## State of Maine Office of Information Technology



# 2009 Report on Information Technology



#### Preface

This report is designed to fulfill the statutory reporting requirements of the Chief Information Officer found in 5MRSA Chapter 163 §1973 Subsection 3-B; 5MRSA §1974 Subsections 5 and 6. Those requirements are:

- Report achievements, problems and the procedures planned for resolving the problems related to information technology
- Report on Information Technology Planning process
- Report written polices and standards for data processing and telecommunications

Executive Summary	1
Introduction	6
Forward	7
Looking Back	8
Accomplishments of the Past Year	9
Doing the Business of Government through IT	
Our Progress by the Numbers	18
Challenges	19
Moving Ahead – 2010	
Priorities to Fund	21
Positioning for the Future/Recommendations	23
Appendix 1 – What Government Partners Say	
Appendix 2 - Risks and Opportunities	25
Appendix 3 - Nationwide Policy and Technology Priorities	
Appendix 4 - Online Services	

## **Executive Summary**

#### Introduction

Information technology (IT) is an essential component of state government. It is embedded in virtually every business process, and it delivers the information necessary to transact business, support Agency programs, and provide on-line services to citizens.

In these challenging economic times, it is increasingly difficult to meet the growing need for IT services with limited resources. The Office of Information Technology (OIT), in collaboration of its government business partners, does this by:

- Consolidating and standardizing IT equipment and infrastructure to reduce overall cost to the State.
- Sharing IT staff to support multiple agencies.
- Promoting common IT business solutions across multiple agencies.

#### **Looking Back**

Besides providing highlights for 2009, this report reviews progress made over the past five years, and identifies priorities for the future. In January 2005, Governor Baldacci issued an Executive Order directing the creation of an Office of Information Technology (OIT), and consolidating functions, staff, and equipment from the Bureau of Information Services (BIS) and 16 State Agencies in the Executive Branch. The consolidation was done primarily as a cost-saving measure, as well as to promote State-wide IT solutions.

#### Accomplishments of the Past Year

A few of the IT accomplishments of the past year are highlighted in the following report, explaining their benefit to State Government and citizens. "Key" accomplishments in 2009 included:

- Maine State Communications Network (MSCommNet) moving to final design phase
- Support of the Federal Economic Stimulus initiative
- Upgrade to the State's remote access system to allow emergency connections
- Reorganization of management team overseeing application services, consolidating under a single entity
- Compilation of a state-wide application inventory, allowing us to make better decisions on how to leverage existing investments
- Reduction in security vulnerabilities
- Increase in customer satisfaction
- Awards for www.maine.gov

#### Doing the Business of Government through IT

Technology touches every Mainer every day. Whether you are an employer filing taxes over the Internet, a citizen renewing your fishing license on Maine.gov or a state employee answering a citizen phone call – technology is the backbone that makes it possible.

Many State Agencies have used IT as an investment – to transform business processes, increase internal efficiency, improve services to citizens, and save money. In the case of Maine Revenue Services (MRS), they have brought millions of dollars of additional revenue to the State, through wise investment in technology.

Maine state government has made great strides in service delivery through government partnering.

- ConnectME Broadband to Maine's Most Un-served
- Unified Statewide Land-Mobile Radio Communications
- Online Services

#### **Our Progress by the Numbers:**

This section shows several charts and graphs, comparing our progress with previous years. The financial chart shows that key rates for IT services continue to drop each year. The general trend is increasing demand and decreasing resources to meet those needs.

As demand and consumption of technology services rises, OIT is adapting to the challenges and overcoming obstacles. OIT is successfully adjusting its tactics to fulfill the original vision, while remaining focused on its strategy for the creation and sustainment of a consolidated enterprise-scale technology services organization.

OIT remains the primary source for all IT spending in the Executive Branch. With the budgetary challenges facing the state, OIT has looked for ways to reduce the cost of providing core OIT services. This detailed analysis led to a cost reduction of approximately \$2.1 million which resulted in lower rates for a number of OIT services.

To support their business functions, the Executive Branch agencies use roughly 1,000 applications. These range in size and complexity from multi-terabyte, highly available, highly performing systems written in state-of-the-art technologies to small, single person Microsoft Access databases. There are over fifty of these applications that support hundreds, and in some cases, thousands of users. Management of these systems has been consolidated to ensure the utilization of common components and best practices. Continued direction includes focusing on shared solutions, reducing the number of applications and the associated support cost.

Statewide, 20,000 enterprise devices connect to the state's network – personal computers, servers, VoIP phones, video conferencing devices, and many other devices – at more than 600 physical locations serving agencies within the Executive Branch, Judicial Branch, Secretary of State, Attorney General, quasi state government as well as local, county, and federal law enforcement agencies. Service and support of these devices is centralized thus optimizing the ability for uniform management of deployments, updates and security.

In some areas, such as online services, Maine is far ahead of other states. Other areas need more attention. State government in Maine has experienced an accelerated growth in networked devices, storage demands, and internet based information exchange with

government partners, federal, state and municipal entities. This increased demand places a heavy burden on our infrastructure, most notably an increased demand for network bandwidth.

#### Challenges

Maine has improved its performance on projects, but work remains to be done. Two major projects failed to deliver on the projected schedule. The delays were measured in months not years and costs were contained to avoid overruns.

The first, the upgrade of the Maine Revenue Services tax system (MERITS), is highly tested, benchmarked and planned. Like a building renovation project, issues surface that require time and attention beyond that which was budgeted. By all other measures this project has been highly successful thanks in large part by the leadership of the MRS Director, his key staff and the technology team (State and Contractor).

The second is the Medicaid Management Information System being implemented by DHHS and UNISYS as Maine moves towards a Fiscal Agent delivery system and to replace the MECMS claims management system implemented five years ago. This project will be implemented five months behind schedule, but its design, oversight and testing are extraordinary.

The experience from these projects and the many that have been completed this year will continue our improvement in project management and contract development.

#### Moving Ahead – 2010

Major special initiatives on the horizon include Medicaid Information Management Systems implementation, ARRA Reporting, Broadband, Online Services (including Social Networking), FOAA request fulfillment, and overall greater transparency.

#### What Government Partners Say

Several statements by our government partners in various State agencies show the growing satisfaction with OIT services under the consolidated model.

#### **Nationwide Policy and Technology Priorities**

The National Association of State Chief Information Officers (NASCIO) released the *Top Ten Policy and Technology Priorities* for State CIOs. As has been the case in years past, Maine finds itself facing the same challenges and concerns as other states across the nation.

#### **Priorities to Fund**

The majority of the IT budget is for "keeping the lights on" – maintaining the existing systems and infrastructure. The areas below are highlighted as needing funds in the coming biennium:

• Agency Business Systems Needing to be Replaced or Modernized:

- The State's Human Resource and Payroll system is overdue for replacement, having been implemented twenty years ago and written in outdated technology.
- As part ARRA, the federal government focused on Health Information Technology, and the exchange of electronic health information. Beginning in 2010, the State must begin the effort of ensuring its applications support this requirement.
- The Automated Client Eligibility System, supporting numerous programs for the Department of Health and Human Services such as Medicaid Eligibility, Food Supplements Program, and Temporary Assistance for Needy Families (TANF), has been experiencing performance slowdowns due to the growth of usage beyond its original design. Because this is so critical to the services that DHHS provides, improvements must be found.

#### • Application Hosting Support:

- "Virtualization" and consolidation of servers, to reduce the cost of having to replace aging servers, and be more efficient in administering a much smaller inventory of physical servers
- Improving the Oracle database environment by "clustering" of servers for greater stability and high-availability of mission-critical systems
- **Radio Communications/ MSCommNet:** Complete the modernization of the State's radio communications infrastructure
- Network: In order to support the mission-critical business applications we need to have adequate network capacity. As State Agencies expand their use of IT to "do the business of State Government," the IT infrastructure has to be able to meet the growing demand. The specific areas of increasing demand on the IT infrastructure that we are highlighting as priorities to fund include:
  - Expanding network capacity to meet the growing demand for data traffic
  - Improving network fail-over capacity, to ensure continuity of service and to minimize disruption to State Government business functions and citizen services
  - Increasing remote access capacity, to support working from home and offsite
  - Increasing the number of State Government locations that have wireless capacity, to increase productivity for workers at those locations
- **Data Center:** Moving into a new data center before October 2012, and ensuring data center fail-over capacity for mission-critical systems

#### **Risks and Opportunities**

In times of budgetary shortfall, every government program is under pressure to reduce costs, and information technology is no exception. OIT is taking every possible measure to contain costs while maintaining essential services. The report highlights areas of risk

and opportunities for us to focus on in the coming years, even in the face of severe budget constraints.

#### **Positioning for the Future**

**Recommendation #1-** Evaluate opportunities to consolidate, create or share relationship with Constitutional Offices and Branches of Government.

Generally, these entities operate their own data systems and in most cases in small data centers located within their location. There are needs to share data across these entities with, to and from the Executive Branch. The opportunities for a closer relationship should be evaluated in the next Legislature and Administration

This relationship will accomplish better returns for the State as a whole by extending an already successful delivery model, refined over the last four years. Additionally, it also holds out the promise of statewide data integration, encompassing not just the Executive branch, but the constitutional entities as well.

**Recommendation** #2 – Information Technology has become a major component of the operations in State Government. The Chief Information Officer (CIO) currently reports to the Commissioner of Administrative and Financial Services in what has been a very successful relationship. That said, the CIO needs a more direct relationship with the Governor and a peer relationship with Commissioners to have the greatest impact on efficient use of information technology and to leverage those relationships during the funding and prioritization processes.

This is critically important as government is reengineered to be most efficient and effective.

## Report on Information Technology in State Government 2009

## Introduction

Information technology (IT) is an essential component of state government. It is embedded in virtually every business process, and it delivers the information necessary to transact business, support Agency programs, and provide on-line services to citizens.

In these challenging economic times, it is increasingly difficult to meet the growing need for IT services with limited resources. The Office of Information Technology (OIT), in collaboration of its government business partners, does this by:

- Consolidating and standardizing IT equipment and infrastructure to reduce overall cost to the State.
- Sharing IT staff to support multiple agencies.
- Promoting common IT business solutions across multiple agencies.

This report reviews progress made over the past five years, and priorities for the future. It highlights specific accomplishments for 2009.

## Forward

2009 was a very busy year for the Office of Information Technology (OIT). The year started with significant budget challenges and increasing demands for technical services. This will be the year known as doing more with less and developing good working relationships with our business partners to discover innovative ways to deliver services directly to the citizens of Maine.

During the course of the year, the federal government placed increasing demands on the State, many requiring modifications to the systems we use today. ARRA was a large source of these changes (and included the funding to make them happen). These demands were seen in varying degrees across all Agencies and required technical support from OIT. For example the Department of Labor was mandated to increase unemployment benefits on several different occasions. The Department of Health and Human Services was required to implement tracking of Medicaid claims processing (turn-around time) in support of receiving enhanced federal funding. All of these were accomplished through OIT managed resources, which made programming changes in support of these requests, often on very short timeframes.

Working with the Center for Disease Control (CDC), OIT saw an increased demand for technical services to ensure we were prepared for a potential pandemic. We ramped up our disaster recovery plan to ensure capacity to accommodate a potential increase in teleworking. Critical systems were identified that needed to be available 7 x 24 in order to effectively provide the information to track a potential pandemic. We also built an Influenza Data Dashboard, allowing CDC to have H1N1 information at their fingertips pulled from several sources.

OIT has been working with the Departments of Public Safety, Inland Fisheries and Wildlife, Conservation, and Marine Resources to develop the Maine State Communication Network (MSCommNet). This system will consolidate all communication systems under the support structure of OIT. In 2009 a contract was signed with Harris Corporation to build out the MSCommNet infrastructure. We are in the process of finalizing land acquisition, and our frequency plan. We have been establishing partnerships with federal agencies (Customs and Border Patrol), municipalities, and private entities when appropriate to develop a robust system that will meet the State's public safety communication and interoperability needs far into the future.

Amid all of this we have also been able to meet our budget obligations. Over the course of the past year we have reduced a number of rates for State Fiscal Year (SFY) 2010 and 2011 by \$2.189 million per year in General Fund dollars. Because of the methodology used to leverage federal funds, the actual reductions were close to \$5.6 million. Rate reductions will severely hamper our ability to meet the increasing demands for technology. Our State Agency partners, although they are appreciative of the rate

reductions, recognize the need to leverage technology in order to meet the demands being placed on them with a smaller workforce expanding workloads and limited funding.

OIT is committed to providing quality services. We believe that technology is the answer to meet current and future demands for services. Technology properly employed, along with agency partnerships in data sharing, aggressive data retention strategies, and improved process will position the State of Maine as an industry leader.

## **Looking Back**

In January 2005, Governor Baldacci issued an Executive Order directing the creation of an Office of Information Technology (OIT), and consolidating functions, staff, and equipment from the Bureau of Information Services (BIS) and 16 State Agencies in the Executive Branch. The consolidation was done primarily to promote State-wide IT solutions and streaming information efficiently across government. Cost containment and savings were anticipated over time.

Specifically, the Governor's Executive order declared four basic reasons for the consolidation:

**"WHEREAS,** information technology is a vital business enabler for Maine government, business, and economic development; and,

WHEREAS, continuing and innovative improvements are necessary in the access and delivery of services for the citizens and customers of the State of Maine, including improvements in the coordination of services between state, federal, and municipal governments; and,

**WHEREAS**, the taxpayers of the State expect their government to operate efficiently, to adopt quality procurement practices, to invest its capital wisely, to achieve economies of scale, and to have mechanisms in place to ensure accountability for the monies that fund information technology investments; and

**WHEREAS,** Maine's information technology for state government should be managed from the perspective of the entire enterprise, thereby ensuring unified vision and meaningful strategic planning, a common technology architecture and infrastructure, effective project management, accountability, and establishment of statewide priorities;"

The CIO was charged with creating an organization to:

- Strengthen the ability of the CIO to achieve a sharper focus and accelerated outcomes for IT enterprise strategies and initiatives.
- Improve governmental services and foster economic development efforts.

Since the consolidation of IT services in 2005, OIT has been delivering the full range of technology services to the Executive Branch, and selected services (such as e-mail) to non-Executive agencies.

The Chief Information Officer is statutorily charged to direct, oversee and coordinate the provisioning of information technology and enterprise services in data processing, policy making, planning, architecture, and standardization throughout State Government. The CIO serves as the lead advocate for information and telecommunications technology strategies, policies, standards and plans for the executive branch and independent units of State Government, constitutional offices, the media and the general public. He advises the Governor's Office and the commissioner with development and support of information technology-related legislation. The CIO is statutorily directed to sit as a Board member on the Maine Library of Geographic Information Board and act as a member of the ConnectME Authority.

On July 1, 2005, the Office of Information Technology (OIT) commenced a major consolidation and, as a result, became an enterprise scale technology services provider within the Department of Administrative and Financial Services (DAFS). The CIO has provided central leadership and vision in the use of information and telecommunications technology on a statewide basis, establishing a consolidated organization to manage telecommunications technology on a statewide basis. Today OIT has 461 employees a statewide IT budget of approximately \$160 million.

## Accomplishments of the Past Year

Much of the work of IT is done behind the scenes, and transparently. Like the telephone or electric power, people just expect that it is there when they need it, but there is complex engineering and technical expertise required to make it all work. Such it is with IT. The State of Maine's IT infrastructure is the foundation that sustains "the business of State Government" – supporting essentially all Agency business functions, and provides citizen-services. Specifically, the servers and storage arrays house the data, the enterprise database environment process and analyze the data, and the networks carry that data to where it needs to go – both for State workers and the public. Automated systems are developed to meet the business needs of all of State Government. Hundreds of on-line services bring needed information and transactions conveniently to the citizens we serve.

A few of the IT accomplishments of the past year are highlighted below, explaining their benefit to State Government and citizens.

#### Services to Citizens

#### **Online Services – Maine.gov**

In 1999 Maine.gov boasted two online services, ten years later nearly all state agencies participate and 1.8 million transactions were processed.

• Maine.gov ranks first in the US States Governance Report. This report assessed state governments for website security, usability and content, online services offered, and citizen response and participation.

- Maine.gov awarded Fourth Place in Annual Best of Web Competition. For the ninth year, the Center for Digital Government has named Maine.gov one of the best state government sites in the nation. Maine.gov was ranked fourth in the 2009 Best of the Web national competition for state government web portals which evaluates portals on the basis of online services, innovative technology, efficiency, ease-of-use, accessibility to the disabled, privacy and security.
- The Maine.gov DataShare Service was named an award winner in the Government to Citizen Category of the 2009 Digital Achievement Awards which recognizes government services provided to citizens that combine innovative usage of technology with functional design, efficiency, and economy.

#### American Recovery and Reinvestment Act (ARRA) Support

In 2009, Congress passed the American Recovery and Reinvestment Act (ARRA), which brought millions of dollars to the state. The ARRA project is one of the largest statewide government data transparency endeavors to date. It was recognized early on that technology will be the major factor in acquiring and delivering the data necessary to meet federal guidelines. OIT joined agencies, the Controller's Office, Service Centers and the DAFS Commissioner at the table on day one, collaborating with government partners, and will continue to be a key player throughout the process. In support of ARRA, many of the State's application systems were modified, to support new services available through ARRA funds. OIT and INFORME built a web site<sup>1</sup> to publish Recovery Act information along with data to demonstrate to the citizens of Maine how they are impacted by the economic stimulus funds.

#### Transparency

The Maine.gov DataShare<sup>2</sup> provides easy access to public data, increases government transparency, and encourages public participation and collaboration in government. By making data readily available for research, analysis, and development of web tools and applications, we hope to encourage new and creative approaches to the data. Maine DataShare will continue to grow.

#### **Consolidation of Application Management**

In 2009, OIT took the next step in raising the bar on the delivery of IT services to the State. A primary focus was on application development and management; it consolidated these services under the direction of a single entity – the Associate CIO of Applications. Since being enacted in the beginning of State Fiscal Year 2010, a foundation has been laid; and the group has focused in two areas: Systems Integration, and Common Practices and Skills.

Related to Systems Integration and Governance, much has been accomplished:

• A new policy directing application teams to leverage existing applications, and then look towards commercial applications, and finally building systems as a last resort has been enacted. This is referred to as the COTS policy; COTS meaning Commercial off the Shelf software.

<sup>&</sup>lt;sup>1</sup> <u>http://www.maine.gov/recovery</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.maine.gov/cgi-bin/data/index.pl</u>

- A strategy and process to identify and work towards common solutions has been documented and enacted;
- A comprehensive, state-wide, application inventory has been developed that provides information on systems in which the State has already investments. This will be used to make decisions on how to leverage existing systems for changing and new business needs;
- The first Application Strategic Position documents have been created in the areas of Address Validation, Licensing, and Document Management & Imaging. These are akin to the architectural bricks used to govern the technologies we use, and narrow our toolset; and
- Plans have begun to take shape to migrate to the common solutions as well as ensuring expanded needs are met using these common solutions.

Related to Common Practices and Skills, the new Application Management Team has the goal of establishing common framework for managing applications, as well as establishing (recognizing that some may be in place) best practices for the delivery of application services. Accomplishments include:

- Certification of Interim Releases of Software More applications have been utilizing the Deployment Certification process when implementing new releases (as opposed to just applying this to new applications). This has the benefits of ensuring interim releases of software are production ready, and a documentation trail of the work and decisions that proved this.
- Systems Development Lifecycle Policy This policy directs the application teams to ensure that applications are developed by adhering to basic guidelines, including the activities that should be performed and the resulting documentation. This aligns the state with best practices utilized in industry. The teams are working to put this into practice.

#### **IT Supporting Business Efficiencies**

During 2009, there were several examples of technology supporting efficiencies in the way agencies perform their work and provide services. Some of the more notable include:

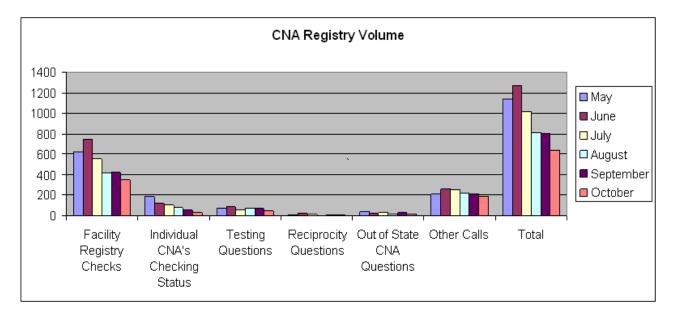
#### Web Applications Keep Unemployment Support Available

The efficiency of the DOL unemployment staff was significantly improved with the use of WEB and IVR (interactive voice recognition) systems which handled over 75% of the transactions. Without those systems working 24 hours a day 7 days a week it would have been impossible for Unemployment staff to handle the workload. OIT continues to work with DOL Unemployment to make changes to the systems to improve efficiency and effectiveness.

#### C.N.A. (Certified Nursing Assistant) Registry Portal Reduces Demand on Staff

In the first half of 2009, OIT worked with DHHS/Division of Licensing and Regulatory Services (DLRS) to implement a law that was passed in the previous legislative session. The resulting system functionality allowed licensed facilities to determine if an unlicensed individual other than a C.N.A. committed abuse, neglect or misappropriation of property. Thanks to the efficiencies gained by the C.N.A. web portal that allowed DLRS to do this with existing resources.

DLRS tracked the impact of the newly developed portal with the change in phone calls to the business area. This portal allowed both C.N.A.'s and employers to check whether C.N.A.'s are active on the Registry or whether they have been annotated for abuse. The included chart below and its metrics show that the demand on the DLRS staff decreased significantly. The call volume went from a peak of over 1200 calls in May to roughly 600 calls in October – a fifty percent decrease in demand.



#### Partnership with State Agencies Salvage Project on Verge of Failure

OIT has worked hard to develop partnerships with agencies, and instill the confidence that the IT team can support the business needs. One such example is with DHHS' Maine Center for Disease Control and Prevention. The Maine CDC's relationship with OIT on the Integrated Public Health Information System (IPHIS) has produced a stable and successful technical system that provides essential daily electronic integration and analysis of infectious disease data. This is essential to Maine CDC's mission in ensuring the protection of the state population. Not only is Maine CDC poised to expand the toolkit to other disciplines in public health, but the success of the project is equipping Maine's public health authority to benefit from the profound opportunities that the federal ARRA health information exchange stimulus funds are advancing nationally.

The partnership turned a difficult vendor provided solution fraught with potentially expensive vendor-driven 'fixes' into a successful, interoperable public health toolkit in less than 18 months as the state resumed in-house support for the project by the IPHIS Applications team.

#### **Reportable Events Functionally in EIS Saves State Efforts**

This past fiscal year, OIT partnered with the DHHS Office of Adults Cognitive and Physical Disability Services to implement a Reportable Events component to the EIS (Enterprise Information System) application, which supports much of the Behavioral Health offices within DHHS This module converted a very manual effort to an automated process. Previously, information was mailed and faxed to the central office to be manually entered into the EIS, often days later. Now, several hundred provider employees enter the "reportable events" directly, notifying DHHS immediately so action may be taken. This has the result of reducing the department's data entry costs and more importantly, improving the time to follow up on these events for clients. Reportable events are often events at provider locations (hospitals, for example) that adversely affect clients and patients.

**Building Common Solutions - Maine DOT GIS Web Framework and Map Viewer:** OIT/Maine DOT staffs have developed reusable code and mapping infrastructure called the Maine DOT GIS Web Framework. It can be extended to build applications specific to spatial assets Maine DOT manages. The goal was to extend the use of GIS into any application or process that utilizes spatial information in an efficient, rapid and consistent manner. A good example of the benefits of the Map Viewer comes from the Maine DOT Property Office, which requested the right of way data they maintain be incorporated into the Map Viewer. The data was incorporated within days and also integrated with the right of way plans. Previously staff answering right of way questions for users (internal and public) would use multiple applications to find addresses and towns, view related Maine DOT assets and search for right of way plan documents. All the functionality is now incorporated into a single easy to use application.

#### IT Infrastructure to Support it All



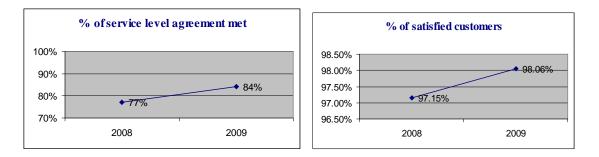
The State of Maine's IT infrastructure is the foundation that sustains "the business of State Government" – supporting essentially all Agency business functions, and provides citizen-services. Specifically, the servers and storage arrays house the data, the enterprise database environment process and analyze the data, and the networks carry that data to where it needs to go – both for State workers and the public.

OIT supports the State's network infrastructure and over 800 servers that house the data that transacts business for essentially all functions in State Government. The demand for network capacity continues to grow, and is a concern for us in being able to meet the growing demand, giving budget constraints. In the server hosting environment, we are standardizing, consolidating, and "virtualizing" servers both to cut costs as well as to adopt recommended best practices.

Security of data is of paramount importance. Our servers house data for the State Agencies that covers the full range of programs – taxes, welfare, health and human services, criminal history records, etc. While security vulnerabilities remain as a major risk factor, OIT continues to make progress in this area. Monthly security assessments are now being conducted, and vulnerabilities are being mitigated. While there are still areas of risk, the overall security profile is gradually improving.

#### **Customer Support**

A key accomplishment in 2009 is the marked improvement in customer support provided to staff in the State Agencies. See charts below. Much of this is due to business process improvements in delivery of desktop computers and support, use of standard operating procedures, and measuring performance against customer expectations.



## **Doing the Business of Government through IT**

Technology touches every Mainer every day. Whether you are an employer filing taxes over the Internet, a citizen renewing your fishing license on Maine.gov or a state employee answering a citizen phone call – technology is the backbone that makes it possible. Maine state government has made great strides in service delivery through government partnering. Following are examples of how OIT leverages staff, robust systems and government partners to meet the ever changing needs of 21<sup>st</sup> century constituent base.

#### IT Is a Good Return on Investment

Many State Agencies have used IT as an investment – to transform business processes, increase internal efficiency, improve services to citizens, and save money. In the case of Maine Revenue Services (MRS), they have brought millions of dollars of additional revenue to the State, through wise investment in technology. Over the past dozen years, MRS has used the Internet to significantly reduce costs, and streamline tax filings and

revenue collections for both MRS and the public. Currently, MRS receives between \$900 million - \$1.2 billion of credits per year in check form. "The time value of receiving money earlier is phenomenal," explained Mr. Gerard. A new check processing system, TRIPS (Tax and Revenue Imaging and Processing System) will cost \$2-3 million, and pay for itself within 12-18 months. By processing checks electronically, the State gets credit for the deposits within 24 hours, versus 4-6 days. "Overall, MRS strives to automate/digitize as many of the MRS transactions as possible. Without information technology, MRS would not be able to successfully accomplish its mission," Jerome Gerard, Acting Executive Director, Maine Revenue Services.

#### **Broadband to Maine's Most Un-served**

The ConnectME Authority was created with the goal of expanding broadband access in the most rural, un-served areas of the state that have little prospect of service from a traditional provider. The Authority is not an internal function to OIT. The CIO sits as one of five voting members of the ConnectME Authority. Given this external status, the CIO does not exercise authoritative oversight.

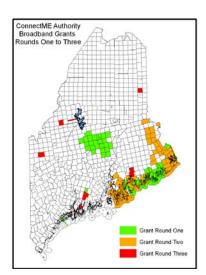
Broadband - The ConnectME Authority has processed three rounds of grant funding to expand affordable broadband service to the unserved areas of Maine. The Authority has awarded \$2.79 million in total grants with total projects amounting to \$8.26 million. To further the broadband effort ConnectME will fund a mapping and planning project with a \$1.8 million grant from the National Telecommunications and Information Administration (NITA). A \$25.4 million federal Recovery Act grant, called the "Three Ring Binder" Middle Mile Project, will expand high-speed Internet service to rural areas of the State.

In 2009, the Authority awarded its third round of grants, based on smaller, more focused proposals. The Authority suggested grant limits of \$100,000 per project, funding no more than 50% of the total project. Recognizing the need for flexibility for exceptional proposals, we made eight awards for just over \$600,000 (total project value of \$1.23 million), to serve over 4,200 households in the most rural areas of Maine.

Grant	# of	Grant Range	Total	Total Project	Household	Increased
Year	Gran		Grants	Amount	Availability	Availability <sup>3</sup>
	ts					
2007	6	\$38K - \$370K	\$738,724	\$1.53 million	13,800	2.7%
2008	5	\$45K - \$533K	\$1.44 mil	\$5.5 million	9,000	1.7%
2009	8	\$43K - \$232K	\$609,860	\$1.23 million	4,200	.8%
TOTAL	19		\$2.79 mil	\$8.26 million	27,000	5.20%

The following table summarizes all the Authority's grant activities to date:

 $<sup>^3</sup>$  Based on the 2000 Census for population and number of households in Maine, obtained from the State Planning Office. Total occupied housing units = 518,200, population = 1.275 million, 2.39 = average household size.



Future grants will continue to be targeted to areas of the State that have no form of broadband or terrestrial high-speed Internet service available. Eligible applicants are municipalities, co-ops, community groups and broadband service providers.

#### **Unified Statewide Land-Mobile Radio Communications**

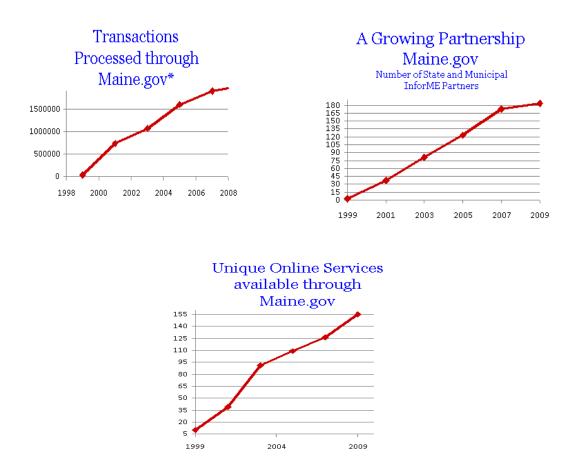
MSCommNet is four years into an eight year process to design and build a unified statewide land-mobile radio communications network for State law enforcement, public safety, and public service agencies. The State's new system will be interoperable with existing local and regional radio networks to ensure continued interoperability with our most important partners. When the MSCommNet is commissioned in the fall of 2012, Maine State government will have a "public safety grade" radio communications network with the high reliability and interoperability expected by the public and radio users in the post Katrina/9-11 world.



The new system will replace the State's current, aged and obsolete department-based radio systems with a consolidated (MSCommNet) and modernized system that will: serve the State's current and future needs; meet new Federal requirements; and, provide for interoperability with local, county, and federal partners.

#### **Online Services**

Offering more than 300,000 web pages, Maine.gov is an outstanding public resource within a framework that is easy to navigate and accessible to a wide range of users. Usage of the site grows each year, now exceeding 230 million hits annually. This year, enhancements to Maine.gov included a fresh re-design, the Maine.gov Media Gallery, and DataShare, an online catalog of free public government data. In the past year, Maine.gov has added 20 new services offerings to over 400. New services include boat registration renewal, court fine payments, a conservation easement registry, online health assessment, and duplicate vehicle registrations.

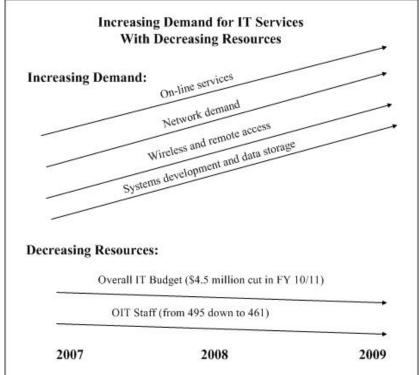


## **Our Progress by the Numbers**

y	Service	<u>E-mail</u>	<u>File</u> Services	<u>Phone</u> <u>Line</u>	<u>Toll per</u> <u>Minute</u>	<u>WAN</u>	<u>Desktop</u> Support
	Fiscal Year						
	FY05	\$8.50	\$30.00	\$30.00	\$0.05	\$34.75	\$53.00
OIT Consolidation began in FY06							
	FY06-07	\$6.50	\$25.00	\$31.00	\$0.04	\$34.75	\$53.00
	FY08-09	\$6.00	\$19.30	\$29.00	\$0.04	\$33.50	\$42.00
	FY10-11	\$6.29	\$18.37	\$28.02	\$0.04	\$34.32	\$42.46
	FY10-11						
	Revised	\$6.08	\$17.94	\$27.53	\$0.03	\$34.14	\$39.51
	Decrease since OIT consolidation	-6.91%	-39.35%	-12.60%	-33.33%	-1.79%	- 34.14%

The following chart shows how IT rates have generally been reduced over the past five years.

Since the consolidation of technology resources in 2005, OIT has continued to reduce costs while increasing the level of service provided to agencies. The total expenditures continue to grow as the volume of services provided to agencies grows at a rate greater than the cost reductions.



## Challenges

Maine has improved its performance on projects, but work remains to be done. Two major projects failed to deliver on the projected schedule. The delays were measured in months not years and costs were contained to avoid overruns.

The first, the upgrade of the Maine Revenue Services tax system (MERITS) is highly tested, benchmarked and planned. Like a building renovation project, issues surface that require time and attention beyond that which was budgeted. Going forward, better resource planning and implementation of contingency allowances for work effort will avoid the perception of a late project. By all other measures this project has been highly successful thanks in large part by the leadership of the MRS Director, his key staff and the technology team (State and Contractor) who have been assigned to the project.

The second is the Medicaid Management Information System being implemented by DHHS and UNISYS as Maine moves towards a Fiscal Agent delivery system and to replace the MECMS claims management system implemented five years ago. This project will be implemented five months behind schedule, but its design, oversight and testing are extraordinary. The extra time to complete the process is supported by the Federal funding sources to assure the highest degree of performance possible at go live.

The experience from these projects and the many that have been completed this year will continue our improvement in project management and contract development.

## Moving Ahead – 2010

Technology has become so important to government interaction it is a part of almost every exchange a citizen has with a department or agency. Citizens require a secure model in which to store and exchange information. Moving ahead, OIT will be attuned to the following endeavors.

#### Broadband

ConnectME will fund a mapping and planning project with a \$1.8 million grant from the National Telecommunications and Information Administration (NITA). This project will create the first comprehensive geographic inventory of high-speed Internet services statewide for use in identifying unserved and underserved areas and in planning expansion throughout the State. This project is crucial for administering future State public- and private-sector grants for broadband, creating opportunities for broadband service providers, the business community, public institutions, and the citizens of Maine.

A \$25.4 million federal Recovery Act grant, called the "Three Ring Binder" Middle Mile Project, will expand high-speed Internet service to rural areas of the State. The project will bring benefits in construction and jobs, and will consist of 1,100 miles of "dark fiber" installed through western, eastern and northern areas of the State. The Governor has asked Dick Thompson, his designee on federal Recovery Act Broadband matters, to ensure that the project makes the most effective and efficient use of the taxpayer dollars by eliminating overlaps and duplication of infrastructure.

#### Social Networking – Public Policy Issues

A 2009 report by the Pew Internet & American Life Project found that one in five Internet users searched for political information, posted their views about issues or engaged in another civic activity on a social network. "I think people realize this is no longer a fad," Alan Shark, executive director of the Public Technology Institute, says of social media. "This is a way of life." Many officials are simply worried that Web 2.0 experiments will spiral out of control. There also are a lot of legal risks and management concerns involved. For example, should government-posted content on a third-party Web site be considered public record? Who owns the content, and does it need to be archived? If advertisements show up on a government fan page, does it imply that the state, city or county is endorsing the advertised product? And how should officials handle rude or libelous comments? A recent report<sup>4</sup> estimates that 66% of US government still trails US corporate use of social media - which provides some indication of the direction for the future.

#### Social Networking Sites Used by US Social Network Users, by Generation, May 2009 (% of respondents in each group)

	Facebook	MySpace	Twitter	LinkedIn
Generation Z	61%	65%	9%	0%
Generation Y	65%	75%	14%	9%
Generation X	76%	57%	18%	13%
Baby boomers	73%	40%	13%	13%
WWII generation	90%	23%	17%	4%

WWII generation use Facebook Source: Anderson Analytics, "Social Network Service (SNS) A&U Profiler," provided to eMarketer, July 13, 2009

www.eMarketer.com

Doug Robinson, executive director of the National Association of State Chief Information Officers (NASCIO), says several states have approached him with questions about these issues. One of the things NASCIO is doing to help states navigate the risks is to convene an ad hoc group of lawyers, deputy state CIOs, and technology and policy professionals. The group is trying to put together some formal guidelines for states on issues regarding governing laws, liability and endorsements. The Maine Office of Information Technology is a participant in this group.<sup>5</sup>

#### **FOAA Requests**

Over the past few years, OIT has become increasingly involved in Freedom of Access Act (FOAA) requests. The electronic nature of the way we transact business today lends itself to a seemingly transparent mechanism in which to retrieve data. One might assume that data which the State works with on a day to day basis is accessible electronically.

<sup>&</sup>lt;sup>4</sup> <u>http://www.hci.org/cfe/library/directories/research</u>

<sup>&</sup>lt;sup>5</sup> <u>http://www.governing.com/article/social-media-friend-or-foe-government</u>

This is not always the case. The majority of data is in electronic format, but the data itself has not been cataloged according to specific standards, making it difficult to retrieve cost effectively. There is still data that is kept in only paper format. Public record laws and archival procedures have not kept pace with technological advances. Antiquated fee structures determine the amount an agency can charge a requester to cover the cost of retrieval and preparation; these costs were created for the old traditional paper based system. Agencies have seen a drastic increase in FOAA requests and are looking toward OIT for assistance in meeting their obligations in retrieval of data. OIT works with the Governor's Office, the Attorney General's Office and various other State agencies in responding to FOAA requests and strategizing ways to make the retrieval process more efficient and transparent for constituents. Even though more data is being generated electronically, cataloging still remains incomplete to allow efficient and effective discovery. OIT will continue to provide leadership in improving the cataloging.

#### Transparency

Transparency promotes accountability and provides information for citizens about what their government is doing. OIT is committed to working with state agencies in creating an unprecedented level of openness in government. Maine.gov was one of the first states in the nation to launch an online interface for citizens to track various aspects of the transparency endeavor.

### **Priorities to Fund**

The majority of the IT budget is for "keeping the lights on" – maintaining the existing systems, infrastructure, application and their operation. The list below represents the most pressing needs going forward:

#### Agency Business Systems needing to be Replaced or Modernized:

- *State's Human Resource and Payroll system* is overdue for replacement. Implemented around 1990, it is written in older technologies in which the State has difficulty maintaining a knowledge base. It is difficult to support the most fundamental reporting and as a result, complex and maintenance-intensive system interfaces must be used to move data into an external data warehouse for reporting. The many changes that are required due to legislative directives are becoming increasingly difficult to implement and the time it takes to implement even what appears to be a simple change, sometimes takes a significant amount of time in comparison to the time it would take to make the same change in a more modern, table driven system running on today's technology. In short, it is expensive and difficult to maintain.
- *Electronic Health Information Exchange HIT/HIE*. Beginning in 2010, the State must begin the effort of ensuring its applications support this requirement. There are several HIT/HIE related activities already underway across the State of Maine. These initiatives will be major pieces of the "As-Is" landscape assessment to help ensure that DHHS' HIT planning activities capture a full picture of Maine's capabilities that also be integrated into "To-Be" vision for 2015.

• Automated Client Eligibility System supports numerous programs for the Department of Health and Human Services such as Medicaid Eligibility, Food Supplements Program, and Temporary Assistance for Needy Families (TANF). Over the past year, it has been experiencing performance slowdowns due to the growth of usage beyond its original design. Coupled with the fact that this application is targeted to become a cornerstone component as the Financial Eligibility system of record for DHHS, improvements must be found. Assessments are underway to determine what architectural changes must occur to support this direction and to determine what this will translate to in terms of dollars and resources.

#### **Application Hosting Support:**

- "Virtualization" and consolidation of servers, to reduce the cost of having to replace aging servers, and be more efficient in administering a much smaller inventory of physical servers
- Improving the Oracle database environment by "clustering" of servers for greater stability and high-availability of mission-critical systems

#### Radio Communications

• MSCommNet – complete the modernization of the State's radio communications infrastructure. Federal regulation requires conversion to a narrow band frequency set for all public safety users. A contractor has been retained but significant work must be completed by January 01, 2013.

#### Network-Voice, Data, Video

In order to support the mission-critical business applications we need to have adequate network capacity. As State Agencies expand their use of IT to "do the business of State Government," the IT infrastructure has to be able to meet the growing demand. The specific areas of increasing demand on the IT infrastructure that we are highlighting as priorities to fund include:

- Expanding network capacity to meet the growing demand for data traffic
- Improving network fail-over capacity, to ensure continuity of service and to minimize disruption to State Government business functions and citizen services
- Increasing remote access capacity, to support working from home and off-site
- Increasing the number of State Government locations that have wireless capacity, to increase productivity for workers at those locations

#### Data Center:

- Moving into a new data center before October 2012. The current major data center is leased and the leaseholder does not wish to renew. The Bureau of General Services is working with OIT to make this happen.
- Ensuring data center fail-over capacity for mission-critical systems

## **Positioning for the Future/Recommendations**

Beyond anything else, the past four years of OIT experience has been about leveraging the economies of scale to deliver better IT value while holding down costs. This idea is uniformly reflected in all aspects of OIT today, from operations and applications to architecture, policy, and governance. Economies of scale not only extract deeper discounts from vendors but also facilitate interoperability, cross-training, and peer-topeer mentoring, thereby lowering costs and improving supportability.

**Recommendation #1-** Evaluate opportunities to consolidate, create or share relationship with Constitutional Offices and Branches of Government.

Constitutional Offices and the Judiciary already subscribe to common network services, common Bureau of General Services (BGS) services, etc. The Legislatures subscribes to telephone services.

Generally, these entities operate their own data systems and in most cases in small data centers located within their location. There are needs to share data across these entities with, to and from the Executive Branch. The opportunities for a closer relationship should be evaluated in the next Legislature and Administration

This relationship will accomplish better returns for the State as a whole by extending an already successful delivery model, refined over the last four years. Additionally, it also holds out the promise of statewide data integration, encompassing not just the Executive branch, but the constitutional entities as well.

**Recommendation #2** – Information Technology has become a major component of the operations in State Government. The Chief Information Officer (CIO) currently reports to the Commissioner of Administrative and Financial Services in what has been a very successful relationship. That said, the CIO needs a more direct relationship with the Governor and a peer relationship with Commissioners to have the greatest impact on efficient use of information technology and to leverage those relationships during the funding and prioritization processes.

This is critically important as government is reengineered to be most efficient and effective.

## **Appendix 1 – What Government Partners Say**

"I know from experience that the agencies in the Department of Professional and Financial Regulation have been the direct beneficiaries of the expertise, experience and commitment of OIT staff members. They always take extra time needed to understand client problems and issues and resolve them as quickly as possible. I know the Department is very well-served through our partnership with the Office of Information Technology in terms of the development of web applications, licensing database development and other enterprise issues."

#### - Anne Head, Commissioner Professional and Financial Regulation

"Over the past 20 years MRS has used IT investments to contribute both to internal savings and efficiencies, as well as increased revenue by more effectively collecting taxes that are due to the State. In addition, automation at MRS has benefited the public by making it convenient to get "on-line" instead of "in-line."

- Jerry Gerard, Acting Executive Director Maine Revenue Services

"OIT has been an enthusiastic partner in our efforts to implement business-focused information planning. They have been a key resource in our development of single-pointof-access tools for management information, including the development of an outstanding map viewer that is quickly becoming a key tool for the Department. They have nearly completed some massive efforts to replace and retire old mainframe applications and to migrate to new servers. These complicated tasks have been virtually invisible to the end users, except for the associated improvements to performance."

- Jerry Casey, Director Results and Information Office, Maine DOT

"After several years of Maine State Police development, OIT along with the Administrative Office of the Courts (AOC) started laying down the foundation for information sharing among criminal justice partners in Maine, including the State Police, the Judiciary, the Department of Corrections, and the Maine Prosecutors' Association. The goal is to exchange information in such a way as to improve the collective capacity to respond by connecting disparate justice information systems across local, state, and geographic agency lines, and still ensure that these systems maintain their internal autonomy. The infrastructure has already been acquired, and the first live exchanges, including court disposition information, bail bond information, and protection order information, are expected by mid 2010."

- Lt. Col. Robert A. Williams, Deputy Chief Maine State Police

## **Appendix 2 - Risks and Opportunities**

In times of budgetary shortfall, every government program is under pressure to reduce costs, and information technology is no exception. OIT is taking every possible measure to contain costs while maintaining essential services.

One of the opportunities that OIT is exploring is enterprise-wide data integration. The OPEGA report identified two "observations" related to data integration. Also, the Governor's IT Executive Order (January 6, 2005) explicitly instructs the creation of one-stop services to serve the citizenry, and the only means of realizing such services is via enterprise-wide data integration. Unfortunately, data integration is a long and arduous process with many prerequisites, including infrastructure, applications, staff, etc. Many operational and management issues still need to be resolved before we get there. Data integration holds the promise of dramatically improving the efficiency and effectiveness of government, and that it remains one of the very best value propositions of information technology.

## **Appendix 3 - Nationwide Policy and Technology Priorities**

The National Association of State Chief Information Officers (NASCIO) released the *Top Ten Policy and Technology Priorities* for State CIOs. As has been the case in years past, Maine finds itself facing the same challenges and concerns as other states across the nation.

#### **Category: Priority Strategies, Management Processes and Solutions**

- Budget and Cost Control: managing budget reduction, strategies for savings, reducing or avoiding costs, activity based costing
- Consolidation: centralizing, consolidating services, operations, resources, infrastructure, data centers
- Shared Services: business models, sharing resources, services, infrastructure, independent of organizational structure
- Broadband and Connectivity: strengthening statewide connectivity, broadband and wireless
- American Recovery and Reinvestment Act: execution, support, reporting, data management
- Security: risk assessment, security safeguards, enterprise policies, employee education, data protection, insider threat
- Transparency: open government, performance measures and data, accountability, access to government data
- Infrastructure: data centers, infrastructure investment, critical infrastructure protection
- Health Information: architecture, assessment, partnering, implementation, health information exchange, technology solutions
- Governance: improving IT governance, data governance.

#### **Category: Priority Technologies, Applications and Tools**

- Virtualization (storage, computing, data center, servers, applications)
- Networking, voice and data communications, unified communications
- Document/Content/Records/E-mail management (repository, archiving, digital preservation)
- Cloud computing, software as a service
- Security enhancement tools
- Enterprise Resource Planning (ERP) / Legacy application modernizationrenovation
- Geospatial analysis and Geographic Information Systems (GIS)
- Business Intelligence (BI) and Business Analytics (BA) applications
- Identity and access management
- Social Media and Networking (Web 2.0 services, wikis, blogs, collaboration technologies, and social networking)

## **Appendix 4 - Online Services**

Online Services (including Social Networking) – Results from a recent survey indicate that constituents remain highly interested in online vital records, property tax payments, one-stop background checks, EZPass purchase, transparency of spending, legislative/bill tracking, live video/audio of meetings, and most of all, in social networking. While social networking is definitely no longer a fad, many legal and management risks still remain unresolved. As a random example, should government-posted content on a third-party Web site be considered public record? OIT is in the process of putting in place a framework that will allow the State to participate in Social Networking with all necessary legal and management risks mitigated.

In the fall of 2009, a User Needs Analysis was conducted which sampled several key groups that are served by Maine.gov. The primary goals of the analysis were to evaluate the awareness of Maine.gov and usage of online services, and interest in new service ideas. Results of the survey were:

- All groups strongly supported expansion of eGovernment services and request that more government functions be made available online.
- The most desired services were: online vital records, property tax payments, onestop background checks, EZPass purchase, transparency of spending, and legislative/bill tracking.
- Interest in a more centralized or seamless experience on Maine.gov, offering the ability to conduct transactions with multiple agencies from one location or in one transaction.
- Live video/audio of meetings, public meeting notices, bill tracking, and rulemaking services were of most interest to those over 30, however, the 18-30 age group is the most interested in transparency of government spending.
- In deciding to offer online services, the most important factors for agencies were: serving customer/users more effectively, meeting customer demand, and creating efficiencies.
- Government and community leaders desired new features and services that included consistency of design and branding, more municipal participation, integration with libraries and the legislative branch, email updates and reminders, and a central help line for online services.

According to government and community leaders, the future for eGovernment holds continued expansion, automation, social networking, more consistent availability of local government online services, and increased security. Funding will be a challenge and convenience fees will be necessary. Government will become more reliant on online service delivery with tightening budgets and growing use of technology.

Submitted by the Chief Information Officer 2009 Office of Information Technology Annual Report