## STATE OF CALIFORNIA Budget Change Proposal - Cover Sheet

Allison Hewitt

| <b>Fiscal Year</b><br>2023-24   | Business Unit<br>5225                                     | Department California Department Rehabilitation                  | California Department of Corrections and                        |                                    |   |  |  |
|---|---|--|---|------------------------------------|---|--|--|
| <b>Budget Requ</b> e<br>5225-075-BCF  |   | Rehabili   | Program  4500 – Corrections and Rehabilitation Administration   |                                    | Subprogram<br>4500039 – Information<br>Technology |  |  |
| <b>Budget Requ</b><br>BIS Migration   | uest Description<br>n to S4 Hana                          |  |   |                                    |   |  |  |
| The Californic<br>Fund in 2023<br>Applications<br>Requires Legi   | -24, \$9.3 million in<br>and Products (SA<br>islation     | Corrections and Re<br>2024-25, and \$7.8 (<br>P) software to SAP | million in 2025-26 to<br>'s new system offer<br>Code Section(s) | o migrate CDering, S/4 HAN         | CR's System                                       |  |  |
| □ Yes 🗵   |   |  | N/A   |                                    |   |  |  |
| Does this BCP contain information technology (IT) components? ⊠ Yes □ No  If yes, departmental Chief Information Officer must sign. |   |  | <b>Department CIC</b> Kristin Montgom                           | Date Click or tap to enter a date. |   |  |  |
|   |   |  |   | enier a dale.                      |   |  |  |
| S1BA, S2AA,   | \$3\$D, \$/4PRA), an                                      | ject number, the m<br>d the approval da                          | te.   | approval do                        | cument (FSR, SPR,                                 |  |  |
| •   | 3225-180 <b>Project A</b><br>I <b>te:</b> Click or tap to | pproval Document enter a date.                                   | : S1BA  |                                    |   |  |  |
|   | -   | partment, does oth<br>department, signe                          | -   |                                    | oosal? □ Yes ⊠ No<br>ent director or              |  |  |
| <b>Prepared By</b><br>Tammy Caso  | n   | Date Click or tap to enter a date.                               | Reviewed By<br>Madelynn McClain                                 |                                    | Date Click or tap to enter a date.                |  |  |
| <b>Department I</b><br>Kristin Montgo   |   | Date Click or tap to enter a date.                               | Agency Secretary<br>Kathleen Allison                            |                                    | Date<br>Click or tap to<br>enter a date.          |  |  |
| Additional Re   | eview: 🗆 Capital C  | Department o  Outlay □ ITCU □ FS                                 | f Finance Use Only<br>CU □ OSAE □ De                            |                                    | oav   |  |  |
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Click or tap to enter a date.

#### A. Budget Request Summary

The California Department of Corrections and Rehabilitation (CDCR) requests \$8.1 million General Fund in 2023-24, \$9.3 million in 2024-25, and \$7.8 million in 2025-26 to migrate CDCR's System Applications and Products (SAP) software to SAP's new system offering, \$/4 HANA.

#### B. Background/History

In 2007, the Senate Budget Committee performed an operational review of CDCR's business performance and found the need for a new centralized CDCR fiscal system of record. To comply with these findings, CDCR purchased the SAP enterprise resource planning (ERP) software for the Business Information System (BIS) with the goal of providing transparency, ease of reporting, and the ability to perform essential tasks easily for both CDCR and California Correctional Health Care Services (CCHCS). CDCR implemented SAP as an accounting, budgeting, and procurement solution but, over time, added additional functionality by building different modules onto the original system.

Prior to SAP, CDCR lacked integrated, standardized, and cost-effective administrative systems. Since the initial launch of the BIS project and SAP in 2011, many vital CDCR and CCHCS functions have been developed and refined in SAP, such as inventory control, warehousing, asset tracking, plant maintenance, time and shift tracking, employee health and safety data, fleet tracking, armory tracking and, most recently, allegations of staff misconduct tracking. SAP has become the system of record for CDCR and CCHCS. It allows effective and efficient management of resources and the ability to provide timely responses to control agency requests regarding CDCR's accounting, budget, human resources, and supply chain-related activities.

Currently, CDCR maintains the existing SAP system with an annual operational budget of \$24 million General Fund and 61.0 permanent positions. The original SAP project included a comprehensive system tailored to meet CDCR's needs, and ongoing staff resources were, and remain, essential for successful implementation and continuing maintenance. It takes significant time to determine the needs of the Department's numerous divisions, have staff test the systems to ensure they work properly, implement them, and continue to make adjustments to improve functionality. Not migrating to SAP's new system will negatively affect many departmental functions.

#### C. State Level Consideration

SAP interfaces with other State systems to include: FI\$Cal, for purchasing and accounting; the State Controller's Office, for Pay and Time evaluation; the Department of Public Health, for COVID testing and vaccination data; and the Office of the Inspector General, for allegations of staff misconduct data.

#### D. Justification

System support for the current version of SAP will end in 2027. Existing systems must move to the new cloud-based platform (S/4 HANA) before that date, and CDCR projects the migration will take three years. This is not a CDCR-specific issue, as SAP users worldwide are required to complete the same migration. If CDCR does not move to S/4 Hana, SAP will become obsolete and prone to security breaches and a loss of functionality, leaving CDCR unable to conduct daily business.

Not moving to S/4 HANA will adversely impact the Department. Migrating to a third-party support provider is not a viable option because it would prohibit future enhancements. Since implementation of SAP, the Department has used the system to automate a number of CDCR business processes as well as develop new applications such as COVID-19 tracking.

CDCR would be unable to react to changes in procurement and incorporate them into the system. Additionally, the Department would not receive SAP software or security updates, and products such as Adobe used in SAP would become outdated and inoperative.

#### **Analysis of Problem**

The State's FI\$Cal system does not have the full functionality included in SAP, and moving the current CDCR financial functions to FI\$Cal and ceasing to maintain some form of the current SAP system would require the replacement of the human resources, asset management, environmental health and safety, and materials management systems, and the potential operation of parallel systems. However, CDCR will continue to work with the relevant control agencies regarding the feasibility of FI\$Cal integration for certain business functions.

CDCR estimates that the acquisition and implementation of entirely new software to support these functions would cost approximately \$70 million, based on CRCR's experience implementing similar scaled IT solutions. This does not include costs to have specialized staff running multiple different systems simultaneously as they continue to operate the unsupported SAP system while also creating new functionalities within a new management system, such as FI\$Cal. The time required to meet all impacted program areas within the Department to verify business needs and compare against existing availability on a new system could result in significant delays to crucial departmental operations.

S/4 HANA offers many improvements as compared to the current SAP software. Within S/4 Hana, the technology has become more intuitive and easy to use, processing time is faster, and mobile accessibility is available and expanding. Some examples of available improvements:

- Performance and Agility: S/4 HANA utilizes modern database technology, resulting in faster transaction processing and reporting. Reports that currently take minutes to run would generate in a few seconds. Time-driven business activities like real-time planning, execution, reporting, and analytics based on live data, as well as prompt period closing and forecasting will all improve.
- Increased Productivity: S/4 HANA analytics will allow business staff to create, run, and modify reports instantly, and not have to wait until month end or quarter end to combine multiple reports, or wait for development requests to get the necessary data. This will allow the Department to make better data-driven decisions in real time.
- Easier to Use, Easier to Learn, Easier on the Go: the Fiori Apps (mobile use apps) make
  transactions easy and user friendly; the apps can be installed on phones, tablets and run from
  browsers. Mangers can approve invoices, purchase orders, access requests, and view real
  time reports all from their phone.
- Business Process Simplification: S/4 HANA data architecture uses a new feature called Universal Journal, which combines multiple data structures into a singular database table. This results in fewer user steps to perform the same business function.

Moving to S/4 HANA now allows for continued, uninterrupted functionality; mitigation of security risks; enhanced functionality to meet the needs of the Department; and minimizes potential disruption on operations.

Although the current SAP will be available until 2027, there are several positive justifications to begin this process now. They include:

Planning to the exact deadline date for complex system migration will certainly lead to
greater issues and complications. Migration to the S/4 HANA platform now will allow time to
navigate any issues that may arise during migration so that they can be resolved before the
deadline.

#### **Analysis of Problem**

- The cost for migration will be higher and the risk of securing available vendor resources reduced the longer CDCR waits. Demand for quality skills in third party vendors will increase as other customers begin implementation, increasing the costs, and reducing the number of quality resources available. As time passes, CDCR will not have the quality support needed to make the migration, and the possibility for complications increases as quality resources and time left to migrate decrease. Beginning implementation now avoids many of the likely consequences of high demand and short supply.
- Migrating now avoids additional time, money, and contract staff to transition the additional functionality successfully.
- Staffing challenges will result if migration timelines begin too close to 2027. If the transition occurs now, the Department can utilize current staff to migrate to S/4 HANA. If transition is delayed, CDCR will likely need to request additional staff to work solely on a migration to a new platform to meet key deadlines.
- Delay could have implications with regard to contracting. CDCR encumbers the majority of its contracts for several years. Not allowing time to appropriately, accurately, and safely transfer existing contracts on an extended timeline could result in goods delivery and time management errors.
- Not having a supported and fully functional business system could generate fiscal risk. Without
  access to timely and accurate budget projections because of a loss of functionality of the
  current system, this may negatively impact business operations and prevent the Department
  from elevating concerns or issues to external agencies as needed.
- Human Resources would be impacted by any delay, largely in the potential loss of the ability to generate staffing packages, which impact payroll and benefits distribution.
- Not allowing sufficient time to train staff across CDCR's numerous divisions and offices on a
  new system prior to its implementation would result in a massive delay to business operations. If
  staff do not have adequate time to train on a new system, CDCR risks delays in being able to
  process goods to be sent to institutions.
- Medical records need to be transferred timely and accurately. Allowing the time to ensure the
  Department has accurately migrated both incarcerated individuals' and staff records will
  allow seamless business operations to continue for medical staff.

#### E. Outcomes and Accountability

#### **Business Continuity**

The most significant outcomes from approval of this request are the continuation of system support (see Attachment A).

#### **Migration Activities**

CDCR ran a SAP S/4 HANA Readiness report in 2019. At that time, 299 actions were identified for migrating to S/4 HANA. CDCR will run a SAP S/4 HANA Readiness report again at the beginning of the migration activities to identify the newest activities for migration. These activities include, among others: simplification activities for custom code remediation, business operation process, and interface adaptation. The identified activities will be the formative punch list for the project.

#### **Analysis of Problem**

#### Legacy Data Conversion

The data from the legacy source SAP environment will be extracted, converted, mapped, and loaded into the target S/4 HANA system, which will become CDCR's new system of record. Unit testing is performed and completed by the data conversion teams and business data owners, only approved S/4-ready data will be loaded into the SAP S/4 HANA target system.

#### F. Analysis of All Feasible Alternatives

<u>Alternative I:</u> Provide \$8.1 million General Fund in 2023-24, \$9.3 million in 2024-25, and \$7.8 million in 2025-26 to migrate to \$/4 HANA.

#### Pros:

- Allows CDCR to fully prepare for system migration.
- Solves the issues of system non-support.
- Allows CDCR/CCHCS to continue uninterrupted operations and realize the benefits of the newer system/service offering.
- Most economical migration option.
- Estimated to return to the current operational funding baseline after the initial investment, a better performing system and user experience, and increased business productivity.

#### Cons:

Results in additional General Fund Resources.

<u>Alternative 2:</u> Contract with third party providers to continue support of the system after SAP support stops without system migration. Estimated costs of \$100,000 one-time General Fund in 2023-24, and \$800,000 in 2027-28 and ongoing for support services.

#### **Pros:**

- The SAP system will be still be usable for some period of time.
- General Fund costs and effort of migration are avoided.

#### Cons:

- CDCR would not have access to necessary SAP software or security updates or enhancements.
- The current version of SAP will become unsupportable and eventually obsolete, leaving CDCR to seek an alternative, which could be very expensive and require a greater timeline for implementation.
- CDCR would not realize the other system benefits described in this proposal.

#### G. Implementation Plan

Planning and blueprinting for the S/4 HANA migration will begin July 1, 2023; the assessment, planning, procurement and migration will take approximately three years to complete.

#### H. Supplemental Information

Attachment A – Business Process Outline

#### I. Recommendation

Approve Alternative 1 to initiate the process of migrating to S/4 HANA in 2023-24, with costs of \$8.1 million General Fund in 2023-24, \$9.3 million in 2024-25, and \$7.8 million in 2025-26.

### **BCP Fiscal Detail Sheet**

BCP Title: BIS Migration to S4 HANA BR Name: 5225-075-BCP-2023-GB

**Budget Request Summary** 

Operating Expenses and Equipment

| Operating Expenses and Equipment       | FY23<br>Current<br>Year | FY23<br>Budget<br>Year | FY23<br>BY+1 | FY23<br>BY+2 | FY23<br>BY+3 | FY23<br>BY+4 |
|--|-------------------------|------------------------|--------------|--------------|--------------|--------------|
| 539X - Other                           | 0                       | 8,146                  | 9,252        | 7,824        | 0            | 0            |
| Total Operating Expenses and Equipment | \$0                     | \$8,146                | \$9,252      | \$7,824      | \$0          | \$0          |
| Total Pudget Peguset                   |                         |                        |              |              |              |              |

#### Total Budget Request

| Total Budget Request | FY23<br>Current<br>Year | FY23<br>Budget<br>Year | FY23<br>BY+1 | FY23<br>BY+2 | FY23<br>BY+3 | FY23<br>BY+4 |
|----------------------|-------------------------|------------------------|--------------|--------------|--------------|--------------|
| Total Budget Request | \$0                     | \$8,146                | \$9,252      | \$7,824      | \$0          | \$0          |

## **Fund Summary**

#### **Fund Source**

| Fund Source                            | FY23<br>Current<br>Year | FY23<br>Budget<br>Year | FY23<br>BY+1 | FY23<br>BY+2 | FY23<br>BY+3 | FY23<br>BY+4 |
|--|-------------------------|------------------------|--------------|--------------|--------------|--------------|
| State Operations - 0001 - General Fund | 0                       | 8,146                  | 9,252        | 7,824        | 0            | 0            |
| Total State Operations Expenditures    | \$0                     | \$8,146                | \$9,252      | \$7,824      | \$0          | \$0          |
| Total All Funds                        | \$0                     | \$8,146                | \$9,252      | \$7,824      | \$0          | \$0          |

## **Program Summary**

## **Program Funding**

| Program Funding                  | FY23<br>Current<br>Year | FY23<br>Budget<br>Year | FY23<br>BY+1 | FY23<br>BY+2 | FY23<br>BY+3 | FY23<br>BY+4 |
|----------------------------------|-------------------------|------------------------|--------------|--------------|--------------|--------------|
| 4500039 - Information Technology | 0                       | 8,146                  | 9,252        | 7,824        | 0            | 0            |
| Total All Programs               | \$0                     | \$8,146                | \$9,252      | \$7,824      | \$0          | \$0          |

# CDCR BIS SAP Migration Milestones

- Identify customizations that need to be transformed for migration
- Identify testing scenarios for user acceptance testing
- Archive data to reduce storage requirements
- Patch legacy system to recommended levels
- Customization remediation
- Fit Gap remediation

**CDCR BIS SAP Legacy System Tasks** 

#### **S/4 SAP Hana Migration Tasks**

- Hire a migration vendor
- Identify sponsors, SMEs and resources.
- Stand up governance
- Create a project plan
- Plan Technical system landscape
- License and software
- Business process fit gap analysis
- Purchase SAP Stand up target system landscape
- Migrate Transformed Legacy data into SAP S/4 target system

• User acceptance

testing

- Migrate to S/4 Hana weekend cutover
- User training
- Sponsor Sign off

- Migration complete
- Wrap up outstanding items
- Plan new technology roadmap with the business