



State of Montana
Department of Public Health and Human
Services

Agency IT Plan
Fiscal Year 2012-2017

May 2012

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EXECUTIVE SUMMARY

To fulfill our mission to improve and protect the health, well-being, and self-reliance of all Montanans, the Department of Public Health and Human Services (DPHHS) has made significant investments in information technology. Our systems and the data they collect and manage are mission critical for the programs they support. Responsibility for these systems lies within the Technology Services Division (TSD), which is charged with system development and maintenance, procurement, project management, and data center and telecommunications services. These IT services play a vital role in enabling the Department to succeed in its mission.

DPHHS continues its system modernization effort that includes replacing several of the Department's largest systems that have reached end-of-life. These system replacement efforts will put in place the next generation of IT systems. The next generation of DPHHS systems must be built to:

- Improve the integration of services to customers using more than one of the Department's programs.
- Improve the quality, integrity, and reliability of data used to administer the Department's programs and provide benefits to customers.
- Increase the value and lower the risk of the Department's investment in information technology by providing a framework of components and data that can be shared and reused by many systems.
- Implement the appropriate security and confidentiality safeguards for the Department's information systems and data.

Our system modernization efforts will also incorporate enterprise architecture and accompanying technologies such as business rules engine, web services and Service-Oriented Architecture into its plans for replacing its legacy set of human service systems. This enterprise architecture will support the Director's initiative to operate the Department as an "enterprise," rather than a collection of unrelated programs and services. The goal of this initiative is to foster holistic service delivery where programs collaborate and cooperate with each other in meeting the needs of individuals and families. Additionally, it supports department, statewide and national initiatives such as health information technology.

Our IT Plan includes goals and objectives that directly support the Department's strategic goals and objectives and are aligned with the goals in the State IT Plan published by the State CIO. The DPHHS IT Plan supports Department initiatives to enhance the service levels of all its programs by establishing an enterprise-based environment that increases the efficiency of service delivery by facilitating information sharing while maintaining the data, functionality and confidentiality unique to each program. All of the initiatives presented in this plan are designed to ensure that DPHHS is able to accomplish its mission to promote the health and welfare of the citizens of Montana.

SECTION 1: AGENCY ADMINISTRATIVE INFORMATION

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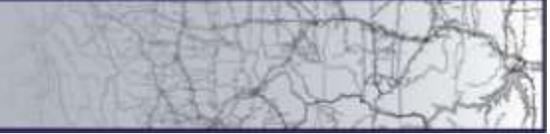
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IT Inventory

The IT inventory database located at <http://mine.mt.gov/enterpriseitinventory> was or will be updated on June 30, 2012. As required by MCA 2-17-524(3)(c) the plan will be updated by June 30th, 2012.

SECTION 2: AGENCY IT MISSION



To implement and improve technology that supports the Department's mission to improve and protect the health, well-being, and self-reliance of all Montanans.

SECTION 3: AGENCY REQUIRED PROGRAMS

Information Security Management (ISM) Program General Description

The Department of Public Health and Human Services (DPHHS) has implemented a department-wide information security management program compliant with §2-15-114, MCA and State Information Technology Systems Division *Information Security Programs* policy with adoption of the National Institute of Standards and Technology (NIST) Special Publication 800 series as guides for establishing appropriate security procedures. This is in alignment with the State of Information Technology Service's direction for an enterprise approach to protect sensitive and critical information being housed and shared on State and/or external/commercial information assets or systems.

As described in NIST SP 800-39, the agency has developed and adopted the Information Risk Management Strategy to guide the agency through information security lifecycle architecture with application of risk management. This structure provides a programmatic approach to reducing the level of risk to an acceptable level, while ensuring legal and regulatory mandates are met in accordance with MCA §2-15-114.

The agency's information security management program is challenged with limited resources; manpower and funding. While alternatives are reviewed and mitigation efforts are implemented the level of acceptable risk is constantly challenged by the ever changing technology and associated risks from growing attacks and social structure changes.

The DPHHS information security management program consists of the following components:

- Roles and Responsibilities defined
- Security Awareness and Training Program
- Security Planning
- Risk Management
- Authorization and Certification

Roles and Responsibilities

DPHHS has created a roles and responsibilities document that defines the security roles throughout the Department. The purpose of this document is to clearly define roles and responsibilities of key participants involved in the risk management process. This roles and responsibilities document complies with NIST SP 800-39. DPHHS further identifies system specific roles within the system specific Security Plan.

Security Awareness and Training Program

DPHHS is in the process of creating a NIST compliant Security Awareness and Training Program. NIST SP 800-50 provides guidance for the Department. Security awareness and training should be focused on the organization's entire user population. The awareness and training program is crucial in that it is the vehicle for communicating security requirements across the Department. DPHHS continues to improve, develop and implement the awareness and training program. Most training is and will be conducted during the month of October which is cyber security month. The program includes:

- Cyber security month training – posters, emails, newsletters, computer pop-ups, etc.
- Newsletters – SITSD provides newsletters throughout the year. DPHHS will develop and implement a process to consistently utilize and disseminate these newsletters.
- New Employee Orientation – information security is part of the DPHHS new employee orientation. DPHHS will review and improve this training.
- Securing the Human – DPHHS is purchasing licenses for this online training. During this biennium DPHHS will determine how to effectively utilize these licenses for training DPHHS staff.

One of the primary information security focuses of the next biennium is to fully implement an awareness and training program. Challenges faced include: determining which modules are mandatory for all staff; defining staff (i.e., is this to include temporary staff?); developing a tracking tool for annual training; determining how to get security awareness and training to employees who have limited access to computers (i.e., direct care staff in institutions).

Security Planning

Using NIST SP 800-18 as a guideline DPHHS has established an Enterprise System Security Plan which presents a plan for securing all DPHHS systems. The Enterprise Security Plan provides an overview of the security requirements for the systems and describes the controls planned for meeting those requirements. This plan also defines the responsibilities and expected behavior of all individuals who access DPHHS systems. A system specific System Security Plan will be written for DPHHS systems as part of the risk management process.

DPHHS uses NIST SP 800-53 and NIST SP 800-53A to select appropriate privacy and security controls for its systems.

The objective of system security planning is to improve protection of information system resources. The purpose of a system security plan is to provide an overview of the security requirements of the system and describe the controls in place or planned for meeting those requirements. The system security plan delineates responsibilities and expected behavior of all individuals who access the system. The System Security Plan should document the structured process of planning adequate, cost-effective security protection for a system. The System Security Plan establishes and documents the security controls and forms the basis for the authorization.

Risk Management

DPHHS utilizes NIST SP 800-39, NIST SP 800-37 and NIST SP 800-30 as guidelines to assist in performing risk management. Risk management is the process of identifying risk, assessing risk and taking steps to reduce risk to an acceptable level. The objective of performing risk management is to enable the Department to accomplish its mission by:

- Better securing the IT systems that store, process, or transmit Department information;
- Enabling management to make well-informed risk management decisions to justify the expenditures that are part of an IT budget; and
- Assisting the management in authorizing (or accrediting) the IT systems on the basis of the supporting documentation resulting from the performance of risk management.

Risk assessment is used to determine the extent of the potential threat and the risk associated with an IT system throughout its SDLC (System Development Life Cycle). This process helps to identify appropriate controls for reducing or eliminating risk during the risk mitigation process.

Risk is a function of the LIKELIHOOD of a given THREAT-SOURCE'S exercising a particular potential VULNERABILITY, and the resulting IMPACT of that adverse event on the Department.

The DPHHS security team assists and facilitates the risk assessment process for the Department but the ultimate responsibility for the assessment lies with the data owners of each system. The Department's risk assessment process fits within available resources and meets federal requirements and the Department's desire to adequately secure DPHHS resources.

The first step of the DPHHS risk assessment process is to complete a System Characterization and Prioritization tool. This tool is intended to assist DPHHS security staff in determining if further risk assessment is necessary on the system. It allows the Department to determine the degree to which an information security program has been implemented for the system. The Department Information Security Officer (ISO) or Chief Information Officer (CIO) use this form to identify general areas of concern and determine what level of risk assessment should be performed on the system.

Based upon the results of the System Characterization and Prioritization tool one of the following further actions will occur:

- No further action required: For systems with an overall security rating of low no further action is required.

- Perform Basic Risk Assessment Checklist: This simple checklist provides a high-level view of standard security practices. General instructions for its use are included in the Checklist's Introduction section. This basic risk assessment tool is used to assess systems with an overall security rating of moderate.
- Perform Advanced Risk Assessment: The Facilitated Risk Analysis Assessment Process (FRAAP) is a process for ensuring that threats are identified, examined and documented. The IT Security Team will facilitate the FRAAP process. In most instances, the Department will conduct a modified FRAAP that utilizes a written threat and vulnerability assessment. A full, in person FRAAP is time consuming for all stakeholders and will only be used if necessary. This advanced risk assessment tool is used to assess with overall security rating of high.

Upon completion of each risk assessment the security team will develop two reports for the department.

- Management Summary Report
 - This report will detail all findings for the Data Owner. The report will assist the Data Owner in determining the criticality of each finding. This report is confidential and only personnel with a need to know are given access to this report.
- Executive Summary Report
 - This report is a high level summary of the full risk assessment report. It gives enough detail for management to understand the level of vulnerability a system may face. This report is not considered confidential and can be viewed by all interested parties.

The data owner, system owner and Department management will respond to any identified risk. Risk response identifies, evaluates, decides on and implements appropriate courses of action to accept, avoid, mitigate, share or transfer risk to organizational operations and assets, individuals, and other organizations resulting from the operation and use of information systems.

Authorization/Certification

Based on all the information from the security planning and risk management the authorizing official must make decisions on whether or not the information systems are initially authorized to operate within the designated environments of operation or continue to receive authorization to operate on an ongoing basis. These ongoing risk-based decisions are informed by the risk management process with guidance from the security team and the various architectural considerations supporting the mission/business processes.

Future Security Program Plans

Over this strategic period we plan to fully implement the Security Awareness and Training Program and the Authorization and Certification process.

Continuity of Operations (COOP) Capability Program General Description

DPHHS has joined with the Department of Administration *Continuity Services* for the development of our agency's Continuity of Operations Capabilities, which will provide the plans and structure to facilitate response and recovery capabilities to ensure the continued performance of the State Essential Functions of Government. This program involves two Blocks of focus; the first is to complete the Business Continuity Plans (BCP) involving two phases, the second Block works on the specific business processes or activity plans such as Emergency Action Plans (EAP), Information System Contingency Plan (ISCP), Communications Plans, Incident Management Plans, and more. DPHHS is currently in the process of entering information into the Living Disaster Recovery Planning System (LDRPS). This program is not a standalone process in that information which is identified and recorded under this structure can and often exists in the Records Management Program and associates with Information Security Management Program requirements.

Integration of these three programs is critical to the confidentiality, integrity, and availability of information, which is associated with each program.

Future COOP Program Plans

Over this strategic period DPHHS will continue to work with the State Information Technology Services Division on completion of the Department's portion of the LDRPS.

SECTION 4: AGENCY IT PLAN – GOALS & OBJECTIVES

Goal Number 1:

IT Goal 1 Use information technology to support and enhance DPHHS program service delivery and increase efficiencies.

Description: Information technology is an essential tool used to support and improve DPHHS program service delivery. The DPHHS will continue to look for ways in which information technology can add value to its business functions. Examples include document management, document imaging, system integration, web-based applications, internet portals, and public/provider access.

Benefits: Increased efficiency and effectiveness in performing DPHHS business functions.

This DPHHS IT goal supports the following State IT Goals:

- Goal 1: Achieve maximum value of information through the active management of information technology.
- Goal 2: Aggressively use technology to extend capabilities that enhance, improve, and streamline service delivery.
- Goal 3: Build an infrastructure / architecture that provides citizens and employees of the state access to information however and whenever they need it.

Supporting Objective/Action

Objective 1-1 Develop, maintain and enhance DPHHS IT systems to meet changing business needs and policies at the State and federal levels

Business Driver: As business needs change and as advancements in technology become available enhancing DPHHS IT systems will enable the programs to meet federal mandates and increase efficiency and effectiveness.

Benefits: Meet State and federal program mandates; meet new program needs; increase efficiency and effectiveness; support data sharing with federal partners.

Risks: Unmet policy mandates could result in non-compliance with State and federal laws with potential monetary penalties and sanctions. Delays in development and enhancement could delay the provision of new services or require manual processes be implemented.

Timeframe: Ongoing

Critical Success Factors: Compliance with State and federal mandates, continued access to federal funding, increased program efficiency (more served and reduced costs).

Supporting Objective/Action

Objective 1-2 Plan to replace legacy systems that have reached end-of-life.

Business Driver: Replacing aging legacy systems with systems that utilize modern IT concepts, tools and techniques, and that are consistent with DPHHS and State direction and standards will increase functionality, increase efficiencies, automate business rules, and reduce costs.

Benefits: Updated technology, increased functionality, reduced maintenance cost, increased interoperability and data sharing, automated business rules, efficiency and effectiveness in performing DPHHS business functions.

Risks: Current legacy systems are difficult and costly to maintain. Legacy technology is two generations

behind current IT trends and tools. Systems are at risk of compromised support in terms of both technical expertise and vendor software support.

Timeframe: 2010-2017

Critical Success Factors: New systems implemented on time and on budget. New systems result in reduced user training, higher service levels, increased accuracy, and reduced cost of maintenance.

Supporting Objective/Action

Objective 1-3 Implement electronic records management at the enterprise level.

Business Driver: Establish the infrastructure and processes (document imaging, storage and retrieval) for electronic records management to create efficient and paperless real-time access to documents in a virtual office environment that crosses physical boundaries.

Benefits: Ensure the efficient and safe retention and access of archived information for the timeframe required based on the type of data stored.

Risks: Archival information is not safely retained and is at risk for loss and not being available as needed.

Timeframe: 2010-2014

Critical Success Factors: Information safely retained for appropriate period. Allow efficient and rapid access to archival information, which results in higher service levels, increased accuracy, and reduced cost of maintenance.

Supporting Objective/Action

Objective 1-4 Design Department systems to allow for GIS functionality.

Business Driver: Incorporating GIS requirements into system replacement projects by designing geo-code ready databases in current and future systems will maximize the ability of DPHHS to provide appropriate, accurate and timely delivery of services essential to the health and welfare of Montana citizens...

Benefits: Increased service levels through geo-spatial reporting and analysis to identify populations and maximize targeted use of benefits and funding. Enhance reporting of problems and outcome measures by region.

Risks: Systems that do not avail themselves to GIS reporting and analysis capabilities will result in missed opportunities to target and measure services and outcomes.

Timeframe: ongoing

Critical Success Factors: Improved outcomes, increased program efficiencies, services and benefits targeted to populations in need.

Supporting Objective/Action

Objective 1-5 Expand use of collaboration tools (WebEx, SharePoint) Department-wide in support of programs and projects.

Business Driver: Implementing collaboration tools internally to support our operation will increase efficiency, decrease staff travel time, increase ability to outreach/train and decrease costs. Internal implementation includes going beyond employee based to include Contractor's and other partners.

Benefits: Decreased service levels through effective sharing of information through oral and written communications that transcend physical and organizational barriers.

Risks: Incomplete, ineffective and redundant information and communications.

Timeframe: Ongoing

Critical Success Factors: Business conducted with decreased travel time.

Supporting Objective/Action

Objective 1-6 Expand eGovernment Services.

Business Driver: Implementing web-based self-service applications will increase access to services, reduce travel costs, and reduce time to process service requests by Department staff.

Benefits: Increase service availability and speed.

Risks: Missed opportunities to serve.

Timeframe: Ongoing

Critical Success Factors: More clients served more quickly.

Supporting Objective/Action

Objective 1-7 Participate in, and provide leadership for, the implementation of Health Information Technology (HIT) statewide.

Business Driver: Health information technology (HIT) makes it possible for health care providers to better manage patient care through secure use and sharing of health information. Health IT includes the use of electronic health records (EHRs) instead of paper medical records to maintain people's health information. The federal Health Information Technology for Economic and Clinical Health (HITECH) Act provides the U.S. Department of Health and Human Services (HHS) the authority to establish programs and funding that assist states in the implementation of HIT.

Benefits: Improved health care quality, safety, and efficiency through the promotion of health information technology (HIT), including electronic health records and private and secure electronic health information exchange.

Risks: Lack of coordination of care, higher medical costs, and lower overall health care quality for patients.

Timeframe: Ongoing

Critical Success Factors: Statewide authorized and secure sharing of health information. Broad implementation and use of electronic health records by providers across the state in a manner that meets "meaningful use" as defined by HHS.

Goal Number 2:

IT Goal 2 Ensure that information technology resources are efficient, responsive, cost-effective and available when needed.

Description: DPHHS must acquire and maintain the adequate number, type, and quality of IT resources needed to support its systems. IT resources including staff, hardware and software tools, must be maintained at the appropriate levels to adequately provide this support. IT resources must be responsive and provide the required availability and redundancy in a cost-effective manner.

Benefits: Increased efficiency, cost-effectiveness, responsiveness, availability and redundancy of IT resources to support DPHHS business functions.

This DPHHS IT goal supports the following State IT Goals:

- Goal 1: Achieve maximum value of information through the active management of information technology.
- Goal 2: Aggressively use technology to extend capabilities that enhance, improve, and streamline service delivery.
- Goal 3: Build an infrastructure / architecture that provides citizens and employees of the state access to information however and whenever they need it.
- Goal 5: Develop and implement an information technology governance structure for delivery of expected benefits.

Supporting Objective/Action

Objective 2-1 Install, maintain and enhance servers, databases, networks, and personal computers in a manner that promotes efficiency, performance and availability.

Business Driver: Upgrading and enhancing the DPHHS infrastructure is necessary for increasing efficiency, decreasing cost, ensuring availability and support DPHHS business functions.

Benefits: Increased efficiency, cost-effectiveness, responsiveness and availability of IT resources to support DPHHS business functions.

Risks: Server and PC hardware, in terms of performance and capacity, does not keep up with program business needs and will not support newer IT technologies and systems.

Timeframe: Ongoing

Critical Success Factors: Server and PC performance meets user expectations. Server and PC performance and disk capacity is available and sufficient for modern web-based systems. Databases support reporting requirements.

Supporting Objective/Action

Objective 2-2 Implement enterprise IT governance.

Business Driver: The alignment of information technology with DPHHS mission, programs, and resources.

Benefits: Information technology that provides maximum value to the agency by enabling and supporting services to citizens through measured performance, properly allocated resources, and the reduction and mitigation of risk.

Risks: Inappropriately allocated resources (funds, assets, and people), increased risks, and inadequate program support and service delivery.

Timeframe: Ongoing

Critical Success Factors: IT that focuses on agency mission, promotes efficient service delivery, maximizes use of resources, reduces cost, and provides high-performance systems and platforms.

Supporting Objective/Action

Objective 2-3 Hire, train and retain a skilled IT workforce at appropriate levels.

Business Driver: A skilled IT workforce is necessary to adequately meet all the other goals and objectives within this IT plan.

Benefits: Increased efficiency, cost-effectiveness, responsiveness and availability of IT resources to support DPHHS business functions.

Risks: Reduced IT services levels for the support, maintenance and development of IT systems critical to DPHHS operations.

Timeframe: Ongoing

Critical success factors: Increased productivity; decreased turnover; maintain and evolve skills needed to develop and support Department systems.

Supporting Objective/Action

Objective 2-4 Create and implement efficient IT infrastructure that includes virtual technology and makes use of the state's centralized data center resources.

Business Driver: Efficient, shared, and cost-effective use of IT assets and infrastructure.

Benefits: Reduction in servers, energy consumption, and other resources needed to host and operate IT systems and platforms.

Risks: Higher cost systems, greater energy consumption, and redundant and inefficient use of hardware and resources.

Timeframe: Ongoing.

Critical Success Factors: Lower cost of IT by maximizing use of the department's and state resources.

Supporting Objective/Action

Objective 2-5 Continue to create project management tools, templates and processes to be used across agency wide projects.

Business Driver: Creating project management tools and templates based on the Project Management Institute's Project Management Body of Knowledge (PMBOK) will result in lower risk and better communications on IT projects.

Benefits: Planned and managed IT projects that meet customer expectations and are on-time and on-budget. Lower risk and better communications.

Risks: Projects without adequate project management are at high risk of failure, cost and schedule over-runs.

Timeframe: ongoing

Critical Success Factors: Successful projects, on-time and on-budget that meet customer expectations.

Supporting Objective/Action

Objective 2-6 Provide consistent and integrated management of all IT resources within the agency.

Business Driver: Efficient, cost-effective, and well-managed use of IT resources across the agency, including PCs, printers, IT staff.

Benefits: Consistent oversight and management of IT resources in a manner that eliminates redundancies and maximizes staff and equipment, and which is planned and administered by qualified IT staff working in coordination with agency divisions, programs, and with SITSD.

Risks: Resources that are not managed effectively or consistently or aligned with state and agency IT practices, standards, policies, and strategic initiatives.

Timeframe: Ongoing.

Critical Success Factors: Consistent management of IT resources that results in the efficient and appropriate purchase, development and maintenance of systems and IT equipment across the agency.

Goal Number 3:

IT Goal 3 Implement a modern enterprise architecture that supports interoperability and sharing of data and functionality.

Description: Create an Enterprise Architecture plan that leverages State (Conceptual Architecture Plan) and federal (Medicaid Information Technology Architecture) guidelines and initiatives will allow systems to maximize their functionality and increase efficiencies and effectiveness.

Benefits: Increase the value of the Department's investment in information technology by defining an Enterprise Architecture that allows systems to maximize their function and data through re-use and sharing.

This DPHHS IT goal supports the following State IT Goals:

- Goal 1: Achieve maximum value of information through the active management of information technology.
- Goal 2: Aggressively use technology to extend capabilities that enhance, improve, and streamline

service delivery.

- Goal 3: Build an infrastructure / architecture that provides citizens and employees of the state access to information however and whenever they need it.
- Goal 4: Enhance the reliability and security of the state's information systems.

Supporting Objective/Action

Objective 3-1 Implement new systems that align with Service Oriented Architecture.

Business Driver: Service Oriented Architecture framework allows services and data to be shared between systems which will ensure appropriate, accurate and timely delivery of services essential to the health and welfare of Montana citizens.

Benefits: Increase the value of the Department's investment in information technology by providing a framework of services that can be shared and reused by multiple systems. Minimize redundant capture and promote sharing and reuse of data.

Risks: New systems without service orientation will be more difficult to integrate and will exist as silos.

Timeframe: 2010-2017

Critical Success Factors: New systems are able to share functionality and information.

Supporting Objective/Action

Objective 3-2 Implement an Enterprise Service Bus.

Business Driver: Implementing Enterprise Service Bus software that allows for message exchange between services in a Service Oriented Architecture environment ensures appropriate, accurate and timely delivery of services essential to the health and welfare of Montana citizens.

Benefits: Increase the value of the Department's investment in information technology by providing a messaging framework that allows services to communicate between systems. Minimize redundant capture and promote sharing and reuse of data.

Risks: Without an ESB, it will be difficult and costly to provide the messaging required between services and across platforms.

Timeframe: 2010-2013

Critical Success Factors: Systems exposing and accessing services and information via the ESB.

Supporting Objective/Action

Objective 3-3 Implement sets (libraries) of functions (web services) that support common enterprise needs.

Business Driver: Common application functions/services (e.g. fiscal services, client index services) that are available to and leveraged by agency IT applications, both purchased and developed.

Benefits: Reuse of common services prevents duplication of effort and promotes consistency and standardization of enterprise functionality between agency applications.

Risks: Increased costs for development and inconsistent application of enterprise functionality.

Timeframe: Ongoing.

Critical Success Factors: Reduced cost of system development and standardized processing through the reuse of enterprise web services.

Goal Number 4:

IT Goal 4 Develop and Implement a National Institutes of Standards and Technology (NIST) Based Security Program

Description: DPHHS systems and data are a critical and valuable resource that is required for the continued success of program business functions. Access to this data and these systems must be appropriate, allowing access only for those with a legitimate need-to-know. Data must be available but protected from both deliberate and accidental theft or destruction

Benefits: Ensure the confidentiality, integrity and availability of DPHHS data allows DPHHS to provide services to Montana citizens.

This DPHHS IT goal supports the following State IT Goals:

- Goal 1: Achieve maximum value of information through the active management of information technology.
- Goal 4: Enhance the reliability and security of the state's information systems.

Supporting Objective/Action

Objective 4-1 Ensure security of DPHHS data.

Business Driver: Increasing security of DPHHS data will result in decreased cost, increased public trust, increased public safety, decreased legal risk and increased compliance with federal rules and regulations.

Benefits: Protection of IT assets and sensitive and confidential information on individuals and families.

Risks: Loss of security of data places DPHHS at legal risk and increases.

Timeframe: Ongoing

Critical Success Factors: All DPHHS systems with sensitive and confidential data on individuals must require authentication. No breaches of confidentiality. No access allowed to unauthorized users.

Supporting Objective/Action

Objective 4-2 Ensure privacy of DPHHS data.

Business Driver: Increasing privacy of DPHHS data will result in decreased cost, increased public trust, increased public safety, decreased legal risk and increased compliance with federal rules and regulations.

Benefits: Protection of sensitive and confidential information on individuals and families.

Risks: Loss of confidentiality could comprise the safety and service of individuals. Loss of confidentiality places DPHHS at legal risk.

Timeframe: Ongoing

Critical Success Factors: All systems with confidential data on individuals must require authentication. No breaches of confidentiality. No access allowed to unauthorized users.

Supporting Objective/Action

Objective 4-3 Ensure availability of DPHHS systems.

Business Driver: Ensuring the availability of DPHHS data by implementing backup, recovery and failover procedures will result in decreased cost, increased public trust, increased public safety, decreased legal risk and increased compliance with federal rules and regulations.

Benefits: Uninterrupted operations of systems critical to program operations.

Risks: Loss of operations will comprise the time-sensitive delivery of services essential to the health and

welfare of Montana citizens.

Timeframe: Ongoing

Critical Success Factors: Critical systems are available 99% of operational hours.

Supporting Objective/Action

Objective 4-4 Ensure integrity of DPHHS data.

Business Driver: Ensuring the integrity of DPHHS data is necessary for the appropriate, accurate and timely delivery of services essential to the health and welfare of Montana citizens.

Benefits: Ensure data required for program service delivery, reporting and decision support is accurate, timely, and complete.

Risks: Loss of integrity will comprise the appropriate, accurate and timely delivery of services essential to the health and welfare of Montana citizens.

Timeframe: Ongoing

Critical Success Factors: Accuracy of data meets acceptable State and federal program standards.

SECTION 5: IT INITIATIVES (FY2012 – FY 2017)

PROGRAM AND PROJECT SPECIFIC INITIATIVES:

Initiative 1 *MMIS Replacement*

Description: Montana's current MMIS system is mainframe CICS/VSAM and utilizes COBOL legacy language that has been in operation since 1985. The system was previously updated in 1997 and certified by CMS in 1998. Due to the old technology and data integrity of our existing system, the Department finds it necessary to update the current MMIS with a system using the most current technology in order to increase the accuracy and timeliness of processing claims. This system processes claims for Medicaid, Children's Health Insurance Plan (CHIP) and Mental Health Services Plan (MHSP).

MBARS EPP Number: NA MBARS IT Number:

Initiative 2 *TANF Eligibility System Replacement (CHIMES-TANF)*

Description: The Temporary Assistance for Needy Families (TANF) eligibility system project will replace the TANF component of The Economic Assistance Management system (TEAMS), a mainframe-based system currently used in the eligibility determination, benefit distribution and program administration for the Supplemental Nutrition Assistance Program (SNAP) and TANF programs. In the face of ever growing federal changes to the TANF program, increased requirements for safeguarding security and confidentiality, and aging technology, it is no longer cost-effective to attempt to meet future business needs with TEAMS enhancements.

MBARS EPP Number: NA MBARS IT Number:

Initiative 3 *Supplemental Nutrition Assistance Plan (SNAP) Eligibility System Replacement (CHIMES-SNAP)*

Description: The SNAP eligibility system project will replace the SNAP (previously food stamps) component of The Economic Assistance Management system (TEAMS), a mainframe-based system currently used in the eligibility determination, benefit distribution and program administration for the SNAP and TANF programs. In the face of ever growing federal changes to the SNAP program, increased requirements for safeguarding security and confidentiality, and aging technology, it is no longer cost-effective to attempt to meet future business needs with TEAMS enhancements.

MBARS EPP Number: NA MBARS IT Number:

Initiative 4 *Medicaid/HMK Maintenance and Operations*

Description: HMK requirements and functionality were integrated with the CHIMES-Medicaid system in 2011. Enhancements and maintenance will be managed by the Technology Services Division (TSD) through a contract with an outside vendor.

MBARS EPP Number: NA MBARS IT Number:

Initiative 5 *Child and Adult Protective Services (CAPS)/Statewide Automated Child Welfare Information System (SACWIS) Federal Compliance*

Description: With the delay of the SACWIS replacement build there will need to be several enhancements to the CAPS system. These enhancements are necessary to be compliant with federal regulations.

MBARS EPP Number: NA MBARS IT Number:

Initiative 6 ***Shared Fiscal Services Layer (SFSL) Implementation and Maintenance and Operations***

Description: SFSL transforms fiscal business processes into a library of shared fiscal services. These shared services will replace and centralize the functionality housed in separate systems. CHIMES-TANF and CHIMES-SNAP will use the shared fiscal services layer (SFSL) for all fiscal processing and fiscal-related interfaces. Other systems will use the SFSL in the future, as they are enhanced or replaced.

MBARS EPP Number: NA MBARS IT Number:

Initiative 7 ***Medicaid Management Information System (MMIS) Fiscal Agent Contract***

Description: The Department contracts with ACS (Affiliated Computer Systems) to maintain and update our MMIS and run our fiscal agent operations.

MBARS EPP Number: NA MBARS IT Number:

Initiative 8 ***The System for Enforcement and Recovery of Child Support (SEARCHS) Maintenance and Operations***

Description: The system for Enforcement and Recovery of Child Support (SEARCHS), the State's current Child Support System, is used in the enforcement and recovery of child support, financial accounting, payments, and reporting. Enhancements and maintenance of the SEARCHS system is managed by the Technology Services Division (TSD) through a contract with an outside vendor.

MBARS EPP Number: NA MBARS IT Number:

Initiative 9 ***Central Database System (CDS)/ Homeless Management Information System (HMIS) Maintenance and Operations***

Description: The Central Database System (CDS) is used in support of the Human Resource Development Councils in the delivery of services to low-income residents of Montana in the critical areas of LIEAP heat assistance, Weatherization, Energy Share, Community Service Block grant programs and many other programs. The Homeless Management Information System (HMIS) is used by Montana service providers such as Emergency Shelters, Transitional Housing and Permanent Supportive Housing so they may have the opportunity of utilizing a Management Information System to track client information and report progress. This includes replacing the 20+ year old commodities system.

MBARS EPP Number: NA MBARS IT Number:

Initiative 10 ***Affordable Care Act (ACA) Implementation***

Description: The Department needs to enhance its Medicaid eligibility system with newer technology to ensure it is ready to support a Health Insurance Exchange and other changes to Medicaid and Children's Health Insurance Program eligibility required by the ACA. The integrated its CHIP eligibility system into the CHIMES Medicaid system. This integrated system, CHIMES Medicaid HMK, is a highly coordinated set of eligibility systems connected through a shared enterprise architecture. This modernized, modular and flexible approach will allow

Montana to implement ACA requirements and better meet the needs of the State and its clients.

MBARS EPP Number: NA MBARS IT Number:

Initiative 11 ***CAPS/Operation Protect Montana (OPM) Maintenance and Operations***

Description: The Child and Adult Protective Services (CAPS) system supports case management for child protective services, services to juvenile probation and parole, payments, and licensing activities. It is used to monitor, track and make provider and beneficiary payments for Child and Adult protective services, including foster care, subsidized adoption, and elder abuse. Operation Protect Montana (OPM) supports case management for Senior Long Term Care Division (SLTC)/Adult Protective Services (APS). Enhancements and maintenance of the CAPS and OPM systems is managed by the Technology Services Division (TSD) through a contract with an outside provider.

MBARS EPP Number: NA MBARS IT Number:

Initiative 12 ***Child Care Under the Big Sky (CCUBS) Maintenance and Operations***

Description: Child Care Under the Big Sky (CCUBS) supports Montana's child care program. Primary functions include child care licensing, provider inspection, family eligibility determination for subsidy & payment processes, and quality improvement program contract management. CCUBS interfaces with TEAMS, CAPS, CDS and the MSU Practitioner Registry. Enhancements and maintenance of the CCUBS system is managed by the Technology Services Division (TSD) through a contract with an outside provider.

MBARS EPP Number: NA MBARS IT Number:

Initiative 13 ***Immunization Registry Maintenance and Operations***

Description: The Immunization Registry replaced the Public Health Database System (PHDS) and the Web-based Immunization Registry Database (WIZRD). The registry is a statewide National Vaccine Advisory Committee compliant registry. Maintenance and operations of the Registry is managed by the Technology Services Division (TSD) through a contract with an outside provider.

MBARS EPP Number: NA MBARS IT Number:

Initiative 14 ***Electronic Benefits Transfer (EBT) Outsourcing***

Description: The SNAP and TANF programs have been using a state administered EBT for many years. Two independent EBT planning projects supported the state moving to an out-sourced EBT for SNAP, TANF, WIC and possibly other programs in the future. The Department will move towards this solution.

MBARS EPP Number: NA MBARS IT Number:

Initiative 15 ***Montana Access (EBT) Maintenance and Operations***

Description: Electronic Benefits Transfer (EBT), aka Montana Access, is used to electronically disburse SNAP benefits and Temporary Assistance for Needy Families (TANF) cash payments. It is also used for electronic reimbursement of retailers and financial institutions. Enhancements and maintenance of the EBT system is managed by the Technology Services Division (TSD) through a contract with an outside provider. This in-house administered system will be replaced by an outsourced contract.

MBARS EPP Number: NA MBARS IT Number:

Initiative 16 ***DDP Subsystem Maintenance and Operations***

Description: Maintenance and support of the Developmental Disabilities Program (DDP) AWACS subsystem is managed by the Technology Services Division (TSD) through a contract with an outside vendor.

MBARS EPP Number: NA MBARS IT Number:

Initiative 17 ***Vocational Rehabilitation Case Management***

Description: The Disability Transitions Program (DTP) requires a new and modern vocational rehabilitation case management system to replace the current legacy system, currently maintained as a sub-system of AWACS. DTP requires a modern web-based system that is ADA compliant and designed for the efficient management of service-based assistance cases from initial referral to closure. The system will provide remote and mobile access, configurability, and be interoperable with the agency and state enterprise systems.

MBARS EPP Number: NA MBARS IT Number:

Initiative 18 ***Big Sky Rx Maintenance and Operations***

Description: Big Sky Rx supports Montana's program to help pay monthly premiums for people with Medicare prescription drug coverage. Enhancements and maintenance of the Big Sky Rx system is managed by the Technology Services Division (TSD) through a contract with an outside vendor.

MBARS EPP Number: NA MBARS IT Number:

Initiative 19 ***FTE Requests for Information Systems Bureau***

Description: This request is made to maintain existing services for the programming and maintenance of the National Electronic Disease Surveillance System in the Information Systems Bureau in the Technology Services Division being currently performed by an incumbent in a modified FTE.

MBARS EPP Number: NA MBARS IT Number:

Initiative 20 ***FTE Requests for Project Management Bureau***

Description: This request is made to maintain existing services for the TANF and SNAP systems maintenance and operations in the TSD currently being provided by incumbents in modified FTE.

MBARS EPP Number: NA MBARS IT Number:

Initiative 21 ***Evaluate and Implement Modern, Certified Electronic Health Records (EHR) for Department Facilities***

Description: The Department is subject to the federal electronic health care information requirements and is in need of significant improvements in their electronic health care environment. In order to come into conformance with the necessary standards, to achieve to the extent that may be available any incentive payments and to realize substantive improvements in the provision of health care services the Department will obtain credible assessments of the EHR information needs for the services delivered through the institutions.

MBARS EPP Number: NA MBARS IT Number:

Initiative 22 ***The Economic Assistance Management Systems (TEAMS)
Maintenance and Archive***

Description: The TEAMS system is used for eligibility determination and benefits issuance for the SNAP and TANF programs. The new SNAP and TANF systems will go live in the fall of 2012. Upon implementation of those new systems TEAMS will go into archival mode. The Department is required to maintain archived records for a number of years. This system is managed by the Technology Services Division through a contract with an outside vendor.

MBARS EPP Number: NA MBARS IT Number:

DEPARTMENT STRATEGIC INITIATIVES:

The following initiatives do not currently meet the criteria established for inclusion as initiatives. However, they are strategic initiatives for the Department.

Initiative 1 ***Improve Department Website***

Description: Reviewing the current website, determining Department needs and analyzing the options will help the Department create a website that is easy for consumers to use and helps the Department achieve its mission

Initiative 2 ***Social Networking***

Description: Some programs would benefit greatly by using social networking. These technologies will allow the Department to better meet its mission by communicating to citizens in ways that increase the Department's reach.

Initiative 3 ***Human Resources Database and Tracking System***

Description: The Human Resources Office has increased needs for a system(s) that will allow them to track, analyze and report different data sets. The TSD will work with HR to determine their needs and implement a system (or systems) that will assist them.

Initiative 4 ***Modernize Agency Wide Accounting Client System (AWACS)
Subsystems***

Description: The AWACS system has many subsystems that are critical to the Department. Each subsystem on its own does not meet the criteria to be included as an initiative. These subsystems include ISERV, ISERVT, Contracts, and PERQS

Initiative 5 ***Implement Business Intelligence Tools***

Description: DPHHS wishes to implement an enterprise business analytics tool that includes business intelligence, data integration and data mining capabilities – providing rapid decision support for senior management and program evaluation. Business intelligence tools will enable agency users to intuitively access, discover and analyze data to enable information-driven decisions that increase program performance and service delivery.

Initiative 6 ***Health Information and Technology (HIT) Implementation and
Support***

Description: The Department will provide technical consulting services to identify needs of critical access hospitals and to support implementation of HIT, including electronic health records, health information exchanges, and connectivity issues related to linking facilities, IT security and HIPAA compliance. Emphasis will be placed on assistance and training for achieving meaningful use requirements as defined

by the Office of the National Coordinator for HIT and CMS, and to explore feasibility of sharing HIT infrastructure and staff. The HIT consultant will also coordinate and integrate efforts with DPHHS State Medicaid Health Information Technology Plan, HealthShare Montana (Montana's State Designated Entity for HIE), Mountain Pacific Quality Health (regional extension center for development of HIT), and MHA HIT Task Force.

Initiative 7 *Evaluate and Implement Electronic Document Management System for Department Facilities*

Description: Department facilities would benefit from document imaging which would allow them to create an efficient paperless office. Any DMS solution should include consideration of the Department's DMS capabilities and determine if an enterprise wide solution is possible.

Initiative 8 *Upgrade and Enhance State Laboratory Systems*

Description: The DPHHS Laboratory Services Bureau uses three data systems to provide clinical and environmental testing services and billing for those services. Electronic laboratory reporting, where testing results are automatically reported to the submitters' data system, will be required in the near future. The current data systems will need to be upgraded to meet this requirement.

Initiative 9 *e-Discovery Capabilities*

Description: DPHHS is faced with increasing FOIA and legal requests for information. The increasing amount of electronically sent and stored information presents a significant challenge in the search and retrieval of correspondence and documents that are subject to these requests. To address these challenges, the Department requires e-Discovery software that has enterprise capabilities and reduces the time and effort to respond to information requests.

Initiative 10 *CAPS Replacement*

Description: The Montana Automated Child Welfare Information System (MACWIS) project will replace Child and Adult Protective Services system (CAPS), the State's current SACWIS application. CAPS is a mainframe-based system used in the monitoring of foster care cases, adoption cases, provider contracts and licensing, financial accounting, payments for services to providers and reporting. In the face of ever growing federal changes to Child and Adult Protective Services, increased requirements for safeguarding security and confidentiality, and aging technology, it is no longer cost-effective to attempt to meet future business needs with CAPS enhancements. Implementation of this replacement has been delayed.

Initiative 11 *TPL Case Management System/Database*

Description: This system will replace a Microsoft Access database that does not have the capabilities to store and organize the many types of data necessary for case management of Third Party Liability cases that ultimately return monies to the state.

Initiative 12 *TPL Data Matching System*

Description: This system will have connections to health insurers' data systems that will provide better data on third party resources owned by clients whose medical costs were originally paid by Medicaid.

Initiative 13 *System for Enforcement and Recovery of Child Support (SEARCHS) Replacement Planning.*

Description: The System for Enforcement and Recovery of Child Support (SEARCHS) is the State's current Child Support System. SEARCHS is a mainframe-based system used in the enforcement and recovery of child support, financial accounting, payments, and reporting. In the face of ever growing federal changes and aging technology, it is no longer cost-effective to enhance and maintain the current system. The State anticipates conducting a feasibility study for replacing the legacy system.

Initiative 14 ***QAD Licensing Bureau Health Care Facilities Database***

Description: This system will replace a Microsoft Access database with more capabilities to gather, store and retrieve data and create the efficiencies for provider application/renewal submission.

Initiative 15 ***Open Scan Update***

Description: The Montana Child Support Enforcement Division (CSED) is required by 42 USC 654b to operate a State disbursement unit for the collection and disbursement of child support payments. Further, the CSED must use automated procedures, electronic processes, and computer-driven technology to the maximum extent feasible, efficient and economical, for the collection and disbursement of support payments, including: receipt of payments from parents, employers, and other States, and for disbursement to custodial parents and other obligees, the State agency and other states; accurate identification of payments; ensure prompt disbursement of the custodial parent's share; distribute payments within 2 business days after receipt; and an audit trail to track funds through the entire process and the system must be able to interface with various accounting systems for batch processing of payments. The current Open Scan system resides on outdated equipment and must be updated so that a current and supported version of the software may be implemented.

SECTION 6: ENTERPRISE ALIGNMENT

Communities of Interest Participation

DPHHS will be involved in many communities of interest. The services provided by DPHHS touch a majority of Montanans and their communities. DPHHS provides services for protecting the health and economic security of all Montanans and providing Montana citizens with essential services. Accordingly, DPHHS intersects with all of the following communities of interest, crossing public and private boundaries.

- Government Services
- Public Safety
- Human Resources
- Environmental
- Education
- Economic
- Cultural Affairs
- Finance

SECTION 7: PLANNED AGENCY IT EXPENDITURES

<u>Expense Category</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>
Personal Services	6,160,619	6,739,238	6,840,327	6,942,932	7,047,076	7,152,782
Operating Expenses	12,636,555	11,826,985	13,122,511	13,220,051	13,493,141	13,432,882
Initiatives	44,549,907	52,932,566	61,888,166	47,252,381	40,932,702	33,585,390
Other expenditures	0	0	0	0	0	0
Totals	63,347,082	71,498,788	81,851,004	67,415,364	61,472,919	54,171,054

SECTION 8: ADDITIONAL INFORMATION - OPTIONAL

DPHHS is required to submit Advanced Planning Documents (APD) to our Federal Partners. The APD process is a series of successive steps through which State agencies obtain Federal prior approval of and Federal financial participation (FFP) in IT system projects. The APD process includes the following:

Planning Advanced Planning Documents (PAPD) requests funding for planning activities; specifies the nature of the IT system project; investigates the feasibility, system alternatives, requirements, and resources needed to move forward with the system development.

Implementation Advanced Planning Documents (IAPD) addresses system analysis, design, development, integration, testing and deployment; completes the planning phase; requests funding for enhancements to ongoing operations; and obtains approval to conduct implementation activities.

Annual Advanced Planning Document Updates (APDU) can be planning or implementation. Is an update to an ongoing project and is required annually when planning or implementation activities occur for more than one year.

Advanced Planning Document Updates , As-Needed (APDU As-Needed) can be planning or implementation. An APDU As-Needed may be needed for unexpected project changes that significantly affect project cost and outcomes.

Each federal agency has slightly different criteria for APDs. DPHHS must submit the APDs to the Federal partners to obtain, or maintain, FFP. In addition to the APDs the APD process also requires federal partner approval of Requests for Proposal (RFPs), contracts and contract amendments.

The expected APDs for the next biennium include:

- CHIMES-SNAP annual APDU
- Affordable Care Act annual APDU
- EBT IAPD
- CHIMES-Medicaid as needed APDU
- SEARCHS annual APDU
- CAPS annual APDU
- MACWIS as needed APDU
- MMIS annual APDU
- HIT annual APDU

The Department is moving away from monolithic and outdated legacy systems toward its vision of web-based, people-friendly, and interoperable systems that are capable of meeting and exceeding program needs. Enterprise architecture is the centerpiece of this shift from the present to the future. The architecture will allow separate, standalone systems to communicate using exposed, shared services through a common architecture. Users will be able to access data from multiple systems seamlessly, and errors associated with redundant data entry will be reduced. Enterprise architecture will reshape the way the Department serves Montanans and does business going into the future.

The Department intends to employ a Service Oriented Architecture (SOA) for system interoperability that will take advantage of COTS products and allow for the reuse of system components across business functions as services.

Service oriented architecture is an approach to loosely coupled, protocol independent, standards-based distributed computing where software resources expose their functionality as services and are available on the network. The Department will implement standards-based interoperability that makes use of multiple industry standards, including HL7 (V 3), XML, XSLT, WS-I, WSDL, SOAP1.1 or 2.0, UDDI and WS-BPEL. The Department current and future system replacement projects will be directed to align with these standards.

The Department also plans to collect and store data from multiple systems for the purpose of decision support. The Department envisions an enterprise data warehouse that will allow data mining and analytics is essential in the assessment of program performance and efficacy, particularly for evaluating the impact and correlation of services from multiple programs and agencies over time as it affects a single client or a population. Accordingly, internally and externally hosted systems should have the capability to transmit data to a data warehouse and other databases within the Department. It is expected that this transmission capability would use an extraction, transformation, and loading (ETL) process that is standardized, flexible and customizable.

Finally, for future healthcare systems, the Department advocates the Medicaid Information Technology Architecture (MITA) principles associated with high-quality software systems (e.g., scalability, adaptability, secure ability, availability, manageability, and interoperability) as the basis for the system architecture. To this end, the Department is replacing its Medicaid Management Information System (MMIS) with one that is fully aligned with the MITA standard. The Department intends to adhere to the MITA roadmap for controlled and strategic transformation for all Medicaid programs and systems.