

Budget Change Proposal - Cover Sheet

Fiscal Year: 2020-21
Business Unit: 0820
Department: Department of Justice
Priority Number: N/A
Budget Request Name: 0820-015-BCP-2020-GB
Program: California Justice Information Systems
Subprogram: Hawkins Data Center

Budget Request Description: Firearms Information Technology Systems Modernization

Budget Request Summary: The Department of Justice requests \$2.4 million Dealers' Record of Sale Special Account in 2020-21 to plan and analyze the necessary efforts to modernize the systems that support the Bureau of Firearms.

This request is only for the initial planning and analysis phase of the firearms systems modernization. The Department of Justice anticipates participating in the Project Approval Lifecycle process, which is estimated to be 18 to 24 months. The deliverables of this effort will include a plan and schedule for the development, testing, and implementation of the proposed solution.

Requires Legislation: Yes No

Code Section(s) to be Added/Amended/Repealed:

Does this BCP contain information technology (IT) components? Yes No

If yes, departmental Chief Information Officer must sign.

Department CIO Name: Joe Dominic, CJIS Chief

Department CIO Signature: Joe Dominic

Signed On Date: January 8, 2020

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project Number:

Project Approval Document:

Approval Date:

If proposal affects another department, does other department concur with proposal?

Yes No

Attach comments of affected department, signed and dated by the department director or designee.

Prepared By: Silvia Siu

Date: January 8, 2020

Reviewed By: Joe Dominic

Date: January 8, 2020

Department Director: Chris Ryan

Date: January 8, 2020

Agency Secretary:

Date:

Department of Finance Use Only

Additional Reviews: Capital Outlay: ITCU: FSCU: OSAE:

Department of Technology:

PPBA: Emma Jungwirth

Date submitted to the Legislature: January 10, 2020

A. Budget Request Summary

The Department of Justice (DOJ) requests \$2.4 million Dealers' Record of Sale (DROS) Special Account in 2020-21 to plan and analyze the efforts to modernize the systems that support the Bureau of Firearms (BOF).

This request is only for the initial planning and analysis phase of the firearms systems modernization. The DOJ anticipates participating in the Project Approval Lifecycle (PAL) process, which is estimated to be 18 to 24 months. The deliverables of this effort will include a plan and schedule for the development, testing, and implementation of the proposed solution.

B. Background/History

The State of California leads the way in balancing the constitutional right to bear arms with the need for public safety. In recent years, the California Legislature has passed multiple laws related to firearms ownership, purchasing, background clearances, mental health issues surrounding gun possession, and the reporting of this information to the DOJ. Addressing the public safety issues is of critical importance to the BOF, which serves as the liaison with various entities such as law enforcement, at the state and local levels.

The DOJ has built and operates numerous firearms information technology systems in response to the needs of the citizens of California. These systems support the education, regulation, and enforcement actions regarding the manufacturing, sale, ownership, safety training, and transfer of firearms. To support the comprehensive program that promotes the legitimate and responsible firearms possession and use by California residents, the DOJ maintains the following systems:

- Armed Prohibited Persons System
- Automated Firearms System
- California Firearms Information Gateway
- California Firearms Licensee Check
- Carry Concealed Weapons
- Centralized List
- Certificate of Eligibility
- Consolidated Firearms Information System
- Dealer Record of Sale
- DROS Entry System
- Mental Health

Many of these systems and subsequent modifications or enhancements to these systems have been in reaction to numerous legislative mandates that have been implemented since the first system was built, in 1980. As a result, the network of systems has become increasingly complex over the last several decades, with each system using different logic that cannot be applied to modifications needed across multiple systems. Consequently, the existing firearms systems utilized by law enforcement agencies and firearms dealers that are tightly coupled, have reached their end-of-life.

The aforementioned firearms systems have been stitched together in a patchwork manner, which holds together, but is not efficient. This has created a tightly-coupled system. Making one change for one application requires timely and extensive testing of many systems to ensure there is no negative impact to other applications. The firearms systems can no longer be enhanced in a cost effective or efficient manner and cannot be further utilized to implement the changing needs of law enforcement and California as a whole. The systems were designed to meet user needs based on outdated system design practices and point-in-time business requirements. The current design method results in significantly longer development times, requires more resources, and requires longer and more extensive regression testing, making it difficult to respond to the constantly evolving landscape of statutory mandates pertaining to firearms.

The current system requires significant resources to make even a small change, such as changing the minimum age from 18 to 21 for a person who can purchase a long-gun as a result of legislative action. The current firearms systems and architecture is in attrition—it is wearing down and nearly impossible to enhance.

The intent of this proposal is to modularize functions by creating micro-services. Micro-services are a software development technique that structures an application as a collection of loosely coupled services. The benefit of separating an application into different smaller services is that it improves modularity, making the application easier to understand, develop, test, and become more resilient to architecture attrition. Micro-services enable parallel development by enabling small autonomous teams to develop, deploy and scale their respective services independently. It also allows the architecture of an individual service to be enhanced through continuous delivery and deployment.

This development framework will enable the department to respond to changing business needs and legislative mandates efficiently and in a cost effective manner.

For example, the Legislature recently passed Chapter 25, Statutes of 2019 (AB 94) which requires specific data on the collection of firearms from Armed and Prohibited Persons (APPS) be reported annually. Due to the antiquated state of the APPS system, many of the required data points cannot currently be tracked and maintained. As a result, the DOJ is unable to meet the statutory mandate, delaying the collection of

critical public safety information which could assist in streamlining the enforcement process and the collection of firearms from potentially dangerous individuals.

The DOJ is exploring the modernization of all aforementioned firearms systems, and determining what resources would be necessary to develop one dynamic and adaptable solution to meet existing needs and statutory mandates. Rebuilding the affected systems to work interactively in a way that can be more quickly and easily scaled, would translate to future integration of new and changing requirements with minimal fiscal impact, and would thus be the most cost-effective solution in the long-term. The intent is to reduce the firearms systems into no more than two systems; external publicly accessible and internal DOJ only. The planning and analysis along with security requirements will determine the system architecture feasible for DOJ.

Resource History – Hawkins Data Center (*Dollars in thousands*)

Program Budget	PY-4	PY-3	PY-2	PY-1	PY
Authorized Expenditures	\$53,010	\$54,719	\$55,081	\$60,961	\$62,029
Actual Expenditures	\$50,747	\$52,389	\$53,290	\$58,594	\$60,885
Authorized Positions	308	308	312	326	323
Filled Positions	246	257	266	266	278
Vacancies	62	51	46	60	45

C. State Level Considerations

California Penal Code Section 11106 requires the DOJ to maintain a registry of the sale and transfer of all firearms in the state. The DROS is the registry system used by the DOJ for licensed firearms dealers to determine whether a firearms transaction can be processed by, among other things, performing criminal background checks for the purchase of firearms eligibility. The DROS Entry System (DES) is the web-based application used by licensed firearms dealers to report the sale, loan, transfer, redemption, and acquisition of handguns and long guns to the DOJ Bureau of Firearms.

Penal Code Section 28205 requires licensed firearms dealers to access and use the DES for the submission of information concerning the sale or transfer of firearms.

In addition, the DOJ provides criminal justice information services to law enforcement and various other regulatory and crime prevention services throughout the state to the public and to state, local and federal agencies. The more effectively the DOJ firearms reporting systems and support functions operate, the better the DOJ will be able to meet its mission and obligations to the citizens of the state.

Furthermore, existing law requires the Attorney General to establish and maintain an

online database known as the Prohibited Armed Persons File, also referred to as APPS. The APPS system cross-references persons who have ownership or possession of a firearm and who, subsequent to the date of that ownership or possession of a firearm, fall within a class of persons who are prohibited from owning or possessing a firearm.

AB 94 was recently chaptered, requiring the Department of Justice to report, no later than April 1, 2020, and no later than April 1 of each year thereafter, to the Joint Legislative Budget Committee and the fiscal committees of each house of the Legislature, on specified information related to the APPS, including the number of individuals in the APPS and the degree to which the backlog in the APPS has been reduced or eliminated. Due to the current limitations of the firearms systems, the required data points are not currently available in the firearms systems, and will require extensive system modifications which will not be complete in the timeframe necessary to meet the obligations of the statute as written.

D. Justification

The DOJ requires the support of the following team of consultants that can perform the necessary planning and analysis to define a modernization approach and roadmap for the firearms systems. They will be charged with developing a dynamic and adaptable solution to meet existing needs and statutory mandates. The consultants will perform a systems assessment to analyze the existing applications to determine the overall complexity and structure. They will gain a detailed understanding of the application portfolio, and the nature and intended use of the application from a public safety perspective.

1 Senior Consultant Project Manager - \$506,880

One-time consultant costs to perform the project management duties to plan, organize, direct, and control the project activities. The consultant will have the requisite knowledge, experience, and expertise in managing integrated projects to assist the DOJ as a technical Project Manager in the planning and analysis of a modernization approach. The Project Manager will produce meeting minutes and project status and executive reports.

Hours Needed: 3,168 (based on 18 months at 176 hours per month)

Hourly Rate of Consultant: \$160

1 Senior Consultant Information Data Analyst - \$396,000

One-time consultant costs to analyze and review the flow of data in the firearms systems to determine ways to improve and streamline the business. The consultant will have the requisite knowledge, experience and expertise regarding data modeling, data architecture design, database design, data mining and statistical analysis and reporting

best practices. The consultant will collect data, analyze results using statistical techniques, identify and interpret patterns with complex data to provide an understanding of where data resides and how it travels through the network of systems.
Hours Needed: 3,168 (based on 18 months at 176 hours per month)
Hourly Rate of Consultant: \$125

1 Enterprise Architect Consultant - \$459,360

One-time consultant costs to analyze and review the complex network of firearms systems alongside the DOJ's enterprise suite of applications to determine how the DOJ can most effectively achieve its modernization objectives. The consultant will perform enterprise analysis and planning using a comprehensive approach to define how information, business and technology work together. The consultant will look for opportunities to standardize and consolidate processes to support the growth and modernization of information technology within the Department.

Hours Needed: 3,168 (based on 18 months at 176 hours per month)

Hourly Rate of Consultant: \$145

1 Senior Java Developer Consultant - \$380,160

One-time consultant costs to assist with the analysis and review of the complex Java-based firearms applications.

Hours Needed: 3,168 (based on 18 months at 176 hours per month)

Hourly Rate of Consultant: \$120

1 Senior Systems Analyst - \$364,320

One-time consultant costs to assist with the analysis and review of the complex Java-based firearms applications. The consultant will conduct Joint Application Design/Development workshops, gathering business needs and documenting system requirements in order to meet client needs and the requirements of the modernization effort.

Hours Needed: 3,168 (based on 18 months at 176 hours per month)

Hourly Rate of Consultant: \$115

In addition to the consultant services, the California Justice Information Services Division will require \$216,000 (\$18,000/month x 12) for the California Department of Technology to conduct project oversight for the one-year planning effort.

E. Outcomes and Accountability

Funding this effort allows DOJ to develop a dynamic and adaptable solution to meet existing needs and statutory mandates related to firearms. These systems will support the education, regulation, and enforcement actions regarding the manufacture, sale,

ownership, safety training, and transfer of firearms. In addition, rebuilding the systems to work interactively in a way that can be more quickly and easily scaled, would translate to future integration of new and changing requirements with minimal fiscal impact, and would thus be the most cost-effective solution in the long-term.

F. Analysis of All Feasible Alternatives

Alternative 1 - Authorize DROS Spending Authority As Requested

Approve the requested \$2.4 million DROS Special Account in 2020-21 to plan and analyze the necessary efforts to modernize the systems that support the BOF.

Alternative 2 - Postpone the System Modernization Efforts

If these efforts are postponed, the Department will continue to be at risk of system failures due to the antiquated state of the current firearms systems, in addition to the inability to meet growing firearms enforcement and reporting demands.

Alternative 3 - Take No Action

If this request is denied, the DOJ will be unable to meet its mission and mandates in a timely manner resulting in increased workloads that would affect public safety.

G. Implementation Plan

Upon approval of this request, the DOJ will immediately begin the procurement process to hire the necessary consultants to plan and analyze the modernization approach and roadmap for the firearms systems.

H. Supplemental Information

N/A

I. Recommendation

Alternative 1 - Authorize DROS Spending Authority As Requested

BCP Fiscal Detail Sheet

BCP Title: Firearms Information Technology Systems Modernization

BR Name: 0820-015-BCP-2020-GB

Budget Request Summary

Operating Expenses and Equipment

Operating Expenses and Equipment	FY20 Current Year	FY20 Budget Year	FY20 BY+1	FY20 BY+2	FY20 BY+3	FY20 BY+4
5340 - Consulting and Professional Services - Interdepartmental	0	29	0	0	0	0
5340 - Consulting and Professional Services - External	0	2,323	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$2,352	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY20 Current Year	FY20 Budget Year	FY20 BY+1	FY20 BY+2	FY20 BY+3	FY20 BY+4
Total Budget Request	\$0	\$2,352	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY20 Current Year	FY20 Budget Year	FY20 BY+1	FY20 BY+2	FY20 BY+3	FY20 BY+4
State Operations - 0460 - Dealers Record of Sale Special Account	0	2,352	0	0	0	0
Total State Operations Expenditures	\$0	\$2,352	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,352	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY20 Current Year	FY20 Budget Year	FY20 BY+1	FY20 BY+2	FY20 BY+3	FY20 BY+4
0445010 - O. J. Hawkins Data Center	0	2,352	0	0	0	0
Total All Programs	\$0	\$2,352	\$0	\$0	\$0	\$0