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2011 Innovations Awards Application

DEADLINE: MARCH 28, 2011

ID # (assigned by CSG): 2011- _____

Please provide the following information, adding space as necessary:

State: California

Assign Program Category (applicant): Government Operations-Administration

1. Program Name

California Technology Agency: Maturing IT Governance

2. Administering Agency

California Technology Agency

3. Contact Person (Name and Title)

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9. Please provide a two-sentence description of the program.

Over the past three years California rapidly moved to transform state IT services from an inefficient, diffused and siloed governance model to a governance model that consolidated departments and functions to maximize the state's ability to deliver greater programmatic value from IT services. This transformation has improved project management and reduced duplicative platforms and unnecessary expenditures while addressing long-standing internal and external issues surrounding the government and management of IT in the state.

10. How long has this program been operational (month and year)? Note: the program must be between 9 months and 5 years old on March 28, 2011 to be considered.

- The Office of the State CIO (OCIO) was established by Senate Bill 90 (Chapter 183, Statutes of 2007).
- The OCIO grew on May 10, 2009 when Governor's Reorganization Plan (GRP 1) took effect, combining the disparate organizations needed to effectively govern California's IT.
- With the enactment of AB 2408 (Chapter 404, Statutes of 2010), the OCIO became the California Technology Agency effective January 1, 2011.

11. Why was the program created? What problem[s] or issue[s] was it designed to address?

Until recently, California state government lacked enterprise wide, comprehensive IT program leadership and strategy. Most IT initiatives, even the most successful ones, were developed by departments without significant consideration for other state IT projects or initiatives and how each IT project enhanced the state's overall IT portfolio. This lack of a central governance body to coordinate operations and guide policy decisions led the state to spend more and get less for its IT dollar. The problems that led to this unusually rapid change in governance in one of the country's largest bureaucracies included:

- **The state did not have a single IT leader or a point of coordination for the state's \$3 billion IT portfolio:** Instead, California's IT community had separate leaders for IT project approval, procurement and contracts, information security, policy enterprise architecture (EA), and telecommunications. Each of the disparate areas worked on the pieces of the IT system under their responsibility, without significant discussion as to compatibility, intersecting interests or needs, or potential efficiencies.
- **California had multiple data centers:** Multiple data centers require significantly greater ongoing investment to maintain or upgrade than if the state had consolidated data center operations.
- **California lacked a comprehensive understanding of IT resources and challenges, and no comprehensive vision for meeting state IT needs:** The lack of a statewide IT plan or standards allowed state departments and agencies to develop different, duplicative platforms for software, hardware, and networks. This meant that each platform needed to be supported separately, at great cost.
- **The state lacked an organizational infrastructure to manage the state's IT projects:** The state relied on contractors that had an interest in the projects they oversaw. There was no overarching state level project management office that could effectively review proposed projects, and provide skilled project guidance or oversight during development. As a result, many projects had failed or were severely over budget.
- **There was no seat at the policy table for an IT leader when crucial business decisions were made:** The state did not have an IT leader at the same level as Agency Secretaries and thus had little ability to demonstrate to decision-makers how IT leadership could alter program choices to better serve the people of California.

As a result, of these problems, California invested billions of dollars in its IT program but did not see benefits commensurate with its costs. The legacy of California's inability to effectively govern state technology

direction included several projects that failed to deliver the expected value, or that cost significantly more to complete than expected.

In the past three years, the state has established the governance and technology environment necessary to manage and leverage the state's valuable resources and assets to transform the way the state delivers programs and services. The approach has already delivered significant value and that value is expected to grow annually as efforts now in progress come to fruition.

12. Describe the specific activities and operations of the program in chronological order.

The following represent significant milestones in the creation and maturation of California's consolidated IT governance structure

- 2006: Senate Bill 834 (Chapter 533, Statutes of 2006) provided for the establishment of the office of the State Chief Information Officer. The Chief Information Officer (CIO) was to advise the Governor on the direction of the State's information technology resources, minimize overlap, redundancy, and cost in state operations, improve the state's management of information technology, and establish performance management and improvement processes to ensure state information technology systems and services are efficient and effective. The CIO did not have a budget or staff until late in 2007 when SB 90 was enacted.
- August 2007: OCIO established by Senate Bill 90 (Chapter 183, Statutes of 2007) and provided with 32 positions by the 2008 Budget Act.
- December 6, 2007: Teri Takai announced as CIO.
- May 2008: California completes first statewide IT Survey to get information on IT infrastructure, servers, mainframes, storage, email services and technical environments.
- January 2009: California's first IT Strategic Plan released. The plan involved CIOs from many California departments and set overall direction for the state's IT program.
- January 2009: California's first IT Capital Plan released to help ensure that IT investments are consistent with the Administration's policy and budget priorities, and to reduce duplication and overlap.
- May 10, 2009: The Governor's 2009 Reorganization Plan consolidated the initial CIO responsibilities, with the following specific changes:
 - Integrated four agencies - the OCIO, Office of Information Security and Privacy Protection, Department of Technology Services (renamed Office of Technology Services or OTech) and Department of General Services' Telecommunications Division (renamed Public Safety Communications Office or PSCO) into an expanded OCIO.
 - Provided the State CIO with authority for IT procurement policy and enterprise IT management.
 - Proposed consolidation of software contracts, office automation tools, data centers/computer rooms, servers, storage and networks over the course of five years.
- April 2009: California begins its Project Management Methodology to ensure that IT projects are managed with the appropriate level of accountability and transparency. This establishes a systematic approach for managing, talking about, and monitoring IT projects across the state. A standard training program for IT project management is initiated to provide consistency in delivering project results and a new state-led oversight framework began to reduce costs and enhance accountability.
- February 9, 2010: Executive Order S-03-10 is signed, beginning the state's Infrastructure Consolidation Program to leverage shared services and reduce costs and greenhouse gas emissions.
- September 28, 2010: Passage of 2408 (Ch. 404, Stats. 2010) codified OCIO into statute, renamed the office the California Technology Agency, extended the sunset date to January 1, 2015, made the technology organization a Cabinet Agency, and codified the provisions of EO S-03-10.

13. Why is the program a new and creative approach or method?

The speed, size, and success of the change in California's IT governance is innovative given the scope and complexity of California's bureaucracy, technology commitments, and governance landscape. Most other state IT governance models matured over many years but California's most significant IT governance changes were accomplished in less than three years while implementing a comprehensive approach.

California also established a federated IT governance model to define the reporting relationship between the State CIO, and Agency and department technology leaders. As a result, the Technology Agency serves as the primary point of accountability for, and management of, the state's integrated information technology, public safety communications, and information security program. This governance model ensures the strategic use of technology resources by bringing together the state's core IT policy and operating functions into a single organization.

14. What were the program's start-up costs? (Provide details about specific purchases for this program, staffing needs and other financial expenditures, as well as existing materials, technology and staff already in place.)

The approved budgets at the initiation of the change are:

- At startup in Fiscal Year 2008/09, the OCIO budget was \$6.7 million.
- After consolidation through GRP 1, the budget for Fiscal Year 2009/10 was \$434.1 million. This included the addition the Office of Information Security, OTech, and PSCO and local assistance for projects the PSCO is building on behalf of local law enforcement agencies.

15. What are the program's annual operational costs?

The Technology Agency's current budget for Fiscal Year 2010-11 is \$361 million.

16. How is the program funded?

One percent of the Technology Agency's funding comes from the State of California's general Fund. The remaining 99 percent of funding comes from reimbursements departments pay for IT services they receive.

17. Did this program require the passage of legislation, executive order or regulations? If YES, please indicate the citation number.

Yes, the immense change that took place in California required the enactment of multiple pieces of legislation and a Governor's Reorganization Plan as shown below.

- Senate Bill 834 (Statutes of 2006) redefined the role and responsibilities of the State CIO.
- SB 90 (Chapter 183, Statutes Of 2007) appropriated funds to establish the OCIO with statutory authority over strategic vision and planning, enterprise architecture, IT policy, and project approval and oversight.
- The Governor's IT Reorganization Plan (GRP 1) consolidated statewide information technology functions under OCIO, as described in Question 12.
- AB 2408 (Chapter 404, Statutes of 2010) codified GRP 1 and extended the repeal date of the provisions establishing the OCIO to January 1, 2015. The bill also renamed the Office of the State Chief Information Officer to the California Technology Agency and the State Chief Information Officer to the Secretary of California Technology.

18. What equipment, technology and software are used to operate and administer this program?

The Technology Agency uses a variety of software and hardware to administer its program including:

- WorkLenz, a portfolio management tool that increases visibility into, and analytical capacity of, the state's IT projects. By gathering current data on project "health," the state improved the performance of the state's \$5.5 billion IT portfolio.
- California has one of the world's largest microwave networks: This helps ensure that public safety personnel can receive or provide information when and where needed to keep Californians safe.
- Energy efficient data centers and all the infrastructure and applications needed to run them, such as storage systems, redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, fire suppression) and security devices.
- Award-winning websites such as CA.gov, which receives more than eight million visits per month and contains innovative features such as a robust platform for mobile devices.
- Standard office tools, such as the Microsoft Office suite and SharePoint.

19. To the best of your knowledge, did this program originate in your state? If YES, please indicate the innovator's name, present address, telephone number and e-mail address.

Centralized IT governance, planning and implementation did not originate in California. Other states have previously implemented a centralized IT governance body.

20. Are you aware of similar programs in other states? If YES, which ones and how does this program differ?

Yes. Other states have centralized IT governance. What distinguishes California from other state's approach is:

- **The speed with which centralized governance was achieved:** In less than three years, California moved from siloed governance processes for IT planning, procurement, security, EA, project approval, and technology operations, to a centralized IT governance process with statewide policy and standards, with the Technology Agency at the center. Combining all of these facets of IT governance in one body is seldom accomplished in such a short period of time, especially in government systems.
- **The comprehensive governance approach:** The governance and organizational consolidation included the state's major data centers, project approval, oversight and management, information security, and statewide network, strategic and capital planning, IT policy-making, public safety communication and IT aspects of procurement.
- **The complexity of achieving centralized IT governance in a state as large and complex as California:** The sheer size and complexity of California make any significant changes difficult. California is the eighth largest economy in the world. It has almost 40 million people, more than 10,000 IT employees and an annual IT spend of approximately \$3 billion.
- **California's federated model:** GRP 1 established a federated IT governance model to define the reporting relationship between the State CIO, and Agency and department technology leaders. As a result, the Technology Agency serves as the primary point of accountability for, and management of, the state's integrated information technology, public safety communications, and information security program. This governance model ensures the strategic use of technology resources by bringing together the state's core IT policy and operating functions into a single organization.

While accomplishing centralized IT governance has been done before, California's experience provides a model for other states to follow to rapidly and effectively establish IT governance, including policy, management, and procedures in a large and complex environment.

21. Has the program been fully implemented? If NO, what actions remain to be taken?

While California's IT governance has been fully implemented, it continues to mature, and to promise greater statewide results in the future. The organizations brought together through consolidation continue to mature into a unified culture of the Technology Agency, while developing processes and finding opportunities to leverage the combined expertise of its workforce. The programs currently under way include:

- Statewide implementation of infrastructure consolidation;
- Completing the state's enterprise architecture and integrating EA into the review of all proposed projects to ensure that the state does not undertake duplicative infrastructure or applications; and
- Continually improving the working relationships with the IT community of CIOs and IT managers across the state.

22. Briefly evaluate (pro and con) the program's effectiveness in addressing the defined problem[s] or issue[s]. Provide tangible examples.

Pros: Centralized governance has provided unparalleled ability to see the totality of the state's IT portfolio and make informed decisions about where to reduce costs without negatively impacting performance. Concrete examples where IT governance under the Technology Agency has benefitted California include:

- The closure of the old Cannery Data Center resulted in \$40 million in one-time cost avoidance, from moving an old data center to a newer, existing data center. The same move resulted in \$3.7 million in annual cost savings from reduced lease and utility costs.
- \$694 million in costs avoided through the identification of duplicate or unnecessary initiatives.
- A Program Management Office that is responsible for managing the state's \$5.5 billion IT portfolio rather than merely approving projects. As part of centralized governance, the PMO:
 - Aligns all proposed projects to the IT Capital Plan, statewide IT Strategic Plan, and EA to stop unnecessary, redundant or poorly developed project ideas before they start, while leveraging existing infrastructure.
 - Standardized the project management requirements, while developing an infrastructure of project managers and project sponsors to improve project outcomes.
 - Embeds Technology Agency experts in departments' projects at inception and throughout projects to increase the success rate of the state's IT projects.
- Having a central point of coordination for IT initiatives has helped to bring cohesiveness to the IT community including through direction on cabinet-level policy issues.
- California's IT community now has a seat at the policy table as the Governor's Cabinet considers policy decisions, which helps ensure IT is actively engaged in decisions on how to best deliver new services, that provide the best value for the people of California.

Cons:

- Effectively implementing organizational consolidation requires a significant amount of planning and organizational change management before, during, and after the consolidation. Merging organizations creates organizational silos that must be dealt with effectively to ensure that the combined organization reaches its full potential. The Technology Agency is still working to merge cultures after the organizational consolidation that created the agency.

23. How has the program grown and/or changed since its inception?

The program has significantly grown in size and efficacy since its inception. At program inception, the Office of the State CIO had 32 staff members, most of whom were responsible solely for IT project approval. Since that time, the office expanded to include public safety communications, the state's main data centers, information security oversight, geographic information systems, and enterprise architecture functions.

With the full program created by GRP 1 in 2009, the Technology Agency became California's state technology hub and IT policy agency, with a workforce of more than 1200 people and the responsibility to oversee and manage the state's vast IT program. With the changes in GRP 1, the Technology Agency was able to:

- Provide unified direction to state departments on policy and standards;
- Provide training of project managers and sponsors;
- Better manage the state's IT portfolio;
- Progress on unified GIS and EA functions for the state; and
- Direct IT infrastructure consolidation efforts, such as email, server and data center consolidation.

With the additional powers granted by AB 2408, the Technology Agency is a full-fledged agency. This gives California's IT community a seat at the policy table as the Governor's Cabinet considers policy decisions. This is especially significant since IT will have active engagement in every decision on how best to govern, deliver new services, and provide the best value for the people of California.

24. What limitations or obstacles might other states expect to encounter if they attempt to adopt this program?

Based on the experience of creating and maturing the California Technology Agency, obstacles, and the way to address obstacles include:

- **Political limitations:** In most states, large scale governance changes require approval of the Governor and/or Legislature. Overcoming political obstacles typically present a significant barrier and require strong leadership from the Governor working closely with key members of the Legislature.
- **Union issues:** unions are often distrustful of sweeping changes in governance since such changes have the potential to alter the working conditions of their members. The Technology Agency worked with the unions to understand and address their concerns.
- **Organizational Change Management:** Governance changes and organizational consolidation cause significant issues for employees and managers concerned that their work lives will change. Management must have an active plan to engage employees and managers to help them understand and embrace the change.
- **Resistance from the IT community:** Key members of the IT community, such as CIOs may see the new office as a threat to their autonomy. To address this, the new office must work closely to understand concerns of the IT community and to find collaborative ways to move forward with mutually held goals.