VISION 2020
CALIFORNIA TECHNOLOGY STRATEGIC PLAN

Edmund G. Brown Jr., Governor
Marybel Batjer, Secretary
California Government Operations Agency
Amy Tong, Director
California Department of Technology and State of California Chief Information Officer

One digital government securely delivered by a dynamic workforce.
As we looked across the landscape of services we provide and the people we serve, one thing became abundantly clear: we need to put Californians, our customer, at the heart of all we do. We have been entrusted with the resources and information to provide essential services that people rely on. The fact that we are their sole option should compel us to take great pride in our role as public servants and seek to continually improve the responsiveness, effectiveness and efficiency of government services.

Our commitment to utilize technology to break down organizational silos, combined with the talent within our state government, provides tremendous opportunities to innovate and transform how government services are delivered. Our technology community has been energized by the vision to create “One digital government delivered securely by a dynamic workforce”. To realize this vision, we will need to empower our workforce, take calculated risks, innovate, collaborate, share resources and ideas, and seek to continuously improve.

It is our hope that this strategic plan serves as a beacon for the technology community, our program leaders, vendor partners and the public. It will be the guide that charts our course toward a better future for all Californians.
# Table of Contents

Guiding Principles .......................................................... 2  
Summary ............................................................................. 3  
Goals and Priorities ............................................................ 4  
Goal 1: Create One Digital Government .............................. 4  
Goal 2: Ensure Secure Delivery ......................................... 6  
Goal 3: Build a Dynamic Workforce ................................. 8  
Measures of Success .......................................................... 10  
Governing the Implementation ........................................... 11  
What We Heard ............................................................... 12  
How We Heard It ............................................................. 13  
Acknowledgements .......................................................... 14
OUR GUIDING PRINCIPLES

- **Strive for Simplicity** – We build disciplined processes, streamline organizational structures, improve managerial practices, and simplify service portfolios to deliver quality services with greater scope and speed.

- **Put Customers Front and Center** – We practice user and customer-centered design and delivery. We leverage technology to improve communication, increase transparency and provide greater access to data in our pursuit of inclusive engagement with all Californians.

- **Be Innovative** – We take calculated risks to solve problems purposefully and to create greater mission value. We collaborate with our program partners and the private sector to simplify complexity and deliver creative solutions.

- **Focus on Outcomes** – We are flexible, responsive, results-oriented facilitators of success, who overcome constraints to achieve our objectives.

- **Own It** – We demonstrate accountability through transparency, self-evaluation, openness to feedback and the pride we take in our work.

- **Take a Statewide Perspective** – We are one, interdependent, and interconnected technology community serving One California. Therefore, we value our diversity, seek to understand the perspectives of others, and look to collaborate and contribute to each other’s success for the sake of all Californians.

VISION 2020

One digital government securely delivered by a dynamic workforce.

MISSION

To support the delivery of services to the people of California through secure, effective and innovative technology solutions.

PRINCIPLES

- Strive for Simplicity
- Put Customers Front and Center
- Be Innovative
- Focus on Outcomes
- Own It
- Take a Statewide Perspective

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 a diverse and unified technology community.
GOAL 1
CREATE ONE DIGITAL GOVERNMENT
Increase customer satisfaction through improved responsiveness, efficiency, and effectiveness of government services.

California state government primarily operates in organizational and technology silos, limiting our ability to provide customers with a simple, streamlined and responsive experience. It is imperative that we take steps toward creating One Digital Government for the people of California. This will involve improving the agility and responsiveness of our technology operations, accelerating the move toward common platforms and shared services, embracing user-centered design concepts and leveraging technology to fundamentally transform government process and operations. For this to be possible, we must work together in a collaborative and boundaryless manner — transcending the rigid lines of bureaucracy and departmental boundaries to create an open, sharing climate that seeks to harness the combined strength of California’s technology community.

OUTCOMES:
The information and services that customers need delivered anytime, anywhere, and through the most efficient, effective, and responsive method possible.

“"The government doesn’t own anything. We are public servants and stewards of the resources we have been entrusted. All our technology, applications, websites, and various solutions are owned by the people of California. Everything we do should be for the people, to make their lives better, and to make their interaction with their government as easy and streamlined as possible.”

Tim Garza
Agency Chief Information Officer, California Natural Resources Agency

OUR PRIORITIES

1. Increase operational agility and performance in the delivery of technology services.
   To keep pace with customer expectations and the ever-changing technology landscape, we will adopt an agile and continuous improvement mindset to running our technology businesses. To achieve this, we will accelerate the planning-to-execution cycle time, remove barriers to innovation, streamline and simplify the project approval process and the acquisition of technology goods and services by balancing the need for proper due diligence while eliminating unnecessary control friction. We will seek to improve how we measure the efficacy of our operations and the impact of our investments in delivering business value.

2. Improve the design and delivery of digital services.
   Elegant, simple, and user-centric design is an important first step to improving customer experience and engagement with government services. To achieve this, we will adopt a human-centered design approach to our projects, equip our workforce with new skills in design thinking, and embrace a customer-centric approach to service delivery. We will also take steps to increase the availability and accuracy of data retained by the State.

3. Foster collaboration and boundaryless behavior.
   The rapid pace of change and complexity inherent in our societal, organizational, and technological systems requires that we leverage our collective knowledge and work across organizational silos. We strive to be mindful that we are One Technology Community serving One California. Our technology leaders will model desired behaviors, build trust, and seek to eliminate siloed-thinking by promoting cross-departmental initiatives and the sharing of resources, data, technology, talent, and other capabilities. In addition, we remain committed to partnering with local governments and educational entities to meet their technology needs.

4. Transform and simplify the way government does business through innovation.
   We will continually seek to improve the way we deliver services. We will simplify and streamline processes through lean practices, reduce bureaucracy, and innovatively apply technology to deliver better government services. We will avoid simply automating ineffective or inefficient business processes and bureaucracy. We will value and reward the innovators, change agents and calculated risk takers within our workforce.

5. Accelerate the adoption of common technology platforms and shared services.
   We will seek to reduce the often-duplicative technology investments that exist across the State. An increased emphasis on shared platforms, services, and data will provide the State with a cost-effective and innovative opportunity to redirect talent away from lower value, duplicative support functions into more strategic, thoughtful and creative work that directly supports business programs. Shared services can significantly reduce technology debt by eliminating “one-off” business solutions and duplicative investments and encourage the negotiation of statewide agreements.

Vision 2020: One digital government securely delivered by a dynamic workforce
ENSURE SECURE DELIVERY
Advance the maturity of information security across California government.

Information security attacks, data breaches, ransomware — these are the daily headlines impacting the world’s digital landscape. California government is not immune. As one digital government, we must collectively challenge threats to the information entrusted to us by our residents and business program partners. California’s information security community will protect our network infrastructure, safeguard our vast information assets, invest in world-class security capabilities, enhance our enterprise approach to security leadership, and foster a security-minded culture throughout California’s workforce.

OUTCOMES:
Proactive leadership from a security governance team formed with the State’s vital security partners, information protection policies and processes that are flexible and effective, data availability within a stable and resilient technology infrastructure, a measurable and improved risk baseline, and a security-aware and vigilant workforce.

“Californians entrust state entities with their confidential information. It is our obligation to use all that is available to us including tools and services such as the State’s Security Operation Center to safeguard the information.”
Andrew Armani
Deputy Secretary for Information Technology
California Business, Consumer Services and Housing Agency

OUR PRIORITIES

1. Protect California’s information assets and maximize data access.
Californians and government business programs need a secure infrastructure and access to vast pools of information. A catastrophic security failure could do significant damage to California’s economic engine, one of the largest in the world. We will protect our information assets through the promotion of secure design and delivery of government services thus enabling the State’s digital transformation. We will embrace security-resiliency—the ability to anticipate, endure, and recover when the inevitable cyberattack and information security breaches occur.

2. Develop a robust and collaborative security risk reduction strategy.
A complex infrastructure shared by hundreds of government entities is only as strong as the weakest link. We will implement a scalable and collaborative approach to security risk reduction to ensure appropriate protection of both critical and non-critical information. We will conduct regular security vulnerability assessments to measure the effectiveness of our security policies. We will collect, track, and analyze security events and trends to maximize our security resources. We will share security intelligence with our partners to most effectively combat cyberattacks.

3. Develop an enterprise approach to security leadership and governance.
Security governance and policies impact everyone in our government. We will strengthen our security governance structure through expanded participation, refined roles and responsibilities, and improved communication of policy. The governance body will oversee security policies, standards, procedures, performance measures, disaster recovery plans, and statewide security resources.

4. Improve and invest in security capabilities to protect mission-critical systems and data.
Identified security gaps mandate value-added enterprise investments. Security vulnerability assessment results, analysis of risk incidents, and awareness of current and future threats all contribute to sound security investment decisions. As we continue to develop improved in-house security expertise, we will balance our use of private and public service providers. We will be vigilant and unwavering in our commitment to the privacy and protection of the State’s information assets.

5. Foster a security-minded culture throughout California’s workforce.
Security is everyone’s duty. We will broaden security awareness by establishing a security-minded culture in which each State employee believes that security is their responsibility. To further develop the expertise of our existing security professionals, we will implement comprehensive security skills education and training. In addition, we will increase the pool of qualified candidates through innovative recruiting that attracts private sector security professionals to public service.
GOAL 3
BUILD A DYNAMIC WORKFORCE
Build a dynamic technology workforce that takes pride in delivering quality services and innovative solutions to their customers.

Technology is a dynamic industry, marked by rapid and constant change, revealing opportunities for innovation and greater public-sector customer engagement. Therefore, it is essential that we attract, develop, and retain a dynamic workforce—people who are ‘positive in attitude and full of energy and new ideas’. An adaptable, sustainable, skilled and engaged workforce that can embrace these challenges and enable us to fulfill our mission.

OUTCOMES:
An engaged, skilled, and dynamic technology workforce that provides the strategic leadership and functional expertise necessary to create innovative solutions that enable the State’s programs and departments to fulfill their mission.

1. Create a culture of innovation and collaboration.
   Leadership will encourage technologists and program leaders to innovate in order to increase mission value. We will create opportunities that encourage innovative technology, low risk experimentation and the adoption of processes that allows us to learn from failure. We will promote cross-departmental collaboration through the sharing of knowledge, practices and talent.

2. Develop the capabilities of both technology leaders and functional experts.
   We are committed to the development of technology-savvy program leaders and business-savvy technologists. The State of California will continue to lead the way through technology education, technical training and leadership academies. To facilitate more relational and collective learning, we will encourage formal and informal mentoring and the establishment of communities of practice.

3. Improve employee engagement and increase retention of quality employees.
   Leadership will strengthen workforce engagement and accountability by promoting an outcome-oriented culture that recognizes and rewards innovation and results. In partnership with CalHR, we will regularly survey employees and take steps to build a unified culture and improve employee engagement. We will raise awareness of the importance and impact of our work through clear communication of our mission and increased field exposure for our technologists.

“Vision 2020 is a thoughtful, well-crafted and forward-looking plan for the state’s information technology future. I applaud the plan’s recognition of our talented IT workforce, their contributions today and into the future, and the commitment to continued investment in their development. In the end, it is our IT workforce who will deliver the outcomes envisioned in the plan.”

Richard Gillihan
Director, California Department of Human Resources (CalHR)

4. Expand our pool of skilled and experienced technology professionals.
   We will continue to implement strategies that clarify and communicate what we do, our mission, and the difference our work makes. We will address potential skill gaps through creative outreach and recruiting. We will expand outreach to educational institutions, industry, and through job fairs.

5. Foster a diverse and unified technology community.
   We will continue to develop strategies and implement initiatives that directly support the concept of “One Technology Community”. These strategies will include enhancing communication, expanding opportunities for networking, and promoting events that encourage the deepening of community and shared purpose. We will look for opportunities to maximize the diverse skills and experience found across the multiple generations present in today’s workforce. We are committed to activities that promote and encourage the application of our shared vision, mission, and guiding principles.
MEASURES OF SUCCESS
By 2020, we will...

Increase customer satisfaction through improved responsiveness, efficiency, and effectiveness of government services.
1. Reduce the time it takes for new technology initiatives to go from concept to minimum viable product (MVP).
2. Establish policies, standards and guidelines that promote, encourage and enable departments to acquire and share technology services.
3. Implement solutions that facilitate cross-departmental sharing of resources, ideas, capabilities, data, technology, and talent.
4. Increase the adoption of human-centered design principles in future technology projects across the state.
5. Increase the application of lean practices in daily operations and new initiatives.

Advance the maturity of information security across California government.
1. Reduce the time from security incident detection to remediation across the enterprise.
2. Refine our security investment decisions based on comprehensive analysis of vulnerability assessments, incident reports, and identified security gaps.
3. Increase the utilization of private and public security services to reduce overall costs and alleviate the burden on the already strained resources.
4. Bolster our statewide security governance through broader involvement, clarity of roles and responsibilities, and improved communications.
5. Establish programs to enhance the skills of security professionals and improve the security awareness for all current employees.

Build a dynamic technology workforce that takes pride in delivering quality services and innovative solutions to their customers.
1. Develop new programs with educational institutions to attract new talent.
2. Improve messaging and marketing effectiveness about the benefits of career opportunities within the State.
3. Establish formal mentoring programs and measure their effectiveness.
4. Promote the adoption of evidence-based practices that increase employee engagement.
5. Increase access to educational opportunities in emotional intelligence, analytical and innovative thinking, culture-shaping and strategic leadership.

GOVERNING THE IMPLEMENTATION

Information Technology Executive Council (ITEC)
Central decision-making body comprised of executive leadership to oversee statewide technology strategy, policy, oversight and service offerings.

Operations Council (OC)
Customer-focused body comprised of executive leadership to provide customer-centered input on shared services, rates and opportunities for cross-agency collaboration.

Information Security Advisory Council (ISAC)
Security-focused body comprised of state security representatives to provide input and training on security policy, procedures, standards, and guidelines.

Project Management Advisory Council (PMAC)
Project delivery-focused body comprised of state project management professionals to provide input on project challenges, opportunities, shared services, standards and frameworks.

Technology Services Advisory Council (TSAC)
Services-focused body comprised of state and local government technologists that provide input on CDT services offerings.

Workforce Development Advisory Council (WDAC)
Workforce-focused body comprised of executive leadership, training and HR representatives that provide input on workforce development initiatives.

Civic Advisory Council (CAC)
Performance improvement-focused body comprised of (non-vendor) business and technology executives to provide input on technology trends, industry best practices and potential enhancements to CDT’s services portfolio.

Vendor Advisory Council (VAC)
Service improvement-focused body comprised of vendor representatives to provide input on technology and potential enhancements to CDT’s services portfolio.

Key Roles and Responsibilities
- ITEC Members will monitor Vision 2020 performance, lead efforts to prioritize investments, and enable strategies that ensure accountability, alignment and the achievement of the plan’s goals. Encourage boundaryless behavior, statewide solutions, and multi-department initiatives.
- State Technology Advisory Councils will develop statewide initiatives and strategies in their focus area that contribute to the successful implementation of the strategic goals and priorities outlined in Vision 2020.
- Department Leaders will develop departmental technology strategic plans aligned with Vision 2020. Collaborate to develop cost-effective, customer-centered and innovative solutions.
- California Department of Technology will develop policy and provide cost-effective, shared services that facilitate implementation. Focus on simplicity, outcomes, and value creation in procurement and oversight functions.
WHAT WE HEARD

Compilation of opportunities, challenges, and expectations heard from state technology and program leadership through various discovery sessions and focused workgroups.

HOW WE HEARD IT

6 Discovery Sessions
7 Focused Workgroups
32 Agencies and Departments Represented
112 Participants
We would like to acknowledge the following individuals and thank them for their contributions to the California Technology Strategic Plan.

Carlos Aguilera, Government Operations Agency
Allicia Alberson, Government Operations Agency
Michele Ames, Department of Motor Vehicles
Andrew Armani, Business, Consumer Services and Housing Agency/Government Operations Agency
Tamara Armstrong, Department of Technology
Jorge Avila, Department of Technology
Wayne Babb, Department of Corrections and Rehabilitation
Steve Barnett, State Water Resources Control Board
Michelle Bobell, Department of Motor Vehicles
Steve Bonta, California Energy Commission
Thomas Boom, Governor’s Office of Business & Economic Development
Sivivani Bose, Department of Technology
John Bouie, Office of Systems Integration
Bill Buffington, Department of Corrections and Rehabilitation
Jonathan Calabretta, Department of Human Resources
Pete Cervinka, Department of Social Services
Sandra Chambers, Department of Corrections and Rehabilitation
Jeff Christ, Department of Corrections and Rehabilitation
Scott Christian, Office of Statewide Health Planning and Development
Debra Connick, Department of Technology
Blake Cooke, Franchise Tax Board
Chad Crowe, California Department of Human Resources
Matt Curran, Air Resources Board
Carrie Daves, Department of Corrections and Rehabilitation
Scott Davidson, Department of Corrections and Rehabilitation
Patrick Dennis, Department of Technology
Veronica Dodd, Air Resources Board
Adam Dondro, California Health and Human Services Agency
Stuart Dunn, Government Operations Agency
Niles Friedman, California Health and Human Services Agency
Jeff Funk, Department of Corrections and Rehabilitation
George Gaborek, Department of Business Oversight
Tim Garza, California Natural Resources Agency
Richard Gilham, California Department of Human Resources
Lynda Gledhill, Government Operations Agency
Erica Gonzales, Department of Finance
Scott Gregory, Department of Technology
Sergio Gutierrez, California Environmental Protection Agency
Brandon Hansard, Department of Technology
Russell Hernandez, Water Resources Control Board
Cheryl Holden, State Water Resources Control Board
Scott Howland, California Highway Patrol
Marion Hughes, Franchise Tax Board
Ellen Ishimoto, Department of Technology
Karen Johnson, Covered California
Marcie Kahboly, California State Transportation Agency
Peter Kelly, Office of Systems Integration
Kimberly Kirchmeyer, Medical Board of California
Karl Koepsel, Department of Transportation
Elbert Lawrence, Department of Technology
Peter Liebert, Department of Technology
Jennifer Maestretti, Office of Public School Construction
Ricardo Martinez, Department of General Services
Mike Mason, California Highway Patrol
Melissa Matsuura, Department of Technology
Julie Moreno, Franchise Tax Board
Tony Moshed, Natural Resources Agency
Khaim Morton, Government Operations Agency
Kem Musgrove, Franchise Tax Board
Steve Nash, Franchise Tax Board
Robert Nelson, Office of Traffic Safety
Russ Nichols, Department of Corrections and Rehabilitation
Cruz Nieto, Department of Technology
Gary Nodine, Department of Public Health
Greg Norris, Department of Social Services
George Okamoto, Labor and Workforce Development Agency
Jose Orozco, Franchise Tax Board
Vitaliy Panych, Department of Corrections and Rehabilitation
Keith Parker, Department of Technology
James Parsons, California Military Department
Scott Paterson, Department of Technology
Marlon Paulo, Department of Technology
Heidi Perras, Department of Corrections and Rehabilitation
Jason Piccione, Department of Consumer Affairs
Michael Piolet, Department of Technology
Kevin Piombo, Department of Technology
Angelica Quirarte, Government Operations Agency
Dave Rechs, Government Operations Agency
Ezaz Reyes, Department of Insurance
Chris Riesen, California State Lottery
Ken Ritzman, Department of Corrections and Rehabilitation
Ron Rubinette, Department of Technology
Richard Rogers, Department of Technology
Jan Ross, State Treasurer’s Office
Rico Rubino, Department of Motor Vehicles
Nicki Rusczyczky, Department of Resources Recycling and Recovery
David Saika, Department of Motor Vehicles
Rogene Sears, Department of State Hospitals
Lisa Senitt, Department of Veterans Affairs
Dwight Sheller, Department of Pesticide Regulation
Caroline Short, Department of Technology
Daniel Signorotti, Office of Statewide Planning & Development
Sam Silva, Department of Pesticide Regulation
Carla Simmons, California Governor’s Office of Emergency Services
Margaret Shaggs, California Highway Patrol
Sumi Smith, Department of Child Support Services
Jay Song, California Highway Patrol
Colin Stevens, California Governor’s Office of Emergency Services
Danny Stratton, Department of Housing and Community Development
James Swartzlander, Department of Toxic Substances Control
Holly Tabor, California Public Employees’ Retirement System
Victor Tam, Office of Environmental Health Hazard Assessment
Keith Tresh, California Governor’s Office of Emergency Services
Michael Vallee, Office of Statewide Health Planning and Development
Myrna Villoria, California Highway Patrol
Andy Wurtzin, Department of Technology
Julie Whitten, Government Operations Agency
Michael Wilkening, California Health and Human Services Agency
Gretchen Williams, Department of Technology
Jana Wolf, Department of Technology
Ryan Wong, Department of Corrections and Rehabilitation
Ben Word, Department of Technology

Strategic Planning Project Team
Adrian Farley, Department of Technology
Manveer Bola, Department of Technology
Tina Rau, Department of Technology
Keith Alldrich, Continuity Consulting
Chris Baltzley, Continuity Consulting
Jeff Pfeiffer, Continuity Consulting

Communications Team
Adelina Zendejas, Department of Technology
Michael Todd, Department of Technology
Michelle Wagner, Department of Technology
Sydney Kuyama, Department of Technology
Bryan Brown, Department of Technology