



TWO THOUSAND SEVEN
BEST PRACTICES

in the USE of
INFORMATION TECHNOLOGY
in STATE GOVERNMENT

Business Continuity and Disaster Recovery

This category addresses IT initiatives related to continuity of government operations which make states better prepared for major incidents such as natural or man-made disasters, pandemic flu and major infrastructure failures.

Cross-Boundary Collaboration and Partnerships

This category addresses coordinating, sharing, integrating or joining up of IT related goals and strategies, governance and management, policies, architecture and standards, business processes, data and information, systems and applications, services, technologies and infrastructure.

Data, Information and Knowledge Management

This category addresses strategies, processes, applications and solutions, initiatives or programs using, processing or creating data, information, knowledge and intellectual value, property or capital.

Digital Government: Government to Business (G to B)

For innovative applications that foster less cost to business for regulatory compliance, setting up and growing a business, and day-to-day government-to-business interactions.

Digital Government: Government to Citizen (G to C)

For governmental applications that provide innovative service to citizens or increase government's efficiency with citizen interaction. Acceptable submissions include any type of electronic interface and may demonstrate self-service portal applications, personalization, subscription or notification features.

Digital Government: Government to Government (G to G)

For digital government initiatives aimed at enhancing intergovernmental collaboration, cross-jurisdictional services and intergovernmental transaction processing.

Enterprise IT Management Initiatives

This category represents state initiatives to completely plan, organize and execute enterprise-wide initiatives. Recognizing the continued fiscal pressures within state governments, please describe the enterprise innovations that have helped states more effectively address or manage their changing budgetary demands. Focus areas should be on solutions that employ policies, best practices and processes for enterprise change management, workforce development, governance or transformation.

Information Communications Technology (ICT) Innovations

This award category covers initiatives or services to promote economic development, interoperability and improve quality of life. This may be accomplished by facilitating or providing communications capabilities that enable state government to operate more efficiently and effectively or offer more innovative, responsive, and personalized services to citizens. Initiatives or services could be unique uses of current technology or the application of leading-edge technology.

Information Security and Privacy

This award category encompasses both IT security and privacy as strategic initiatives. These initiatives may include cybersecurity, risk assessment, data security, IT security awareness, crisis communications, privacy frameworks, or homeland security concerns. Challenges in this area include automated or directed external threats, hardware or software vulnerabilities, remote or mobile access, insider threats, incident management, or crisis handling.

IT Project and Portfolio Management

For state initiatives which have developed a framework, governance processes, policies and systems for the efficient management of IT investments from concept, funding, implementation, operation to retirement.

BUSINESS CONTINUITY & DISASTER RECOVERY



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Washington DC: Unified Communications Center

The Unified Communications Center (UCC), a magnificent building that opened in September 2006, consolidates all communications functions of the District of Columbia into a common state-of-the-art facility. The UCC is the result of a \$116 million investment that consolidates all public safety and non-public safety communication functions of the District of Columbia, including E9-1-1, 3-1-1 and the Mayor's Citywide Call Center, which processes non-emergency constituent service calls. The UCC is also the home for the District's Homeland Security and Emergency Management Agency (HSEMA), which houses the emergency operation center (EOC), the Regional Incident Command and Control Center (RICCC), and the Mayor's Command Center. During major emergencies, the UCC provides centralized regional coordination and communications hub involving, beside local authorities, FEMA (RICCC), FBI, Capitol Police, Secret Service, Park Police and other critical agencies within the National Capital Region (NCR).

The 128,000-square-foot facility is located on 11.8 acres on the grounds of St. Elizabeth's Hospital campus, approximately four miles from the Capitol in the District of Columbia. The site also includes an 11,000-square-foot childcare development center, adjacent to the UCC and primarily for the use of the staff working at the center. The facility was designed to meet or exceed GSA Level C security standards.

Some of the key facts and features of the UCC include a design that provides for a minimum

72-hour emergency self-sustaining operation in the event of emergency and loss of commercial utilities, blast/bullet-resistant glass/walls, a 100-foot security setbacks and multiple systems redundancy, including power, HVAC equipment and communications systems. As part of this initiative, the District's old E9-1-1 center (PSCC) was upgraded with the same technology infrastructure to serve as a redundant and back-up site.

The technical systems infrastructure is also a model of integration for the most advanced technology, and is redundant at both UCC and PSCC sites. These include:

- Telephony System
- Computer Aided Dispatch System (CAD)
- Radio Dispatch
- Digital Voice Logging / Recording System
- Timing
- LAN/WAN Security Infrastructure
- Integrated Network Monitoring System (INMS)

The realized benefits of the UCC for the citizens of the District include improved emergency preparedness and coordination, improved service delivery, increased efficiency through shared resources, faster response from public safety agencies and improved overall reliability. Since the opening of the new center, the UCC has processed over 1.7 million calls. The UCC is also contributing to the local economy growth and has created over 170 new positions of which 142 were District residents.

"The Unified Communications Center project represents the District's commitment to improving our local and regional emergency preparedness. It provides our first responders the environment and the tools needed to carry out their public safety mission serving our Nation's capital and our constituents. The UCC will improve the District's ability to respond to local and regional emergencies through embracing innovative design, technologies and processes."

Vivek Kundra, Chief Technology Officer, Government of the District of Columbia



CROSS BOUNDARY COLLABORATION & PARTNERSHIPS

Texas: Data Center Services (DCS) Project

In 2005, the 79th Texas Legislature gave state government agencies clear direction to improve services and lower costs for technology infrastructure. To fulfill this vision, 27 of the largest Texas agencies joined in a collaborative contracting effort to select a private sector provider to manage service delivery and consolidate operations.

The level of collaboration was remarkable. The DCS Project involved over 400 state employees in an array of expert workgroups and governance advisory committees. Cross-agency teams guided the project, executed project work tasks, and prepared state government, as an enterprise, to enter into a very large IT infrastructure sourcing agreement. Emphasizing broad representation, working teams included executive and management advisory councils (governance), a dedicated full time project staff, transition workgroups composed of chief financial officers, human resource directors, federal funds experts, and IT infrastructure technical experts.

Applying the advice of leading sourcing advisory services, the DCS Project executed a procurement process that was ground-breaking in its sophistication, quality, and inclusiveness. Over 60 evaluators worked on specialized evaluation teams to develop the request for offer (RFO) specifications and evaluate bid responses. Employing a highly structured, iterative methodology of individual scoring followed by group analysis and consensus scoring, the evaluation process yielded thoroughly considered and fair evaluation results

that delivered best value to the state.

In November 2006, the nearly two-year collaboration culminated in a signed agreement with a major integrator to deliver comprehensive data center and disaster recovery services. The seven-year contract, valued at \$863 million, was one of the largest public or private sector IT sourcing agreements signed in 2006. It addresses 31 independent data centers, 16 mainframes, approximately 7,000 servers located in 1,300 locations, and 563 full time equivalent (FTE) positions.

The contract leverages the buying power of the state to modernize and refresh the state's technology infrastructure, allows agencies to enjoy high-quality service at an affordable price, and provides flexibility to meet changing business requirements. Overcoming a lack of consistent levels of service, security, and disaster recovery preparation, the new agreement brings (1) heightened security levels for assets, (2) uniform, measured, and continuously improving service levels, (3) predictable costs based on actual consumption, (4) standardized processes and governance based on industry best practices, and (5) detailed reporting not currently seen in Texas state government. After taking all new and retained costs into account, the agreement is expected to save Texas \$25 million in 2008-09 and \$178 million over the seven-and-a-half-year base contract period. The arrangement will also return 210,000 square feet of state-owned space for alternative use.

"Historically, Texas state agencies are fiercely independent. Collaboration on this scale is a trailblazing and significant event that I see as an example for future sharing across governmental lines."

Robert Duncan, State Senator, State of Texas

"Working together as an enterprise representing much of Texas IT presented an opportunity to raise all agencies to a higher standard for service and security. This level of performance simply would not be possible without the commitment of so many technology professionals to the process."

Carl H. Isett, State Representative, State of Texas

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DATA, INFORMATION & KNOWLEDGE MANAGEMENT



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Corporate Partner: Bull Services

Minnesota: Program Integrity Efforts: Preventing and Eliminating Welfare Fraud

The state of Minnesota recognizes that it is critical for taxpayers to trust in the overall honesty and integrity of public assistance programs for the state's neediest citizens. Minnesota's Family Investment Program (MFIP) is the state's primary vehicle for helping low-income families with children make the transition from poverty into the workplace. In 2006, state spending for MFIP cash and state food assistance was \$55 million and federal spending was \$224 million. Some 37,000 Minnesota families used MFIP in an average month during 2006.

Such a broad-based program requires sophisticated program integrity efforts. Minnesota has developed a comprehensive three-step fraud fighting process that involves front-end analysis, criminal investigations and collections. Program Integrity Network (PIN) is designed to improve the accuracy of public assistance eligibility determinations, and to help prevent, control, recover, and evaluate public assistance program payments made to ineligible persons.

Relying on a Business Intelligence (BI)/enterprise data warehouse as its informational and knowledge backbone, the PIN system was originally designed for use by welfare fraud investigators. It has expanded its base over the last few years to serve more than 300 people from several different professional categories. The front-end process, the Fraud Prevention Investigation (FPI) program, involves state and county staff members working collaboratively to prevent and control recipient fraud in Minnesota's child care, health care and food programs.

Because the BI/data warehouse links data from a variety of disparate sources, including welfare eligibility system, medical eligibility, child support, wage and employer data, auto registrations and more, investigators are quickly able to build economic, demographic, and behavioral profiles to determine if further investigation is warranted. Moreover, the BI/data warehouse enables investigators to construct queries using their own knowledge and to drill down intuitively, as opposed to using mainframe-based data.

The results have been dramatic. In 2006, investigators completed more than 7,400 front-end investigations, stopped or reduced benefits in 45 percent of them, found and corrected case file information discrepancies in 70 percent of the investigations, and identified more than \$12.2 million in cost avoidance (benefits not paid) and overpayments. Investigations also stopped disbursement or identified for collection a total of \$4.46 for every \$1 spent on program administrative costs.

Once the front-end process is completed, some welfare fraud cases may rise to felony theft levels and require the involvement of the criminal justice system. In 2006, criminal investigators completed nearly 2,500 criminal investigations, proving benefits had been illegally obtained in 60% of them, and identifying \$5.2 million in overpayments. In the collections phase, the Treasury Offset Program intercepts federal payments and tax returns to recover Food Support debt, with \$21.3 million collected since 1999.

"This project demonstrates perfectly the power we have to address the business of government and to impact lives through innovative and collaborative technology solutions. The Department of Human Services has done an excellent job building a system that collects critical data from a variety of sources and enables the effective use of that data across jurisdictional boundaries to improve systems, services and, ultimately, lives by eliminating fraud and thus better managing resources. I am delighted that NASCIO recognizes the department's accomplishments and add my heartfelt congratulations to those who made this project so successful."

Gopal Khanna, CIO, State of Minnesota





DIGITAL GOVERNMENT: GOVERNMENT TO BUSINESS

Washington: Enterprise Business Portal Initiative

"The Next Washington" outlines Governor Gregoire's Open for Business approach to keeping Washington businesses competitive in the world by reducing barriers and improving efficiency. One component of this approach is the Enterprise Business Portal Initiative (www.business.wa.gov) which provides a clear and easy way to navigate the online systems for state and local licensing, tax, and regulatory filings. The Business Portal initiative has already improved access to government services and regulatory functions by placing many routine business processes and necessary information in one spot. This approach helps ensure that businesses and environmental permit applicants can "get it right the first time" when they deal with government. In the longer term, the Business Portal will provide even more personalized and integrated services to save time and money for Washington businesses.

In 2006 the project successfully launched four releases on schedule. A fifth release launched June 21, 2007. Today the website is:

- Easier to find with a new web address, www.business.wa.gov
- Easier to navigate with:
 - Information reorganized into categories business people intuitively understand
 - Simplified and clarified language
 - Improved and established clear links to and from the websites of partner agencies

- And more comprehensive with:
 - Links to more online information and services provided by state and local agencies
 - New step-by-step instructions for starting a business
 - New interview capability to help business owners answer the question, "Do I need to register with the state?"
 - An improved online process to change an address with four state agency programs
 - Ability to apply online for the state's master business license and simultaneously apply for city business licenses in 12 cities
 - New information on business licenses and taxes in all 278 cities in Washington

The project team reached out to business leaders, organizations supporting businesses, and 22 state and local government agencies to gather input and save them time and effort. These outreach efforts are ongoing and the homepage of www.business.wa.gov now offers a short survey for users on the services provided by the portal so improvements can continue to be made.

4 "In July, *Forbes* magazine ranked Washington as number 5 among the Top States for Business. Reasons for this ranking include reduced red tape and assistance from the Governor's Office of Regulatory Assistance to individuals and businesses in sorting through the many layers of government regulation all in one place—the Business Portal. This initiative has been a highly collaborative effort involving business and technical staff from 24 state and local agencies and associations. Washington has successfully worked across organizational boundaries to better serve the business community."

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DIGITAL GOVERNMENT: GOVERNMENT TO CITIZEN



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Michigan: Michigan.Gov release 2.0.

The state of Michigan first introduced its state-wide integrated government portal, www.michigan.gov, in the summer of 2001. This is the official website for the state of Michigan. In the months that followed the official launch, all IT development was focused on adding interactive, online services to the portal, and the state now offers over 200. With the focus shifted from fundamental navigation and usability best practices, new services minimized the importance of having a portal that was intuitive, engaging and accessible for all. These usability limitations came to the surface in 2004 when the nationally renowned Taubman Center for Public Policy at Brown University released their annual review of state and federal web sites. The review focuses on key features, such as ADA compliance, usability, foreign language translation, and online services. Michigan's web portal was ranked in the bottom 50%, results which were validated by a critique from the Michigan State University usability lab.

The business problem was simple – improve the end user experience of Michigan.Gov by making measured improvements in all categories addressed by the 2004 Brown University report. A two-year strategy, completed in April 2006, was developed to improve four key areas of the portal:

- Enhanced accessibility
- Expanded delivery channels
- Cross boundary data sharing
- Public engagement

The project and all of its related improvements were designated as Michigan.Gov release 2.0. This project engaged multiple development teams and was tracked as a strategic, enterprise-wide project for the state of Michigan. Tangible improvements from the 24-month process include:

- The adoption of fifth generation technologies, including, wireless access and web services to extend the reach and utility of the portal
- Integrated multi-channel delivery, including KIOSK and multi-media
- Adoption of assistive and translation services ensures that all citizens have access to their state government
- Practical use of social computing strategies, including web logs, online surveys, and, personalization to make Michigan.Gov truly a two way mechanism for communicating with citizens

This sustained focus on improving the end-user experience over a twenty-four month period resulted in Michigan.Gov earning a top 5 ranking by Brown University in 2006. This back-to-basics approach has taught Michigan not to place quantity over quality and has resulted in a more deliberate examination of end-user needs as the state proceeds with continued improvements to its portal.

"In Michigan, we are fortunate to work in a climate where our partners in state government understand the important role technology plays in serving our citizens and businesses. We are also fortunate to work in a culture where innovation is encouraged so that we can surprise and delight the many people who visit Michigan.gov. By focusing on the needs of our citizens and businesses, we will continue to innovate and improve the site to provide them with the information and services that they require from their state government."

Teri Takai, CIO, State of Michigan





DIGITAL GOVERNMENT: GOVERNMENT TO GOVERNMENT

North Carolina: eCITATION®

eCITATION® is a joint initiative of the North Carolina Administrative Office of the Courts (AOC) and the NC State Highway Patrol that benefits both the 100 county Clerks of Superior Court (CSC) offices in the court system and approximately 450 law enforcement agencies (LEA) statewide. Other entities involved in the highly successful program are the NC Criminal Justice Information Network (CJIN) and the Governor's Crime Commission (GCC).

As a result of this collaborative effort, North Carolina is the first and only state to implement a completely electronic citation system, where the data is transmitted from the patrol car to the court system almost instantaneously. eCITATION® is an innovative system that automates the transmission of citation data from a law enforcement officer's mobile data computer in the patrol car, through the NC CJIN Mobile Data Network to the AOC Automated Criminal/Infraction System (ACIS) and local LEA records management systems, eliminating the need for paper citations and redundant data entry.

Each year about 1.2 million citations are issued across the state of North Carolina. Until the advent of eCITATION®, all of these citations were handwritten by a variety of law enforcement officers statewide. Copies of the citations would subsequently be delivered by the officer to the county CSC office periodically, based on

the officer's schedule and availability. A second set of copies would be kept by the LEA for its own records. Upon receipt, staff at the CSC office would then manually enter the citation information into ACIS, the statewide repository for such court records. Upon completion, the paper copy of the citation would be filed.

As of April 2007:

- All 100 county CSC offices have been implemented.
- Over 4,700 officers in nearly 140 LEAs have been provided eCITATION® access. In April 2007, over 2,000 officers processed electronic citations.
- Over 1,000,000 electronic citations have been processed to date with 0% errors.

The eCITATION® system benefits both the courts and law enforcement. There is less time spent filing paper and retrieving it from filing cabinets. Court labor costs are reduced, as are storage costs. More importantly, officers spend less time in the physical act of writing tickets, and more time patrolling.

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“The eCITATION® program is extremely popular among both court personnel and law enforcement officers. It continues to receive strong commitment from all government agencies involved, and it is an excellent example of collaboration among multiple state and local agencies. The program provides benefits to both courts and law enforcement users, including improved accuracy and the elimination of redundant data entry. This allows officers to spend less time writing tickets and more time on patrol.”

Judge Ralph A. Walker, Director, North Carolina Administrative Office of the Courts

ENTERPRISE IT MANAGEMENT INITIATIVES



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Corporate Partner: Unisys

Michigan: Data Center Consolidation

Centralization and consolidation are hardly new topics to state government. What is new and interesting is the scope of consolidation that is now possible and the significant savings and government transformation that are being realized. The critical ingredient to this level of success—at least in the Michigan example—has been collaboration.

In the past three years Michigan's Department of Information Technology (MDIT) has closed 21 separate hosting centers, saving millions of dollars while improving our overall quality of service. Specific benefits of Michigan's Data Center Consolidation are well documented:

- \$9.5 Million saved to date (with an estimated 5-year ROI of \$19.1 million)
- Elimination of over \$375,000 a year from facilities environmental and leased space cost
- Savings of \$403,000 per year in hardware maintenance cost
- Avoidance of \$7,313,245 in capital costs to upgrade legacy data centers/computer rooms
- 29,062 sq feet of floor space regained

But the ROI is only half the story.

Michigan's successful efforts of the past—mainframe consolidation, telecommunication consolidation and the print center consolidation projects—were all accomplished with clear, imperative and visible executive mandate (in the form of an Executive Order from the Governor). But what happens when the

mandate cools, when the urgency fades and agencies begin to tally the costs? Consolidations of this magnitude are measured in terms of years, not months.

With the data center consolidation, the MDIT executive team set out to build a strategy that would stand the test of time and changing political priorities. In the midst of the most challenging economic climate in decades, Michigan needed a project that delivered ROI, but not at the political and financial expense that a forced march would impose.

MDIT took a dramatically different approach to the Data Center Consolidation Project. From the onset of planning, the Data Center Consolidation team collaborated with technical and client staff to determine the most effective means to move their systems with the minimum risk at the minimum cost. The MDIT Strategic Management Team (SMT) worked directly with agency partners to find both creative fiscal solutions and to educate clients on the risk their current environments posed.

In the end, the collaborative approach is what has seemed to matter the most. A commitment to collaboration has given Michigan a technology climate where agencies now openly request to get their remote locations closed. The project team now has a waiting list of locations targeted for closure. This approach has helped cement a reputation for quality, built trust with clients, and set the stage for more fundamental initiatives that reach across government boundaries such as virtualization, SOA, and shared services.

"This award is especially meaningful to Michigan and we are thrilled to receive national recognition for the migration of our data centers. For me, it means we have delivered on the promise of consolidating and centralizing our IT operations, saving millions of dollars and creating the efficiencies that were the motivating factor behind the creation of our department. The millions of dollars saved, on top of enhanced security, make this a huge win for our government and the citizens of Michigan."

Teri Takai, CIO, State of Michigan



INFORMATION COMMUNICATIONS TECHNOLOGY INNOVATIONS

Virginia: Department of Forestry Integrated Forest Information Resource System (IFRIS)

In the past, when forestry rangers, management and loggers were in the field, they relied on maps and property pin markers to determine location and used paper-based maps and input for their business processes. Through two major and sequential IT initiatives, the Virginia Department of Forestry (VDOF) has facilitated a paradigm shift in the way their field personnel work.

The integration of geospatial mapping, GPS-enabled pocket PC devices and forestry business applications have dramatically changed the way the VDOF does business. The change enables superior management of the state's more than 15 million acres of forest land, maximizes financial and human resources and significantly improves service delivery to citizens and businesses.

The Integrated Forest Information Resource System (IFRIS) is a centralized, Web-based enterprise system that sews geospatial mapping into routine employee accomplishment recording. With IFRIS in operational use since April 2006, VDOF now has launched the next phase, the Forest Protection and Mobile Computing (FPMC) project. FPMC expands on the geospatial toolset by integrating use of GPS-enabled Pocket PC devices for efficient, timely, and geospatially accurate field data collection. Secure data transfer and synchronization is created for activities such as wildfire incidents and mitigation, water quality law enforcement, and forest health observations.

VDOF leverages the Virginia Geographic Information Network (VGIN) by integrating digital aerial photos and topographic maps from

VGIN's Geospatial Enterprise Platform (GEP). IFRIS and GEP are hosted by the Virginia Information Technologies Agency (VITA) to minimize redundant efforts. IFRIS leverages Web services and Service Oriented Architecture constructs to unify all spatial and non-spatial operations. It leads the way for enterprise mobile computing in the commonwealth.

IFRIS minimizes redundant data entry and errors, increases workforce productivity and supports a mobile workforce through technology. It streamlines and integrates administrative functions with business applications, supports multiple program areas, enables location-based tracking of activities, feeds employee and agency reporting and vastly improves customer service. This application is the first of its kind in the nation and is a prototype for other states.

The commonwealth's investment in IFRIS provides a strong return on investment. In less than one year, five paper forms have been eliminated and one full time payroll position has been transferred to customer service. Virginia's Cost Benefit Analysis Tool projects measurable financial benefit. Cost avoidance is expected to be \$293,000, cost savings \$558,600 and the ROI is expected to be 55% with a payback period of 2.6 years.

IFRIS is creating a significant positive business impact as it transforms the way the organization does business. It supports nearly all agency performance metrics in VDOF's Strategic Plan and the Commonwealth's Strategic Plan for IT.

“There are more than 15 million acres of forest land in Virginia that require sound management to ensure long-term protection and sustainability of this resource. IFRIS enables wider availability of critical Department of Forestry data, minimizes errors, and increases workforce productivity through an innovative application of technology. This tool is the first of its kind in the nation and is being used as a prototype for other states.”

Mindia Brown, GIS Manager, Department of Forestry, Commonwealth of Virginia

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INFORMATION SECURITY & PRIVACY



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**Corporate
Partner:** IBM,
Cisco, and
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Michigan: Security 2.0: Next Generation Security Program

The Internet has changed everything, including government opportunities to serve the public in new, innovative ways. Not only have Michigan citizens come to expect secure e-government transactions and ease of use, the public is now calling for a new generation of Web 2.0 transactions with a new level of collaboration. Two essential keys to success are ensuring that the state moves forward in a secure manner that addresses the serious challenges that come with these new technologies, while at the same time addressing traditional cyber threats posed by the internet and other security risks.

A recent study by a local consulting firm showed that Michigan citizens feared identity theft more than they feared the loss of a job, home foreclosure or a terrorist attack. Security 2.0 addresses these fears by placing cyber protection at the top of the priority list as Michigan moves forward with infrastructure enhancements for Web 2.0 applications.

One of the goals in forming the Michigan's Department of Information Technology in 2002 was strengthening the central policymaking and direction-setting in the area of security and data protection. The initial (1.0) Secure Michigan Initiative Program improved the availability, confidentiality and integrity of Michigan systems while ensured that newly added e-government services were also protected.

Michigan's Security 2.0: Next Generation Security Program was started to deal with the changing internet threat profile. Through a defense-in-depth architecture, the program mitigated a

number of the major internet risks associated with offering services over the internet. The program encompassed 15 projects that were planned in 2004 and implemented between 2005 and 2007. It supported the following initiatives: Enterprise Filtering initiatives, Vulnerability Assessment initiatives and Security and Readiness Response initiatives.

This program has had many positive benefits to both government operations and the public. It protected the network from over 91 million viruses last year; reduced the amount of hardware and software necessary to operate the e-mail system; protected the network bandwidth available for state operations; reduced IT costs by reducing the number of field service calls made to remove malware from workstations; preserved the state's reputation by preventing 11.4 million attempts to deface public websites; and kept critical programs operational by eliminating over 3.2 million internet browser based compromises.

Whether an organization is small or large, a local or a state government, or a K-12 school or university, there are elements in the Security 2.0: Next Generation Security Program that can be applied to address internet challenges.

Security 2.0 has not only had a positive impact on securing Michigan's technology infrastructure, this program has yielded an annual return on investment of over \$10.7 million. Even more importantly, legislators and senior executive leaders in the state have praised this program as being innovative and timely.

"I don't think there's a CIO in the country that hasn't lost sleep over security and privacy. We feel honored to be recognized for our work in information security and privacy. In times of increasing threats to security and diminishing budgets, I am proud of the measures we have been able to put in place to protect Michigan and of our success in defending our information from daily attacks."

Teri Takai, CIO, State of Michigan





INFORMATION SECURITY & PRIVACY

Pennsylvania: Information Security Architecture

The Commonwealth of Pennsylvania is a trusted steward of citizen information. To ensure the confidentiality, integrity and availability of data and services, the commonwealth recognizes the need to have enterprise policies, standards and views of the state of security within the government.

In the past several years, the commonwealth has implemented many solutions and technologies to improve connectivity and sharing between commonwealth entities, with external business partners, and with citizens. These solutions have resulted in increased productivity and reduced costs, but have also led to greater information technology security risks related to increased connectivity.

The Office of Administration, Office for Information Technology (OA/OIT), is an executive agency responsible for leading and coordinating information technology services in the commonwealth. In the past two years, OA/OIT has initiated several information security initiatives which together, make up the Information Security Architecture.

The Pennsylvania Information Security Architecture consists of the following initiatives and frameworks:

- Security Governance to evolve Information Security policies and architecture
- Security Policies to prescribe procedures for data encryption, privacy roles, and acceptable use policies
- Information Sharing to establish relationships and communication vehicles

- Identity Protection & Access Management to align with federal and industry standards
- Security Assessment Framework to verify proper configuration of systems, accuracy of documentation, skills of staff members, and to determine gaps between current and desired practices
- Cyber Security Exercise Program to participate in national exercises and hold Pennsylvania-specific exercises
- Enterprise Security Technologies to ensure that agencies are using and deploying security technology and products in a consistent manner
- Security Awareness Program to ensure that users are familiar with information technology security best practices, policies, procedures and standards

The development and implementation of Pennsylvania's Information Security Architecture has provided real and measurable value to the citizens of the commonwealth. The establishment of enterprise standards and the use of enterprise license agreements have resulted in real savings of over \$27 million to the commonwealth for the purchase of security related solutions.

The enterprise patch management solution allows easy identification of vulnerable systems and saves an estimated \$6 million per year in time savings from its automation capabilities. Additionally, the commonwealth estimates it has saved over \$33 million in avoidance of lost productivity caused by virus and worm outbreaks.

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10 "The Commonwealth of Pennsylvania is honored to accept this award. In the rapidly evolving security landscape, the Commonwealth continues its commitment to securing our IT resources, protecting our citizens, and ensuring best security practices through a multi-layered approach utilizing a multitude of Information Security technologies. We remain vigilant and will continue to build upon our strong foundation supporting our current commitments well into the future."

Kristen Miller, CIO, Commonwealth of Pennsylvania

IT PROJECT & PORTFOLIO MANAGEMENT



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Corporate Partner:

CompTIA - National IT Apprenticeship System (NITAS)

North Dakota: Building Project Manager Competencies Via the Mentor/Apprentice Relationship

In 1999, the North Dakota legislature enacted law that required oversight of any information technology projects in excess of \$250,000. For approximately five years, the oversight function was primarily audit-based. The Enterprise Project Management Office (EPMO) for the state of North Dakota was formally chartered in April 2004 to improve the success of IT projects and the present Enterprise Project Manager (EPM) was appointed effective June 1, 2004. In addition to the EPM, there is one additional staff member that is also assigned to the large project oversight function.

The EPMO was chartered with six main functions:

1. Project Management Best Practices
2. Project Management Training, Mentoring, and Certification
3. Large Project Oversight
4. Project Management Consulting
5. Outreach and Coordination of PM Issues and Topics
6. Coordination of Projects Across the Enterprise

This project highlights the efforts of the EPMO and the EPM Advisory Group to increase the competencies of project managers across all entities of state government via training, mentoring, and certification efforts. A key innovation impacting success rates of this initiative was the validation of competencies through the apprentice/mentor relationship. The state of North Dakota had previously provided an eclectic array of classroom training opportunities, certification programs, and on-the-job

learning opportunities. However, the EPM Advisory group agreed that while those components of learning were all critical, information about whether the activities had a direct impact on the employee's competency or effectiveness was not being captured.

In May 2005, the state of North Dakota began a pilot project based on a training model being constructed by CompTIA on behalf of the Federal Department of Labor. This model intended to combine the existing apprenticeship model utilized for professions ranging from electricians to pharmacists with a wide range of professions within the information technology field, including project management.

This program has been marketed within the state of North Dakota to Executive Branch agencies, Legislative Branch, Judicial Branch, K-12 Schools, ND University System, and elected officials.

Subjective and objective data was collected relating to both project performance and participant involvement. That data was analyzed by Dr. John Aaron, Milestone Planning, Inc. who indicated the program had a practical and statistically significant impact in reducing project cost variances as well as improving project manager effectiveness. Of key importance to the initiative's return on investment was Dr. Aaron's finding that, "classroom training plus mentoring (i.e. apprenticeship) is the most powerful predictor of percent cost variance reduction."

"North Dakota's project management processes have shown continuous improvement over the past several years. The mentor/apprentice model has increased the state's project management competency which has built a trust between those entities who manage large information technology projects and the legislative oversight committee. This has subsequently reduced the need to pursue any legislatively mandated project controls."

Senator Larry Robinson, Chairman, Legislative Information Technology Committee



PHOTO IDENTIFICATION

Business Continuity & Disaster Recovery

Washington DC: Unified Communications Center

Front row (from left to right): Phillippe Gregory, Allam Al-Alami, Yolanda Weems, Michele Holmes
Back row (from left to right): Roman Nemet, Udell Mentola, Norm Peterson, James Callahan, John Cunningham, Roger Richmond, Ayanna Nahmias, John Ramsey, Young Kim, and Harold (Dean) Shepherd
Not pictured: Don Eischens, Bob Blend, Luther Scaife and Jeff Lollichon.

Cross Boundary Collaboration & Partnerships

Texas: Data Center Services (DCS) Project

Meeting of the Texas Data Center Services Advisory Council, Jodie Erickson at the podium.

Data, Information & Knowledge Management

Minnesota: Program Integrity Efforts: Preventing and Eliminating Welfare Fraud

Front row (from left to right): Rob Stansbury, Ramona Scarpace, Mary Arveson
Back row (from left to right): Dan Neubert, Nina Terhaar, Brian Shields, Jim Myrah

Digital Government: G to B

Washington: Enterprise Business Portal Initiative

Standing (from left to right): Gary Robinson, Faith Lumsden, Patti Prouty, Mary Selecky, Jeff Koenings, Governor Christine Gregoire, Dave Kirk, Tom Fitzsimmons, Jay Manning, Karen Lee, Liz Luce, Gary Weeks, Juli Wilkerson, David Sorrell
Seated: Cindy Holmstrom

Digital Government: G to C

Michigan: Michigan.Gov release 2.0.

Front row (from left to right): Mahesh Thatavarthi, Mike Pauley, Shiv Singh, Deb Christensen, Lucy Pline, Jim Hogan
Back row (from left to right): Michelle Stiffler, John Thompson, Rick Peterson, Doug Witten, Kalyan Murali

Digital Government: G to G

North Carolina: eCITATION®

Front row (from left to right): FSgt. Eric Jackson, Beverly Gregory, Paul Hester, Richard Little
Back row (from left to right): Tom Nevlud, Cliff Little, Steve Kulig, Amanda Bunnell, Janet Greene

Enterprise IT Management Initiatives

Michigan: Data Center Consolidation

Front row (from left to right): Neil Slagle, Jim Kanya, Jack Grundtner, Carol Steele Sherman, Don Hertzske, Sunil Varghese, Stevan Meck

Second row (from left to right): Rob Surber, Carol Webber, Theresa Spalding, Jeannie Irwin, Nancy Presocki, Beth Dean, Aparna Agrawal, Lynn M. Draschil, Kathy Seaton, Jim Ostrowski, Richard Novello
Third row (from left to right): Trent Carpenter, Don Eitniear, Juan Chapa, Ken Seyka, Brad Stoddard, Paul Groll, Fran Wresinski, Ann Newell, Tina Richardson, Ken Theis, Palmer Giron, Nathan Buckwalter, Leo LaPorte, Chris Fellows, David Borzenski
Not pictured: Pat Hale, Girish Salpekar, Brent Senters, Jack Harris, Jim Fricke, Tess Layman, Scott Thompson, Jim Nelson

Information Communications Technology Innovations

Virginia: Department of Forestry Integrated Forest Information Resource System (IFRIS)

Pictured (from left to right): Chris Gerecke, Edwina Blalock, Joe Street, Aneesh Chopra, John Scrivani, Jason Braunstein, Lemuel Stewart.

Information Security & Privacy

Michigan: Security 2.0: Next Generation Security Program

Front row (from left to right): Bob Cairns, Rose Johnson-King, Elaine Brandon, Charlotte Allen, Joel Weever, Rick Wolfinger, Darrell Dontje, Rock Rakowski.
Back row (from left to right): Trent Carpenter, Mark Lawrence, Jeremy Reynolds, Patrick White, Chris, Kellogg, Larry Trial, Dan Lohrmann, Rich Reasner, Andre Jones, Brent Ericks, Clarence Gill, Blane Perry
Not pictured: Nick Crittenden, Tom Glomski, Penyen Li, Vicki McPherson, Denise Simon, and Mark Zehner

Information Security & Privacy

Pennsylvania: Information Security Architecture

Pictured (from left to right): Frank Morrow, Kevin Williams, Lane Mummert, Teresa Menke, Daniel Paese, Jeffrey Bitner, Brenda Orth, Stephen Aux, Erik Avakian, Steve Fink, Robert Maley, Keith Boden

IT Project & Portfolio Management

North Dakota: Building Project Manager Competencies Via the Mentor/Apprentice Relationship

Front row (from left to right): Roger Wetzel, Pam Anderson, Jeannine Wohl
Middle row (from left to right): Heather Raschke, Dave Eckenrode
Back row (from left to right): Dirk Huggett, Mark Molesworth, Shawn Meier

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Tom Ferree, Commonwealth of Kentucky

Bob Fitzpatrick, AT&T

Davood Ghods, State of California

Max Ivey, State of Arizona

Bob Kennedy, Compuware Corporation

Julie Leeper-Evans, State of New York

Mark Molesworth, North Dakota

Aggie Nteta, District of Columbia

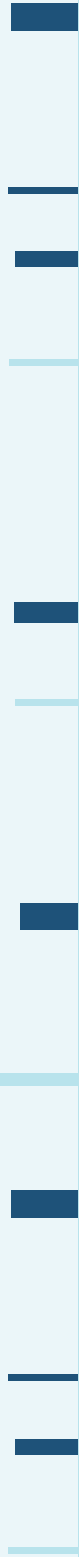
Brenda Orth, Commonwealth of Pennsylvania

Andris Ozols, State of Michigan

Kyle Schafer, State of West Virginia

Rob Trimble, Commonwealth of Kentucky





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Information
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Knowledge
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to Business
(G to B)

Digital
Government:
Government
to Citizen
(G to C)

Digital
Government:
Government
to Government
(G to G)

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