



California
DEPARTMENT OF TECHNOLOGY

CALIFORNIA INFORMATION TECHNOLOGY ANNUAL REPORT 2018

Edmund G. Brown Jr,
Governor

Marybel Batjer,
Secretary, California Government Operations Agency

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





LETTER FROM THE STATE CIO AND DEPUTY STATE CIO



The close of the 2018 calendar year opens the door for changes throughout California. The new administration will voice new priorities that will continue to propel the state toward realizing one digital government securely delivered by a dynamic workforce. In fact, as we write this message we are looking to the future – both near and far – and envision the continued adoption of technologies and policies that will benefit every Californian by enabling government services that are more innovative, efficient and effective.



While this report highlights many of California's technology outcomes, we'd be remiss not to mention the state's ranking in the 2018 Digital States Survey: This biennial, national survey benchmarks government use of digital technologies to improve service delivery, increase capacity and reach policy goals. In 2018, California's grade rose from an overall B+ to A- as a result of improvements in several key survey categories. We took first place in the Public Safety category as well as third place in two others, making us one of only three states in the nation to receive three category awards for the year. This improvement validates the hard work and collaborative spirit of CDT and our government technology partners. It also proves that we are making a difference in the delivery of secure, quality services across the state.

The foundational work and forward-looking initiatives we put forth this year will help make the transition to a digital government as seamless as possible. This is evidenced by Vision 2020, our technology strategic plan that lays out goals and priorities for coming years that will improve our lives in the future. Vision 2020 is the voice of a united, statewide, interconnected community striving to innovate and simplify in an effort to put the people of California first.

As you read this report, please take a moment to consider the significance of how the state's technologists have successfully partnered with program owners across government, as well as private sector vendor partners, to deliver successful outcomes. Our IT community continues to demonstrate the agility and scalability necessary to adapt to an ever-changing technology landscape and deliver a broad scope and high degree of services to benefit the people of California.

Here's looking forward to a productive and successful 2019.

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.....	12
Enabling Successful Project Establishment and Delivery	15
Fostering a Dynamic and Unified Technology Workforce	19
Providing Efficient and Effective Government Services through Innovation.....	21
Acknowledgements.....	25
Abbreviations and Acronyms	27

CALIFORNIA TECHNOLOGY STRATEGIC PLAN - 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



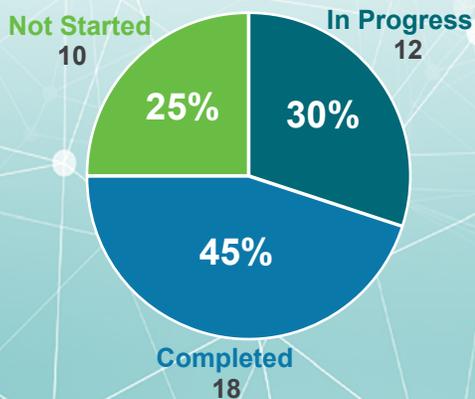
Build a dynamic technology workforce that takes pride in delivering quality services and innovative solutions to their customers.

PRIORITIES

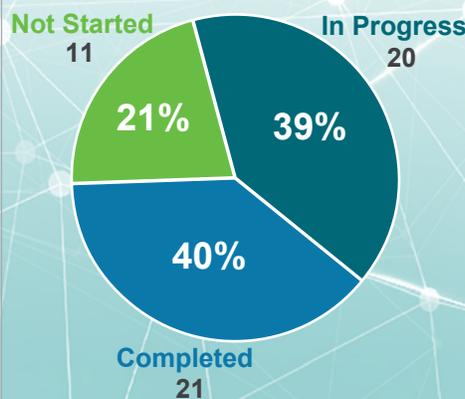
1. Create a culture of innovation and collaboration.
2. Develop the capabilities of both technology leaders and functional experts.
3. Improve employee engagement and increase retention of quality employees.
4. Expand our pool of skilled and experienced technology professionals.
5. Foster the advancement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

Since releasing Vision 2020, CDT's executive leadership team and members of the IT community have been actively engaged in implementing the initiatives and tactics associated with each of the goal areas. The graphs below show the percentage of initiatives that have been completed to date for each of the Vision 2020 goal areas.

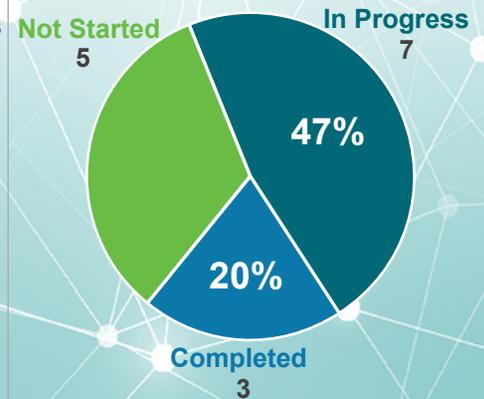
INITIATIVE PROGRESS



INITIATIVE PROGRESS



INITIATIVE PROGRESS



INTRODUCTION

California is home to a diverse population, but all of its people share the need for accessible, efficient and effective government services. Even this need can be as diverse as the population itself. In response, the state's Information Technology (IT) community must be responsive, innovative, productive and accountable. How the State of California, in partnership with private sector and local government entities, accomplishes the monumental task of delivering projects and secure cyber infrastructures across various government bodies is highlighted in this Annual Report. This document reflects the shared mission, vision and guiding principles established in *Vision 2020: California Technology Strategic Plan*.



Improving Public Safety and the Security of Sensitive Information Assets – The deliberate theft of California's sensitive information is illegal and intolerable. Building a robust cybersecurity infrastructure is one of the state's top initiatives as it works to stiff-arm cyber criminals before they can snatch the data of Californians and wreak havoc on government and commercial information assets. Whether it is bolstering email security or securing the cloud computing environment, California is leading the charge for cybersecurity.



Enabling Successful Project Establishment and Delivery – Like every state, California relies on IT projects to implement new technologies that deliver an array of projects aimed at modernizing vital services. However, when you are home to nearly 40 million people and the world's fifth-largest economy, the business-as-usual approach to problem solving cannot keep pace with the rapid evolution of technology. To ensure it meets best practice standards, the state's technology community has adopted a human-centered design approach that begins by identifying problems from the customer's point of view.



Fostering a Dynamic and Unified Technology Workforce – California's vast public technology needs must be met with a skilled workforce. The state continues to work on new ideas and initiatives that will deliver a pool of capable workers and strategic leaders who can create innovative solutions for evolving government services. Since California's leaders should spend time focusing on business needs rather than technical ones, the state strives to attract, develop and retain a professional technology workforce to move California ever closer to the goal of being One Digital Government.



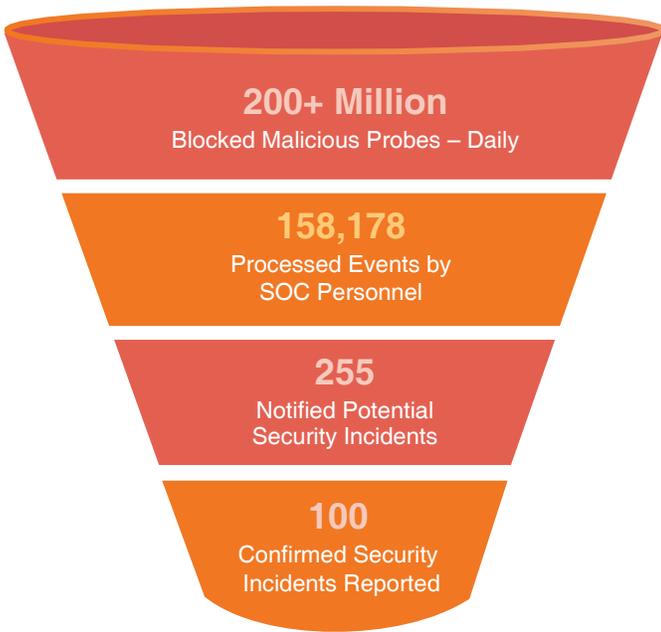
Providing Efficient and Effective Government Services through Innovation – The state pushes itself to improve efficiency and agility by capitalizing on innovative technology solutions. Renowned for delivering information-supported business programs and processes, California has created a litany of proactive and effective technology assets. Making innovation a part of the way Californians live and work changes – for the better – the way we live and work.

Measuring IT Performance

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 between California Department of Technology (CDT) and the reporting IT organizations within state government.

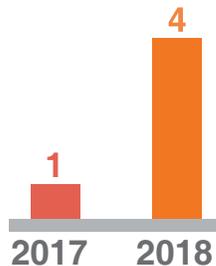
SECURITY

Malicious Activity Detected by the Security Operations Center



The number of malicious activities detected in 2018 by CDT's Security Operations Center (SOC) targeting the California Government Enterprise Network (CGEN) and other IT systems owned and/or managed by CDT.

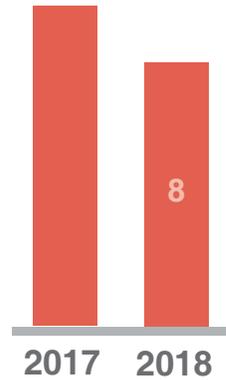
Number of Electronic Incidents Resulting in the Unauthorized Disclosure of Personal Information



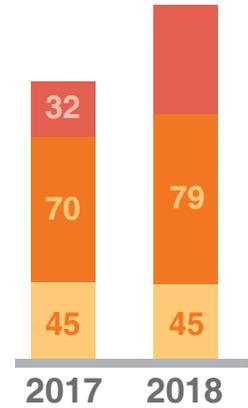
The number of breaches during the calendar year that involved Personally Identifiable Information (PII) contained in lost or stolen unencrypted electronic devices and storage media. This number does not include paper and verbal releases of information.

Information Security Audits (Policy Focused)

Completed:



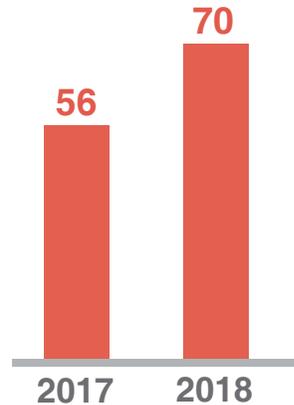
Findings:



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)

Completed/ In-Progress:



Focus Areas:

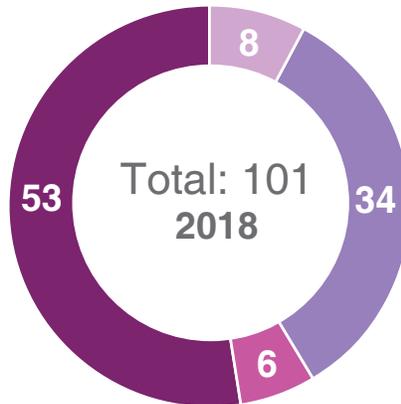
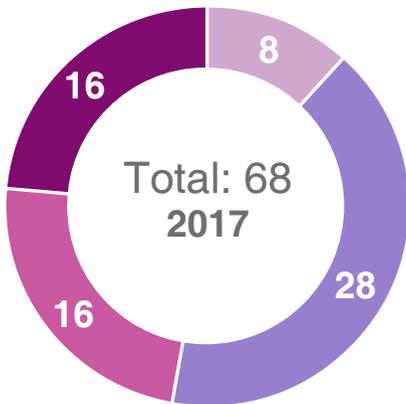
- Asset Management
- Continuous user training against Phishing attacks
- Consistent Patching for vulnerabilities
- Removing and Upgrading Non-supported Operating Systems
- Continuous monitoring through Next Generation, Application-aware advanced endpoint protection
- Cloud Security configurations

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

Measuring IT Performance

PROJECT DELIVERY

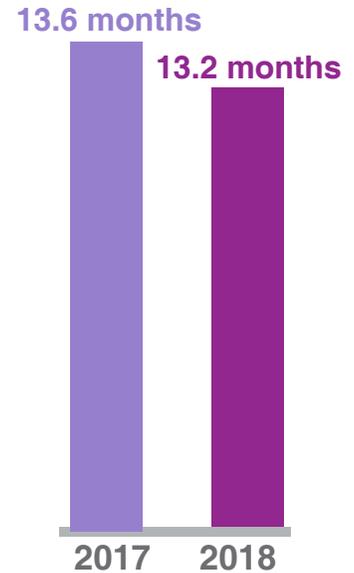
Number of Technology Initiatives in Project Approval Lifecycle



- Approved
- Approval Delegated to State Entity
- Withdrawn by State Entity
- In-Progress/Under Review

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.

Median Time to Complete the Project Approval Lifecycle



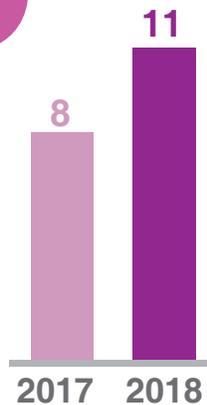
The median time frame to complete the Project Approval Lifecycle from Stage 1 to Stage 4.

Median Duration of Competitive Project Procurements



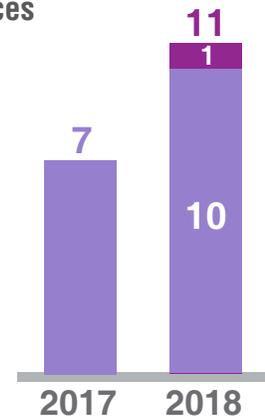
The median time it takes to complete a competitive technology procurement from initiation through contract award.

Large Projects Completed Within Schedule and Budget



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

Number of Projects with Major Variances



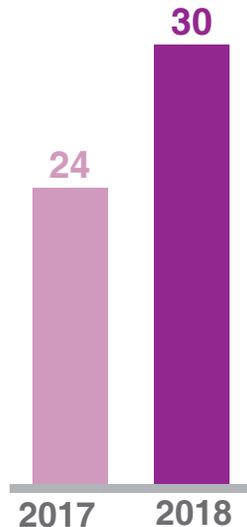
- Special Project Reports (SPRs) associated with projects approved through the former Feasibility Study Report (FSR) process
- SPRs associated with projects approved through the new Project Approval Lifecycle process

The number of Special Project Reports (SPRs) submitted for non-delegated projects. SPRs are required for project schedule, cost, or scope variances in excess of 10% (See the "Continuous Improvements to the Project Approval Lifecycle" story on page 15 for more information).

Measuring IT Performance

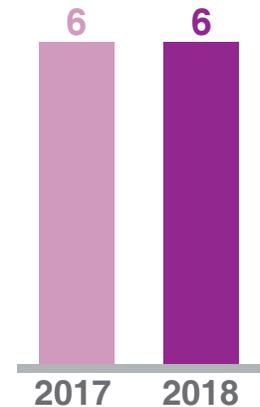
PROJECT DELIVERY

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



The Pre-Qualified Vendor Pool facilitates greater access to competent, user-centered resources while reducing solicitation time and cost.

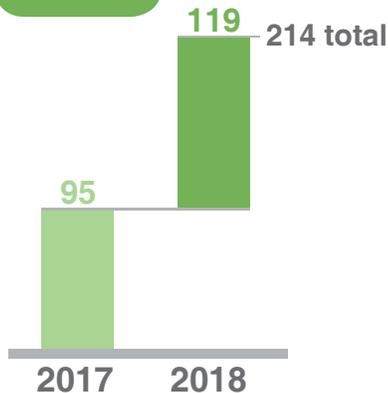
Projects Completed Using Agile Development Methodology



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.

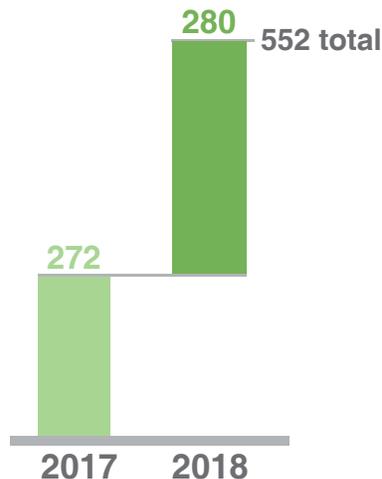
WORKFORCE

Number of Individuals Completing IT Leadership Training



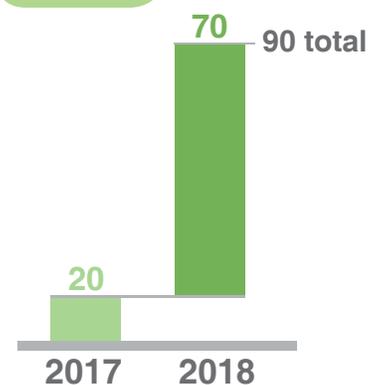
The number of state IT professionals completing IT leadership training.

Number of Individuals Completing Project Management and Procurement Training



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

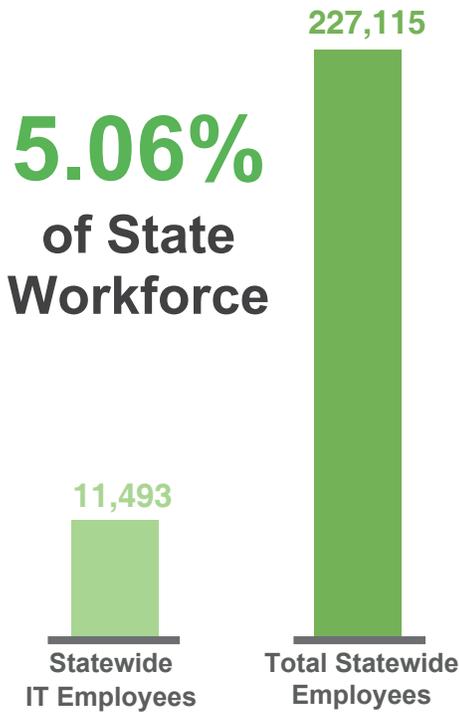


The number of classes available to all state entities through CDT's Training Center, new classes include leadership, soft skills, and technical training.

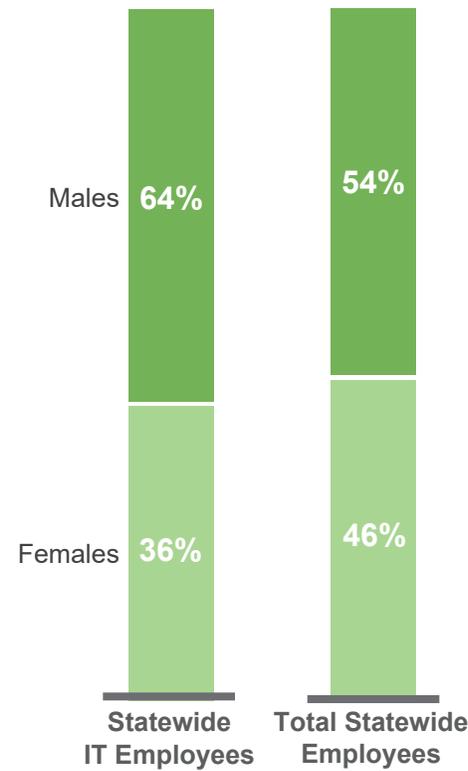
Measuring IT Performance

STATEWIDE IT WORKFORCE DEMOGRAPHICS

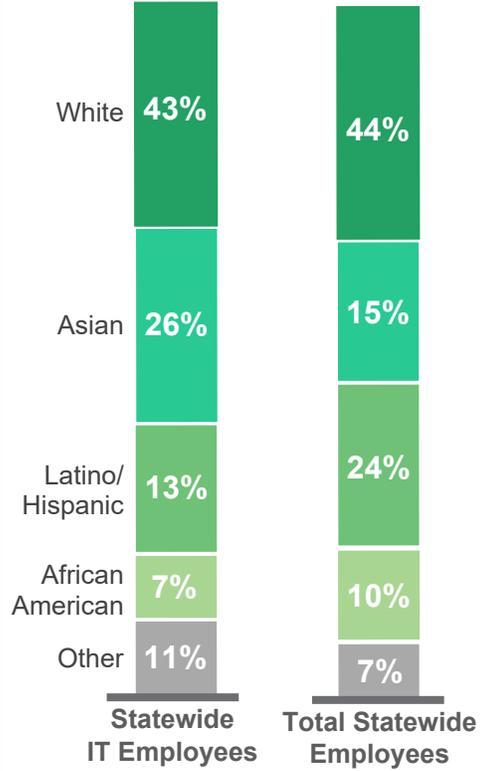
State IT Employees vs. State Employees



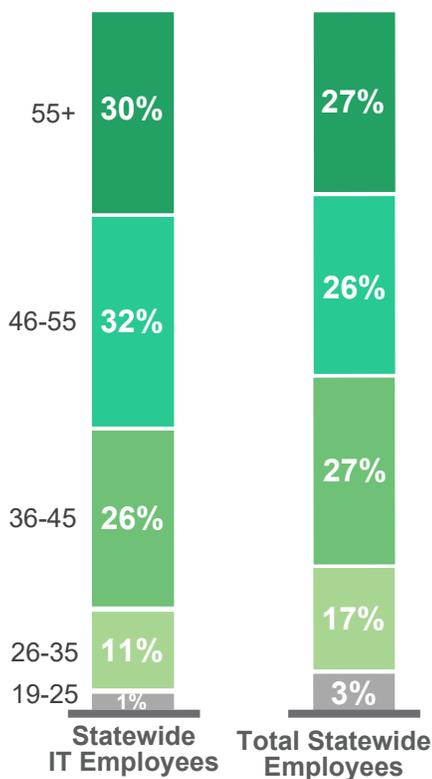
Gender



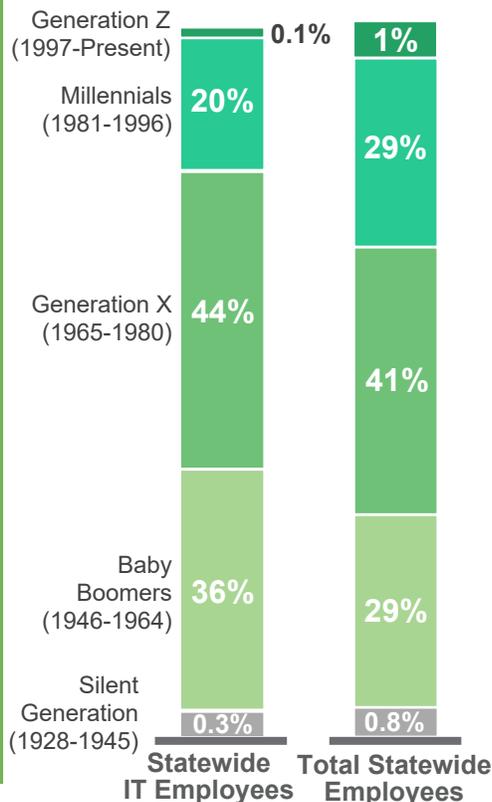
Ethnicity



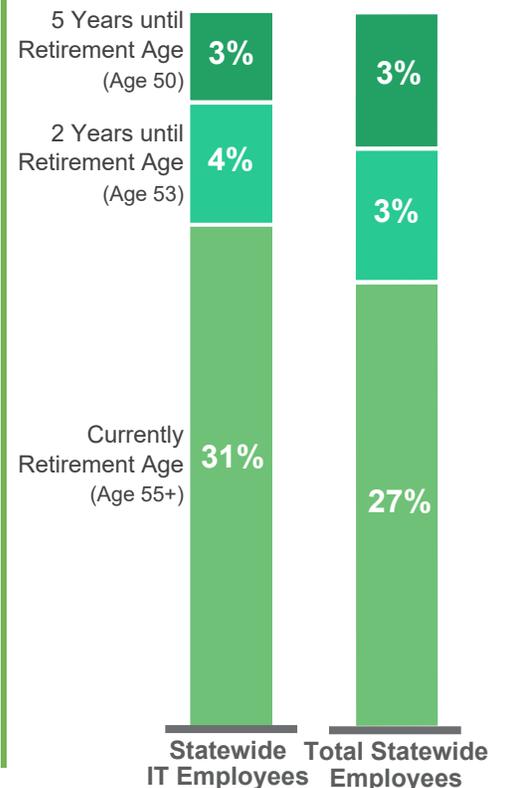
Age



Generation



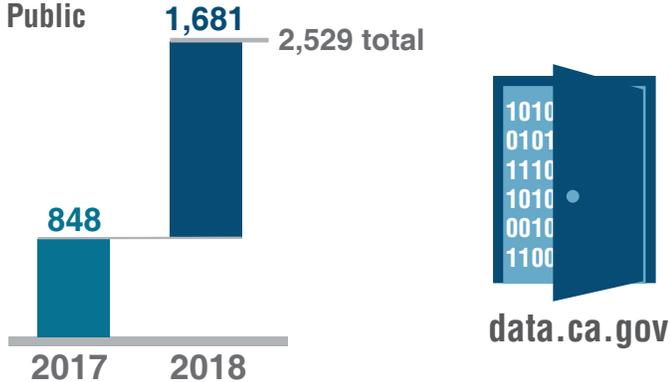
Range to Retirement



Measuring IT Performance

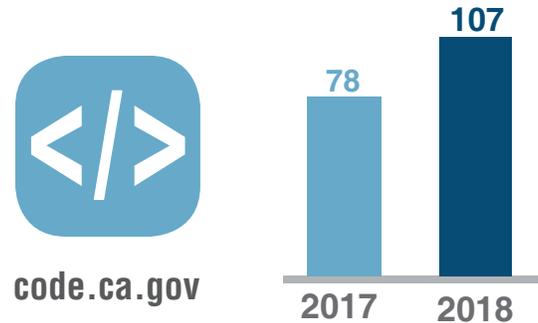
INNOVATION

Number of High-value Data Repositories Available to the Public



The number of cumulative open data repositories available to the public. High-value data repositories 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.

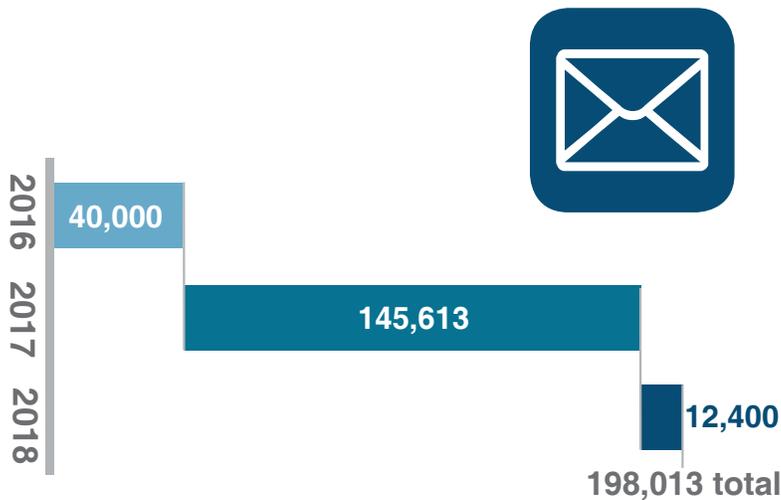
Number of State Contributed Open Source Code Sets



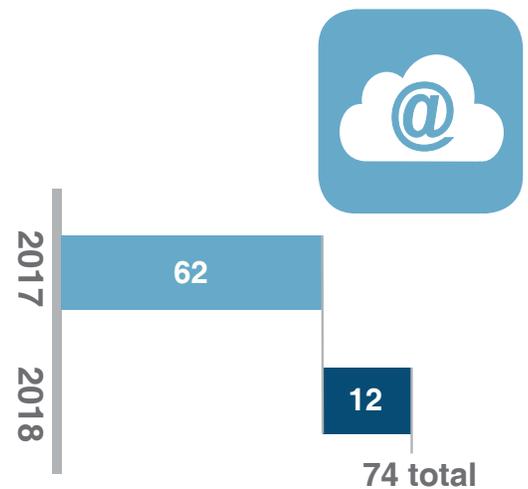
The number of state contributed open source code sets made broadly available to other state entities and the public through a central code repository.

Statewide Email Consolidation

Number of Mailboxes Migrated



Number of State Entities Migrated



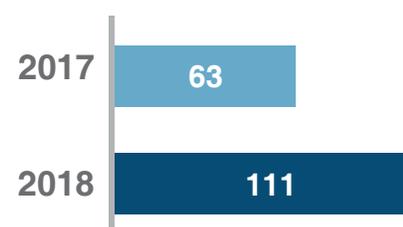
The number of state entities and respective mailboxes migrated to a single statewide cloud-based email system, improving communication and interdepartmental collaboration.

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



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)



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.

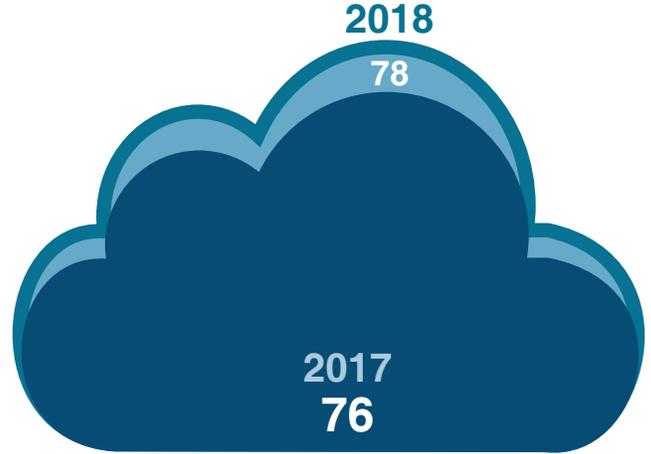
Measuring IT Performance

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



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).

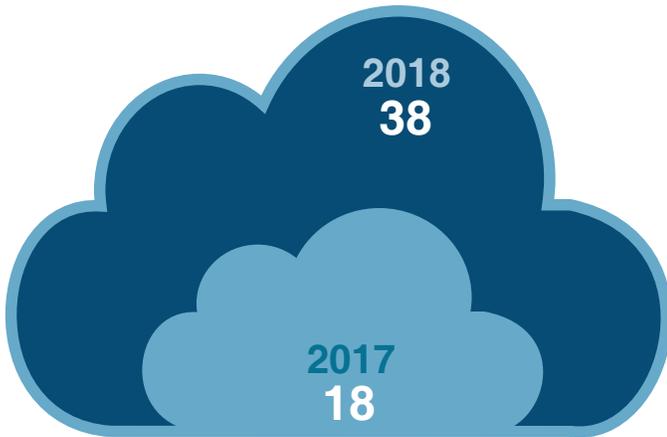
Number of State Entities Using Software as a Service (SaaS) Cloud Services Offered through the State Data Center



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).

State Entities Subscribing to Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) Cloud Services Offered through the State Data Center

Number of Services Utilized



The number of state entities using cloud-based IaaS and PaaS solutions offered through the State Data Center.

Total Subscriptions for Services Utilized



The total amount spent on subscriptions by state entities using cloud-based IaaS and PaaS solutions offered through the State Data Center.



IMPROVING PUBLIC SAFETY AND THE SECURITY OF SENSITIVE INFORMATION ASSETS

Data theft is a malicious trend that shows no sign of slowing. Cyber thieves continue to devise innovative and deceptive ways to wreak havoc on government and commercial information infrastructures to achieve a simple goal: Steal as much sensitive data as possible. In response, the California Department of Technology (CDT), in partnership with the California Cybersecurity Integration Center (Cal-CSIC), has been raising the bar on combating data theft by building robust, statewide cybersecurity infrastructures that it believes will thwart data thieves' best efforts. Working in cooperation with other public entities and private-sector vendors, California continues to develop new policies, strategies and initiatives that stiff-arm cyber thieves. From bolstering email security to ensuring a secure cloud computing environment, the state is leading the charge for cybersecurity.

Expanded Secure Cloud Service Offerings

As government entities look for ways to reduce the cost of computing infrastructures, improve scalability, and ease the financial burden of system maintenance, cloud computing has become more widely adopted by state and local governments. As a result, the need for cloud cybersecurity measures – ensuring the safety of Californian's data – has become more evident than ever. To meet this growing need, CDT expanded its cybersecurity risk management services through a statewide contract administered by the Department of General Services (DGS) to include the Federal Risk and Authorization Management Program (FedRAMP) Moderate as a critical component of its cloud services. Simply put, FedRAMP is a U.S. government program that establishes a standardized approach for validating that cloud services are secure. FedRAMP offers independent, third-party validation of a cloud provider's security posture and a standardized approach to security assessments, authorization and continuous monitoring for cloud products and services. Available to all state agencies and departments, as well as to California cities and counties, FedRAMP Moderate provides a significant level of security and infrastructure standardization. Leveraging the State of California's robust buying power, this single state contract provides cloud services to government customers at discounted prices, up to 9 and one-half percent, with additional volume discounts available for select providers. Service providers include Amazon, Microsoft and recently added IBM.



[Learn more about FedRAMP at fedramp.gov](http://fedramp.gov)

Protecting Californians' Sensitive Information

The Employment Development Department (EDD) implemented software to help protect customer identities and ensure customers have a secure platform to store sensitive information. The new Benefit Programs Online (BPO) portal provides customers the convenience of a single sign on to access EDD's mission-critical benefit systems. Hundreds of thousands of users rely on these high-visibility and essential benefits, including 832,697 registered users on State Disability Insurance Online and 726,230 registered users on Unemployment Insurance Online. In addition to enhanced protections for customers, the deployment of identity management software gives EDD a better decision-making tool while reducing overall operational cost and risk.



[Visit the new BPO Portal at edd.ca.gov/benefit_programs_online.htm](http://edd.ca.gov/benefit_programs_online.htm)

California Joins National Emergency Communications Network

FirstNet is a secure and interoperable broadband solution that ensures first-responder communications will always function even during significant emergency situations. The FirstNet network grew out of the 9/11 Commission recommendation calling for interoperable communications for all U.S. first responders. Through a 25-year agreement between FirstNet and AT&T, first responders are able to use the same network that local consumers and businesses use. However, during an emergency when networks become congested and disrupt communications, the FirstNet system gives first responders priority to preempt access on the AT&T network. Since California, represented by the California Governor's Office of Emergency Services (Cal OES), opted in to FirstNet as one of the first five adopting states, all 50 states, including the District of Columbia and territories of Puerto Rico and the U.S. Virgin Islands, have followed suit. As a result, AT&T will build and maintain the FirstNet LTE network and gain access to a broadband spectrum licensed to FirstNet throughout the United States and its territories.



[Learn more about FirstNet at firstnet.gov](http://firstnet.gov)

Strengthening Email Security

Since its inception, email has been a favorite target for cyber criminals hoping to steal data, user credentials and other sensitive information. Today, email continues to be the most common method used to gain unauthorized access to perpetrate cyber fraud. To address the ever-evolving threat landscape and improve overall email security, CDT has released new statewide email security policies and migrated 76 state entities – almost 200,000 mailboxes – off-premises to Microsoft's Office 365 Exchange Online Protection solution in California's government cloud. Previously, state departments acquired email licenses on an individual basis making it difficult for the state to ensure a high-degree of security for users. This consolidation to a single, secure, cloud-based email system and platform permits CDT to secure its data so that it meets the highest levels of security compliance, including that of the national FedRAMP standard. Additionally, this statewide email solution also improves interdepartmental collaboration through shared email addresses and calendaring, enabling more efficient and effective business practices.

Did You Know?



California's
Cybersecurity
4-Core

Partnership was a finalist in the National Association of State Chief Information Officers (NASCIO) "State CIO Special Recognition" award. This partnership, including CDT, Cal OES, Cal-CSIC, the California Highway Patrol (CHP), and the California Military Department (CMD), was formed to protect California's cyber assets. In 2017, CDT launched the Security Operations Center (SOC) to monitor the California Government Enterprise Network (CGEN) and the California's Wide Area Network (CWAN) and exchange critical cyber intelligence with its 4-Core partners.

Did You Know?



The Electronic Health Record System (EHRS) was

a finalist in the NASCIO “Digital Government: Government to Citizens” award and won a Best of California award for “Best Application Serving an Agency’s Business Needs.” After years of collecting reams of paper forms and scanning them into electronic files, the California Correctional Health Care Services (CCHCS) transitioned to a fully integrated electronic system for its 35 participating California locations. Through EHRS, CCHCS can provide greater operational efficiencies and documentation compliance, and ensure that clinically relevant patient documentation resides in a single patient record.

Video Surveillance of Prisons

The California Department of Corrections and Rehabilitation (CDCR) set a goal to increase public safety and provide a secure environment for inmates and staff participating in rehabilitative programs. CDCR believes that reducing the amount of contraband introduced into the state’s prisons will diminish crime and foster a more rehabilitative environment for inmates. To that end, CDCR launched a multi-layered approach to fighting contraband in state prison facilities. A key component of this effort is a state-of-the-art audio/video surveillance system to assist in maintaining the safety and security of staff by monitoring criminal activity, in real-time or after the fact, as it occurs. Additional system benefits include providing a mechanism to review and address allegations of staff misconduct and access to video evidence of criminal behavior where available.

As of June 2018, CDCR has implemented the system at two of its adult institutions: High Desert State Prison in Susanville and Central California Women’s Facility in Chowchilla. The audio/video recording systems cover areas that include inmate housing, rehabilitative programming and culinary spaces, as well as recreational yards. While the project has been approved for a statewide implementation, additional installations are contingent on budget appropriations.



The video surveillance system mitigates lengthy investigations by providing CDCR with ‘irrefutable evidence’ in identifying criminal behavior.

Endpoint Encryption

Endpoint Protection, Detection, and Response (EPP/EDR) is a leading technology that shields endpoint devices from malicious threats and compromise. The methods applied are several fold but most interesting is the use of machine learning and artificial intelligence as a key element of those protections. Endpoint devices include PCs, laptops, tablets, and servers which may have access to sensitive data and business processes. If malicious actors succeed in compromising these devices, they may then gain access to those data and processes which may include confidential data held by the state.

California Information Security Policy requires all state entities to protect their endpoint devices, this is generally done in a variety of ways including EPP/EDR technologies. To enforce this requirement, the California Department of Technology, Office of Information Security (OIS), has developed an Endpoint Protection Policy standard which updates and revises state policy (SIMM Section 5355) to establish minimum required and recommended endpoint threat protection capabilities.



ENABLING SUCCESSFUL PROJECT ESTABLISHMENT AND DELIVERY

The State of California – in partnership with local government entities and private sector partners – delivers an array of technology projects to modernize vital services for the people of California. The rapid evolution of technologies demands an other than ‘business-as-usual’ approach to problem solving, especially when outcomes impact the quality of life in a state boasting the world’s fifth largest economy and home to 39 million people. To ensure it meets best practice standards, the state’s technology community has adopted a human-centered design approach that begins by understanding the problem from the user’s perspective and flows through every aspect of a project’s lifecycle to achieve stated objectives and improve customer experiences.

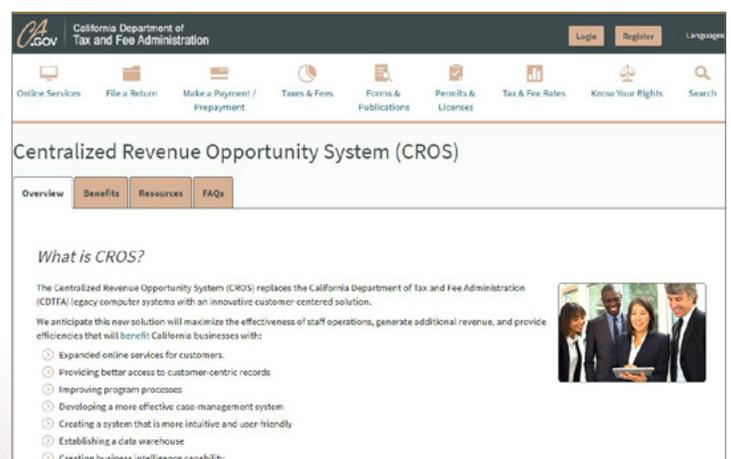
Continuous Improvements to the Project Approval Lifecycle (PAL 3.0)

When it became apparent that the State of California had a project approval process that lacked effective planning, often resulting in inaccurate cost and schedule estimates, CDT established the Project Approval Lifecycle. PAL promotes comprehensive, upfront planning to ensure greater focus on business needs, improving project experiences and outcomes while producing more accurate cost and schedule estimates. At each stage of this four-stage process, state control agencies and state entities engaged in projects have an opportunity to assess and manage risk while performing vital project planning activities, monitoring project health and making adjustments when needed to ensure the project delivers its expected business outcomes and value for the state. Of the 15 projects that have completed all four stage/gates of PAL to date, the median time to complete the process was 13 months, significantly faster than the prior Feasibility Study Report (FSR) process that took an average of 24 months to complete. Additionally, compared to the historic average, two-thirds of FSR approved projects had schedule or cost overruns in excess of 10 percent. Projects that have completed planning using PAL have not had any schedule or cost overruns or variances in excess of 10 percent. In the latest of continuous improvements made to PAL over the years, CDT is utilizing a new tool called PLAN-IT to deliver an enhanced, automated experience to departments planning IT projects. It is a priority of CDT to facilitate effective project planning through collaboration and partnership rather than using the traditional control agency approach. PLAN-IT, also called PAL 3.0, is an online collaborative process between CDT and the departments it serves through its oversight role, replacing Microsoft Word forms with easy-to-follow workflows. PLAN-IT features electronic routing and built-in online tool tips and reference materials. The PLAN-IT tool has embedded guidance to support risk management and planning activities based on the size and complexity of the proposed effort. PLAN-IT can also be used in support of delegated projects that do not require CDT embedded oversight or approval.

Tax System Modernization

When the California Department of Tax and Fee Administration (CDTFA) looked to replace its aging legacy computer systems, the department set out to create something innovative and customer centered. The solution – the Centralized Revenue Opportunity System (CROS) – maximizes the effectiveness of staff operations, generates additional revenue for California, and provides efficiencies that benefit California businesses. The successful implementation of CROS has expanded online services for customers, provided better access to customer-centric records, established a data warehouse and offered real-time access to account information. Additionally, CROS benefits businesses by allowing for a single registration

for multiple tax and fee programs, expanding online services with increased account maintenance capabilities, and allowing more access to information that can be used to improve business operations. CROS makes it faster and easier for CDTFA to implement new legislation and program changes and offers greater efficiency through streamlined business processes. Unlike other state technology projects of similar magnitude, CDTFA was able to fund the CROS project using revenue generated by and attributed to the new system, reducing risk and financial burden to the state.



Visit CROS at: cdtfa.ca.gov/services/cros

Did You Know?

The California Broadband Council (CBC), along with the State Surplus Equipment Task Force, in partnership with its non-profit community partner Tech Exchange, sponsored a Technology Fair in Oakland. This Technology Fair distributes free, refurbished desktop computers and related equipment to underserved communities. Volunteers helped 141 households receive computers and enrolled 36 families for low-cost Internet service.



Hybrid Methodology Used to Fast-track Appeals

As the California Department of Social Services (CDSS), within the Health and Human Services Agency, began developing a more efficient hearing appeals system that would better meet the department's needs, it faced some tough obstacles. The Appeals Case Management System (ACMS) faced severe procurement limitations with regard to budget, scope and schedule. This required the project to go from a 24-month rigid, waterfall methodology to a new, fast-track hybrid agile/waterfall methodology. With strong project sponsorship, the ACMS project was implemented in just 13 months, six weeks early, within budget, and with full consensus regarding the project's scope. The project team trained more than 1,200 end users responsible to process appeals within six weeks with positive survey results. As of September 2017, 756 end users accessed ACMS and created 705 appeals with an additional 29 claimants filing appeals via the ACMS web portal. The beneficiaries of the new ACMS are social service program recipients seeking fair hearings, CDSS stakeholders, CDSS itself, the Department of Health Care Services, Covered California, all California counties and California taxpayers. Ultimately, ACMS is intended to be leveraged by other California agencies to be the primary business solution for appeals case management.

Improving the Lives of Californian Children

The Child Welfare System-New System (CWS-NS) is a mission-critical child welfare solution focused on protecting the safety of children and families. Replacing a 20-year old system, CWS-NS supports statewide out-of-home care providers. Because of this urgent need, the traditional practice of using long and costly contracts has been replaced with fast procurements, short turnaround times and multiple vendors. Nationally, CWS-NS is significant because it is an open source project, potentially allowing other states to reuse its code and save on their own deployments. To ensure the highest quality of services for those who need it most, Child Welfare Digital Services released the California Automated Response and Engagement System (CARES) 1.0 in September of 2018 and applied the following functionality to the CWS-CARES application.

Identity Management is a tool that provides users a secure login to the CWS-CARES application with multi-factor authentication. It also provides administrative staff the ability to add new users, manage users access and assign user roles and permissions within the application.

Child Welfare History Snapshot provides users with a comprehensive view of case and referral history for clients in the Child Welfare Services/Case Management System (CWS/CMS). It allows child welfare staff to search for clients and view their relationships, demographic information, and child welfare history including dates of referrals/cases, victim and perpetrator information, allegations and dispositions. It also provides users the ability to copy and paste the history into other documents, such as investigative narratives or court documents which has proven to be a huge time-saving benefit for workers.

Facility Search and Profile retrieves children's residential facilities and county-approved homes data from CWS/CMS, the Licensing Information System (LIS), and the Field Automation System (FAS). It allows authorized users to search for and view children's residential licensed facilities and county-approved homes, along with the number of beds, complaint history, and children currently associated to the facility or home.

Centralized Hospital Records

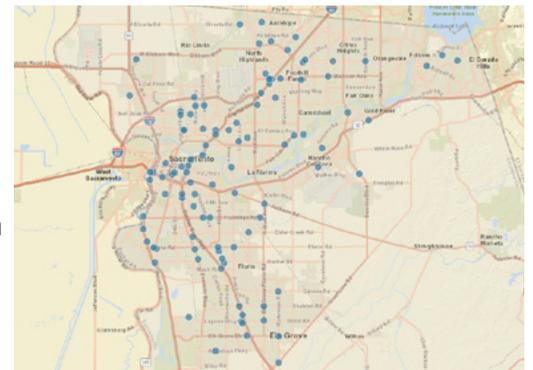
The Department of State Hospitals (DSH) is the largest inpatient mental health hospital system in the nation with five hospitals and care for more than 13,000 patients per year. In order to improve business processes, the department has implemented a Records Management System (RMS) and computer assisted dispatching software to support police department and investigative operations in its hospitals. This unified RMS provides standard processes and common administrative control to deliver consistent data across the department. Additionally, the system was recently expanded to provide centralized access and interdepartmental shared services to the Office of Protective Services and the California Correctional Health Care Services Agency's Office of Law Enforcement Support.

Real-Time Access to Offender Records

What once took days to access can now be retrieved in seconds, thanks to the launch of the California Department of Corrections and Rehabilitation's (CDCR) Strategic Offender Management System (SOMS) – the largest system of its kind in the nation. CDCR, with offices and more than 35 institutions scattered across California, implemented this automated system to replace older systems and manual paper processes that took as long as two weeks to access inmates' files. As part of the SOMS undertaking, CDCR staff scanned 170,000 inmate paper files, comprised more than 200 million pages, and converted them into electronic files. All of these files are now instantaneously and widely viewable in the SOMS Electronic Records Management System providing staff access to real-time offender data. SOMS has resulted in cost savings and increased efficiency and supports CDCR's mission to enhance the safety of institution staff, inmates and the public.

Enhanced Traffic Safety through Integrated Records

The Statewide Integrated Traffic Records System (SWITRS) is a cross-agency effort led by the California State Transportation Agency (CalSTA) to provide accurate, timely, and easily accessible data gathered from traffic collision scenes. The web-based SWITRS is used by the California Highway Patrol (CHP) to request various types of statistical reports in an electronic format. The collection of traffic collision data helps law enforcement agencies identify specific problems related to traffic safety and seek effective solutions. The data is also used by the California Department of Transportation (Caltrans) to evaluate and propose infrastructure improvements and justify priorities for expending traffic safety funds. Custom reports can be created to capture data relevant to specified criteria such as jurisdiction and location.



The SWITRS GIS Map offers an interactive map-centric approach to viewing SWITRS collision data.

In 2018, CalSTA launched a collaborative cross-agency initiative to develop a transformation roadmap for the future of SWITRS. The SWITRS Roadmap identified ways by which integration between systems and collaboration between stakeholders could be enhanced, potentially allowing all law enforcement agencies to submit information electronically. This project will improve and expand SWITRS data accuracy, timeliness and completeness through electronic crash reporting and integration with local crash databases.

Major Progress in Modernizing Technology Procurement

CDT, in partnership with Department of General Services (DGS), initiated several efforts to improve and modernize the way IT Procurements are conducted across the state. The IT Procurement Modernization project is focused on improving access to IT contracts, streamlining procurement transactions, simplifying and consolidating procurement vehicles, and enhancing IT project procurements. Some of the initiatives include establishing a single enterprise cloud service contract specifically for the purchase of infrastructure, platform and software. This will allow departments to adopt safer cloud services that will improve the state's overall cyber security posture. Another initiative includes established a Pre-Qualified Vendor Pool for services that leverage the agile methodology – an inclusive and fast-reacting application development process. Additionally, this CDT/DGS partnership has succeeded in streamlining acquisitions for IT projects by utilizing leveraged procurement agreements rather than the lengthy Request for Proposal (RFP) process. Most recently, new policies and process tools were also issued to help implement Assembly Bill 1817 which further aligns CDT's IT project procurement authority while maintaining DGS primary authority for IT goods and services (statewide contracts and leveraged procurement agreements). These statutory changes provide CDT authority to procure IT goods and services related to IT projects that are not delegated to departments while helping clarify the distinction between CDT and DGS with respect to IT project related procurements.

Did You Know?



The IT Initiative for the implementation of the Medicinal and Adult-Use Cannabis Regulation and Safety Act received the 2018 Best of California Award for “Best IT Collaboration Among Organizations.” A cross-agency team comprised of the Department of Consumer Affairs, Bureau of Cannabis Control, California Department of Food and Agriculture, California Department of Public Health and CDT created a statewide architecture and collaborative approach for the online licensing of more than 6,000 cannabis growers and other cannabis-related businesses ranging from retailers to testing labs.

Improving Air Quality through Technology

The California’s Air Resources Board (CARB) continually strives to provide Californians with the cleanest air possible. Through increased efficiencies and improved data utilization, CARB has successfully delivered several projects to fulfill this mission.

Freight Regulations and Reporting System (FRRS) replaces CARB’s cumbersome, paper-based processes by automating record keeping and reporting requirements for cargo-handling equipment, commercial harbor craft and oceangoing vessels.

Best Available Control Technology (BACT) Clearinghouse is a database of emission control technologies developed by CARB and various air pollution control and air quality management districts. BACT supports CARB program goals and fulfills Assembly Bill 617 mandates – requiring improvement of air quality in environmental justice communities through local, community-specific strategies focused on the individual needs and issues particular to each community.

Emissions Inventory Database (IMPEI) is an inventory of greenhouse gases, criteria pollutants and toxic air contaminants to support program goals and fulfill the mandates of Assembly Bills 617 and 197 – requiring reports of emissions inventories for greenhouse gases (GHGs), criteria pollutants, and toxic air contaminants be made public and updated at least once a year.

Community Air Quality Monitoring (CAQM) provides ambient air quality and toxics data from a number of community monitors, along with a publicly accessible online data portal, in support of programs and Assembly Bill 617 mandates. The program’s focus is to reduce exposure in communities most impacted by air pollution.

Providing Broadband to the Central Coast

More than 100,000 people living in the rural areas of California’s Central Coast lacked broadband services that met the minimum level of state or federal standards. The businesses and institutions they relied upon for jobs and services were stagnating due to the lack of broadband infrastructure and willing telecommunications providers. The California Broadband Council (CBC) sought to ease this digital divide by building a consortium of like-minded local governments, economic development organizations and independent Internet Service Providers (ISP) that would support the University of California, Santa Cruz’s initiative to develop two open access, middle-mile fiber routes connecting the region to major Internet hubs. The consortium articulated very clear goals: make commercial and industrial-class broadband available throughout the region with price, capacity and quality levels on par with Silicon Valley; provide every home and small business in the region with access to competitive broadband providers; and develop a competitive environment and infrastructure necessary to deliver a full range of broadband services. As a result of the CBC’s efforts, at least 95,000 of the more than 100,000 people identified as under-served now have access to affordable broadband service that exceeds state and federal minimums. Urban centers in the region’s largest cities now enjoy high-capacity, open access networks that provide a foundation for the region’s continued economic growth.



FOSTERING A DYNAMIC AND UNIFIED TECHNOLOGY WORKFORCE

Sound workforce development initiatives ensure that California's vast public technology needs are met with a skilled and dynamic pool of capable workers and strategic leaders who can create innovative solutions for evolving government services. These initiatives also foster a more meaningful relationship between state and local governments and their communities as they work together to propel economic development. Scalable and flexible IT capabilities in the form of services allow California's leaders to spend more time focusing on business needs rather than on technical issues. For that and many other reasons, the state strives to attract, develop and retain a workforce that enables departments to fulfill their missions. As outlined in Vision 2020, California is expanding the capabilities of its technology leaders and functional experts through education, technical training and leadership academies. Through this expansion, and by illuminating technology opportunities, the state continues its march to the drum of building "One Digital Government."

State Consolidates IT Classifications

Under the leadership of the Government Operations Agency (GovOps) and the California Department of Human Resources (CalHR), the state consolidated 36 IT classifications down to nine service-wide classifications. Even though the concept of consolidation and streamlining goes back decades, the IT Classification Consolidation Project began as recently as 2014 – part of CalHR's Strategic Plan. Effective January 31, 2018, more than 11,000 civil service positions were reallocated and transitioned into this new, streamlined system. This modernization of the state's decade-old IT classification system – now offering greater clarity about job qualifications and opportunities – improved California's ability to attract and retain those highly sought employees who possess essential technical skills.

Further Inmate Rehabilitation through Automation

The California Department of Corrections and Rehabilitation (CDCR), implemented the Career Technical Education – Media Evolution (CTE-ME) Project to enhance rehabilitation opportunities for offenders working toward earning online vocational trade certifications. To achieve this goal, the project developed secure, wireless Internet access in 309 vocational classrooms within 35 adult institutions, providing offenders a greater opportunity to study and take online certification examinations. Career technical provider sites granted controlled Internet access for online technical training, class curricula, study resources, test preparation, and other content. Through controlled online access, CTE-ME gives offenders greater opportunity to prepare for future careers by learning and becoming proficient with industry standards as they work toward earning their vocational trade certificates. Furthermore, the California Prison Industry Authority (CalPIA) and CDCR are expanding career development programs to include computer coding and web accessibility assessment services.



Inmates learn to code through the CTE-ME project

PMLA won the 2018 Best of California Award for the "Most Innovative IT Workforce Initiative"



In recognition of his leadership in advancing innovation in California through the adoption of new technologies, best practices and advancements in service delivery, NASCIO awarded its coveted "State Technology Innovator Award" to Deputy State Chief Information Officer Chris Cruz. Specifically, NASCIO cited Cruz's leadership in the expansion of cutting-edge, cloud-based services and for his role in supporting the creation of California's Cybersecurity Integration Center – both key to implementing the state's cloud migration plan, as well as for its common security posture. The award is a recognition of California's capability to bring about innovative change that aligns with business-wide propositions.

Did You Know?

The California Air Resources Board (CARB) replaced its legacy Learning Management System (LMS) and manual processes with a new system providing CARB management insight into all aspects of employee training and development programs. The updated LMS system administers online training classes and tracks all training activities and requests for approximately 13,500 active users.

Digital Services Innovation Academy

CDT's Digital Services Innovation Academy (DSIA) inaugurated its first cohort in 2018. Designed to foster leadership skills necessary to redesign and rethink how California utilizes technology, the 9-week program provides a variety of classes and experiences to guide participants through the process of developing meaningful digital services. The program helps students expand their skills in the areas of design, data analytics, ideation, and platforms/development tools through classroom instruction and exposure to CDT's Innovation Lab. The program features a "digital services challenge" during which students have the opportunity to apply the concepts and knowledge they learned. Developers, web designers, graphic artists, communication specialists, program managers, data analysts and others working in similar disciplines are encouraged to apply. Experience gained through this program helps develop California's future innovative leaders – critical to the state's digital workforce.



Digital Services Innovation Academy 2018 Participants

Information Security Leadership Academy

The Information Security Leadership Academy (ISLA) added in 2018 as one of four CDT academies within its workforce development program prepares candidates for their critical role as a Department Information Security Officer (ISO), Agency Information Security Officer (AISO) or an expanded role within their departments' security office. The ISLA curriculum presents students with security best practices, and National Institute of Standards and Technology (NIST) risk and security control frameworks, as well as California-specific policy, standards and compliance. Program participants gain experience by learning from experts, through practical workshops, and by participating in actual incident response simulations. As a result of this comprehensive learning environment, participants have an opportunity to gain the knowledge and experience they need to join, and lead, the next generation of information security leaders.



Information Security Leadership Academy 2018 Participants



PROVIDING EFFICIENT AND EFFECTIVE GOVERNMENT SERVICES THROUGH INNOVATION

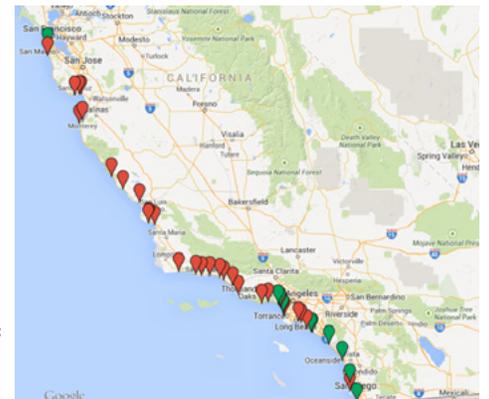
California pushes itself to improve efficiency and agility by capitalizing on innovative technology solutions that enhance performance. Recognized nationally as an incubator of ideas and renowned for delivering information-supported business programs and processes, California has created a litany of proactive and effective technology assets. What California realizes, and what makes it a national leader, is that making innovation a part of the way Californians live and work changes – for the better – the way they live and work. Innovation is the very heartbeat of progress.

Stamping Out Insurance Fraud through GIS



Each year, government agencies lose billions of dollars due to fraud, waste and abuse. In response, agencies tasked with fraud prevention are turning to innovative technology solutions. One solution the Employment Development Department (EDD) has adopted incorporates Geographic Information System (GIS) platforms into its Unemployment Insurance Online (UIO) system to accurately identify and reduce fraud. UIO is the fastest and most convenient way for Californians to file or reopen a claim, certify for benefits, and get up-to-date claim and payment information. UIO system upgrades now include Internet Protocol (IP)

tracking capabilities for monitoring and addressing fraud associated with the Unemployment Insurance Initial Claims process. The system associates online activity for a claim or claimant with an IP address then, due to the functionality of GIS, allows EDD to see where the activity is occurring through a geo mapping feature. By adding the element of GIS, EDD has reduced fraud and improved organizational efficiency.



The GIS platform allows the UIO system to track fraud activity and identify problem areas.

Dig Once to Extend Broadband

The objective of the Dig Once initiative is for major infrastructure programs to install underground fiber when building or renovating roads, railways, pipelines, utility infrastructures and energy distribution channels. This effort mitigates the high cost of broadband deployment in rural areas of California. To capitalize on this initiative, the California Emerging Technology Fund (CETF) and CDT, on behalf of the California Broadband Council, convened public and private institutions to identify Dig Once strategic corridors. Additionally, the California Department of Transportation has enabled interested parties to access information regarding transportation projects suitable for the installation of broadband and collaborate with the department to install broadband conduits. Dig Once reduces construction costs by limiting the number of times transportation and utility channels must be opened. The installation of broadband can boost local economies by making existing businesses more efficient and attracting more economic prosperity to rural areas. Additionally, rural area first responders, businesses and residents can enjoy the same access to high-speed broadband as found in California's metropolitan areas.

Ensuring the Best Quality for Health Care Beneficiaries

Every year, the California Department of Health Care Services (DHCS) invests nearly \$100 billion into funding health care services for more than 14 million Californians. One of the department's most important activities is providing effective program integrity measures that ensure DHCS funds are spent on the best quality care for its enrolled beneficiaries. In order to ensure its integrity measures and meet new Affordable Care Act (ACA) requirements for enrollment and oversight of providers, DHCS implemented the next-generation Provider Application and Validation for Enrollment (PAVE) solution. PAVE transforms the enrollment process from paper-based to automated while complying with new federal regulations. PAVE improves efficiency by automating management activities associated with the DHCS Provider Enrollment Division (PED). The PAVE solution improves how PED conducts business through a secure web-based provider portal that offers guided preparation, context-based intelligence, social collaboration, secure and private messaging, account management, affiliations management, real-time status tracking, document storage, reporting changes functionality, e-signatures, and much more.

Did You Know?



The California Business Initiatives Gateway (CBIG)

project was a finalist in the NASCIO “Business Process Innovations” award and won a Best of California award for “Best Application Serving the Public.” CBIG is the state’s only online marketplace that connects businesses to more than 360 economic development incentives offered by various California agencies. Located within the California State Treasurer’s Office, the CBIG web portal helps existing businesses, new businesses and even businesses relocating to California by connecting them to the state’s diverse incentives base – tax credits, fee waivers, one-stop permitting, training grants, employment credits, loan guarantees – once scattered across thousands of local government and state agency websites. CBIG offers a showcase for incentives all in one, convenient, online marketplace.

Enhancing Delivery of Food and Nutrition Benefits

The California Department of Social Services (CDSS), in partnership with the Office of Systems Integration (OSI), implemented the Electronic Benefit Transfer (EBT) Project to support the CalFresh Program. CalFresh, federally known as the Supplemental Nutrition Assistance Program (SNAP), is a federally mandated, state-supervised, county-operated government entitlement program providing monthly food benefits to assist low-income households to maintain adequate nutritional levels. The program issues monthly benefits that can be used to buy most foods at many markets and food stores. These benefits are issued on an EBT card. In general, these benefits are for any food or food product intended for human consumption that contributes to a healthy diet. Benefit amounts depend on family size, countable income and monthly expenses, such as housing and utilities. All U.S. citizens and Legal Permanent Resident (LPR) children may qualify to receive CalFresh benefits, regardless of their parents’ birthplaces. Parents and individuals with no children may also qualify.

State Data Center Powered by Solar

In a concerted effort to become more energy efficient, CDT and the Department of General Services (DGS) completed construction of a parking lot solar canopy to power the State’s primary Data Center. The solar structure, located at CDT’s Gold Camp Data Center facility in Rancho Cordova, will generate more than 2 million kilowatt hours of electricity – about 9.5% of the facility’s annual electrical demand – while reducing approximately 9.87 tons of greenhouse gas emissions annually. This green energy parking structure is projected to save in the neighborhood of \$2.3 million over the 25-year term of the agreement.



Gold Camp’s Solar Panels

Ask Eureka



The Center for Digital Government presented the California Secretary of State (SOS) with the Best of California Award for its Business Programs Division’s Eureka Chatbot. Awarded for Best Application Serving the Public, the Eureka Chatbot, developed in partnership with Microsoft, answers frequently asked business entity and trademark questions, helping to better serve approximately 400,000 customers who contacted the agency last year and allows customers to navigate business resources on the Secretary of State’s website 24 hours a day, 7 days a week. Through Eureka, customers can ask questions like “How do I check my business filing status online?” and they will be linked to the California Business Search website where they can look up their business record and access documents for free. Eureka responds best to short questions or keywords. SOS is the first state-level Department or Agency to use artificial intelligence using the Microsoft Bot Framework to modernize and create efficiencies when providing services to customers. The Eureka chatbot assistant is part of Secretary of State Alex Padilla’s Digital Initiative to modernize and digitize the agency’s divisions.

“We are proud that our Eureka Chatbot was recognized by the Center for Digital Government for making it easier to do business in California. Californians can get answers to their business related questions instantly using Eureka’s artificial intelligence. This is another example of what is possible when innovation and public private partnerships meet. I congratulate our Business Programs and IT divisions for their work bringing this project to fruition.”

- Alex Padilla, Secretary of State

California Digital Transformation Initiative

CDT supports transformation initiatives through Digital Innovation and Digital Service, both playing an integral role in the development of future concepts for the people of California. Digital Innovation ensures that California has the most cutting-edge products available (e.g. open source development, open data, web development, artificial intelligence, blockchain, etc.) organized in a manner that allows any organization within the state to build, test and prove the value of digital services concepts. Digital Innovation provides an environment where organizations can experiment and push the envelope on civic development that brings people closer to their government. Digital Services further supports transformation through pilot initiatives utilizing digital services teams. Informed by the work of the U.S. Digital Service, the California Digital Services Initiative was launched in 2016 to bring together policy, program, and technology leaders across agencies to accelerate the delivery of complex, mission critical, and time sensitive digital projects. The initiative brings together leading practices around agile software development, business-centered architecture, cloud-based technologies, user-centered design, and the integration of information security, software development, and operations to deliver modern digital services. In partnership with department product owners, CDT deployed teams of state employees who worked collaboratively with vendors to deliver digital services. As part of this initiative, CDT has partnered on several significant efforts, including the following:

Cannabis Licensing & Regulation – At the request of the Governor’s Office, CDT partnered with the California Department of Food and Agriculture, the Department of Consumer Affairs, and the Department of Public Health to develop and deliver solutions to license and regulate cannabis businesses. Licensing systems for all three departments were implemented in December 2017.

Child Welfare Digital Services – At the request of the California Health and Human Services Agency, CDT has engaged with the project team to establish an overall product and platform strategy and accelerate the agile software delivery pipeline. The first product was delivered statewide in September 2018.

Enterprise Human Resources – CDT partnered with the Government Operations Agency, the State Controller’s Office, the California Department of Human Resources (CalHR), the Financial Information System for California (FI\$Cal), and the State Personnel Board to develop a business-centered technology strategy to drive the delivery digital services for state employees and human resources professional across state government. In July 2018, the first enterprise services, cloud-based learning management platforms, were made available to departments.

Motor Voter – At the request of the Governor’s Office, CDT partnered with the Department of Motor Vehicles, the Office of the Secretary of State, and the California Transportation Agency to develop digital solutions to modernize the process for applying for driver licenses and ID cards and implement automatic voter registration of all eligible DMV customers. In less than 9 months, an integrated product, design, and engineering team delivered multiple digital services that have been used by more than 5 million Californians since April 2018.



The California Lottery’s Check-a-Ticket application won the Best of California award for “Best Mobile/Wireless Project.” Now, millions of players across the state can easily scan their tickets to see if they are winners. Check-a-Ticket allows players to scan their Scratchers or draw game tickets and immediately check if they have a winner by using a simple mobile phone camera to scan the ticket’s barcode.

Did You Know?

The Employment Development Department (EDD) took a major step in improving customer service. The department released an automated reminder system that contacts Reemployment Services and Eligibility Assessment (RESEA) participants to remind them of upcoming appointments. The innovative system replaces a manual process and is anticipated to increase RESEA participation and avoid loss of benefits to claimants.





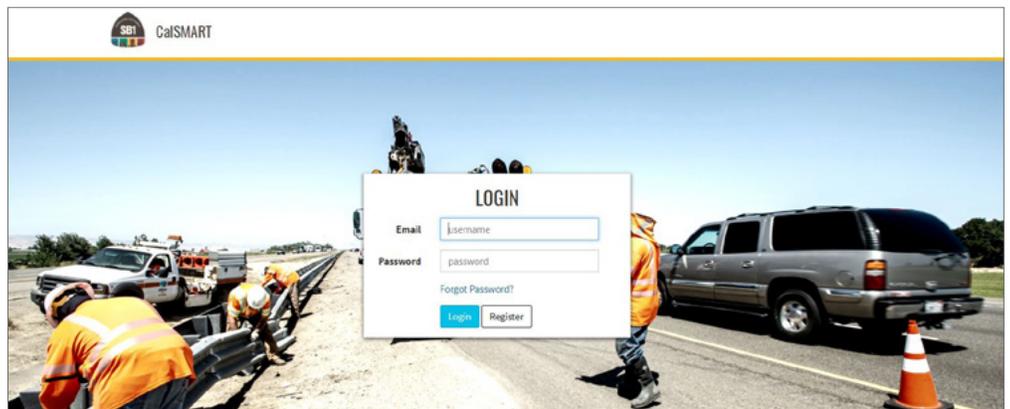
CDT, under the leadership of GovOps, issued the Website Standard Policy (Technology Letter 18-04) to foster a consistent look and feel, and a common navigational framework across government websites. This policy will help visitors recognize they are accessing official State of California information and supports the adoption of usability principles to ensure websites are accessible to people with disabilities. Best practices and the Web Template can be found on webstandards.ca.gov.

Did You Know?

To support California's commitment to improve the way the state acquires, builds and delivers IT solutions and reduce duplicative development or acquisitions of similar code, CDT issued the Open Source and Code Reuse Policy (Technology Letter 18-02). This policy furthers open source adoption by making the state's custom-developed code broadly available for reuse across state government in a consistent manner. Custom-developed code is now inventoried and made discoverable through code.ca.gov, the state's public code repository and, whenever possible, custom-developed code is made available to the public as Open Source Software. The Code California Playbook provides tactical level guidance on implementing the Open Source Policy on go.code.ca.gov.

Utilizing Technology to Manage Major Transportation Investments

In 2018, the California Department of Transportation launched the California State Multi-Modal Accountability and Reporting Tool (CalSMART) in support of Senate Bill (SB) 1 initiatives – California's single largest funding commitment to transportation with more than \$700 million dedicated to transit each year. Through CalSMART, Caltrans' partners are able to apply for Local Streets and Roads (LSR) funding for transportation projects. Additionally, CalSMART collects 2017-2018 funded LSR and State of Good Repairs (SGR) projects expenditure reports. This innovative reporting tool exemplifies Caltrans' and the California State Transportation Agency's commitment to transparency and accountability. It ensures that SB1 projects will be processed efficiently so Caltrans and partners can address the safety and repair of the state's roadways and infrastructure, and provides transparency by allowing Caltrans' partners to see how SB1 funds are being spent. CalSMART helps to improve California's highways and local streets, bridges, and transit systems that provide broad economic benefit to every community and improves the Golden State's overall quality of life.



Visit CalSMART at: calsmart.dot.ca.gov

Major Push to Enhance Web Accessibility

When information is available in an accessible format, it is significantly easier for people with disabilities to access essential information – in some cases, where there was no access to it before. The Internet provides an opportunity for unprecedented access to information for people with disabilities, helping overcome barriers to print, audio, and visual media. The State of California is making a major push to bring its websites into compliance with state and federal accessibility requirements with the enactment of Assembly Bill 434. This legislation requires all departments, before July 1, 2019, and biennially thereafter, to post a signed certification on their department's Internet website certifying compliance with specified accessibility standards. The Government Operations Agency, in partnership with CDT and the Department of Rehabilitation, formed a workgroup to provide guidance and resources to help departments come into compliance with federal and state web accessibility requirements. Policy guidelines (Technology Letter 18-05), training, and vendor resources have been made available to assist departments develop the necessary skillsets and internal processes to update their websites and keep them continuously accessible. Additional tools and resources will be

made available in early 2019. It is essential that the Internet be fully accessible to everyone, providing equal access and equal opportunity to all Californians.

<p>ACCESSIBILITY 101</p> <p>Learn the basics about accessibility, roles and responsibilities, and laws that govern digital accessibility</p>	<p>WEBSITE ACCESSIBILITY REQUIREMENTS</p> <p>Learn how to determine website accessibility using a variety of tools</p>	<p>DOCUMENT ACCESSIBILITY</p> <p>Learn how to create accessible content and check to ensure your content is accessible</p>	<p>VENDORS</p> <p>Information on the state accessibility RFI and list of vendors</p>
---	---	---	---

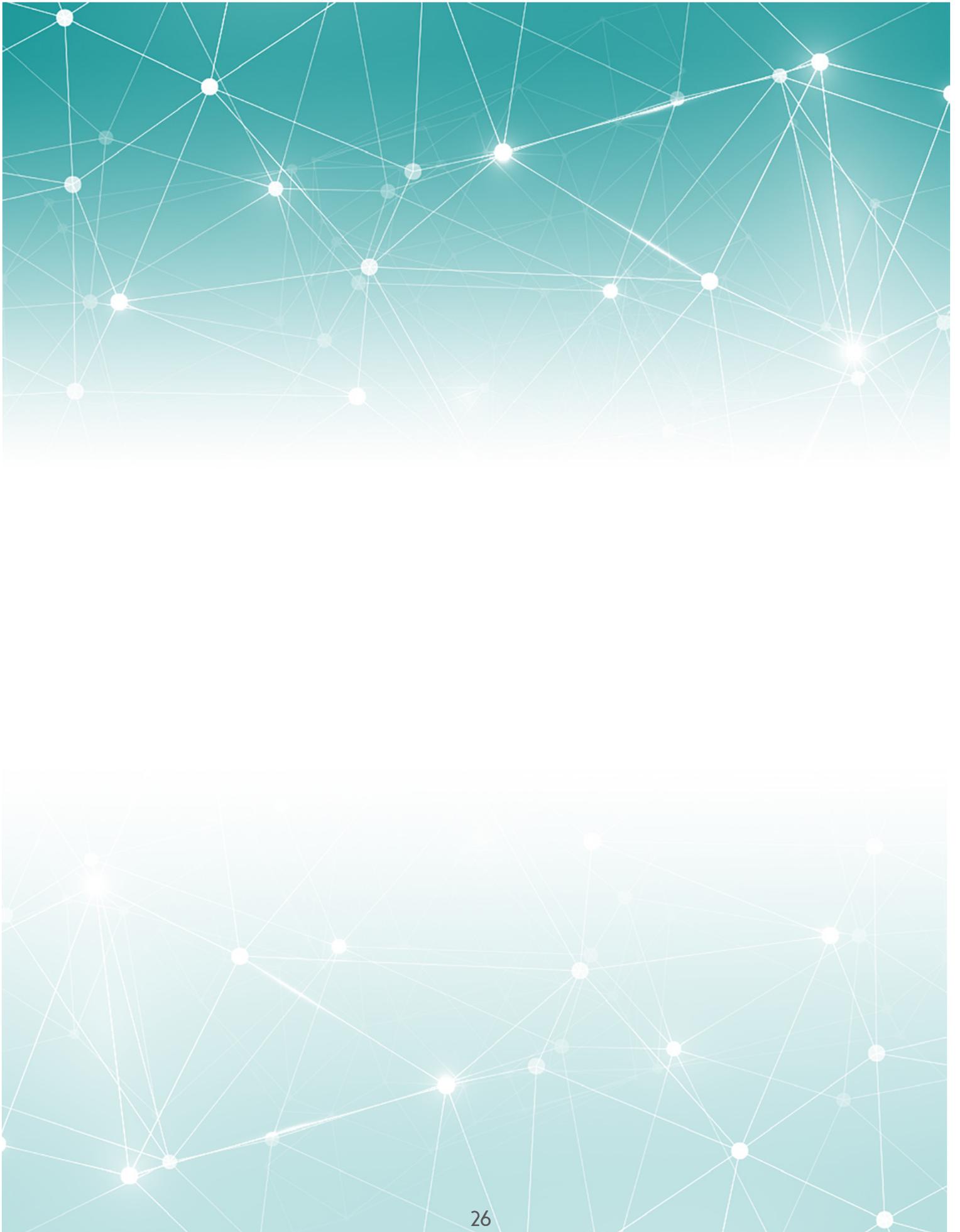
Visit California's Accessibility Toolkit at: dor.ca.gov/State-AB434/

ACKNOWLEDGEMENTS

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
Marybel Batjer, Secretary, California Government Operations Agency
Darrin Bender, Director of Government Affairs, California Military Department
Edmond Blagdon, Manager, California Department of Corrections and Rehabilitation
Scott Capulong, Project Director, California Department of Tax and Fee Administration
Cheryl Carlson, Manager, California State Lottery
Gil Chavez, Deputy Director for Infectious Diseases, California Department of Public Health
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
Rita Gass, Chief Information Officer, California Secretary of State
Lynda Gledhill, Deputy Secretary for Communications, California Government Operations Agency
Erica Gonzales, Chief, IT Consulting Unit, Department of Finance
Steve Grogan, Division Chief, California Air Resources Board
Sergio Gutierrez, Agency Chief Information Officer, California Environmental Protection Agency
Scott Howland, Chief Information Officer, California Highway Patrol
Tammy Irwin, Chief of Staff Enterprise Information Services, California Department of Corrections and Rehabilitation
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
Isaiah Mall, Chief Information Officer, California Department of Veterans Affairs
Ricardo Martinez, Branch Chief, Department of General Services
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
George Okamoto, Agency Chief Information Officer, Labor and Workforce Development Agency
Gail Overhouse, Deputy Director and Chief Information Officer, Employment Development Department
Alex Padilla, Secretary of State, California Secretary of State
James Parsons, Lieutenant Colonel and Cyber Network Defense Chief, 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, Chief Information Officer, California Department of Health Care Services
Jan Ross, Chief Administrative Officer, State Controller's Office
Karen Ruiz, Chief Technology Officer and Chief Information Officer, California Department of Health Care Services
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
Kevin Sutton, Project Director, California Correctional Health Care Services
Kathleen Webb, Director of Performance Improvement, California Government Operations Agency
Julie Whitten, Assistant Secretary for Innovation and Accountability, California Government Operations Agency
Michael Wilkening, Secretary, California Health and Human Services Agency

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



ABBREVIATIONS AND ACRONYMS

ACA	<i>Affordable Care Act</i>	FedRAMP	<i>Federal Risk and Authorization Management Program</i>
ACMS	<i>Appeals Case Management System</i>	FI\$Cal	<i>Financial Information System for California</i>
AISO	<i>Agency Information Security Officer</i>	FRRS	<i>Freight Regulations and Reporting System</i>
BACT	<i>Best Available Control Technology</i>	FRS	<i>Feasibility Study Report</i>
BCC	<i>Bureau of Cannabis Control</i>	GHG	<i>Greenhouse Gases</i>
BPO	<i>Benefit Programs Online</i>	GIS	<i>Geographic Information System</i>
Cal OES	<i>California Governor’s Office of Emergency Services</i>	GovOps	<i>Government Operations Agency</i>
Cal-CSIC	<i>California Cybersecurity Integration Center</i>	laaS	<i>Infrastructure as a Service</i>
CalHR	<i>California Department of Human Resources</i>	IMPEI	<i>Emissions Inventory Database</i>
CalPIA	<i>California Prison Industry Authority</i>	IP	<i>Internet Protocol</i>
CalSMART	<i>California State Multi-Modal Accountability and Reporting Tool</i>	ISLA	<i>Information Security Leadership Academy</i>
CalSTA	<i>California State Transportation Agency</i>	ISO	<i>Information Security Officer</i>
Caltrans	<i>California Department of Transportation</i>	ISP	<i>Internet Service Providers</i>
CAQM	<i>Community Air Quality Monitoring</i>	IT	<i>Information Technology</i>
CARB	<i>California Air Resources Board</i>	LIS	<i>Licensing Information System</i>
CARES	<i>California Automated Response and Engagement System</i>	LMS	<i>Learning Management System</i>
CBC	<i>California Broadband Council</i>	LPR	<i>Legal Permanent Resident</i>
CBIG	<i>California Business Initiatives Gateway</i>	LSR	<i>Local Streets and Roads</i>
CCHCS	<i>California Correctional Health Care Services</i>	LTE	<i>Long-Term Evolution</i>
CDCR	<i>California Department of Corrections and Rehabilitation</i>	NASCIO	<i>National Association of State Chief Information Officers</i>
CDFA	<i>California Department of Food and Agriculture</i>	NIST	<i>National Institute of Standards and Technology</i>
CDPH	<i>California Department of Public Health</i>	OIS	<i>Office of Information Security</i>
CDSS	<i>California Department of Social Services</i>	OSI	<i>Office of Systems Integration</i>
CDT	<i>California Department of Technology</i>	PaaS	<i>Platform as a Service</i>
CDTFA	<i>California Department of Tax and Fee Administration</i>	PAL	<i>Project Approval Lifecycle</i>
CETF	<i>California Emerging Technology Fund</i>	PAVE	<i>Provider Application and Validation for Enrollment</i>
CGEN	<i>California Government Enterprise Network</i>	PED	<i>Provider Enrollment Division</i>
CHP	<i>California Highway Patrol</i>	PII	<i>Personally Identifiable Information</i>
CMD	<i>California Military Department</i>	PMLA	<i>Project Management Leadership Academy</i>
CROS	<i>Centralized Revenue Opportunity System</i>	RESEA	<i>Reemployment Services and Eligibility Assessment</i>
CSP	<i>Cloud Service Provider</i>	RFP	<i>Request for Proposal</i>
CTE-ME	<i>Career Technical Education—Media Evolution</i>	RMS	<i>Records Management System</i>
CWAN	<i>California’s Wide Area Network</i>	SaaS	<i>Software as a Service</i>
CWS/CMS	<i>Child Welfare Services/Case Management System</i>	SAM	<i>State Administrative Manual</i>
CWS-NS	<i>Child Welfare Services New System</i>	SB	<i>Senate Bill</i>
DGS	<i>Department of General Services</i>	SGR	<i>State of Good Repairs</i>
DHCS	<i>California Department of Health Care Services</i>	SIMM	<i>Statewide Information Management Manual</i>
DSH	<i>Department of State Hospitals</i>	SNAP	<i>Supplemental Nutrition Assistance Program</i>
DSIA	<i>Digital Services Innovation Academy</i>	SOC	<i>Security Operations Center</i>
EBT	<i>Electronic Benefit Transfer</i>	SOMS	<i>Strategic Offender Management System</i>
EDD	<i>Employment Development Department</i>	SOS	<i>California Secretary of State</i>
EHRS	<i>Electronic Health Record System</i>	SPR	<i>Special Project Reports</i>
EPP/EDR	<i>Endpoint Protection, Detection, and Response</i>	SWITRS	<i>Statewide Integrated Traffic Records System</i>
FAS	<i>Field Automation System</i>	UIO	<i>Unemployment Insurance Online</i>
		VHSS	<i>Vendor Hosted Subscription Services</i>



California
DEPARTMENT OF TECHNOLOGY

1325 J Street, Suite 1600 • Sacramento, CA 95814
Phone: (916) 319-9223