2017 was an exciting and constructive year for California’s technology community. As technology leaders, we are pleased to see our colleagues across state government find unique and innovative ways to leverage technology to solve complex business problems and further our common goal of delivering quality services to all Californians.

This year’s Annual Report highlights many technology initiatives that improve public safety and security, enable project success, foster a dynamic and unified technology workforce, and provide efficient and effective government services through innovation. Departments and agencies have used technology to realize positive business outcomes and enhance the delivery of government services, delivering applications to improve the utilization of data and ensure the safety of our brave first responders.

In 2017, we set out to realize our shared mission, guiding principles, and objectives established in the California Technology Strategic Plan – “Vision 2020.” Through this plan we’ve set considerable goals, not just for ourselves but also for the entire statewide community and our business partners.

While “Vision 2020” is focused on the future, this report is a look back at some of our accomplishments that we achieved together as a state technology community. We should all be proud of the accomplishments highlighted in this report as they represent an important step forward towards the achievement of “Vision 2020”, “One digital government securely delivered by a dynamic workforce.”

Amy Tong
Director, California Department of Technology
State of California Chief Information Officer

Chris Cruz
Chief Deputy Director, California Department of Technology
State of California Deputy Chief Information Officer
TABLE OF CONTENTS

California Technology Strategic Plan - Vision 2020 ................................. 4
Introduction ................................................................................................. 5
Measuring IT Performance ........................................................................... 6
Improving Public Safety and the Security of Sensitive Information Assets. .... 10
Enabling Successful Project Establishment and Delivery .............................. 13
Fostering a Dynamic and Unified Technology Workforce ........................... 17
Providing Efficient and Effective Government Services Through Innovation. . 19
CALIFORNIA TECHNOLOGY STRATEGIC PLAN – VISION 2020

In 2017, the State Chief Information Officer released the California Technology Strategic Plan – “Vision 2020.” This plan is the culmination of input from hundreds of policy, program, and technology leaders representing numerous state entities, ensuring the State of California’s innovation path remains constant and transformative. California’s technology community effectively supports the delivery of critical government services to the people of California and is guided by the principles to Strive for Simplicity, Put Customers Front and Center, Be Innovative, Focus on Outcomes, Own It, and Take a Statewide Perspective. As outlined in “Vision 2020”, the state has promoted and encouraged the application of shared goals and vision to create:

“One digital government securely delivered by a dynamic workforce.”

VISION 2020 GOALS

Create One Digital Government

Increase customer satisfaction through improved responsiveness, efficiency, and effectiveness of government services.

PRIORITIES
1. Increase operational agility and performance in the delivery of technology services.
2. Improve the design and delivery of digital services.
3. Foster collaboration and boundaryless behavior.
4. Transform and simplify the way government does business through innovation.
5. Accelerate the adoption of common technology platforms and shared services.

Ensure Secure Delivery

Advance the maturity of information security across California government.

PRIORITIES
1. Protect California’s information assets and maximize data access.
2. Develop a robust and collaborative security risk reduction strategy.
3. Develop an enterprise approach to security leadership and governance.
4. Improve and invest in security capabilities to protect mission-critical systems and data.
5. Foster a security-minded culture throughout California’s workforce.

Build a Dynamic Workforce

Build a dynamic technology workforce that takes pride in delivering quality services and innovative solutions to their customers.

PRIORITIES
1. Create a culture of innovation and collaboration.
2. Develop the capabilities of both technology leaders and functional experts.
3. Improve employee engagement and increase retention of quality employees.
4. Expand our pool of skilled and experienced technology professionals.
5. Foster the advancement of a diverse and unified technology community.
INTRODUCTION

The State of California’s Information Technology (IT) community is continuously evolving and improving to provide high quality service and deliver solutions that address the state’s most critical needs. This Annual Report exemplifies the community’s efforts to achieve the shared mission, vision, and guiding principles established in “Vision 2020” by highlighting the 2017 accomplishments of California’s technology community in four primary imperatives:

**Improving Public Safety and the Security of Sensitive Information Assets** – The state continues to make great strides in improving its security posture and reducing the likelihood and severity of cyber incidents. In 2017, the state launched the first-ever statewide Security Operations Center (SOC) that protects, detects, and responds to malicious activity targeting critical technology infrastructure. The state also partnered with commercial cloud service providers to offer hybrid cloud solutions that provide state entities greater security and flexibility in meeting business needs. Additionally, the state enhanced its emergency networks to improve communication and connectivity, allowing first responders to quickly and effectively respond to statewide emergencies.

**Enabling Successful Project Establishment and Delivery** – California implemented major technology projects to support and modernize the delivery of government services. State entities currently manage more than $2.5 billion in technology projects to deliver contemporary, high value, and stable business solutions. To support these efforts, the state created new standards and methodologies to further enhance project delivery, encouraging agile practices, shared services, and statewide procurement agreements. California also adopted a human-centered design approach to ensure technology projects achieve business objectives while improving customer experience and engagement.

**Fostering a Dynamic and Unified Technology Workforce** – California continues to build an engaged, skilled, and dynamic technology workforce that supports the delivery of continuously evolving government services. In 2017, the state enhanced the capabilities of both technology leaders and functional experts through education, technical training, leadership academies, apprenticeship, and mentoring opportunities. The state leveraged communities of practice to develop skills that enable its workforce to effectively support government programs to fulfill their mission. Additionally, the state progressed towards building “One Digital Government” by fostering a diverse and unified technology workforce through enhanced communication, expanded opportunities for networking, and events that encourage the community and shared purpose.

**Providing Efficient and Effective Government Services Through Innovation** – The people and businesses of California expect modern, reliable, and secure services. The state continues to meet these expectations by providing secure government services through innovative solutions, shared knowledge, and the expanded availability of data and open source solutions. The state also continues to enhance user experiences by redesigning and standardizing its websites to help the public quickly access information they need. Additionally, the state continues to build a sustainable California by reducing its environmental footprint through energy efficient operations, renewable energy generation at state facilities, environmentally preferable state purchasing, and sustainable state-owned vehicles.
Creating Business Value through Technology

The following metrics measure the state’s performance against its strategic goals and objectives in four primary domains: Improving Public Safety and the Security of Sensitive Information Assets, Enabling Successful Project Establishment and Delivery, Fostering a Dynamic and Unified Technology Workforce, and Providing Efficient and Effective Government Services Through Innovation. These technology performance metrics are the culmination of the collaboration among California Department of Technology (CDT) and the reporting IT organizations within state government.

SECURITY

Malicious Activity Detected by the Security Operations Center

- 200+ Million Blocked Malicious Probes – Daily
- 5,504,059 Suspicious Events Detected (to date)
- 61,238 Processed Events
- 17 Notified Potential Security Incidents
- 9 Confirmed Security Incidents Detected and Reported

The number of malicious activities detected by CDT’s Security Operations Center (SOC) targeting the California Government Enterprise Network (CGEN) and other IT systems owned and/or managed by CDT. Since the SOC was established in April 2017, the numbers above only reflect April through December of 2017.

Number of Electronic Incidents Resulting in the Unauthorized Disclosure of Personal Information

- 30 2016
- 26 2016
- 1 2017
- 54 2017

The number of breaches during the calendar year that involved Personally Identifiable Information (PII) contained in lost or stolen unencrypted electronic devices and storage media. This number does not include paper and verbal releases of information.

Information Security Audits (Policy Focused)

<table>
<thead>
<tr>
<th>Completed/Planned:</th>
<th>Findings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 2017</td>
<td>2016 2017</td>
</tr>
<tr>
<td>4 10</td>
<td>39 68</td>
</tr>
<tr>
<td>7</td>
<td>70</td>
</tr>
</tbody>
</table>

The number of Information Security Audits conducted by CDT and their corresponding findings. Each audit includes a comprehensive evaluation of the state entity’s infrastructure and security practices to ensure compliance with state policy and federal standards.

Independent Security Assessments (Technical Focused)

<table>
<thead>
<tr>
<th>Completed/In-Progress:</th>
<th>Focus Areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 2017</td>
<td>- Patching across systems</td>
</tr>
<tr>
<td>54</td>
<td>- Non-supported Operating Systems in use</td>
</tr>
<tr>
<td></td>
<td>- Endpoint and internal network monitoring, alerting, and advanced protection</td>
</tr>
<tr>
<td></td>
<td>- Increase Awareness Training/Prevention in the areas of: malware introduction, password strength, and email phishing</td>
</tr>
<tr>
<td></td>
<td>- Email security has improved with cloud technologies</td>
</tr>
</tbody>
</table>

The number of Independent Security Assessments conducted by the California Military Department, or an approved third party, and a summary of their findings.
Creating Business Value through Technology

PROJECT DELIVERY

Number of Technology Initiatives in Project Approval Lifecycle

<table>
<thead>
<tr>
<th>Year</th>
<th>Approved</th>
<th>Withdrawn by State Entity</th>
<th>Approval Delegated to State Entity</th>
<th>In-Progress/Under Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>24</td>
<td>8</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>2017</td>
<td>31</td>
<td>28</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>68</td>
<td>30</td>
<td>2</td>
</tr>
</tbody>
</table>

The number of technology project proposals that state entities have submitted to CDT for review and approval through the state’s Project Approval Lifecycle (PAL). PAL is a multi-stage project planning and approval process that helps state entities develop a strong business case, clear business objectives, appropriate solutions, and more accurate costs and schedules. PAL provides flexibility to help expedite approvals for low risk projects and build additional support for more complex, high risk projects. Approval of low risk projects are delegated to state entities.

Large Projects Completed Within Schedule and Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>Large Projects Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>5</td>
</tr>
<tr>
<td>2017</td>
<td>8</td>
</tr>
</tbody>
</table>

The number of complex technology projects completed timely and within budget compared to latest approved schedule and budget (no more than 10% variance).

Average Duration of Competitive Project Procurements

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>18 months</td>
</tr>
<tr>
<td>2017</td>
<td>8 months</td>
</tr>
</tbody>
</table>

The average time it takes to complete a competitive technology procurement from initiation through contract award.

Number of Agile Development Vendors in the Pre-Qualified Vendor Pool

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>13</td>
</tr>
<tr>
<td>2017</td>
<td>24</td>
</tr>
</tbody>
</table>

The number of vendors in the Agile Development Pre-Qualified Vendor Pool. This pool facilitates greater access to competent, user-centered resources while reducing solicitation time and cost.

Projects Completed Using Agile Development Methodology

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>6</td>
</tr>
</tbody>
</table>

The number of technology projects completed using an agile development methodology. The agile methodology allows for adaptive planning, evolutionary development, rapid delivery, and flexible response to change.
Creating Business Value through Technology

WORKFORCE

Number of Individuals Completing IT Leadership Training

- 2016: 141
- 2017: 95

The number of state IT professionals completing IT leadership training.

Number of Individuals Completing Project Management and Procurement Training

- 2016: 702
- 2017: 272

974 total

The number of professional state project stakeholders who have taken an active role in improving their project management and procurement skills.

Number of Classes Offered through CDT’s Training Center

- 2016: 50
- 2017: 20

70 total

The number of classes available to all state entities through CDT’s Training Center, new classes include leadership, soft skills, and technical training.

INNOVATION

Number of Software as a Service (SaaS) Cloud Services Offered through the State Data Center

- 2016: 6
- 2017: 11

The number of cloud-based SaaS solutions offered to all state entities through the state data center as part of its Vendor Hosted Subscription Services (VHSS).

Number of State Entities Using Software as a Service (SaaS) Cloud Services Offered through the State Data Center

- 2016: 67
- 2017: 76

The number of state entities using cloud-based SaaS solutions offered through the state data center as part of its Vendor Hosted Subscription Services (VHSS).

Number of State Entities Using Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) Cloud Services Offered through the State Data Center

- 2016: 0
- 2017: 18

The number of state entities using cloud-based IaaS and PaaS solutions.
### INNOVATION

#### Number of High Value Data Sets Available to the Public

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sets</td>
<td>325</td>
<td>848</td>
<td>1,173</td>
</tr>
</tbody>
</table>

The number of cumulative open data sets available to the public. High value data sets increase state entity’s accountability and responsiveness, increase public knowledge, improve operations, further the core mission, create economic opportunity, and respond to needs and demands identified by the public.

### Number of State Contributed Open Source Code Sets

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Sets</td>
<td>0</td>
<td>78</td>
<td>78</td>
</tr>
</tbody>
</table>

The number of state contributed open source code sets made broadly available to other state entities and the public through a central code repository.

#### Statewide Email Consolidation

**Number of Mailboxes Migrated**

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailboxes</td>
<td>40,000</td>
<td>145,613</td>
<td>185,613</td>
</tr>
</tbody>
</table>

The number of state entities and respective mailboxes migrated to a single statewide cloud-based email system, improving communication and interdepartmental collaboration.

**Number of State Entities Migrated**

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entities</td>
<td>12</td>
<td>62</td>
<td>74</td>
</tr>
</tbody>
</table>

The number of digital services accessible through the California State Portal (www.ca.gov) to provide point of delivery for common public services to the people of California.

#### Number of Unique Page Views of All Websites Within the CA.gov Domain

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page Views</td>
<td>1,700,182,658</td>
<td>1,751,455,163</td>
<td>3,451,637,821</td>
</tr>
</tbody>
</table>

The number of unique page views of all websites within the CA.gov domain.

#### Number of Digital Services Accessible Through the CA State Portal (CA.gov)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>0</td>
<td>63</td>
<td>63</td>
</tr>
</tbody>
</table>

The number of digital services accessible through the California State Portal (www.ca.gov) to provide point of delivery for common public services to the people of California.
IMPROVING PUBLIC SAFETY AND THE SECURITY OF SENSITIVE INFORMATION ASSETS

Through proactive leadership, California continues to overcome information security challenges that threaten its technology infrastructure and vast information assets. In 2017, the State of California continued to fortify its security posture and strengthen its preparedness and cyber-defense strategy through the California Cybersecurity Integration Center (Cal-CSIC), in partnership with the California Department of Technology (CDT), the California Governor’s Office of Emergency Services (Cal OES), the California Highway Patrol (CHP), and the California Military Department (CMD).

Measuring Cybersecurity Effectiveness

The California Cybersecurity Maturity Metrics provide an objective way to measure the effectiveness of each state entity’s cybersecurity program. Administered by CDT’s Office of Information Security (OIS), the maturity metrics cover foundational elements that are common among successful cybersecurity programs—e.g. policies, governance, and system categorization. The maturity metrics include 34 key controls, and focus on measures that provide the highest return on investment—leveraging existing information sources where possible. As a result, state entities will benefit from greater cybersecurity visibility, better decision-making, and greater efficiencies in resource allocation and overall security spending. The California Cybersecurity Maturity Metrics are weighted, and scoring is based on a “0” (low program maturity) to “4” (high program maturity) scale. To promote greater transparency, metrics will be published online through a dashboard which will include the maturity scores of individual entities, rolling up to the agency and statewide level. The dashboard will be available on CDT’s website in Fall 2018.

National Institute of Standards and Technology (NIST) Cybersecurity Framework

Comprehensive Audit Program

CDT’s OIS provides a comprehensive audit program to evaluate an entity’s infrastructure and security practices to ensure compliance with state policy and federal standards. Entities chosen for audit are considered high risk based on an analysis of the following factors: data that the entity stores, nature of their business, maturity of their overall information security program, and the threats that the entity faces are at a level that necessitate a high level of attention and monitoring. Entities identified as high risk will be selected to enter a 4 year audit oversight schedule during which one Standard Audit and one Check-In Review of the entity is conducted. The Standard Audit will include a risk informed review of an entity’s information security program while the Check-In Review is a more tightly scoped evaluation focusing on progress with findings identified in the earlier Standard Audit, as well as pulling key maturity metrics from the entities’ environment. CDT’s OIS is comprised of the following three distinct functional groups:

- **Advisory Services**: Provides training workshops, consultation services, tools, and resources to support the state’s information security workforce. These services include pre and post audit workshops for state entities undergoing Information Security Audits.

- **Audit Research**: Analyzes documentation from the state entity and other sources, and prepares preliminary documentation for review.

- **Audit Program**: Provides independent and objective assurance and consulting activities designed to improve the state’s security operations and ensure compliance with state and federal standards. The Audit Program also performs on-site verification and validation of processes and policies to ensure compliance with state requirements.
Protecting Critical Infrastructure and Assets Through Security Operations Center

To build upon Cal-CSIC, CDT launched the first-ever statewide SOC. CDT’s SOC protects against malicious activity targeting the California Government Enterprise Network (CGEN) – which is the state’s wide area network, as well as IT systems owned or managed by CDT. This 24/7/365 operation utilizes a unique staffing model to continuously monitor for malicious activity.

Cal-CSIC’s mission is to provide curated cyber threat intelligence as well as large scale IT incident response to state and local government and beyond. CDT’s SOC will regularly interact with Cal-CSIC to exchange valuable cyber threat intelligence and support the Cal-CSIC incident response mission as needed. This new and critically beneficial capability will continue to be expanded and matured to realize security benefits for the state and its constituents.

Enhanced Security Through Hybrid Cloud Strategy

In an increasingly digital era, state government and consumers of technology services expect greater agility and increasing returns on their technology investments. They want modern, reliable, secure, and innovative solutions for the people and organizations they serve. Cloud computing continues to be the technology of choice for meeting these growing demands through on-demand, self-service computing, in a pay-as-you-use model. To further realize the benefits of cloud, CDT has updated the state’s cloud computing policy and increased secure commercial cloud service offerings to enable rapid acquisition of cloud infrastructure technologies through pre-existing contracts.

CDT’s new hybrid cloud service offerings establish a channel between commercial IT service providers and state and local business partners, providing greater flexibility and more opportunities to meet program needs than previously possible. These off-premises Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) cloud services represent a step forward in terms of security, meeting stringent Federal Risk and Authorization Management Program (FedRAMP) requirements. FedRAMP is a U.S. government-wide program that provides a standardized approach to security assessment, authorization, and continuous monitoring for cloud products and services. FedRAMP includes hundreds of security controls that enable state entities to protect their most sensitive, unclassified data in cloud computing environments. As cyber threats grow more sophisticated, it is the government’s responsibility to continuously innovate in order to make sure its vital information assets are protected and secure.

Did You Know?

As part of the Department of Motor Vehicles (DMV) Payment Card Industry Data Security Standard (PCI DSS) compliance initiative DMV eliminated risks associated with processing credit card information. All credit card numbers are redirected to a secure third party partner and all backup PCI data was completely deleted. Tokenization standards were also implemented to mask existing credit card information. The project was successfully implemented in October 2017.
Protecting Sensitive Documents

To replace the non-secure methods of sending and receiving case documentation via email and fax, the Office of Administrative Hearings (OAH) implemented a browser-based secure file transfer system for electronic filing and service of case-related documents. Secure e-File encrypts files both in transit and at rest, complying with the Health Insurance Portability and Accountability Act (HIPAA) security requirements. Additionally, the application provides easy accessibility, a user-friendly interface, automatic confirmation of receipt notification, and 24/7 availability. Secure e-File has successfully launched in all OAH offices and currently has over 1,500 users and 14,000 transferred documents.

Enhanced Emergency Logistics and Communication

The California Department of Forestry and Fire Protection (CAL FIRE) significantly enhanced its emergency management capabilities by implementing new emergency equipment and vehicle locator technologies. These improvements allow CAL FIRE to quickly locate and dispatch critical equipment and vehicles throughout the state, during emergencies. Additionally, CAL FIRE implemented a new wide-area communication network to improve communication, connectivity, and resilience during critical emergencies. Both of these efforts have improved CAL FIRE’s ability to respond quickly and effectively to statewide emergencies. They also ensure that CAL FIRE responders can communicate quickly and access critical equipment when working in changing and often dangerous conditions.

Health and Safety - Employee Medical Records

The California Department of Corrections and Rehabilitation (CDCR) Environmental Health and Safety program established a medical record keeping system through three modules: a respiratory protection program, a vaccination and immunization program; and a tuberculosis screening program. The system runs through CDCR’s Business Information System and tracks the immunization status of flu and tuberculosis vaccinations for the department’s 60,000 employees. Previously done on spreadsheets, the system now has real-time compliance reporting that is tied to the employee master record.
California continues to implement major technology projects to support and modernize the delivery of government services. State entities currently manage more than $2.5 billion in technology projects to bring contemporary, high value, and stable solutions to meet business and user needs. To support these efforts, the state created new standards and methodologies to further enhance project delivery, encouraging agile practices, shared services, and statewide procurement agreements. California has also adopted a human-centered design approach to ensure it achieves its business objectives while improving customer experience and engagement.

Expanded Resource Library

CDT supports the successful delivery of IT projects for the State of California by providing practical guidance and templates to project practitioners. To further enhance the project resource library and help achieve successful project outcomes, CDT recently launched a series of comprehensive frameworks and tools tailored to government technology initiatives:

- **California Agile Framework (CA-Agile):** Provides practical guidance for understanding, planning, and managing iterative incremental project delivery activities within California government.
- **California Organizational Change Management Framework (CA-OCM):** Provides project practitioners with a guide for managing change within an organization in order to achieve business outcomes associated with a new mandate, process, technology, or strategy.
- **California Business Process Re-engineering Framework (CA-BPR):** Provides guidance on business process re-engineering methods and approaches to assist organizations in optimizing their business processes to leverage and maximize the capabilities of technology.
- **Open Source and Software Development Lifecycle (SDLC) Plans and Tools:** Open Source Tools provide a platform to access and share custom developed code for reuse. SDLC Plans and Tools provide templates, instructions, and sample content that can be adjusted and scaled based on project size and complexity.
- **Security and Project Management Framework:** Provides templates for guidance and insight on security and project management methods, with justifications for why specific activities should be performed.

**Licensing of Medicinal and Adult-Use Cannabis**

The Medicinal and Adult-Use Cannabis Regulation and Safety Act mandated state entities to create a state regulatory system for commercial cannabis businesses in California. A cross-agency team consisting of the Department of Consumer Affairs, Bureau of Cannabis Control (BCC), the California Department of Food and Agriculture (CDFA), the California Department of Public Health (CDPH), and CDT created a statewide architecture to ensure a coordinated and collaborative approach to licensing cannabis. In December 2017, BCC, CDFA, and CDPH successfully launched online licensing services for retailers, distributors, testing laboratories, microbusinesses, cultivators, nurseries, processors, and manufacturers. These services provide the capability to efficiently regulate cannabis businesses, track trends and patterns, and document investigations and enforcement actions. These online services enable businesses and consumers to more easily and efficiently participate in the regulated cannabis industry.
Modernizing Technology Procurement

The Department of General Services (DGS) and CDT have partnered to improve the way the state acquires technology. The IT Procurement Modernization Project will enable the effective and efficient delivery of technology solutions through simplified processes, consolidation of duplicate or redundant procurement methods, and standardized solution offerings. As a result, the modernized procurement process will enhance data collection, reduce cost and improve the state’s security posture. Specific benefits include:

• Reduce: the number of steps in the IT procurement processes
• Offer: better and more affordable IT services to state entities
• Eliminate: overlapping roles and responsibilities between DGS and CDT
• Leverage: the purchasing power of the state to reduce overall cost
• Negotiate: contracts with product vendors, where feasible, to improve the enforcement of standard contract terms and conditions
• Improve: the statewide comprehensive accounting of all IT expenditures

Improve the Adoption of IT Accessibility Standards

To enable state entities to easily adopt key accessibility concepts, thereby improving access to government services, the IT Leadership Academy 24 class developed Access IT California, sponsored by the Department of Rehabilitation (DOR). This centralized website of samples, techniques, guides, resource/reference materials, and worksheets serves as a model to help state agencies and departments build accessibility into IT systems. Access IT California is geared towards addressing the lack of internal capability, understanding, and skillsets that many state entities struggle with when attempting to comply with IT accessibility requirements. By making it easier to find accessibility related information, California’s state entities and any end users browsing the site will benefit from this project as they can become more self-reliant when implementing accessibility. This capability will allow systems to be designed considering the needs of all users, including those with accessibility or specific usability needs. Ultimately, all Californians and State employees will benefit from systems that are designed with accessibility and user experience in mind.

Visit Access IT California at: dor.ca.gov/access-IT/index.html

Did You Know?
The Department of Managed Health Care (DMHC) enhanced the premium rate review section of its public website with the goal of making the site more informative, user friendly, and easier for the public to view and comment on health plan proposed rates. The DMHC reviews proposed health plan rate changes and asks health plans questions about their changes to make sure health plans are providing detailed information to the public to support any rate increases. The Health Plan Rate Review Enhancement Project provides information on the rate review process and health care costs. The enhanced website now includes the ability to sign-up for email notifications on rate filings, a user friendly public comment process and the ability to quickly locate specific rate filings. The project also automated manual processes and reconciled rate filing data that saved rate reviewers time, enabling staff to complete concurrent review and analysis of multiple health plan’s rate filings.
Modernizing California’s Financial Management System

Due to California’s large and continuously evolving economy, the state’s aging legacy systems no longer support the state’s financial management and business process needs. To address the limitations of these legacy systems, the California Department of Finance (DOF), in partnership with the Department of General Services (DGS), State Controller’s Office (SCO), and State Treasurer’s Office (STO) jointly developed the Financial Information System for California (FI$Cal). The FI$Cal System re-engineered and consolidated the state’s entire financial management process into a single financial management system, encompassing budgeting, accounting, procurement, cash management, vendor management, and asset accounting functions. When fully deployed, FI$Cal will process approximately $2 trillion in banking transactions each year and approximately $400 billion in annual spending. The system will also be used by over 15,000 users from more than 150 state entities. Through ease of use, system stability, and improved functionality, the FI$Cal System enables more informed decision making while eliminating data redundancy, streamlining financial data processing, and reducing manual data entry. FI$Cal furthers the state’s goal of providing a transparent financial management system for the State of California.

Improving Customer Service through Data Transparency

To address the frustration and complaints about the long, unknown customer service wait times, the Franchise Tax Board (FTB) developed a mobile-responsive Customer Service Dashboard to display contact center wait times and processing time frames to the public. This simple and fully-accessible dashboard provides customers with wait time expectations at a glance to help them make informed decisions on the most efficient way to contact FTB. All customers who need to contact FTB to resolve their tax matters can benefit from using the Customer Service Dashboard. In only three months, there were over 300,000 visits to the Dashboard, proving how valuable it is to FTB’s taxpayers and practitioners. The fully disclosed wait times and processing time frames create a level of transparency that puts customers first, while also providing a positive customer experience.

Creating a Shared Vision for Enterprise Human Resources

The State of California, through the California Civil Service Improvement (CSI) Initiative, has championed the modernization of statewide Human Resources (HR) processes. To advance this initiative, the Enterprise Human Resource (EntHR) program was established as a statewide cross-agency initiative designed to create a unified enterprise standard and a common approach towards addressing HR technology needs. Co-chaired by the California Department of Human Resources (CalHR) and SCO, EntHR established a shared vision and strategy for HR management, aligned and prioritized workforce investments, and provides guidance for departments to ensure their specific initiatives achieve defined business results based on a statewide strategic roadmap. A primary goal of EntHR is to ensure the State of California has the ability to manage more accurate and comprehensive employee data through common data sets and a central data repository.
Streamlining Health Care Data for Inmate Patients

Since 2008, California Correctional Health Care Services (CCHCS) has continuously improved the management of health care for inmates in California’s 35 state prisons by transitioning from a paper-based records system to a fully Electronic Health Record System (EHRS). EHRS has streamlined all aspects of medical and mental health care to help CCHCS increase patient safety and improve outcomes for patients. The last of 15 rollouts concluded on October 31, 2017. EHRS is now live at all 35 prisons statewide, providing real-time data and processing over 8 million transactions per day. Dental records will be added this summer.

Enhancing Access to Parolee Information

In partnership with San Diego County Probation, CDCR developed a mobile application, known as Virtual Integrated Mobile Office (VIMO), to provide Parole Agents, Office of Correctional Safety, and Office of Internal Affairs’ staff access to real-time parolee information. Up-to-date details about the supervised offenders has been critical to enhancing agents’ abilities to confirm parolees are complying with the conditions of their release from prison. The implementation of VIMO increased the efficiency of the Record of Supervision (ROS) business function by 57%, allowing agents to maximize the amount of time spent on supervising offenders in the community. By eliminating the dependency of manual notes, paper-based files, and administrative tasks, VIMO successfully improved business processes and access to parolee information, while increasing officer and public safety. Additionally, with the talk-to-text feature, parole agents are able to enter text as fast as they can speak, improving the quantity and quality of information about the parolees. This information sharing and collaboration between state and county government exemplifies the innovative approach of VIMO’s open source platform.

Supporting Contamination Cleanup

The Department of Toxic Substances Control (DTSC) deployed its Environmental Data Management System (EDMS) to support the cleanup and investigation of lead-contaminated soil at properties in areas surrounding the former Exide Technologies battery recycling facility in the City of Vernon. This information system manages data and generates reports to increase the efficiency of removing the contaminated soil. The EDMS solution also contains a mobile application, allowing data to be conveniently collected in the field. This allows DTSC to collect data in real-time when broadband connectivity is available, or to store and sync it later. DTSC’s business processes have benefited from this access to real-time data and the automating of manual tasks, resulting in an increase in productivity towards alleviating the contaminated areas.
FOSTERING A DYNAMIC AND UNIFIED TECHNOLOGY WORKFORCE

California continues to develop an engaged, skilled, and dynamic technology workforce that provides the strategic leadership and functional expertise necessary to create innovative solutions and deliver continuously evolving government services. The state strives to attract, develop, and retain a workforce that enables government programs and departments to fulfill their mission. As outlined in “Vision 2020”, the state has promoted and encouraged the application of a shared vision, mission, and guiding principles. As such, California continues to expand the capabilities of both technology leaders and functional experts through education, technical training, and leadership academies. To facilitate more relational and collective learning, California has encouraged formal and informal mentoring and the establishment of communities of practice. Through enhanced communication, expanded opportunities for networking, and events that encourage the deepening of community and shared purpose, the state is progressing towards fostering a diverse and unified technology workforce to achieve the goal of building “One Digital Government.”

Partners in Professional Development

CDT’s Office of Professional Development (OPD) is focused on developing an adaptable, sustainable, skilled, and engaged technology workforce that enables state entities to fulfill their mission. As such, OPD provides a strong framework to support workforce investment across the IT community. This strategy includes a mindful blend of education, training, and leadership academies. Subject matter experts within CDT have developed a number of educational sessions on trending topics such as the project approval lifecycle and information security foundations. The sessions are hosted at CDT’s training center and are offered at no cost to government employees. Through partnerships with certified instructors, a variety of training classes are made available for open registration. Training is offered through courses that are developed and administered on a standardized curriculum and through those that have been customized to incorporate state policy, guidelines, and templates. The final piece of this partnership in professional development is conducted through leadership academies. The Information Technology Leadership Academy (ITLA) and the Project Management Leadership Academy (PMLA) both launched cohorts in 2017, and additional academies focusing on information security and digital services are currently under development.

Helping Teachers Save for Retirement

In March 2017, the California State Teachers’ Retirement System (CalSTRS) launched the redesign of the 403bCompare.com website, which provides financial awareness tools and retirement resources to help California school employees make informed decisions about retirement savings. Through a more user-friendly interface, the site strives to clarify investments terminology and increase participation in 403(b) retirement savings accounts. With a 220% increase in site user traffic and 403(b) account enrollments within the first six months of the launching the new site layout, the comprehensive redesign proved its success in simplifying financial information, statistics, and data for its members.
Developing the Next Generation of Project Leaders

PMLA inaugurated its first cohort this year. With executive sponsorship from FTB and the California Health and Human Services Agency (CHHS), this 11-week workforce development program has been created for state IT professionals and focuses on developing essential project management and leadership skills. The program is designed for project managers with experience on small scale projects who aspire to manage large, complex, IT projects. The framework includes a mindful blend of structured curriculum and mentoring through an internship component. What differentiates PMLA from other leadership academies is the full-time internship component, in which participants apply what they learned in the classroom through on-the-job practical experience working on large scale projects. Mentors from some of the largest and most complex state IT projects have generously dedicated their time to invest in PMLA interns to guide them through the challenges and the opportunities associated with larger IT projects. Experience gained through this program is applied to the participant’s sponsoring departments, which directly supports an investment in developing a strong foundation of project managers across the state.

Creating a Path into the IT Workforce through Apprenticeships

In partnership with the Government Operations Agency (GovOps), the Labor and Workforce Development Agency launched the IT Apprenticeship Program in July 2017 with the goal of providing professional growth and upward mobility opportunities for state employees. The program offers the necessary instruction, training, and experience to transfer or promote into an IT position within state service. This two year program consists of on-the-job training and community college classes, with a cohort of up to 30 state employee apprentices. After completing the program, apprentices will meet the minimum qualifications for an Associate Information Systems Analyst and will be eligible to apply for the exam. The IT Apprenticeship Program is critical towards recruiting, developing, and retaining the next generation IT workforce. Those who work in the greater Sacramento area and meet specific criteria are encouraged to apply for this program. For more information, visit: www.seiu1000.org/grow.

Did You Know?

ITLA kicked off its 25th year in 2017. ITLA is a robust professional development program for state IT professionals focused on developing leadership skills. During the course of the academy, students attend a combination of dynamic classroom sessions and are exposed to a number of leadership development experiences, such as, Walk Like a Leader and the CIO Academy. The ITLA program is continually evaluated and the framework is updated annually. Changes to ITLA 25 included a timeline reduction from nine to seven months, updated curriculum, and a modified approach to the class project.
PROVIDING EFFICIENT AND EFFECTIVE GOVERNMENT SERVICES THROUGH INNOVATION

In today’s continuously changing landscape, the state’s technological capabilities are evolving to meet public needs. California is focused on improving efficiency and agility through active engagement with other government entities by capitalizing on technology to enhance business performance. By providing more user-centric websites and improving access to data, state IT has become more proactive, efficient, and effective in the business of government to ultimately benefit the people of California.

Enhancing Digital Services

California’s web efforts continue to develop with the goal of providing user-centric websites to increase customer satisfaction through improved responsiveness, efficiency, and effectiveness of government services. The following web efforts highlight California’s commitment to continuously improving the delivery of digital services to users and empowering state entities to be more user-centered, responsive, and innovative.

Traveling with Technology

With approximately 32 million registered vehicles on the road and the average driver traveling approximately 13,000 miles per year, the California Department of Transportation (Caltrans) is always looking to keep people and commerce moving. California’s transportation system has made quite a journey from wagon routes used to transport supplies for gold miners and merchants to today’s State Highway System. Caltrans’ QuickMap is the latest innovation to help today’s travelers get from Point A to Point B. QuickMap is a mobile application that provides real-time, interactive, and responsive information on California road conditions and traffic. It provides information on lane and road closures due to construction and maintenance activities, incidents on the roadways, Changeable Message Sign information, camera snapshots, chain control information, snow plows, and traffic speeds for State Highways. QuickMap makes it easier for travelers to leverage the state’s vast collection of data to make informed decisions on the best route to their destination and helps alleviate congestion as travelers decide to take alternate, less impacted routes. Turn on QuickMap the next time you decide to check out some of the beautiful destinations of our great state.

Travel with QuickMap at: quickmap.dot.ca.gov/

California Immigrant Guide: Helping All Californians Thrive

California is home to the largest population of immigrants in the country. In an effort to integrate immigrants, California offers many innovative services that help immigrants become part of the social, economic, and civic fabric of our state. The Governor’s Office, in collaboration with entities across state government, created the Immigrant Guide (www.immigrantguide.ca.gov). This guide features services that help immigrants thrive and succeed in their path towards integration. Immigrants seeking help with English language learning, workforce skill development, naturalization preparation, or legal assistance, can find information on available services throughout the state. This comprehensive and easy-to-use web-based guide features four main program areas: Learn English, Find Jobs and Training, Education, and Legal Help and Citizenship. To ensure the immigrant guide is broadly accessible, it was designed to be fully ADA compliant and was translated into the most common languages spoken by California immigrants and refugees including: Arabic, Armenian, Cantonese, Farsi, Khmer, Korean, Mandarin, Russian, Spanish, Tagalog, and Vietnamese. The guide is updated regularly to include resources that center on current events and contains many other resources available for California’s immigrant community.

Visit California’s Immigrant Guide at: www.immigrantguide.ca.gov
Code Reuse Through Open Source Technology

California is committed to improving the way state entities acquire, build, and deliver technology solutions to support cost efficiency, effectiveness, and the public’s experience with government programs. Increasing the reuse of custom-developed code across state government can have significant benefits for taxpayers, including decreasing duplicative software development efforts for similar code. CDT developed code.ca.gov to be California’s central repository for open source code produced by state agencies, departments, and partners. This site allows source code that has been custom-developed for the State of California to be broadly available for reuse across state government in a consistent manner. As California continues to mature and develop open source code solutions, code.ca.gov will help facilitate greater sharing of publicly derived and developed open source code for more cost-efficient development endeavors and technology operations. As an integral part of future software development efforts, code.ca.gov will provide improved access to the state’s software investment and encourages inter-government partnerships and public collaboration around the public’s code.

Web Standardization - Creating a Consistent User Experience

The state has embraced the notion that “the lives of Californians are improved through the use of digital services.” The CA.gov portal delivers more than 63 digital services over multiple channels that were previously difficult to find, or only available in person, and has increased public awareness through the use of emergency banners and links to vital information. Under the leadership of GovOps, CDT redesigned the standard template for state government websites through a user-centered approach. By centralizing and standardizing access to key government information, the state is providing services that are robust and always available to meet the demands of California’s fast-paced lifestyle, while ensuring available, highly secure services so the people of California are confident their personal data is protected. The new template provides all state government websites a way to display services consistently across the CA.gov domain. In order to promote this statewide look and feel, state entity webmasters are given a uniform pallet of tools designed to ensure consistency, improved accessibility, and responsive design across their website that promotes the CA.gov brand as well as contributes to a familiar user experience.

Explore California State Parks

The California Department of Parks and Recreation made it significantly easier to book an adventure at California’s beautiful state parks. Reserve California™, a recreation sales and reservations management platform, allows park patrons to purchase or reserve multiple state park amenities in a single web-based transaction through an easy-to-use online interface. The new system provides detailed inventory management functionality linked to interactive maps, real-time information for availability, sales, transactions, and check-in status, and advanced business intelligence analytics for comprehensive ad hoc reporting. The system also includes specialized functions for tours, groups and pass management and validation, patron outreach, social media campaigns, and community engagement. Reserve California™ has a similar look and feel that consumers are familiar with when booking commercial hotels, airline tickets, and other comparable services.
Greening the State’s Vehicle Fleet

As California continues to reduce its environmental footprint through sustainable state government operations and practices, the state has undertaken an ambitious effort to promote a reliable, environmentally responsible, and cost effective vehicle fleet. The state fleet consists of approximately 50,000 assets spread amongst various state entities. In 2007, legislation was enacted that established a goal of reducing or displacing the consumption of petroleum products by the state fleet by 10 percent in 2012 and by 20 percent in 2020 (compared to a 2003 baseline). The Green Fleet website (www.green.ca.gov/fleet) tracks petroleum and alternative fuel consumption and measures the state’s progress towards meeting consumption and emission reduction goals through data metrics and visual diagrams. California exceeded the 2012 goal of a 10 percent reduction and is on pace to exceed the 2020 goal of reducing petroleum consumption by 20 percent.

Unlocking the Potential of Data

The rapid pace of change and complexity inherent in our societal, organizational, and technological systems requires the state to leverage its collective knowledge and not only work across organizational silos, but also share information with its people. Fostering boundaryless behavior and providing greater access to data brings government closer to its people and promotes growth and progress.

Consolidated Immunization Records

The California Immunization Registry (CAIR) is a secure, confidential immunization information system for California residents. Prior to the CAIR2 Project, the CAIR system consisted of 10 distinct regional immunization registries, each accessible online to help providers and other authorized users in each region track patient immunization records, reduce missed opportunities, and help fully immunize Californians of all ages. The CAIR2 Project consolidated immunization records from seven separate regional registries across the state into a single state registry to provide more accurate and complete immunization histories. In 2018, CAIR2 will be fully populated with statewide immunization data so that medical care providers can determine which immunizations children and adults have received and which are due, regardless of where in California a child or adult received their immunizations. Prior to CAIR2, when people moved to different areas or providers, they may not have access to their immunization history, forcing providers to decide between potentially over- or under-immunizing patients.

Did You Know?

CDCR developed a barcode scanning process to prevent inmates from going through the food line multiple times and picking up or not picking up specialty meals (religious diet, vegan, medical diet). This system replaces a manual tracking process with wireless handheld scanners that scans barcodes on inmates’ ID cards. Through this innovative approach, CDCR expects significant cost reductions associated with greater efficiencies in the food preparation process.
Natural Resources Open Data and Analytical Eco-System

The California Natural Resources Agency (CNRA) utilized open source technologies to architect and implement an improved “New-Style” Open Data and Data Analytical eco-system. This new data eco-system will help the Agency transform into a true open data culture, enhancing data sharing across the agency’s various program areas and changing the way it interfaces and provides information to its constituencies, stakeholders, partners, and the public. The new eco-system is an interoperable environment that supports the entire data information value chain including: collection; analytics; visualization; and publishing. This eco-system will create useful, transparent, and accessible data for the people of California.

DMV Enhances Reliability

In October 2016, DMV experienced a statewide service disruption of its vehicle registration system. The disruption involved critical infrastructure being housed on outdated systems that were no longer supported by its manufacturer. In order to ensure interruptions in service do not reoccur, the department moved the DMV Automation system and DMV’s Business Partners processors to a high availability environment hosted by CDT. As a result, if components do fail, it minimizes the risk of another statewide service disruption.

Innovation Incubator

CHHS has invested in incubator teams to improve service delivery and demonstrate how innovative ideas and approaches can be scaled and translated into better project and programmatic outcomes. Two-thirds of CHHS departments have invested in incubator teams with a collective goal to sustain a culture of innovation and demonstrate how government can, and should, be responsive to the needs of Californians. An initial group of over 100 change agents have been experimenting with the incubator projects, a few examples include:

- Created a user-centered digital application, with the private sector, used an agile development process to improve consistency with licensing and certification investigations.
- Created a transformative eligibility model that empowered counselors to facilitate same-day expedited enrollment in vocational services for individuals with disabilities. Those who request enrollment in services are now assumed eligible, rather than having to wait a prerequisite number of days.
- Challenged historical assumptions with data and analytics by collaborating across three departments to improve child-hunger program enrollment rates and targeting local outreach with geo mapping tools and resources.

“Building an environment friendly to innovation means not being afraid to fail. Encouraging calculated risk-taking enables a government to successfully deliver for Californians.”

- Michael Wilkening, Undersecretary of CHHS

Did You Know?

During open enrollment, Covered California produced videos featuring member success stories highlighting why health insurance coverage is so important. The videos were featured on social media and increased Covered California’s engagement rate to 24%, exceeding their goal by 21%. These compelling stories can be viewed at: www.coveredca.com/realstories/.

The California State Information Data Exchange System (CA-SIDES), administered by the Employment Development Department (EDD), helps employers process Unemployment Insurance information while reducing errors that are common with paper-based processes. CA-SIDES incorporates a nationally-standardized format that streamlines communications, while providing fast and secure data transmission. The system was developed through a strategic partnership between the U.S. Department of Labor, the National Association of State Workforce Agencies, and state Unemployment Insurance (UI) agencies.
We would like to acknowledge the following individuals and thank them for their contributions to the California Information Technology Annual Report.

Lori Ajax, Chief, Bureau of Cannabis Control, Department of Consumer Affairs
George Akiyama, Chief Information Officer, California Department of Transportation
Andrew Armani, Agency Chief Information Officer, Government Operations / Business, Consumer Services and Housing Agency
Darrin Bender, Director of Government Affairs, California Military Department
Cheryl Carlson, Manager, California State Lottery
Shanda Chaudhry, Assistant Deputy Director of the Strategic Planning and Communications Division, Financial Information System for California
Gil Chavez, Deputy Director for Infectious Diseases, California Department of Public Health
Cathy Cleek, Ret. Chief Information Officer, Franchise Tax Board
Jim Culbeaux, Chief Information Officer, Department of Industrial Relations
Scott Davidson, Section Chief, California Department of Corrections and Rehabilitation
Adam Dondro, Agency Chief Information Officer, California Health and Human Services Agency
Stuart Drown, Deputy Secretary for Innovation and Accountability, California Government Operations Agency
Kenneth Foster, Manager, California Military Department
Niles Friedman, Executive Advisor - Innovation, California Health and Human Services Agency
Mario Garcia, Deputy Commander of Cal-CSIC, California Governor’s Office of Emergency Services
Tim Garza, Agency Chief Information Officer, California Natural Resources Agency
Lynda Gledhill, Deputy Secretary for Communications, California Government Operations Agency
Erica Gonzales, Chief, IT Consulting Unit, Department of Finance
Sergio Gutierrez, Agency Chief Information Officer, California Environmental Protection Agency
Kelly Hassenplug, Manager, California Health and Human Services Agency
Dave Hawley, Program Manager, California Department of Corrections and Rehabilitation
Cheryl Holtinger, Project Director, California Department of Food and Agriculture
Scott Howland, Chief Information Officer, California Highway Patrol
Ashish Jain, Chief Technology Officer, California State Teachers’ Retirement System
Marcie Kahbody, Deputy Secretary and Agency Chief Information Officer, California State Transportation Agency
Jon Kirkham, Deputy Director, Department of Rehabilitation
Cheryl Larson, Chief Information Officer, California Correctional Health Care Services
Anna Leano, Project Director, California State Teachers’ Retirement System
Ricardo Martinez, Branch Chief, Department of General Services
Khaim Morton, Deputy Secretary for Legislation, California Government Operations Agency
Subbarao Mupparaju, Deputy Director and Chief Information Officer, Financial Information System for California
Russ Nichols, IT Director and Agency Chief Information Officer, California Department of Corrections and Rehabilitation
Gary Nodine, Deputy Director and Chief Information Officer, California Department of Public Health
Krista Noonan, Director of Communications, California State Teachers’ Retirement System
George Okamoto, Agency Chief Information Officer, Labor and Workforce Development Agency
Gail Overhouse, Deputy Director and Chief Information Officer, Employment Development Department
James Parsons, Team Chief of Cyber Networks Defense, California Military Department
Jason Piccione, Deputy Director and Chief Information Officer, California Department of Consumer Affairs
Jerry Powers, Director of Adult Parole Operations, California Department of Corrections and Rehabilitation
Angelica Quirarte, Assistant Secretary for Digital Engagement, California Government Operations Agency
Dave Rechs, Deputy Secretary for Human Resources, California Government Operations Agency
Chris Riesen, Deputy Director and Chief Information Officer, California State Lottery
Jan Ross, Deputy Treasurer and Chief Information Officer, State Treasurer’s Office
Karen Ruiz, Chief Technology Officer and Chief Information Officer, California Department of Health Care Services
Lisa Senitke, Agency Chief Information Officer, California Department of Veterans Affairs
Angela Shell, Deputy Director and Chief Procurement Officer, Department of General Services
Carla Simmons, Chief Information Officer, California Governor’s Office of Emergency Services
Valerie Stanfield, Manager, Department of Rehabilitation
Keith Tresh, Director of Performance Improvement, California Government Operations Agency
Julie Whitten, Assistant Secretary for Innovation and Accountability, California Government Operations Agency
Michael Wilkening, Undersecretary, California Health and Human Services Agency
Myra Yeung, Manager, Financial Information System for California

We would also like to thank California Department of Technology staff for their contributions to the development of this report.
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOE</td>
<td>Board of Equalization</td>
</tr>
<tr>
<td>BCC</td>
<td>Bureau of Cannabis Control</td>
</tr>
<tr>
<td>CA-PMO</td>
<td>California Project Management Office</td>
</tr>
<tr>
<td>CA-SIDES</td>
<td>California State Information Data Exchange System</td>
</tr>
<tr>
<td>CAIR</td>
<td>California Immunization Registry</td>
</tr>
<tr>
<td>Cal-CSIC</td>
<td>California Cybersecurity Integration Center</td>
</tr>
<tr>
<td>CAL FIRE</td>
<td>California Department of Forestry and Fire Protection</td>
</tr>
<tr>
<td>CalHR</td>
<td>California Department of Human Resources</td>
</tr>
<tr>
<td>Cal OES</td>
<td>California Office of Emergency Services</td>
</tr>
<tr>
<td>CalSTRS</td>
<td>California State Teachers' Retirement System</td>
</tr>
<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>CCHCS</td>
<td>California Correctional Health Care Services</td>
</tr>
<tr>
<td>CDCR</td>
<td>California Department of Corrections and Rehabilitation</td>
</tr>
<tr>
<td>CDFA</td>
<td>California Department of Food and Agriculture</td>
</tr>
<tr>
<td>CDPH</td>
<td>California Department of Public Health</td>
</tr>
<tr>
<td>CDT</td>
<td>California Department of Technology</td>
</tr>
<tr>
<td>CDTFA</td>
<td>California Department of Tax and Fee Administration</td>
</tr>
<tr>
<td>CGEN</td>
<td>California Government Enterprise Network</td>
</tr>
<tr>
<td>CHHS</td>
<td>California Health and Human Services Agency</td>
</tr>
<tr>
<td>CHP</td>
<td>California Highway Patrol</td>
</tr>
<tr>
<td>CMD</td>
<td>California Military Department</td>
</tr>
<tr>
<td>CNRA</td>
<td>California Natural Resources Agency</td>
</tr>
<tr>
<td>CSI</td>
<td>Civil Service Improvement</td>
</tr>
<tr>
<td>DCA</td>
<td>Department of Consumer Affairs</td>
</tr>
<tr>
<td>DGS</td>
<td>Department of General Services</td>
</tr>
<tr>
<td>DIR</td>
<td>Department of Industrial Relations</td>
</tr>
<tr>
<td>DMHC</td>
<td>Department of Managed Health Care</td>
</tr>
<tr>
<td>DMV</td>
<td>Department of Motor Vehicles</td>
</tr>
<tr>
<td>DOF</td>
<td>Department of Finance</td>
</tr>
<tr>
<td>DOR</td>
<td>Department of Rehabilitation</td>
</tr>
<tr>
<td>DTSC</td>
<td>California Department of Toxic Substances Control</td>
</tr>
<tr>
<td>EDD</td>
<td>Employment Development Department</td>
</tr>
<tr>
<td>EHRS</td>
<td>Electronic Health Record System</td>
</tr>
<tr>
<td>EntHR</td>
<td>Enterprise Human Resource</td>
</tr>
<tr>
<td>ERS</td>
<td>Environmental Remediation System</td>
</tr>
<tr>
<td>FedRAMP</td>
<td>Federal Risk and Authorization Management Program</td>
</tr>
<tr>
<td>FISCal</td>
<td>Financial Information System for California</td>
</tr>
<tr>
<td>FTB</td>
<td>Franchise Tax Board</td>
</tr>
<tr>
<td>GovOps</td>
<td>Government Operations Agency</td>
</tr>
<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>IaaS</td>
<td>Infrastructure as a Service</td>
</tr>
<tr>
<td>ITLA</td>
<td>Information Technology Leadership Academy</td>
</tr>
<tr>
<td>MApLE</td>
<td>Mobile Application for Licensing and Enforcement</td>
</tr>
<tr>
<td>NASCIO</td>
<td>National Association of State Chief Information Officers</td>
</tr>
<tr>
<td>NIST</td>
<td>National Institute of Standards and Technology</td>
</tr>
<tr>
<td>OAH</td>
<td>Office of Administrative Hearings</td>
</tr>
<tr>
<td>OASIS</td>
<td>Occupational Safety and Health Appeals Board (OSHAB) Appeals Scheduling and Information System</td>
</tr>
<tr>
<td>OIS</td>
<td>Office of Information Security</td>
</tr>
<tr>
<td>OPD</td>
<td>Office of Professional Development</td>
</tr>
<tr>
<td>OSHAB</td>
<td>Occupational Safety and Health Appeals Board</td>
</tr>
<tr>
<td>OTA</td>
<td>Office of Tax Appeals</td>
</tr>
<tr>
<td>PaaS</td>
<td>Platform as a Service</td>
</tr>
<tr>
<td>PCI DSS</td>
<td>Payment Card Industry Data Security Standard</td>
</tr>
<tr>
<td>PII</td>
<td>Personally Identifiable Information</td>
</tr>
<tr>
<td>PMLA</td>
<td>Project Management Leadership Academy</td>
</tr>
<tr>
<td>ROS</td>
<td>Record of Supervision</td>
</tr>
<tr>
<td>SaaS</td>
<td>Software as a Service</td>
</tr>
<tr>
<td>SCO</td>
<td>State Controller’s Office</td>
</tr>
<tr>
<td>SOC</td>
<td>Security Operations Center</td>
</tr>
<tr>
<td>STO</td>
<td>State Treasurer’s Office</td>
</tr>
<tr>
<td>UI</td>
<td>Unemployment Insurance</td>
</tr>
<tr>
<td>VHSS</td>
<td>Vendor Hosted Subscription Services</td>
</tr>
<tr>
<td>VIMO</td>
<td>Virtual Integrated Mobile Office</td>
</tr>
</tbody>
</table>