



Project Controls, Efficiencies, and Strategic Progress

Submitted in Accordance with Conn. Gen. Stat. §4d – 14

State of Connecticut Department of Information Technology

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Introduction

The Department of Information Technology (DOIT) sets State IT policies and standards and provides enterprise IT services to state agencies.

Conn. Gen. Stat. § 4d-14 requires DOIT to issue a report annually specifying “potential opportunities for increasing the efficiency or reducing the costs of the state's information and telecommunication systems and (2) including a plan to realize such opportunities.”

This report, issued in accordance with this statutory requirement, highlights DOIT 's progress and strategy in maximizing IT resources, achieving new efficiencies and promoting strategic technology standards and practices.



DOIT Mission Statement

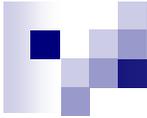
The mission of the Department of Information Technology is to provide quality information technology services and solutions to customers, effectively aligning business and technology objectives through collaboration, in order to provide the most cost-effective solutions that facilitate and improve the conduct of business for our state residents, businesses, visitors and government entities.

IT Expenditure Overview

Between FY 2005 and FY 2009, state agencies and branches spent an average of \$111 million per year on information technology goods and services. Overall, IT expenditures in FY 2009 were just \$287,153 over FY 2005 levels – an increase of just .25 percent.

<i>Category (Core-CT)</i>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2009 vs. FY 2005	FY 2009 vs. FY 2005
IT Hardware Lease and Rental	1,436,232	1,522,373	1,280,983	816,882	965,986	-470,245.53	-32.74%
IT Hardware Maintenance and Support	12,018,655	11,940,339	11,883,086	12,369,629	13,414,222	1,395,566.63	11.61%
IT Software Maintenance and Support	13,753,924	14,024,833	17,749,071	19,886,190	21,947,726	8,193,802.36	59.57%
IT Software License and Rental	15,056,152	15,062,217	14,449,725	18,909,114	12,819,379	-2,236,772.82	-14.86%
IT Data Services	33,376,549	36,768,642	36,340,403	37,581,462	37,193,111	3,816,561.80	11.43%
IT Consultant Services	38,175,142	33,163,167	20,732,861	26,374,530	27,763,383	-10,411,758.81	-27.27%
Total IT Expenditures	113,816,653	112,481,571	102,436,130	115,937,807	114,103,807	287,153.63	0.25%

IT consultant expenditures are now \$10.4 million below FY 2005 levels, and IT Software License and Rental expenditures are now \$2.2 million, or 15 percent, below FY 2005 levels.



Summary Results

Strategic Plan for Information Technology FY 2006 – FY 2009



Strategy 1: *Build a high performance organization by investing in IT personnel and addressing organizational issues.*

DOIT expanded employee **development opportunities**, securing modernized IT job classifications, and launching new development programs and tools.

DOIT increased **alignment** between performance objectives, and strategic and operating goals at all levels of the organization.

Strategy 2: *Strengthen and improve comprehensive disaster backup and recovery strategies and security programs.*

DOIT enhanced protection of state data and systems by upgrading, expanding and deploying IT security tools, and expanding disaster recovery exercise scope and participation.

Strategy 3: *Enhance and enforce a technology blueprint and standards.*

DOIT launched a new architecture program to enhance and deploy state IT standards.

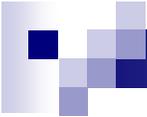
DOIT streamlined and aligned review processes for IT systems from initial design to final purchase.

Strategy 4: *Use technology to improve program effectiveness and resolve business issues, making services more accessible to residents and business.*

DOIT enhanced the state's capacity to support e-government applications, expanding broadband capacity, building a new e-government platform, and enhancing systems to support agency online information and services.

Strategy 5: *Implement technology best practices.*

DOIT deployed new project controls to increase cost effective and on-time delivery of all IT projects, and deployed a multi-year operational excellence program for efficient delivery of service.



Summary, Preliminary Strategies and Operating Plan Strategic Plan for Information Technology FY 2010 – FY 2013



Summary, Corresponding FY 2010 Operating Plan Objectives

Strategy 1: *Maintain a trusted and reliable environment that promotes efficiencies through an enforced enterprise architecture and standards.*

Strategy 2: *Use technology to improve program effectiveness and resolve business issues, making services more accessible to residents and business, and promoting shared information across state agencies.*

Strategy 3: *Promote IT collaboration and partnerships that produce better IT solutions while maintaining the culture for a high performance organization.*

- ✓ Continue development, integration and deployment of **architecture and standards** and **lower cost, efficiency-boosting technologies**, enhance infrastructure and system security, and advance **data classification** policies and procedures.
- ✓ Promote cost-effective enterprise services and solutions, including **electronic licensing** and a statewide **content management** strategy, and leverage federal stimulus dollars to expand state **broadband** capability.
- ✓ Continue enterprise deployment of the **System Development Methodology and Operational Excellence** programs, and create new prioritization tools including a governance structure.

IT Project Controls

DOIT's FY 2010 Operating Plan calls for DOIT to continue to integrate standard tools and practices to manage IT projects in the executive branch.

System Development Methodology (SDM)

DOIT will continue deployment of the SDM throughout the executive branch. Launched in June 2008, the SDM is a series of tools and processes to promote better direction, delivery, and control of project timelines and costs.

The SDM is required for all IT projects in accordance with Executive Order 19, issued by Governor M. Jodi Rell in 2008.

In FY 2009, DOIT delivered SDM presentations and training to more than 200 senior state agency executives, IT managers, and technicians across 39 sessions.

DOIT held individual SDM consultations with 23 agencies, and issued new SDM tools to accommodate projects of different scopes.



Project Reviews

DOIT will continue to require additional reporting, tracking and other review requirements for major IT projects.

In FY 2009, such projects underwent 80 hours of review across nineteen special sessions with IT managers and agency officials, enabling earlier identification and management of risk factors.

Operation Efficiencies

DOIT's FY 2010 Operating Plan calls for DOIT to continue its operational excellence program and deploy efficiency-boosting technologies.

Operational Excellence

To date the Operational Excellence program has generated incident, problem and change management process improvements, key performance indicators, and 563 standard operating procedures relating to security, hosting, and other functions that support statewide IT services.

Efficiency-Boosting Technology

In FY 2009, DOIT decommissioned older legacy processing equipment, and continued the shutdown of a decades-old platform hosting legacy applications and historical data.

DOIT also installed newer, more cost effective disk arrays to improve overall performance of the Storage Area Network (SAN) system, which stores 180 terabytes of data for 100 agency applications.

In FY 2010 DOIT will continue to migrate off legacy technology and apply upgrades that boost performance and efficiency.



Green IT Practices

DOIT has applied virtualization technology to 65 percent of servers in the DOIT Data Center to help keep Data Center operations cost-effective, efficient, and to lower energy consumption.

In FY 2009, DOIT awarded two statewide contracts to promote use of greener technology, including:

- Servers using 14 percent less power.
- Laptop computers meeting "EPEAT" ratings of silver or above.

Enterprise Cost Reductions

DOIT will continue to execute statewide spending measures and position the state for future savings.

Spending Freeze

In April 2009, DOIT placed and enforced a “do-not-order” status on contracts, approving only emergency and essential agency purchase requests. DOIT will continue to enforce the state's IT spending freeze in FY 2010.

Wireless Cost Reductions



DOIT will continue to enforce a freeze on new wireless services spending, and continue wireless reduction efforts that in FY 2009 resulted in the cancellation of 1,038 cellular phones/wireless devices across 31 agencies and migration of 3,261 across 52 agencies to lower cost plans.

Purchasing Review

DOIT will continue to seek and block payment for non contracted invoiced IT items, which has saved agencies nearly \$900,000 since FY 2007.

Contract Savings

DOIT will continue to seek lower rates for IT goods and services.

In FY 2009, DOIT secured lower rates for network, wireless, and desktop computer goods and services.

- Lower rates secured for network equipment and maintenance may bring an estimated savings of \$1.5 million per year across 30 agencies using the statewide contract for this commodity (based on current usage).
- DOIT secured lower wireless rates that will save state agencies an estimated \$1.8 million.
- DOIT awarded a new statewide desktop computer contract based on new, price saving specifications it developed that eliminated higher-end models and 13 out of 15 optional configurations that under previous contracts could drive up the cost of a computer by as much as 56 percent.

Enterprise Services

DOIT will continue to deliver centralized IT services across the executive branch, saving agency resources and leveraging common requirements.

Hosting Agency Data and Systems

DOIT provides a secure and reliable environment for the storage, processing and movement of state data, and currently hosts 118 IT applications for 80 state agencies in its Data Center.

Network Connectivity

DOIT connects 100+ agencies to the state network, which carries and moves data to and between more than 1,400 locations and connection points statewide. DOIT works to ensure adequate bandwidth at the lowest possible cost, and that agencies are provisioned appropriately.



E-mail

DOIT provides centralized email services to 43 executive branch agencies, saving agencies resources associated with maintaining their own systems. In FY 2009, the Department Transportation joined the system, saving \$25,725 in licensing costs.

Internet Filtering

DOIT's internet filtering tool is now used by 57 executive branch agencies to block access to unsafe or non-business related sites. "Per user" seat charges have dropped 60 percent since the inception of service, with increased agency participation enabling greater volume discounts.

Anti-Spam, Virus and Patch Management Services

DOIT anti-virus systems blocked 1.1 million virus/adware/spyware/malware attacks in FY 2009, protecting 10,548 computers and servers across 29 agencies. DOIT's patch management system deployed corrective/protective code to more than 3,800 computers and servers in 17 agencies. DOIT upgraded both systems in FY 2009.

Remote Application Deployment

DOIT continues to provide terminal services technology enabling agencies to deliver applications to desktop computers using remote servers. Ten agencies with more than 10,000 employees utilize the service.

Remote Access

DOIT-provided technology enables nearly 5,000 agency users to access the state network, computers and systems from remote locations. The service supports business continuity planning and supports an increasingly mobile workforce.

Enterprise Services

E-Government Platform

In FY 2009, DOIT constructed a new platform dedicated to internet facing applications, offering agencies a cost effective foundation for current and future online applications.

Online Payment Service

DOIT's online payment service enables agencies to offer online payment options to customers. The online payment service is now used by four agencies and in FY 2009 processed 54,000 transactions.

Internet Portal

DOIT's enterprise web content management system is used by 78 agencies to make government information available online to the public. In FY 2009, DOIT upgraded the system to a .net platform that includes web 2.0 capabilities to enable agencies to improve and expand online content.

Online Learning

In FY 2009 DOIT launched a new Enterprise Learning Management System, a system providing agencies new tools to manage and deliver workforce training and reduce associated costs.

E-Licensing

DOIT continues to support the development of an enterprise e-licensing capability as resources become available.

DOIT played a leading role in the FY 2009 procurement and development of the new Department of Public Health system enabling Connecticut-licensed physicians, dentists and nurses to renew professional licenses online.

DOIT also worked on a major upgrade of the Department of Consumer Protection's renewal system that enables workers in more than 200 trades and occupations to renew occupational, professional and trade licenses and registrations online.



Enterprise Security Programs



Defense in Depth

DOIT sets and executes firewall policies to prevent unauthorized access to state systems and data through the internet. In FY 2009, the firewall system blocked an average 3.2 million potential attempts per day, or close to 1.1 billion per year. DOIT's second layer of intrusion prevention protection blocked an additional 2.06 million external intrusion attempts in FY 2009.

Encrypting Devices and Data

DOIT continues to lead and advance the statewide encryption initiative. In FY 2009, the number of encrypted laptop and desktop computers increased from 6,700 to 10,519, and DOIT continued to train agencies to apply the full disk encryption to new equipment as acquired. DOIT also introduced "persistent encryption" tools and training to ten agencies. Persistent encryption tools enable data to remain encrypted regardless of the device or medium upon which it is located.

Disaster Backup and Recovery

DOIT tested recovery capabilities of IT systems across three disaster backup and recovery exercises spanning 180 hours, including the largest cross-agency Disaster Recovery exercise to date that involved ten agencies.

HIPAA Compliance

DOIT continued to lead the state HIPAA compliance program, working with ten agencies on compliance with Federal HIPAA regulations that establish privacy and security policy for the protection of electronic health care transmissions, medical information and medical records.

Emergency Communications

DOIT continues to manage resources enabling government access to communication lines during times of emergency or crisis in the nation's communications infrastructure. DOIT manages 417 access cards on behalf of customer agencies to enable access to land and wireless lines.



Agency Support – FY 2009

A few highlights of agency support initiatives in FY 2009 include:

Office of the Governor: Connecticut Recovery Website

To support the mission of the Connecticut Recovery Act Transparency and Accountability Board, DOIT created the [Connecticut Recovery Website](#) which enables members of the public to use interactive maps to track use of federal stimulus dollars and submit online requests for expedited assistance.

Department of Emergency Management and Homeland Security

DOIT completed construction of an infrastructure to ensure continuity of key emergency management systems used by state and local emergency responders and planners. The systems include *Web EOC*, the internet-based situational awareness tool used by emergency managers, and GEMS, a system providing web-based access to state GIS data. This \$2 million project was completed \$78,000 below budget.

Department of Education: Single Sign-on

DOIT completed a single sign-on solution for the Department of Education (SDE) to enable school districts to administer identity and access rights for SDE applications, reducing administrative tasks associated with granting user rights and identifications to 1,300 local education officials.

State Department of Education, Connecticut State Library

DOIT initiated a competitive procurement of E-Rate eligible services for the State Department of Education and the Connecticut State Library to ensure these agencies receive \$160,000 in discounts per year from the federal E-Rate program.

Connecticut Education Network (CEN)

DOIT's Program office each year applies for and secures discounted telecommunication service rates that have reduced CEN costs of providing schools with an internet connection by \$21.8 million since FY 2006. In FY 2009, \$5.04 million was saved in CEN costs.

Secretary of the State: Connecticut Voter Registration System

DOIT upgraded network connections for the Secretary of the State in 162 out of 169 cities and towns to ensure optimal functioning of the Connecticut Voter Registration System during the busiest election season in history.

The upgrade, completed ahead of schedule, provides increased bandwidth, disaster recovery capability, enhanced network management capabilities and encryption and will save an estimated \$100,000 per year in network costs.