INFORMATION TECHNOLOGY DEPARTMENT

STATE OF IOWA

Annual Report

FY2000 Accomplishments/ 2001 Activities

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Director of ITD/CIO of Iowa

ITD

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Executive Summary

The Information Technology Department (ITD) was created on April 25, 2000 in SF 2395 to effectively plan for, develop, and manage information technology and related resources for the State of Iowa. The ITD, through its new Information Technology Council (ITC) and IowAccess Advisory Committee, is to assure that the information technology needs of the citizens of Iowa as well as the State's needs are met.

With the Information Technology Department being created this year, our employees worked throughout most of FY '00 in the Information Technology Services Division of the Department of General Services with the objective of providing quality service to State government agencies and the citizens of Iowa.

We are making every effort to communicate with our stakeholders on what our standard process has become in accomplishing the large enterprise projects or standards highlighted in the following pages.

1. Our first goal is to Educate ourselves and our stakeholders (often with outside experts like Gartner Group).
2. We then Communicate with all Iowa government stakeholders.
3. At that point, we seek Collaboration, Participation and Partnership to determine what will be done and who will do it.

What "it" is varies by project, but we try to accomplish as much of the following as possible and when applicable:

- an **Architecture** to guide us,
- specific **Standards** to follow,
- **Vendors** and **Staff** who can or will do the work,
- **Products** that are needed and either buy them or establish the contract for their acquisition,
- determine what **Tools** will be necessary to support, maintain, or modify the products and buy them or establish the contract for their acquisition,
- create or acquire **Objects** which are components of software that are needed for this project or which can be reused for multiple projects.

The purpose of this report is to highlight the accomplishments of ITS/ITD in FY '00 and to give an idea of the breath and scope of the current activities as well as the goals the department has for the current fiscal year as determined by the Governor, Legislature and CIO.

We desire your opinion of this report, and we ask that you let us know how we can be of assistance to you. We can be reached via telephone at 515-281-5503, our web site is www.state.ia.us/government/its/, and any of us can be reached via email at: first name.last name@its.state.ia.us.

Executive Summary Cont.

Our FY '00 accomplishments were varied and numerous. A sampling of our accomplishments include:

•Worked with executive and legislative branches to establish a new Information Technology Department (ITD) that has enterprise responsibilities for the coordination and successful implementation of enterprise IT for state government.

•Successful oversight of Y2K initiative for state government.

•Worked with the Department of Personnel to develop a new job classification called Information Technology Enterprise Expert (ITEE) to help retain highly skilled IT experts.

•Established a flexible service matrix that will assist agencies in choosing the type and level of service(s) that are appropriate to their needs.

•As part of the ITD legislation, established a new Digital Government Bureau to take the lead in adopting an enterprise approach to electronic commerce that will maximize efficiencies and create a sense of empowerment in the implementation of new business processes.

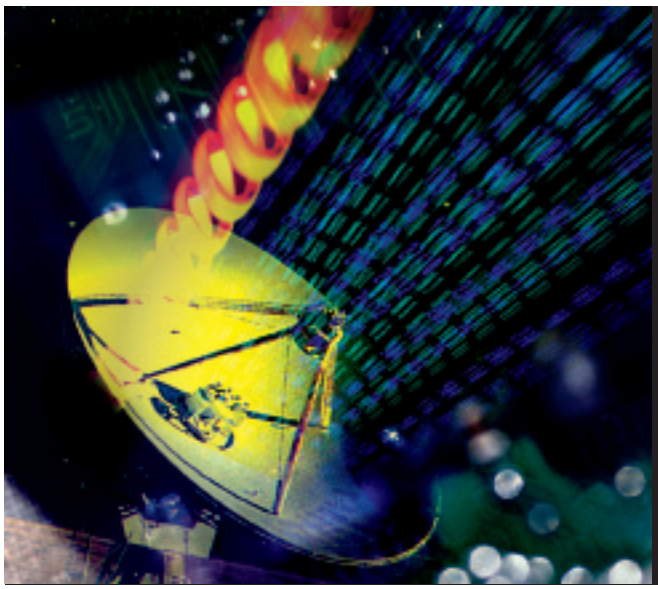
•Began an enterprise security program that will save the state money by performing periodic vulnerability assessments on State agency networks. Also, initiated a Public Key Infrastructure (PKI) effort to allow citizens to perform transactions with state government that involve sensitive information.

•Initiated a 21st century learning infrastructure to utilize a wide range of information technologies to provide life-long learning opportunities within and beyond the bounds of the traditional classroom.

•Standardized electronic mail systems to promote cost-effective procurements and system support. It will also allow functional interoperability.

•Managed and supported one data warehouse platform that services the State government enterprise.

•Successfully launched the Single Contact Repository (SING) that allows registered users to perform state background checks on potential employees. The State of Iowa was nominated for a 2000 Computerworld Smithsonian Award for this innovative project.



•Developed an enterprise "server farm" which provides security, high speed flexible network connections, uninterruptible power supply, and a variety of cooperative support services to agencies taking advantage of the ITD location for their servers.

•Successfully hired several highly qualified IT professionals to support the numerous enterprise IT initiatives instead of the more expensive contracting out for these services.

The new Information Technology Department has even a larger agenda for FY '01 as we begin implementing the executive and legislative branch's plan for "100% E by 2003" that will allow citizens to conduct most state government transactions online. It will fulfill Governor Vilsack's and Lt. Governor Pederson's Leadership Agenda of improving customer services so Iowans can have 24-hour access to services.

Some of the activities ITD is/will be engaged in during FY '01 include:

•Work with the new Information Technology Council (ITC) to carry out the duties of the department.

•Work with the new IowAccess Advisory Council to help create and provide a service to citizens that is the gateway for one-stop electronic access to federal, state and local government information and transactions.

•Work with the Department of Management to bundle appropriate "desktop management" services into a "core service" package that would be available to employees in covered agencies.

•At the request of Gov. Vilsack, developed and implemented a Return on Investment (ROI) program to evaluate requests for state IT funding.

•Establish an improved electronic method for managing the administrative rules process and fulfilling the requirements of Executive Order #8.

•Initiate and fully implement an independent verification and validation program to audit the execution of departmental policies and procedures related to the management, maintenance, and change control of departmental systems and equipment.

•Assisted in enterprise budget object code revisions to better track IT spending.

•Establish a number of IT electronic government initiatives funded through the Pooled Technology Fund. These include a continuation of online professional licensing initiatives, an expanded and improved Resource House that will include the entire scope of resources provided by Iowa and its communities, an ERP initiative that will revolutionize how state government performs its business processes, and an enterprise-wide forms project. Also, the operation of IowAccess becomes an in-house operation.

•Focus this year's 21st century learning infrastructure initiatives on middle school math teacher training and an electronic emphasis for two AEA media service's divisions.

•Develop an enterprise security training and awareness program.

•Develop IT standards for use by participating agencies of state government.

•The "Knowledge Community" will be available to all state employees. These live functions include desktop video/audio conferencing, online discussion, ability to share applications and desktops, white boarding and live course delivery.

Project Office - Fy '00 Accomplishments

Y2K

The ITD Project Office was asked to take the lead in ensuring that State government would not be disrupted by Y2K problems. State government computer hardware, computer software and embedded systems all operated successfully. This did not occur by accident, but rather as a direct result of three years of tireless effort on the part of State employees. Our State employees did a commendable job and saved Iowa's taxpayers millions of dollars.

An example of how State government prepared for Y2K was the development, writing and testing of the Y2K Contingency Plan for ITD. This plan was developed with the involvement of all ITD divisions and outlined major roles for ITD employees. Critical information for the department was gathered and collected into one document to be used in the event of a Y2K disaster. Inventory and leasing information for both mainframe and server environments were collected in the following areas: hardware, software, vendor service numbers, application contingency plans, end user contacts and priority lists. Due to the thoroughness of our department's plan, other departments used our plan as a model for their own plans.

Another example was the ITS database/data access team implementing software upgrades and performing extensive testing to ensure that all database system software would perform correctly after December 31, 1999. In addition, we provided a wide range of Y2K-related services to our users, including database changes, date simulation, and compliance auditing of application code.

Because of the efforts of the ITD Project Office and government employees statewide, we were able to accomplish the following:

- One of the first three states in the country to be certified as Y2K compliant by the federal General Accounting Office (GAO).
- First state to initiate Independent Verification and Validation (IV & V) as a fundamental part of the Y2K effort.

- Saved taxpayers at least $30 million by having State employees do the lion's share of Y2K remediation work, as opposed to hiring private contractors to do all the work.
- Iowa became a national model for efficiency and effectiveness in its Y2K efforts.
- All Y2K compliance efforts were completed 5 months before the January 1, 2000 threshold date.
- Iowa was the only state in the country to implement a "compliance maintenance" program to ensure the integrity of the Y2K effort, after the project was completed and before the threshold date.
- The Y2K project permitted the State, for the first time ever, to assemble a comprehensive, enterprise wide inventory of computer applications, hardware, software and embedded systems.
- Developed and implemented an effective quality assurance standard (red, yellow, green charting) of accountability to gauge/report agency performance.
- Under spent the Y2K project budget by over $2.0 million.

Project Office - Fy '01 Activities

Return On Investment (ROI) Program

The Chief Information Officer, Richard Varn, at the request of Governor Vilsack, has developed a methodology for evaluating the anticipated or actual benefits of proposed or implemented information technology (IT) projects and systems in State government. The benefits are those that accrue to Iowa citizens, to State government, or to both. The Governor wants to know the extent to which IT projects and systems have delivered or will deliver a bona-fide "return on investment (ROI)".

The ITD Project Office developed a Return On Investment (ROI) program to evaluate requests for State IT funding. The purpose of the program is to identify the requirements and relative merits of specific IT projects and to weigh them against the requirements and relative merits of other IT projects that are seeking funding. The program will fulfill an oversight function for specified IT projects and systems (before, during, and after implementation). It will facilitate more thoughtful and informed IT funding decisions. Iowa's ROI program is unique to both state government and the private sector. The program will be fully implemented in FY2001.

Administrative Rules Terminal (ART)

Executive Order #8, issued by Governor Vilsack, has initiated what is perhaps the largest and most comprehensive administrative rules review effort ever undertaken in State government. Agencies have done a commendable job of preparing written plans that explain how they intend to manage their respective rules review project. In addition, the ITD Project Office is exploring other process improvement opportunities related to the rules.

An improved electronic method for managing the rules process and fulfilling the requirements of Executive Order #8 has been developed. This methodology will facilitate standardization, automate the workflow, and assist in electronically managing the rules review process. The new Administrative Code server is currently available to electronically search the entire Administrative Code.

At the conclusion of this project, Iowa will have a comprehensive electronic administrative rules process that is representative of progressive 21st century State government. From an agency perspective, administrative rules will be easily accessed, searched, revised, and kept current. From a citizen perspective, administrative rules will be realistic, understandable and accessible. To our knowledge, no state has attempted, much less successfully completed, a project of this magnitude and complexity.

Waiver/Variance

Consistent with HF 2206, an electronic system is being developed which will permit the public to view a summary of the disposition of all waiver/variance requests received by each State agency. The system will also permit the public to download a waiver/variance request form.

Quality Assurance (QA) Process

The ITD Project Office initiated an enterprise IT process improvement program. Its purpose is to improve IT accountability and consistency by developing and implementing an enterprise IT process standard for application maintenance and development activities. The requirements of the standard are subject to independent and ongoing compliance auditing by the Project Office. The program will be fully implemented in FY2001. In the future, the Project Office will be conducting process audits as a part of the annual agency financial audit conducted by the Office of the Auditor of State.

Independent Verification and Validation (IV & V) Program

The ITD Project Office initiated an IV & V program to audit the execution of departmental policies and procedures related to the management, maintenance, and change control of departmental systems and equipment. The program will be fully implemented in FY '01.

Policies, Procedures, Standards and Advisories (PSA's)

The Project Office has initiated a program to comprehensively review, evaluate, update and maintain agency PSAs. The last attempt at this effort occurred in 1998. The program will be fully implemented in FY '01.

Administration - Fy '00 Accomplishments

The New ITEE Job Classification

Like many other states and private corporations, the State of Iowa has had a problem with recruiting and retaining highly skilled "experts" in the various areas of information technology we must support. We find ourselves paying consultants and various service providers a much as $310/hour for high-end services and support.

To address this issue, the Information Technology Department in cooperation with the Iowa Department of Personnel has recently established a new job classification called Information Technology Enterprise Expert (ITEE). The characteristics of this new job classification is as follows:

- This job classification would be for use by the Chief Information Officer.
- The job classification needs to have a broad pay range with a relatively high upper limit to be competitive with the private sector.
- The job classification is defined as having "enterprise" responsibilities in one or more technical or IT policy areas.

This new classification would be used for employees not having supervisory responsibilities. Those having supervisory responsibilities would be more appropriately placed in the IT Administrator classifications. (In discussing this issue with IDOP, we assumed that a person with high degree of specialization or technical expertise probably would not be tasked with supervisory duties.)

"Flexible" Service Matrix

The Information Technology Department has developed a flexible service matrix that will assist agencies in choosing the type and level of service(s) that are appropriate to their needs. The matrix (depicted below) illustrates the decisions (who performs the service and where is it performed) that can be made for each type of service related to information technology. Services are priced based on the agency's requirements.

Service Matrix Example

Examples of Services	Who			Where		
	Agency	ITD	Both	Agency	ITD	Both
Physical Hardware						
Operating Systems						
Trained Technical Staff						
Application Programming						
Electronic Storage						
Disaster Recovery						

Administration - Fy '01 Activities

Enterprise Budget Tracking Change To Track IT Spending

The need for revising IT object codes is a result of efforts to begin reporting IT expenditures at a more specific level. The Department of Management, Governor's Office and Legislature have all expressed a strong interest in being able to determine annual levels of IT spending by type and by entity. The state has had a particularly difficult time identifying IT expenditures and finds itself unable to compare its spending for IT on an apples-to-apples basis with IT spending in other states.

Defining new object codes for the accounting system and having agencies use those new codes in a meaningful manner will allow for better comparisons and benchmarking. It will also afford the Governor and legislators the opportunity to better measure the levels of IT spending against benefits accrued.

Approximately 60 new codes were identified and implemented on July 1, 2000 (FY '01). By more than doubling the number of object codes, the required data can be captured. All of the object codes for particular object classes can be viewed online through the various IFAS tables.

Digital Government - Fy '00 Accomplishments

It is generally believed that electronic commerce will revolutionize state government by cutting across organizational boundaries and introducing self-service models for citizens. We see the implementation of electronic commerce as a force for positive transformation. This is especially critical where "stove-piping" often makes it difficult for citizens to access services.

Digital Government - Fy '00 Accomplishments - cont.

Our goal has been to adopt an enterprise approach to electronic commerce that will maximize efficiencies and create a sense of empowerment in the implementation of new business processes. We have identified and brought together the community of stakeholders to help us establish enterprise-wide polices on issues such as privacy, security and infrastructure.

Governor Vilsack has made electronic government one of his six Leadership Agenda priorities by asking state government to "improve customer service so Iowans can have 24-hour access to services." Much of the work done in FY '00 was to prepare for an electronic government explosion in FY '01 and beyond.

Iowa Court Information System

In 1998, the Iowa Supreme Court identified several strategic goals it felt could be achieved within two years. Among those was a goal dealing with the deployment of technology to implement electronic court services. At its annual strategic planning meeting in July 1999, the Supreme Court identified this goal as one of its top priorities for fiscal year 2000.

As a first step in the implementation of electronic court services, the Judicial Branch of Government, in association with Information Technology Services, are engaged in a project to develop and deliver a number of web-based services to provide web-enabled access to the data maintained in the Iowa Court Information (ICIS) System.

The web development for this project is centered on a user-friendly, Windows-based, intuitive interface to the Court's databases. This includes a front-end for court dockets, court financial data, case scheduling data, query selections, reports and judgment data. The development also includes highly functional, easy to use tools to assist the public in accessing this information. The Information Technology Department will be responsible for the web hosting of the production applications, maintenance of the servers and associated network connections, performance monitoring and optimization of applications.

Digital Government - Fy '01 Activities

Creation of New Bureau

The Digital Government Bureau has been created within the Information Technology Department to focus the efforts of the state concerned with electronic access to government services. Digital government will work with a wide range of stakeholders to develop the strategy, the systems, and the applications necessary to perform the functions of government using electronic means. The goals will include the appropriate use of the technology available to provide access to Iowans when and where they want it and to use technology to improve services and decrease the cost to the state. The Legislature provided an estimated $19.1 million for IT Technology projects in FY '01 through the Pooled Technology Account. The Bureau will take the lead in implementing the Governor's Plan of "100% e by 2003."

Resource House

We are currently rewriting the software to create a more functional, easier to maintain and improved system which will meet the needs of the growing list of partners in the system. The system requirements have transitioned from mostly health and human services resource providers to include the entire scope of resources provided by Iowa and its communities. The system will provide an efficient and comprehensive resource guide for professional referral people and an easily comprehensible interface for the non-professional user.

Online Licensing

This year we started to offer professional license renewals electronically. Early in the year the State of Iowa allowed engineers to renew their licenses over the Internet. Nurses will be able to renew their licenses online by September 1 with real estate agent renewals coming later in the fiscal year. The next step will be to develop a platform to allow for a multitude of licensing and permissioning services that the state provides as we have already completed much of the code development.

Forms

We are looking at an enterprise system for dealing with information intake, management and storage. The common manifestation that we all are familiar with is filling out a form. After filling out that form is passed to others, processed, the information may be added to a database, that data may then feed an application, other forms may be filled out and passed along some process completed and something returned to a citizen. The information about that process is then recorded and saved. Oftentimes this process still is paper based and/or enabled.

ITD worked with all agencies and elected officials offices to determine what forms are currently being used or plan to be used to transact business with external customers. The survey portion of the project was completed in June 2000 and final compilation and refinement is now taking place. Once this is completed a final inventory of forms will be published.

Governor Vilsack is requesting the enterprise to have all forms available electronically by the end of the fiscal year. Hence, each agency will be expected to place each of its forms on the Web by June 30, 2001. This means that each of their respective forms must either be available to view, print, download or complete interactively by that time. The purpose of the initiative is to put in place an electronic system to facilitate our information intake, to reduce or eliminate duplication of data, to reduce the cost to the state, and to reduce the "hidden tax" burden on citizens.

ITD is currently working on developing an enterprise standard for forms publication and interactive forms application development. That system will have to provide for security of the data, privacy, sharing when appropriate, and storage of the information the state collects.

Change In IowAccess

The operation of IowAccess will become an in-house operation this year. Iowa Interactive will operate as a subcontractor for the State of Iowa with four of their employees performing website development (look and feel) services. They will be located at a facility with other Digital Government personnel in order to operate as a more integrated unit to provide a wider array of applications through IowAccess.

We will also be implementing better management of web development and improve the functioning of the website by creating an ongoing reengineering process to continually upgrade the usability and access provided to citizens of the state. Some of the changes will be to the structure of the site and will include adding quick access to the most popular pages, a functional category access, and a better hierarchical search capability. We will also be starting to create life-event paths. We will group information and applications that center around common life-events that Iowans encounter.

Growth of the Enterprise Intranet

ITD assisted in a number of initiatives to increase the content and use of the State Intranet and the ITD web site. Some of these initiatives include:

- Expanded usage of Discussion Forums.
- Placed the Division of Vocational Rehabilitation Services Policy Manual, Training Manual and Procedures Manual, as well as added highly accessed forms to their new web site.
- Created the Executive Council web site.
- Added the Department of Health Prescription Drug & Medicare policy information.
- Added the electronic version of the complete ITD Employee Handbook.
- Added the ITD Projects web page.
- Added the Department of Revenue and Finance Policies and Procedures Manual.
- Added Group Systems resources.
- Added Audio/Video links to hear the Governor's major speeches.
- Added a new ITD Administrative Rules site.
- Added a new Information Technology Council (ITC) site that includes the ROI information.
- Added a new ERP Migration Planning Project site.

Other Digital Government Initiatives

- Campaign Finance Disclosure and Lobbyist Filings
- DNR Underground Storage Tanks
- DNR Hunting and Fishing Licenses
- DNR Waste Management
- Employee Suggestions Systems
- DGS Fleet Management
- DHR Low Income Heating (LIHEAP)
- Restaurant Inspections

Policy and Planning - Fy '00 Accomplishments

Public Key Infrastructure

The State of Iowa Public Key Infrastructure (PKI) effort was initiated by holding a PKI seminar with representatives from the leading PKI vendors. Attendees from Iowa State Government, Iowa public corporations and financial institutions, Iowa state colleges and universities, as well as other states were on hand to learn about public key cryptography, its applications and issues, and the associated technology. Following the seminar and a request for information effort, Baltimore Technologies Professional Services completed an engagement with the State by developing some of the initial documentation and plans in preparation for the first phases of the effort.

Security

The Enterprise Security Program contracted for several security vulnerability assessments, identifying security flaws with critical systems and networks. Later in the year, the program developed an in-house vulnerability assessment capability by training a selected group of individuals to perform assessments. This capability will save the government thousands of dollars by performing periodic vulnerability assessments on State agency networks with government employees - it will also enhance the security of enterprise systems by identifying security flaws and recommending solutions.

21st Century Learning

A 21st Century Learning Infrastructure utilizes a wide range of information technologies to provide life-long learning opportunities within and beyond the bounds of the traditional classroom. It will be a combination of a digital library and a virtual open campus for all learners and institutions.

ITS/ITD set the stage for this bold initiative by taking the following actions:

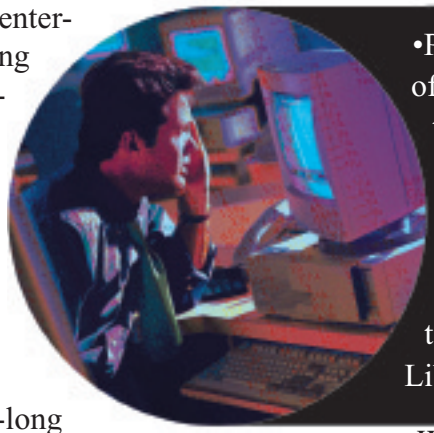
•Hosted Partners Network Meetings in January, 2000.

o **Focus:** Interconnecting the ICN with the broadband private sector net works to facilitate the delivery of education and government sevices.

o We also held private discussions with US West, McLeod, Northwest Iowa Power Cooperative, MCI, and AT& T Cable. Potential peering arrangements and their involvement with our pilot projects were dis cussed. They all expressed interest in partnering with us.

•Developed and issued 2 RFIs - a vendor version and an end user version (educators and learners) which was less technical.

•Worked with the Internet Team to put 21st Century Learning Infrastructure information on our website. Vendor and end user surveys were also created so our respondents could reply electronically. We utilized GroupSystems to evaluate our data.



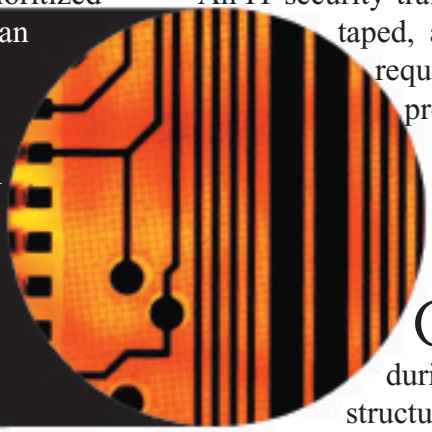
•Pilot Project: Partnered with Bennet Glotzer of The Education Group (content provider) to apply for a National Science Foundation grant. The proposal was for a grant of funds to create a prototypical broadband digital video library and technology service for science, math, engineering and technology, as envisioned by the SMETE Library Plan.

•We formed an advisory group that consists of people from state universities, private colleges, community colleges, public schools, AEAs, the Iowa Communications Network, Iowa Public Television, the State Library, the Department of Education, and the Department of Public Defense.

o On April 26th, we held an all day Advisory Group Retreat. We dis cussed the RFI responses, prioritized the desired attributes and began drafting the RFP.

o Results from the Retreat
This initiative has seven main components:

1. Integration
2. Storage
3. Networking and Connectivity
4. Distribution
5. Learning Management
6. Acquisition
7. Infrastructure Management



•SF 2433 - The University of Northern Iowa was funded with $1 million in appropriations from the state legislature. We have begun collaborating on this project with UNI and the Department of Education.

•Integrator/consultant research and meetings. Developed and issued an RFS.

•Presented information at: Managing Technology Series, Financial Users' Network, ITMC, and IDOP.

Physical Security

A heightened awareness was brought to physical security issues within the department during the past fiscal year. All doors between the four major work areas within the Hoover Building's ITD office are now locked down 24 by 7. Access card readers have been added to all major area doors. The main entrance door for the office has been redesigned to allow greater security measures. These physical security changes within the department required new access levels added to the capitol complex security system. Access is based on work duties and responsibilities, and all access is now monitored on a monthly basis. A more streamlined process for obtaining access cards was implemented for the department. All employees now wear photo IDs, and all visitors are required to sign in and wear an identifying badge. An IT security-training program was developed and taped, and all new employees are now required to view a tape of the security program.

Enterprise IT Infrastructure Survey

Conducted by an industry expert during this fiscal year, the infrastructure survey collected information throughout the enterprise on key IT areas. These IT areas were: mainframe hardware, server hardware, PC hardware, midrange hardware, peripheral hardware, telecommunications hardware, mainframe software, mainframe applications, PC applications, and planned purchases. Using the information collected for the infrastructure survey, ITD compared the IT infrastructure of the state against current industry standards. This survey identified gaps, critical areas and areas for improvement throughout the IT enterprise.

Project Management at ITD

ITD instituted a Project Management methodology that addresses a wide range of project types. This initiative resulted in a Project Management process manual, employee training, and the deployment of Microsoft Project 2000 software to enable effective definition, monitoring, and evaluation of project activities.

"A 21st Century Learning Infrastructure utilizes a wide range of information technologies to provide learning opportunities within and beyond the bounds of the traditional classroom and supports life long learning."

Policy and Planning - Fy '00 Accomplishments

Help Desk Analysis

An independent assessment of ITD, ICN, and IPTV Service Desks was performed to identify characteristics of current service structures and to provide an analysis of services processes. This initiative provided an analysis of current service processes and a recommended road map to enhance the future customer support environment. Next-step efforts will integrate organization, process, and technology components that directly define and support Help Desk service delivery.

The IowAccess Help Desk support has been integrated with the ITD Help Desk. This consolidated model provides additional breadth of service to customers of the IowAccess network as well as users of ITD enterprise services.

Electronic Storage

In response to the growing need for electronic data and multi-media storage, ITD has completed the first phase of a project to utilize next-generation technology to address these storage requirements. This first phase included research of Storage Area Network (SAN) technology, assessment of current enterprise technology, identification of SAN opportunities across state government, and the issuance and review of Request for Information documents. This lays the groundwork for subsequent phases of a SAN technology rollout. SAN implementation would provide consolidation of dispersed storage devices, centralized storage management, efficient utilization of storage resources, and robust backup, restore, and disaster recovery capabilities.

IT Standards Established for Email

To promote cost-effective procurements and system support, as well as functional interoperability, standardization of Electronic Mail systems has been formalized for the state enterprise. Microsoft Exchange and Lotus Notes products have been identified as the two products meeting this enterprise standard. The ITD provides service and support for both products to interested departments.

Data Warehouse Project

ITS/ITD is managing and supporting one data warehouse platform that will serve the enterprise of state government. Government agencies will house data on a scaleable Teradata platform with appropriate security controls. With proper security clearance, data will be available for analysis and decision making to all agencies. The effective use of standards and implementation of one centralized platform will minimize total cost of ownership. A 28-E agreement between ITS, DRF, DHS and the Division of Criminal Juvenile Justice Planning (CJJP) was signed. We also created and loaded risk and benefit data on the data warehouse for the Iowa Department of Personnel.

Eight major accomplishments were completed in FY '00:

•Educated the legislature and the agencies regarding the use and benefits of an enterprise data warehouse approach.

•Identified the initial partners in the data warehouse environment and collaborated with them to define a configuration that met all of their needs.

•Financed the purchase of the hardware, software and services required to implement and develop the data warehouse applications.

•Installed the hardware and software platform.

•Developed processes and procedures to support the data warehouse platform effectively.

•Continued to collaborate with the data warehouse partners to resolve issues and develop standards.

•Assessed and selected a web based, online query and reporting tools for agencies to use on data warehouse data.

•The original three partner agencies have created initial applications and loaded data.

Enterprise Server Survey

A comprehensive inventory of all servers throughout state government was conducted at the end of the fiscal year. To publicize services ITD currently offers and to gather requests for future services, ITD interviewed departments on their current and future server needs. The actual survey collected additional server information that built on the recent enterprise infrastructure survey, and the interview was an attempt to define those IT services the department will do on its own and those it would like ITD to deliver. Collecting all server information within the participating executive branch departments, this inventory will be used to answer questions from the Legislature, the Department of Management and the Governor's Office. During recent legislative sessions, awareness has grown of the amount of mission-critical information stored on an ever-expanding quantity of servers. Various issues raised about the quantity of servers are: security (both electronic and physical), consolidation (where applicable), data sharing and standards.

IT Grant Writing

•ITD established an ITGRANTS ListServ for individuals interested in grant funding for information technology (IT) projects. Subscribers to the free electronic mailing list receive periodic notices of upcoming IT grant opportunities, grant-related information, and the ability to interact quickly with other members of the list.

•We created a newsletter *ITGRANTS ALERT*, containing funding announcements for upcoming IT grants and award opportunities and general grant-related information. This is distributed to subscribers to the ITGRANTS ListServ.

Policy and Planning - Fy '00 Activities

Security

The Information Security Office, directed by the Chief Information Security Officer, has been created within ITD to provide centralized security support and activities for the State of Iowa. Several initiatives have been identified for FY2001:

•Security Training and Awareness Program. This program will provide needed education and training for all State Government computer users on an annual basis, focusing on general security concerns, security policy and procedures, and user security responsibilities. In addition, the program will provide security awareness information to users throughout the year. On the administration side, technical security training shortfalls across the enterprise will be identified and appropriate training opportunities will be made available. By identifying common needs and taking advantage of economies of scale, necessary training can be provided locally at a reduced cost.

•Enterprise Intrusion Detection. An intrusion detection system has been installed at strategic locations throughout the enterprise. The system will be fine tuned, put into full operation, and expanded during the year, allowing security personnel to stop intrusions as they occur, thereby protecting critical information and information systems.

•Enterprise Security Policy Suite. A suite of security policies, procedures, standards, and guidelines will be developed to provide guidance to state agencies on how to protect systems, respond to incidents, and implement security systems. The suite will be an all-inclusive set of documents that will address all security issues affecting Iowa information resources. These will be living documents and they will be updated continuously. The Security Office will also provide assistance to State agencies in developing and implementing their own security policies and procedures that follow the higher enterprise guidance.

•Vulnerability Assessment Team. The State's vulnerability assessment team will conduct security vulnerability assessments for State agencies and the enterprise. These assessments will identify technical security vulnerabilities in State information systems and provide recommendations on necessary countermeasures. The team will also develop an incident response capability for assisting State agencies in responding to security events. Both of these activities are crucial to maintaining systems at a high level of assurance, and will become even more important as the 100% E initiatives ramp up.

•Risk Management. A standard risk assessment process will be developed and implemented across the enterprise. Appropriate agency personnel will be trained on the process and agencies will conduct individual assessments according to policy. The ITD Project Office will be partnered to include these results in their audits. These assessments, in conjunction with the vulnerability assessments, will provide input into the risk management program that will identify, prioritize, plan for, and implement necessary security controls at the enterprise and lower levels.

•State of Iowa Security Web Site. A security web site will provide up-to-date status information of security office activities to State agencies. It will also be a repository for applicable security policies, standards, procedures, guidelines, and checklists. Services provided by the security office will be identified, and security educational materials, such as on-line books, training classes, PowerPoint presentations, and seminars will be available. Links to appropriate Web sites and other sources of information will also be included. This site is intended to be a one-stop shop for security information applicable to the State of Iowa.

•Partnership with Iowa State's Information Systems Security Laboratory. A partnership with ISU's Information Systems Security Laboratory (ISSL) will enable ITD to utilize the knowledge and resources available from the lab to further their experience and expertise. On the other side of the equation, the security office will be able to provide an operational perspective to students, researchers, and other ISSL staff to help further their efforts. While still being developed, it is hoped that this symbiotic relationship with mature into a valuable endeavor for both parties.

•Cyber Terrorism. The Iowa Emergency Management Division (EMD) has initiated a cyber terrorism work group as part of the Iowa Interagency Domestic Preparedness Work Group. The security office is part of that group and will be providing expertise and assistance during the development of EMD's response plan and during planning and exercise activities.

21st Century Learning Infrastructure

The State of Iowa Information Technology Department, the Department of Education, the Iowa Communications Network, the State Library and the University of Northern Iowa will work together on a 21st Century Learning Infrastructure Initiative collaborative pilot project during the 2001 fiscal year, using an appropriation from the legislature, focused on enhancing the learning for Iowa's students in the area of middle-school math. The project will have the following primary purposes: 1) the acquisition and creation of digital educational materials (i.e. digital pictures, audio and video; interactive web sites; electronic presentations; e-books; software; and evaluation mechanisms); 2) to research, test, and evaluate indexing systems for easy acquisition of content over the internet; 3) delivery and use of the content in the classroom; 4) provide instructional design and developmental support to the classroom teacher; 5) to evaluate the success of the pilot and make recommendations.

It has the following project elements:

•Pilot and test a flexible infrastructure environment that facilitates the delivery and use of the content as needed.

•Identify and acquire digital educational materials that serve common educational needs within and beyond the boundaries of the classroom.

•Evaluate different architectures and approaches to sharing and delivering digital content over the Internet. (continued on next page)

Policy and Planning - Fy '00 Activities

•Test the ease of searching and delivery of the content to the classroom from remote sites.

•Test and evaluate the delivery and reception of digital educational material to be used within and beyond the classroom.

•Provide instructional design and development support to teachers, allowing them to take shared digital educational material and incorporate their use into their curriculum.

•Identify ways the pilot can impact the CSIP (Continuous School Improvement Plan) for the identified schools.

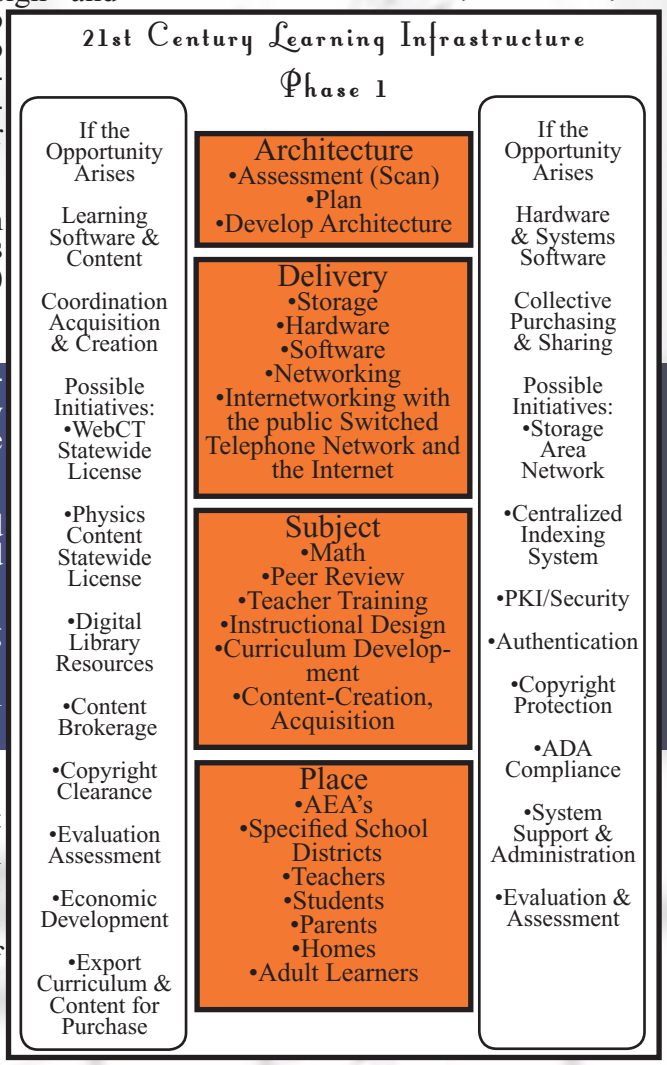
•Provide effective communication to those directly involved and those who are stakeholders.

•Provide assessment and evaluation of progress and results.

There are also the following parallel project elements:
(To be completed by outside contractor, RDR Associates, funded through the appropriation.)

•Perform an assessment (scan) of current education technology, distance learning, and digital library environments in the state of Iowa.

•Design a functional, statewide electronic learning and library architecture.



Enterprise/ITD Business Continuity Plan

Using major sections of the recent Y2K contingency plan, a business continuity plan for state government and ITD will be developed. This business continuity plan will be more comprehensive than the Y2K plan. To be an effective tool for the enterprise, it must adequately prepare for likely major disasters.

Baltimore PKI Assessment

ITD asked for a review the current needs in the state for Internet based security and authentication. This included a list of possible initiatives, possible architecture, PKI needs, and a vendor analysis. This assessment will be used by ITD to develop enterprise PKI initiatives.

Restaurant Inspections

Restaurant inspections will be placed online and searchable for the public.

Electronic Storage

ITD issued an RFP to begin the deployment of Storage Area Network (SAN) technology. The SAN will be used initially for storage consolidation for a variety of Intel-based and UNIX servers. This first phase will eventually include the opportunity for integration with other departmental storage/server networks and disaster recovery sites. Centralized storage management will be a key feature to effectively administer the storage and network components. Additionally, storage subsystems will be available from the SAN contract.

IT Standards

ITD will work closely with the Information Technology Council to develop standards for consideration with respect to the procurement and development of information technology by the enterprise.

Data Warehouse

Continuing upon the successes of FY '00, data warehouse initiatives are expected to be the following:

•To continue to educate agencies and stakeholders regarding the use and benefits of the enterprise data warehouse.

•To develop and publish a complete set of standards for the data, access, metadata, infrastructure, tools, and support.

•To develop a training plan for ITD support staff and agency partners.

•To develop a full set of services and reasonable rates for the data warehouse.

•To identify additional partners for the data warehouse initiative.

•To identify additional applications and expand the size of the data warehouse.

•To develop and publish a plan that would enable data from multiple agencies to be linked for longitudinal studies.

IT Grant Writing

A statewide forms inventory was recently completed by the Information Technology Department. Under the "100% E by 2003" initiative, state forms, including grant applications, will be available online in an interactive format. To assist in the overall design and requirements for this initiative, a pilot project is being undertaken. This will be limited to a selected number of state agencies that administer grant programs.

•Create a web site that would serve as a single portal for state grant programs and funding information;

•Determine non-technical needs of grants programs managers in administering state grant programs (notification to potential applicants, current methods of processing grant applications, databases - manipulation of data, reporting requirements of grant recipients, statistical data collection, federal
agency reporting requirements, grant manuals, FAQs, etc.)

ITD is also working on the creation of an online database containing grant programs that offer funding for IT projects

Customer Liaison - Fy '00 Accomplishments

ERP Migration Planning Project

Staff from the Information Technology Department, Department of Management, Department of Personnel, Department of Revenue and Finance, Department of General Services, and Legislative Fiscal Bureau developed a request for services. Our goal was to study current 'potential' Enterprise Resource Planning (ERP) systems and determine the feasibility of moving to an ERP environment - using the following as possible migration path:

- Change existing systems
- Web-enable current process
- Utilize data warehouse
- Move the system to the ERP environment

The request for services was issued, the contract was awarded, and work began on the planning project.

SING (Single Contact Repository)

The Single Contact Repository (SING) is an Internet application that allows registered users to perform background checks on potential employees. The application lets a user check criminal history, three abuse registries (child, dependent adult, and sex offender), and over 40 professional license types from a single web screen. This application was successfully implemented during FY '00, and is currently processing over 1,000 queries a day. The user base is currently limited to licensed health care facilities, but we expect significant expansion to other users during FY '01. The State of Iowa was nominated for a 2000 Computerworld Smithsonian Award for this project.

The Customer Liaison Division is responsible for providing applications development and support as well as advice and assistance in developing and supporting business applications. The Division works closely with the enterprise in developing new applications as well as improving existing applications.

Education

We provided start up training for 141 students from 49 State Agencies and Divisions on Administrative Rules Terminal (ART) Training. There were a total of 19 two-hour sessions taught. We also provided 20 training sessions in MS Access and Excel.

We set up a Media Server for the first ever Web cast of the Governor's Condition of the State Address.

ITD completed the Multi-Media upgrade of the ITD Learning Centers and created new ergonomically correct workstations.

Geographic Information System

A geographic information system (GIS) is a computer-based tool for mapping and analyzing things that exist and events that happen on earth. GIS technology integrates common database operations such as query and statistical analysis with the unique visualization and geographic analysis benefits offered by maps.

First used in Iowa's academic institutions in the mid-1970s, GIS has in the last ten years become an integral data management tool in private business as well as state, city, county and federal offices. This growth in user numbers also creates an expanding number of potential cooperation and partnering opportunities between organizations.

Throughout FY '00 there were a number of GIS-related activities of note:

4th Iowa GIS Conference

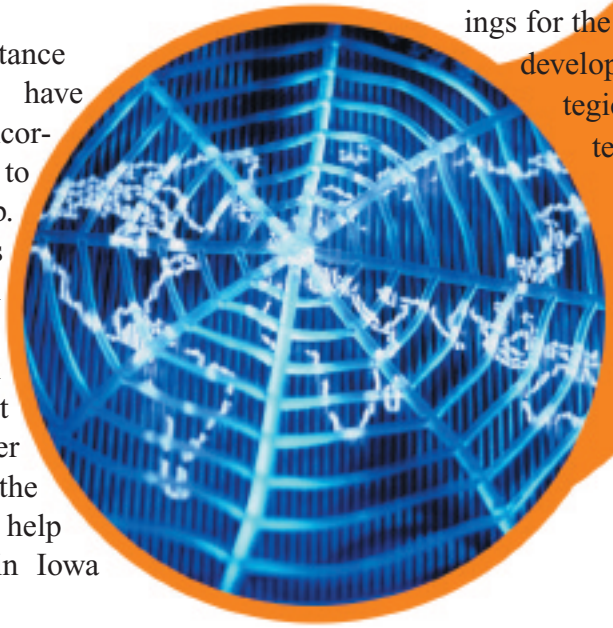
Held in Storm Lake, IA, this three-day conference brought together over 200 GIS users in Iowa. Those attending participated in one of the many workshops: Introduction to ArcView, Intro to GPS, Remote Sensing, GIS in Transportation, GIS for cities, GIS on the Internet and several more. The lectures were broken into six major topics: transportation, applications, data management, education, GIS management and natural resources. The conference also included an interactive session designed to gain input from the attendees to aid in the development of the IGIC strategic plan.

ArcView GIS Training

ArcView GIS is a desktop GIS package. ITD personnel taught eight classes during the year. While a majority of the attendees were state employees, people from federal agencies, counties, planning organizations and private business attended as well. The class spends two days learning the many tools and functions available with the software. It also covers GIS basics that are not software specific.

State Agency Assistance

Several state agencies have expressed interest in incorporating GIS as a tool to help them do their job. DED talked about ways of utilizing GIS within a web-based application that aids companies in finding existing, but vacant, buildings. Another DED application was the potential use of GIS to help locate new businesses in Iowa taking wastewater facility capacities, environmentally sensitive areas and infrastructure into consideration. While neither of this projects ever materialized, the interest in GIS exists in this department. Technical support was provided to many people who had questions on how to use the software or perform a certain task.



Emergency Management

Assistance was provided to EMD in several ways. During the floods in eastern Iowa, ITD staff was dispatched to the area to assist in collecting damaged buildings into a GIS using recently purchased GPS equipment. Staff assisted in creating a customized interface for the collection software, testing the equipment and training EMD and FEMA staff on its use. A series of maps was made for EMD showing dispatch areas and response teams per county. ITD staff were part of the team during the Y2K event and now serve as the reviewer of technical specifications on EMD HARA grant.

IGIC Administrative Assistance

Administrative assistance was provided to the Iowa Geographic Information Council in several ways. ITD staff set up all ICN meetings for the council and its committees, developed a large part of the strategic plan, attended all committee meetings and served the role of secretary, distributed information via email and the clearinghouse, created a database for IGIC membership and conducted election of board members.

Customer Liaison - Fy '00 Accomplishments

The Customer Liaison Division works closely with state agencies. A sampling of their work is listed below that shows the accomplishments of our "techies":

HRIS/Payroll Team Accomplishments

•Creating a separate unemployment tape for Gates McDonald from the one IWD uses. With this change, Gates McDonald will start sending an unemployment billing tape to us quarterly. This will aid DRF greatly in the quarterly unemployment billing process.

•We started to implement DHS institutions to HRIS Time Reporting.

•We implemented collective bargaining changes such as the new deduction type for flexible spending.

•We made programming changes to handle Delta Dental separating from Wellmark.

•We made changes to charge move pay to object 2575 instead of 1100. This will cut down on the work that accounting sections in other departments have to do.

Worker's Comp System

The warrant cycle was changed from bi-weekly to weekly. This change, requested by IDOP, was implemented in April 2000, and brought the system into compliance with Iowa Code 85.

Flexible Spending Accounts

This system, requested by IDOP, was implemented in January 2000. The system enables state employees to have expenses for health care and dependent care deducted from paychecks before tax.

Payroll Cost Projection System (PMIS)

The payroll cost projection system (PMIS) was changed to allow up to 21 steps in each pay plan. These changes were effective for the first pay period in FY 2000.

Mainframe VALS Utility Tax

This project breaks off Gas and Electric Utility taxes from property taxes and replaces them with an excise tax. It was to bring the system into compliance with Iowa Code 437A.

Iowa Interactive Training System (IITC)

ITD provides continual support and maintenance of this system used by ITD, IDOP, DNR and DHS. We work with IDOP personnel to provide information and to also teach them some of the tools so they can generate ad-hoc reports on their own.

The Financial Users Network (FUN) Conference Registration

This web application created a way for users to register for the 2000 FUN conference. This application keeps track of user information and class levels. When a class is full based on a class size table that class is not shown on the web page (dynamically).

Intranet Web Site

The Database/Data Access team was the first ITD team to implement an extensive Intranet web site for our users (IT staff in other departments). It includes PSA's, online manuals, forms, software downloads, sample program code and JCL, self-training guides, and other information.

Database Support

The database team continued to provide the expected high level of support for IDMS databases across the enterprise. Increased usage required numerous file expansions, and the addition of two new CV's (central versions).

The database team added or upgraded support of several new enterprise database platforms during FY00, including Teradata, CA-Relational, and MS-SQL Server.

Welfare Reform

COC2CSRU is an Intranet application that enables county clerks of court and DHS child support recovery workers to view each other's data. Iowa Interactive initiated this project, but during FY00, ITD assumed responsibility for the project and successfully implemented it. COC2CSRU was completed in cooperation with DHS and Judicial branch staff.

Help Desk

We have been assisting various Banks and Financial institutions with the new Financial Institution Data Match (FIDM) system. This tracks delinquent child support obligors and matches them to bank accounts and savings accounts.

The Single point of contact (SING) is a program assisting health care facilities do criminal and abuse background checks on potential employees. The Help Desk is handling all calls associated with this application.

Fixed Assests

A PC based Fixed Assets system was developed to replace a mainframe system, which was no longer supported by the owner. It is flexible enough to handle a wide range of assets. This system allows for maintenance of the asset file, will calculate the depreciation for any period of time, has the option of several reports or listings, and maintains a history of changes. This system will be used as a base for other inventory systems, which we plan to develop in the future.

Public Utility Match Program (PUMP)

PUMP is a system developed for Department of Human Services (DHS) Child Support Recovery Unit (CSRU) to locate delinquent child support people. DHS supplies an obligor file that is downloaded and encrypted that is e-mailed along with a subpoena to participating public utilities. The public utilities run through their system ao find matches. Public utilities encrypt their file of matches and e-mail the file to the Information Technology Department (ITD). ITD uploads the file to the mainframe for DHS to process. The sending email and tracking system has been developed on Microsoft ACCESS. PUMP system is run monthly for DHS.

Customer Liaison - Fy '00 Accomplishments

Applications for Programming

•Worked with the ITD Data Base Team to make College Student Aid/Grant application data available via the Intranet for use by Financial Aid Administrators.

•All staff members were heavily involved with the State's Y2K Verification and Validation efforts. This included the initial review and testing of all application code; and the subsequent usage of the ITD Re-Infection Prevention Process to insure code integrity was maintained.

•Participated on the ITD Y2K Audit Compliance Team. This involved developing the ITD Re-Infection Prevention Process, and performing audits of any modified application code.

•Participated as an ITD representative in the Quality Assurance Team to development guidelines for performing enterprise-wide Application Audits.

•Improved three programs in the Loan Defaulters system so it performs much less expensively and more efficiently. This involved changing the method used to search a table and the sequence of the input data. Since the file contains 2.2 million records, these improvements have reduced the production cost every six months of two jobs from $600+ per run to less than $25 each. Net savings for the customer will be over $2,000 annually.

IFAS Team

•The primary focus of the IFAS team in FY 2000 was to clean up the remaining issues from the implementation of Advantage 2.0 in FY 1999. The team succeeded in closing 343 issues since the IFAS upgrade was implemented.

•Modifications were also made to the GAAP and 1099 subsystems to align them with the new IFAS system.

•Other major changes that were accomplished included allowing EFT transactions for the DOT Pre-Issue file and allowing the DHS bank transactions to use the CCD+ format and the new CTX format to meet federal requirements.

ERP Migration Planning Project

The planning project for ERP was completed in September, 2000. The sponsoring departments of Information Technology Department, Department of Management, Department of Personnel, Department of Revenue and Finance, and Department of General Services have continued to work towards an ERP environment. A budget request has been submitted for ERP and eProcurement. We have also begun working several areas in preparation of proceeding with the project. The functions that would be included in the ERP project would be: eProcurement, Budget, Accounting, HR, Payroll, and Benefits. The following is a brief description of our efforts:

- Holding vendor education sessions for staff from various state agencies.
- Reviewing financing options and ROI opportunities.
- Researching what other states are doing in this area.
- Determining communication/education plans for various groups about ERP and the many benefits that would be realized by state government and citizens.

GIS Initiatives

GIS Resource Guide

The State is developing a GIS resource guide. Its goal is to " build awareness and promote user education leading to broader adoption and successful implementations of spatial information management systems." Developed in an electronic web-based format, the resource guide will act as both a GIS related communications forum and content repository. The guide will be targeted to a number of audiences including State agencies, Regional, County and City governments and the general public. Besides helping governments to leverage investments in GIS, the resource guide will also act as a focal point to help the public better understand the basic concepts and capabilities of GIS and gain better access to GIS resources.

Redistricting Application

With the release of the 2000 census results new political districts will need to be drawn incorporating these data. ITD is assisting in reviewing different methods of boundary delineation that will make the job easier for cities, counties, school districts, etc in Iowa and for the Secretary of State's Office that must compile the results.

Clearinghouse Node

Software has been purchased, but not yet installed that will assist in creating an FGDC (Federal Geographic Data Committee) compliant node. This will allow the server to join the network of other servers housing geographic data. By being an FGDC compliant node, Iowa's server will be among the 100+ "hit" during a data query.

ITD Integration

Evaluate legacy systems within ITD and incorporate a GIS interface where applicable. We are currently evaluating the vendor database as our first target.

Grants with a GIS Emphasis

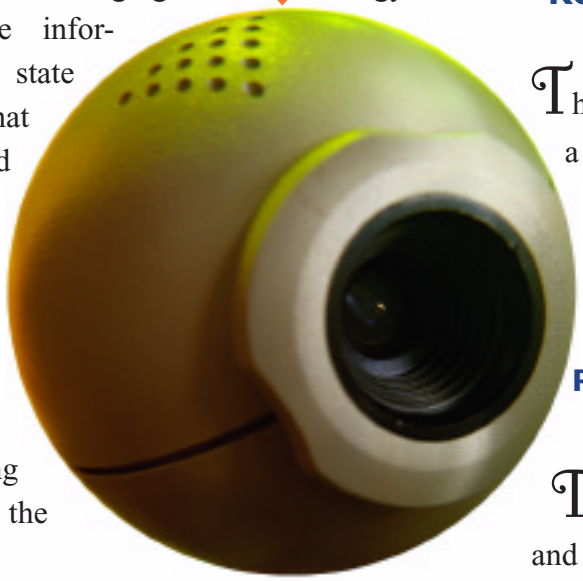
ITD will be working with three different grants: Floodplain boundaries, Archaeological database and NatureMapping Phase 2. All will incorporate a GIS component or rely heavily on GIS to accomplish the grant goals.

Customer Liaison - Fy '01 Activities

Education

This year we have moved the pilot program for online learning for state employees to a full rollout. The "Knowledge Community" will be available to all state employees. The live collaboration function of the Knowledge Community will be tested and rolled out within the next six months. These live functions include desktop video/audio conferencing, online discussion, ability to share applications and desktops, white boarding and live course delivery.

We are continuing our work with the Dept. of Personnel with the Trainer's Consortium and the Managing Technology Seminars. We will be setting up a training resource repository for the Trainer's Consortium. The repository will be a web-enabled database of training resources available for all agency trainer's. The Managing Technology Seminars provide information to state employees that are involved with information technology. We assist in the planning, programming and providing speakers for the seminars.



We are continuing to provide multimedia production and multimedia web serving for state agencies. Current projects include: Almis database online training. The training project includes audio, video flash animations and slides. Three current video productions of twenty to thirty minute lengths. We currently host 30 hours of digital video for state agencies for delivery via the Internet.

Other Customer Liaison Initiatives for FY '01 include:

Implementation and Development of Administrative Rules

Learn Lotus Notes and be able to support and assist with installation of the next phase of the administrative rules.

Production of Annual IPERS Statements to All Members

This will occur next April.

Expanding Use of Single Contact Repository to Other Agencies Wishing to Do Backgrounds Checks

The Board of Educational Examiners has signed a contract, and the Medical Examiners and DHS have expressed interest.

Representing ITD on a Committee to Develop the IDOP Managing Technology Series for 00-01

This Committee worked to get sessions leaders and facilitate the sessions.

Iowa Interactive Training

Provide continual support and maintenance of this system used by ITD, IDOP, DNR and DHS. Work with IDOP personnel to provide information and to also teach them some of the tools so they can generate ad-hoc reports on their own.

HRIS/Payroll

•We hope to expand on the data warehouse created for IDOP.

•We plan to finish implementing HRIS Time Reporting. This will include handling Institutions with multiple work schedules and also handling SPOC pay plan.

•We will implement new HRIS module that will automate insurance billing process.

•We will be implementing deferred comp match (calculating deferred comp state share) in August 2000 for Judicial and April 2001 for AFSCME and non-contract employees.

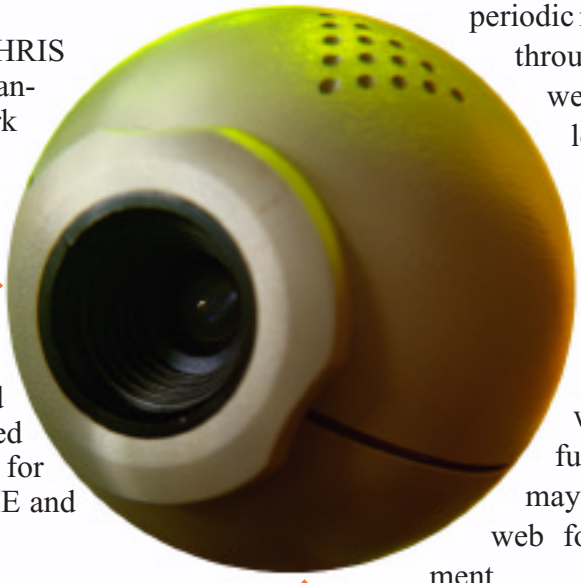
•We will be enhancing the garnishment system with a new garnishment type based on specifying a set amount. This will make the garnishment system much more flexible.

Mainframe and VALS Annual

Make any changes required by legislation and as requested by the Department of Management Local budgets division to the Mainframe Statewide Valuations, School Budgets, City Budgets, County Budgets, Township Budgets or Miscellaneous Budgets systems.

PMIS

Will provide data and cost projections for the collective bargaining process. This fall when the State is preparing for the contract negotiations with the employee bargaining units, PMIS will provide data, reports, and projections of payroll costs to DOM and IDOP to be used in the bargaining process. This will involve collecting data, modifying programs and processes, and setting up reports and projections. This will begin in the fall of 2000 and continue until the spring of 2001. The duration of our involvement will depend on how quickly the agreements are settled between the State and the unions.



Lobbyists and Lobbyist Clients

Lobbyists will be able to fulfill their periodic reporting requirements through the web. This web application records lobbyist and their client's contribution information. Additional enhancements of things like online administration have been discussed and will be added in the future. This application may be a model for other web forms for this department.

Developing a New Web-Based StateTravel Request System

This web application will replace the current paper way of filing for out-of-state travel. It automates several manual tasks that the paper version had. This project has three levels of activity. This will provide a state agency with a one-stop place to file and check out of state travel requests. It also gives the Executive Council and Administration one place they can set up agencies, approve/deny request and view request. This program may be a model for other similar projects.

Flexible Spending Account

This Intranet web application creates an electronic data entry system for IDOP. They will use this to record and send information to the Flexible Spending mainframe program. Data is inputted on one of two forms and submitted to a database.

Help Desk

On July 1, 2000 the ITD help desk was given the responsibility of replying to all 'help' activities associated with IowAccess.

(continued on next page)

Customer Liaison - Fy '01 Activities

(Continued from page 27) These will come in the form of phone calls, emails, and mail. The current volume is about 20 emails a day and 10-15 telephone calls from people all over the world.

ITD has formed a help desk focus group to study the whole help desk process within and between departments to determine the best solution for the State in creating an enterprise-wide help desk system. The departments included in this focus group are the Information Technology Department, Department of Transportation, Iowa Communications Network and the Department of Natural Resources. Recommendations are due by March 2001.

Financial Institution Data Match (FIDM)

FIDM currently is being developed for the Department of Human Services (DHS). There are three match methods. 1) Financial Institutions send media of all account information kept confidential. 2) Obligor file is downloaded and encrypted for security reasons. 3) Financial institutions send all accounts on paper to DHS for data entry to be uploaded to the mainframe. ITD is developing a distribution and tracking system for DHS showing what's happening.

Requisitions

The Requisition System is a web-based system that will be located on the State of Iowa's Intranet. Implementation date will be February 2001. The Requisition System is actually a 'pre' requisition system being developed to aid the ITD budget/accounting group in identifying planned and/or outstanding purchases and the dollars encumbered. This will aid in having an up-to-date status of the ITD budget especially in the critical last three months of the fiscal year. The Requisition system does not replace the purchase order process, but supplements the process to provide information to the budget accounting team on a timelier basis. ITD staff will enter 'requisition' type information into the system where it will be assigned a number and forwarded for management approval. After management approval, the requisition is forwarded to the budget administrator for budget approval. A status code indicates the current status of the requisition requested. The budget administrator can view requisitions at all stages of the process.

Vehicle Dispatch

ITD has been contracted to develop some enhancements to the Department of General Services Vehicle Dispatch system. We are to create and maintain a history of changes to their master file. We are to develop, write, and implement a replacement for the Mileage sub-system. This will utilize data already input into the system instead of having it entered again by the user agencies

Applications For Programming

ITD is participating in a joint effort with DHS in the development of the Financial Institution Data Match to help with the collection of funds from parents who are delinquent with their child support payments. State law now allows the State to collect monies directly from financial institutions from accounts held by parents who are delinquent. ITD's role is to coordinate the distribution of data to, and the receipt of data from, these institutions (more than 600 total). Account data is being made available to the DHS Child Support Recovery Data Base (ICAR) for further processing. After processing, DHS is responsible for executing the collection process. Collections have begun, and the goal set by DHS is in the millions of dollars.

IFAS Team

- We will bring online a PC-based ad hoc tool for displaying and reporting info. from the IFAS System.
- ITD will implement debit payments for the DRF collection system.
- We will begin revising the entire warrant writing process. This will enable the printing of state warrants to take advantage of many new advances in technology.
- ITD has begun the upgrade to Advantage 2.1.1 to position ourselves for the transition to the Web-based Advantage 4.0 financial accounting solution in FY '02.

Suggestion System

ITD is building an enterprise system for collecting suggestions from state employees. It allows users, administrators, and quality coordinators to easily view, edit, report, and communicate with each other about suggestions.

Operations - Fy '00 Accomplishments

The Operations Division is responsible for providing server systems, including mainframe and other server operation; telecommunications (excluding responsibility of ICN); desktop support; and applications integration. The mainframe computers are located in the basement of the Hoover Building and are the Operations Division responsibility. ITD also provides staff to operate the Iowa Workforce Development mainframe. Have successfully hired several highly qualified IT professionals to support the numerous IT initiatives involved in providing additional services to citizens electronically. Developed an aggressive training plan to enhance current employees ability to provide these new services. This division typically provides the following services to state government:

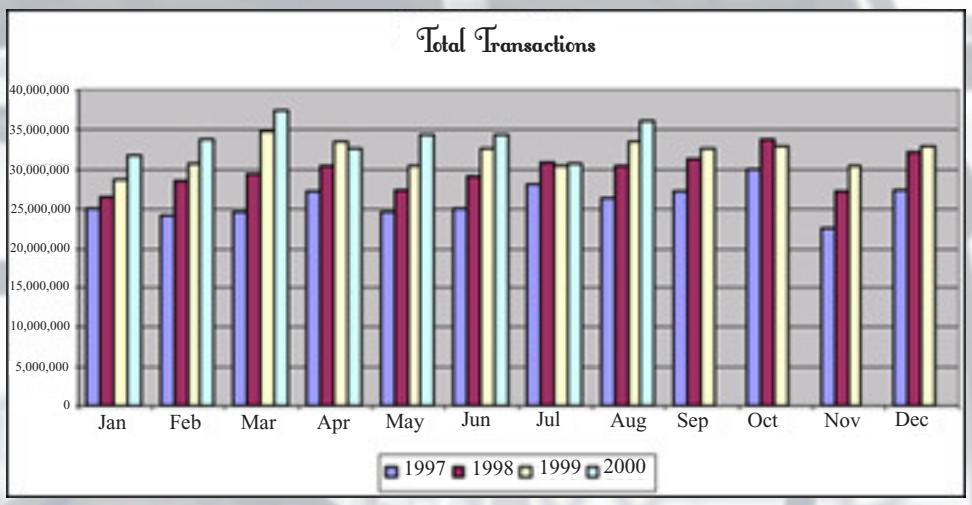
Data Center Services

One key mission for the ITD Operations division is to ensure that the state's mainframes, computer networks, and key servers are providing service during all scheduled hours of operation (24 hours a day, 7 days a week). Mainframe operations and networking are run from highly secure data centers with environmental controls, fire suppression equipment, and uninterruptible power supplies. The server farm is in a separate secure area, but utilizes most of the electrical and other services that allow the mainframe to be operated reliably. Because ITD maintains the facility that provides these services, agencies can place servers in the server farm and concentrate on the applications they are designed to support without having to plan for and provide the support. The server farm currently houses servers for:

- Governor's Office
- Governor's Alliance on Substance Abuse
- Terrace Hill
- ITD
- Department of Management
- Crime Victims Division of Attorney General's Office
- Human Rights

ITD provided computational resources (mainframe, networking, server and workstation level) to aid the Y2K transition. This included complete simulation tests of the three mainframe operating systems and related software. We assured that computational and storage capacity would support the additional application development and testing done by agencies for their Y2K efforts. ITD installed a variety of software tools to assist in agency efforts, and we created standards for workstations to meet Y2K requirements and directly upgraded workstations for ITS customers.

The ITD mainframe computers perform between 2.5 - 3 million transactions per day. These transactions consist of project inquiries, people searches, data base record updates, adding or deleting records, and much move.



Some examples of the types of work that make up these transactions include:

- Public Safety: look up license plates, criminal history checks, and crime statistics.
- Child Support Recovery Unit: request support checks, check status of cases.
- Department of Revenue and Finance: do online taxes, ask questions in regard to filing.

Operations - Fy '00 Accomplishments

Information Systems Management

This includes capacity planning, problem management, and change control. This group works with the strategic plans from ITD customers and work groups to identify how much storage and processing power will be required to support new and existing applications.

Agencies are asked to fill out surveys looking at the proposed CPU usage, expected number of transactions, and sizes of data bases used in the application to identify resources required to support the application.

This group has identified mainframe computer upgrades and storage requirements and provided the justification to support numerous additions to capacity in the previous year.

Local Area Network Team Activities

The LAN (Local Area Network) team provides support for state agencies' LAN applications and their PC workstations. More and more data that is critical to agency operations is being stored and processed on LAN servers and workstations. Service level agreements set objectives for server availability, and define services ITD performs for agencies.

The ITD LAN/PC Team currently has Service Level Agreements in place with the following state agencies:

- Governor's Office
- Department of Management
- Office of Drug Control Policy
- Department of Human Rights
- Department of Education
- Department of Commerce
- Board of Parole
- Department of Elder Affairs
- Department of Cultural Affairs
- Department of Revenue and Finance
- Department of Transportation
- Public Employment Relations Board
- Treasurer of State
- College Student Aid Commission
- Ethics and Campaign Disclosure Board
- Department of Justice
- Judicial Branch

The Service Level Agreements are individually designed to allow state agencies technical computer hardware and software support that includes:

- Enterprise Local Area Network support Enterprise Mail Services
- Desktop Support
- Server Support
- Software/Hardware installations
- Consulting Services
- Web Hosting Services

ITD LAN staff installed, trained, coordinated and supported the Capitol Correspond Constituent Tracking System in the Governor's office. This is the first automated tracking system used by the State of Iowa governor's office. The system currently has approximately 70,000 records entered in the Capitol Correspond database.

The LAN team built a server farm that started out as 10 servers and has grown to approximately 70 servers over the last two years. The server farm is composed of ITD servers and other state agencies servers. It is in a secure environmental controlled area in the Hoover Building.

We also implemented "Group Systems" collaborative software for demonstration meetings, and developed and supported plans to further its use in government meetings.

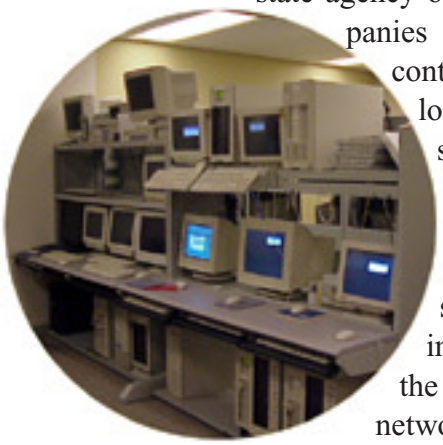
Storage Network Team

The storage management team makes sure there is enough space available for each data file that needs to be stored on ITD computer systems, and works with agencies to determine how and where the data should be stored. The critical nature of this data requires reliable backup capability. ITD uses robotic tape libraries (called silos) to backup data to tape cartridges. The silos store over 15,000 tapes holding data from the mainframe, and (new this year) the data warehouse. This is much faster and more reliable than processing tape backups manually.

Computer Network Team

The Computer Networking group is responsible for the "Campus Backbone Network" that allows agencies located in the capitol complex to access the ITD mainframe and servers.

It is also responsible for supporting connection of state agency offices and companies working under contract to agencies located across the state to ITD data centers.



We made significant improvements in the capitol complex networking security and network access to mainframe data by implementing appropriate firewalls and cooperative agreements with customers needing secure access to data.

In the past year, we have developed the ability to allow secure communication between PC workstations, servers, and the mainframe computer using TCP/IP (Transmission Control Protocol over Internet Protocol). TCP/IP is used by the Internet, and is standard on almost every computer in use today. Prior to this, the methods available to access mainframe data were much more complicated and expensive, which limited the availability of mainframe data.

In addition to the improved TCP/IP services, the Computer Networking team has:

- Provided networking support for the Department of Management "Reconnecting Iowans with their Government" booth at the Iowa State Fair.

- Provided networking support for state agency booths at the 2nd annual Technology Showcase.

(continued on next page)

Operations - Fy '00 Accomplishments

(continued on previous page)

•Worked with multimedia staff to provide networking for the World Food Fair and several other videoconferences.

•Worked with DGS, ICN, and other agencies involved in the Bold Move initiatives to plan and install network connectivity in buildings being remodeled on the capitol complex with no loss of service.

Professional Licensing

ITD developed a computational environment to support the Commercial Licensing application. This is the first of many initiatives for electronic access to government services by citizens.

Processing

The Operations Division continues to improve communication with agencies to gather capacity planning information so growth in requirements for processor power and storage can be factored into plans and accommodated in a timely manner. ITD has automated this process to improve timeliness.

ITD processes an enormous number of jobs for agency customers. This capacity planning effort helps ensure that there is enough computer power to get these jobs done in a timely manner.

FY 00	Jobs	Printed Lines
July 1999	66,457	85,600,036
August 1999	70,798	86,564,378
September 1999	69,910	104,358,150
October 1999	72,922	102,617,930
November 1999	78,528	67,502,485
December 1999	67,350	91,812,292
January 2000	68,340	91,882,532
February 2000	71,984	77,142,928
March 2000	79,159	96,983,824
April 2000	69,611	93,991,266
May 2000	77,772	119,137,155
June 2000	77,106	80,388,780
TOTALS	869,937	1,097,981,755

Operations - Fy '01 Activites

Improvements to Routine Services

Constantly strive to provide high quality, cost effective IT services to agencies from our data centers, computer networks, server farm, and desktop support. Improvements include: automated tape handling installations and enhancements, additional processor power to keep up with increasing workloads, and a new generation of storage technology (SAN) to make data available where and when it's needed.

Improvements to Secure Computer Networking

Initiatives include: VPN (Virtual Private Network) will allow locations to use Internet connections to exchange private data with state networks securely, network connectivity for supporting servers involved in the 21st century learning environment - including making training available to government employees using this service, and capacity increases (gigabit Ethernet) necessary to support these new uses.

Core Services

Develop proposals to bundle appropriate networking, processing, e-mail, desktop management and other services into a "core service" package that would be widely available to employees in covered agencies.

Governor's Office Automated Constituent Tracking System

ITD LAN Team installed, trained, coordinated and supported the Capitol Correspond Constituent Tracking System in the Governor's office. This is the first automated tracking system used by the State of Iowa governor's office. The system currently has approximately 70,000 records entered in the Capitol Correspond database.

Internet/Intranet Services

The LAN Team supports the hardware and software for the Internet and Intranet Services provided by ITD. We provide web hosting on both the Internet and Intranet servers.

Relocated Lucas Building Offsite Storage

ITD relocated the contents of the Lucas Building's offsite storage to a new location due to the Department of General Services "Bold Move" renovation of Lucas.

Install Mainframe Transcation Software

Install new mainframe transaction processing software (CICS-TS Release Version 1.3). This will open new opportunities for communication with servers and workstations, and help make information available to the public through Internet web browsers. This serves the goal of making the information the state has collected and stored for years on mainframe computers more useful in a wider array of applications.

Storage Area Network

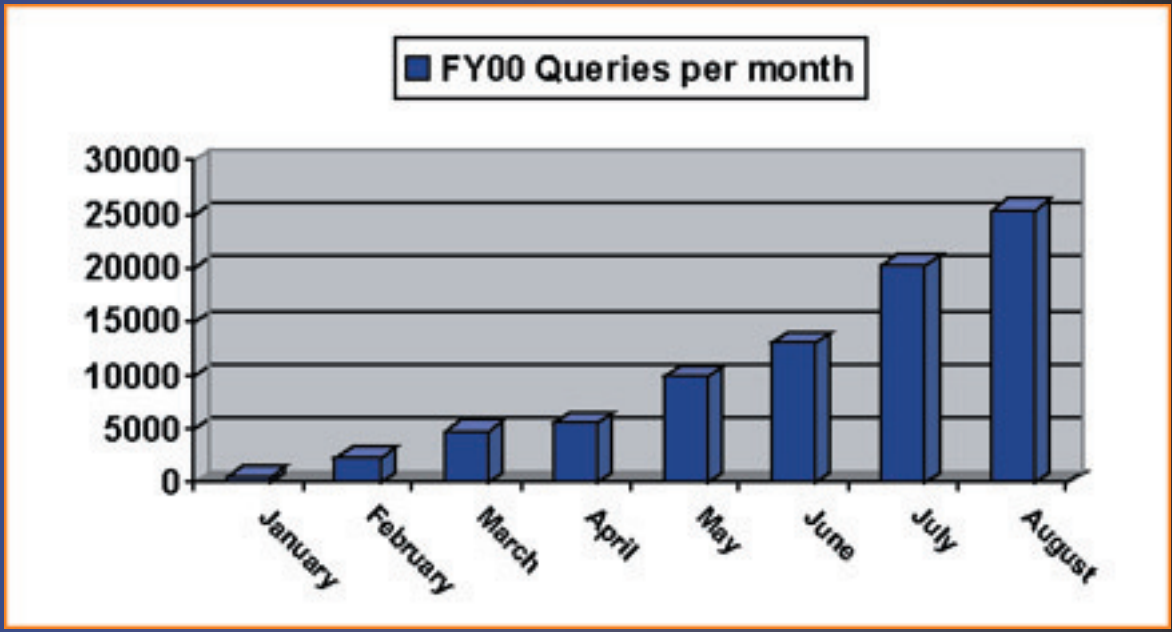
Implement the first stages of a Storage Area Network (SAN). This will allow for rapid additions of storage to meet needs, and physical distribution of data to "hot" backup sites to improve reliability in a disaster recovery situation for applications that require it.

Enhance the automated tape library (SILO) to LAN data from the SAN a high rate of speed. This will also improve mainframe backups to accommodate ever-larger files being stored there.

Operations - Fy `01 Activites

Single Contact Repository

SING (single contact repository) is one example of the applications enabled by the improved TCP/IP (telecommunications protocol) capabilities being installed (including VPN and firewalls). This service allows nursing homes to do on-line background checks of potential employees. It has been very successful, as demonstrated by the growth shown in the following graph.



E-Mail Standards

The state has adapted standards for e-mail based on the Microsoft Exchange and Lotus Domino/Notes products. ITD has moved to eliminate the 1980 era Office Vision e-mail system and offer Exchange and Notes services as replacements. These systems support more than 4,000 mailboxes for state employees. Major efforts are being made to do a V&V (validation and verification) audit to ensure that the systems are being operated according to the highest standards, improve virus scanning and control spam (junk mail), improve directory services to conform to the published e-mail naming standard, and add additional capabilities. Addition capabilities being evaluated or implemented include on-line meeting services, and Internet access to mail.

Group Systems

Group Systems facilitates planning meetings and cooperative development and review of plans and other documents is being rolled out as a potential core service. It is now available via the Internet for virtual meetings as well as being used in computer lab environments (where meeting attendees can participate in person).

Faster Printing of State Warrants

ITD is participating in a major initiative to print state warrants on high-speed laser printers. The current process requires several manual processes that slow down the process, rely on obsolete machines that are hard to repair, and have inconsistent quality. The laser printing process can result in a finished, folded, sealed, addressed form that is even sorted to save postage when it is mailed. Examples of documents that will benefit from the new process include: medical cards, child support payments, DHS monthly checks, and state paychecks.

State Government Research and Development

The Office of IT Innovation is responsible for fostering innovation in the application and use of IT via pilot projects that test the viability of new concepts and technologies and other research and development (R&D) activities. This includes exploring the potentials of emerging technologies including, but not limited to:

•Wireless technologies such as: wireless digital e-mail and web services; short range radio frequency communication interfaces for handheld devices such as phones, organizers, and personal digital assistants; personal computer Local Area Networks using radio frequency communication; and medium and high capacity laser and/or radio frequency data transmission systems for cross-town and cross-campus use.

• Hardware Innovations such as: flat panel display technologies; small form factor workstations and portable PC's; improvements and enhancements in connectivity and communications (e.g. universal serial bus, IEEE 1394 multimedia transfer protocols, short range radio frequency interfaces); and ultra-high speed processors (1GHZ and above).

•Software Innovations such as: asset and operational management software; dynamic service level agreement monitoring and alert; automated backup and recovery for severs and desktop systems; and productivity tools for supporting the development, deployment, and maintenance of e-government applications.

The state government R&D function will provide input and support to the ITD Policy and Planning Division for the maintenance and development of current IT standards. The Office of IT Innovation will service specific state agency requests for the technical research, special projects, prototypes, and field trials. For the purposes of conducting certain field trials or special projects, this position may supervise and direct the work of a designated group of FTEs (both within ITD and in other state agencies) for a designated period of time.

The Office of IT Innovation will assist governmental entities with education and provide hands-on experience with leading edge technologies.

Office of IT Innovation - Fy '01 Activites

Information Technology Technical and Policy

The Office is involved in the development and promotion of technical and policy initiatives related to the Economic Development Technology Investment Plan to establish and maintain Iowa's position as a leader in the "New Economy". It will promote R & D and IT innovation in Iowa, including the evaluation of new Internet technologies, pilot projects to develop prototype applications, collaborative systems development with the private sector, start-up funding of promising citizen-facing applications, incubation of new applications development projects, funding of joint application development across multiple agencies, testing of new Internet access, security and privacy approaches, and prototype development of intergovernmental electronic applications. The Office will act in a technical and policy advisory role to various boards, commissions, task forces, and other working groups in the formation of public policy related to information technology. This would include issues such as equal access for all citizens to broadband internet services (digital divide issues), establishment of a high-speed network access portal in Iowa, IT workforce training and planning issues, telecommuting, and implementation and use of wireless digital devices in the conduct of state business.

The Office of IT Innovation is representing the Information Technology Department on the following task forces and working groups:

- Governor's Criminal Justice Information Technology System Integration Task Force - This task force is dedicated to the integration and improvement of the function and interrelationships of the state government criminal justice systems.

- Information Solutions Advisory Committee - This committee is identifying and making recommendations to address three priority foundation issues: access to IT skilled workers, entrepreneurial development/access to capital, and access to advanced technology infrastructure.

- New Economy Enterprise Planning Team - It is developing strategies to position Iowa to function effectively in the 21st century economy.

- Information Privacy Task Force - This group is focused on information privacy as it relates to electronically stored and transmitted medical history and diagnostic information.

State Government Info. Tech. Privacy Advocate

Under the general administrative direction of the Chief Information Officer, this position functions as an advocate for the privacy of data and personally identifiable information that is processed, maintained, or transmitted electronically by governmental entities. This position may: serve on work groups of task forces dedicated to formulating information policy; act in an advisory capacity to the Chief Information Officer and Director of Digital Government and his staff.

Technical Advisor to the IT Project Office

The ITD Project Office is charged with the development and implementation of cost control, quality assurance, and auditing of information technology applications throughout state government. The Director of the Office of IT Innovation serves as a technical advisor to the ITD Project Office is all aspects of their operation. This provides the necessary technical expertise to allow them to perform their job effectively and enables them to maintain a reasonable separation from the technical staff within ITD who may be the subject of current or future audits.

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Notes

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