Information Technology Project Request

Feasibility Study Report
Executive Approval Transmittal

Department Name		
Department of Justice		
Project Title (maximum of 75 characters)		
Controlled Substance Utilization Review & Evaluation System CURES 2.0		
Project Acronym	**Department Priority**	**Agency Priority**
CURES 2.0	1	

I am submitting the attached Feasibility Study Report (FSR) in support of our request for the California Department of Technology 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		
DOJ Chief Information Officer		Date Signed
Printed name:	Adrian Farley	4/9/14
DOJ Budget Officer		Date Signed
Printed name:	Michael Fong	4/24/14
Director, DOJ California Justice Information Services Division		Date Signed
Printed name:	Cuong Nguyen	4/9/14
Chief, DOJ Bureau of Criminal Identification and Investigative Services		Date Signed
Printed name:	for Linda Denly	4/15/14
DOJ Chief Deputy Attorney General		Date Signed
Printed name:	Nathan R. Barankin	14 April 2014
DCA Chief Information Officer		Date Signed
Printed name:	Amy Cox-O'Farrell	4/24/14

Feasibility Study Report
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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
	The IT project meets the definition of a national security system.
	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.)
	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
	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.
	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
	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.

FEASIBILITY STUDY REPORT

Controlled Substance Utilization
Review & Evaluation System
CURES 2.0
(820-218)

State of California
Office of the Attorney General
Department of Justice

December 2013
Version 2 April 2014

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1. Approval Sheet

4/9/14

CUONG NGUYEN **DATE**
Director
California Justice Information Services Division

4/9/14

ADRIAN FARLEY **DATE**
Chief Information Officer
Office of the Chief Information Officer

4/9/14

JOE DOMINIC **DATE**
Bureau Chief
Departmental Technology Services Bureau
California Justice Information Services Division

for Linda Denly 4/15/14

LINDA DENLY **DATE**
Bureau Chief
Bureau of Criminal Identification and Investigative Services
California Justice Information Services Division

2. Project Summary

1.	**Submittal Date**	January **2014**

		FSR	SPR	PSP Only	Other:
2.	**Type of Document**	**X**			
	Project Number	820-218			

			Estimated Project Dates	
3	**Project Title**	CURES 2.0 Feasibility Study Report	**Start**	**End**
	Project Acronym	CURES 2.0	04/2014	06/30/2015

4.	**Submitting Department**	Department of Justice
5.	**Reporting Agency**	

6. Project Objectives

This project has multiple business objectives (see Section 3.3 for specifics). In summary, the project will:

- Automate and improve CURES processes
- Comply with the legislative mandates of Senate Bill (SB) 809 of 2013.
- Comply with the legislative mandates of Assembly Bill (AB) 110 – Budget Act of 2013.

8.	**Major Milestones**	**Est Complete Date**
	Project Planning	05/15/2014
	Project Requirements	06/30/2014
	Project Design	07/11/2014
	Project Development	03/31/2015
	Project Implementation	06/30/2015
	Project Closeout	06/30/2015
	PIER	06/30/2016
	Key Deliverables	
	Project Plans:	05/15/2014
	Project Management Plan	05/15/2014
	Communication Plan	
	Change Management Plan	
	Risk Management Plan	
	Project Test Plan	
	Project User Test Plan	
	Project Acceptance Plan	
	Requirements Document	
	Design Document	07/11/2014
	Project Development Plan	07/01/2014
	Project Implementation Plan	05/15/2015
	Project Closeout Letter	06/30/2015

7.	**Proposed Solution**
	DOJ intends to replace the existing Prescription Drug Monitoring Program (PDMP)/ Controlled Substance Utilization Review and Evaluation System (CURES) with a new system utilizing, when appropriate, existing functionality. A vendor will be procured to assist DOJ with the development of the system.

SECTION B: PROJECT CONTACTS

Project #	820-218
Doc. Type	FSR

Executive Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Agency Secretary	**N/A**							
Dept. Director	**Cuong**	**Nguyen**	**916**	**324-5043**				**Cuong.Nguyen@doj.ca.gov**
Budget Officer	**Fong**	**Michael**	**916**	**445-8215**				**Michael.Fong@doj.ca.gov**
CIO	**Adrian**	**Farley**	**916**	**227-3122**				**Adrian.Farley@doj.ca.gov**
Project Sponsor	**Arwen**	**Flint**	**916**	**227-0821**				**Arwen.Flint@doj.ca.gov**

Direct Contacts								
	First Name	**Last Name**	**Area Code**	**Phone #**	**Ext.**	**Area Code**	**Fax #**	**E-mail**
Document Preparer	**Sheila**	**Kerr**	**916**	**227-3072**				**Sheila.Kerr@doj.ca.gov**
Primary Contact	**Debbie**	**Florendo**	**916**	**227-4441**				**Debbie.Florendo@doj.ca.gov**
Contract Manager	**TBD**[1]							
Project Manager	**TBD**[1]							

[1] As per DOJ policy, the Project Manager and Contract Manager will be assigned once the project is approved.

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

1.	**What is the date of your current Operational Recovery Plan (ORP)?**	**Date**	5/11/2009
2.	**What is the date of your current Agency Information Management Strategy (AIMS)?**	**Date**	11/13/2007
3.	**For the proposed project, provide the page reference in your current AIMS and/or strategic business plan.**	**Doc.**	n/a
		Page #	n/a

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

If YES, CHECK all that apply:

X	a) The estimated total development and acquisition costs exceed the Technology Agency established agency cost threshold.
X	b) The new system development or acquisition is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.
X	c) The project involves a budget action
	d) The project meets a condition previously imposed by the Technology Agency.

SECTION D: BUDGET INFORMATION

Project #	820-218
Doc. Type	**FSR**

Budget Augmentation Required?								
	No							
	Yes	**X**	**If YES, indicate fiscal year(s) and associated amount:**					
			FY	**2013/14**	**FY**	**2014/15**	**FY**	**2015/16**	**FY**	**2016/17**
			$		**$**		**$**		**$**	

PROJECT COSTS

1.	**Fiscal Year**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	TOTAL
2.	**One-Time Cost**	**2,130,666**	**2,109,620**	**0**		**$4,240,286**
3.	**Continuing Costs**	**0**	**0**	**968,865**		**$968,865**
4.	**TOTAL PROJECT BUDGET**	**$2,130,666**	**$2,109,620**	**$968,865**	**$**	**$5,209,151.00**

SOURCES OF FUNDING

5.	**General Fund**					**$**
6.	**Redirection**	**178,387**	**713,550**			**$891,937**
7.	**Reimbursements**	**1,952,279**	**1,396,070**	**968,865**		**$4,317,214**
8.	**Federal Funds**					**$**
9.	**Special Funds**					**$**
10.	**Grant Funds**					**$**
11.	**Other Funds**					**$**
12.	**PROJECT BUDGET**	**$2,130,666**	**$2,109,620**	**$968,865**	**$**	**$5,209,151.00**

PROJECT FINANCIAL BENEFITS

13.	**Cost Savings/Avoidances**	**$**	**$**	**$**	**$**	**$**
14.	**Revenue Increase**	**$**	**$**	**$**	**$**	**$**

Note: The totals in Item 4 and Item 12 must have the same cost estimate.
Continuing Costs of $968,865 differ from Project Funding Plan since $1,629,181 includes Program Costs

SECTION E: VENDOR PROJECT BUDGET

Project #	**820-218**
Doc Type	**FSR**

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

VENDOR PROJECT BUDGET

1.	**Fiscal Year**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	TOTAL
2.	**Primary Vendor Budget**	**344,000**	**688,000**			**$1,032,000**
3.	**Independent Oversight Budget**					**$**
4.	**IV&V Budget**					**$**
5.	**Other Budget**					**$**
6.	**TOTAL VENDOR BUDGET**	**$344,000**	**$688,000**	**$**	**$**	**$1,032,000**

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

PRIMARY VENDOR HISTORY SPECIFIC TO THIS PROJECT

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

PRIMARY VENDOR CONTACTS

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

Project #	**820-218**
Doc. Type	**FSR**

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

General Comment(s)

This Risk Management Plan describes the methods that the DOJ CURES 2.0 project team will use to manage risks throughout the life of the project. A risk is defined as any potential problem that may interfere with the successful completion of the project. Risks may potentially affect project schedule, cost, and/or quality.

Risk management includes the following major components:

- Risk analysis – identifying and prioritizing risks.
- Risk action planning and tracking – developing a plan of action for each identified risk, and tracking progress against the plan.
- Risk escalation – providing appropriate visibility of risks to management.

The processes and procedures to be used are defined in the SIMM Section 17, CA-PMM, and SIMM Section 45, CA Department of Technology IT Project Oversight Framework. Risks associated with the DOJ CURES 2.0 project will be identified, analyzed, and prioritized. Identified risks will be controlled through the processes of project planning and monitoring. Risk identification and management will be integrated components of project management and will be continually assessed and analyzed during the life of the project. Using industry-proven IT methodologies throughout the project life cycle will reduce the likelihood of adverse impacts to the project schedule and outcome.

3. Business Case

3.1. Business Area Identification

California Justice Information Services Division

The California Department of Justice (DOJ) is committed to providing accurate, timely, and comprehensive criminal history data and analysis to local law enforcement and regulatory/criminal justice agencies through the California Justice Information Services (CJIS) Division. CJIS maintains numerous unique databases that provide information to California's public safety community on identity and criminal histories. Since its inception, CJIS has strived to meet the growing and diverse data collection needs of California's public safety community. CJIS Systems, relied upon by law enforcement, criminal justice agencies, applicant and regulatory agencies, and probation departments, have been in place for more than 30 years. To fulfill its ongoing commitment to public safety, CJIS continues to make improvements in information technology and client services in light of recent changes with regard to the responsibilities of counties in monitoring offenders.

Controlled Substance Utilization Review and Evaluation System

At the direction of the California State Legislature, the DOJ established the Controlled Substance Utilization Review and Evaluation System (CURES) in 1997 to support efforts to prevent, investigate, and prosecute serious cases of abuse and misuse of controlled prescription drugs. This system was put into place to replace an antiquated, paper-based process created in 1939 (Triplicate Prescription Program (TPP)) to regulate the distribution of controlled substances and to work in conjunction with the Automated Triplicate Prescription System (ATPS), an outdated system used to capture information regarding prescriptions of Schedule II controlled substances[2]. CURES operated in parallel with the TPP and the ATPS to examine the comparative efficiencies between the two systems over a three-year period. After only ten months of evaluation, it was evident that the CURES program far out-performed the ATPS and the comparison of the two systems was suspended permanently in March 1999. In 2003, Senate Bill 151[3] decommissioned the ATPS, made CURES a permanent program, and added Schedule III controlled substances[4] to CURES. In 2006, Assembly Bill 2986[5] added the collection of Schedule IV controlled substances[6] prescription information to CURES.

Prescription Drug Monitoring Program

CURES was a significant improvement over ATPS, but the system did not provide licensed healthcare practitioners and pharmacies with access to uniform and timely information to

[2] A category of drugs, established by the Controlled Substances Act (CSA), considered to have a strong potential for abuse or addiction but that also have legitimate medical use. Included are opium, morphine, and cocaine.
[3] SB 151, Burton, Controlled substances: Schedule II.(2003-2004), Chaptered 09/17/2003
[4] A category of drugs, established by CSA, that have less potential for abuse or addiction than Schedule I or II drugs and have a useful medical purpose. Included are short-acting barbiturates and amphetamines.
[5] AB 2986, Mullin. Controlled substances: prescription requirements, Chaptered 09/14/2006
[6] A category of drugs, established by CSA, that are deemed medically useful and have less potential for abuse or addiction than those of Schedules I, II, and III. Included are diazepam and chloral hydrate.

proactively diminish and deter the diversion of controlled substances because a direct, web-based access was not yet developed and practitioners would have to wait days to weeks for a mailed CURES report. The DOJ initiated the Prescription Drug Monitoring Program (PDMP) in 2009 to address these issues. The PDMP, using the CURES database, allows licensed prescribers and dispensers to access PDMP patient data at the point of care through secure Internet access to the PDMP system. This allows medical practitioners to assess patient Schedule II through IV prescription history, to identify contra-indicated prescriptions, and to identify the possibility of drug-seeking behavior.

The PDMP serves two distinct worlds - the medical community (prescribers and dispensers) and the regulatory/criminal justice community. As such, the PDMP and supporting information systems must be able to quickly and efficiently serve the state's large medical practitioner community as well as meet the demanding analytical and information requirements of the regulatory/criminal justice community.

The DOJ uses the PDMP system to collect and store data on the prescription and dispensation of Schedule II through IV controlled substances. State law requires the DOJ to assist law enforcement and regulatory agencies in their efforts to control the diversion and resultant abuse of controlled substances. The California Health and Safety Code § 11165, et seq., specifically allows licensed prescribers and dispensers to access the system in order to prevent and intervene with patients under their care who may be abusing controlled substances. The statute also authorizes DOJ to support legitimate academic research projects with non-personally identifiable CURES/PDMP data. Medical practitioners dispensing these controlled substances are statutorily required to notify the California Department of Justice of each prescription.[7] The CURES program receives and reviews millions of prescription forms, provides information to doctors regarding patient Schedule II through IV prescription history, and responds to inquiries from regulatory boards and law enforcement.

The existing CURES and PDMP systems, and each system's inability to meet current and future demands, are the subjects of this feasibility study.

There has been no permanent funding to support the CURES/PDMP program since the passage of the California Budget Act of 2011. This Budget Act eliminated all General Fund support of CURES/PDMP, which included funding for system support, staff support, and related operating expenses. To perform the minimum critical functions and to avoid shutting down the program, the DOJ opted to assign five staff to perform temporary dual job assignments on a part-time basis. While this decision allows for nominal tasks to be performed, the program is faced with a constant backlog (e.g., a four-week backlog on processing new user applications, a six-week response time on emails, a twelve week backlog on voicemails, etc.). DOJ will continue to redirect existing staff and employ temporary staff to support the program during the CURES 2.0 system project effort.

Arwen Flint from the DOJ is the Project Sponsor.

[7] California Health and Safety Code § 11165(d)

Department of Consumer Affairs
The Department of Consumer Affairs (DCA) protects and serves California consumers while ensuring a competent and fair marketplace. DCA helps consumers learn how to protect themselves from unscrupulous and unqualified individuals and also protects professionals from unfair competition by unlicensed practitioners. To protect and serve consumers, DCA programs issue licenses in more than 250 professional and business categories, including doctors, dentists, contractors, cosmetologists and automotive repair facilities. DCA includes 39 regulatory entities (26 Boards, nine Bureaus, two Committees, one Commission, and one program). These entities establish minimum qualifications and levels of competency for licensure. They also license, register, or certify practitioners, investigate complaints and discipline violators. The committees, commission and boards are semiautonomous bodies whose members are appointed by the Governor and the Legislature. DCA provides them administrative support. DCA's operations are funded exclusively by license fees. For purposes of this document, when DCA is referred to, the reference includes the DCA and the Medical Board of California, the Dental Board of California, the California State Board of Pharmacy, the Veterinary Medical Board, the Board of Registered Nursing, the Physician Assistant Board of the Medical Board of California, the Osteopathic Medical Board of California, the Naturopathic Medicine Committee of the Osteopathic Medical Board, the State Board of Optometry, and the California Board of Podiatric Medicine as identified in subdivision (d) of Section 208 of the California Business and Professions Code. The DCA is in the process of implementing a new online enterprise licensing and enforcement solution. DOJ will develop the CURES 2.0 with the capability of receiving the registration information from DCA when they are capable of transmitting the information.

There is no change management or business process re-engineering necessary for CURES 2.0.

3.2. Business Problem and/or Opportunity

3.2.1. Opportunity: Compliance with Chapter 400, Statutes of 2013

Chapter 400 of the Statutes of 2013 (Senate Bill 809[8] [SB 809]) adds Sections 208, 209, and 2196.8 to the Business and Professions Code, and amends Sections 11164.1, 11165, and 11165.1 of, and adds Section 11165.5 to, the Health and Safety Code, relating to controlled substances. This statute: a) assists law enforcement and regulatory agencies in their efforts to control the diversion and resultant abuse of Schedule II, III, and IV controlled substances; b) provides for statistical analysis, education, and research through the use of a new, enhanced CURES/PDMP; and c) creates a funding source for replacing, maintaining, and operating the CURES/PDMP for the electronic monitoring of, and internet access to, information regarding the prescribing and dispensing of Schedule II, III, and IV controlled substances by all practitioners authorized to prescribe or dispense these controlled substances.

[8] SB 809, DeSaulnier, Controlled substances: reporting. Chaptered 09/27/2013.

DOJ will work, in collaboration with the DCA, to attain complete compliance with the Controlled Substances Reporting Act as approved by the Governor and filed with the Secretary of State.

DOJ will build a scalable system which meets the need for timely reporting, analysis, and registration.

3.2.2. Problem and Opportunity: Automation and improvement of the CURES/PDMP services

Automation and improvement of the current CURES/PDMP services must be undertaken to maximize investigative services to Law Enforcement Agencies (LEAs) and regulatory boards and access to prescribed controlled substance information to medical practitioners across the State.

Problem: The California Budget Act of 2011 resulted in the elimination of staff supporting CURES/PDMP. This necessitates the automation of CURES/PDMP functionality to maximize CJIS staffing abilities to operate and maintain the program and related information systems while continuing to provide the regulatory/criminal justice community with timely, critical information regarding Schedule II, III, and IV controlled substance prescriptions. Because of the largely manual effort in responding to information requests, the PDMP and supporting information systems are no longer able to quickly and efficiently serve the state's large medical practitioner community as well as meet the demanding analytical and information requirements of the regulatory/criminal justice community. Additionally, the current hardware used by PDMP is reaching end-of-life and must be replaced.

Opportunity: The table below identifies current CURES/PDMP issues that will be addressed by the proposed CURES 2.0 solution.

Table 1 Issues and Response

Issue	CURES 2.0 Response
Statewide, prescription drug investigations are often fragmented amongst regulatory, law enforcement, and licensing agencies with each agency often unaware of the others' involvement creating a weakened response to the	The proposed solution will provide statewide cross-jurisdictional information to assist in coordinating investigations and to medical practitioners to assist in preventing "doctor-shopping"[9].

[9]Doctor shopping or double doctoring refers to the practice of a patient requesting care from multiple physicians, often simultaneously, without making efforts to coordinate care or informing the physicians of the multiple caregivers. This usually stems from a patient's addiction to, or reliance on, certain prescription drugs or other medical treatment. Usually a patient will be treated by their regular physician and be prescribed a drug that is necessary for the legitimate treatment of their current medical condition. Some patients will then actively seek out other physicians to obtain more of the same medication, often by faking or exaggerating the extent of their true condition, in order to feed their addiction to that drug.

Issue	CURES 2.0 Response
prescription drug abuse problems.	
The current registration process for the program is time intensive and highly manual.	The proposed solution will automate and expedite the registration process for the medical practitioners and regulatory/criminal justice communities.
The PDMP system is reactive in nature and has limited reporting and analytical capabilities.	The proposed solution will provide current, online reports regarding patient, prescriber, and dispenser activity to users with the appropriate authority to view the reports.
	The proposed solution will provide local, state, and federal law enforcement investigators with sufficient dynamic inquiry abilities to analytically discern diversion violations[10] to investigate.
The current PDMP system is underutilized. Today, 8,912 prescribers and dispensers are registered users of the web-based CURES/PDMP system. This represents 3.6% of the possible 245,186 licensed California prescribers and dispensers.	The proposed solution will, through the automation and expediting of the registration process for the medical practitioners, allow for an increased number of participating prescribers and dispensers.
The current system is not designed for flexibility, reliability, performance, or scalability.	The proposed solution will be designed with requirements to ensure flexibility, reliability, performance, and scalability.
The current system is supported by two distinct databases, CURES and PDMP. Discrepancies between these two data sources result in unreliable information, requiring manual intervention to reconcile.	The proposed solution will eliminate the discrepancies.
The system is slow and frequently freezes because the system was built in the 1990s and the system architecture and infrastructure is outdated and has reached end-of-life.	The proposed solution will update and modernize the system architecture and infrastructure that supports the application.
The current system is incompatible with the Prescription Monitoring Program Information Exchange[11] (PMIX) hub.	The proposed solution will be designed to be compatible with PMIX in order to enable DCA and DOJ to participate in a national infrastructure for the secure, reliable, and sustainable interstate exchange of state PDMP data.

[10]In the terminology of the United States Drug Enforcement Administration, diversion is the use of prescription drugs for recreational purposes. The term comes from the "diverting" of the drugs from their original purposes.

[11]The Prescription Monitoring Information Exchange (PMIX) Architecture is a nationwide framework that will enable standards-based data sharing across PMIX-compliant exchange points. This architecture is being developed to support a nationwide interoperability framework with which Prescription Drug Monitoring Program (PDMP) systems and data exchange hubs must comply.

3.2.3. Opportunity: Alignment with the California Information Technology Strategic Plan Strategic Goals

The CURES 2.0 proposed solution provides the DOJ the opportunity to further align itself with the California Information Technology Strategic Plan and Goals:

Table 2 California Strategic Plan[12] / CURES 2.0 Opportunities

Goal	Strategy	CURES 2.0 Opportunity
1. Accessible and Mobile Government: California's government is providing more services and information to citizens by expanding online services, increasing access from mobile devices, and bridging the digital divide by increasing digital literacy and access to broadband. The result is a state government that is better able to meet Californians' service expectations and which provides Californians with access at their convenience, on their schedule, and wherever they are.	1.1 Increase online service and information offerings and make them more accessible through mobile devices.	The proposed solution will provide increased data collection capabilities and increased analytical tools for investigative purposes.
	1.2 Enhance transparency, accessibility, and openness through online solutions.	The proposed solution will provide online access to authorized users.
	1.3 Enhance the value of state information through tools to increase the ease of collaboration and data analysis.	The proposed solution will provide increased data collection capabilities and increased analytical tools for investigative purposes.
2. Information is an Asset: To engender trust from consumers of government services and information, the state must secure and safeguard sensitive and confidential data through strong privacy and data security practices. Additionally, government will leverage data resources and analytical capacities so we can convert data into information and knowledge that departments can use to make more informed policy decisions, administer programs, reduce costs, improve outcomes and better serve	2.1 Protect sensitive and confidential data through implementation of strong security and privacy standards and practices.	The proposed solution will comply with and implement stringent security and privacy standards and practices.
	2.2 Improve how California uses data and information, including through the use of data warehouses, analytical tools, and better use of geo-spatial information systems	The proposed solution will provide increased data collection capabilities and increased analytical tools for investigative purposes.

[12] California Information Technology Strategic Plan www.itsp.ca.gov/pdf/2012/strategic-plan-V3b.pdf

Goal	Strategy	CURES 2.0 Opportunity
constituents. Further, by creating secure transactions, we will ensure that Californians can leverage technology with confidence to get the services and information they need.	data.	

3.2.4. Business Problem/Opportunity Summary

The following table provides a summary view of the business problems and opportunities defined in this section:

Table 3 Business Problems and Opportunities Summary

Business Problem or Opportunity
3.2.1. **Opportunity:** Compliance with Chapter 400, Statutes of 2013
3.2.2. **Problem and Opportunity**: Automation and improvement of the CURES/PDMP services
3.2.3. **Opportunity:** Alignment with the California Information Technology Strategic Plan Strategic Goals

3.3. Business Objectives / Benefits

The business objectives and their resulting functional requirements form the basis for assessing whether specific solution alternatives are a viable means of meeting the needs of the project. Alternatives not meeting these objectives and requirements will be rejected. The following table identifies specific objectives identified to address the business problems and opportunities from Section 3.2:

Table 4 Business Objectives

Business Problem or Opportunity	Business Objective	Measurement
3.2.1. Opportunity Compliance with Chapter 400, Statutes of 2013	3.2.1.a Provide licensees, as specified by subdivision (b) of Section 208 of the California Business and Professions Code, a streamlined application and approval process, through DOJ and in conjunction with DCA, to access CURES 2.0 information stored on the Internet.	Increase the online access to the user application process, through DCA licensure applications and renewals, from 0% to 100% for those customers with internet access upon implementation.

Business Problem or Opportunity	Business Objective	Measurement
	3.2.1.b Provide access to, and consultation on, information by authorized users[13] prior to prescribing or dispensing Schedule II, Schedule III, or Schedule IV controlled substances.	Increase the online access to online functions for authorized users from 0% to 95% for those customers with internet access upon implementation.
3.2.2. Problem and Opportunity: Automation and improvement of the CURES / PDMP services	3.2.2.a Provide a user-friendly, all-electronic user registration process that accepts, processes, stores and provides easy retrieval of all application forms and documentary attachments.	Increase the online access to the user registration process from 0% to 100% for those customers with internet access upon implementation.
	3.2.2.b Provide a data collection system that accepts data real-time directly from pharmacies and direct dispensers.	Increase real-time data entry from 0% to 95% for participating pharmacies and direct dispensers.
	3.2.2.c Provide interoperability and interface with the major health care systems and pharmacy systems to enable widespread use of the system by these entities for prescription abuse prevention and intervention, as well as potential future users to accommodate future needs (scalability).	Increase the online access to online functions for authorized users from 0% to 95% for those customers with internet access upon implementation.
		Increase usage of system by authorized users from 4% to 75%.
	3.2.2.d Provide robust tools for investigative purposes.	Increase query capabilities by 80%.
		Decrease time needed to produce large reports by 90%.
		Increase LEA alerting capabilities by 98%.
		Increase data analytic capabilities by 98%.

[13] Authorized users are defined as those who have applied for, and been approved for, access to the CURES 2.0 information. Levels of authority will be identified and defined during the design of the CURES 2.0 solution after control agency approval of the FSR.

Business Problem or Opportunity	Business Objective	Measurement
		Increase geo-spatial analytics[14] from 0% to 100%.
3.2.3 Opportunity: Alignment with the California Information Technology Strategic Plan Strategic Goals	3.2.3.a Provide online service and information access via internet capable devices.	Increase the online access to the user application process, through DCA licensure applications and renewals, from 0% to 100% for those customers with internet access upon implementation.
		Increase the online access to online functions for authorized users from 0% to 95% for those customers with internet access upon implementation.
	3.2.3.b Provide enhanced transparency, accessibility, and openness through online solutions.	Increase online functionality and information for investigative purposes by 85%.
	3.2.3.c Provide increased data collection capabilities and increased analytical tools for investigative purposes.	Increase real-time data entry from 0% to 75% for participating pharmacies and direct dispensers.
		Increase query capabilities by 80%.
		Decrease time needed to produce large reports by 90%.
		Increase LEA alerting capabilities by 95%.
		Increase data analytic capabilities by 95%.
		Increase geo-spatial analytics from 0% to 100%.
	3.2.3.d Provide strong security and privacy standards and practices.	100% compliance with privacy and security laws.

[14] A method of analyzing data and tying it to geographic coordinates.

3.4. Business Functional Requirements

The following table demonstrates the relationship between each business functional requirements and the business objective(s) met by each functional requirement.

Table 5 Requirement Correlation Matrix

Functional Requirement (FR)	Business Objective met by FR
The system shall provide an on-line, all electronic application process for web-based users.	3.2.1.a
The system shall verify an applicant's e-mail address prior to any processing of the application.	3.2.1.a 3.2.2.a 3.2.3.a
The system shall provide systematic validation of state licenses, through the DCA, during the application review process.	3.2.1.a
The system shall provide for accepting application supporting document attachments, or electronic supporting data from the DCA, to the electronic application submission.	3.2.1.a
The system shall provide storage of application forms and supporting documentation or data in an easily searchable and retrievable manner. Storage of documents shall be HIPAA compliant.	3.2.1.a
The system shall provide a "forgot password" self-service affording an easy and user-friendly password reset.	3.2.1.a 3.2.2.a 3.2.3.a
The system shall provide full messaging capability across interoperable health care and pharmaceutical entities, utilizing those entities' organizational directories.	3.2.1.b
The system shall provide an application based messaging capability that registrants may utilize when signed onto the system. The system shall not allow transmission of any messaging to any non-organizational account.	3.2.1.b
The system shall provide inquiry capability based on user roles.	3.2.1.b 3.2.2.d 3.2.3.a
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with dynamic, parameter-based inquiry capabilities.	3.2.1.b
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with ad hoc inquiry capabilities.	3.2.1.b

Functional Requirement (FR)	Business Objective met by FR
The system shall provide each individual user a dashboard presenting queued inquiry results, a separate queue of unsolicited reports, a Watch Notice queue, DOJ information and notices queue, and a message queue.	3.2.1.b
The system shall provide timely Patient Activity Reports (PAR) to prescribers and dispensers.	3.2.1.b 3.2.2.d 3.2.3.a 3.2.3.c
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with reports and crime analytics (geo-spatial, social networking, and investigatory analyses).	3.2.1.b
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with geo-spatial analytics and functionality.	3.2.1.b 3.2.2.d
The system shall provide authorized prescribers and dispensers with reports on patient medication acquisition history.	3.2.1.b 3.2.2.d 3.2.3.a 3.2.3.c
The system shall produce a watch feature whereby a doctor can place a watch on a patient.	3.2.1.b 3.2.2.d 3.2.3.a 3.2.3.c
The system shall provide authorized users with geo-spatial reports, by date parameters, of the physical dispersion of prescriber type, specialty type, dispensers, prescription fillings by schedule(s), and patient distance to prescriber.	3.2.1.b
The system shall provide DOJ, DCA, the regulatory / criminal justice community, and prosecutorial users with robust (up to 500,000 patient or prescriber or dispenser records each) reports on patients, prescribers and dispensers based on time and geographic parameters.	3.2.1.b 3.2.2.d 3.2.3.a 3.2.3.c
The system shall provide a web-based, single-sign on program for registered users.	3.2.1.b 3.2.2.a
The system shall provide an on-line, all electronic application/registration process, in conjunction with DCA to register users.	3.2.1.b
The system shall provide an on-line, all electronic registration process to register users.	3.2.2.a
The system shall provide systematic validation of state licenses during the registration application review process.	3.2.2.a
The system shall provide for accepting application supporting document attachments to the electronic registration submission.	3.2.2.a 3.2.3.a

Functional Requirement (FR)	Business Objective met by FR
The system shall provide storage of registration application forms and supporting documentation in an easily searchable and retrievable manner. Document storage shall be HIPAA compliant.	3.2.2.a
The system shall provide real-time data-entry capabilities to authorized users based on user roles.	3.2.2.b
The system shall provide a web-service for Pharmacy Management Systems to connect through.	3.2.2.b
The system shall interface with major healthcare prescribing and dispensing delivery systems and provide trusted, secure interoperable delivery of services.	3.2.2.c
The system shall provide full messaging capability across interoperable health care and pharmaceutical entities, utilizing those entities organizational directories.	3.2.2.c 3.2.3.a
The system shall provide an application based messaging capability that registrants may utilize when signed onto the system. The system shall not allow transmission of any message to any non-organizational account.	3.2.2.c 3.2.3.a
The system shall provide law enforcement agencies, regulatory boards, DCA and DOJ with dynamic, parameter-based inquiry ability.	3.2.2.d
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with ad hoc inquiry ability.	3.2.2.d 3.2.3.a
The system shall provide each individual user dashboard presenting queued inquiry results, a separate queue of unsolicited reports, a Watch Notice queue, a DOJ-information and notices queue, and message queue.	3.2.2.d 3.2.3.a
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with reports and analytics (geo-spatial, social networking, and investigatory analyses).	3.2.2.d 3.2.3.a 3.2.3.c
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with geo-spatial reports, by date parameters, of the physical dispersion of prescriber type, specialty type, dispensers, prescription fillings by schedule(s), and patient distance to prescriber.	3.2.2.d 3.2.3.a
The system shall provide for the automated validation of state licenses during the registration process using web-services.	3.2.3.a
The system shall provide storage of registration application information and supporting documentation in an easily searchable and retrievable manner.	3.2.3.a

Functional Requirement (FR)	Business Objective met by FR
The system shall provide a web services interface with major healthcare prescribing and dispensing delivery systems for real-time access of information.	3.2.3.a
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with dynamic, parameter-based inquiry ability.	3.2.3.a
The system shall provide DOJ, DCA, and the regulatory / criminal justice community with geo-spatial and socialization analytics and functionality.	3.2.3.a 3.2.3.c
The system shall provide DCA and DOJ with ad hoc inquiry ability.	3.2.3.a
The system shall provide each individual user a dashboard presenting queued inquiry results, a separate queue of unsolicited reports, a Watch Notice queue, a DOJ-information and notices queue, and message queue.	3.2.3.b
The system shall provide DCA and DOJ with geo-spatial reports, by date parameters, of the physical dispersion of prescriber type, specialty type, dispensers, prescription fillings by schedule(s), patient distance to prescriber.	3.2.3.c

4. Baseline Analysis

4.1. Current Method

Given budgetary reductions and limitations in the use of grant funds, the current program and system are not sustainable.

- The current CURES/PDMP business model is headquarters-centric and demands heavy personnel resource commitments for information processing/dissemination. Such commitments are no longer attainable, reasonable, or desirable.
- Telephone calls and e-mail response times are delayed by as much as six weeks.
- Support of the PDMP system is resource intensive, requiring the equivalent of seven information technology staff to stabilize the system.

Schedule II, III, and IV Prescription Reporting

The current process of Schedule II, III, and IV prescription information capture is a mix of manual and electronic processes with time delays at every step:

1. A patient visits a prescriber who, if needed, writes a prescription for (or directly dispenses) a Schedule II, III, or IV controlled substance on a tamper-resistant form approved by the DOJ and gives it to the patient or electronically submits it to the pharmacy.
2. The pharmacist receives the controlled substance prescription.
3. The pharmacist fills the controlled substance prescription.

4. The pharmacist retains the original copy of the controlled substance prescription and submits the controlled substance prescription data into a CURES screen on a desktop computer in the pharmacy.
5. The data is electronically sent to Atlantic Associates, Incorporated (AAI) the approved vendor that collects and collates the controlled substance prescription information on a weekly basis.
6. A DOJ programmer performs a File Transfer Protocol (FTP) link with the AAI server at the vendor site, extracts the controlled substance prescription data for the current month, and uploads it to a DOJ internal database.
7. DOJ utilizes a Cognos reporting software (ReportNet) to provide a web-based presentation framework wherein users such as DOJ and medical board users can use a standard web browser in conjunction with the Cognos PowerPlay software in order to interact with the data cubes which are elements designed to help facilitate data analysis by combining data from different sources into a predefined multidimensional data model. The data cube, once complete, becomes the source of data for queries and reports.

In addition, DOJ has developed applications to permit reporting, ad-hoc queries, and other data-mining activities using the controlled substance prescription data.

As described, the data is not real-time and does not allow prescribers or pharmacists to access needed information to prevent doctor-shopping or drug diversion tactics.

Patient Activity Reports (PARs)

The DOJ initiated the PDMP in 2009 to provide licensed healthcare practitioners and pharmacies with access to uniform and timely information, in the form of Patient Activity Reports (PARs), to proactively diminish and deter the diversion of controlled substances. The PDMP allows licensed prescribers and dispensers to access PDMP patient data at the point of care through secure Internet access to the PDMP system. This allows medical practitioners to assess patient prescription history, to identify contra-indicated prescriptions, and to identify the possibility of drug-seeking behavior.

Direct Dispense

Prescribers and veterinarians may directly provide Schedule II, III, IV controlled substances to patients. In each case, when such medications are dispensed, the practitioner is required to manually complete a log entry and forward the log to the DOJ each week. Practitioners must provide their logs to the DOJ weekly and have the option of either mailing paper logs to the DOJ or providing the data to the DOJ in electronic format following specifically prescribed parameters. The manual process for paper logs consists of the CURES staff reviewing the document and entering the data into a template. The data is then uploaded by DOJ technical staff data into the CURES database. Data submitted in electronic format is added to the CURES database by the DOJ technical staff.

4.1.1. Current System's Ability to Meet Workload

The current CURES/PDMP is unable to meet the current workload demands in a timely manner and is not sustainable in its current form.

As stated in Section 3, there has been no permanent funding to support the CURES/PDMP program since the passage of the California Budget Act of 2011. This Budget Act eliminated all General Fund support of CURES/PDMP, which included funding for system support, staff support, and related operating expenses. To perform the minimum critical functions and to avoid shutting down the program, the DOJ opted to assign five staff to perform temporary dual job assignments on a part-time basis. While this decision allows for nominal tasks to be performed, the program is faced with a constant backlog (e.g., a four-week backlog on processing new user applications, a six-week response time on emails, a twelve week backlog on voicemails, etc.). In addition, since January 23, 2012, four unpaid Regional Occupational Program students have been assigned to assist with the workload. Their assignments ended at the conclusion of the school year effective May 31, 2012.

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

Users of the CURES/PDMP are not satisfied with the current level of service found in the CURES/PDMP. Most information is not real-time and there is an extreme backlog of information requests which invalidates the usefulness of the information. Additionally, because the information is not real-time or interactive, the purpose of the PDMP is undermined.

4.1.3. Data Input and Output

Prescription data is retrieved from AAI on a daily basis through an electronic file transfer. This data is then uploaded into the CURES database. It is not real-time and does not facilitate the prevention of doctor-shopping or drug diversion maneuvers. Patient activity reports, for use by prescribers and dispensers, are requested, produced, and received through an entirely manual process. Medical prescribers that are allowed to directly dispense controlled substances report the information to the DOJ in either a paper-based, manual process or in electronic formats on a weekly basis. Again, this negates any benefits of real-time processing.

4.2. Technical Environment

Expected Operational Life
The current CURES/PDMP System is beyond its useful lifecycle.

Interaction of a proposed solution with other systems – internal and external
The information captured by CURES/PDMP must be shared with medical prescribers, dispensers, and the regulatory / criminal justice community. The current system is not capable of allowing real-time web-access to the necessary data.

4.2.1. Existing Infrastructure

The DOJ's existing application infrastructure consists of Production, Quality Assurance/Staging (QA), and Development environments housed at the HDC in Sacramento:

Production Environment The Production environment consists of multiple servers fulfilling the various roles (application server, query server, central administration server and web server) and a set of database servers operating in a single database cluster. The production environment is comprised primarily of physical servers. A virtual server was created as a backup to ensure the availability of the environment in case of a hardware failure.

QA Environment The QA/Staging environment is a close representation of the production environment and consists of multiple servers fulfilling the various roles and a set of database servers operating in a single database cluster. The QA environment is primarily a virtual server environment.

Development Environment The Development environment consists of a single application server and a single database server. The application server fulfills all the various roles: application server, query server, central administration server and web server. The Development environment is primarily a virtual server environment.

The existing infrastructure for HDC applications consists of Oracle's Relational Database Management System (RDBMS) 11g and Java/J2EE on a JBoss Application Server under a Linux operating system. The California Justice Information Systems (CJIS) applications operate as described below:

- General Design: Oracle RDBMS 11g and Java/J2EE on a JBoss Application Server under Linux operating system.
- Principal Location: HDC.
- Principal Application System Software: Procedural Language/Structured Query Language (PL/SQL), Java/J2EE on a JBoss Application Server, and Oracle RDBMS 11g.

5. Proposed Solution

The DOJ has conducted a feasibility study in cooperation with the CURES business staff and the DOJ IT staff. The feasibility study assessed the full implications of a proposed IT project as it relates to the business problems and opportunities identified during the feasibility study and defined in Section 3 of this report. The feasibility study has concluded that the implementation of the IT solution will fulfill the business objectives and functional requirements defined by this report to satisfy the business problems and opportunities.

The recommendation of the feasibility study is a system replacement utilizing, when appropriate, current functionality. The system replacement will be designed and developed to meet the functional

and business requirements set forth in this FSR and further developed, after FSR approval, with the DCA and its represented regulatory boards[15]. This recommendation best meets the needs of the users, DOJ, DCA, and the regulatory / criminal justice community. This recommendation is based on a comprehensive analysis of the current process, the proposed solution, and the alternatives as discussed in Section 5.3. The proposed solution is also recommended in terms of feasibility based on cost effectiveness, agility, and the ability to meet the needs of the DOJ, DCA, the regulatory / criminal justice community, and the medical community.

5.1. Solution Description

The DOJ established a working group consisting of doctors, pharmacists, insurers, drug manufacturers, and other groups interested in preserving the CURES program. During 2012, and into 2013, numerous working group meetings took place. At these meetings, CURES program representatives presented the various options for supporting a prescription drug monitoring system within California. Through these meetings, the majority of working group members informed DOJ that they were generally supportive of DOJ's proposal to replace the existing prescription drug monitoring system identified in the CURES 2.0 document.

Through the system replacement process, existing features would be utilized, when appropriate, to provide analytical capabilities for medical professionals and the regulatory / criminal justice community to aid in prevention and diversion efforts.

Under this alternative, the CURES 2.0 program would focus on outreach, training, and serving as an analytical resource. This alternative would include an integrated process for program and system enrollment. The CURES 2.0 system would interface and share data with authorized electronic health record (EHR) systems and pharmacy management systems on a real-time basis. These integrations and data services would be built and tested by DOJ, and their use would be subject to DOJ approval. Prescribers and dispensers without access to an EHR system or Pharmacy Management System would be able to access a modernized CURES 2.0 web application with enhanced usability and advanced analytic and reporting capabilities.

[15] Medical Board of California, Dental Board of California, California State Board of Pharmacy, Veterinary Medical Board, Board of Registered Nursing, Physician Assistant Board of the Medical Board of California, Osteopathic Medical Board of California, Naturopathic Medicine Committee of the Osteopathic Medical Board, State Board of Optometry, and the California Board of Podiatric Medicine.

Advantages of the proposed solution

- Highly secure, responsive, scalable, and reliable system.
- Enhanced access to CURES 2.0 data.
- Improved user experience.
- Ability to provide geo-spatial and data analytics.
- Ability to electronically distribute unsolicited PARS.
- Lower total cost of ownership (TCO) than the other alternatives studied.
- Streamlines the program registration process.
- Integration with health information systems.
- Align data model with national standards.
- Enables sharing of CURES 2.0 data across state boundaries.
- Enables collaboration among CURES 2.0 users.
- Enables secure e-prescription for controlled substances.
- Ability to meet advanced security requirements.

Disadvantages of the proposed solution

- One-time costs are higher.

5.1.1. Hardware

The DOJ Hawkins Data Center (HDC) will provide the environments to develop, test, operate and maintain CURES 2.0. DOJ's IT staff will have access to the hosted environments to support the application. The HDC will provide hardware, software, disaster recovery support, and backup services. The following table lists the HDC hardware services/support required for each CURES 2.0 environment.

Table 6 Hardware

Tier	Service/Support Description	Quantity	Tier Total Cost	
CURES 2.0 Production/Performance Environment			**One-Time**	**Ongoing**
Presentation	Operating Base System	2	$160,498.50	$12,000.00
	Dedicated Web Support	2		
	Server Load Balancing	2		
Application	Operating Base System	2	$160,498.50	$12,000.00
	Dedicated Web Support	2		
	Server Load Balancing	2		
Data	Operating Base System	1	$184,000.00	$42,000.00
	Processor core (2 quad-core)	8		
	Memory (Gigabytes)	16		
	Database support	1		
	SAN Storage (Terabytes)	3		

Tier	Service/Support Description	Quantity	Tier Total Cost	
CURES 2.0 Development / QA Environments			**One-Time**	**Ongoing**
Presentation	Operating Base System	1	$34,000.00	$2,500.00
	Dedicated Web Support	1		
Application	Operating Base System	1	$34,000.00	$2,500.00
	Dedicated Web Support	1		
Data	Operating Base System	1	$116,000.00	$29,000.00
	Processor core (2 quad-core)	4		
	Memory (Gigabytes)	4		
	Database support	1		
	SAN Storage (Terabytes)	3		

5.1.2. Software

CURES 2.0 will be developed using an open source programming language, such as Java, and Oracle as the database. DOJ's IT staff are familiar with both and will be able to provide on-going maintenance without the need for language or database training. The following table lists the software required by CURES 2.0:

Table 7 Software

Software	Purpose	One-Time	Ongoing
Application Software	Analytics and data integration	$500,000	$66,000.00
Java SDK	Java Software Developer Kit - used for developing applications	$0.00	$0.00
	Web Server	$0.00	$0.00
	JBoss Application Server J2EE Compliant	$32,000.00	$32,000.00
Oracle	Database	$10,102.00	$2,000.00

5.1.3. Technical Platform

CURES 2.0 will be a modernized system using N-tier architecture. N-tier is a multi-level architecture where the user interface (presentation), the business logic (application processing), and the data management are separate tiers. With N-tier architecture, each tier can be developed and maintained independently. Technicians can upgrade or replace each tier as requirements or technology standards change. N-tier also supports enhanced data security with firewalls between each tier.

DOJ utilizes REpresentational State Transfer (REST) Application Programming Interfaces (APIs) for predefined interfaces.

5.1.4. Development Approach

The DOJ has defined a two-step approach to the CURES 2.0 solution. The first step is to ensure data integrity within the current system. Data entry validation and clean up of existing data will be completed in this step. This will ensure that the current system can be used during the modernization effort while minimizing risk and public safety concerns. DOJ would then be able to focus the majority of technical resources on the design, development, and implementation of the CURES 2.0 system.

The CURES 2.0 replacement effort is planned to take approximately 18 months to complete once system design efforts begin. Additional time may be required if changes are made to the scope of the project or additional required functionality is identified for the system following the design and development phase of the project.

In the project life cycle shown below, when DCA is referred to, the reference includes selected SMEs from the DCA and the Medical Board of California, the Dental Board of California, the California State Board of Pharmacy, the Veterinary Medical Board, the Board of Registered Nursing, the Physician Assistant Board of the Medical Board of California, the Osteopathic Medical Board of California, the Naturopathic Medicine Committee of the Osteopathic Medical Board, the State Board of Optometry, and the California Board of Podiatric Medicine as identified in subdivision (d) of Section 208 of the California Business and Professions Code.

The CURES 2.0 solution will be accomplished using both DOJ technical and business staff along with additional technical vendor staff. The project team will use a standard systems development life cycle approach:

- Planning – to be done in conjunction with DCA.
- Requirements Analysis– to be done in conjunction with DCA.
- Design – to be done in conjunction with DCA.
- Development – to be done by DOJ.
- Testing – to be done in conjunction with DCA. This phase will include System Acceptance.
- Implementation – to be done by DOJ. This phase will include the retirement of the existing system.
- Maintenance – to be done by DOJ.

Long-term support and maintenance will be provided by DOJ IT staff. Because of this, stringent documentation standards will be applied and the contracted technical staff must provide knowledge transfer of any products developed to DOJ staff.

5.1.5. Integration Issues

The CURES 2.0 solution is not required to directly integrate with any existing DOJ applications. Integration requires the real-time sharing and updating of data from a single database. CURES 2.0 will not directly share or update any other application's database. The solution will utilize a standards-based Web Service to collect and provide access to data.

5.1.6. Procurement Approach

DOJ will issue a Request for Offer using the Leveraged Procurement Agreement vehicle of the Master Services Agreement (MSA). DOJ procurement staff have experience in this process and the technical expertise needed to successfully complete this project is well covered by the MSA IT categories.

a. Proposed Prime Vendor Procurement Vehicle(s): MSA / RFO.
b. Proposed Prime Vendor Contract Type: Deliverable based.
d. Government Code section 19130: This solution is subject to the mandates of SB 809 Controlled Substances Reporting Act and AB 110 Budget Act of 2013. As such, the DOJ will not be able to meet the mandates within the necessary timeframe without seeking outside technical expertise.
e. Contract Term: DOJ anticipates the term of the contract will be 16 months from contract award to completion.
f. Hardware will be purchased utilizing leveraged purchasing agreements supported by DGS.

Table 8 Contract Information

Type	Contract Awarded (Y/N)	Planned Award Date	Start date of Contract	End date of Contract	Total Value of Contract	Competitively Awarded (Y/N)	Alternative Financing Option(s)
Primary Solution Vendor	No	5/15/14	6/30/14	06/30/15	$1,032,000	Yes	
Hardware - ELA	Yes	-	Ongoing	-		Yes	No
Application Software	No	5/30/14	6/30/14	6/30/15	$500,000	Yes	No
Middleware and Database Software-ELA	Yes	-	Ongoing	-		Yes	No

5.1.7. Technical Interfaces

The CURES 2.0 solution will interface and receive data from DCA for purposes of registering for CURES data access during licensure application or renewal. This will be accomplished once DCA and DOJ have determined that it is technically feasible between CURES 2.0 and DCA's BreEZe licensing and enforcement database.

The modernized CURES 2.0 solution will allow authorized EHR systems, pharmacy management systems, and prescribers and dispensers without access to an EHR system or

Pharmacy Management System to access the CURES 2.0 web application with enhance usability and advanced analytic and reporting capabilities.

5.1.8. Accessibility

The CURES 2.0 solution will meet the Americans with Disabilities Act (ADA) accessibility requirements as set forth in Section 508 (29 U.S.C. 794d),[16] which was enacted to eliminate barriers in IT, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals.

5.1.9. Testing Plan

DOJ, DCA (DCA and the Medical Board of California, the Dental Board of California, the California State Board of Pharmacy, the Veterinary Medical Board, the Board of Registered Nursing, the Physician Assistant Board of the Medical Board of California, the Osteopathic Medical Board of California, the Naturopathic Medicine Committee of the Osteopathic Medical Board, the State Board of Optometry, and the California Board of Podiatric Medicine as identified in subdivision (d) of Section 208 of the California Business and Professions Code), and the vendor will jointly develop a testing strategy to ensure accuracy, completeness, and usability of the application. Testing of CURES 2.0 features and functions during the development and implementation phases will occur using this established testing strategy. The user acceptance tests will occur before implementation in the quality assurance environment. The DOJ and DCA (DCA and the Medical Board of California, the Dental Board of California, the California State Board of Pharmacy, the Veterinary Medical Board, the Board of Registered Nursing, the Physician Assistant Board of the Medical Board of California, the Osteopathic Medical Board of California, the Naturopathic Medicine Committee of the Osteopathic Medical Board, the State Board of Optometry, and the California Board of Podiatric Medicine as identified in subdivision (d) of Section 208 of the California Business and Professions Code) subject matter expert team will schedule, perform, and approve all acceptance tests.

5.1.10. Resource Requirements

During the planning, development, and implementation of CURES 2.0, DOJ resources will be required to support the current PDMP system until CURES 2.0 is implemented.

DOJ anticipates that the project will require 16.8 one-time PYs at a total cost of $1,977,187 over an 18-month period. This total cost is the sum of staff and other costs. The following tables list the one-time staff PYs by resource type for each Fiscal Year (FY):

[16] Rehabilitation Act, amended 1998, Section 508

Table 9 CURES 2.0 One-Time Resource Requirements

One-Time Project Resource Requirements – IT						
Classification		**FY 13/14**	**FY 14/15**	**FY 15/16**	**FY 16/17**	**Total**
DOJ Data Processing Manager II	Project Manager	.5	1.0	0.0	0.0	1.5
DOJ Associate Programmer Analyst (4)	Developers	3.0	6.0	0.0	0.0	9.0
DCA Varying Classifications	Subject Matter Experts	1.3	5.0	0.0	0.0	6.3
Total One-Time Resources		**4.8**	**12.0**	**0.0**	**0.0**	**16.8**

The project will require 5.0 dedicated, continuing IT PYs during the first year of implementation at a cost of $643,365 (sum of Staff and Other costs) and 5.0 on-going dedicated IT PYs the second year at a cost of $643,365 for a total resource cost of $1,286,730 for the first two years of ongoing IT support of the CURES 2.0 application. The following table shows the IT staff required:

Table 10 Continuing Project Resource Requirements – DOJ Resources

Continuing Project Resource Requirements – IT						
Classification	**Role**	**FY 13/14**	**FY 14/15**	**FY 15/16**	**FY 16/17**	**Total**
Data Processing Manager II	Management	0.0	0.0	1.0	1.0	2.0
Associate Programmer Analyst (4)	System Support	0.0	0.0	4.0	4.0	8.0
Total Continuing Resources		**0.0**	**0.0**	**5.0**	**5.0**	**10.0**

The Data Processing Manager II (DPM II) will supervise, direct, and monitor the activities of the staff. The DPM II is responsible for planning, coordinating and managing activities associated with CURES 2.0 to ensure the most effective use of assigned staff.

The Associate Programmer Analysts (APAs) will, under general supervision of the CURES 2.0 DPM II, work independently or participate with other team members performing duties such as troubleshoot, support existing applications and processes, work with end-users to define requirements, design, code, build and test application fixes and enhancements, and update and maintain system documentation in the support and maintenance of the CURES 2.0 application.

A total of $1,032,000 in contract services is required to implement and support CURES 2.0 (for developing, testing, implementing the application, and post-implementation support).

Total costs for the CURES 2.0 project are estimated at $4.240 million over eighteen months. Total ongoing information technology (IT) and program costs are estimated at $1.620 million annually.

5.1.11. Training Plan

The DOJ IT staff responsible for ongoing maintenance and support of the CURES 2.0 application will receive on-going mentoring and training from the technical consultants contracted to develop and implement the CURES 2.0 solution during the first year following implementation. In addition to the technical training, the project team will develop an ongoing training program that includes a curriculum and manual. The project team will work with the business staff to identify and train key personnel, who will then train internal users on CURES 2.0 functionality.

The front-end of the CURES 2.0 application will include a "guide" that will provide the external end-users with step-by-step decision assistance, which should facilitate the use of the application without the need for in-depth training sessions. All necessary documentation for the external end-users will be available online through links provided by the application.

5.1.12. On-going Maintenance

DOJ IT staff will be responsible for ongoing operations and maintenance of CURES 2.0.

5.1.13. Information Security

This section addresses questions put forth in the Questionnaire for Information and Privacy Components in Feasibility Study Reports and Project Related Documents (SIMM 20-D). The CURES 2.0 project will comply with the security standards set forth by the DOJ IT Security Division. Additionally, CURES 2.0 will be subject to, and comply with, information security policies and standards required by the California Office of Information Security. The DOJ Chief Information Security Officer will participate in all phases of the CURES 2.0 project to ensure compliance with security policies and the necessary protection of data.

The designated owner of the data is the DOJ. The custodian of the data is DOJ HDC with HDC policies for data security and protection. Secure access of data is addressed in Section 5.1.20.

The current PDMP/CURES online access is compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The CURES 2.0 solution will retain the same level of compliance with the users of the solution being required to agree to the following when logging into the system:

"User Agreement

The California Prescription Drug Monitoring Program's (PDMP) mission is to reduce pharmaceutical drug diversion while promoting legitimate medical practice and patient care. PDMP accumulates Schedule II through IV controlled substance prescription and

dispensation information for facilitating diversion awareness and intervention. It is assumed prescribers and pharmacists dedicate their professional skills to identify and assist controlled substance abusers.

Prescribing practitioners and dispensers must treat this information in accordance with the provisions of the Health Insurance Portability and Accountability Act (HIPAA), the California Confidentiality of Medical Information Act, and Health & Safety Code section 11165(c). Law enforcement users must obtain, use and share this information with regulatory/criminal justice partners only in conjunction with criminal investigative matters. This data shall not be disclosed, sold, or transferred to any third party.

Any other use of this information is strictly prohibited.

Users of the information herein must know, understand, and abide by these provisions.

The Department of Justice (DOJ) limits access and dissemination of this information to licensed prescribers, licensed pharmacists, law enforcement personnel, and regulatory board personnel strictly for patient care or official investigatory/regulatory purposes. DOJ pursues regulatory and/or criminal sanctions for misuse of PDMP information.

Logging into the PDMP system signifies you understand and agree to these terms."

5.1.14. Confidentiality

In further accordance with SIMM 20-D, the data that is to be collected by CURES 2.0 has been reviewed for adherence with security policies. Data stored in the CURES 2.0 database is considered confidential - there is information that is deemed to be "personally identifying" or "sensitive." As such, measures will be in place to ensure that all data is encrypted to prevent any security breaches.

Confidentiality is required from any contracted developers and from the IT staff. All vendor contracts must include confidentiality agreements and security clearances.

5.1.15. Impact on End Users

The CURES 2.0 project team will develop a "awareness campaign" using best practices to help minimize the impact on current end-users. External customers who currently submit data or information requests by fax, mail, or walk-in will also have access to a Web-based application. The external customers will also be able to obtain real-time information to assist in preventing drug diversion or doctor shopping.

5.1.16. Consistency with Overall Strategies

The CURES 2.0 proposed solution is in alignment with the Attorney General's strategic priorities and is consistent with the California IT Strategic Plan.

5.1.17. Impact on Data Center

The DOJ HDC costs are included in the Economic Analysis Worksheet under Hardware and Other costs.

5.1.18. Impact to Current Infrastructure

DOJ will be hosting this application at Hawkins Data Center (HDC). As a constitutional office, the DOJ is not required to use OTech datacenters. The CURES 2.0 proposed solution does not require any changes to the DOJ existing technology architecture. The proposed solution will be a Web-based system at DOJ HDC.

5.1.19. System Hosting/ Data Center Consolidation

The CURES system and data will be hosted at the DOJ HDC. The DOJ HDC costs are included in the Economic Analysis Worksheet under Hardware and Other costs.

5.1.20. Backup and Operational Recovery

HDC will perform system and data backups (off and onsite). The cost for these backups is included in the Hardware costs shown in the Economic Analysis Worksheet.

5.1.21. Public Access

CURES 2.0 will only be accessible to statutorily authorized users. The CURES 2.0 project team will define and implement appropriate levels of application and data access to the CURES 2.0 application for the various functions within the CURES 2.0 processes based on requirements identified during the planning, requirements identification, and design stages. The access will be controlled through user authentication/authorization. The CURES 2.0 application will require the establishment of authorized users through the creation of user identifications, passwords, and roles. The user identifications and passwords will authenticate the user and the roles will define the authorized functions/data the user can access.

In addition, the technical architecture of CURES 2.0 provides data safeguards by separating the tiers (present, application, and database) with firewalls between each tier.

5.2. Rationale for Selection

The DOJ selected the modernization solution for CURES 2.0 because it is consistent with the Attorney General's objectives, the California IT Strategic Plan, and the CURES 2.0 goals and objectives. The evaluation criteria used in assessing this and other solution alternatives are:

- Ability to meet mission requirements and objectives.
- Cost Effectiveness. The proposed solution provides the best value solution available that meets the business objectives and requirements that can be feasibly implemented.

- Agility. DOJ considered the length of time it would take to implement the proposed solution and the other alternatives considered. Under this criterion, the proposed solution is deemed most likely to be successfully developed and implemented in the required timeframe.
- Level of Risk. The proposed solution poses the lowest level of risk in that it leverages in-house knowledge of the technical platform for long-term support and maintenance as well as taking advantage of the existing technical architecture and infrastructure at DOJ HDC.

5.3. Other Alternatives Considered

During the feasibility study, DOJ examined a number approaches to meeting the CURES 2.0 requirements. One alternative considered was the enhancement of the existing PDMP application to improve functionality and meet the needs of the business. This alternative is described in Section 5.3.1. The second alternative considered was to support and maintain the current program and system. This alternative is described in Section 5.3.2.

5.3.1. Alternative 1 - Enhancement of Existing PDMP Application

Under this alternative, the PDMP program would be allowed to focus on outreach and training to a greater degree than is possible under the status quo as system enhancements would allow most physicians to register for the system through the hospital or medical group through which they practice. The system enhancements proposed would allow for the PDMP system to integrate with a limited number of EHR systems and establish standards by which Pharmacy Management and other EHR systems could integrate with the PDMP system; such integrations would not be built by DOJ, but would be subject to DOJ approval and testing. Prescribers and dispensers without access to an EHR or Pharmacy Management System would continue to access the PDMP through a Web-based interface.

This alternative has been deemed non-feasible. Given the needs of the medical community and the law enforcement community, the requirements for CURES 2.0 cannot be fully satisfied through this alternative.

Costs

Estimated one-time costs for enhancing the current PDMP system come to a total of $1,687,433. This one-time total includes $188,740 for hardware costs, $470,643 for software and services, and $1,028,050 for design, enhancement, and implementation of the enhancements.

Estimated ongoing costs for maintaining the enhanced PDMP system come to a total of $1,829,543 annually. The estimated ongoing costs for program staffing are $1,191,458. This comes to a total of $3,021,013 annually.

Advantages

- Ability to deliver system-to-system integration.
- Align data model with national standards.
- Improved performance.

Disadvantages

- Requires more business and technical resources long-term.
- Requires significant hardware upgrades.
- High total cost of ownership.

5.3.2. Alternative 2 – Support and Maintain the current Program and System with Increased Program Staff

Under this alternative, the existing PDMP program would be expanded to allow for an increase in the number of system users and the system would be maintained and operated as it does under the status quo. Program will be staffed to allow for a significant increase in user registration and use and provide adequate data reporting for medical professionals and law enforcement.

This alternative has been deemed non-feasible. Given the needs of the medical community and the law enforcement community, the requirements for CURES 2.0 cannot be fully satisfied through this alternative.

Costs

Estimated ongoing costs for maintaining the current PDMP system come to a total of $1,829,543 annually. The estimated ongoing costs for program staffing are $1,191,458 for program staff. This comes to a total of $3,021,001 annually.

Advantages

- No capital expenditures required for the PDMP system.

Disadvantages

- Costly to operate and maintain.
- Significant hardware has reached “End of Life”.
- Database will not accommodate expected growth.
- Data integrity issues due to evolving data models and legacy CURES data.
- Resource intensive provisioning process that will require additional resources each year to support the growing number of users.
- Resource intensive application support required.

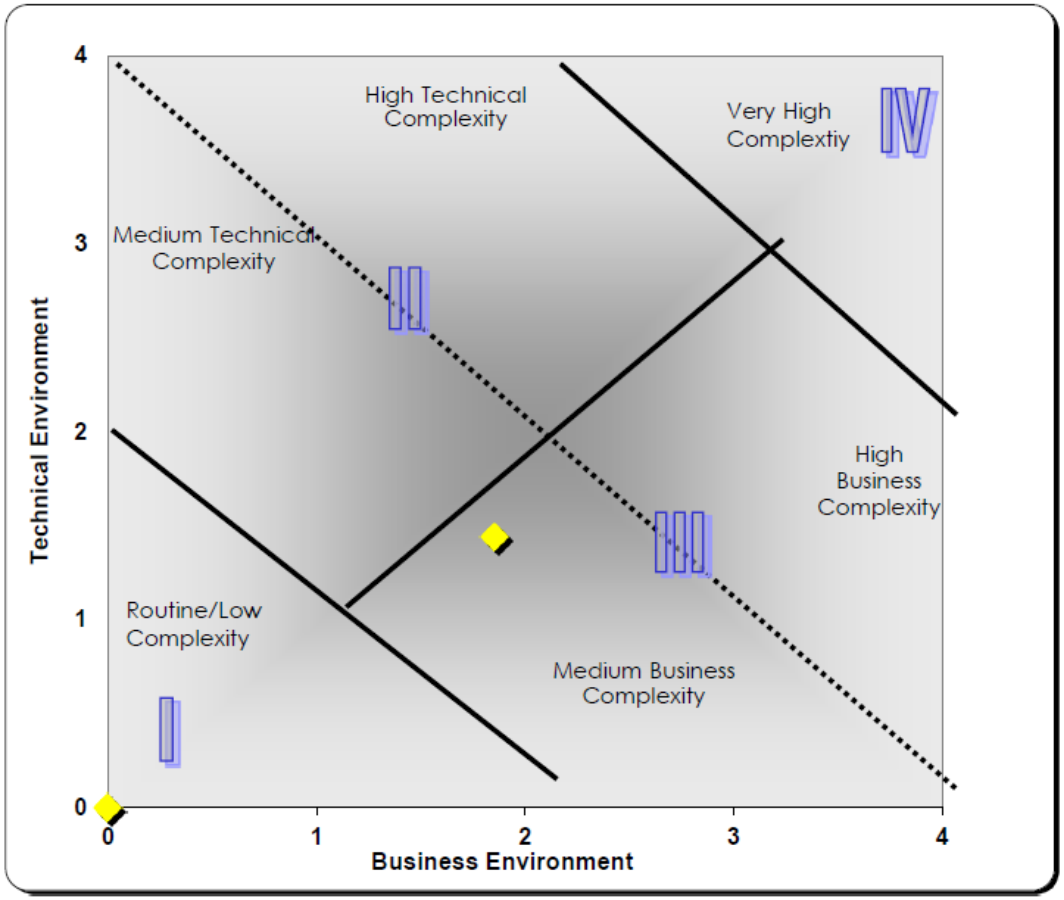
6. Project Management Plan

6.1. Project Manager Qualifications

A California Project Management Methodology (CA-PMM) Complexity Assessment was prepared for this project using the SIMM Section 17 template. Based on the results of the assessment, a Level 2 Project Manager, with the following experience and knowledge, is recommended. The Complexity Assessment is shown on the following pages:

Low Complexity	Business Attribute	High Complexity	Rating
0	1 2 3	4	
Static	**Business rules**	Changing	**1**
Static	**Current Business Systems**	Changing	**3**
Known and Followed	**Decision Making Process**	Not Known	**1**
Low	**Financial Risk to State**	High	**0**
Local	**Geography**	State Wide	**4**
Clear and Stable	**High Level Requirements**	Vague	**1**
Few & Routine	**Interaction with Other Departments and Entities**	Many and New	**3**
None	**Impact to Business Process**	High	**2**
Few & Straight Forward	**Issues**	Multiple & Contentious	**2**
High	**Level of Authority**	Low	**1.5**
Clear	**Objectives**	Vague	**0**
Established	**Policies**	Non-existent	**1**
Minimal	**Politics**	High	**2**
Familiar	**Target Users**	Unfamiliar	**2**
Experienced	**Project Manager's Experience**	Inexperienced	**1**
Experienced	**Team**	Inexperienced	**1**
Loose	**Time Scale**	Tight	**2**
Low	**Visibility**	High	**4**
		Total:	31.5
		Business Complexity:	**1.9**

Low Complexity	Technical Attribute	High Complexity	Rating
0	1 2 3	4	
Local	**Communications**	State wide	**3**
Established	**Delivery Mechanism**	New	**2**
Local	**Geography**	State wide	**2**
Proven	**Hardware**	New	**0**
Stand-alone	**Level Of Integration**	Tightly Integrated	**2**
Proven/Stable	**Networks (L/W)**	New	**0**
In place	**New Technology Architecture**	Not in place	**0**
9-5, Mon-Fri	**Operations**	24-hour, 7-day	**2**
Expert	**PM Technical Experience**	Novice	**0**
Established and in use	**Scope Management Process**	None	**1**
Light	**Security**	Tight	**4**
Proven	**Software**	New	**0**
Established and In Use	**Standards And Methods**	None	**0**
Experienced	**Team**	Inexperienced	**0**
High	**Tolerance To Fault**	Low	**4**
Low	**Transaction Volume**	High	**3**
		Total:	23
		Technical Complexity:	**1.4**



Scores		
	Business Complexity	1.9
	Technical Complexity	1.4

Complexity		Duration		Budget		Resources	
○	Zone 1	○	< 6 months	○	<$500K	○	< 5
◉	Zone II, Medium Zone III, Medium	○	< 1 year	○	<$1M	◉	<10
○	Zone II, High Zone III, High	◉	>1 year; < 3 years	◉	>$1M; <$5M	○	11 – 20
○	Zone IV	○	>3 years; <10 years	○	>$5M; <$100M	○	21 – 40
		○	>10 years	○	>$100M	○	40+

PM Level: 2

Experience: 3 – 5 years as a key team member on a medium or large IT project or as a Project Manager on small or medium IT project. Technical experience commensurate with the proposed technology.

Professional Knowledge: Strong working knowledge of the CA-PMM, department's methodology, Software Development Life Cycle. Familiar with CA Budgeting, Procurement and Contracting processes.

6.1.1. CURES 2.0 Project Governance

The CURES 2.0 Project Governance structure will be established to ensure:

1. The Project aligns with the mission and goals set forth in the approved FSR.
2. DOJ and DCA's leadership receives, at a minimum, monthly project status and all project reporting documents prior to be sent to the legislature or any state government control agencies e.g. CalTech or DOF;
3. Effective and appropriate oversight, guidance and authority; and
4. The Project is positioned to be completed on time and within its approved scope and budget. Any material deviations, meaning those that are three percent or greater, to the budget, schedule or scope will be approved through the Joint Executive Steering Committee (JESC);
5. The project, once implemented, has a defined and approved process for change control of CURES 2.0 addressing changes requested by DCA programs. To the extent necessary, the cost for these changes will be reimbursable through the CURES fund.

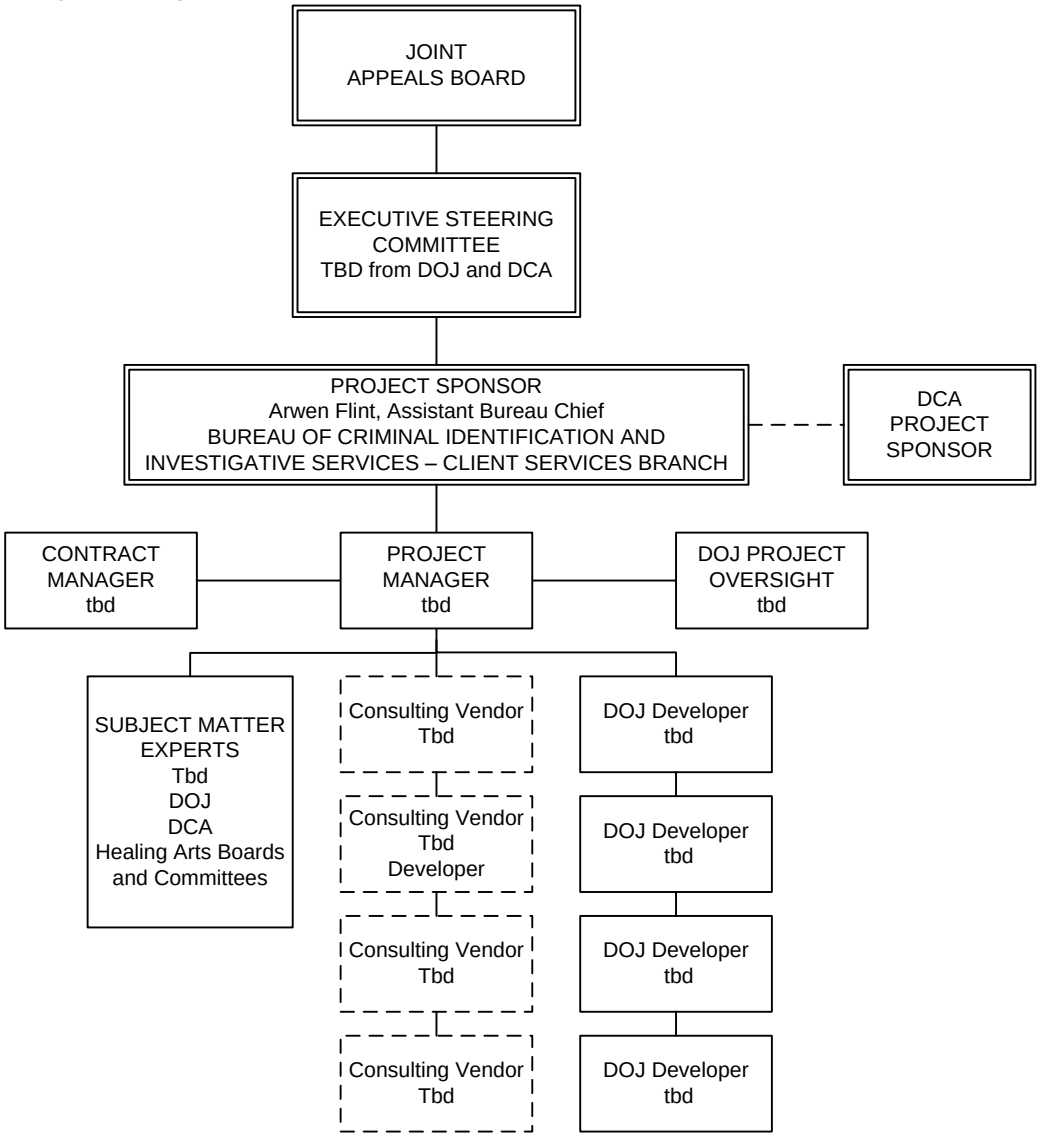
The JESC will provide strategic leadership and oversight for the Project. The JESC shall be comprised of executive-level stakeholders from DOJ, DCA, and the DCA program funding CURES 2.0. Both parties will have equal representation. The JESC shall be comprised of six (6) members – three (3) represented by the DOJ and three (3) represented by DCA and the DCA programs. The JESC will provide strategic direction for the Project and will have the sole authority to approve significant modifications to the Project scope or requirements. The JESC may delegate to the Project Sponsor any duties and responsibilities deemed necessary by the JESC. For the duration of the Project, the JESC shall meet on a monthly basis. All decisions of the JESC are final unless revisited by the JESC for reconsideration. Five JESC members are required for all decisions.

Further details of the CURES 2.0 Project Governance can be found in the Inter-Agency Agreement.

6.2. Project Management Methodology

This project will use the CA-PMM, based on the Project Management Body of Knowledge, as published by the Project Management Institute (PMI), in addition to the processes required by the CA Department of Technology's CA-PMM. The methodologies cover all phases of the project, including project initiation, project planning, project execution, and project closeout.

6.3. Project Organization



6.4. Project Priorities

The Project Priorities have been vetted with all Stakeholders.

Managing a project requires the balancing of three interrelated factors: resources, schedule, and scope. A change in one factor may result in a change in another factor. Project stakeholders should agree on the importance of each of these factors before the project begins by assigning one of the following to each factor:

- Constrained: the factor cannot be changed.
- Accepted: the factor is somewhat flexible to the project circumstances.
- Improved: the factor can be adjusted.

The following presents the priority matrix for this project.

Table 11 Project Priority Matrix

Schedule	Scope	Resources
Constrained	Accepted	Improved

These project priorities were assigned based on the following:

- Schedule – This factor is somewhat flexible in that a shift in the project schedule will only delay, not prevent, achievement of the project objectives.
- Scope – This is the most important factor to project success. Compromising the scope will result in an application that does not fulfill the business needs.
- Resources – This is the most flexible factor in that the DOJ program is in a position to devote more staff to the project, if necessary, to minimize impact on schedule and scope.

6.5. Project Plan

6.5.1. Project Scope

The scope of the CURES 2.0 solution is to design, develop, and implement an upgraded prescription drug monitoring application with enhanced access and features based on the business requirements resulting from planning and design sessions with all the project subject matter experts shown in the project organization chart.

6.5.2. Project Assumptions

The project is identified with following assumptions which could favorably influence the ultimate success of the project:

- The California Department of Technology's CA-PMM will be utilized for project management.
- The DOJ Technology Oversight Office with provide project oversight.
- DCA will participate in the Design sessions and Requirements definitions to ensure that the business needs are met.
- Current PDMP and CURES data reside in an Oracle database and, as such, will not require data conversion to be used by the CURES 2.0 solution.

6.5.3. Project Phasing

Project phasing has been deemed inappropriate for CURES 2.0 based on the size and duration of the project and the low level of risk when following the industry-proven system development life cycle.

6.5.4. Project Schedule

Table 12 Project Schedule

The project schedule has taken into consideration the following tasks and all stakeholders:

Milestone	Planned Completion
Project Planning: Project Management Plans	TBD (will be included in DOJ Project Charter)
Project Management Plan	
Communication Plan	
Change Management Plan	
Risk Management Plan	
Project Test Plan	
Project User Test Plan	
Project Acceptance Plan	
Requirements Review (DOJ/DCA)	04/25/2014
Project Planning: Solicitation	05/01/2014
Project Planning: Vendor Selection and Contract Award	05/15/2014
Project Execution: System Requirement Specifications (DOJ and DCA) through the use of JAD sessions	06/30/2014
Project Execution: Design (DOJ and DCA)	07/11/2014
Project Execution: Development	03/31/2015
Project Execution: Testing	05/29/2015
Project Execution: User Acceptance (DOJ and DCA)	05/29/2015
Project Execution: Training	06/30/2015
Project Execution: Implementation / Cutover / Closeout	06/30/2015
Project Closeout: Closeout Letter	06/30/2015
PIER	06/30/2016

- Business process reengineering
- Data clean-up/conversion
- Requirements definition for procurement vehicle
- Configuration/Change Control Plan
- Data Governance Plan
- Requirements Management Plan
- Contract Management Plan
- Procurement Plan
- Stakeholder Management
- Schedule Management
- Cost Management
- Risk/Issue Management

- Quality Management
- Human Resource Plan
- Organizational Change Management Plan
- Transition Plan

6.6. Project Monitoring

The project management team will track the status and progress of defined project activities against the Project Management Plan and document variance in terms of scope, schedule, and cost, as required for all IT projects within DOJ. Project management tools will be used to document and track stages of the project, project milestones, activities within stages, tasks within activities, and resources assigned to each task. Costs will be tracked throughout the life of the project to ensure that the project remains within budget. The DOJ Oversight staff will work closely with the project team to monitor project compliance with state and departmental IT project policies. Weekly and monthly project status reports will be submitted to the DOJ Oversight staff to further assist in project oversight. By combining staff expertise with effective project management, DOJ can monitor the project while ensuring effective communication and knowledge transfer relating to the system.
In accordance with the CA Department of Technology IT Policy Letter 10-05, a complexity assessment has been prepared for this proposal using the template from SIMM Section 17. A summary of the assessment appears in the table below. The complexity will be reassessed periodically throughout the life of the project.

Table 13 CA-PMM Complexity Assessment Summary

Complexity Assessment Area	Complexity Rating
Business Complexity (0 = NA, 0.5 = Low, 4.0 = High)	1.9
Technical Complexity (0 = NA, 0.5 = Low, 4.0 = High)	1.4
Project Complexity (Low, Medium, or High)	Medium

6.7. Project Quality

DOJ will maintain processes and organizational entities to ensure that quality assurance is performed for IT projects that will include meeting stated business requirements and technology standards.

6.8. Change Management

The team will strictly adhere to the project scope. If deviations from the scope become warranted, the project team will use an approved Change Management Plan. The vendor and Project Manager will agree on any changes to the scope and obtain approval from the project sponsor and project Joint Executive Steering Committee (DOJ and DCA) before processing proposed scope modifications. If the mitigation remedy requires a change in the functionality, completeness, or quality of the delivered system, the project team will ensure

that the change does not affect the project budget. The Project Manager will consult with the project sponsor before allowing any changes to the project scope, schedule, or cost.

IT Governance and Change Control will be addressed after approval of the FSR. Additionally, an interagency agreement (IA) will be developed between the DOJ and the DCA on behalf of each board or committee funding the system, which includes, but is not limited to, the roles and responsibilities of each department as to the governance, development, implementation, and utilization of the system.

Please refer to the IA.

6.9. Authorization Required

No special authorization (federal agency funding approval, state legislative review, etc.) is required for this FSR. Control Agency approval of the FSR is required prior to any project work being initiated.

7. Risk Management Plan

This section documents the process and procedures that will be used to manage project risks.

The project's risk management plan will address risk/issue identification, documentation, mitigation, analysis, tracking, reporting, and close-out activities to be applied by all impacted stakeholders.

This Risk Management Plan describes the methods that the DOJ CURES 2.0 project team will use to manage risks throughout the life of the project. A risk is defined as any potential problem that may interfere with the successful completion of the project. Risks may potentially affect project schedule, cost, and/or quality.

Risk management includes the following major components:

- Risk analysis – identifying and prioritizing risks.
- Risk action planning and tracking – developing a plan of action for each identified risk, and tracking progress against the plan.
- Risk escalation – providing appropriate visibility of risks to management.

The processes and procedures to be used are defined in the SIMM Section 17, CA-PMM, and SIMM Section 45, CA Department of Technology IT Project Oversight Framework. Risks associated with the DOJ CURES 2.0 project will be identified, analyzed, and prioritized. Identified risks will be controlled through the processes of project planning and monitoring. Risk identification and management will be integrated components of project management and will be continually assessed and analyzed during the life of the project. Using industry-proven IT

methodologies throughout the project life cycle will reduce the likelihood of adverse impacts to the project schedule and outcome.

The DOJ CURES 2.0 Project Manager will act as the risk manager for the project. Oversight and review of the risk management function will be provided by the DOJ CURES 2.0 project sponsor. Risk management will involve all project participants and will be conducted throughout the project life cycle. Risk management began with the development of the conceptual solutions described in this FSR, and the FSR team identified several key risk areas. These risks have been documented within this section and, where appropriate, the actions to be taken to respond to the risk have been included. After project kickoff, there will be periodic risk assessment sessions conducted with project participants under the direction of the DOJ Project Manager. Based on the results of these sessions, additional preventative and contingent project activities may be identified for the project plan to deal with identified risks. Preventative activities become a normal part of the project plan and must be performed in order to achieve the desired effect.
To minimize the risks associated with this project, DOJ will:

- Allow any existing systems used to support the current process to remain in place until the new system has passed acceptance testing.
- Work with DOJ IT management at HDC to obtain an independent perspective on the project management and risk management activities of the project.

7.1. Risk Management Worksheet

During the preparation of this FSR, the project team identified some of the risks associated with the proposed DOJ CURES 2.0 project. The results of these risk identification activities and the defined risk measures are included in the list of risks below.

Table 14 Risk Management Worksheet

ID	Risk Category / Event	Probability (0=Low: 10=High)	Affected Project Area / Element	Preventive Measures / Contingency Measures
1	Project approval is not obtained.	2	Schedule	Not possible to prevent.
				Revise FSR to overcome objections to approval.
2	Project funding is not available.	1	Budget and Schedule	Not possible to prevent.
				Postpone project until funding becomes available.
3	Project experiences cost overruns.	3	Budget	Implement rigorous scope control.
				Develop Special Project Report (SPR) with valid explanations of cost

ID	Risk Category / Event	Probability (0=Low: 10=High)	Affected Project Area / Element	Preventive Measures Contingency Measures
				overrun.
4	Late project delivery.	3	Schedule	Implement rigorous scope control. Develop realistic project schedules with adequate detail to allow early identification of schedule slippage. Acquire short-term resources to return the project to original schedule. Identify and postpone scope that can be delivered after live operation without impacting usability (such as year-end reports). Petition legislature for an extension of spending authority.
5	Additional legislation or policy changes create changes in scope or requirements during the project.	5	Scope, Budget, and Schedule	Not possible to prevent. Initiate formal change control processes to assess, scope, schedule, and budget for changes introduced after project funding is approved. Ensure that funding for additional changes is included in each piece of legislation.
6	End users are resistant to new application / new process.	5	Resources	Involve representatives for all users in key solution decisions to give them a voice and ownership in the solution. Keep the end-users informed of the project progress and benefits

ID	Risk Category / Event	Probability (0=Low: 10=High)	Affected Project Area / Element	Preventive Measures Contingency Measures
				the application will provide. Increase project presence and availability to users to instill confidence in the solution.
7	Budget issues require work stoppage.	4	Scope, Budget, Schedule, and Resources	Not possible to prevent. None

7.1.1. Risk Assessment

The Project Manager will identify, analyze, quantify, and prioritize risks. The risks will be reviewed and, as appropriate, mitigation strategies will be determined. Risk assessment will be conducted at regular intervals as the project progresses

7.1.2. Risk Identification

The Project Manager will lead the risk identification process with the vendor who will provide input from various perspectives (technical, user, and management). Risks will be listed, analyzed for probability of occurrence and potential impact on the project, and prioritized. The Project Manager will ensure that the project team openly and routinely discusses and analyzes risks throughout the life of the project.

7.1.3. Risk Analysis and Qualification

Project risks will be tracked and analyzed on an ongoing basis, and discussed as part of regular project management meetings. Risks will be analyzed based on the type of risk, probability of the risk occurring, the ability to mitigate the risk, and the potential effect of the risk. Quantification efforts will focus on probability and impact of identified risks according to the scale used for the risk management worksheet.

7.1.4. Risk Prioritization

Risk prioritization will be determined by the use of a probability and impact matrix. The matrix will combine two dimensions of risk: its probability of occurrence and its impact on objectives if it occurs. Risks that are identified as having high probability and high impact will be given top priority and will be addressed first. This method

of prioritization is consistent with the PMI's current guidelines. The steering committee will make the final determination on risk priorities.

7.1.5. Risk Response

As the project proceeds and risk events occur, appropriate risk response actions will be implemented. Preventive and contingency measures have been identified for each risk in the risk management worksheet. Preventive and contingency measures will fall into one of the following three general categories:

- Avoidance – The risk will be avoided by taking specific actions to change a planned event in the project. Avoidance will be pursued when the risk cannot be managed away or when it will be costly to the project.
- Mitigation – Effect of the risk will be mitigated. Mitigation reduces the expected monetary value of a risk by reducing the probability of occurrence.
- Acceptance – The possibility that a risk may occur will be accepted.

7.1.6. Risk Avoidance

Risk avoidance involves eliminating the risk by eliminating the cause or by using and alternate approach that does not involve the risk thereby avoiding the risk altogether. The feasibility study for DOJ CURES 2.0 has not identified any risks that can be avoided. However, as this is the most effective risk response, risk avoidance will be utilized whenever possible on any future risks identified for DOJ CURES 2.0.

7.1.7. Risk Acceptance

DOJ realizes that implementing any product has inherent risks. The strategies outlined in this section along with the analysis conducted to identify risks and contingency plans provides an approach and starting point for DOJ to move forward with implementing the selected software. Based on this analysis and the identified risks, DOJ accepts the risks identified in the risk management worksheet.

7.1.8. Risk Mitigation

Preventive measures will be taken in each of the risk areas to mitigate the chances of risk occurrence. These measures are identified in the risk management worksheet. As new risks are identified throughout the project life cycle, appropriate preventive measures will be developed or implemented.

7.1.9. Risk Sharing

The members of the team will share the project risk. The vendor will accept risks associated with customization, integration, and configuration.

7.2. Risk Tracking and Control

The Project Manager will monitor risk throughout the life of the project. Ongoing risk identification meetings will be held with the team to review and update the current risk list. Risk status will be presented at the regular executive review meetings. A Risk Management log along with MS Project management software will be used to monitor activities affected by identified risks. All identified risks will be buffered with a 5 percent to 10 percent reserve amount for scope, schedule, or cost risks, which cannot be mitigated, depending upon the risk probability. A risk probability of 1 percent to 5 percent = 5 percent buffer. A risk probability of 6 percent to 10 percent = 10 percent buffer.

7.2.1. Risk Tracking

To prevent failure on the project, the Project Manager and project team will monitor and track risk throughout the project on the risk management worksheet. The tools used to monitor and track risk include project management software to identify potentially impacted project activities situated on the critical path, a risk management plan, and risk management worksheets.

7.2.2. Risk Control

Control and iteration are important to prevent risks from impacting the project. Risk control executes the risk management plan to respond to the risk events throughout the duration of the project. The methodology is an iterative approach in response to changes that occur during the project's life cycles.

8. Economic Analysis Worksheets (EAWs)

The attached Economic Analysis Worksheets (EAWs) reflect the cost estimates for the existing system, proposed solution, and identified alternatives.

9. Glossary

Word / Phrase	Definition / Description
Authorized Users	Authorization is the function of specifying access rights to resources (users), which is related to information security and computer security in general and to access control in particular. Authorization levels and access is defined during the design phase of a project. Authorized users in the CURES 2.0 FSR are defined as those who have applied for, and been approved for, access to the CURES 2.0 information. Levels of authority will be identified and defined during the design of the CURES 2.0 solution after control agency approval of the FSR.
California Health and Safety Code § 11165(d)	(d) For each prescription for a Schedule II, Schedule III, or Schedule IV controlled substance, as defined in the controlled substances schedules in federal law and regulations, specifically Sections 1308.12, 1308.13, and 1308.14, respectively, of Title 21 of the Code of Federal Regulations, the dispensing pharmacy or clinic shall provide the following information to the Department of Justice on a weekly basis and in a format specified by the Department of Justice: (1) Full name, address, and the telephone number of the ultimate user or research subject, or contact information as determined by the Secretary of the United States Department of Health and Human Services, and the gender, and date of birth of the ultimate user. (2) The prescriber's category of licensure and license number; federal controlled substance registration number; and the state medical license number of any prescriber using the federal controlled substance registration number of a government-exempt facility. (3) Pharmacy prescription number, license number, and federal controlled substance registration number. (4) NDC (National Drug Code) number of the controlled substance dispensed. (5) Quantity of the controlled substance dispensed. (6) ICD-9 (diagnosis code), if available. (7) Number of refills ordered. (8) Whether the drug was dispensed as a refill of a prescription or as a first-time request. (9) Date of origin of the prescription. (10) Date of dispensing of the prescription.
California Information Technology Strategic Plan	A strategic vision and direction for the state technology community providing strategic objectives which can serve as guideposts for the technology community and decision-makers in supporting state programs and business operations and in better serving constituents. www.itsp.ca.gov/pdf/2012/strategic-plan-V3b.pdf

Word / Phrase	Definition / Description
Department of Consumer Affairs **DCA**	The Department of Consumer Affairs (DCA) includes the DCA and the Medical Board of California, the Dental Board of California, the California State Board of Pharmacy, the Veterinary Medical Board, the Board of Registered Nursing, the Physician Assistant Board of the Medical Board of California, the Osteopathic Medical Board of California, the Naturopathic Medicine Committee of the Osteopathic Medical Board, the State Board of Optometry, and the California Board of Podiatric Medicine as identified in subdivision (d) of Section 208 of the California Business and Professions Code.
Diversion	Per the United States Drug Enforcement Administration, diversion is the use of prescription drugs for recreational purposes. The term comes from the "diverting" of the drugs from their original purposes.
Doctor Shopping	The practice of a patient requesting care from multiple physicians, often simultaneously, without making efforts to coordinate care or informing the physicians of the multiple caregivers. This usually stems from a patient's addiction to, or reliance on, certain prescription drugs or other medical treatment. Usually a patient will be treated by their regular physician and be prescribed a drug that is necessary for the legitimate treatment of their current medical condition. Some patients will then actively seek out other physicians to obtain more of the same medication, often by faking or exaggerating the extent of their true condition, in order to feed their addiction to that drug. Also known as double doctoring.
Geo-spatial Analytics	A method of analyzing data and tying it to geographic coordinates.
HIPAA	Health Insurance Portability and Accountability Act
Prescription Monitoring Program Information Exchange (PMIX) hub.	PMIX Architecture is a nationwide framework that will enable standards-based data sharing across PMIX-compliant exchange points. This architecture is being developed to support a secure, nationwide interoperability framework with which Prescription Drug Monitoring Program (PDMP) systems and data exchange hubs must comply.
Scalability	Software scalability refers to business applications that can adapt to support an increasing amount of data or a growing number of users. For example, a scalable database management system (DBMS) should be able to efficiently expand as more data is added to the database. Scalable Web hosting software should make it easy to add new users and new Web hosting accounts. They key is that the software "grows" along with the increased usage. This means scalable programs take up limited space and resources for smaller uses, but can grow efficiently as more demands are placed on the software.
Schedule II Drugs	A category of drugs considered to have a strong potential for abuse or addiction but that have legitimate medical use. Among the substances so classified by the Drug Enforcement Agency are morphine, cocaine, pentobarbital, oxycodone, alphaprodine, and methadone.

Word / Phrase	Definition / Description
Schedule III Drugs	A category of drugs that have less potential for abuse or addiction than Schedule II or I drugs. Among the substances so classified by the Drug Enforcement Agency are glutethimide and various analgesic compounds containing codeine.
Schedule IV Drugs	A category of drugs that have less potential for abuse or addiction than those of Schedules I to III. Among the substances so classified by the Drug Enforcement Agency are chloral hydrate, chlordiazepoxide, meprobamate, and oxazepam.
Timely	Existing or taking place within the designated period. CURES 2.0 specifics will be defined during the life of the project.