

States were evaluated on the number and type of online services offered. Features were defined as services only if the *entire* transaction could occur online. Searchable databases counted only if they involved accessing information that resulted in a specific government service. Services requiring "non-routine" user fees or payments were not included as general public-access services.

### **IT Structure**

In January 2003, Gartner conducted a study among the 50 states as to their approaches to managing information technology. The study indicated that the IT organizational structure is a major variable determining IT success. According to the study, the lack of an enterprise view reduces the likelihood of economies-of-scale in the procurement process, requires support for multiple data centers and networks, diminishes the likelihood of customer-centric applications, and promotes agency-centric applications.

In an article entitled *Predicts 2005: Government Ramps Up IT*, published in November, 2004, Gartner predicts that by 2006, 35 percent of all government jurisdictions with decentralized or federated IT governance styles will vest greater authority and accountability in the CIO and central IT organization. Michigan, North Dakota, South Dakota, and Virginia are a few states that have moved to a more centralized IT organizational structure. Gartner finds a trend towards consolidation of certain core IT services such as e-mail administration, file and print server administration, directory services, database administration, storage, web site hosting, and application server and hosting services.

The Center for Digital Government found the top 10 ranked states had IT structures that were between 'balanced' and 'centralized'; the profile of the 40 remaining states was skewed to decentralization.

When the Montana Information Technology Act created the CIO's office, Montana took the first step toward a more centralized IT organizational structure. Thus far, Montana has not evaluated or used server consolidation, resource sharing, or centralization of IT operations.

## **MITA Implementation**

### **Duties and Responsibilities**

The Montana Information Technology Act of 2001 (MITA) specifies that the Department of Administration is responsible for carrying out the planning and program responsibilities for information technology for state government. In the three years since the enactment of this legislation, the Information Technology Services Division (ITSD) of the Department of Administration has made progress towards implementing the requirements specified by the Act.

- **IT Strategic Planning**

Since the passage of MITA, ITSD has produced and published two Strategic Plans for Information Technology: one for FY 04-05 and one for FY 06-07. These plans were produced with the input and collaboration of various governing

bodies, in particular, the Information Technology Board (ITB) and the Information Technology Managers Council (ITMC).

Each biennium, ITSD is responsible for preparing a report on the State's IT infrastructure and progress on the State's strategic plan for IT. The first biennial report was published in May 2002. This document is the second report.

- **Establish and enforce statewide IT policies and standards**

ITSD's Policy and Planning Services Bureau reviews and approves agency IT plans and IT procurements to assure that they comply with policies and standards and conform to the strategic direction of the State.

- **Information Technology Board (ITB)**

MITA created an Information Technology Board to advise on IT activities across the State. The Board is composed of representatives from the Legislature, Judicial branch, Executive branch, agencies, local government, education, and the private sector. The Board held its first meeting in September 2001 and meets about 6 times a year.

- **Review and approve agency IT plans**

During the spring of 2002 and 2004, ITSD/PPSB reviewed and approved agency IT plans to assure that they complied with the statewide IT plan. Copies of these plans are posted on the ITSD web site.

- **IT procurement reviews**

Created immediately after the passage of MITA, the Policy and Planning Services Bureau (PPSB) has the responsibility for reviewing all IT procurements by executive branch agencies. Procurement reviews have grown from 303 in fiscal year 2002 to over 850 in fiscal year 2004. This growth in procurement reviews is due to the fact that many more agencies are complying with the provisions of the MITA, not growth in IT spending. ITSD reviews each agency's IT procurements for compliance with the State IT plan, the agency's IT plan, and state standards. ITSD has established a procedure for granting exceptions to any policy, standard, or other requirement if it is in the best interest of the state of Montana.

- **Central computer center**

ITSD operates and maintains a central computer center for the use of state government, political subdivisions, and other participating entities under terms and conditions established by the department. Details on the data center can be found under "Data Center," page 16.

- **State-wide telecommunication network**

ITSD operates and maintains SummitNet II, a statewide telecommunications network for the use of state government. Details on the network can be found in "Telecommunications Network," page 18.

- **Coordinate public safety communications**

ITSD's Public Safety Services Bureau manages statewide planning of public safety communications and provides staff support for the Montana Public Safety Communications Council.

- **Management of the E-9-1-1 program**

ITSD's Public Safety Services Bureau manages the State's E-9-1-1 program and provides staff support to the E-9-1-1 Advisory Council.

## MITA Policies

MITA created the office of the CIO, the Information Technology Board (ITB), and entrusted DOA with a new set of oversight responsibilities for IT procurements and strategic planning. These actions were aimed at accomplishing specific policies from MITA quoted below:

1. *"Development of IT resources in the State must be conducted in an organized, deliberative, and cost effective manner"*
2. *"Establish statewide IT policies, standards, procedures, and guidelines"*
3. *"Common data is entered once and shared among agencies"*
4. *"Minimize unwarranted duplication"*

While Montana has made excellent progress in structuring the office of the CIO, organizing the ITB, and conducting strategic planning, progress towards realizing of these four major policy mandates has been slow at best. A status of each follows:

1. *"Development of IT resources in the State must be conducted in an organized, deliberative, and cost effective manner."*

The identification, prioritization, and business justification of IT projects is frequently not an organized process. While a few agencies have created IT governance boards, most agencies do not have a formalized internal IT governance structure and process. These internal boards are a major step forward in organizing management insight into IT projects. In many instances, individual agency management does not require a comprehensive business and technical analysis of proposed IT projects prior to submittal to ITSD for review. A business case justification that examines alternatives, risks, and life cycle costs, and implementation planning is missing from almost all IT projects and acquisitions. Frequently, any analysis that is conducted is primarily from the agency perspective. The overall needs of the State are not adequately considered.

2. *"Establish statewide IT policies, standards, procedures, and guidelines."*

Montana uses a wide variety of hardware, software, and services to run its IT operations. The inexpensive hardware of the 1990's fueled the proliferation of hundreds of smaller servers. Decentralization of the IT infrastructure blossomed and with it came a wide variety in software and hardware. Standards and policies are in place but have not fully contained or reversed this trend. When a

new hardware or software standard is adopted, agencies often do not see an advantage to migrate their non-standard products to the new standard. The costs (staff training, new licenses, etc.) of migrating to the standard are often not balanced by benefits to the agency. While it is true that the State benefits from common-skilled staff and the ability to share systems, these advantages are not part of the agencies' evaluations. What results is a wide variety of IT systems and tools, all requiring their own maintenance and support.

The objective of 100% compliance with common standards is not obtainable, or even desirable. It is impossible for the State to choose standards that are best of breed for every single agency application and system. For this reason, an exception process was designed to allow for these differences. Too often, however, the exception request is based on technical features and preferences that have no impact on the agency's business operation.

Montana's IT infrastructure is still extremely diverse, and we have not made significant progress in reducing the diversity. Even the simple step of developing a common look and feel for the State's web sites required a governor directive.

3. *"Common data is entered once and shared among agencies."*

Over the past two years, there were no major initiatives or agency projects that resulted in major data sharing between agencies.

4. *"Minimize unwarranted duplication."*

The State has achieved some success in providing enterprise services; for example: SummitNet is the State's data communications network service, SABHRS is the enterprise financial applications system, and ITSD provides enterprise e-Mail services. The use of enterprise solutions serves to minimize unwarranted duplication of IT systems.

ITSD has taken a number of actions in response to MITA's policy to "minimize unwarranted duplication." Late in 2002, ITSD established procedures that include evaluating requests for software purchases or the procurement of system and application development resources to determine if solutions currently exist within State government. This review process has encouraged some agencies to utilize existing resources rather than build or buy new systems.

In July 2004, the CIO and the Budget Director submitted a request to agency information technology managers for information related to 47 agency financial and human resources subsystems and applications that showed potential for reducing duplication. The initial results of the review are as follows:

- 10 Systems have been sunsetted
- 6 Systems have sunset target dates established
- 4 Systems have been recommended for sunset
- 11 Systems have been recommended for retention
- 4 Systems are still under review
- 12 Systems are questionable; no information was received

Furthermore, as part of the effort to prepare this report, agencies were asked to submit an inventory of their information technology applications and systems. In 2005, ITSD staff will continue to review this information and identify applications or systems that merit further evaluation for potential replacement with enterprise solutions.

This MITA policy was directed at ensuring that IT systems were as cost efficient as possible. While Montana has excellent examples in the SummitNet II network and the single e-Mail system for the State, other examples are rare. Most agencies support their own file and print servers, web servers, and Oracle database servers. Although centralization of IT operations and server consolidation were not specific MITA policies, they are strategies that can lead to minimizing unwarranted duplication.