State of Maryland
Information Technology
Master Plan

Fiscal Year 2010

July 2008
EXECUTIVE SUMMARY

Given the economic, environmental and political distress in the world today, Maryland state government must continually hone its business process and service delivery tools in support of its mission to protect and serve its citizens, visitors and commerce partners. There are three facts that are well known. One, demand for services is ever increasing. Two, the resources associated with the provision of government services are ever decreasing. Three, technology can be a significant and effective enabler for the enterprise as it sets out to meet the challenge.

The Fiscal Year (FY) 2010 State of Maryland Information Technology Master Plan (ITMP) is a concise and direct roadmap that begins with a strict alignment to the goals and priorities of the Governor and the present Administration, travels across three broad, over-arching perpetual objectives, visits a number of underlying supporting strategies, and, finally, offers a plethora of representative project initiatives that matrix to the plan’s framework.

The plan’s three Perpetual Objectives provide direction and consistency over numerous planning cycles; they include: Consolidation, Interoperability, and Standards. Supporting Strategies serve as the framework upon which agencies develop specific initiatives in support of improved customer service and operational efficiencies. This year’s plan adds two new and significant Supporting Strategies, Internet and Web-based Services and Process Management. Internet and Web-based Services highlights the use of the Internet and web-based technologies to transform government towards customer-centric solutions. Process Management recognizes the need to change how we might do business before we consider how we might change technology. Agencies will develop their specific Supporting Strategies under their own Master Plans that define the actions and plans that they will initiate to provide for agency-specific core responsibilities, demonstrate collaboration with other agencies in the deployment of comparable technological needs, and support the Perpetual Objectives of the State ITMP.

While the FY 2010 ITMP provides agencies flexibility towards meeting the business units’ core missions, it stands vigilant in its requirement for all agency plans to conform to statewide objectives and strategies. Given the general uncertainties of the future in addition to a predicted competition for scarce resources, those IT projects that exhibit the “best fit” and forecast the highest returns on investment have the best chance of moving forward. A well-coordinated and executed plan assures the State the best chance of leveraging information technology to its fullest and providing maximum benefit to its constituency.
RECENT ACCOMPLISHMENTS

While leveraging information technology results in a higher level of cost effectiveness, a more efficient State work force, and an improved delivery of services to the constituency, it is critical that all information technology projects maintain full alignment with the Governor’s priorities, which are to:

- Strengthen and grow our middle class and our family owned businesses and our family farms;
- Improve public safety and public education in every part of our state; and to
- Expand the opportunities – the opportunities of learning, of earning, of enjoying the health of the people that we love, as well as enjoying the health of the land, the water, the environment that we love – to more people rather than fewer.

The following examples illustrate numerous IT initiatives that support the goals and mission of the Administration.

The innovative Network Livescan system provides Maryland’s law enforcement community the tools to electronically collect fingerprints and identify demographic information. The quality of this information enhances public safety through its support of the criminal offender booking process. Additionally, with the increasing demand for vital background checks of individuals applying for child care, nursing and commercial driver licenses, Network Livescan technology has reduced the time to complete these investigations from several months to a few days. The high quality images and data available through this system form the foundation for both a new automated fingerprint matching system and a new offender case management system, both critical to agency improvements in community public safety goals.

With the automation of the Maryland Online Sex Offender Registry, law enforcement can quickly update and rapidly access timely information about convicted sex offenders and share the data with the National Registry and the FBI. Further, via the Internet, telephone or email, this automated tool makes it possible for citizens to know when a registered sex offender has moved into their neighborhood.

Recent years have seen a rise in the number of homeowners potentially facing foreclosure, due to the challenging economic environment, declining home values, and risky loan practices. However, Maryland citizens threatened with defaulting on their mortgages have HOPE (Home Owners Preserving Equity). A new custom HOPE website and toll-free telephone call center assists homeowners with instant access to mortgage counselors and programs designed to help identify refinancing options.

A new telecommunications relay center was opened in Frostburg, Maryland providing telecommunications services to Maryland’s deaf, hard of hearing and speech disabled citizens.

In cooperation with the federal government, Maryland implemented the Federal Vendor Offset (FVO) program to recover tens of millions of dollars annually from delinquent taxpayers and businesses. As of the end of June, 2008, FVO had recovered over $17 million.
The State replaced an underperforming procurement contract with two new master contracts used to purchase commodity hardware and software. The new contracts allow master contractors to add manufacturer product lines throughout the life of the contracts to ensure access to emerging technologies. The two new vehicles also provide considerably more robust competition (112 master contractors vs. 9), far more MBE prime contractors (41 vs. 3), and the first SBR participation in these areas with 31 SBR master contractors on-board.

Minority Business Enterprise (MBE) Master Contractor awards on the Consulting and Technical Services contract continued to exceed expectations with nearly 50% ($102 million) of the $206 million task orders awarded to date going to MBE firms. More than $33 million of task orders awarded has gone to Small Business Reserve companies.

The Statewide Public Safety Communications System project to ensure that first responders from the State, county and local jurisdictions are able to communicate in an interoperable and seamless fashion completed several key milestones in FY 2008. The team completed functional requirements, a channel plan, and system design requirements. The FCC delivered the final frequency allocation in the 700 Mhz band. Twelve new communication towers and 18 communication shelters were constructed in support of the project.

MDOTs Maryland Aviation Administration (MAA) recently completed a complementary project implementing a unified radio communications network compatible with the statewide effort. The MDOT project brought online a dedicated consolidated channel for emergency and maintenance workers for State and local government entities in and around Baltimore/Washington International Thurgood Marshall Airport.

The number of subscribers to networkMaryland™ increased from 69 to 77, with several counties and municipalities, including the Town of Ocean City, the City of Laurel and Caroline County.

Through the Educator Information System (EIS), Maryland teachers may now efficiently submit applications for and manage their certifications directly through the EIS portal, greatly reducing the burden on teachers and MSDE program staff, thereby improving customer services and quality teacher retention. EIS also enhances the State's ability to recruit talented teachers, both local and otherwise, with over 60% hired from outside the State, because all certification records are readily available to support a hiring decision.

With protection of the State’s information and ability to provide uninterrupted service as a continuing priority, several agencies embarked on successful Disaster Recovery (DR) resources sharing initiatives. Maryland State Archives, working with networkMaryland™ was able to leverage the resources at the University of Maryland Baltimore Campus to set up a remote hot site for immediate recovery, if needed. Both the Department of Health and Mental Hygiene’s Laboratories Administration and the Maryland State Police (MSP) Crime Lab have established a reciprocal agreement under which each agency will host a backup and DR platform for the other’s Laboratory Management Information System. DPSCS and MDOT Motor Vehicle Administration configured a DR arrangement such that DPSCS can directly access MVA data in the event of failure.
INTRODUCTION

Beginning in FY 2009, the State enhanced the ITMP model by adopting Consolidation, Interoperability and Standards as the three perpetual objectives that are relevant across all agencies and supportive of Maryland’s priorities.

These long-term objectives serve as the umbrella under which State agencies can plan for, develop and implement information technology initiatives across multiple funding years and even across multiple agencies. Supporting each objective are various strategies that agencies can use as a way to focus their IT planning efforts in congruence with the State’s enterprise goals.

Commitment remains to the strict adherence to industry-proven standards in the management and oversight of the State’s Major IT Development Projects (MITDPs). In addition, the FY 2010 Plan brings to the forefront the business processes that must drive the State’s IT decision-making. This is represented by a new supporting strategy of Process Management. To complement the emphasis placed on planning for the infrastructure that supports IT, the Internet and Web Services supporting strategy was also developed for FY2010. This strategy addresses the expanding use of web sites and services delivered over the Internet and Maryland’s continually expanding presence as an eGov enterprise.

Many critical services are provided to Maryland’s citizens via systems that were developed in decades past and have far surpassed their intended lifespan, often with basic maintenance and upkeep no longer available. To promote planning for the next generation of critical systems and their support, one final new supporting strategy has been included, Legacy System Risk Mitigation.

The FY 2010 ITMP model is further enhanced by listing examples of a few of the actual initiatives that agencies will pursue, given ultimate approval and funding support. This is a representative listing only; whereas each individual agency’s ITMP offers a comprehensive listing of the agency’s proposed initiatives.

Lastly, each of the example initiatives is aligned into a category that best describes its breadth. For FY 2010, a fifth category, Inter-Agency, has been added.

- **Statewide** – An initiative applicable to many or all State agencies.
- **Location Specific** – An initiative that is geographically defined, such as a building, city or region and may include multiple agencies.
- **Line-of-Business** – An initiative involving multiple agencies that provide similar services.
- **Intra-Agency** – An initiative that is specific to a single agency.
- **Inter-Agency** – An initiative that encompasses more than one agency, but is not statewide and for which line-of business and location are not essential drivers.
OBJECTIVES AND STRATEGIES

Perpetual Objective I – Consolidation

The elimination of duplicative systems to achieve economies of scale. Consolidation refers to integrating IT resources, including physical hardware, human capital, software licensing and operating systems. Consolidation can simplify the State’s IT environment, enabling streamlined business processes, thereby reducing support requirements and associated costs.

#1 Supporting Strategy:  Platform

Platform refers to the physical devices used for IT activities as well as the software and operating systems operating on them. The most recent trends in IT platform architecture have been toward a more centralized model. Platform consolidation refers to a variety of possible outcomes, including agencies sharing enterprise applications, streamlining or eliminating redundant systems, and virtualization, which combines many separate components onto a minimum number of physical devices. The benefits of platform consolidation include running a greener operation by reducing energy cost, operations and maintenance staff spending less time physically moving between resources requiring attention; potential for reducing the resources needed for operations and maintenance and reducing potential points of failure.

#2 Supporting Strategy:  Disaster Recovery (DR)

Disaster Recovery is any activity that secures IT resources from vulnerability, such as protection from events ranging from man-made attacks to natural disasters. Initiatives range from performing regular tape back-ups of a system to having redundant operations in separate locations that would immediately failover in the event of a disruption at the primary location. The overriding benefit of a DR supporting strategy is the continuity of operations to support critical business functions after a disastrous event. Likewise, non-critical systems are backed up and can be quickly and efficiently restored in a prescribed timely manner after an event.

#3 Supporting Strategy:  Networks

Networks are the “plumbing systems” that convey electronic data from one place to its intended destination. Data may be conveyed through physical cables including fiber optics or via wireless means such as radio frequency, satellite communication and cellular networks. Network consolidation includes multiple entities finding opportunities to piggyback on new or existing network infrastructure. The benefits of network consolidation are the optimization of resources, increased capacity and performance and improved security.
Perpetual Objective II – Interoperability

The ability to exchange and share information across disparate systems, enabling system users to collaborate more effectively.

#4 Supporting Strategy: First Responder Tools

Maryland’s geography makes it perpetually susceptible to both man-made and natural disasters that can have an impact on many different scales from local to regional to worldwide. Constant availability of communication and information facilitated via technology systems is a necessity during such events. A broad range of tools and technology fall into this category, including dedicated multi-agency communication channels, computer-aided dispatch systems and portable tracking devices with real-time logistics data. This strategy benefits all who live and work in and around Maryland, by enabling first responders to efficiently respond to and minimize the impact of emergent events.

#5 Supporting Strategy: Case Management

Case management refers to information technology systems that automate an individual’s movement, concurrent with all associated case data, through a business process or workflow. Cases range from those associated with offenders to those for citizens in need of State provided social services. Interoperable case management systems set the stage for unifying business processes within single or multiple partner organizations so that data associated with the individual can be shared and coordinated efficiently between stages of the process. These systems allow case managers to perform their jobs with all required data at their fingertips, thus enabling them to make the most informed decisions and provide the highest level of service.

#6 Supporting Strategy: Geographical Information

Geographical Information Systems (GIS) offer an opportunity to link existing State data to a location on a map to support any number of innovative and valuable services. It can be used, for example, to inventory State highway assets, plan and track land use, plan for natural and man-made disaster responses, provide useful data to the StateStat program, etc. The geo-spatial data is based on a combination of aerial photography and global positioning information. The cost of the aerial photography can be shared across several agencies, as well as municipal and county governments. Since the system is standards based, all levels of government and its partners can share the same data.
**Perpetual Objective III – Standards**

The use of industry accepted and State developed best practices as the framework for deploying, operating and maintaining IT operations. These include data, security, hardware and software applications, and project and contract management.

### #7 Supporting Strategy: Legacy System Risk Mitigation

The State must apply industry best practices through continuous analysis and upgrade of its supporting IT systems – both software applications and hardware. Legacy systems are those put in place in bygone years ranging from monolithic mainframe applications to the PCs on employees’ desks. Some of these systems have outlived their original operational and maintenance life cycle, yet they can be found, today, still supporting business functions that are critical to the State’s ability to provide services to its citizens. This adds considerable risk to an agency’s core capability to fulfill its mission and provides little opportunity for interoperability. Also, if maintenance is available, it can be costly. By mitigating risk through modernizing legacy systems and performing routine hardware refreshes, the State has the potential to increase return on the investment by creating applications that are more quickly and cost effectively maintained, enhanced and distributed.

### #8 Supporting Strategy: Data Standards

For data to be standard, users must agree on how data is defined, formatted and represented. These standards become the rules to be followed when capturing data into a supporting system. Once standard, data can be more easily communicated and shared, reducing redundancy and improving data quality. Lack of uniform data standards in an environment of disparate systems is a universal problem. For example, the State has many systems that contain different versions of the same information about the same topic or customer. If the data contained in these systems were standardized, the systems may be able to share one source of the data with the potential for eliminating redundancy, while improving consistency and integrity.

### #9 Supporting Strategy: Information Retention

Information retention refers to the length of time an organization has/is obligated to keep artifacts such as emails, memos, meeting notes, etc. associated with its business. There are many factors influencing this issue that force a multi-faceted approach to this strategy. Internal policies, litigation requirements, the Public Information Act, and Code of Maryland Acquisition Regulations specifications are a few drivers dictating what information retention policies are suggested at different levels of State government.

### #10 Supporting Strategy: Internet and Web Services

This strategy addresses the delivery of services to Maryland’s citizens, visitors, business partners and other government agencies through the use of the Internet and web-based technologies. The collection of Internet web sites and online services available to the public
showcases the State’s eGov presence. The State must be prepared to meet a growing demand for information and services available via the web and to adopt a customer-centric focus that establishes Maryland.gov as the default channel for the State’s public-facing services. At the same time, the Statewide Government Intranet (SwGI) should evolve as a secure channel for shared applications between agencies and business partners. This strategy acknowledges dynamic technical challenges and business processes needed to ensure the secure and effective delivery of information and services via these channels. Web services must map to a common approach and practices that also address high availability, accessibility, usability, privacy as well as tools to measure accountability and customer satisfaction. The strategy spans from fundamental principles such as domain name conventions, design templates, and search functionality to innovations that foster inter-agency collaboration to aggregate data and produce timely and accurate information covering the entire spectrum from day-to-day life and events to emergency preparedness and response.

### #11 Supporting Strategy: Process Management

Without clearly defined and understood business processes, the benefit of IT is diminished. To enable excellence in State service, applying and using current processes related to IT strategic planning, operations and procurement needs to continually be practiced in order to maximize return on dollars invested in IT. Ironically, not doing so can result in less efficient business processes when the goal had been “doing more with less”. Examples of current processes include System Development Life Cycle (SDLC), contract management, project and program management and associated tools, standard operating procedure documentation and business process analysis and re-engineering. Benefits of initiatives for this supporting strategy are the alignment of State IT with industry best practice processes and cohesion in operations within and between agencies.
REPRESENTATIVE INITIATIVES

The Information Technology Master Plan (ITMP) provides examples of actual initiatives that the State anticipates in support of the plan’s defined objectives and strategies, of course, depending upon available resources. Initiatives can be research and planning exercises, business process analysis/re-engineering, operational priorities, or actual IT development projects. Initiatives that meet the threshold of Major IT Development Projects (MITDP) will be submitted by the lead agency for review and approval via the IT Project Request (ITPR) process.

Messaging Consolidation

In the FY 2009 ITMP, the State suggested the potential for identifying a host for consolidated e-mail. The initiative in the FY 2010 ITMP amplifies that suggestion to include all voice and data messaging applications, including handheld personal digital assistants, access to global address lists containing the names of State agency employees, centralized e-mail spam and virus protection, access to centralized calendars and the implementation of a standardized nomenclature for all State e-mail addresses. In FY 2009, the State will contract with an independent third party to conduct a robust analysis of the messaging platforms and functionality now used in each State agency. The result will be recommendations for incremental approaches to consolidate to centralized platforms. For FY 2010, DoIT will submit an ITPR on behalf of all State agencies for funding to pursue the most advantageous approach.

Lead Agency: Department of Information Technology (DoIT)
Category: Statewide
Supporting Strategies: #1 Platforms, #8 Data Standards, #9 Information Retention

Server Consolidation

Currently, State agencies have a conglomeration of system architectures, resulting from years of independent decision making and purchasing. The FY 2010 initiative is to pursue opportunities whereby agencies can mutually benefit by consolidating IT resources, while enhancing end user performance. This effort would leverage existing technology, where appropriate, and consider additional investments in server virtualization. Virtualization uses advanced hardware and software to make more efficient use of server resources to improve server availability, to assist in disaster recovery, testing and development, and to centralize server administration. This will allow participating agencies to focus their attention on their agency’s mission, rather that IT support functions.

Lead Agency: Multiple
Category: Location-specific
Supporting Strategies: #1 Platforms, #2 Disaster Recovery, #3 Networks, #7 Legacy System Risk Mitigation

Multi-Purpose Data Center/DR Site

A FY 2010 capital project request will be submitted to begin planning for a Multi-purpose Data Center (MDC) that could provide numerous IT services to State agencies. The FY 2010 portion of this initiative will be to gather requirements, as well as develop building and functional operations plans, complete with cost and implementation options.
The MDC would improve the State’s ability to protect critically important data systems. Services that the MDC could provide include hosting operational systems that are currently hosted by third party public and private entities, and provide a variety of disaster recovery capabilities, such as cold, warm, hot sites and long-term recovery operations. When not supporting actual event recovery, the MDC could provide agencies the ability to test, evaluate, and refine individual disaster recovery plans within an alternate server-based support facility.

In addition to being a recovery center following emergent situations, the MDC would also be able to support short-term transfer of operational requirements for known events such as construction, utilities maintenance, etc. occurring at a primary data center location.

Lead Agency: Department of Information Technology (DoIT)
Category: Statewide
Supporting Strategies: #2 Disaster Recovery, #3 Networks, #7 Legacy System Risk Mitigation, #9 Information Retention

**Disaster Recovery (DR) Resource Sharing**

Several agencies will engage in resource sharing efforts to enable DR for high availability applications. In this scenario, platform consolidation efforts have reclaimed physical hardware resources that can be shared with a sister agency for the purpose of housing a readily available copy of critical applications, in the event of primary site failure. These are low cost initiatives often requiring little more than a service level agreement and the resources to configure the application at the DR site. DR resources sharing will augment the use of a statewide MDC to ensure the most comprehensive coverage across expansive geography, multiple lines of business and varying recovery needs. A major benefit to this approach is further maximization of return on investment in both network infrastructure and platform consolidation.

Lead Agency: Multiple
Category: Inter-agency
Supporting Strategies: #2 Disaster Recovery, #7 Legacy System Risk Mitigation, #9 Information Retention

**Computer-Aided Dispatch and Records Management System (CAD/RMS)**

The State is currently in the planning stages of creating a consolidated computer aided dispatch and records management system (CAD/RMS) to effectively coordinate statewide public safety information across the State agencies that have a police force. As envisioned, this system will enable sharing of anti-terrorism, homeland security and crime data; but equally important, it will replace multiple legacy end-of-life systems that do not interoperate. It will also facilitate improvements in officer response times, officer safety and records retention and analysis. The CAD/RMS will be developed in conjunction with agency stakeholders, including DGS, the Department of Natural Resources (DNR), MSP, MDOT MAA and Maryland Transportation Authority (MdTA). Local jurisdictions may interoperate with the State CAD/RMS system with their own compatible system or participate directly as a user.

Lead Agency: Maryland State Police (MSP)
Category: Line-of-Business
Supporting Strategies: #1 Platform, #3 Networks, #4 First Responder Tools, #6 GIS, #7 Legacy System Risk Mitigation
**Statewide Public Safety Communication System**

The State’s police, fire, medical and transportation first responders have legacy radio systems that are incompatible and do not interoperate. As a result, when there are multi-jurisdictional or multi-agency events, such as traffic accidents, pursuits or public disturbances, the first responders cannot communicate critical information to each other. Public safety officer and citizen safety is therefore compromised. Building on the completion of the functional and design requirements in FY 2008, a contract will be competitively awarded in FY 2009 to develop an engineering plan, design the interoperable system, and produce multiple implementation options, complete with schedule and cost detail. In FY 2010, MSP/DoIT will request funding to begin the most advantageous implementation option.

Lead Agency: MSP/DoIT  
Category: Line-of-Business  
Supporting Strategies: #3 Networks, #4 First Responder Tools, #7 Legacy System Risk Mitigation

**Maryland Involuntary Admissions System**

The Office of Administrative Hearings (OAH) and the Department of Public Safety and Correctional Services (DPSCS) will automate the access to information concerning persons prohibited from possessing or receiving a firearm who have been adjudicated as having a mental disorder or have been committed to a mental institution. OAH will install a secure File Transfer Protocol (FTP) server. The FTP server will provide OAH with a secure system to transmit National Instant Criminal Background Check System data from OAH’s case management system to the DPSCS for their submittal to the National Crime Information Center.

Lead Agencies: OAH and DPSCS  
Category: Line-of-Business  
Supporting Strategies: #3 Networks, #4 First Responder Tools, #5 Case Management, #8 Data Standards, #11 Process Management

**Personnel System Replacement**

In FY 2009, a request for proposals will be released to industry to procure a commercially viable human resources system that can be implemented in modules over a period of years as funding becomes available. The current system is reaching end-of-life and does not easily provide the functionality required to manage the State’s work force. The desired replacement system is a commercial-off-the-shelf (COTS) system that requires the least amount of customization while supporting requisite business process changes.

As the desired solution will be modular, in FY 2010 DBM anticipates requesting additional funding to continue implementation of additional modules.

Lead Agency: DBM  
Category: Statewide  
Supporting Strategies: #1 Platforms, #7 Legacy System Risk Management, #11 Process Management

**Department of General Services (DGS) Legacy Systems Replacement**

In FY 2009, DGS plans to update risk assessments of their architecture and legacy systems that were conducted in prior years to further refine and provide a clear vision of their
current risk vulnerabilities, potential risk mitigation strategies, and recommendations for enhancements or replacements. One major area of focus will be procurement system technology. Based on the outcome of the assessment, DGS expects to submit ITPRs to begin implementation of one or more of the assessment recommendations in FY 2010.

Lead Agency: DGS  
Category: Intra-agency  
Supporting Strategies: #1 Platform, #7 Legacy System Risk Mitigation, #10 Internet and Web Services, #11 Process Management

**Maryland Outdoor Licensing & Registration System Replacement**

DNR’s current system, Customer Oriented Information Network (COIN), employs obsolete technology and inefficient processes. DNR cannot view or act on real-time data, greatly diminishing their ability to make resource decisions based on accurate information. Additionally, DNR Police officers cannot properly validate licensee information in the field at the time of inspection, which can result in poor customer service and potentially negative interactions with their, in fact, properly licensed constituents. During FY 2009, DNR will continue their planning efforts in preparation for submitting a FY 2010 ITPR to pursue the replacement of the COIN system as a new MITDP.

Lead Agency: DNR  
Category: Intra-agency  
Supporting Strategies: #3 Networks, #6 Geographic Information Systems, #7 Legacy System Risk Mitigation, #10 Internet and Web Services, #11 Process Management

**Criminal Justice Data Standards**

Judicial Information Systems (JIS) actively participates on the statewide Criminal Justice Information Advisory Board with the overarching goal to establish standards and mechanisms to share data across Criminal Justice entities. JIS has embraced several key national open standards as part of its current and target systems architecture, to enable information sharing through web services technology and will continue these efforts. The two standards are being leveraged as part of the systems architecture and data access projects to enable information sharing through web services technology in the criminal justice related agencies.

Lead Agency: Judiciary  
Category: Line-of-Business  
Supporting Strategies: #4 First Responder Tools, #5 Case Management, #8 Data Standards, #10 Internet and Web Services

**Records Management**

This initiative encompasses a number of different activities relating to official State records, past, current and future. It involves evaluation and updates to how Maryland handles records through policies and standards. Agencies will continue to re-evaluate and modify their records retention and disposal schedules using the guidance that is provided by Archives and DGS. An Internet Records Management Community will be developed to serve as a clearinghouse for general information, laws, regulations, guidance, templates, and existing state, county and municipal agency records retention and disposal schedules for the State of
Maryland. Without current records management policies and guidelines, agencies face a range of potential problems from lack of physical space to store excessive documentation to not having required documentation in the event of litigation.

Lead Agency: Archives  
Category: Statewide  
Supporting Strategies: #9 Information Retention, #11 Process Management

**Systems Development Lifecycle (SDLC) and Project Management Institute (PMI) Principals Training (Statewide)**

In FY 2009, DoIT plans to enhance the State’s SDLC to make is easier to use for all types of software implementations, from fully custom-built applications to minor customization of COTS applications, within the framework of current, best practice PMI principles. In FY 2010, DoIT intends to partner with Maryland’s institutions of higher learning to make training on the State’s SDLC available to the business community and State employees.

One of the State’s four project management oversight tiers is adherence to the established PMI professional project management principles. The State will continue building on initiatives begun in previous years to encourage agencies to avail project staff of PMI-based training. This is important to promote a common vocabulary, understanding and proficiency in creating and following comprehensive Project Management Plans, and, as a result, to help ensure the success of the State’s IT projects. Part of this initiative will be to pursue training opportunities that allow the State to take advantage of economies of scale, including training necessary to qualify employees to become certified Project Management Professionals.

Lead agency: DoIT  
Category: Statewide  
Supporting Strategies: #11 Process Management

**Implementation of Portfolio Management Tools**

Building on small pilot initiatives, several agencies will pursue the implementation of various portfolio management tools in FY 2010. These software tools assist agencies with IT projects to manage project information at multiple levels. Such tools allow users to track project progress by established methodologies, easily communicate project information to executive sponsors and stakeholders, enable efficient reporting, better manage resources and track cost. With all of an agency’s projects entered into a central tool, Chief Information Officers can make more informed decisions at an enterprise level, while individual project managers can manage resources at the most granular level, without duplication of data entry.

Ultimately, all of the State’s requests for MITDPs may be submitted, vetted, approved, managed and reported via a Portfolio Management Tool. In FY 2010, DoIT will undertake a planning initiative to pursue the options for driving to this goal, assuming integration with tools already used throughout the agencies.

Lead agency: Multiple  
Category: Intra-agency and Inter-agency  
Supporting Strategies: #8 Data Standards, #10 Internet and Web Services, #11 Process Management
**New Services Provided via networkMaryland™**

With the establishment of the networkMaryland™ backbone in all 24 jurisdictions of the State, there is an opportunity to maximize this investment by providing additional services such as Voice over Internet Protocol technology for telephone systems. In FY 2009, networkMaryland™ is deploying its “Ethernet Everywhere” product, allowing subscribers access to higher bandwidth services at a lower cost than previously available.

Additionally, networkMaryland™ will enable SwGl to support IP multicast. Multicast refers to efficiently transporting data between a single sender and multiple receivers on a network. An example of a future application of this technology is distributing the Maryland CHART traffic flow videos from cameras strategically positioned along many of Maryland's highways and bridges to multiple, statewide users. Using networkMaryland™ as the backbone, this critical support infrastructure could be extended to all State agencies that support homeland security efforts.

During 2009, networkMaryland™ managers, in conjunction with the networkMaryland™ Advisory Group will continue to evaluate potential services and a business case will be developed to determine which new services warrant additional investment in FY 2010.

Lead agency: DoIT
Category: Statewide
Supporting Strategies: #1 Platforms, #3 Networks, #4 First Responder Tools

**MD iMAP**

MD iMap is the culmination of years of voluntary efforts to consolidate and standardize GIS information. iMap is a framework and centralized repository of the most up-to-date geospatial data available. It serves as a tool from which consumers and developers of geographic data can pull the most current, vetted information. Services have also been developed as part of iMap to assist users at all levels of government and their constituencies. These services allow users to perform location-based queries such as finding addresses and overlaying any combination of available iMap layers to see a complete picture of political boundaries, emergency services, roads and environmental information around that location.

Lead: State Geographic Information Officer, in coordination with DNR, Environment, MSP, Agriculture and the BayStat office
Category: Line-of-Business
Supporting Strategies: #6 Geographic Information, #8 Data Standards, #11 Process Management