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California State Information Technology Strategic Plan 2006

Office of the State Chief Information Officer

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California State Information Technology

STRATEGIC PLAN

Update to the 2005 Plan



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November 2006

Arnold Schwarzenegger
Governor
State of California

Clark Kelso
Chief Information Officer
State of California



Message from the State CIO

November 2006

I am pleased to present the California State Information Technology Strategic Plan, as updated by the Information Technology Council pursuant to its annual review and strategic planning process. The plan, originally adopted in November of 2004, guides the acquisition, management and use of technology within the Executive Branch of State government for a five-year period (2005-2009). We are now entering the third year of the plan.

The ideas and contents of the original plan were developed over a two-year period and represented the collective research and judgment of literally hundreds of the State's IT and program leaders. We began executing on that plan during 2005. We fully accomplished a number of the action items and objectives, began others and held the initiation of some pending the completion of requisite contingencies. The plan was updated in November 2005. During 2006, our progress has accelerated, and we are now fully executing on all of the goals and most of the objectives in the plan. We have transitioned from planning to execution.

The list of strategic plan accomplishments is growing:

- Consolidation of the State's two general-purpose data centers into the Department of Technology Services (DTS) which is now offering new statewide services;
- A series of statewide information technology procurements conducted by the Department of General Services with the active assistance and guidance of the IT Council's Acquisitions Committee, procurements that have resulted in estimated cost avoidance of 43 million dollars (representing a 40% savings over historic purchasing levels);
- Completion of an Enterprise Architecture framework, as well as publication of selected key architecture documents dealing with "service oriented architecture" (SOA);
- Agreement among key stakeholders on a long-term vision for establishing, over a 10-year period, the State's next generation of common business management systems based on an integrated financial and administrative system built on Enterprise Resource Planning software which will evolve to become the State standard;
- Initial rollout of a new eServices strategy and refresh of the State's web pages as a result of the combined efforts and leadership of the State

CALIFORNIA STATE INFORMATION TECHNOLOGY STRATEGIC PLAN

Portal Steering Committee, the Director of eServices in the State and Consumer Services Agency, the Department of Technology Services, the State Librarian, the Secretary of State and Consumers Services Agency, and the State CIO;

- Passage of AB 2241, which authorizes a skills-based certification process, and the development of a new IT classification system which, when implemented in the coming year, should substantially improve the yield resulting from our recruitment efforts;
- Creation of a "Leadership for the Government Executive Certificate Program" offered by California State University Sacramento, which is designed to help us build both IT and business-side executive leadership in State government, leadership that is attuned to the 21st century's digital environment;
- Passage of SB 834 which elevates the State CIO to a cabinet-level position and makes the State CIO the Executive Branch's chief leader and adviser on information technology and telecommunications technologies.

We are doing IT right, and we are doing it from an enterprise-wide perspective. Much of our fundamental planning has now been completed, and we are beginning to move into sustained execution of major portions of our strategic plan. Our challenge is to continue executing on these plans. The plan has a full menu of activities, and an aggressive timetable for implementation. We are asking a great deal of ourselves, and we will need the strong support of the State's policy-makers in the Executive and Legislative Branches to accomplish our goals. The plan is worthy of that support. It sets us on the right course to improve services to the public while reforming State government operations in the process.

Working collaboratively as a team, we can keep the State's information technology program on track and, in the process, provide the support that is so essential to improving State operations. For the State's information technology leaders, that is our challenge, our obligation and our opportunity.

Join me in transforming California government, making it more responsive to the diverse needs of our great State.



J. Clark Kelso
Chief Information Officer
State of California

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CALIFORNIA STATE INFORMATION TECHNOLOGY STRATEGIC PLAN

INTRODUCTION

The State is moving forward with collaborative planning and coordinated execution to make government services more accessible to the people it serves, to improve the cost-effectiveness of government programs and operations, and to embrace the spirit of innovation that is California's distinctive characteristic. Information and telecommunications technologies lie at the heart of nearly all significant improvements in statewide programs and operations. As a consequence, we have invested substantial time and effort in our IT Strategic Planning Process to make sure that our information technology and telecommunications systems stay well aligned with the State's business needs and goals.

Technology for a Changing California

As the Nation's largest state and one of the world's most powerful economic engines, California has long been the home of innovation and change. State government must be integrated into the fabric of this change. How the State manages its information technology (IT) resources in the coming years will be critical to the success of its program efforts.

The trends that are faced by California government are staggering:

- The State's population continues to grow vigorously, with about 500,000 new California residents added each year.
- Diversity is unparalleled; State and local government employees provide services to people having over 100 different native tongues.
- Our population is bulging at the ends of the scale – with the largest numerical growth among the young and the highest rate of growth among the elderly.
- Privacy and security – both physical and cyber – are increasingly important to California residents.
- Californians continue to be concerned about the environment and demand government action to preserve our natural heritage.

These facts add up to continuing increases in demand for State and local government services. Moreover, the taxpayers have made it clear that higher taxes cannot be viewed as an instant governmental remedy. Consequently, greater effectiveness and efficiencies are the best avenues available to State program managers for improving the satisfaction of their clientele.

Information technology is a key contributor to the execution of State programs and a measurement of their success. Although each department and program has unique technology needs that must be addressed and focused on the specific business needs

of the organization, several cross-cutting needs and priorities can be identified that are important to most or all State programs and customers. Among these are the following:

- Further development of Internet- and technology-based channels for the delivery of State information and services for the convenience of the public.
- A need for consistent and accurate data that will interface with other systems as necessary.
- The assurance that confidential information and valued assets are secure.
- The ability to easily access information and services while ensuring that such access is allowed only to those intended.
- Availability of appropriate tools for executive oversight, management decisions, and program implementation.
- Efficient and cost saving means to deliver services.
- Need to respond and transact quickly.
- Need to maintain systems and services in adequate working order throughout their life cycles and to replace or retire them when support is no longer possible.

Strategy for a Changing California

This statewide Information Technology Strategic Plan outlines a bold but necessary agenda for redefining how we manage our information technology resources to improve service delivery and streamline internal operations. It is a plan to align our technology to an enterprise perspective and focus our investments on those initiatives that will enable significant improvement in statewide service delivery and business operations.

Our adopted mission statement recognizes and emphasizes information technology's organizational role as a support player – information technology should not drive program design and implementation; instead, business needs should drive information technology. Our mission is as follows:

Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.

We have adopted six strategic goals to focus our efforts. These goals, and their associated objectives and action items, detail the steps necessary for California to harness the power of information technology to improve service delivery and streamline internal operations. The goals are as follows:

1. Make Government services more accessible.
2. Implement common business applications and systems to improve efficiency and cost-effectiveness.
3. Ensure State information assets are secured and privacy protected.
4. Lower costs and improve the security, reliability and performance of the State's IT infrastructure.
5. Strengthen our technology workforce.
6. Establish a technology governance structure.

In order to keep our action items as concrete and meaningful as possible, we have generally limited their horizon to the next twelve to eighteen months. We update action items annually, and issue a revised plan that reflects current progress and next year's activities. This means in many cases that full implementation of a goal or objective will require additional action items that have not yet been included in this document.

Visit the State CIO's web site <http://www.cio.ca.gov> for more information about the California State Information Technology Strategic Plans and Program.

MISSION

Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



GOALS, OBJECTIVES AND ACTIONS

GOAL 1

MAKE GOVERNMENT SERVICES MORE ACCESSIBLE.

The State will complete a technology-enabled transformation in the delivery of services, improving the accessibility, value, and cost-effectiveness of services, benefits and information provided to the public, businesses, other government agencies and State employees.

Government services must be made widely available through multiple delivery channels. We must move beyond the traditional face-to-face, paper-based interactions and demonstrate California technology prowess by making information and services available inexpensively and on a 24x7 basis. Modern information and telecommunication technologies are the foundation for this transformation of service delivery.

However, it is not enough to take existing services and processes as-is and make them electronic. There is a need to rethink the entire service delivery model. Integration of like services into a "service center" model is a must. For example, an entrepreneur starting a new business should not have to visit ten or more different agencies (or their web sites) when this could be done in a single transaction. This type of a transformation can only happen when there is a deeper collaboration between related government agencies and willingness to share data.

Finally, the widespread deployment of network technologies and broadband is creating brand new opportunities that never existed before. Health IT and Geospatial Information System (GIS) technologies are a harbinger of a new world in which California State government could dramatically enhance the value of its services.

Objective 1

Develop A Foundation For Transforming Government

The State will implement a foundation for transforming government service delivery and operations, enabling business solutions and processes that are more customer-focused, strategic, and cost-effective.

The essential ingredients of this foundation include:

- *Leadership focused on the redesign of business processes and the application of technologies across organizational boundaries to improve efficiency, interoperability, and cross-organizational program integration*
- *A collaborative governance process for evaluating government needs and challenges across organizational boundaries, and prioritizing those initiatives based on value to customers, public acceptance and a high return on investment*
- *Further development of the e-Government service delivery channel, recognizing that digital and web-based transactions and interactions are now the preferred way in which millions of people and businesses conduct their affairs*
- *Shared architectures, infrastructure, and tools for rapid deployment of new applications and services*
- *Streamlined project development, management and implementation to capture early benefits and encourage transformation*
- *State workforce skilled in implementing industry best practices*

A key facilitator for this transformation of the State's Internet presence is our federated ownership and architecture, a federation that empowers independent, yet parallel and coordinated, implementation by agencies across State government. Other objectives and action items throughout this plan will also contribute to the essential ingredients listed above.

Actions

1. By February 2007, the Director of eServices, who provides statewide leadership for the refresh and expansion of the State's web presence, will have available on the eServices website (www.eservices.ca.gov) a comprehensive set of policies, standards, web templates and toolkits to assist agencies in the transformation of the State's portals and web pages.
2. By February 2007, the State CIO, the Director of eServices and the eServices Steering Committee, using the *Government Services on the Web: "California In-Touch"* report as foundation, will adopt a California In-Touch Initiative Charter and a model Charter for the development of Service Centers for various lines of business (e.g., "Tax Service Center", "Business Service Center", "Health Service Center", and so on).
3. By March 2007, the State CIO will initiate ongoing discussions, to be led by the State Librarian and State Archivist, with communities of interest across Agencies and Departments to develop policies and methodologies for the preservation of information on State portals and web pages, thereby ensuring long-term public access to important public information.

4. By April 2007, the Director of eServices in collaboration with the Department of Technology Services, State and Consumer Services Agency, and the California State Library will take steps to provide guidance for the agencies to train internal resources in various web development disciplines such as: Usability, Accessibility, Graphics, and others.
5. By June 2007, the DTS Director and the Director of eServices will implement a contract to re-build the current State portal and provide advanced technology resources for optional use by State agencies to upgrade their Internet services.
6. By November 2007, each State agency will have completed a refresh of its web pages consistent with the policies, standards and web templates available on the eServices website, or will have reported to the Director of eServices on its plans for completing the refresh.

Objective 2

Leverage Services between State Agencies, Federal and Local Government and Promote Interagency and Intergovernmental Data Sharing

The State will pursue opportunities to collaborate with federal and local agencies and within state government to leverage e-Government services. The State will coordinate interagency and intergovernmental data collection and management, to improve data sharing capabilities and reduce costs of acquiring and managing data.

Many federal, state and local government programs are interrelated or interdependent. Working together, governmental agencies can deliver better services to citizens and reduce the overall cost of implementing and maintaining service delivery systems.

System and database designs often prescribe unique definitions and program-focused restrictions, inhibiting the use of data for other purposes, and resulting in duplication and incompatibility of data. The State can do a much better job of sharing data through collaborative planning efforts.

Actions

1. By January 2007, the State CIO will establish a Federated Identity Management Steering Committee responsible for establishing a State vision, policies and standards regarding identification and authentication of State system users and data.
2. By April 2007, the Federated Identity Management Steering Committee will identify selected State agencies as the owners of identity data for persons, businesses and other entities consistent with the intent to maximize secure and reliable collaborative data collection, management, and data sharing.

3. By July 2007, the Federated Identity Management Steering Committee will develop policy, privacy, and data sharing rules recommendations to support statewide business needs for identity management.
4. By July 2007, one or more State agencies will work with the Social Security Administration to develop data sharing capabilities using scalable enterprise technologies. The State will use the architecture of these initial systems as a foundation and model for enterprise data sharing.
5. The State CIO will work with Agency Information Officers and Chief Information Officers to identify other opportunities for expanding interagency data sharing consistent with privacy interests and fair information practices.

Objective 3

Leverage and Secure the State's Geospatial Information Assets

California needs to enhance its organizational and institutional capacity to develop, share and serve an integrated set of digital geospatial data resources in a manner that is closely aligned with the State's business needs. State agencies must work together to stand up the California Spatial Data Infrastructure: framework geospatial data sets, systems, standards, policies and practices. This will require an entity charged with the responsibility for coordinating the geospatial activities with policy makers from key business units providing executive sponsorship and oversight.

California faces significant challenges in a number of important areas that require the marshalling of quality geospatial information and services. These include among others:

- *Guarding against terrorism and criminal activities*
- *Emergency preparedness and response*
- *Planning strategic growth (e.g., San Joaquin Partnership)*
- *Planning and operating critical infrastructure*
- *Mitigating the affects of global warming (e.g., Delta Vision)*
- *Sustainable management of our natural resources*
- *Restoring and ensuring environmental quality*
- *Pandemic detection and response*

Actions

1. By January 2007, the State CIO will sponsor the Geospatial Information Executive Committee to oversee the planning, acquisition, implementation and support of geospatial data assets, systems and solutions. The Geospatial Information Executive Committee is comprised of the Secretary of Resources Agency; the Director of Office of Homeland Security; the Director of Office of

Emergency Services; the Secretary of the California Environment Protection Agency; Secretary of the Business, Transportation and Housing Agency; the Secretary of the Health and Human Services Agency; the Secretary of the State and Consumer Services Agency; the Secretary of the Department of Corrections and Rehabilitation; the Director of the Department of General Services; the Director of the Department of Personnel Administration; the California Geospatial Services Director; and the State CIO.

2. By July 2007, there will be a Geospatial Services Office reporting to the Geospatial Services Director in the Resources Agency with the responsibility for providing strong statewide leadership for the review of business processes that lend themselves to better leverage geospatial data assets and related web services for business decisions. The Director and the Geospatial Services Office will collaborate with Cabinet Secretaries, the Department of Finance (DOF), the Department of Personnel Administration (DPA), the Department of Technology Services, the Department of General Services (DGS) and other state agencies to facilitate the application of enabling geospatial technologies and services.
3. The Geospatial Services Director will work with the California GIS Council to plan and begin implementation of the California Spatial Data Infrastructure (CSDI). The CSDI will define the data architecture, systems, standards, processes and coordinate the availability of geospatial data and web services used by state agencies and partner entities. The Geospatial Services Director will seek opportunities to share GIS data and services with cities and counties through collaborative efforts.

Objective 4

Support Statewide Efforts to Develop Health Information Technology Solutions and Promote Health Information Exchange

As both a major purchaser of health care and a regulator of the market, State government has a role to play in leading and facilitating the transformation of the health care industry in Health IT.

The healthcare industry is beginning to examine how best to take advantage of information and telecommunications technologies across the industry to improve quality of care, expand patient access to and control over medical records, and address issues of affordability, while maintaining the highest levels of security and privacy protection over personal health information. Early experience with Health Information Technology (HIT) indicates that it can reduce medical errors by providing physicians and pharmacies with more complete patient histories, computerized ordering of services and electronic reminders. With HIT, medical information can follow consumers so that they are at

the center of their own care. HIT may also reduce duplication, waste, and fraud in healthcare. Over the next decade, HIT is expected to revolutionize healthcare, making it more consumer-centric, and improving both the quality and cost-effectiveness of healthcare in California.

Actions

1. By December 31, 2006, pursuant to Executive Order S-12-06, the Secretaries of Health and Human Services Agency and Business, Transportation and Housing Agency, and the State CIO, will deliver to the Governor a roadmap for a health information technology program that improves quality of care, accessibility and affordability for Californians.
2. By December 31, 2006, the State CIO will incorporate the existing CA Government Committee on Health Information Technology into the State's IT governance structure.

Objective 5

Support Statewide Efforts to Expand Broadband Access and Usage in California

California is taking action to reduce barriers to broadband access and adoption and adopting measures to ensure that State policies evolve in response to ever-changing conditions in the technology marketplace.

Pursuant to Executive Order S-21-06, Executive Branch agencies will identify barriers to broadband access and opportunities for increased broadband adoption. The Executive Order focuses on strategies that can be pursued at an administrative level and will either reduce bottlenecks or build upon "best practices." An in-depth analysis will also be done relating to identification and resolution of government-imposed barriers or obstacles, technology-neutral recommendations for how to achieve statewide ubiquitous broadband coverage, metrics for evaluating private and public sector efforts, targets for region-by-region annual increases in availability and adoption rates, identification of regionally based business broadband deployment models, identification of areas where stakeholders may aggregate demand for broadband and create opportunities that result in increased adoption rates, evaluation of value-added applications, analysis of how public and private organizations can best integrate their efforts, and recommendations for how California can better leverage federal, state, and private foundation grant and loan programs relating to broadband. Together, public and private stakeholders will enable continued improvements in healthcare, public safety, education, and the economy.

Actions

1. By February 27, 2007, the California Broadband Task Force will deliver to the Governor a preliminary report that identifies administrative actions that can

result in immediate promotion of broadband access and usage in the State. Task Force members will include, but are not limited to, senior representatives from government entities having a role in infrastructure deployment, information technology, and economic development; representatives from California's private sector technology and investment industries; and representatives of non-profit organizations.

2. By November 27, 2007, pursuant to Executive Order S-21-06, the California Broadband Task Force will deliver to the Governor and Legislature a comprehensive report on broadband deployment and usage, including specific recommendations for how California can take advantage of opportunities for and eliminate any related barriers to broadband access and adoption.
3. The Business, Transportation and Housing Agency (BTH) shall be the lead agency for coordinating implementation of policies and practices set forth in Executive Order S-21-06, including:
 - Leading the California Broadband Task Force;
 - Modifying rights-of-way policies and practices; and,
 - Instituting broadband data collection and analysis.
4. The DTS and the Department of General Services (DGS) shall take steps to facilitate use of state-of-the-art technologies such as:
 - Use by government agencies of advanced communication technologies, such as web casting and Voice-over Internet Protocol (VoIP) services; and,
 - Development of public access, wireless Internet in public buildings.

GOAL 2

IMPLEMENT COMMON BUSINESS APPLICATIONS AND SYSTEMS TO IMPROVE EFFICIENCY AND COST-EFFECTIVENESS.

To serve the best interests of California and to optimize the business management of state government, we will collaboratively and successfully develop, implement, utilize, and maintain an integrated financial management system. This effort will ensure best business practices by embracing opportunities to re-engineer the State's business processes and will encompass the management of resources and dollars in the areas of budgeting, accounting, procurement, cash management, financial management, financial reporting, cost accounting, asset management, project accounting, grant management and human resources management.

Objective 1

Develop an integrated financial management system for use by all agencies and the Legislature initially encompassing budgeting, accounting and procurement functions, and continue development of the statewide payroll project

The Department of Finance, in partnership with the Department of General Services, the State Controller and the State Treasurer, will undertake a 10-year initiative based on a phased development and rollout to establish the State's next generation of common business management systems.

Actions

1. By January 2007, the Department of Finance, in partnership with the State Controller, the State Treasurer and the Department of General Services, will finish preparing a Special Project Report for the "FI\$Cal Project" to acquire a system that will ultimately encompass the management of resources and dollars in the areas of budgeting, accounting, procurement, cash management, financial management, financial reporting, cost accounting, asset management, project accounting, grant management and human resources management. The effort will ensure the best interests of the State and its citizens, and optimize the business management of state government. The Special Project Report will propose that California establish an integrated financial and administrative system based on Enterprise Resource Planning (ERP) software.
2. During 2007, the Fi\$Cal partners will develop a Request For Proposal (RFP) for the FI\$Cal Project, and in 2008, the Department of Finance will conduct

a business-based procurement for statewide software and system integrator services.

3. During 2007, the State Controller will continue development of the 21st Century Project, leading to the establishment of an enterprise-wide payroll system.

Objective 2

Establish Executive Governance for Projects with Significant Statewide Implications

The State needs to establish a broadly-representative governance structure to provide a forum for stakeholders of statewide projects and initiatives to address issues of mutual interest and concern and, as necessary, to make final decisions on matters of statewide import and impact.

With the creation of the Technology Services Board as the governing authority for the Department of Technology Services, the State has established appropriate executive level governance over the State's common information technology and telecommunications infrastructure. As the State now embarks upon a series of enterprise-wide applications and initiatives, the need for executive leadership and governance at a statewide level is reinforced.

Actions

1. By January 2007, an "Enterprise Leadership Council" (ELC), formed through a charter of its members, will establish a forum and governance structure for stakeholders of enterprise projects and initiatives in development by state agencies, including but not limited to the State Controller's Office 21st Century Project, Department of Finance's FI\$Cal Project, the State Portal initiative, and the Department of General Services' Payment Acceptance Process initiative. The Department of Finance will sponsor the ELC, and the Office of the State CIO will have primary responsibility for ELC support and coordination. The ELC will consist of representatives from the following statewide enterprise project stakeholders:
 - Director, Department of Finance
 - Secretary, Business, Transportation and Housing Agency
 - Secretary, Department of Corrections and Rehabilitation
 - Secretary, California Environmental Protection Agency
 - Secretary, Department of Education
 - Secretary, Department of Food and Agriculture

- Secretary, Health and Human Services Agency
 - Secretary, Labor and Workforce Development Agency
 - Secretary, Resources Agency
 - Secretary, State and Consumer Services Agency
 - Secretary, Department of Veteran's Affairs
 - Director, Department of Personnel Administration
 - State Controller
 - State Treasurer
 - Executive Director, Board of Equalization
 - State Chief Information Officer
2. By January 2007, an "Enterprise Systems Governing Board" (ESGB), formed through a charter of its members and empowered by the collective decision-making authority of its members, will be charged with making final policy decisions of statewide import and impact in matters referred to it, with or without recommendations, by the Enterprise Leadership Council. The State CIO's office will provide staff support to the ESGB. The members of the ESGB will be:
- Director, Department of Finance
 - Secretary, State and Consumer Services Agency
 - State Controller
 - State Chief Information Officer

Objective 3

Create Coherent State Processes For Access, Management and Preservation Of Digital Material

The State will develop processes to ensure the long-term preservation of and public access to digital records that have enduring legal, historical or administrative value. The State CIO and agencies will coordinate to develop a statewide digital preservation plan including the development of metadata standards.

Actions

1. By March 2007, the State CIO will initiate ongoing discussions, to be led by the State Librarian and State Archivist, with groups or communities of interest across Agencies and departments to develop policies and methodologies for the preservation of State records and documents that are created in or converted to digital form, ensuring long-term public

access. These policies and methodologies shall include standards for metadata to ensure the ability to locate, catalog and process digital information.

2. By December 2007, the State CIO will coordinate the sponsorship of one or more projects to demonstrate an integrated approach to transitioning digital documents from dynamic working files to permanent archives available to the public.
3. By December 2007, the appropriate state entities, with input from the State Library and State Archives, will adopt and publish policies and related procedures to require full lifecycle management of digital material. These policies and procedures shall include provisions that will ensure that potential long-term value of material is properly assessed; that provisions, when deemed appropriate, for transfer to the State Archives and Library are established; and that all necessary steps are taken for the long-term access, preservation and usability of digital material.

GOAL 3

ENSURE STATE INFORMATION ASSETS ARE SECURED AND PRIVACY PROTECTED.

The State will improve interdepartmental coordination, conduct rigorous security assessments, adopt secure architectures, mitigate security and privacy risks to its systems, infrastructure and information, and provide guidance for adequate governance of information security.

As the State's information systems become more complex and the need for rapid collection, storage and distribution of large amounts of data continues to grow, the challenge for their protection becomes critically important. Catastrophic events, as well as attacks against our technology infrastructure and systems, can have a severe impact on business operations. We must work together to ensure California's systems are sufficiently safeguarded and robust enough to support homeland security needs and to maintain business continuity of state government.

Moreover, the State's possession of significant amounts of personal and confidential information, and the risk of disclosure or inappropriate use of that information, makes privacy protection a significant concern. In California, where "privacy" is expressly protected by our State Constitution, the State's obligation to safeguard this information is of paramount importance.

Objective 1

Adopt Statewide Security and Privacy Protection Standards

The State will adopt statewide security and privacy protection policies and standards consistent with the State's enterprise architecture, for program data access, network connectivity, desktop management, server configuration, Internet connectivity, and external access to technology services.

Implementation of statewide security policies and standards will help ensure the elimination of structural vulnerabilities from the State's information technology architecture and systems, and enable more uniform and robust security measures.

Actions

1. By June 2007, the IT Council's Security Committee will update the IT Security Program Guidelines.
2. By July 2007, the IT Council's Security Committee will develop general standards or guidelines for remote access authentication implementation.

3. By November 2007, the State Information Security Officer (SISO), in collaboration with the IT Council's Security Committee and the Department of Personnel Administration, will develop a general Internet acceptable usage policy and a related best practice guideline for agencies.
4. The SISO, in collaboration with the Office of Privacy Protection, will provide continuing education and training for security and privacy protection awareness for state management and staff.

Objective 2

Assess and Mitigate Security and Privacy Risks

The State will provide tools to help departments conduct self-assessments of security and privacy risks. These self-assessments will help agencies determine risks and properly mitigate them.

Actions

1. By March 2007, the IT Council's Security Committee will survey departments on existing and planned efforts in implementing data encryption.
2. By April 2007, the SISO will implement a refined Information Security Incident Reporting and Notification Process and ensure adequate training regarding incident reporting and notification is provided to state employees.
3. By August 2007, the SISO will develop a methodology and a set of tools that departments can use to self-assess their IT security vulnerabilities.
4. By August 2007, the State Privacy Officer, in consultation with the SISO, will develop a methodology and a set of tools that departments can use to self-assess the privacy impact of proposed new and major modifications to existing IT systems that contain personal information.

Objective 3

Develop a Governance Structure for IT Security

The State will develop a governance structure for IT security that is in alignment with the State's other IT governance structures to help ensure that privacy protection, risk assessment, risk mitigation, and incident reporting policies and procedures are implemented consistently and thoroughly statewide.

A governance structure is also needed to ensure the State implements a security infrastructure that meets the collective and individual security and privacy needs of State departments.

There are significant interrelationships and dependencies between various departments regarding IT security—we are only as strong as our weakest link. Thus, it is critical for our collective protection that we ensure that each department in the State's infrastructure exercises due diligence in IT security infrastructure and processes. Further, by developing consensus in implementing IT security best business practices and technical configurations, individual departments will benefit from design and implementation economies of scale.

Actions

1. By February 2007, the IT Council's Security Committee will identify all existing IT security groups and committees, and document the charter and stakeholders of each group.
2. By March 2007, the SISO will develop and publish a document that outlines the general roles and responsibilities assigned to an agency's Information Security Officer (ISO).
3. By June 2007, the IT Council's Security Committee, working with the SISO and Agency Information Officers, will develop a recommended approach to statewide IT security governance that covers executive, management, and technical roles.

GOAL 4

LOWER COSTS AND IMPROVE THE SECURITY, RELIABILITY AND PERFORMANCE OF THE STATE'S IT INFRASTRUCTURE.

The State will develop an IT and telecommunications infrastructure that is secure, reliable and meets high performance standards by standardizing its infrastructure around an Enterprise Architecture and consolidating the management of that infrastructure to support and enable a more customer-focused government.

The State must use its limited technology dollars wisely. Enterprise Architecture is the description of the technical framework that a business or enterprise uses to conduct its business over computing and telephone networks. The State of California needs an Enterprise Architecture (EA) to assist departments in their efforts to create consistent, secure, and interoperable information technology systems. The architecture will be an integral part of the governance process for information technology. The EA team will use the IT mission and the State's key business drivers in order to build an architecture that enhances information sharing, guides technology standards, reduces application development costs and complexities, and better serves the needs of departments and the people of California.

Through the use of Enterprise Architecture, infrastructure consolidation and enterprise-wide procurements, as well as the adoption of enterprise-wide standards, departments will be able to lower costs, and improve reliability and performance of the IT and telecommunications infrastructure.



Objective 1

Adopt a Statewide Enterprise Architecture

Pursuant to the California Enterprise Architecture Framework, the State will adopt a statewide Enterprise Architecture to support business-driven, service-oriented IT solutions that facilitate the implementation of statewide technology standards in support of enterprise data sharing and statewide systems interoperability.

The State will adopt and implement the California Enterprise Architecture as a foundation to support the business driven implementation of information technology across the enterprise. Enterprise Architecture provides the foundation for which several other goals of the IT Strategic Plan may be delivered.

Actions

1. By July 2007, the California Enterprise Architecture Program (CEAP) <http://www.cio.ca.gov/ITCouncil/Committees/ArchStandards.html> will be led by the Director for Enterprise Architecture, who reports to the State CIO, and has ongoing responsibility for developing, maintaining, and publishing the State's Enterprise Architecture. The Director will collaborate with the eServices Director, the Geospatial Services Director, the SISO, the State Privacy Officer, the Agency Information Officers (AIO's) and CIO's.
2. By August 2007, the Director for Enterprise Architecture will partner with DTS and one or more departments to build a Services Oriented Architecture (SOA) environment to host multi-departmental shared business services critical to the success of the California Enterprise Architecture Program. This partnership group will identify new roles, skills, processes, and training requirements to support the SOA environment.
3. The CEAP, using the *California Enterprise Architecture Framework* adopted by the IT Council in 2005, will continue to develop and maintain recommendations and documentation in support of the following Enterprise Architecture Initiatives:
 - a. California Service Centers
 - b. Enterprise Business Systems
 - c. Identity and Authentication
 - d. Geospatial Information Systems
 - e. Health IT
4. The CEAP will continue developing models and ongoing maintenance of the following Enterprise Architecture Domain deliverables:
 - a. Business – Business Reference Model (BRM)
 - b. Data – Data Reference Model (DRM)
 - c. Application – Service Reference Model (SRM)
 - d. Technology – Technology Reference Model (TRM)

Objective 2

Consolidate Technology Infrastructure and Services

The State will consolidate its technology infrastructure and services to leverage the economies of scale in the utilization of resources, eliminating unnecessary redundancies and reducing support cost through standardization.

These efforts will align with the development of the enterprise technology architecture and implement the strategic direction for the use and deployment of information technology solutions statewide. Technology consolidation by the departments and the Department of Technology Services, after consulting with its customers, will increase the security, robustness and reliability of the State's technology infrastructure and improve budget allocation and performance management, cross-agency collaboration, information sharing and e-government solutions.

Actions

1. By March 2007, the State CIO and the DTS will establish a business-oriented, statewide telecommunications strategy that will address the full range of telecommunications services used by state agencies, ranging from basic phone service to video conferencing, telecommuting, long-distance learning, call centers and other functions made possible by modern telecommunications technologies. These strategies will complement activities undertaken pursuant to the Governor's Executive Order, S-21-06 (Oct. 27, 2006), which encourages deployment of ubiquitous broadband throughout the State by increasing adoption rates, promotes accessibility and improve applications to better serve California and its economy.
2. By April 2007, the Director of the DTS will submit the Network Infrastructure Consolidation Business Case to the State CIO and the Technology Services Board. Working in conjunction with the Department of Transportation (DOT), the business case will include business model recommendations and plans to transform DTS into a statewide enterprise network service provider.
3. By June 2007, the Director of the DTS jointly with the IT Council Technology Services Committee will submit a Server Consolidation Strategic Plan to the State CIO and the Technology Services Board.

Objective 3 ***Modernize Legacy Systems***

Legacy systems that are outdated, ineffective and labor intensive to maintain should be considered for modernization or replacement since they expose government to higher overall operational costs, increased vulnerabilities to security threats and architectural breakdowns.

The State has many mission critical IT application systems of various ages. Many of these systems were developed with careful design and planning and continue to be high performing systems, even today. Such systems should be leveraged and modernized by extending their functionality with new presentation and access methods to their business rules. However, other systems have outlived their usefulness and should be replaced or modernized.

The objective of legacy system modernization is to build upon and extend existing application systems where it makes sense to do so, from a cost/benefit, customer service, business value and governmental services perspective.

Actions

1. By January 2007, to reduce the State's reliance upon unsustainable legacy application systems, the State CIO will designate one or more demonstration projects to modernize outdated and ineffective legacy application systems.
2. By April 2007, to leverage some of the State's high performing mission critical legacy application systems, the State CIO will partner with one or more departments to develop and demonstrate rapid development of web services accessibility and service delivery via the existing business rules in those legacy application systems.

Objective 4

Pursue Enterprise-Wide Procurements

The State will pursue the enterprise-wide procurement of technology using Enterprise Architecture and standards as a framework to leverage buying power and support the implementation of standards and consolidation.

Enterprise-wide procurements can achieve lower overall pricing, reinforce procurement best practices and responsiveness to business needs, improve systems security and facilitate the integration of systems and support of procurements across agency boundaries. The DGS Strategic Sourcing Initiative was implemented in 2005 and has been expanded over the past year. The State will implement strategies to assess the existing enterprise-wide procurement program to improve benefits to the State and recommend expansion where appropriate.

Actions:

1. By March 2007, the IT Council's Acquisitions Committee in collaboration with the DGS will assess and report on the overall programmatic benefits of the existing Strategic Sourcing Initiative and identify areas for improvement in the administration and operation of the program.
2. By August 2007, the IT Council's Acquisitions Committee in collaboration with the DGS will assess and report on the economic benefits to the State resulting from the existing Strategic Sourcing Initiative, as measured by the overall estimated savings to the State from reduced procurement costs for items covered under the initiative.
3. By November 2007, based on the results of the completed assessments, the DGS will develop a revised Plan for Strategic Sourcing to extend the program

to areas with probable justifiable savings, and to revise or suspend the program in those areas where anticipated savings have not been realized.

Objective 5

Ensure IT Disaster Recovery Plans, Processes, and Capabilities Support Continuity of Governmental Services

Disaster preparedness includes business resumption planning and information technology restoration, among other components. IT plays a significant and critical role in the delivery of state services.

State services are increasingly the result of collaboration across organizational boundaries. This collaboration has recently been embodied in such efforts as the Office of Emergency Services' (OES) development of Continuity of Operations (COOP) / Continuity of Government (COG) guidelines, as well as on-going agency IT operational recovery efforts.

Actions

1. By June 2007, the DTS will have identified and proposed comprehensive disaster recovery solutions for all IT infrastructure components that it supports.
 2. By July 2007, OES and the State CIO will work with Agency Secretaries to develop criteria for setting priorities to re-establish governmental operations in the event of a large-scale disaster and to identify critical interdependencies between different government entities.
 3. By August 2007, the SISO and the IT Council's Security Committee will work with OES to establish consistency between Operational Recovery and COOP/COG planning efforts to align processes, terminology, and reporting requirements.
 4. By December 2007, the SISO and the IT Council's Security Committee will establish a workgroup to develop and publish a process for agency IT operational recovery reviews.
-

Objective 6

Standardize State Document Management Systems

The State will align the architecture and standards of its large document management systems in order for these systems to become capable of sharing peak workloads, provide mutual aid in a disaster scenario, and better leverage expensive equipment and IT hardware and software licenses.

The State maintains a number of large document management systems including large mail processing centers that conduct document imaging, Optical Character Recognition (OCR) and check processing, as well as all large printing and mail distribution centers that produce high-volume mailings, benefit checks printing, various state forms and publications, and custom duplicating services. Standardization of architectures and processes across these document management systems has many benefits. Standardization would allow these unique paper processing environments to share peak workloads, provide mutual aid in a disaster scenario, and better leverage expensive electro-mechanical equipment, technology hardware and software licenses.

Many large agencies rely heavily on the use of paper-based channels of document intake and printing. Document intake management includes sophisticated mail opening equipment that can detect checks, various high-volume scanners for both standard size and coupon size documents, imaging services for automated workflow, and key data operations for data purification and quality. Document printing centers include expensive high-volume printers and copiers, specialized check printers with built-in monetary integrity, envelope stuffing and mail sorting machines that mimic the US Postal Service to obtain maximum postage discounts. The California Performance Review reported that efficiencies can be gained by standardization and consolidation of these large document processing centers including better disaster recovery provisions and increased security of information.

Actions

1. By May 2007, the State CIO will sponsor a statewide Document Management Systems Committee to analyze the current document intake management and document printing environments throughout the State.
2. By December 2007, the Document Management Systems Committee will gather the baseline information for document intake management and document printing environments throughout the State.
3. By July 2008, the Document Management Systems Committee in collaboration with the State CIO and one or more departments will issue a request for solution proposal to the vendor community on how document intake management and document printing centers within the State could be consolidated or leveraged for economies, disaster recovery and increased security.
4. By January 2009, the Document Management Systems Committee in collaboration with one or more departments will complete and publish their analysis of document intake management and document printing centers and determine recommended course of action.
5. By July 2009, the Document Management Systems Committee in collaboration with one or more departments may propose legislation to begin the consolidation for both document intake management centers and / or document printing centers.

GOAL 5

STRENGTHEN OUR TECHNOLOGY WORKFORCE.

The State will strengthen its information technology workforce to meet the needs and challenges of supporting a large and complex public-sector organization in the 21st Century.

The structure of the State's technology workforce has not kept pace with the changing technology environment. The State's move to a more customer-centric service delivery approach requires different skill sets not readily available today. Similarly, skills needed to sustain critical legacy systems are being lost due to retirements. The State has not been able to acquire sufficient skills or capacity to easily develop, operate and/or maintain some of the newer technologies and systems that will form the foundation for the next generation of IT. With this in mind, we must prioritize appropriate succession and workforce planning activities over the next three to five years, which include building an effective and comprehensive training program for IT staff and managers.

Objective 1

Lead Succession and Workforce Planning

The State will engage in IT succession and workforce planning to assist in the transition of the State's IT workforce to the future generation of IT leaders and workers.

The State faces a workforce crisis in the next several years with a large number of impending retirements. We must have strategies in place to ensure an effective transition. The State will recognize and plan for the replacement of IT employees who will likely leave state service within the next three to five years. This plan will account for the unprecedented number of impending retirements, a focus on increasing diversity, increasing skills gap, and preparation to address newer, and changing technologies.

Actions:

1. By January 2007, the State CIO will establish a framework to address statewide IT succession and workforce planning needs.
2. By February 2007, the IT Council's Human Resources (HR) Committee will identify comprehensive training and recruitment strategies to reduce the risks of the 15 identified skills in jeopardy as identified in the *Information Technology Managers Academy XIII (ITMA XIII) Skills Gap Report*.

3. By May 2007, the IT Succession and Workforce workgroup will complete the *Succession & Workforce Planning Tool Kit* that includes templates, recruitment and retention strategies, definitions, and instructions.
4. By June 2007, the IT Council's Human Resources (HR) Committee in collaboration with the Department of Personnel Administration will enable the scheduling of training workshops for CIOs and their staff, and HR staff where appropriate, on how to utilize the *Succession & Workforce Planning Tool Kit* and develop and implement succession and workforce plans.
5. By September 2007, the IT Council's Human Resources (HR) Committee in collaboration with the State CIO's Office will identify implementation success measurements for the completed training and the *Succession & Workforce Planning Tool Kit* use.
6. By October 2007, the IT Council's Human Resources (HR) Committee in collaboration with the State Personnel Board (SPB) will facilitate the development of a plan to maintain and update the statewide vacancy data by classification verticals developed by the Classification Work Group for exam and recruitment planning.

Objective 2

Modernize the Information Technology Classification Structure and Selection Tools and Methods

The State will modernize the classification structure and selection tools for its technology workforce.

The State must continue to support the IT Human Resources Project objectives of modernizing the IT classification structure. This will more accurately reflect the work functions and skills needed to develop, operate and maintain the State's dynamic technology infrastructure, including programs, systems, services and features, and future technology changes. The classification structure must be flexible to match today's working environment; be easily adapted to changes in technology; and incorporate information developed by the DPA during the 1998-99 study, Service Employees International Union (SEIU)/DPA Labor Management Committee, relevant reports, and subsequent Information Technology Managers Academy XII (ITMA XII) survey data. Additionally, new selection tools will be available to enable the State to more accurately assess knowledge, skills and abilities needed to perform in today's technology environments. The selection tools will provide for a skills-based certification process authorized by enabling legislation, AB 2241.

Actions

1. By September 2007, the DPA will prepare an *IT Classification Plan* for review and adoption by the 5-Member State Personnel Board. This Plan will serve as the basis for recruitment and exam planning for the new classifications and selection systems, and as a training tool for the State's Chief Information Officers, IT staff and HR communities.
2. By September 2007, the State Personnel Board in collaboration with the Department of Personnel Administration and the State CIO's Office will develop *Recruitment and Exam Plans* for use with the new IT Classification Plan and Selection System.
3. By September 2007, the Training Workgroup in collaboration with the State Personnel Board will develop and publish a list of common competencies and a staff development strategy for the State's Human Resources practitioners so that they may be better equipped to help improve the IT workforce. The strategy will include: development of IT environment tools which will assist HR practitioners to understand the multi-dimensional environment that IT employees work in, and training for HR practitioners and IT managers and supervisors.

Objective 3

Expand Recruiting Efforts for Technology Professionals

The State will develop a modern, ongoing recruitment program for IT classifications. This program will include recruitment of technology employees from colleges and universities, the public and private sectors, and the state workforce.

Actions

1. By July 2007, the State CIO, in partnership with the SPB and department stakeholders, will implement a Student Internship that facilitates the movement of students from a formal training and education status to permanent employment with the State.
2. By August 2007, the State CIO, in partnership with the SPB and department stakeholders, will develop a recruitment strategy for the new IT classifications and selection systems. The strategy will take into account, among other strategies, the lessons learned from the November 2005 Associate Programmer Analyst open exam and subsequent statewide open IT exams. The recruitment strategy will focus on attracting well-qualified individuals with technology degrees and/or experience from colleges, universities, trade schools, and the private sector.

Objective 4

Provide Professional Development for Technology Personnel

The State will support and maintain a robust technology training program focused on leadership and communication for all levels of IT management, supervisors, and professional staff. This training program proposes to consolidate resources statewide where feasible to address IT statewide needs. Training will address the core competencies and soft skills articulated in the new IT Classification Plan functional areas, such as project management, network and infrastructure management, applications development and other skills necessary to support current and new technologies.

Actions

1. By February 2007, the IT Council's HR Committee Training Workgroup will provide two additional *Leadership for the Government Executive* sessions hosted by California State University Sacramento, College of Continuing Education. The program will address required competencies, including soft skills needed to manage and lead in today's IT environments.
2. By June 2007, the State CIO, in partnership with stakeholder departments, DPA and SPB, will sponsor implementation of a basic supervision program for IT supervisors. This program will address both core competencies as well as soft skills needed to supervise in today's IT environments.
3. By September 2007, the HR Committee Training Workgroup will facilitate establishment of a process to update and maintain a *Professional Development Curriculum & Catalog*, similar to that produced by ITMA XII, but reflective of the IT Classification Plan being readied for adoption by the SPB. The new catalog will be web-enabled and electronically available to improve the ability of state IT employees to meet the IT strategic goals of the State.

GOAL 6

ESTABLISH A TECHNOLOGY GOVERNANCE STRUCTURE.

The State will ensure its decision-making structures and processes improve the application of technology to support government programs and solve business problems.

The overall governance structure and decision-making processes will ensure:

- Business and program performance and responsiveness,
- Successful and relevant strategic planning and decision-making in support of business goals,
- Oversight and alignment of information technology projects and operations to ensure consistency with strategic plans, and
- Operational implementation by those most directly responsible for program performance.

Objective 1

Establish a Layered Technology Governance Structure

The State will establish a layered governance structure that clearly assigns authority and responsibility at appropriate levels throughout the life-cycle of information technology projects and systems.

Actions

1. By January 2007, the State CIO and the Department of Finance will have agreed upon the necessary staffing and funding for the newly-created Office of the State Chief Information Officer. See Government Code § 11545 in Appendix A.
2. For project initiation, development, review, approval and oversight, the State CIO will work collaboratively with agencies, the Department of Finance and the Department of General Services to ensure that decisions about information technology projects are timely, consistent with enterprise-wide strategic directions, standards and architecture, and cost-effectively support clearly defined business needs and goals.
3. The State CIO will conduct regular meetings of Agency Information Officers and the Director of Technology Services to promote integration of statewide technology initiatives, ensure compliance with IT policies and standards, and encourage alignment of IT resources and effective management of IT portfolios.

Objective 2

Improve Alignment of Technology Governance with Business Planning

For enterprise-wide initiatives, the State will establish executive governance structures that ensure critical planning and implementation decisions are brought to the attention of the appropriate state officials for discussion and resolution.

It is not enough to have enterprise-wide technology governance and collaboration. Decisions about government operations ultimately belong to executive leaders throughout government. The State must increase its capacity for cross-agency business planning, governance and implementation.

Actions

- I. Enterprise-wide and cross-agency projects will establish cross-agency steering committees of key stakeholders and control agencies to ensure that key project decisions are made by agency chief executives and that technology decisions remain well aligned with business and program directions. These steering committees will report to the Enterprise Leadership Council and refer to the Enterprise Leadership Council any issues requiring enterprise-wide review and decision.
-

Objective 3

Implement Performance Measures

The State will develop performance measures and methodologies to assist in managing its technology systems and services.

While comprehensive performance measures depend on more robust enterprise financial and resource management systems than exist today in state government and on more complete definitions of business needs, steps will be taken to improve performance review, prepare for more rigorous performance evaluation tools in the future, establish baselines, and encourage better performance from technology systems.

Actions

- I. By April 2007, the State CIO will establish a high-level cross-departmental Performance Measurement Advisory Committee to adopt standard methodologies for information technology service delivery (such as Information Technology Service Management – ITSM) and project management (such as Project Management Institute - PMI).

2. By July 2007, the Director of the DTS will implement a pilot project at the Department to measure key metrics for managing day-to-day IT operations, and measure service level metrics, for the specific business needs of selected clients.
3. By October 2007, the Performance Measurement Advisory Committee will recommend to the State CIO standard model(s) for defining and measuring performance, such as the Balanced Scorecard, Economic Value Added, Service Level Agreements, or Benchmarking, and provide support to state Agencies and departments in developing baselines and ongoing plans for reporting performance to their management.

APPENDIX

Appendix A

Government Code § 11545 - Senate Bill 834 (Statutes of 2006)

11545. (a) There is in state government the office of the State Chief Information Officer. The State Chief Information Officer shall be appointed by, and serve at the pleasure of, the Governor, subject to Senate confirmation. The State Chief Information Officer shall be a member of the Governor's cabinet.

(b) The duties of the State Chief Information Officer shall include, but not be limited to, all of the following:

(1) Advising the Governor on the strategic management and direction of the State's information technology resources.

(2) Minimizing overlap, redundancy, and cost in state operations by promoting the efficient and effective use of information technology.

(3) Coordinating the activities of agency information officers, agency chief information officers, and the Director of Technology Services for purposes of integrating statewide technology initiatives, ensuring compliance with information technology policies and standards, and promoting alignment of information technology resources and effective management of information technology portfolios.

(4) Working to improve organizational maturity and capacity in the effective management of information technology.

(5) Establishing performance management and improvement processes to ensure state information technology systems and services are efficient and effective.

The California Executive Branch Technology Governance Structure

The IT governance structure will be comprised of the following component layers:

- A. A State Chief Information Officer (State CIO) who is a senior advisor to the Governor with full responsibility and authority for statewide technology vision, strategic planning and coordination, technology policies and standards for secure technology solutions, technology architecture, project management and defining a streamlined technology project review and approval process. The State CIO will lead an Office that includes, among other functions, Strategic Planning and Governance, Statewide Policy,

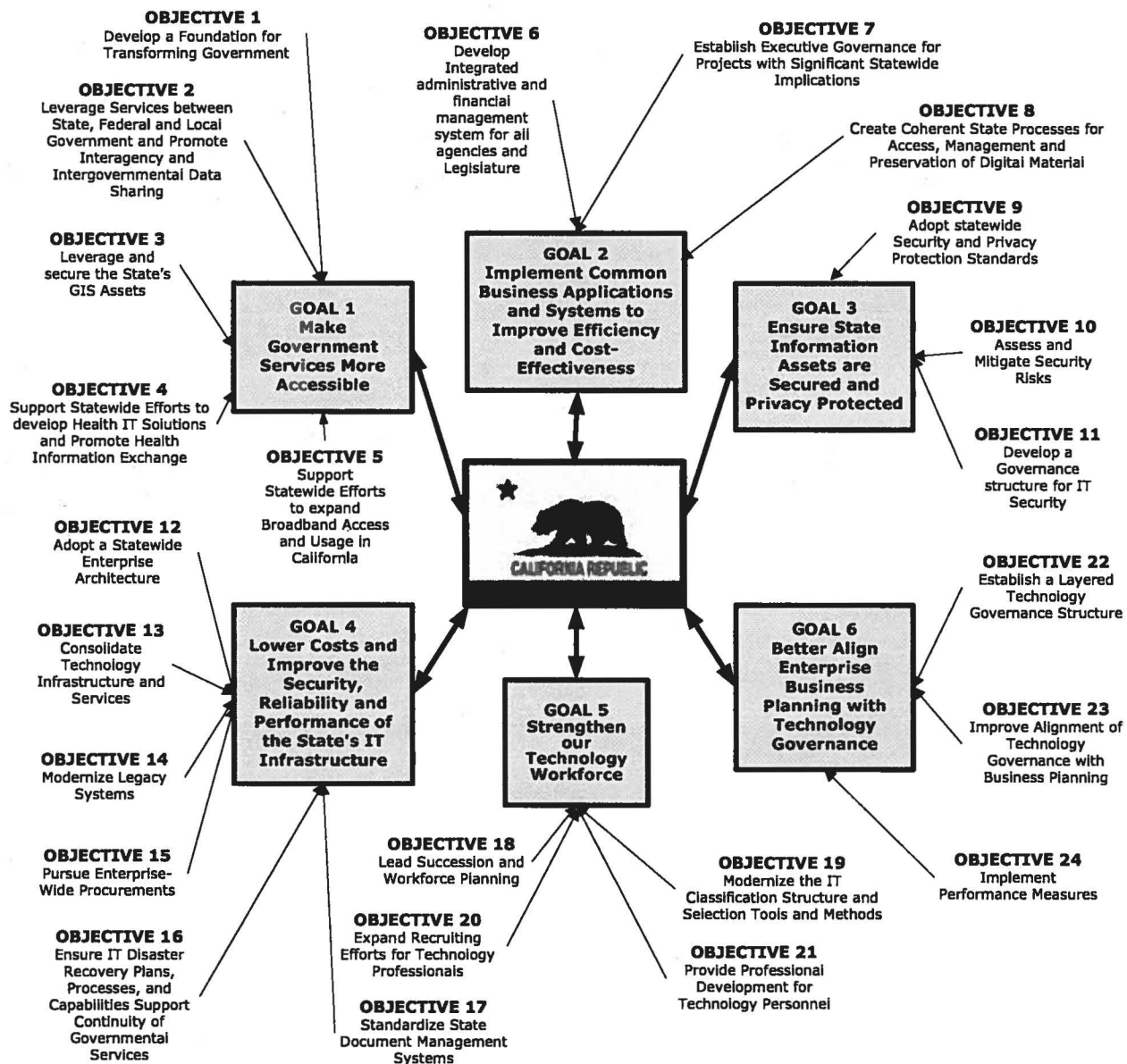
Portfolio Management, Enterprise Initiatives, Enterprise Architecture and Workforce Planning.

- B. Agency Chief Information Officers (Agency CIOs) who are responsible for overseeing departmental management of assets, projects, data systems, and IT services, through a reporting oversight of departmental CIO's. Each Agency CIO shall develop a 3-year plan to rationalize and standardize within their respective Agency, the IT infrastructure, data, and procedures for all departments within the Agency.
- C. A strengthened Departmental CIO function, with Department CIOs directly responsible for all IT activities within the department and accountable to their department director and Agency CIO for purposes of reporting departmental IT performance. All employees in IT classifications and all IT systems, assets, projects, purchases, and contracts will be accountable to the Department CIO, who will, under the direction of the department's governance authority, establish standards and procedures to promote efficient and effective use of IT resources throughout the department. Each Department CIO will develop a 3-year plan to rationalize and standardize the department's infrastructure, data, and procedures, consistent with the Agency plan developed by the Agency CIO and will report IT performance, accomplishments and issues to the Agency CIO.

Appendix B—Graphical Strategic Plan Summary Charts

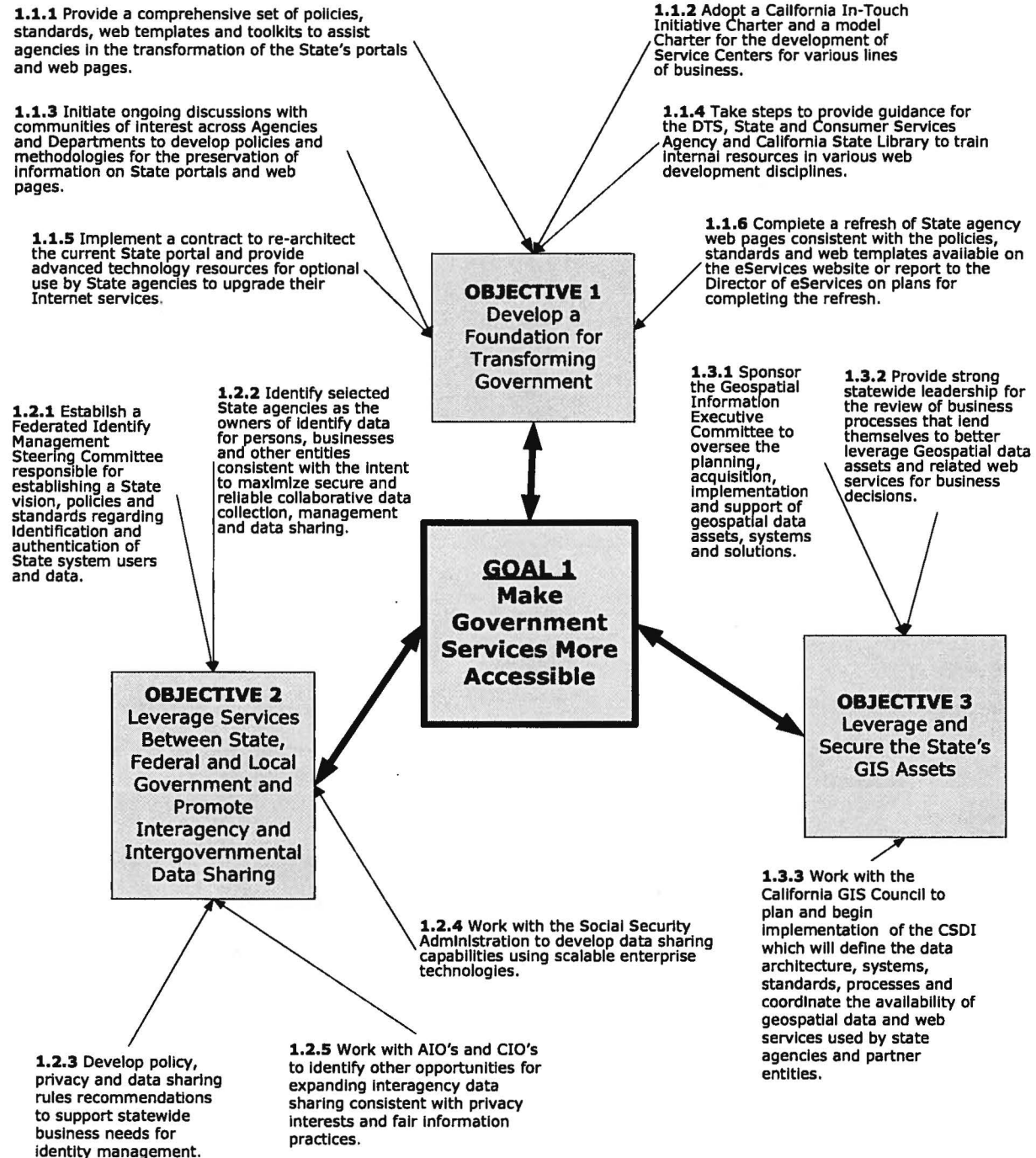
CALIFORNIA IT STRATEGIC PLAN SUMMARY

Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



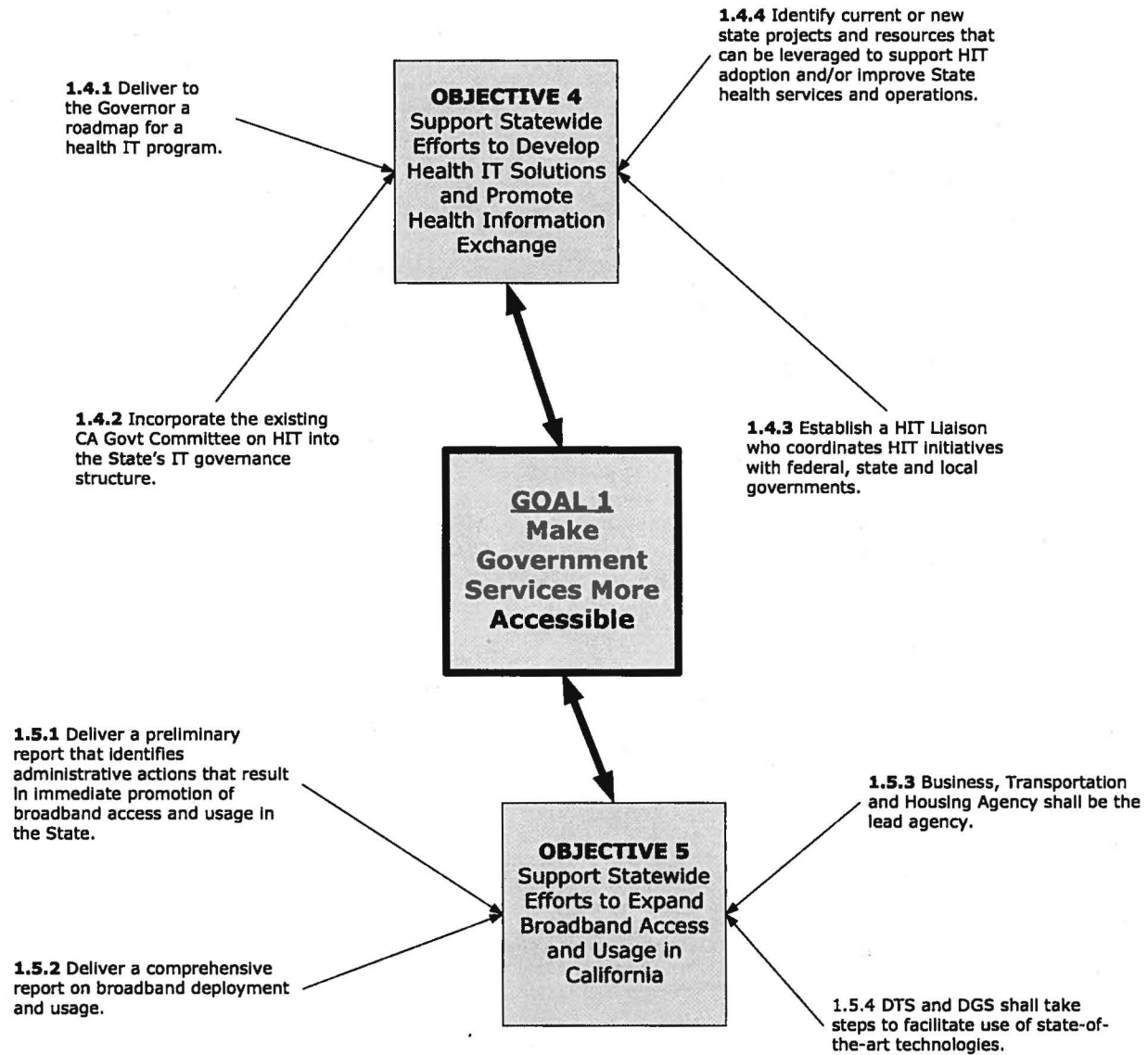
CALIFORNIA IT STRATEGIC PLAN-GOAL 1

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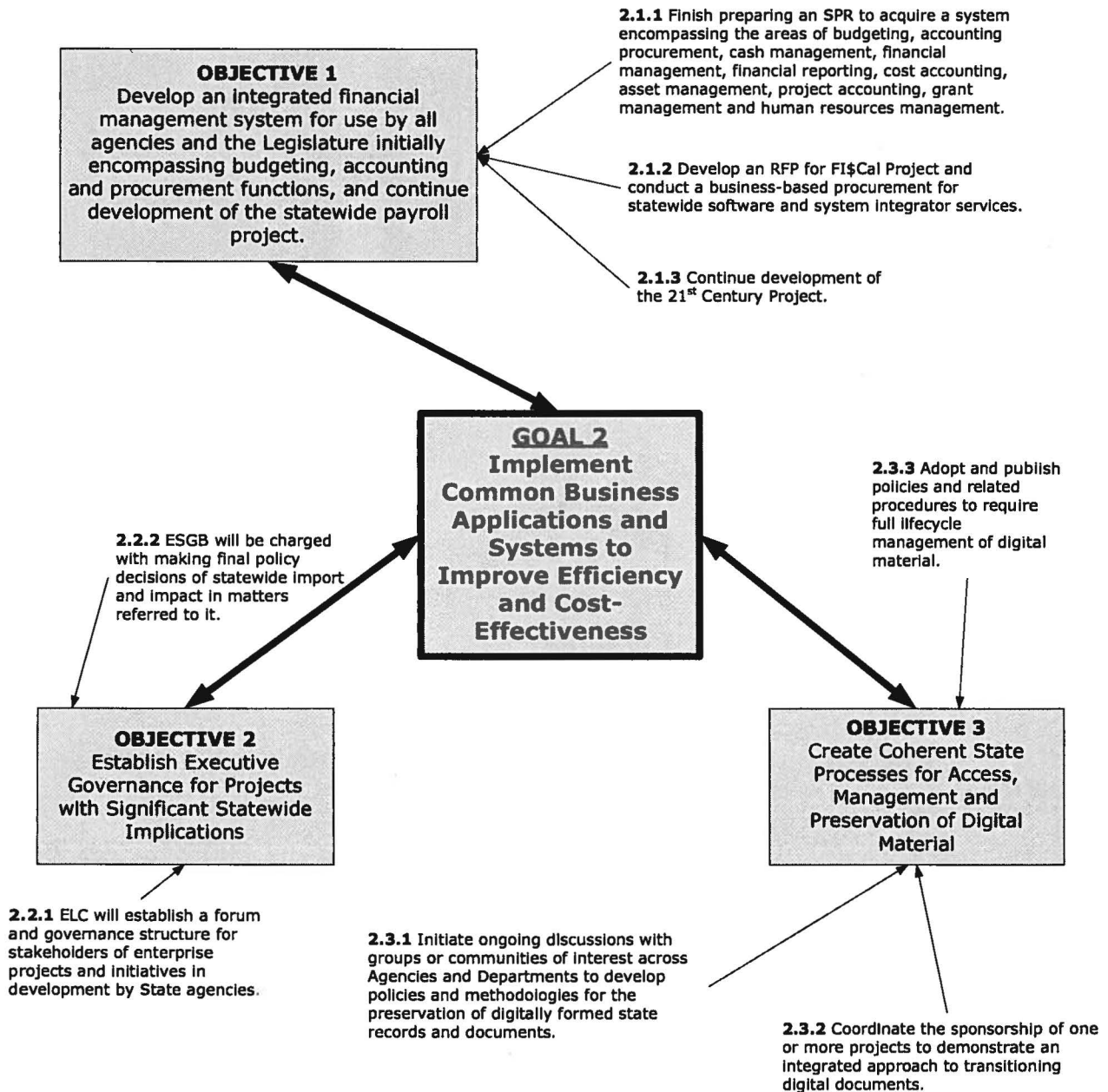
CALIFORNIA IT STRATEGIC PLAN-GOAL 1 cont'd

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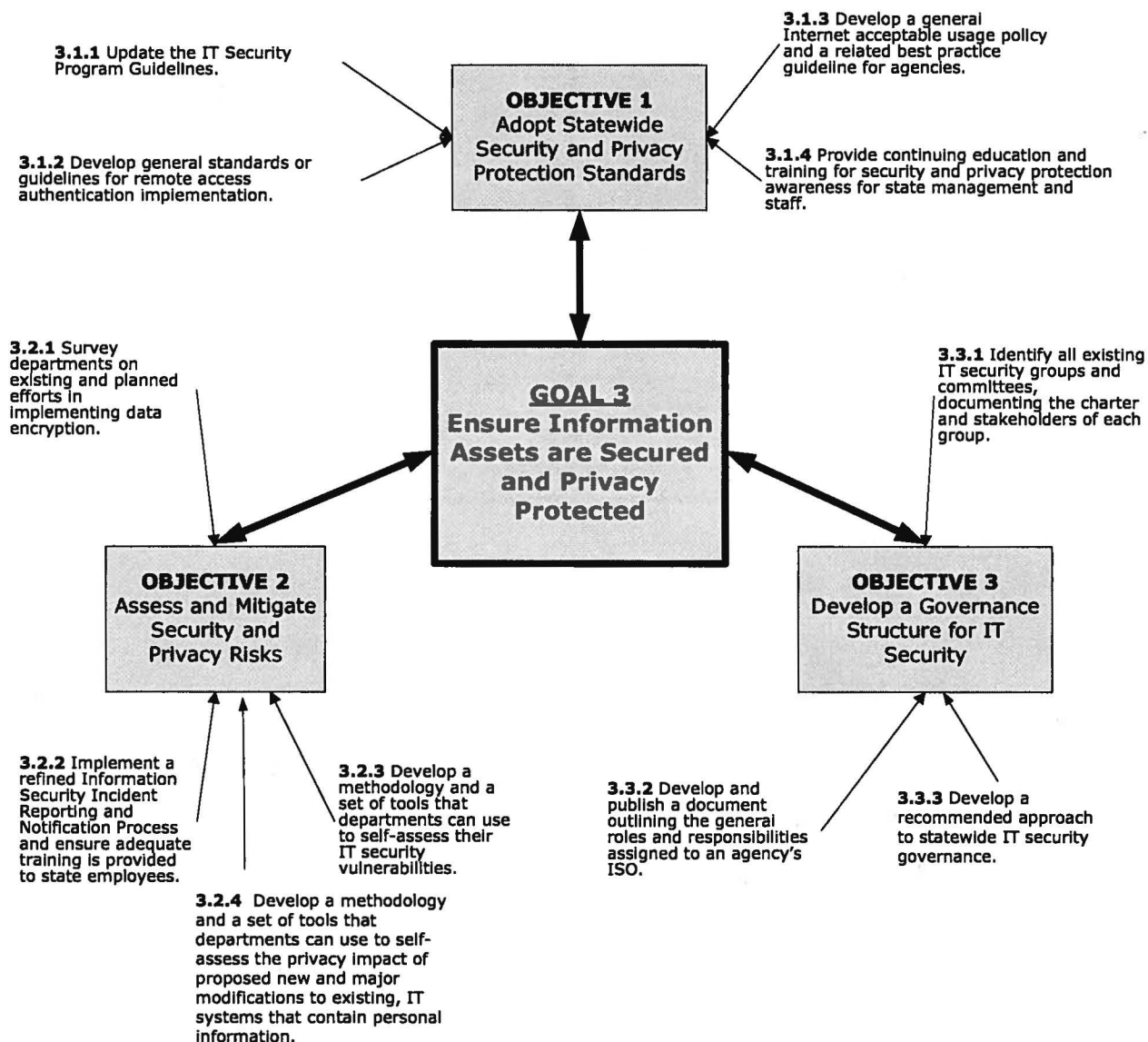
CALIFORNIA IT STRATEGIC PLAN-GOAL 2

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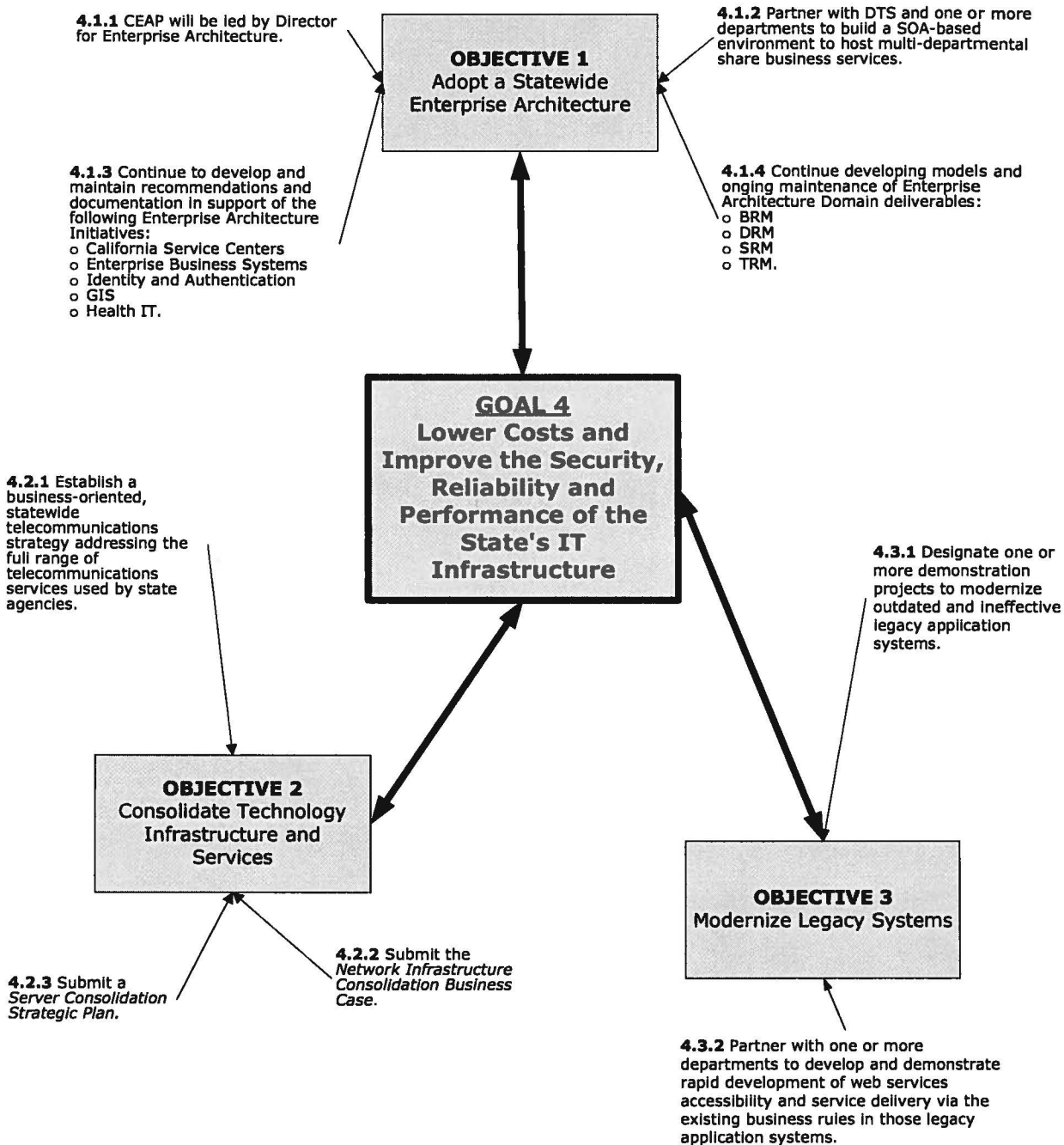
CALIFORNIA IT STRATEGIC PLAN-GOAL 3

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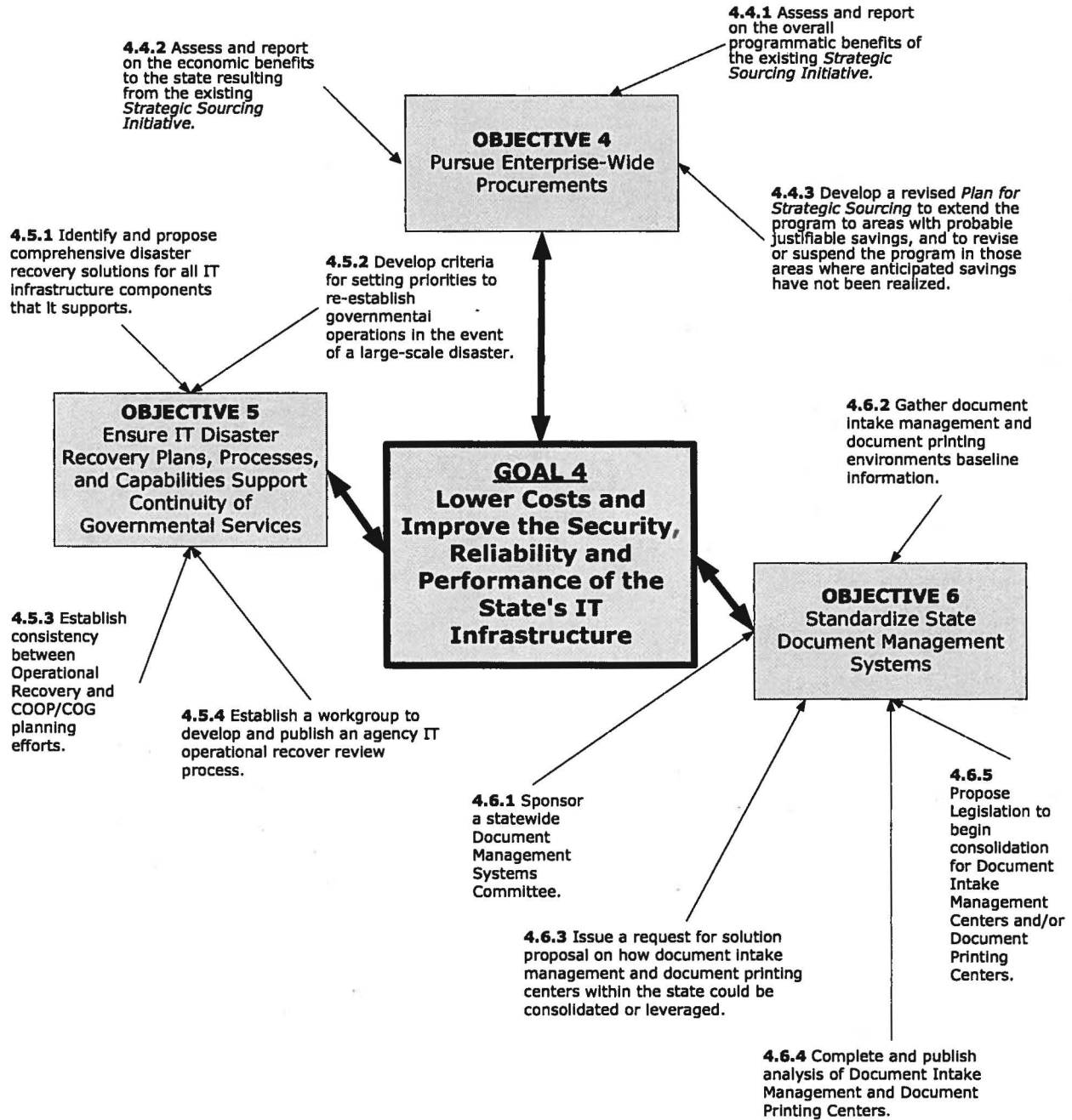
CALIFORNIA IT STRATEGIC PLAN-GOAL 4

Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



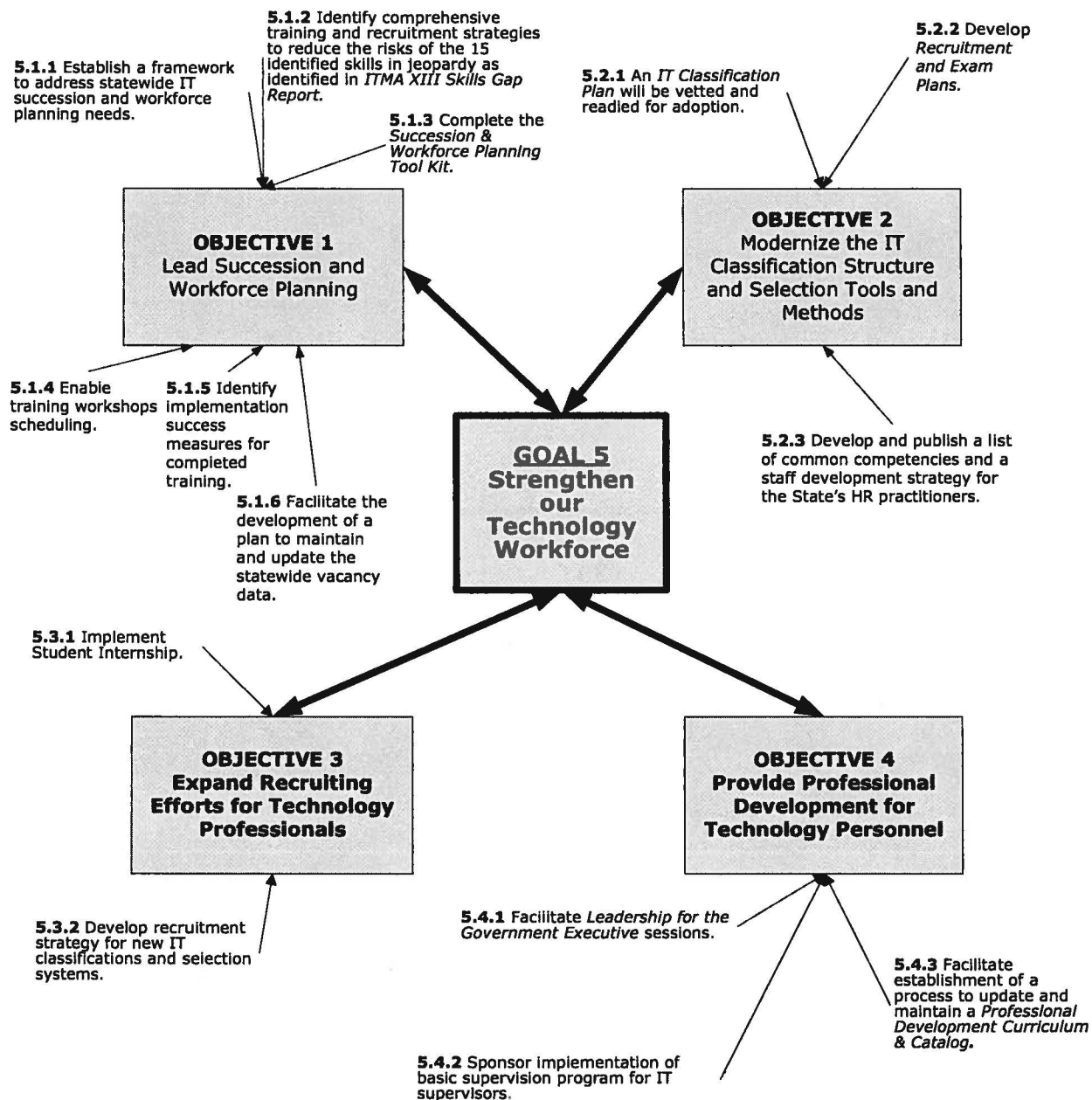
CALIFORNIA IT STRATEGIC PLAN-GOAL 4 cont'd

Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



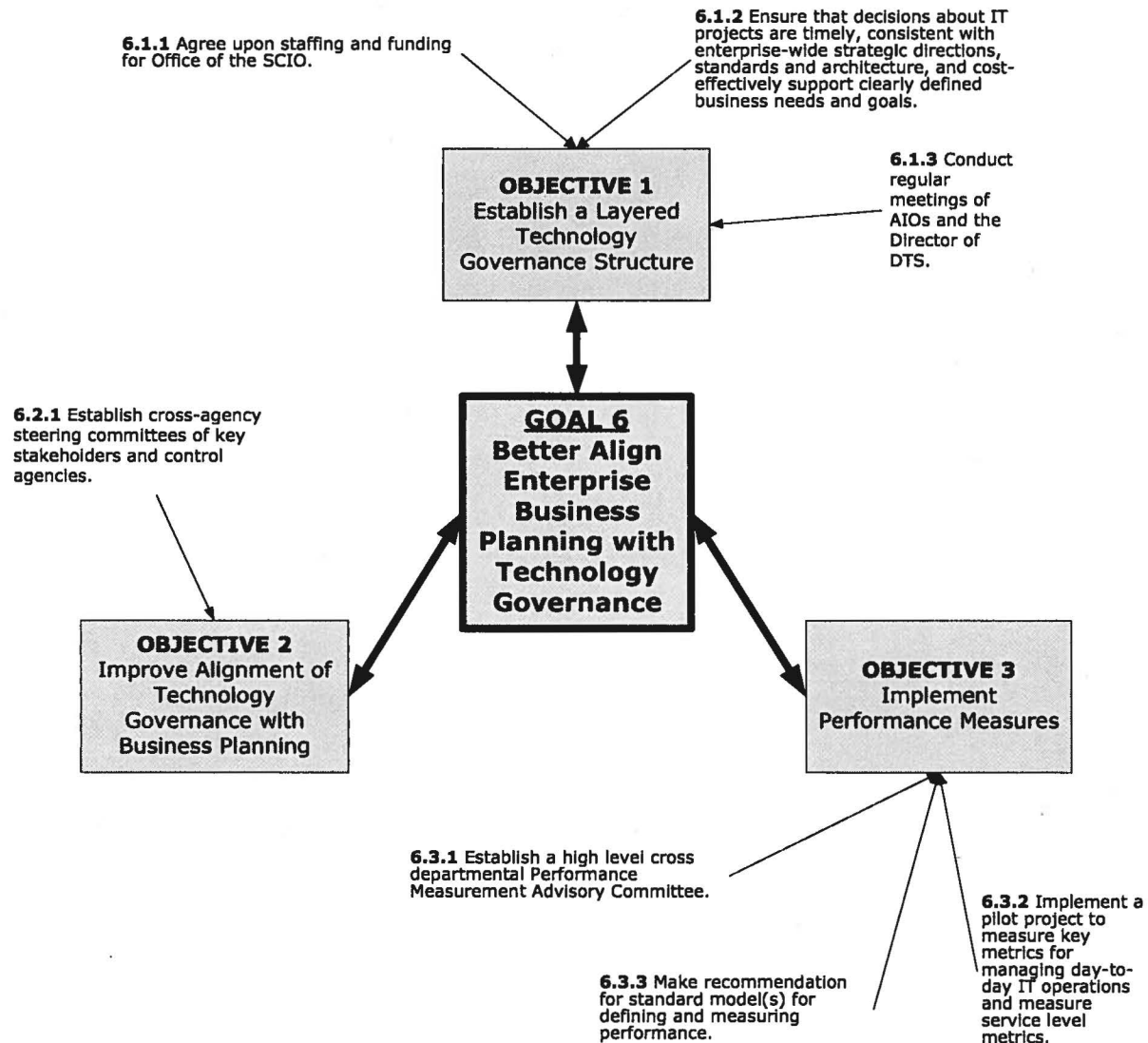
CALIFORNIA IT STRATEGIC PLAN-GOAL 5

Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



CALIFORNIA IT STRATEGIC PLAN-GOAL 6

Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.



Glossary of Terms and Acronyms

Terms

Business Reference Model (BRM)

A framework for describing business operations of the State independently of the agencies performing them.

California Enterprise Architecture Program (CEAP)

CEAP develops, maintains and enables the implementation of the California Enterprise Architecture. The CEAP documents can be viewed at <http://www.cio.ca.gov/ITCouncil/Committees/ArchStandards.html>

California Enterprise Architecture Framework

The IT Council's Enterprise Architecture and Standards Committee developed this framework document which describes California's enterprise architecture at a high level. It can be viewed at http://www.cio.ca.gov/ITCouncil/Committees/PDFs/California_EA_Framework_Final.pdf

California Portal

The State of California web page that provides links to the services offered by its organizations.

California Service Centers

California Service Centers is the collection of the new State portal and its associated federated service centers. The federated service centers are individually maintained by various state agencies, departments and boards. The California service centers are described in the State CIO's "California In-Touch" document which can be viewed at http://www.cio.ca.gov/PDFs/California_In-Touch_Vision_5-10-06.pdf. The enterprise architecture for the California Service Centers can be viewed at <http://www.cio.ca.gov/ITCouncil/Committees/ArchStandards.html>

Classification Team

Team of HR staff from State Personnel Board and Department of Personnel Administration along with IT representatives who are directing the IT classification plan changes as part of the State's IT HR Project.

Data Reference Model (DRM)

The DRM describes the data and information that support the State's business operations from a statewide perspective. The DRM must define a structure that each data element must have in order for users to understand the element, must classify each data element into its business context using the BRM, and must specify how this data element should be exchanged between state agencies.

Glossary of Terms and Acronyms

Terms (Continued)

Domain

A collection of logically related entities (e.g., Business, Data, Application, and Technology) used to simplify analysis and to organize Enterprise Architecture deliverables.

Enterprise Architecture

A description of the technical framework that a business or enterprise uses to conduct its business over computing and telephone networks.

Enterprise Architecture Domains

The California Enterprise Architecture Framework defines four Enterprise Architecture Domains: *Business, Applications, Data, and Technology*.

Enterprise Business Systems

Enterprise Business Systems refer to the collection of internal systems that the State uses to manage its many lines of business as an enterprise. Systems typically include HR, Payroll, General Ledger, Cash Management, Accounts Payable, Accounts Receivable, Fixed Assets, Inventory, Budgeting, Procurement, and Contracts Management.

Geographic Information Systems (GIS)

GIS creates stores, analyzes, and manages spatial data. They are typically used to provide location-based information in applications.

Health IT

Generally, this is the collection of systems managed by the health related departments within the State and counties. There is also a health IT group "CGCHIT" that was formed to address the issues of integrating the systems, making services more available online, and interoperating with federal systems.

HR Practitioners

Personnel analysts and supervisors/managers in departments who resolve hiring supervisor requests for various classification needs (i.e., filling positions, approving allocation levels and classifications, transferring employees, approving Hires above minimum)

Identity and Authentication Management (IDM)

Identity Management allows California to manage the end-to-end lifecycle of user identities across all enterprise resources. Federated Identity Management established

Glossary of Terms and Acronyms

Terms (Continued)

single authorities for certain types of identities that are trusted by members within a trusted domain.

Infrastructure

The basic computing and telecommunications structure, support services, or features of a system or network.

Legacy Application

An application in which a company or organization has already invested considerable time and money. Typically, legacy applications are or use database management systems (DBMS) running on mainframes or minicomputers.

Legacy system

A computer system that continues to be used because of the cost of replacing or redesigning it. Generally the system is large, monolithic and difficult to modify.

Office of Technology Review Oversight and Security (OTROS)

The OTROS organization is part of the Department of Finance (DOF) and is responsible for reviewing IT proposals to ensure IT expenditures represent a prudent investment of resources while meeting the State's business needs. The Office also recommends funding and expenditure authority for IT projects and assists DOF to ensure approved IT expenditures are in alignment with statewide IT policies, priorities and strategies.

Portfolio Management

Portfolio Management is a system used to select a list or portfolio of technology investments to achieve the following:

- Support the strategy of the enterprise
- Rank or prioritize projects
- Manage resources effectively and efficiently
- Maximize the value of the portfolio

Segment

A targeted line of business that typically slices through all four architecture domains: business, data, applications, technologies.

Segment Approach

Promotes the incremental development of architecture products with a focus on lines of business (e.g., security or common financial systems) that is more likely to succeed because the effort is more narrowly defined.

Glossary of Terms and Acronyms

Terms (Continued)

Service-Oriented Architecture (SOA)

SOA is a framework for implementing web-services that provide reuse of existing business services which facilitates rapid development of new business capabilities.

Service Reference Model (SRM)

SRM is a component-based framework that can provide, independent of business function, a foundation for reuse of applications, components, and business services.

Shared Business Services

Shared Business Services are built and managed with an “enterprise mentality”. That is, they are built once then reused by many systems across agencies, departments, and boards. They are based on a Service-Oriented Architecture environment.

Technology Reference Model (TRM)

TRM is a component-driven, technical framework used to categorize the standards, specifications, and technologies that support and enable the delivery of service components and capabilities. You can view California's TRM at <http://www.cio.ca.gov/ITCouncil/Committees/ArchStandards.html>

Glossary of Terms and Acronyms

Acronyms

| | |
|----------|--|
| AIO | Agency Information Officer |
| CEAP | California Enterprise Architecture Program |
| CIO | Chief Information Officer |
| COOP/COG | Continuity Of Operations / Continuity Of Government Plan |
| CRM | Customer Relationship Management |
| CPR | California Performance Review |
| DGS | Department of General Services |
| DOT | Department of Transportation |
| DTS | Department of Technology Services |
| EA | Enterprise Architecture |
| EAP | Enterprise Architecture Program |
| ELC | Enterprise Level Council |
| ERP | Enterprise Resource Planning |
| GIO | Geospatial Information Officer |
| GIS | Geospatial Information System |
| HIT | Health Information Technology |
| ISO | Information Security Officer |
| IT | Information Technology |
| ITC | California IT Council |
| ITMA XII | Information Technology Managers Academy XII |
| OES | Office of Emergency Services |

Glossary of Terms and Acronyms

Acronyms (Continued)

| | |
|------|---------------------------------------|
| PMI | Project Management Institute ® |
| RFP | Request For Proposal |
| SCO | State Controller's Office |
| SEIU | Service Employees International Union |
| SISO | State Information Security Officer |
| SPB | State Personnel Board |

Contributors

The State CIO extends his appreciation to all the people who contributed to the California State Information Technology Strategic Plan. Their dedication produced this plan charting the IT direction for the Executive Branch of the State of California for the next three years.

The following groups and individuals contributed to bringing the Plan together:

California IT Council's IT Strategic Plan Committee Members

Carlos Ramos, Committee Chair, Health and Human Services Agency
 John Lane, Committee Vice-chair, Department of Conservation
 PK Agarwal, Department of Technology Services
 Andrew Armani, State and Consumer Services Agency
 Gary Arstein-Kerslake, Environment Protection Agency
 Terri Bollinger, Department of Social Services
 Caroline Cabias, Board Of Equalization
 John Ellison, Resources Agency
 Davood Ghods, Food and Agriculture Agency
 Dale Jablonsky, Employment and Development Department
 Joan Keegan, Department of Technology Services
 Clark Kelso, State Chief Information Officer
 Lee Kercher, Secretary of State
 Lee Macklin, California Enterprise Architecture Program
 Claudina Nevis, Office of the State CIO
 Arna Perry, Department of Social Services
 Kelvin Pye, Office of the State CIO
 Christy Quinlan, Department of Health Services
 Calvin Rogers, Department of Social Services
 Colleen Pedroza, Department of Finance
 Ben Williams, Department of Water Resources

Other California IT Council Members

Ann Barsotti, Department Of Transportation
 Cathy Cleek, Franchise Tax Board
 Dave Dawson, State Controller's Office
 Nick Dedier, Department of Justice
 Alan Friedman, Department of Parks & Recreation
 Tracy Fong, Legislative Data Center
 Debra Gonzales, Victims Compensation Board
 Rita Hamilton, Department of General Services
 Delphin B. Kyubwa, Managed Risk Medical Insurance Board
 Debbie Leibrock, Department of Finance
 Karen Lynch, Department of Personnel Administration
 Scott MacGregor, California Highway Patrol
 Christine McCaleb, Housing Community Department

Stephen Monaghan, Nevada County
Laura Peabody, City of Fairfield
Ron Ralph, Department of Forestry & Fire
Ronald "Gene" Reich, Public Employees Retirement System
Gigi Smith, Department Of Rehabilitation
Bernard Soriano, Department of Motor Vehicles
Daryll Tsujihara, Department of Personnel Administration
Pat Yerian, Administrative Office of the Courts

Other California IT Council Enterprise Members

Pam Harris, Labor & Workforce Agency
Michael Liang, Business Transportation and Housing Agency
Jamie Mangrum, California Department of Corrections and Rehabilitation
Joanne McNabb, Office of Privacy Protection, Department of Consumer Affairs
Colleen Pedroza, State Information Security Officer
Margarita Maldonado, SEIU 1000

Additional Contributors

Sandra Bierer, Department of Technology Services
Anna Brannen, Department of Technology Services
Dennis Dearbaugh, Department of Technology Services
Barbara Garrett, Department of Managed Health Care
John Hamlin, Board of Equalization
John Jewell, California State Library
Kim Malm, Public Employees Retirement System
Kris Ogilvie, California State Library
Kathy Saito, Department of Technology Services
Frank Werry, Board of Equalization
Lynn Weydert, Board of Equalization
Julie Whitten, Department of Forestry and Fire

Strategic Plan Drafting Staff

Mark Renteria, DGS-Office of State Publishing
Claudina Nevis, Office of the State CIO

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Arnold Schwarzenegger
Governor
State of California

Clark Kelso
Chief Information Officer
State of California

CALIFORNIA IT STRATEGIC SUMMARY



Mission: Information technology support for the Executive Branch of California State Government will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including the People of California, its business communities and its public sector agencies.

