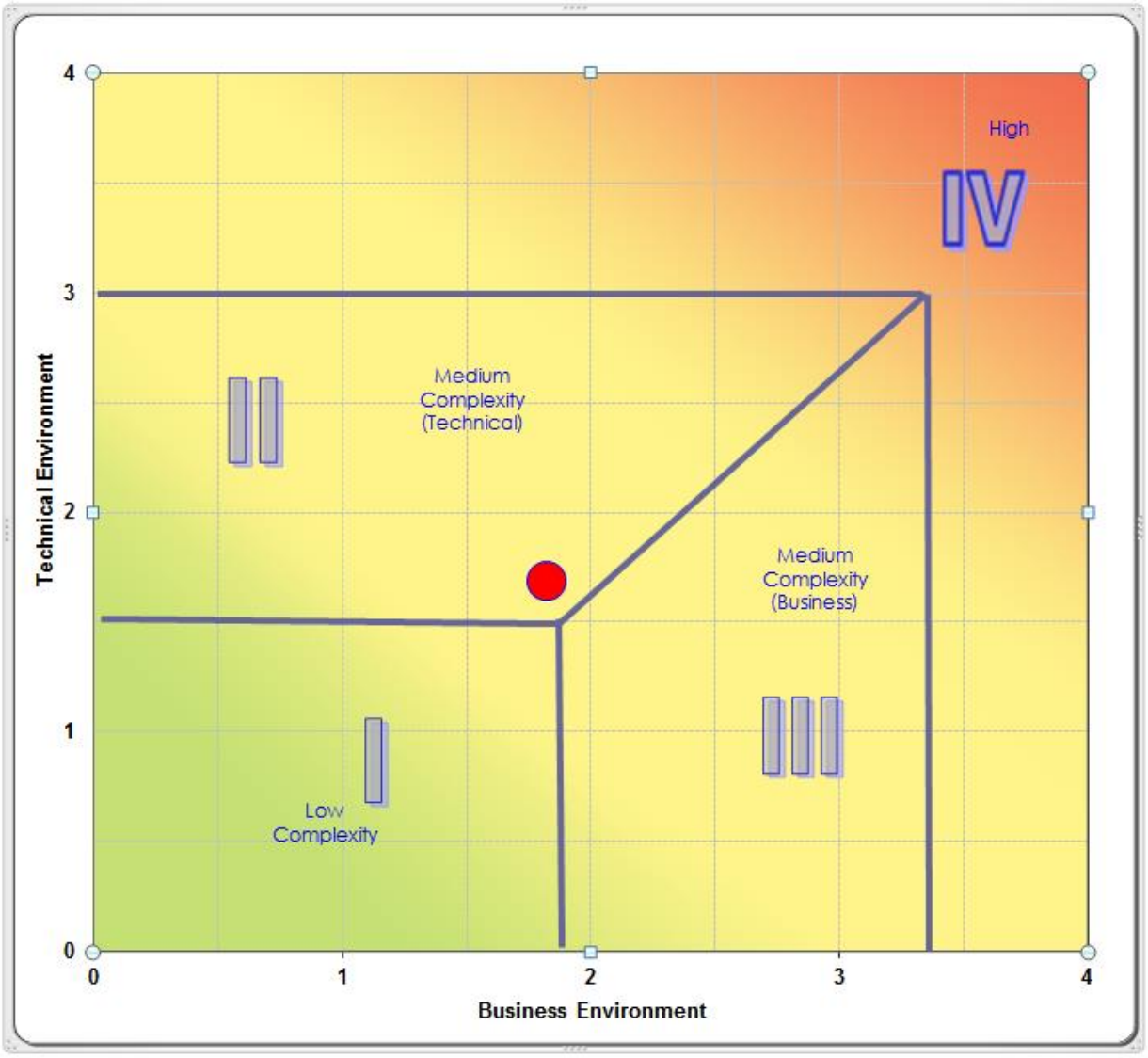
Low Complexity	Business Attribute	High Complexity	Rating
0 1	2 3	4	
Static	**Business rules**	Changing	**2**
Static	**Current Business Systems**	Changing	**4**
Known and Followed	**Decision Making Process**	Not Known	**1**
Low	**Financial Risk to State**	High	**1**
Local	**Geography**	State Wide	**1**
Clear and Stable	**High Level Requirements**	Vague	**1.5**
Few & Routine	**Interaction with Other Departments and Entities**	Many and New	**3**
None	**Impact to Business Process**	High	**4**
Few & Straight Forward	**Issues**	Multiple & Contentious	**1**
High	**Level of Authority**	Low	**0.5**
Clear	**Objectives**	Vague	**0.5**
Established	**Policies**	Non-existent	**1**
Minimal	**Politics**	High	
Familiar	**Target Users**	Unfamiliar	**2.5**
Experienced	**Project Manager's Experience**	Inexperienced	**1**
Experienced	**Team**	Inexperienced	**0.5**
Loose	**Time Scale**	Tight	**3.5**
Low	**Visibility**	High	**3**

Total:	31
Complexity:	1.8

Technical Complexity

Low Complexity	Technical Attribute	High Complexity	Rating
0 1	2 3	4	
Local	**Communications**	State wide	**3**
Established	**Delivery Mechanism**	New	**1**
Local	**Geography**	State wide	**1**
Proven	**Hardware**	New	**1**
Stand-alone	**Level Of Integration**	Tightly Integrated	**2.5**
Proven/Stable	**Networks (L/W)**	New	**0.5**
In place	**New Technology Architecture**	Not in place	**0.5**
9-5, Mon-Fri	**Operations**	24-hour, 7-day	**3**
Expert	**PM Technical Experience**	Novice	**1**
Established and in use	**Scope Management Process**	None	**1**
Light	**Security**	Tight	**4**
Proven	**Software**	New	**1**
Established and In Use	**Standards And Methods**	None	**1**
Experienced	**Team**	Inexperienced	**1**
High	**Tolerance To Fault**	Low	**3**
Low	**Transaction Volume**	High	**2.5**
		Total:	27
		Complexity:	1.7

Complexity Diagram

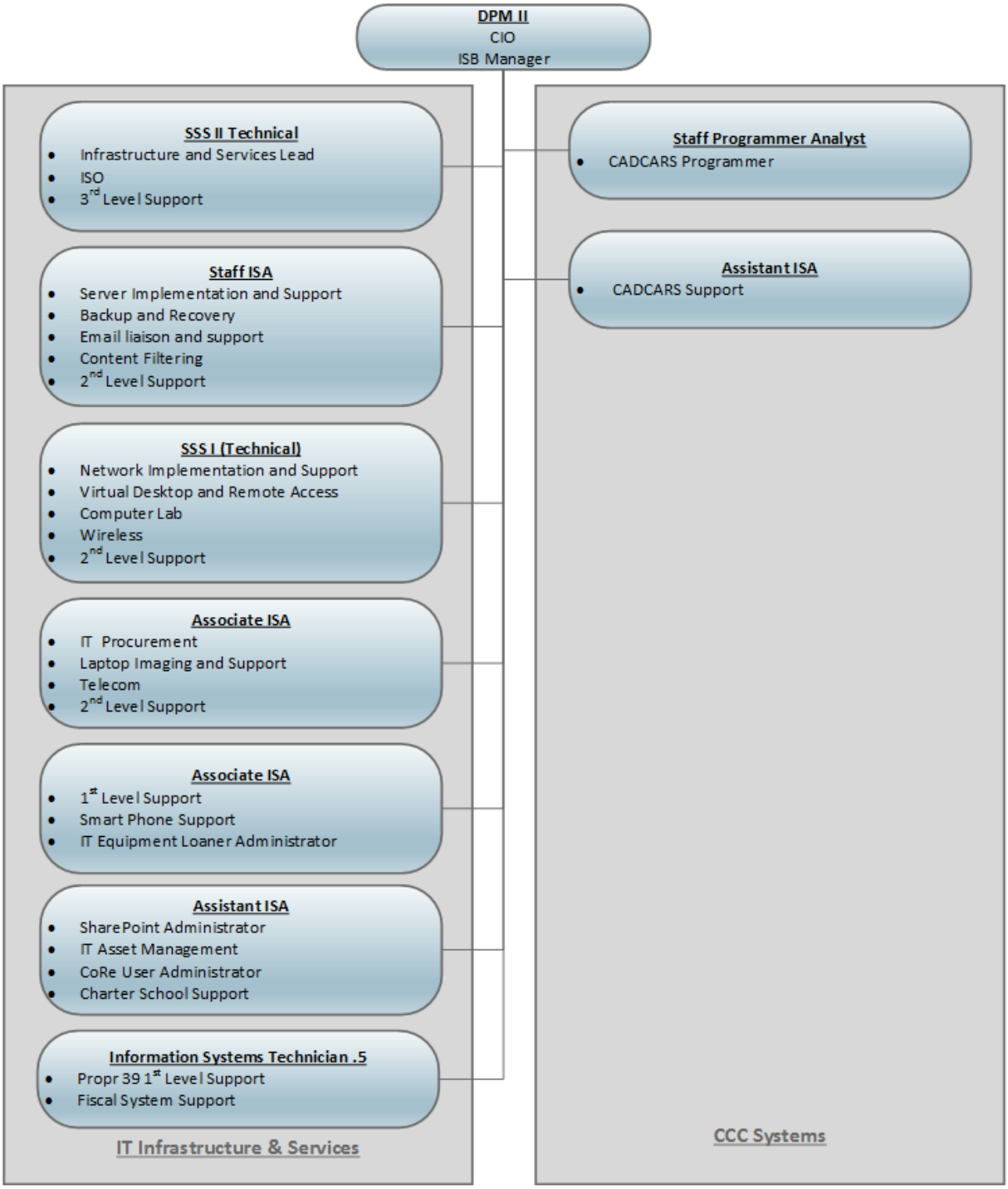


Scores		
	Business Complexity	1.8
	Technical Complexity	1.7

APPENDIX D

ISB Organization Chart

ISB Organization Chart



APPENDIX E

FI$Cal Exemption Letter

October 7, 2013

Subject: CCC BL 08-05 Approval Request

To efficiently and effectively support the Corpsmembers, the California Conservation Corps (CCC) is seeking the approval to implement an enterprise resource management system that will have components of the following applications:

- Human Resource Management System (HRMS) or Human Capital Management (HCM) application that efficiently and accurately tracks, monitors, analyzes and reports Corpsmember:
  - Personal information
  - Benefits
  - Leave balances
  - Pay
  - Education, training and certifications
  - Bonuses
  - Scholarships
  - Program-related injuries (Workers' Compensation)
- Project Management application that efficiently and accurately tracks, monitors, analyzes, and reports data pertaining to:
  - Projects
  - Scheduling
  - Time Keeping
  - Legislative Objectives
  - Job Hazards related to a project
- Business Analytics application– allows the CCC to make better business decisions by providing the capability to:
  - Organize data and data sets
  - Analyze current and historical data
  - Create ad-hoc reports
  - Create advance graphical representation of data by simple user interfaces, dashboards and scorecards.
- Federated Identity Management services – allows the CCC to independently manage user roles and access permissions for on-premise and mobile workers.
  - Portability of identity information across multiple systems.
  - Eliminate redundant user administration
  - Eliminate redundant login through cross-system single sign-on
  - Access data or systems seamlessly
- CCC private cloud – comprises of database systems hosted at a State Data Center.
  - Serves as a backup repository for all data generated and stored on the C³ public cloud for operational continuity.
  - Serves as the interface engine between the SaaS system and other state-owned systems that must interface with C³.
  - Manages the daily batch transfer of data between SaaS system and other state-owned systems.

- Interface with FI$Cal – system of record for contract management, project fiscal management, invoicing and accounts receivable.

The CCC's primary function is to provide job and life skills, as well as training and educational opportunities to young men and women while teaching them to conserve and develop natural resources, and enhance and maintain environmentally important lands and waters. The CCC's benefits to the state's economy and environment are summarized in their mission statement: "The young men and women of the Corps work hard protecting and restoring California's environment and responding to disasters, becoming stronger workers, citizens, and individuals through their service." The benefits to the state's economy are achieved through making young men and women employable after completion of their CCC educational curriculum and job training. The benefits to the state's environment are achieved through training Corpsmembers to respond to fires, floods and other emergencies, perform resource conservation projects to restore and maintain California's environment, and perform energy conservation work to implement clean energy and energy conservation measures. Through their service, Corpsmembers gain life, work, and academic skills allowing them to become strong workers and citizens.

To carry out the mission and goals of the department, CCC enrolls approximately 3,000 Corpsmembers annually in its 25 field offices (Centers), which are supported by the CCC Headquarters office. The CCC operates under the California Public Resources Code (PRC) Sections 14000-14406 (see Appendix B of the FSR). The CCC Corpsmembers are young adults, between the ages of 18 and 25, enrolled in a job training and life skills program. They are not classified as civil service employees and are thus considered exempt contract personnel.

Over the last two years, CCC has undertaken an extensive effort to perform business problem analysis. The results of the analysis showed the CCC's processes for managing Corpsmember information are operating under a legacy system architected in 1980's technology, multiple Access databases, multiple spreadsheets, paper forms and manual processes. These archaic, error-prone and labor intensive processes impede the Department's ability to meet the needs of its Corpsmembers.

To efficiently achieve the Department's mission and comply with its governing PRC sections, the CCC plans to re-engineer it core business processes defined in Section 4.1: Current Method of the Feasibility Study Report (FSR). This re-engineering effort will streamline manual processes, eliminate redundant databases, spreadsheets, and paper forms, and replace the legacy database system (CADCARS). This exemption request seeks approval to implement a key element of our re-engineering effort, which involves the procurement, design, and implementation of an enterprise resource management system utilizing the proposed solution which is the Hybrid Cloud model, a combination of public and private cloud services.

In support of our approval request, the CCC is providing answers to the four questions posed in BL 08-05.

1) Description of the critical business need and why those needs cannot wait for FI$Cal implementation.

The CCC is required to manage, maintain, track, monitor, and report on all administrative, educational, and functional activities related to the Corpsmembers. It is critical that the CCC has an enterprise resource management system to support fundamental CCC functions. CCC and the FI$Cal implementation team have met to discuss planned FI$Cal capabilities. Per these discussions, CCC and the FI$Cal implementation agree that FI$Cal does not meet all of the requirements specified in the C^3 FSR. Those functions that will be available in FI$Cal, namely contract management, project fiscal management, invoicing, and accounts receivable functions will not be deployed in the proposed Hybrid Cloud system known as C^3. The CCC will utilize FI$Cal for these functions. All other applications functions will be deployed within C^3.

The implementation of C^3,will, among other things:

- Develop and deploy an automated system that will replace CCC's legacy system, CADCARS, and eliminate the Access databases, spreadsheets and paper forms.
- Maximize the use of CCC resources in fulfilling the Department's mission.
- Provide the ability to work securely, comply with state and federal security policies, and implement an enterprise automated system that passes an IT security audit.
- Provide data modeling and analysis tools to allow for Corpsmember and Center performance management in a variety of areas.
- Improve customer service to Corpsmembers by interfacing with other CCC' systems and develop web forms to eliminate redundancy.
- Re-engineer and improve business processes by reducing paper processes, streamlining manual business processes, automating business processes, and developing an effective Corpsmember and CCC specific project management system.
- Interface with the State system of records, including FI$Cal for contract management, project fiscal management, invoicing and accounts receivable functions.

2) Adverse effects of not addressing the critical business need before FI$Cal implementation. Statements of adverse effects must be substantiated and quantified.

- System failure, due to CADCARS antiquated computer hardware and obsolete technology, between now and Wave 3 of the FI$Cal implementation will result in:
    - Catastrophic disruption of business operations. This will necessitate a temporary rebuilding of business functions through labor-intensive manual processing of Corpsmember and Project administration. Business continuity will be disrupted for a minimum of two months during the rebuilding process.

- The emergency hiring of temporary staff to help with the manual processing of Corpsmember and Project administration. Currently, CCC's Human Resources Transactions Unit has 7 FTE's and 2 part-time staff. This would have to be increased to a minimum of 18 FTE's to process monthly Corpsmember enrollment, transfer, separation and payroll. Currently, two Reimbursement Contracts Analysts are responsible for managing approximately 300 contracts. This would have to be increased to a minimum of 10 FTEs for Contract and Project administration. The estimated number of FTE needed to process manual activities are based on CCC historical data.

- Compromising the CCC's ability to pay Corpsmembers in a timely manner. The monthly Corpsmember payroll is approximately $1,500,000, excluding overtime. The CCC would be assessed penalties of $100 - $250 per incident for late payment of Corpsmembers. The CCC pays approximately 1400 Corpsmembers each month (penalties would range between $140,000-350,000 per month). Further, other costs associated with late payment, such as legal fees, interest, deflated morale, and loss of good will would be incurred, and while they are difficult to quantify, they could place a great financial burden on the department.

- Compromising the ability to pay Corpsmembers upon separation. Approximately 150 Corpsmembers separate per month. Penalties for missing separation pay are equal to the full pay of the individual per day, plus penalties and any leave balance accrued. For instance if the system were down for 14 days, penalties could be as high as $67,200 per month ((($8.00/hr x 8hrs/day) x 75 CM) x 14 days).

- Loss of critical data such as Corpsmember leave balances, work history, scholarships, certifications, and other important information that will assist the Corpsmembers after they leave CCC.

- In 2012, 100 Corpsmembers were separated for violent and/or inappropriate behavior that would bar them from returning to the CCC. Loss of critical security data regarding terminated Corpsmembers who have been separated for cause could result in violence in the workplace if these Corpsmembers are re-enrolled for lack of information.

- Inability to track reportable Corpsmember injuries to the State Compensation Insurance Fund (SCIF). Software to replace this functionality would have to be purchased at an approximate cost of $5700.

- Loss of injury records compromising the ability of Corpsmembers to file injury claims, or to prevent Workers' Compensation fraud. This could result in incurring penalties up to $400,000.

- Loss of the automated revenue collection process, thus creating cash flow problems affecting the Collins-Dugan Reimbursement Fund. The CCC

generates approximately 100 invoices per month, which would have to be manually processed. Currently, the CCC has one FTE handling invoicing and delinquent payment collection activities. We estimate that number would increase to five FTEs if invoicing and delinquent payment collection became a manual process.

- Possible civil litigation and Department of Labor enforcement action.

- Increased risk of compromising Corpsmember personal identification and medical information.

- Unable to comply with the internal and external reporting requirements.

- Continue to be non-compliant with state and federal security laws.

3) Summary of alternatives considered including arguments for and against each, as well as estimated one-time and ongoing costs to implement. Alternatives should consider non-information technology solutions, if appropriate.

The CCC has assessed the implications of a proposed IT solution as it relates to the business problems and opportunities identified in Section 3 of the Feasibility Study Report (FSR). Given the fact that augmenting the existing legacy system, CADCARS, through application development is impossible due to obsolete technology, the CCC's analysis has shown that the Department's only option is to replace the existing obsolete legacy system with a completely new and updated system that fulfills the Department's business and technical functional needs.

The CCC has taken a two-step approach to determining its universe of potential "Alternatives." During the investigation of possibilities, various "options" presented themselves. These included custom development, procurement of COTS/MOTS products, use of similar systems from other departments, and procurement of SaaS services. A cursory review of some of these "options" indicated that either the cost was prohibitive or the solution would not meet CCC's business requirements, and so they are not included in the "Alternative" analysis. Only those options that fit within the CCC's functional and budgetary requirements have progressed to the "Alternative" step, and are included in the Alternative Analysis and associated EAWs and documentation. Several of the rejected options are listed below the alternative analysis in order to provide a more complete understanding of our search for solutions.

The CCC considered the following two alternatives:

Proposed Alternative: Hybrid Solution

The proposed alternative calls for a combination of public and private cloud services. The primary functions of C³ (Corpsmember Human Resources Management, Corpsmember Development, Timekeeping and Project Management) will be hosted in the public cloud leveraging Software as a Service, (SaaS) solution. Functions such as Contract Management, Project Fiscal Management, Invoicing, and Accounts Receivables will be implemented in

FI$Cal, and will not be part of the SaaS solution. A middle tier environment called Interface and Operational Continuity System (IOCS) which is a private cloud, will be established at the State of California Data Center. The IOCS serves two purposes:

c) The CCC databases at RADC will serve as a backup repository for all data generated and stored on the C³ public cloud. The database will effectively mirror all data stored in the public cloud and will be available in the event the CCC decides to move from the SaaS provider to another technology, service provider, or application architecture. This middle tier environment will be supported by CCC IT staff in partnership with RADC.
d) In addition, RADC environment will serve as the interface engine between the SaaS system and other state-owned systems that must interface with C³. Current plans call for interfaces with FI$Cal, State Controller's Office (SCO), and the State Compensation Insurance Fund (SCIF) systems. Data will transfer between the state-owned systems and the CCC databases hosted in RADC, which will then transfer data to and from the SaaS provider. Confidential and non- confidential data will be segregated into separate environments at RADC. The confidential data will be encrypted and at rest at all times, and will be used for archiving purposes.

After extensive review and careful consideration, the CCC recommends the Proposed Alternative: Hybrid solution which is a combination of the SaaS systems and RADC services. Collaborative analysis and due diligence evaluation of alternative approaches by CCC staff, has determined that the replacement of the current obsolete and time consuming systems through a Hybrid System approach will achieve the best alignment with the department goals and objectives as well as State policies (FI$Cal, Data Center consolidation, Leveraging Cloud Services, etc.) This approach provides the maximum potential environment flexibility to support current and future needs of the CCC.

Advantages:

- Provides the benefits of both public and private cloud models to create an environment that meets the business and functional needs of the CCC.
- Uses a private cloud foundation combined with strategic use of public cloud services.
- Meets FI$Cal requirements for interfacing with contract management, project fiscal management, invoicing and accounts receivable modules provided by FI$Cal.
- Provides high availability infrastructure and low risk of CCC data loss.
- Creates the best value for the state with the most flexible and secure environment.
- Increases portability allowing applications to change environments with minimal technical glitches and business disruption.
- Moderate initial investment while providing scalability with increased demand.
- Allows the CCC to develop internal professional expertise to administer C³.
- Reduces implementation risks and user acceptance failure by leveraging vendor line-of-business experience and the flexible and scalable technology services offered by a cloud service provider. Cloud services leverage a ready-made platform, which has

already been provisioned, implemented, and tested by the cloud service provider, simplifying provisioning and reducing deployment complexities.
- Meets HIPAA and the State of California privacy and security requirements.
- Allows the CCC to control its data.

Disadvantages:

- Increased State staff by 3.0 PYs.
- Increased General Fund and Collins Dugan expenditures.
- Creates data redundancy – CCC data is stored in multiple data centers.
- CCC IT staff is required to manage complex interfaces with SaaS and state-owned systems.
- Requires increased oversight and tighter contract management.

Alternative I: Pure SaaS Solution

The system and associated data are centrally hosted on the cloud with one SaaS provider. One vendor will provide the infrastructure for the entire C³ system, including the computer hardware, software and personnel required to support the operation. Vendor supplied personnel will operate the computer hardware, install and maintain both infrastructure and system, support activities such as database updates, backups, etc., and ensure the infrastructure and the system meet all necessary security requirements. CCC IT staff will be responsible for user administration, minor system configuration to support business process changes, report creation, user support and user training.

Advantages:

- Lowest cost sustainable technological solution requiring the least number of CCC IT resources.
- Requires the least amount of time to address the department's immediate problems as defined in Section 3.2 of the FSR: Business Problems and Opportunities.
- Reduces implementation risks and user acceptance failure by leveraging vendor line-of-business experience and the flexible and scalable technology services offered by a cloud service provider. Cloud services leverage a ready-made platform, which has already been provisioned, implemented, and tested by the cloud service provider, simplifying provisioning and reducing deployment complexities.
- Provides a scalable, dynamic approach to managing computing infrastructure and resources.
- Offers flexible subscription pricing which can be scaled up or scaled down based on evolving business needs.
- Meets HIPAA and the State of California privacy and security requirements. This relieves the CCC from the need to invest and commit major resources and funds to upgrade the current security environment.

Disadvantages:

- Increased State Staff by 2.0 PYs.

- CCC's data will be solely hosted outside a State Data Center.
- Relinquishment of Control – a third-party vendor is entrusted with hosting CCC's mission critical system and invaluable data.
- Interface into other CCC and state-owned systems, specifically FI$Cal will be extremely difficult, highly complex, and possible could over-exceed the estimated cost to implement the solution.
- Increases the risk of business disruption, and requires a high level of coordination if the CCC decides to move into another technology, service provider, or application architecture.
- Very low operational continuity

The estimated one time and annual operational costs of Hybrid vs. Pure SaaS are:

One-Time Costs

Description	Hybrid Cloud	Pure SaaS
Total Vendor Implementation Cost	$1,485,450	$ 1,550,400
Project Management & Oversight Costs	$599,500	$599,500
Procurement Development & Oversight Cost	$200,000	$200,000
Travel and Training Costs	$42,000	$40,200
Hardware Cost	$40,000	0
Staff Implementation Cost	$1,546,646	$1,362,209
Total	**$ 3,913,596**	**$ 3,752,309**

Ongoing Annual Costs

Description	Hybrid Cloud	Pure SaaS
SaaS Licenses	$524,300	$481,180
Microsoft SQL Licenses	$34,578	$11,526
Data Center Services	$60,000	0
Hardware Warranty	$8,000	0
Travel and Training Costs	$34,000	$26,000
Staff Support Cost	$504,325	$364,995

Total	**$1,165,203**	**$883,701**

BCP Request Comparison

Description	Hybrid Cloud	Pure SaaS
FY 2014 - 15 One Time Cost	$2.1M	2.1M
FY 2015 – 16 One Time Cost	$1.5M	$1.3M
Ongoing Cost	$990,000	707,000
No of Permanent IT Position	3	2
Cost of Permanent IT Position including benefits	$328,680	$189,349

After extensive research and careful consideration, the CCC recommends the Proposed Alternative: Hybrid Cloud solution. Although Alternative I: Pure SaaS solution, offers similar benefits, is the least expensive and has the quickest implementation time, the Hybrid Cloud solution will achieve the best alignment with the Department goals and objectives, as well as State polices (FI$Cal, Data Center Consolidation, etc.). Collaborative analysis and due diligence evaluation of alternative approaches by CCC staff has determined that the Hybrid cloud approach provides the best value to the state, the maximum potential environment flexibility to support the current and future needs of the CCC, and less risk associated with project delivery.

The following 4 options were not developed as alternatives:

Option 1: Do Nothing

This is not a viable option since CCC will continue to be at risk of:

- System failure that could result in the inability to pay Corpsmembers in a timely manner, and the loss of the automated revenue collection process, creating cash flow problems affecting the Collins-Dugan Reimbursement Fund.
- Compromising the security of Corpsmember personal identification and health information
- Penalties due to non-conformance with security, labor, and worker's compensation laws.
- The CCC will continue to be out of compliance with control agency mandates to house all mission critical systems in an approved Tier III Data Center.
- The CCC will continue to be out of compliance with State Administrative Manual (SAM) security policies.
- The CCC will continue to be out of compliance with other regulatory and legal requirements for the protection of Corpsmember personal and health information.
- Puts the CCC at risk of adverse impacts discussed in the adverse effects section of this document

Option 2: Upgrade the Existing CADCARS

- This is not a viable option as it is not possible to upgrade a system that is this technologically obsolete.

Option 3: In-House Custom Development

- The CCC considered the feasibility of building a custom solution. This alternative was dismissed because the IT resource requirements and system implementation requirements would be time- and cost- prohibitive.

Option 4: Similar Systems from Other Departments

- Due to the unique nature and role of Corpsmembers in the CCC, no similar systems in other State departments, including those in the Resource Agency, will accommodate the CCC's distinctive need to manage Corpsmembers.

Option 5: Commercial-Off-the-Shelf (COTS) or Modified-Off-the-Shelf (MOTS) Solution

- The CCC considered the feasibility of purchasing licenses for a COTS/MOTS software with the data hosted in a State Data Center. This alternative was dismissed since it duplicates FI$Cal functions for Contract Management, Project Fiscal Management, Invoicing and Accounts Receivables. When purchasing an Enterprise Resource Management COTS/MOTS solution these functions are included and cannot be separated from the total package. This duplication of functionality is not allowed by FI$Cal.

4) High-level plan with estimated timeframes to implement the proposed solution (assuming the exemption request was approved). The plan should include all requisite approvals and critical project milestones necessary to implement the proposed solution. At a minimum, the plan should include any state or federal approvals and funding decision points, procurements, and development and implementation timeframes.

To reduce project risk and stay within resource constraints, the project will be implemented using a phased approach with three system releases:

Project Phases

Project Phase	Phase Deliverables	Duration
Procurement	• RFO document for Procurement support services and PM services • State-approved IFB document for SaaS vendors • Vendor contracts	206 Days
Planning	• Recruit and hire the requested IT positions • Re-engineered business processes • Finalized requirements documents with deliverables and acceptance criteria • Project Plan (Risk, Change, Contract, Communications, Issue, Quality, Staffing) • Project Schedule	46 Days
Development, Implementation, Testing, Training, Acceptance	• Data Center Setup • FI$Cal Interface • Release I Projects and Personnel Modules	216 Days
	• Release II Corpsmember Development	45 Days
	• Release III Mobile Module	125 Days
Project Completion	• Contract closeout • Lessons learned	10 Days

Post-implementation	• PIER	Due 1 year after Project Completion

I can be reached at (916) 341-3244 or rita.gass@ccc.ca.gov for any questions you may have regarding this request.

Thank you for your prompt consideration to this matter.

Sincerely,

Rita Gass
Chief Information Officer
CA Conservation Corps

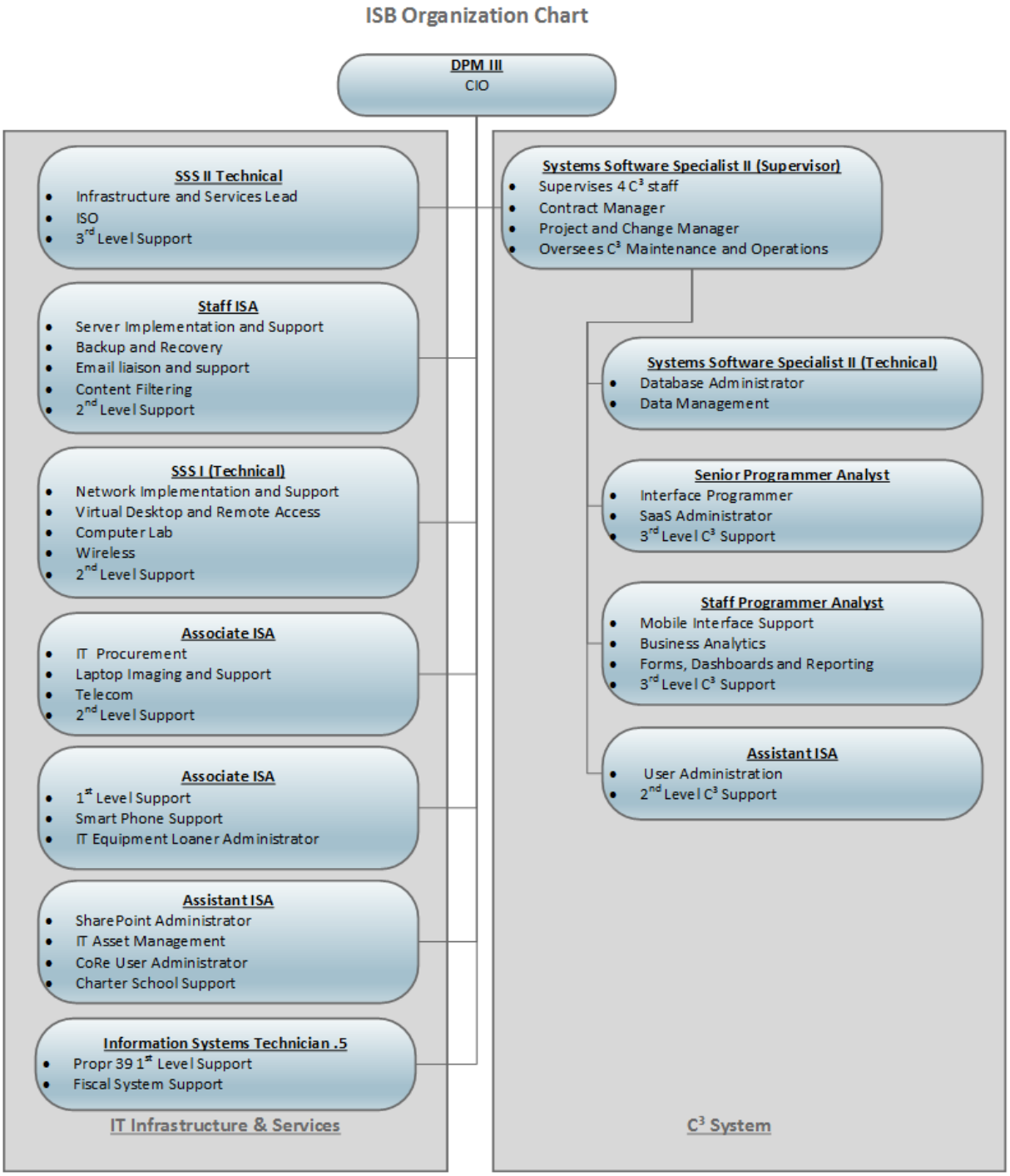
cc: Tim Garza, CIO, CA Natural Resource Agency

APPENDIX F

BCP Workload Analysis

And

ISB Organizational Chart



* New positions, requires a BCP

Systems Software Specialist II (Supervisor) - C³ Supervisor	One-Time						On-Going		
Tasks	FY 2014-15			FY 2015-16			FY 2016-17...		
	Hrs	%	Cost	Hrs	%	Cost	Hrs	%	Cost
• *Technical Manager* - Oversees the day-to-day activities of state and vendor technical staff engaged in the technical management aspects of the project - Manages the technical disiplines of the project	728	35%	$42,903	624	30%	$36,774			
• *Implementation Manager* - Oversees the implementation phase of the project - Provide implementation management leadership through planning, organizing, coordinating and monitoring implementation activities - Responsible for effectively managing all IT resources assigned by the Project Manager - Authorizes invoices for payments	520	25%	$30,645	416	20%	$24,516			
• *Supervision and Work Planning* - Provides expert-level leadership and direction to C³ staff. - Recruits, interview and hire staff - Plans, schedules and prioritizes workload of the C³ unit. - Develop training plans, monitor training needed by C³ staff	832	40%	$49,032	832	40%	$49,032	832	40%	$49,032
• *Contract Manager* - Responsible for managing all contracts associated with C³ - Oversees C³ budget - Approves and authorizes payments for contract services and subscirptions							208	10%	$12,258
• *C³ Support and Maintenace* - Oversees staff that facilitates requirements gathering sessions to define deliverables and make recommendations for changes to the C³ system - Develops relationships with C³ stakeholders and CCC external partners to learn and understand the business requirements and needs Provides expert level technical guidance to the C³ staff to ensure effective and timely solutions are delivered in response to incident and service requests regarding the C³ system - Analyzes the root cause of IT problems in order to implement, or recommend implementation of, efficient technology solutions. - Participates in and coordinate or lead data maintenance and data quality efforts - Assits team efforts to develop solutions for complex maintenance problems - Independently monitors and manages C³ support, ensuring all requests are responded to in a timely and effective manner, review Help Desk calls related to C³ to ensure customer satisfaction and to identify opportunities for improvement							520	25%	$30,645
• *C³ Change Manager* - Implement change management strategy and apply a structured methodology -Lead change management activities - Coordinates efforts with other IT specialist and external partners - Tracks and reports issues - Defines and measures success metrics and monitor change progress - Manages the C³ portfolio and change load							208	10%	$12,258
• *Project Management and Reporting* - Responsible for oversight and reporting of any projects within the scope of the C³ unit - Serves as C³ expert and project lead for C³ staff in conducting the most complex system changes for business process improvement and services -Defines project scope, requirements, milestones, and deliverables, and conduct reviews and prepare management reports for ongoing support and maintenance of the most complex C³ system							208	10%	$12,258
• *Other Duties* - Prepares reports for CCC management addressing specific goals, objectives, and timeframes, as well as any procedural changes and improvements requested to meet strategic goals and objectives of the Department - Participates in the development of methodologies, procedures, and standards. - Ensures security compliance, CCC , CNRA and State policies are met. - Participates in the identification, development and communciation of new technology standards and best practices as appropriate - Contributes to and/or reviews IT Capital Plan, Feasibility Studies, Budget Change Proposals, procurement docuemtns and other documents as needed - Responsible for maintaining and updating the CCC AIMS and IT strategic plan							104	5%	$6,129
Total Workload Hours	**2,080**	**100%**	**$122,580**	**1,872**	**90%**	**$110,322**	**2,080**	**100%**	**$122,580**

Systems Software Specialist II (Technical) - Database Administrator	One-Time						On-Going		
Tasks	FY 2014-15			FY 2015-16			FY 2016-17…		
	Hrs	%	Cost	Hrs	%	Cost	Hrs	%	Cost
• Database Administrator (Project Phase) - Responsible for validating the design of the new IOC databases - Responsible for the installation and impleemntation of the OICS databases hosted in RADC	312	15%	$16,116	104	5%	$5,372			
• Data Conversion Lead - Responsible for ensuring legacy data from Advantage databases, Access databases and excel spreadsheets are successfully converted and uploaded to the IOCS databases - Collaborates with Data Conversion programmer vendor and SaaS vendor in the creation and implementation of a Data Conversion Plan and process during the Project Planning Phase - Oversees data cleansing to ensure data are correct, complete, consistent and convertible - Oversees the execution of automated and manual data conversion - Monitors Data migration - Oversees data validation	832	40%	$42,976	312	15%	$16,116			
• Change Management Lead - Assists in creating and implementing the change management plan - Develops and maintain the Change Management Logs and Request for Changes documents - Schedules and chairs all Change Management meetings - Produces regular Change Management reports	624	30%	$32,232	624	30%	$32,232	208	10%	$10,744
• Data Security - Collaborates with ISO and Interface programmers to implement a strong database level security - Performs research and analysis of current and emerging security requirements; controls access to systems (e.g., network, systems, or database) in order to maintain system security, using Information Security Best Practices, automated tools, the State Administrative Manual and Information Security Policy. - Ensures CCC systems meet CCC, CNRA and State security standards and requirements. - Monitors security logs and report suspicious activities to ISO - Assists ISO in the implementation of IT security best practices	312	15%	$16,116	312	15%	$16,116	312	15%	$16,116
• Database Administrator (Maintenance and Operation Phase) - Responsible for Implementing, maintaining and documenting database designs and schemas, create database objects (tables, indexes, stored procedures, access permissions, scripts, etc) - Responsible for Implementing and maintaining database security - Write database procedures, functions, and triggers - Tune database queries for optimal efficiencies and create shell scripts for task automation - Oversees backup, mirrorring, replication, failover and operational recovery - Installs and tests database upgrades and patches - Provides technical support by analyzing, troubleshooting and resolving database problems. - Conducts root cause analysis to implement and recommend implementation solutions to customer reported or production problems, implement modification request - Assists the Help Desk in providing support to CCC uses and resolving database issues				416	20%	$21,488	728	35%	$37,604
Data Management - Responsible for CCC data management - Business expert with detailed knowledge of the CCC data structure, content and appropriate use of the business informtion. - Responsible for data management activities related to the collection, storage, access and use, archiving and disposal phases of the information lifecycle. - Primary contact for dataset - Maintains data, correcting any faulty data - Document and maintain metadata records where needed - Provide planning, training, and operational support for awareness, coordination, and integration of data and information managament activities, including people, information needs and data. Coordinate internal and external data management activities				208	10%	$10,744	728	35%	$37,604
• Other Duties - Participates in the development and update of the following documents: CCC Technology Recovery Plan, AIMS, IT Strategic Plan,and procurement documents - Provides backup relief to other team members in their absence				104	5%	$5,372	104	5%	$5,372
Total Workload Hours	**2,080**	**100%**	**$107,441**	**2,080**	**100%**	**$107,441**	**2,080**	**100%**	**$107,441**

Senior Programmer Analyst - Interface Programmer	One-Time						On-Going		
Tasks	FY 2014-15			FY 2015-16			FY 2016-17…		
	Hrs	%	Cost	Hrs	%	Cost	Hrs	%	Cost
• *CCC Interface Programmer (Project Phase)* - Collaborates with SaaS Vendor, State representatives and Interface Programmer Consultant in the design, development, and implementation of the interfaces between the IOCS databasess, the SaaS system and the State systems (FI$CAL, SCO and SCIF)	832	40%	$39,464						
• *SaaS Administrator (Project Phase)* - Collaborate with the SaaS vendor in the design, development and implementation of the SaaS system - Learn and understand the administration of the selected SaaS solution - Participates in the User Acceptance Testing activities	624	30%	$29,598						
• *Lead Trainer - (Project Phase)* - Conducts training requirements evaluations - Responsible for designing and developing user training materials to include manuals, handouts, exercises, etc - Coordinates user training schedules with Center Directors and Supervisors - Prepares training environment and resources - Conducts end user training	624	30%	$29,598						
• *CCC Interface Programmer (Maintenance and Operation Phase)* - Provides technical leadership in the support and maintenance of the interfaces between the IOCS databases, SaaS system and State systems. - Responsible for developing detailed API specifications and write/modify complex APIs - Identify problems, draws valid conclusions, and develop effective solutions - Documents interface, workflow, and report requirements. - Participates in C³ change management - Ensures daily data batch jobs are processed without errors - Analyzes, troubleshoot and resolve programming problems associated with APIs and/or batch jobs				728	35%	$34,531	728	35%	$34,531
• *C³ Maintenance and Support* - Ensures daily data batch jobs are processed without errors - Analyzes, troubleshoot and resolve programming problems associated with APIs and/or batch jobs - Provides C³ 3rd level support				520	25%	$24,665	520	25%	$24,665
• *SaaS Administrator (Maintenance and Operation Phase)* - Performs business and technical analysis requested by customers - Configures SaaS objects, tabs, fields and workflows requested by customers to ensure evolving business needs are met - Create or modify: list views, picklist values, workflow rules, routing rules, approval processes - Create or modify: reports and dashboards, email templates, and forms - Modifies page layouts				520	25%	$24,665	520	25%	$24,665
• *SaaS User Trainer (Maintenance and Operation Phase)* - Prepares an effective training schedule for the required annual refresher user training - Prepares an effective training schedule for the required new user training - Responsible for developing or maintaining user training materials - Monitors and evaluates the effectiveness of the user training				208	10%	$9,866	208	10%	$9,866
• *Other Duties* - Participates in the development and update of the following documents: CCC Technology Recovery Plan, AIMS, IT Strategic Plan,and procurement documents - Provides backup relief to other team members in their absence				104	5%	$4,933	104	5%	$4,933
Total Workload Hours	**2,080**	**100%**	**$98,659**	**2,080**	**100%**	**$98,659**	**2,080**	**100%**	**$98,659**