

# IT Unification – Phase One

State CIO Office (or equivalent) Special Recognition



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*Office of Management and Enterprise Services*  
*Information Services*  
**State of Oklahoma**



Project Initiation: July 2011  
Project Completion: June 2014

## Executive Summary

The Information Technology Consolidation and Coordination Act (Oklahoma House Bill 1304) charged the Office of Management and Enterprise Services with increasing the effectiveness and efficiency of the state's technology services. Information Services, a division of OMES, will lead the way by trying to eliminate redundancy and inefficient practices. The goal is to consolidate 85 state appropriated agencies including any IT services and personnel into a single department to reduce IT expenditures by 15 percent.

Many IT infrastructure services are essential to end users, who must have access regardless of supply issues — network connectivity, storage services, computing capabilities, baseline security, desktop management, virus protection, commercial software license management, asset management and email service. These basic services account for more than 70 percent spent on the state's IT. The greatest savings to the state can be realized by consolidating these services, while maintaining or even improving the quality of service.

As of June 2014, Oklahoma has consolidated over 50 percent of the state appropriated agencies as mandated by HB 1304 and 24 percent of voluntary agencies. Consolidation projects will save Oklahoma approximately \$77 million estimated over six years from 2012 – 2017. Cost avoidance projects will save Oklahoma approximately \$20 million estimated over six years from 2012 – 2017.

# Business Problem and Solution

## Problem

Oklahoma's governor and state legislators foresaw that the IT model was unsustainable when they passed HB 1304. Consolidation and centralization of IT resources must occur to meet future technology needs. Consolidation of 85 state appropriated agencies was planned for during a six-year period starting in July 2011. While the state has also helped consolidate 24 percent of the voluntary agencies, its focus has been to complete the consolidation of the state appropriated agencies.

In 2010, the state selected Cap Gemini Government Solutions to assess its IT environment and recommend opportunities to streamline the delivery of services and reduce operating expenses. The study developed practical short and long-term plans with recommendations for modernizing of state systems, infrastructure and services to help meet the savings goal of 15 percent in the first year compared to 2009 IT expenditures. The roadmap led to tangible cost savings and additional value-added services for Oklahomans. It also detailed recommendations for enhancing statewide IT capabilities.

Among the findings, the study discovered:

- 76 financial systems (from custom enterprise resource planning systems to Solomon to Oracle E-Business to Quick Books).
- 22 unique time and attendance systems.
- 17 different imaging systems.
- 48 reporting and analytics applications (Congo's, BI, Crystal Reports, Adobe, SAS, etc.).
- 3 different pension systems.
- 30 data center locations.
- 32,643 workstations, 20 percent were older than four years.
- 7 mainframes.
- 129 email and BlackBerry servers with 25 agencies running their own email.
- Aging systems and processes, service gaps, duplicate services and resource constraints.

The assessment accomplished three key things:

1. Validated that the state could achieve savings of approximately 15 percent.
2. Documented the state environment at a high-level, which included assets, challenges and resources along with the future state for Oklahoma IT and the overall roadmap to get there.
3. Identified the top priority strategies for the CIO.

## Solution

From the study, OMES information services focused on two major IT initiatives for consolidation of the state appropriated agencies over the next three years. The state would execute a comprehensive normalization of the IT infrastructure and the accelerated roll-out of the CORE services to the agencies as an all-encompassing shared service for finance and administration. CORE services included network connectivity, storage services, computing capabilities, baseline security, desktop management, virus protection, asset management and email service.

The state took the first step by freezing the hiring of full-time IT resources, as noted in a February 2011 address by the governor. A second key step was the adoption of an IT modernization program estimated to cost \$100 million.

Oklahoma's second step is being carried out by implementing the three consolidation approaches for state appropriated agencies: agency by agency, service by service and service by agency.

**Agency by agency** consolidation takes the agency as a complete system and merges its IT systems and personnel with an existing centralized system. The risk is generally lower. By addressing the agency as a complete system of people and technology, problems are more effectively addressed.

**Service by service** consolidation risks problems that may fall between areas of responsibility, making it more difficult to troubleshoot and assign ownership. However, service by service offers a greater short-term return on investment. For example, consolidating the state's five mainframes into a single mainframe reduces the expenses of operating these services by \$3 million per year.

**Service by agency** consolidation utilizes components from the other two approaches that are specifically focused on the agency's business drivers.

## Significance

The IT consolidation process focused on leveraging the economies of scale of the existing statewide network and delivering standardized IT services, including PC support, file-and-print services, retiring existing servers where possible and moving others to the state's tier-three data center. Enterprise class management tools and practices are used to reduce cost while simultaneously increasing the systems performance and reliability. Consolidated agencies' existing IT service delivery and processes were replaced with standardized services when possible.

As Oklahoma has gone through this process there have been several lessons learned, but two truly stand out.

### **Lesson One — Unification**

The state's technology reflected several years of varying levels of sophistication and maturity across state agencies. As the consolidation process began to mature, OMES Information Services learned there was more to it than just taking assets and consolidating them. This required a three pronged approach, "Unification," which included not only consolidation and its three different types but also integration and incorporation.

- Consolidation focuses on infrastructure and enterprise and emphasizes efficiencies through adherence to existing state IT standards and solutions.
- Integration uses value-added solutions for agencies that complement existing state IT standards.
- Incorporation creates opportunities to review and replace state IT standards when best IT solutions are discovered within agencies.

Unification initiated the effort for OMES Information Services to focus on operational excellence instead of operational efficiencies. This approach allowed OMES Information Services to:

- Add value to every interaction with state agencies and affiliates.
- Adapt quickly to the needs of agencies and affiliates.
- Provide quality, innovative and secure solutions.
- Transform OMES Information Services' role from a regulator to a trusted adviser

### **Lesson Two — Institutional Knowledge**

People are your best commodity. Many IT staff had institutional knowledge that was needed to successfully complete consolidation of their agencies. There are people in various departments who know how systems work or what problems they have encountered and how to best fix them, but there is no repository of this knowledge in either the agency or with other IT staff.

Putting in place a repository of institutional knowledge will better prepare OMES Information Services to move technology forward for the State of Oklahoma. OMES Information Services is working on aligning IT staff into service teams to improve collaboration and solutions for agencies. The new structure will allow for better training, succession planning and development and retainment of IT personnel.

## Strategic & NASCIO Priority Alignment

The project aligns with the NASCIO State CIO priorities by consolidating and optimizing the state's technology, whether it is agency by agency, service by service or service by agency. The new unification approach will further align with NASCIO State CIO priorities by creating an environment for strategic IT planning among all agencies in Oklahoma as well as reducing and avoiding costs. Finally, the project has led to the realization of the value in retaining institutional knowledge and IT staff. Working on improving training and development as well as succession planning is of great significance.

## Benefits

As of June 2014, 87 percent of state agencies receive some IT services and more than 50 percent receive all IT services from OMES Information Services. Consolidation projects will save Oklahoma approximately \$77 million estimated over six years from 2012 – 2017. Cost avoidance projects will save Oklahoma approximately \$20 million estimated over six years from 2012 – 2017.

As the state moves into Phase Two to complete consolidation for all state appropriated agencies, many more lessons will be learned. Through consolidation several projects have been completed that have vastly improved the technology landscape for the state.

**IT Financial Management:** OMES Information Services implemented unified personnel payroll for state agencies and universities that enables the processing of monthly or biweekly payroll for more than 34,000 employees. Self-service, which allows employees to view and update personal human resource information, is also used by 121 additional government organizations. New functionality gives agencies the capability of approving personnel time based on project funding and appropriations, which improves the distribution of funding, monitoring and transparency reporting for agencies.

In response to concerns of increased IT costs, OMES Information Services worked with the State Comptroller's Office to revise its billing model. In 2013, OMES Information Services moved to a billing system based on actual payroll costs of filled positions that coincides with the OMES biweekly payroll cycle. This approach addresses agency billing concerns while reducing OMES accounts receivable, minimizing balance disputes and establishing more timely transaction turnovers to state agencies.

**Security:** OMES Information Services has secured 80 percent of the state's desktops with security clients and end-point protection software. The secure network creates a real-time intelligence system that constantly feeds into the State of Oklahoma's Cyber Command Security Operations Center. The center monitors the state network and intelligence feeds from around the world to protect the state's data and technology assets. OMES Information Services also monitors the overall health of the state network

through the Network Operations Center. This center monitors firewalls, switches and routers looking for event trends and possible security issues. OMES Information Services serves as the first responder to over 25,000 clients across the state. IT unification not only improved the security tactics for Oklahoma, but also created economies of scale for negotiating state standards with industry solution providers.

**Unified Project and Portfolio Management:** Unified project and portfolio management assists state agencies in delivering quality, efficient, effective and secure IT products and services. OMES Information Services delivers this service by providing a centralized portfolio management tool to track IT projects and a formal project management training program. The training program helps create consistent methods for planning and tracking state IT projects and allows for collaboration on projects across state agencies. The portfolio management tool provides a defined schedule and cost analysis for state IT projects. Once IT unification is finalized, all state IT projects and budgets will be tracked at the statewide and individual agency level. This will provide transparent and timely information for communicating scope and cost-benefit scenarios, as well as encouraging further collaboration and innovation.

**Unified Mainframe:** OMES Information Services worked with the Oklahoma Department of Human Services, the Oklahoma Department of Transportation, the Department of Public Safety and the Oklahoma Tax Commission to consolidate five mainframes into one platform. This effort required combining multiple mainframes, service centers, support resources and technology solutions. Leveraging new and existing equipment, the new solution has increased storage capacity and processing power and reduced costs for the State of Oklahoma.

**IT Governance:** OMES Information Services has partnered with 33 state agencies to establish IT oversight committees. Committees are created based on the individual needs of the agency, its technology environment and its project-based requirements. Establishing IT governance has promoted improved communication with agency leadership and IT support staff on project priorities and provided valuable insight into agency business needs and processes. OMES Information Services will continue to improve collaboration for shared IT projects across government entities through cabinet-level IT governance. IT governance furthers meaningful communications and partnering efforts to align Oklahoma's limited IT resources with endless technology opportunities.