
Appendix 3 • Information Technology Plan

Executive Summary

The DSHS Information Technology (IT) Strategic Plan provides vision and direction for information technology in DSHS. The plan focuses on implementing and sustaining business/technology solutions and services that support DSHS strategic goals and the Priorities of Government (POG).

Our vision is a collaborative IT environment that:

- ▲ Delivers secure anytime/anywhere access to information and systems necessary to support customers; and
- ▲ Facilitates the development of quality data to support decision making.

DSHS is planning and implementing several strategic initiatives in support of the IT vision and strategic goals.

- ▲ **Enterprise Architecture (EA):** The EA program provides a framework for decision-making and a common language that can be used across DSHS. The framework includes policies, principles, models, and standards within the areas of data, business and technology. The framework facilitates decision making for issues that impact most, or all, of the agency. Portfolio Management has been organizationally aligned with EA to better support making the agency's IT Portfolio a decision-making tool. By working with the program areas to develop agency-level tools, data-driven decision making is enhanced.
- ▲ **Sustainability:** DSHS actively supports technology initiatives that improve our stewardship of natural resources and reduce the carbon footprint of the agency.
- ▲ **Integration and Common Services:** The agency will continue to be a leader in systems and service integration efforts. As an active participant in the State Integration initiative, the agency is laying the groundwork to move towards a Service Oriented Architecture (SOA) with the implementation and increased utilization of the Enterprise Service Bus. The agency will continue to pursue opportunities where common processes can be automated through a common tool, leveraging individual investments.
- ▲ **DSHS Internet:** DSHS is committed to using User Centered Design principles to make the right information easily accessible on the DSHS Internet site.
- ▲ **Efficient and Secure IT Infrastructure:** Maintaining a secure, robust and modern technology infrastructure remains a priority for the department. Technologies that provide secure access to employees using a variety of access methods and access media will be evaluated and implemented as appropriate.
- ▲ **E-Discovery:** DSHS is committed to the implementation of an electronic discovery solution to better support the public disclosure and e-discovery process.
- ▲ **Successfully Implement IT Systems Projects:** DSHS has multiple large-scale enterprise IT system projects planned. These projects will allow DSHS to meet federal and state requirements, improve service delivery and data access with modern technology solution.

- ▲ **Effective Project Management:** Building on work done in prior fiscal years, the use of effective project management practices will be promoted at various levels of the department. Policies, standards and practices that support project management, portfolio management, IT acquisition and investments and related areas will be developed and maintained.
- ▲ **Software Utilization:** Maintain installation of supported versions of software products and assist staff in effectively utilizing software upgrades.

Overall, the DSHS IT Strategic Plan provides a high-level road map for implementing enterprise wide IT initiatives that are aligned with the department's vision, mission and overall strategic plan. In this way, DSHS IT supports the department as it helps people achieve safe, self-sufficient, healthy and secure lives.

Our Guiding Direction

MISSION

The mission of DSHS Information Technology (IT) is to provide guidance and support for implementing and sustaining business/technology solutions and services used to support the DSHS mission.

VISION

Our vision is a collaborative IT environment that:

- ▲ Delivers secure anytime/anywhere access to information and systems necessary to support customers; and
- ▲ Facilitates the development of quality data to support decision making.

GUIDING PRINCIPLES

- ▲ Data, business processes and technology should be common when there is a clear business case.
- ▲ Data, business processes and technology should be designed around natural "information system" boundaries with tight coupling within "systems" and loose coupling between "systems."
- ▲ Where allowed by law, regulation, or policy, authorized users should have access to data for purposes of treatment, payment or operations.
- ▲ Data, business processes and technology should support linkages with external partners.
- ▲ Data, business processes and technology should have an identified business owner at the lowest level possible.
- ▲ DSHS systems and data should be accessible to those with disabilities.

Priorities of Government (POG)

This plan supports the Priority of Government goal to improve the ability of state government to achieve results efficiently and effectively. The plan links to four DSHS goals that directly support this POG goal. These goals are:

- ▲ Reinforce strong management to increase public trust
- ▲ Strengthen data-driven decision making
- ▲ Improve Internal and External Partnerships
- ▲ Value and develop employees.

Washington State Strategic IT Plan

The Information Services Board (ISB) has identified six IT goals for the State that also guides this plan:

- ▲ Invest in Common Systems
- ▲ Promote Data Sharing
- ▲ Promote Common IT Practices
- ▲ Provide an Integrated End User Experience
- ▲ Improve Project Management Practices
- ▲ Leverage the State's Buying Power

Statutory Authority

- ▲ Revised Code of Washington (RCW) 43.105
- ▲ Information Service Board – Information Technology Portfolio Planning Policy

Appraisal of the External Environment

In recent years, the State Legislature and the Information Services Board (ISB) have increased expectations for state agencies to utilize common IT services or solutions and to leverage the State's buying power in order to deliver services with the least duplication and redundancy.

During the 2005-07 biennium, the State implemented SmartBuy as a means to achieve savings on a variety of items, including desktop and laptop computers. The 2008-09 biennial budget provided two new processes, the IT Funding Pool and the DIS Service Consultation (903) process, which aid state agencies in identifying where common solutions may exist.

It is expected that, in upcoming biennia, the Legislature and the ISB will take additional, stronger action and may provide mandates on use of central services or technologies.

The State is also making investments that will improve the state's technology infrastructure to better support a Service Oriented Architecture and data sharing between state agencies. DSHS must make investments in the DSHS technology infrastructure to reduce redundant data capture/storage and allow for reuse of solutions that support common processes within DSHS and in support of the state initiatives.

Technology continues to change at a rapid rate and business needs are adapting to meet available technology as well as changing business requirements.

Recruitment and retention of trained staff, especially for project management and emerging technology areas, continues to be a challenge across DSHS.

Recent downturns in the national and State economies mean that DSHS will need to be exceptionally prudent in defining, prioritizing and delivering technology services to meet ever evolving needs.

Trends in Customer Characteristics

We live in an electronic age. There is an increasing expectation to support service delivery through the use of technology.

Citizens want quality services delivered in an economical, timely and convenient way.

'Storefront' service delivery may no longer be the preferred way to access or deliver services. E-commerce solutions are the norm in the private sector and demand is growing for these solutions within the public sector.

Individuals and organizations with data or information needs want their requests to be met quickly and comprehensively. Where multiple systems or data sources necessarily exist, there is an expectation that service delivery or data access be provided in a one-stop and integrated fashion.

Activities Link to Major Partners

DSHS continues to work closely with the Department of Information Services (DIS) and other state agencies in the area of IT policy and planning. Examples of this collaboration include participation in the statewide Enterprise Architecture Committee, the Customer Advisory Board (CAB), the Enterprise Active Directory Workgroup and the Washington Computer Incident Response Center (WACIRC).

Additionally, DIS is a major partner with DSHS in the delivery of key technology infrastructure services. DSHS continues to build upon and improve this partnership with the development and implementation of complementary delivery of IT services using a combination of DIS and internal services.

Interaction with the Information Services Board (ISB) and the Office of Financial Management (OFM) occurs around highly visible IT projects with potential statewide impacts requiring approval and/or special funding by the state legislature.

Stakeholder Input

DSHS program areas involve stakeholders in the process of creating their strategic plans. These plans are reviewed for IT activities and help create the basis for the DSHS IT strategic plan.

In addition, representatives from the DSHS IT community participate in a workgroup that creates the first draft of the strategic plan. The DSHS IT Directors are then engaged to finalize the plan.

Future Challenges and Opportunities

Technology continues to change rapidly. DSHS IT staff support technologies dating from the 1970s through today. It is becoming increasingly difficult to attract and retain staff with skills at either end of this spectrum – those who support often mission critical legacy systems and those skilled in cutting edge technologies.

IT staff with highly marketable skills often locate higher paying jobs elsewhere. Anticipating skill areas and training needs in ever evolving technologies also presents

challenges. Staff with skills suited to older technologies are quickly reaching retirement age.

In addition to difficulties recruiting and retaining skilled technical staff, there are challenges with recruiting, retaining and compensating well-qualified technology managers.

Implementing technology solutions to support increasing volumes of public disclosure and e-discovery requests will help manage risk and minimize staff impacts.

Technology is ingrained in every day life for most DSHS staff and for many business partners and customers. Technology has improved our ability to manage staff and services. It has enhanced service delivery and information sharing and improved partnerships. Mission-critical systems and infrastructure operate with minimal downtime and are highly reliable. Our infrastructure is secure and data and systems are well protected.

However, technology also brings challenges. As traffic on the wide-area network increases, investments are required to increase bandwidth to improve or maintain performance. The prevalence of laptop and other portable devices to support an increasingly mobile workforce make data security more challenging. Proactive management is required to maintain a secure infrastructure in spite of frequent, sophisticated cyber attacks.

Multiple mission-critical systems are aging and require significant investment to extend or replace.

The Department has an active Enterprise Architecture program that supports the identification of common or enterprise solutions and services. When these opportunities are found, it has proven difficult to acquire initial funding to implement the solutions.

Goals, Objectives, Strategies, Activities, and Performance Measures

Priority of Government Goal: IMPROVE THE ABILITY OF STATE GOVERNMENT TO ACHIEVE RESULTS EFFICIENTLY AND EFFECTIVELY

State IT Goals

- State IT Goal 1 - Invest in Common Systems
- State IT Goal 2 - Promote Data Sharing
- State IT Goal 3 - Promote Common IT Practices
- State IT Goal 4 - Provide an Integrated End User Experience
- State IT Goal 5 - Improve Project Management Practices
- State IT Goal 6 - Leverage the State's Buying Power

DSHS IT Goal A: Reinforce strong management to increase public trust

Supports State IT Goal 1 – Invest in Common Systems, Goal 3 – Promote Common IT Practices and Goal 5 – Improve Project Management Practices

Objective 1: Improve processes and practice for information technology governance and decision making

Strategies:

- Support analysis of business processes prior to development of applications.
- Use Enterprise Architecture principles to support decision-making
- Use IT Portfolio Management to guide decisions on IT investments.
- Actively identify and make decisions on common solutions and services.
- Fully implement the enterprise system governance model and monitor its use.

Activities:

- Improve DSHS IT Portfolio processes, practice and technology within DSHS to better support decision making.
- Participate in development of DIS's Portfolio Management software implementation and enhancement to support the State's portfolio management program.
- Improve utilization of the Enterprise Architecture framework to scope IT projects and initiatives.
- Implement the enterprise system governance model for all enterprise systems.

Measures

- Targeted enterprise system Customer Review Boards (CRBs) produce outcomes as planned.
- Utilization of the Enterprise System Governance Board and usage outcomes.
- Increase in the components of the Enterprise Architecture Framework developed.
- Number and outcome of decisions made using the Enterprise Architecture framework to support management of the agency IT portfolio.
- The number of enterprise issues identified and resolved and the timeliness of resolution.

Objective 2: Increase use of enterprise systems, solutions and services

Strategies:

- Actively pursue the use of enterprise services and solutions within DSHS.
- Minimize use of silo implementations of enterprise solutions or services.
- Partner with DIS and other state agencies to utilize common statewide solutions and services where possible.

Activities:

- As business cases for common solutions are identified, plan and implement the solution.

Measures:

- Reduction in numbers of shadow systems by system/solution type.
- Number of use of Enterprise Service Bus.
- Number of common solution or common solution opportunities identified as compared to the number implemented.
- Impacts of consolidated solutions tracked and monitored.

Objective 3: Manage IT projects using sound project management practices.

Strategies:

- Establish and adhere to expectations for project management practice based on project risk levels and types.
- Promote the awareness of IT project oversight and project management practices.
- Utilize inputs from project managers to identify best practices, tools and templates.

Activities:

- Utilize and refine the DSHS Project Quality Framework to improve sponsorship, quality assurance and Independent Verification & Validation practices.
- Routinely review Post Implementation Reviews (PIRs) and implement practice and process improvements.
- Deploy continuously improving project management best practices, based on the ISB Project Management Guidelines, to project managers.
- Identify training and develop mentoring and support programs to improve IT project management practice.
- Establish the mechanism to promote project oversight components and the advantages/benefits of the program.

Measures:

- Impacts of improved practice elements resulting from PIR analysis.
- Percentage of DSHS project managers receiving training (formal and informal) each year.
- Outcomes of projects using quality assurance and/or independent verification and validation as compared to other projects.

Objective 4: Provide well-managed and secure information technology solutions in DSHS.

Strategies:

- Maintain and update existing or implement new core applications, systems and infrastructure to meet evolving needs and take advantage of changes in technology.
- Monitor, plan and upgrade the capacity, security and availability of the Wide Area Network and other core infrastructure in order to meet evolving business needs and technologies.
- Support non-traditional and flexible business or service delivery models with secure technology solutions. Examples include siting staff in community locations, service delivery by non-DSHS staff and supporting a mobile workforce.
- Assess opportunities for enterprise solutions when common business needs are identified.
- Utilize enterprise systems governance model to support stewardship of shared systems.
- Utilize policies, standards and established procedures to improve IT projects and other IT activities as needed.
- Develop a robust enterprise technology architecture program.
- Develop infrastructure elements to support a Service Oriented Architecture.

- Continuously improve business continuity and disaster recovery capabilities and capacity in support of vital DSHS services.
- Continuously improve the overall security infrastructure which includes technology, policies, standards and practice.
- Continue to improve staff skills relative to IT and data security.

Activities:

- Fully implement ProviderOne.
- Fully implement FamLink.
- Procure and implement the Provider Payroll solution.
- Manage the decommission of the SSPS application.
- Select, plan and implement a solution to maintain, extend and/or replace ACES and related systems.
- Continuously improve the performance of the Wide Area Network and other core infrastructure solutions through the use of monitoring and proactive maintenance and upgrades.
- Leverage opportunities presented by the convergence of wireless, voice and data technologies.
- Maintain and continuously improve disaster recovery plans to support end-to-end recovery of vital services.
- Maintain and enhance the program, practice and solutions used to secure and protect applications, systems, infrastructure and data.
- Utilize mature practice for lifecycle management of hardware and commonly used software and operating systems.
- Pursue an agency training strategy to support implementation of new enterprise solutions or technologies.
- Implement and enhance utilization the Enterprise Service Bus.
- Define and implement an overall Service Oriented Architecture for DSHS.

Measures:

- Actual results for critical projects in the areas of scope, schedule, budget and outcomes as compared to planned.
- Availability and performance maintained at or above expected levels for critical applications, systems and infrastructure.
- Number of comprehensive disaster recovery plans for systems/infrastructure supporting vital services which are maintained and tested each year.
- Number of attendees for IT training sessions (selected critical topics).
- Patch updates completed within timeframes required by policy.
- Reduction in the number of computers or other devices impacted by viruses.
- Reduction in the number of critical incidents involving unprotected confidential data.
- Increase in the Percentage of hardware and commonly used software solutions replaced or upgraded prior to end of mainstream service.
- Reduced number of newly developed interfaces.
- Cost avoidance or savings from use of wireless, voice or similar technologies.

Objective 5: Support sustainability initiatives.

Strategies:

- Implement technologies that support sustainability.

Activities:

- Implement energy savings initiatives for IT equipment.
- Implement Web based meeting and other technology solutions to reduce travel needs.

Measures:

- Energy or cost savings achieved as a result of initiatives.

DSHS IT Goal B: Strengthen data-driven decision making

Supports State IT Goal 2 – Promote data sharing

Objective 1: Expand capability to capture and analyze meaningful data to manage budget, caseloads and programs.

Strategies:

- Standardize data where possible.
- Utilize common services and common data.
- Improve access to management information.
- Enhance data analysis capabilities.

Activities:

- Develop data models and data standards for shared client and provider data.
- Evaluate an enterprise business intelligence strategy that addresses use of disparate, aggregate data.
- Create strategies for improved data access (e.g. data warehouse, Service Oriented Architecture, Enterprise Service Bus, etc).
- Implement a data management strategy within DSHS.

Measures:

- Number of existing DSHS processes that implement sharing of client and provider data by December 2009.
- Number of installed interfaces that deliver new data access methods.
- Increased use of disparate and aggregate data from common sources.

DSHS IT Goal C: Improve internal and external partnerships

Supports IT Goal 4 – Provide Integrated End User Experience and IT Goal 6 – Leverage State's Buying Power

Objective 1: Improve partnerships with citizens, stakeholders, customers and business partners.

Strategies:

- Support principles of open government through the use of technology.
- Utilize user-centered design principles to guide internet and intranet site design and content.
- Promote client self-service and other e-commerce solutions that support access to programs and services.
- Accommodate public access to public information.

Activities:

- Implement e-mail vault and search technologies.
- Develop user-centered design program for DSHS Internet.
- Develop user-centered design program for DSHS intranet.
- Create strategies for improved data access.
- Evaluate an agency strategy for legally sufficient electronic signature/transaction solution.
- Implement consumer self-service solutions where feasible.
- Pursue e-commerce opportunities and partnerships.

Measures:

- Implementation of technology initiatives as planned.
- Proportion of DSHS internet and intranet using user centered design concepts.
- Number of self-service or e-commerce solutions implemented.

Objective 2: Improve partnerships with other state agencies and business partners

Strategies:

- Enable cross-agency data and service integration.
- Improve access to management information between state agencies.
- Create strategies for improved data access through the use of SOA technologies.
- Partner with DIS and other state agencies to utilize common solutions and services where possible.

Activities:

- Support the State and Federal strategies on electronic medical records.
- Increase utilization of the DSHS Enterprise Service Bus to support external data exchanges and transactions.
- Utilize statewide services and solutions when possible.

Measures:

- Number of data share agreements supported by data exchanges vs. system access.
- Reduction in the number of newly developed interfaces with external partners.
- Number of 903 consultations completed and resulting in use of enterprise services/solutions.

DSHS IT Goal D: Value and develop employees

Objective: Develop and retain high quality IT leaders.

Strategies:

- Document IT Succession plans within all program areas.
- Promote IT management training opportunities for all levels of IT staff.
- Develop IT skills.
- Enhance recruiting resources.
- Recognize and reward technical leadership.

Activities:

- Determine desired knowledge, skills, abilities and competency areas.

- Establish IT leadership skill set inventory & assess gaps.
- Assess training opportunities relevant to IT leadership skills.
- Explore alternative options for training.
- Provide formal and informal opportunities to learn specific skills.
- Identify alternative recruitment resources.
- Assess options and viability of IT leadership recognition.

Measures:

- IT leadership skill set inventory established and routinely updated.
- IT training assessment completed and gaps identified.
- Number of IT staff completing specific skill training each year.
- Alternative training options identified and utilized.
- IT leadership recognition mechanism established and functioning.
- Alternative recruitment resources identified and utilized.

Performance Assessment

GOVERNMENT MANAGEMENT ACCOUNTABILITY AND PERFORMANCE

DSHS Enterprise IT currently reports on performance measures for:

E-Mail and SPAM Protection

E-mail servers are monitored regularly for the volume of e-mails and spam that comes into the Department. Increases in spam have led to adding more spam filters and investigating alternative tools for blocking spam.

Social Security Numbers Blocked

The department monitors e-mails containing Social Security Numbers (SSNs) that are sent outside of the agency’s Secure E-Mail System. These e-mails are intercepted and returned to the sender. Managers can access information on these attempts to counsel staff and take steps to ensure proper procedures are followed.

Secure E-Mail System

The department monitors the volume of encrypted e-mails that are sent through the agency’s Secure E-Mail System each month. Volume indicates usage and whether more communication or training is needed for staff to use this system.

Project Management

The department tracks the management of Level 2 & 3 projects (and other projects of enterprise interest) in the areas of scope, schedule, budget, funding, and project management documentation. Such tracking allows the department to identify, discuss and mitigate project stresses.

Software Implementation

The department tracks the implementation of commonly used software upgrades. The department is currently tracking progress of the move from Internet Explorer 6.0 to Internet Explorer 7.0 and from Office 2003 to Office 2007.

Additional measures will be identified based on the FY09 Tactical Plan.

