Innovating in our Future

North Dakota
- State Government
- K-12 Education
- North Dakota University System
The State has experienced strong economic growth in recent years. To continue this growth into the future, strategic investments are necessary. The State’s technical infrastructure needs to keep pace with rapid changes in the State’s business requirements and to meet the expectations of our citizens. Economic growth demands high speed networks for education and government services as well as robust administrative systems to manage our schools and government programs. Investments in data management and reporting will be essential for the State to effectively put information into the hands of decision makers and constituents.

Lisa Feldner, North Dakota’s Chief Information Officer, Randall Thursby, Chief Information Officer for North Dakota University System, and Dan Pullen, Director, North Dakota Educational Technology Council, present this plan for technology progress for the 2009-11 biennium. State government, K-12, and the North Dakota University System are committed to continue their history of collaboration and partnership to ensure the maximum return on our technology investments.

The activities described in this plan are intended to build upon our solid technology base and deliver the services our citizens expect in this ever changing world.
Every even numbered year, North Dakota State Government agencies prepare their Information Technology (IT) Plans for the next biennium. The process began in 2008 with the Information Technology Department’s (ITD) planning analysts presenting a planning briefing in March. Updates to the plan process, ITD rates, and technology direction were discussed at the briefing. ITD planning analysts met with each agency to discuss their direction and any concerns the agency may have during March and April. IT Plans were due on July 15 and were submitted to ITD via the Budget and Reporting System (BARS). Each plan was reviewed as to the agency’s technology direction, compliance to technology standards, and verified that the budget included in the IT Plan was tied to the agency’s financial budget submitted to the Office of Management and Budget. The State Information Technology Advisory Committee (SITAC) prioritized the large projects included in the IT plans in October. This State IT Plan document includes a summary of the agency plans, along with summary information from K-12 and the North Dakota University System.

Fifty-two of 53 agencies submitted acceptable IT plans as required.
The State Information Technology Advisory Committee (SITAC) ranks projects requesting general funds of more than $250,000 each biennium. Traditionally, SITAC has ranked only those projects requesting general funds, but for the upcoming biennium projects requesting special and federal funds were included in the list.

**General Funds**

- Adjutant General - Statewide Seamless Map
- Adjutant General - Computer Aided Dispatch (CAD)
- Adjutant General - Additional State Radio Towers
- Information Technology Department - Longitudinal Data System
- Department of Human Services - Replace Eligibility Determination System
- Secretary of State - North Dakota Business Development Engine
- Information Technology Department - K-12 PowerSchool Hosting
- Tax Department - Taxpayer Access Program Financial Institution Tax
- Information Technology Department - Criminal Justice Information System Project Pool
- Tax Department - Oil and Gas Module Integration
- Office of Management and Budget - Business Intelligence / Data Warehouse
- Information Technology Department - Data Center Remodel
- Department of Corrections and Rehabilitation - Integrate Field Service Operations into ITAG

**Special Funds**

- Information Technology Department - Enterprise Email Retention
- Adjutant General - Lab Information Management System Replacement
- Bank of North Dakota - Student Loan Lender System
- Workforce Safety and Insurance - System Web Portal
- Workforce Safety and Insurance - Filenet Phase 2
- Workforce Safety and Insurance - Claims Scanning
- Department of Transportation - Drivers License System Replacement

**Federal Funds**

- Department of Public Instruction - Longitudinal Data System - Phase 1
- Department of Transportation - Asset Management Analysis
- Attorney General - Offender Check-in
North Dakota State Government
Investing in our future is an ongoing process for the State of North Dakota. In 2003, the State focused on improving information technology investments, standardizing infrastructure, and enhancing the delivery of services through the consolidation of information technology. The State successfully consolidated data centers, provided uniform technology standards and guidelines, and saved money through enterprise software licensing agreements. With those accomplishments under our belts, the State is looking forward to future investments in information technology and business processes.

Goal One of the plan highlights online services that make it even easier for citizens to access government services such as new debit card services for unemployment insurance, the state parks reservation system, and the state fire index map. New initiatives for the next biennium include the taxpayer access program, the business development engine, and an education portal just to mention a few.

Goal Two targets the systems that are principal components of efficient and effective business processes. The State has many key IT projects being readied for implementation. This includes an overhaul of the State’s Medicaid system, a replacement of the legacy system for the administration of foundation aid for schools, and a replacement of the system providing individual education plans for special needs students. More projects are planned to replace legacy systems within state agencies such as the Bank of North Dakota, the Judicial System, Job Service North Dakota, and the Department of Human Services.

Informed decision-making lies at the heart of goal three. Several state agencies, as well as the education communities, are planning to implement data warehousing systems with analytical tools. The systems will provide more accurate and timely reporting, in addition to historical, current and predictive views of the information.

Maximizing value with shared solutions is goal four. This goal will continue to see increased activity in the future as we find ways to share services, hardware, software, and data.

It is important to note that accountability and return on investment will be realized through project management. The State has a well-developed enterprise project and portfolio management process that guides and monitors all information technology projects. North Dakota’s process has been nationally recognized as a best practices model.

The State of North Dakota is investing in the future by increasing services to our customers and stakeholders, delivering efficient and effective technology services and shared solutions, and providing solutions that allow for informed decisions.

North Dakota state government goals:

1. Improve the delivery of government services by expanding self-service access to the public
2. Meet changing business needs by providing dependable, robust systems
3. Allow informed decision making by securely collecting and disseminating information
4. Maximize the value of technology by collaborating to provide shared solutions
Goal 1
Improve the delivery of government services by expanding self-service access to the public

Objectives

- Improve the usability of the State portal and agency websites
- Continue to incorporate e-government services into agencies’ standard business processes
- Use technology to improve the effectiveness and efficiency of state government

North Dakota state government has made great strides in service delivery through the use of technology. We continue to look for ways to become more convenient, more efficient and more accommodating to meet the expectations of our citizens.

Initiatives

Secretary of State (SOS) – The Business Development Engine (BDE) is an automated online system that provides a streamlined environment enabling new and existing businesses easier interaction with North Dakota state agencies. The engine will also provide prospective businesses with greater researching functionality resulting in additional opportunities for growth and expansion while moving North Dakota to an ever stronger economy. The SOS office will manage the project funding along with an interagency governance structure.

Secretary of State (SOS) – Electronic Poll Books are a new tool that allows poll books to track voters. This also allows SOS to track voters who have voted in a precinct previously to moving from a paper record to an electronic record. Using Help America Vote Act money, the department will purchase these devices for the counties that choose to use them. The counties will then have five years to pay that money back to the State’s election fund.

Office of Management and Budget (OMB) – The agency plans to improve and enhance the Fiscal Management website to make it more user-friendly.

Office of Management and Budget (OMB) – The agency will add state spending information to Fiscal Management’s website to allow easy public access.

Office of the Attorney General – The Offender Check-in project will deploy capture-device technology to sites across North Dakota. Offenders will register
and provide changes to information such as home address, employment, and school information. The system will provide movement location to local law enforcement to help them track their movement and detect non-compliance more quickly. The capture devices will validate identification through fingerprints, photographs, and/or videos.

Department of Corrections and Rehabilitation (DOCR) – DOCR plans to offer electronic email and money transfers via the web from families who have family members incarcerated at the DOCR. This will reduce DOCR’s labor involved in the management of letters and money to inmates.

Office of State Tax Commissioner – The Taxpayer Access Program (TAP) is a module within Gentax which provides secure taxpayer self-service functions via the internet. Taxpayers can view account status, inspect filing and payment history, and file and pay online. TAP also has the ability to provide a web presence to allow taxpayers to enter a specific tax type return directly into Gentax after validation. This capability within TAP would replace the current Financial Institution Tax (FIT) front-end system.

Department of Public Instruction (DPI) – Adding an Education Portal will provide an effective environment for information collaboration among the education community, including students, parents, teachers, administrators, DPI, Career and Technical Education (CTE), Education Standards and Practices Board (ESPB), legislators, and others. Teachers and administrators will be able to establish district and/or statewide support systems as an effective means to exchange information. The education community will have a single location to enter and retrieve data based on their log-on credentials and interests.

Job Service North Dakota (JSND) – The agency will rewrite the JOBSND website for improved ease of use and more consistent look and feel.

Workforce Safety and Insurance (WSI) – The agency will develop a web portal to give users a single point of entry, a consistent look and feel, and a cohesive method of connectivity for WSI systems, staff, and stakeholders.

Workforce Safety and Insurance (WSI) – WSI plans to implement a state-of-the-art Customer Relationship Management (CRM) tool to better manage stakeholder information and contacts, improving customer service and WSI productivity. At WSI, the primary purpose of the CRM system will be to better support stakeholder and administrative requests for data and services. Other primary features include the ability to automatically identify stakeholders using the call center interface to track their interaction with stakeholder service representatives. Security permitting, CRM can also track and fulfill external web-generated requests for information.

Department of Commerce – The agency will begin implementation of phase two of website enhancements to include RSS feeds, blogging, and video capabilities.

Department of Agriculture – The agency will revamp its website, www.agdepartment.com, to improve the look and feel, improve content management, integrate e-commerce to enhance licensing, add an intranet site to streamline internal business processes for employees, and bring more advanced functionality to the site for the citizens of North Dakota.

Game and Fish Department – The agency plans to migrate the Boat Registration System application from the Linux/ADABAS platform to the existing “Online Services” web application. Staff requiring access to this data will benefit since the legacy Linux application is only available to internal Bismarck personnel. Licensing staff will enjoy having data in one location, and they will no longer need to upload and download data to other applications and users. The enforcement staff will benefit by having easier, quicker, and more convenient access to the data when they are investigating watercraft usage.

North Dakota Parks and Recreation Department (NDPRD) – The NDPRD Online Management System (OMS) was developed during the 2007-2009 biennium and went live on April 1, 2008. Planned enhancements to the existing application include an equipment module, maintenance module, roster module, zip code and city module, expense module, Out-of-State Snowmobile Permit Transition, Off-Highway Vehicle (OHV) Dealer Safety Transition, and Snowmobile Safety Test Fee Transition.
Goal 1 (cont'd)

Improve the delivery of government services by expanding self-service access to the public

Accomplishments

North Dakota Insurance Department - The North Dakota Insurance Department’s Boiler Inspection Program started imaging their Inspection Reports and Manufacturer Data Reports into FileNet, an electronic document management system (EDMS), starting in January 2008. This was a huge success, and the department spent less than $1,000 to implement it. Boiler inspectors can remotely access these reports via the web while performing field inspections.

North Dakota Insurance Department - The Company Licensing section started using the Liquid Office Public Access license to allow insurance companies to submit their Abstract of Statements. These forms go directly into FileNet which are automatically emailed to the North Dakota Newspaper Association (NDNA). This has greatly saved the department’s staff time in handling the paper, alphabetizing, and mailing them to the NDNA.

Job Service North Dakota (JSND) - JSND implemented FindjobsND.com and an advertising campaign to promote workforce services.

Job Service North Dakota (JSND) - JSND implemented a direct deposit and debit card option for unemployment insurance payments, a new web-based case management system, spidering for gathering and displaying open jobs on the website, and a new claimant status page for self service claim information.

Department of Health - The Department of Health’s Vital Records Division implemented the Electronic Death and Fetal Death components of its Electronic Vital Event Reporting (EVER) system. This system’s component is used by funeral homes, coroners, physicians, and the state medical examiner to collect and report all death and fetal death information. This information was previously reported on paper forms.

Commission on Legal Counsel for Indigents - The Commission on Legal Counsel for Indigents added materials to its website, including the Commission’s Guidelines to Determine Eligibility for Indigent Defense Services, Attorney Performance Standards among other standards and policies and various agency forms. This allows the courts, attorneys, and the public to readily access the Commission’s materials.

Adjutant General - The agency rebuilt their web-based fire index weather map to encompass the changes made by the National Weather Service. This web-based tool is available to the general public to help determine the fire index number for their area. The site is http://www.nd.gov/des/info/firedanger.html.

Adjutant General - The North Dakota Department of Health and the North Dakota Department of Emergency Services worked together in 2005 to acquire WebEOC, a web-based emergency management software. During the 2007-2009 biennium this product was enhanced with Geographic Information System (GIS) mapping. This will enable state, local, and federal agencies to get a graphical mapping view of an emergency situation.
Department of Corrections and Rehabilitation (DOCR) - DOCR released a new website to provide additional information about its services.

North Dakota Parks and Recreation Department (NDPRD) - The NDPRD and Information Technology Department (ITD) expanded self-service to the public by providing the Online Management System (OMS), allowing web-enabled campground and cabin reservations. Park users can also purchase annual park permits online. Future plans include additional facility and equipment rentals, expansion of campground sites, and sales for concession items. Several wireless systems were also implemented within campground environments to provide internet access for campers and recreationists. The public is pleased with both endeavors.
Goal 2
Meet changing business needs by providing dependable, robust systems

Objectives

- Plan and manage system maintenance and replacement projects to ensure system viability
- Incorporate disaster recovery and business continuity assessment and mitigation processes as standard practices
- Perform required updates to accommodate changing business needs and legislative mandates

Like any asset the State’s information systems must be maintained and replaced as technology ages and business needs evolve. Investments in information technology reduce the risk of system failures, reduce the cost of support, and they allow for the addition of new features and efficiencies. The State also continues to enhance its capability to recover critical services in the event of a disaster.

Initiatives

Office of Management and Budget (OMB) – OMB is pursuing an upgrade of the Budget Analysis and Reporting System (BARS) to the web-based IBARS.

Office of the Attorney General – The Attorney General office plans to deploy a Crime Lab Information Management System (LIMS) to replace its in-house system to give the Crime Lab the functionality to manage information tracking evidence related to cases, training records, statistical information, tracking techniques in the analysis, identification, and comparison of physical evidence involved in the investigation and prosecution of criminal offenses statewide. Integration with the Criminal Justice Information System (CJIS) will also be developed.

Information Technology Department (ITD) – ITD is proposing to remodel the existing data center and obtain general funds for one-time costs associated with the remodeling effort. The remodel will result in more efficiency and allow ITD to cost effectively provide for state government information technology needs.

Office of State Tax Commissioner – The Tax Commissioner’s office will modify the existing components and configure new components required within the GenTax system to integrate the Oil and Gas tax returns. When completed, the Gentax system will replace the current Oil and Gas tax system that is currently managed by ITD. The Oil and Gas system manages tax returns which provided the State revenue of more than $188 million over the last year.
Office of Administrative Hearings (OAH) – OAH plans to upgrade their case management/billing system with an integrated solution for case management, billing, and file document management services. OAH staff will be able to more quickly and easily locate and access file-related information. The system will also provide a better billing solution.

Judicial Branch – The Judicial Branch plans to replace its 20-year-old case management system used by the Judicial Branch in order to continue to meet the increasing and changing demands of the Judicial Branch and the public.

Veterans Home – The Veterans Home plans to replace their current MDI and paper medical records with an electronic health records (EHR) system. The EHR program will cover five major areas - clinical records, electronic medication administration record (eMAR), electronic charting, minimum data set (MDS) submission, and accounting.

Department of Human Services (DHS) – DHS plans to replace its eligibility determination system(s). The department uses several systems, some dating back to 1984, to determine eligibility for the various programs they administer. DHS’ Eligibility System(s) will be technologically current and will be better able to meet changing business needs including records retention as a result of this project.

Job Service North Dakota (JSND) – JSND will continue its Unemployment Insurance (UI) Modernization Program. This will be the second of a two or three biennium upgrade process for JSND’s major UI business applications.

Office of the Insurance Commissioner – The Insurance Commissioner plans to replace the State Fire and Tornado Fund and State Bonding Fund systems which track contact information on 1085 policyholders and 2527 bondholders, respectively.

Bank of North Dakota (BND) – The bank is planning to replace its Student Loan Lender System with a viable solution to satisfy loan origination, loan disbursement, collections, customer service, electronic reporting, reporting functions, and loan servicing which are currently being provided by the ALS lender mainframe application.

Workforce Safety and Insurance (WSI) – WSI plans to replace their claims management system, policy information computer system, work flow management system (Work Manager), and interfacing sub-systems, with a more up-to-date and comprehensive package.

Department of Corrections and Rehabilitation (DOCR) – DOCR plans to integrate the Docstars Offender Management System for the Parole and Probation Division with the ITAG Offender Management System used within the Prison Facilities Division.

Adjutant General – The Adjutant General plans to upgrade their Law Enforcement Message Switch to provide web-based services. This will enable the agency to provide photos to the law enforcement community, access other State files for photo mug shots, and enhancements for the Computer Aided Dispatch (CAD).

Department of Agriculture – The Department of Agriculture plans to revamp its website, www.agdepartment.com, to improve the look and feel, improve content management, integrate e-commerce to enhance licensing, add an intranet site to streamline internal business processes for employees, and bring more advanced functionality to the site for the citizens of North Dakota.

State Seed Department – The State Seed Department will convert their State Seed Application Software Conversion (SSAS) application to new source code using tools which will meet the current programming standards. This conversion will update to current technology and significantly extend the life of the application.

North Dakota Parks and Recreation – The Parks and Recreation Department recognizes that connectivity issues in remote park locations have always been a challenge. The department’s 2009-2011 budget request includes an optional adjustment for more stable, reliable connections through fiber optics, ethernet, or T-1 lines. This change would include the addition of laptops in entrance booths, providing instant access to reservation information and other business applications.

Department of Transportation (DOT) – DOT plans to initiate a four-year project to rewrite the Driver’s License Master Systems (DL1 & DL3). The current systems are written in ADABAS and are becoming increasingly more difficult to maintain as technology moves to web-based applications and relational databases. The system, by nature, requires high maintenance due to the impact of frequent legislative changes (both state and federal) and administrative requirements.

Department of Transportation (DOT) – DOT will rewrite their Position Information Questionnaire / Employee Information System to remove it from Lotus Notes.
Goal 2 (Cont’d)

Meet changing business needs by providing dependable, robust systems

Accomplishments

Legislative Council and the Legislative Assembly (Legislative Branch) – The Legislative Branch replaced their laptops and desktops, and migrated to Vista operating system and Microsoft Office 2007. They also upgraded to digital recorders and WinScribe software. The Council continued to convert their deteriorating historic documents to PDFs, and they expanded the install base of Polycom equipment.

Office of Management and Budget (OMB) – OMB eliminated all mainframe processing jobs excluding those that involve Human Services.

Department of Human Services (DHS) – DHS updated the current Medicaid Management Information System (MMIS) to accept the new National Provider Identifier (NPI). DHS plans to update related systems as separate projects (i.e., Voice Response and Scanner changes). The National Provider Identifier (NPI) was established by Congress to identify healthcare providers in all standard transactions, eliminating the need for multiple legacy numbers, (i.e., UPIN, Blue Cross and Blue Shield Numbers, CHAMPUS Number, and Medicaid Number, etc).

Department of Human Services (DHS) – Senate Bill 2326 passed by the 2007 Legislature and signed into law provides Optional Medical Assistance for families of children with disabilities. DHS deployed a solution using a similar program for disabled adults as a base.

Job Service North Dakota (JSND) – JSND implemented a Performing Directional Study to determine the best future direction for technology at JSND.

Job Service North Dakota (JSND) – JSND deployed a second mainframe computer in a separate facility to be used for disaster recovery.

Department of Public Instruction (DPI) – DPI designed and implemented a statewide online system for the Individual Education Program (IEP) to streamline the IEP process. This system automates the development of individual education programs for special needs students. This increased data integrity and decreased the time and cost of multiple paper-oriented systems, allowing teachers to spend more time with students.

Department of Public Instruction (DPI) – DPI automated and streamlined its financial data collections and reports to compute Foundation Aid calculations, which now provides a consistent school funding process statewide.

Department of Transportation (DOT) – DOT replaced a manual, paper timesheet process with an automated process, which includes electronic authorization and workflow.
Department of Corrections and Rehabilitation (DOCR) - DOCR worked in collaboration with the North Dakota Attorney General’s sex offender registration kiosk project. The project pilot requires sex offenders to register monthly to report changes in address or status via kiosk technology.

Department of Corrections and Rehabilitation (DOCR) - DOCR installed a new inmate education network to provide computer skills and related training to prepare inmates for release back into society. Providing inmates with employable skill sets improves their chances of success in society thereby reducing their chances of re-offending.
**GOAL 3**

Allow informed decision making by securely collecting and disseminating information

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**OBJECTIVES**

- Establish and expand architectures for sharing data across organization boundaries
- Build staff competencies and deploy business intelligence tools to provide timely access to accurate information
- Identify, plan, and implement measures necessary to ensure privacy, confidentiality, and security of information and other assets

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**INITIATIVES**

**Office of Management and Budget (OMB)** - OMB plans to deploy a business intelligence and data warehouse solution to provide a reporting environment for the PeopleSoft Finance and Human Resources information systems. This project includes a toolset, implementation, support services, and training for end-users.

**State Longitudinal Data System Committee** - The State Longitudinal Data System Committee is proposing to create a longitudinal data system which will provide follow-up information on students involved in education and training programs for organizations involved in education, workforce training, advising, job placement, and policy making. This project will also reduce replication and duplication presently involved in collecting follow-up data. It will also provide an economic development tool which documents the effectiveness of education and training programs in North Dakota for use by businesses, communities, and economic development organizations.

**Geographic Information Systems (GIS)** - The GIS Hub is an ongoing initiative under the governance of the GIS Technical Committee to share GIS infrastructure and data to improve the availability of GIS information and avoid duplication. The GIS Hub is the result of many people working together. In 2001, the North Dakota State Legislature appropriated funds to develop the GIS Hub due to a widespread historic demand by state agencies. Since then, funding has been provided for maintenance of the hub infrastructure and storage, training, and enhancements to GIS capabilities.

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State agencies collect and manage important sources of information on public safety, health care, education, and economic development. To make the data more useful, the State plans to continue to deploy solutions linking data across disparate systems. Business intelligence tools will provide analytic and reporting capabilities within a secure environment.
Criminal Justice Information Sharing (CJIS) – CJIS is an ongoing initiative to share CJIS infrastructure and data between criminal justice agencies and other state agencies. CJIS includes the sharing of information with traditionally non-justice agencies and with the public, which increasingly is demanding greater and more varied access to an expanding array of government information and services. CJIS is a cross agency initiative governed by the CJIS Board established in NDCC 54-59-21. Plans include the development of interfaces with local law enforcement and, potentially, federal data sources.

Department of Public Instruction (DPI) – DPI plans to implement an educational data warehouse and analysis tools to evaluate and deliver data comprised of primary through secondary education data. The project will encompass delivering timely and secure education data to meet the demands of federal and state reporting, No Child Left Behind, policymakers, North Dakota workforce forecasters, school districts, educators, and the public.

Workforce Safety and Insurance (WSI) – WSI plans to deploy a data warehouse, which is a database geared towards the business intelligence requirements of an organization. Data warehouses integrate data at regular intervals from distributed and differently structured databases in a manner designed specifically for efficient data analysis and reporting using common querying tools. This tool will better organize, analyze, and report WSI’s business operations and trends.

Highway Patrol (HP) – The Highway Patrol will purchase cellular aircards for each patrol vehicle. This technology will provide each trooper with secure broadband wireless access to complete roadside reports, query the Criminal Justice Information Sharing (CJIS) system, and receive photographs about Amber Alerts, wanted suspects, and other law enforcement information. The system will also allow employees to access the Highway Patrol’s file server and secure department intranet.

Adjutant General – To enhance the statewide coverage of the public safety radio system, the Adjutant General plans to purchase and install an additional eight State Radio towers to be owned and operated by the North Dakota Department of Transportation.

Adjutant General – The Adjutant General plans an implementation of online database validation requirements to be used by all law enforcement agencies within North Dakota. The division of State Radio is the designated control terminal agency for the National Crime Information Center (NCIC) and must insure that validations are completed in accordance with FBI mandates.

Adjutant General – The Adjutant General will deploy an Online Training and Security Testing system. This system will allow for automated notification and testing of each agency user, currently 610 terminals. The Federal Bureau of Investigation (FBI) Criminal Justice Information Services Division requires that all personnel be tested within six months of hire and every two years thereafter. The testing package would include security awareness, initial training and use of the information contained in the FBI system.

Adjutant General – The Adjutant General plans to deploy an Online Audit solution. This program will allow audit training, user access, data quality, security, and more efficient dissemination of information.

Adjutant General – The 2007 Legislature approved phase one of a Computer Aided Dispatch system (CAD). Phase two will provide an enhanced, more robust CAD system which includes the following:

- Interoperability with other existing CAD systems within the State
- The ability for local sheriff and police departments to operate off a single system
- The ability for State Radio supported counties' FIRE and Emergency Management Services (EMS) to be dispatched from the system
- Additional mapping components
- Automatic Vehicle Location (AVL) functionality
Goal 3 (Cont’d)

Allow informed decision making by securely collecting and disseminating information

Adjutant General – The Adjutant General plans to obtain a statewide seamless, spatially accurate, and complete base map dataset that is accessible by all state agencies, local and tribal governments, and the general public.

Department of Transportation (DOT) – The DOT plans to provide access to FileNet, an electronic document management system, all users, including the 350 section employees, allowing electronic creation of forms and the ability to route to anyone in the DOT.
**Criminal Justice Information Sharing (CJIS)** - CJIS staff are implementing a Statewide Automated Victim Information and Notification (SAVIN) system. SAVIN allows victims to register to receive important offender status notification information. It will interface with and gather information from the courts, county jails, the Department of Corrections and Rehabilitation, law enforcement, and the Attorney General’s Office. Offender status information will also be integrated with the CJIS Portal and exchanged statewide. As a result of this information sharing process, victims will be afforded their basic notification rights and will be notified in real time of offender status changes related to their case.

**Commission on Legal Counsel for Indigents** - The Commission on Legal Counsel for Indigents uses a new secure web-accessed case reporting system for attorneys to report case information such as case type, hours worked, and to permit easy statistical gathering by the agency. The system permits the public defender offices to determine whether a case assignment would pose a conflict.

**Criminal Justice Information Sharing (CJIS)** - The CJIS portal usage grew significantly the past two years, with more than 1200 registered users utilizing the CJIS Portal and more than a million transactions occurring during the last fiscal year. Significant projects completed include:

- Court-Protection Order Integration – Protection order information is now available on the CJIS Portal as well as an electronic flow of information to the registry of protection orders maintained by the Bureau of Criminal Investigation.

- Portal 2.0 – The rewrite of the Portal reduces the cost of future interfaces by adopting national standards (e.g. NIEM, GJXDM) for information sharing.

- NetRMS Integration – Information about calls for service and incident reports from NetRMS users is now available via the CJIS Portal.

- NetRMS Cruiser – The cruiser component (mobile solution) of NetRMS was implemented for a number of law enforcement agencies.

**Job Service North Dakota (JSND)** - JSND developed an Information Technology (IT) Security Plan and completed an IT Risk assessment, as well as performed web application vulnerability testing and training.

**Department of Corrections and Rehabilitation (DOCR)** - DOCR is providing data interfaces to connect offender information with a new crime victims system (SAVIN).

**Department of Corrections and Rehabilitation (DOCR)** - DOCR is deploying an Electronic Medical Records System (EMRS) that will track all costs of medical care provided to the State’s inmates and comply with federal HIPPA requirements. The system will increase efficiencies in all areas of medical care for inmates.
Goal 4
Maximize the value of technology by collaborating to provide shared solutions

Objectives

- Manage network services to state government, education and political subdivisions to ensure availability at a reasonable cost
- Identify opportunities and implement shared solutions to reduce the total cost of ownership for state agencies and political subdivisions
- Leverage the State’s investments in enterprise-wide software and infrastructure by upgrading to new functionality and expanding its usage
- Foster project management

North Dakota’s state agencies, political subdivisions, and citizens benefit from a centrally-managed network and centrally-hosted applications. Sharing these functions allows the State of North Dakota to maximize the value of its investment in technology.

Initiatives

Information Technology Department (ITD) – ITD requested general funds to allow all schools to utilize PowerSchool for student administration and reporting.

Office of the State Auditor – The State Auditor proposes to implement an electronic working papers system. The primary purpose of this system will replace the existing paper-based working papers system with an electronic system. Working papers will be prepared, reviewed, and stored electronically. This project will also replace their system for planning, staffing, and tracking audit progress.

Office of the Insurance Commissioner – The Insurance Commissioner’s Office needs an updated Anhydrous Ammonia Inspection System to schedule and track inspections on approximately 480 permanent storage tanks and 10,000 nurse tanks. The current system was designed in 1995 utilizing MS Access and MS Word. This project will replace the current system with a Basebridge.com module that will integrate with the current Boiler Inspection System by Basebridge.com utilizing MS SQL Server. The North Dakota Agriculture Department issues a license to the tank owner once an inspection is complete.
Department of Financial Institutions (DFI) – DFI plans to provide an interface to DFI’s Records Management System with data from the National Mortgage Licensing System (NMLS). The application/licenses for mortgage consumers would be entered and maintained using NMLS’s secured Internet website. Some of the data would need to be imported into the Oracle table(s) for North Dakota to be able to process complaints and exams for this data in the department’s records management PowerBuilder system.

**ACCOMPLISHMENTS**

Information Technology Department (ITD) – The service and operation of the videoconferencing network for K-12 schools, state agencies, and political subdivisions were transferred from the North Dakota Interactive Video Network (IVN) to ITD in a effort to streamline service for its users.

Information Technology Department (ITD) – ITD, Department of Human Services, Job Service North Dakota, Workforce Safety and Insurance, and the Department of Transportation were anchor agencies for the deployment of Primavera, a Project Management Information System.

Information Technology Department (ITD) – A new toolset from Front Range called ITSM (IT Service Management) was implemented to provide a solution for managing incidents securely and holistically across agency boundaries. ITD’s Service Desk also expanded its “Tier 1” support offering to a variety of new business units. Today, people from ITD, the Department of Human Services, the Bank of North Dakota, Job Service North Dakota, the Office of Management and Budget, the Attorney General’s Office, and others are working together to troubleshoot and resolve incidents.

Office of Management and Budget (OMB) – OMB implemented eApps in PeopleSoft, allowing employees to access and print paycheck information, including not only current but past remittance advices. eApps also allows employees to view deductions and leave balances online.

Office of Management and Budget (OMB) – OMB upgraded PeopleSoft Financials to version 9.0. This was the first upgrade since the initial implementation in 2004. The upgrade provided additional functionality to all users.

Office of Management and Budget (OMB) – OMB implemented the Absence Management module of PeopleSoft, allowing online requesting and approval of leave. The Absence Management module also eliminates further data entry by directly applying the leave taken to the leave balances.

Job Service North Dakota (JSND) – JSND incorporated the Information Technology Department (ITD) Service Desk to take all Tier 1 calls for assistance, reducing costs, and providing better service to JSND staff.

Job Service North Dakota (JSND) – JSND implemented the Primavera project management software and hired a new project manager, who is also assigned to any project more than $50,000.

Department of Public Instruction (DPI) – DPI rewrote the DPI district, school and personnel systems, and the Education Standards and Practices Board (ESPB) applications. The new applications better integrate system data (reducing data duplication) and provide better user interfaces, allowing teachers greater access and control of their information.

Department of Public Instruction (DPI) – DPI automated the enrollment system for the free and reduced school lunch program. This will greatly reduce the staff hours spent to manually determine eligibility. It also automates the identification process and discretely notifies school officials.
Dan Pullen, North Dakota Director of K-12 Technology

The members of the North Dakota Educational Technology Council (ND ETC) represent state government, higher education, school district leaders, and teachers. The Council works closely with the Information Technology Department (ITD), the North Dakota University System (NDUS), the Department of Public Instruction (DPI), and others to accomplish the Council’s statutory responsibility: coordinating educational technology initiatives for elementary and secondary education. The ND ETC Director and the two service agencies of ND ETC, EduTech, and the North Dakota Center for Distance Education (ND CDE), work with our state-level partners to create efficiencies, avoid duplication, and ensure that North Dakota’s technology investments serve K-12 students and educators.

ND ETC, EduTech, and ND CDE also work directly with school organizations and with school administrators, school technology coordinators and classroom teachers to make sure that our services continue to meet educators’ changing needs and bring the benefits of new technologies into all K-12 classrooms across the state. Collaboration with K-12 leaders, both at the state level and in local districts, helped us define our major initiatives for the next two years:

- Expansion of PowerSchool student information system to all schools in the state, and
- Targeted investments in the North Dakota Center for Distance Education.

All of the initiatives undertaken by the ND ETC are in line with the Council’s “Results Policies,” adopted as part of the Policy Governance system that focuses the work of the Council on big-picture goals. The ND ETC engaged in a strategic planning retreat in December 2007 and revised its Results Policies in April 2008. Included in the revised Results Policies is a definition of “educational technology systems” related to the Council’s mission as cited in NDCC 54-59.

Educational technology systems include, but are not limited to, teaching and learning tools and software used in classrooms and labs; Information Technology systems used to support teaching and learning such as networks, course and other content delivery applications, web and video course delivery tools, network applications and network management tools; data systems including student information systems, testing programs, data warehouse and data analysis applications.

The five Results Policies of the ND ETC guide the work of the ND ETC Director as well as the work of the ND CDE and EduTech. “As a result of our efforts ...”:

1. North Dakota educational technology systems will continuously improve educational opportunities for students.
2. Technology systems to enhance educational opportunities will be more efficient, effective and coordinated on a statewide basis.
3. Distance education systems will be in place to deliver a comprehensive curriculum to North Dakota students.
4. Professional development related to the use of educational technology will be available to school administrators and teachers to meet changing education needs.
5. Policies and practices to sustain the integrity, stability and security of the educational technology systems will be maintained and promoted.
GOAL 1
North Dakota educational technology systems will continuously improve educational opportunities for students

OBJECTIVES

- To make funding available to schools, enabling them to move toward more technology-rich learning environments
- To deliver new information technology (IT) services and to improve existing IT services, such as E-mail, web resources/tools and helpdesk services, to students and educators
- To expand the use of PowerSchool student information system to every public school district in North Dakota
- To realign the programs of North Dakota Center for Distance Education (ND CDE) with its new mission and philosophy to provide distance education opportunities to students and schools throughout the State of North Dakota

INITIATIVES

North Dakota Educational Technology Council (ND ETC) will request funding in its 2009-2011 budget to provide more schools with opportunities to receive Classroom Transformation Grants.

EduTech will work with Information Technology Department (ITD) to request general funds for the expansion of PowerSchool to all public schools in the state.

EduTech will provide quality implementation, training, and support services for the PowerSchool expansion.

EduTech will update the online tools available to school technology coordinators, allowing them to efficiently manage e-mail accounts and other services for their users and to manage Internet filtering customizations for their district.

Internet2 and video-based enrichment activities will continue to be facilitated for K-12 schools in collaboration with the North Dakota University System (NDUS).
ND CDE will promote a new synchronous course delivery system to schools in North Dakota.

ND CDE will continue to upgrade its course management system, its website, and online store.

**ACCOMPLISHMENTS**

**ND ETC awarded technology grants** to schools: Classroom Transformation Grants – 22 schools, Video Classroom Grants – 20 schools, and Qwest Foundation Teacher Technology Grants – 20 schools.

**ND ETC provided funding** for a statewide IP video recording system for all K-12 schools administered through the Information Technology Department.

**ND ETC worked with ITD** to determine the need for increased bandwidth in K-12 schools.

**EduTech migrated its website to a new platform** (MovableType 4) and developed a new design, layout, and color scheme.

**EduTech developed a blogging service** based on WordPress MU, which also includes the capability of hosting podcasts.

**EduWeb**, a template-based web hosting solution, was used by over 75 North Dakota K-12 organizations. EduWeb offered publishing privileges and other features designed for the K-12 school environment.

The **EduTech Help Desk provided ongoing technology troubleshooting and consultation to schools across the state.**

**EduTech and ITD implemented** the PowerSchool student information system in 100 schools that include 54 percent of all students statewide. The statewide PowerSchool Users Group met annually.

**EduTech provided a website** with resources, such as templates, tutorials, and a blog, to better support PowerSchool customers.

The entire **EduTech PowerSchool team** was invited to participate in the national PowerSchool Advanced Learning Summit in Tempe, Arizona. Invitations were based on meeting criteria on an assessment ensuring advanced skills and knowledge.

**ND CDE changed** its name from the North Dakota Division of Independent Study to the North Dakota Center for Distance Education to better reflect its goal and mission.

**ND CDE upgraded** to a new, open source, course management system for additional functionality.

**ND CDE developed** a new online store that is secure and ADA compliant.

**ND CDE implemented** a new design theme throughout its program.
GOAL 2
Technology systems to enhance educational opportunities will be more efficient, effective and coordinated on a statewide basis

OBJECTIVES

- Create efficiencies in K-12 technology spending through aggregating purchases and statewide initiatives
- Work collaboratively with state agencies, North Dakota University System (NDUS) and schools districts to implement new data analysis and reporting systems
- Promote a mainstream vision of distance education to K-12 stakeholders
- Develop partnerships with the K-12 Regional Educational Associations (REAs) in the state and with other educational or technology-based entities to create efficiencies in school use of major technology systems
- Work with REAs across the state to fulfill distance education needs
- Promote distance education opportunities for credit recovery to high schools statewide
- Streamline ND CDE curriculum development and purchasing on a statewide basis
- Share the vision and future of online distance education with stakeholders in public education

In order to maximize local, state, and federal investments in school technology systems, statewide coordination and leadership are required. Purchasing and supporting key applications and infrastructure at the state level creates efficiencies statewide.
**INITIATIVES**

North Dakota Educational Technology Council (ND ETC) will lead a stakeholder group in developing the 2009-2012 State Educational Technology Plan.

**EduTech will collaborate** with the Information Technology Department (ITD) to provide leadership to schools related to the E-Rate program. Coordination in the development of the annual state-level E-Rate application will be strengthened.

**EduTech will work with ITD** to integrate EduTech staff into ITD as regular classified employees in order to better manage human resources and serve K-12 needs.

**EduTech and ND ETC will collaborate** with the Department of Public Instruction and other state agencies to successfully implement a Longitudinal Data System.

**North Dakota Center for Distance Education (ND CDE)** will work with Prairie Public and the North Dakota Humanities Council to develop instructional resources for the North Dakota Studies website.

**ND CDE will work with North Dakota schools** to find solutions for their curriculum needs.

**ND CDE will continue to work** with a broad base of entities to improve its programs and services.

**ACCOMPLISHMENTS**

**ND ETC monitored and administered** the State Educational Technology Plan for 2006-2009.

**ND ETC facilitated the technology plan** approval process for all North Dakota schools participating in E-Rate and other federal and state funded school technology programs.

**ND ETC provided leadership** for the transition from an interim to a permanent director of the North Dakota Center for Distance Education.

**ND ETC facilitated the implementation** of school-based data warehouse and analysis tools for schools that purchased those applications through a statewide contract.

**ND ETC participated in state-level planning** of school data systems: the Department of Public Instruction’s Statewide Automated Reporting System (STARS), the proposed state longitudinal data system, school data warehouses, and the expansion of PowerSchool student information system to all schools in North Dakota.

**EduTech offered training** workshops and phone/e-mail support for schools completing their annual E-rate applications.

**EduTech worked with the Department of Public Instruction (DPI)** on assessing the effectiveness of school technology initiatives funded by competitive Title II-D funds administered by DPI.

**EduTech maintained six regional** information technology specialists across the state to serve school needs for information technology consultation and training.

**EduTech offered BlackBoard**, a learning management system, to all North Dakota K-12 schools with an emphasis on interactive television (ITV) schools to increase their communication with students in remote video sites.

**EduTech negotiated with vendors** to provide schools discounts on software and integration tools such as Discovery Streaming.

**ND CDE collaborated with the State Historical Society** to create a new North Dakota Studies high school textbook.

**ND CDE collaborated with Prairie Public and the Humanities Council** to create a new North Dakota Studies website: www.NDStudies.org.

**ND CDE offered video conferencing courses** to all schools in North Dakota.

**ND CDE surveyed North Dakota administrators** to improve its program.

**ND CDE aligned its program requirements** to the changes in high school graduation requirements proposed by the Governor’s Commission on Educational Improvements.

**ND CDE had its program evaluated** by an outside consulting firm to further realign its program to the changing need for distance education opportunities for schools in North Dakota.
Goal 3
Distance education systems will be in place to deliver a comprehensive curriculum to North Dakota students

Objectives

- Support the implementation of video classrooms in schools that need video to share courses
- Implement video networking capabilities and strategies to connect K-12 schools to educational resources outside the state
- Expand the partnership between North Dakota Center for Distance Education (ND CDE) and North Dakota school administrators to better align all ND CDE programs and services with district needs
- Continue to provide distance education and curriculum solutions to North Dakota schools

Initiatives

- North Dakota Educational Technology Council (ND ETC) will budget for funds to support schools that need improved video classrooms or to build new classrooms to meet demand.
- EduTech will pair local expertise with 123 VC-Jazzing Up Your Curriculum with Videoconferencing, a national videoconferencing project, to provide professional development for educators delivering coursework via videoconferencing.
- EduTech will continue to collaborate with North Dakota State University (NDSU) and ITD to offer video enrichment activities for K-20 classrooms.
- The North Dakota Center for Distance Education (ND CDE) will request additional funding to enhance its online course curriculum.
- ND CDE will expand its traditional curriculum to keep pace with technological innovations related to distance education.
- ND CDE will continue to upgrade its online course content with audio/video supplements, interactive activities, and enhanced critical thinking components.
**Top Initiatives & Accomplishments**

**ND ETC awarded $190,000 in grants** to 20 schools to support building and enhancing video classrooms for sharing high school courses. These grants were coordinated with the North Dakota Career and Technical Education (CTE) Department as part of their Virtual CTE Center initiative.

**Over 2,750 North Dakota high school students** attended a class delivered via video during fall semester 2007.

**ND ETC funded the statewide contract for Atomic Learning** as a technology training tool for administrators, teachers, and students in all schools.

**EduTech worked cooperatively with ITD** to assist in the transition of K-12 video services from Interactive Video Network (IVN) to the Information Technology Department.

**EduTech collaborated with in- and out-of-state providers** to offer educational content via videoconference to schools. Provider examples include the Fort Mandan Foundation, North Dakota Council on the Arts, the State Historical Society, North Dakota State University Department of Agriculture, Center of Science and Industry (COSI), and Missouri Research and Education Network (MOREnet).

**EduTech purchased the first group registration** for a live videoconference event that allowed six schools in North Dakota to observe a live total knee replacement surgery.

**EduTech provided facilitation for schools** to participate in global, collaborate events including presenters and observers in the Megaconference, Megaconference Jr., and Read Around the Planet.

**EduTech collaborated with NDSU** to offer advanced technology applications to K-12 schools including projects with the Center for High Performance Computing and the World Wide Web Instructional Committee.

**A videoconference troubleshooting tip sheet was created** to assist school personnel. This tip sheet will be shared with schools during EduTech regional technology specialists’ fall visits.

**EduTech facilitated quarterly ITV consortium directors’ group meetings** to collaborate on statewide video issues.

**EduTech offered BlackBoard**, a learning management software, to all K-12 schools with an emphasis on ITV schools to increase their communication with students in distant video sites and to ease the workload for instructors.

**ND CDE created an online course development team** consisting of staff members who have the expertise to create pedagogically sound online courses.

**ND CDE added synchronous courses** to its offerings at the request of local schools.

**ND CDE actively promoted its program** by presenting and exhibiting at conferences; conducting school visits and one-on-one meetings with school administrators; mailing brochures, catalogs, and other marketing materials to students and schools; and promoting CDE’s programs through e-marketing campaigns.
Goal 4
Professional development related to the use of educational technology will be available to school administrators and teachers to meet changing education needs

Objectives

- Use interactive video networking and web delivery for new professional development opportunities for K-12 educators
- Provide professional development for teachers that models the use of interactive and collaborative teaching/learning methods made available with Web 2.0 tools
- Provide demonstrations regarding how distance education can help schools meet their needs for expanded curriculum and highly qualified teachers
- Develop partnerships with schools to purchase online courses and materials
- Collaborate with DPI to properly assess and identify sound online learning organizations

Initiatives

EduTech’s professional development will be targeted to better meet educator/school needs for time, location, and content.

EduTech will continue to develop and support new training programs for Web 2.0 initiatives including social networking, educational gaming, and virtual worlds.

EduTech will develop strategies to meet educators’ professional development needs that are in line with recommendations of the Governor’s Commission on Education Improvement.

EduTech will develop a plan to raise awareness and understanding of 21st Century Skills and related topics.
Each regional EduTech staff member maintained a weblog for customers in their region. Postings included follow-up workshop content, links to resources, and professional discussions.

EduTech trainers used audio enhancement equipment in their workshops to improve the experience for participating educators.

**Accomplishments**

**Atomic Learning** online professional development resources were made available to all schools through a statewide contract funded by North Dakota Educational Technology Council (ND ETC).

**EduTech provided opportunities** for interactive television (ITV) teachers to collaborate with one another and with experts at annual Videoconferencing Institutes.

**EduTech staff delivered professional development** in face-to-face sessions and through videoconference.

**EduTech developed an online training dashboard** for customers to easily register for and evaluate workshops and to view the number of hours they have toward graduate credit.

**EduTech developed a four-hour workshop** on Web 2.0 tools to assist teachers in integrating these tools into their content areas.

**Featured workshop offerings by EduTech continued** to provide benefits for staff and customers. Offering fewer workshop titles enabled EduTech staff to refine the content and instruction and to move educators toward a deeper level of technology integration.

**EduTech implemented strategies to increase usage** of Atomic Learning including webinars, customized newsletters, and contests for teachers and students.

**EduTech offered advanced PowerSchool training** to educators in districts who were using the PowerSchool student information system.

**EduTech coordinated face-to-face and online** Internet safety programs for school administrators and teachers.

**EduTech developed INStructual TEchnology Partnerships (INSTEP),** and continued to update the program, to assist classroom teachers in the implementation and integration of technology into the classroom by pairing EduTech staff and teachers together to plan, develop, and deliver lessons.

**EduTech developed an online content management system** to allow staff to easily share and update workshop materials and other documentation.
Goal 5
Policies and practices to sustain the integrity, stability and security of the educational technology systems will be maintained and promoted

Objectives
- Provide statewide computer desktop protection, including anti-virus software, in every K-12 school connected to the Statewide Technology Access for Government and Education Network (STAGEnet) to ensure the stability of the shared infrastructure
- Maintain statewide Internet filtering for all K-12 schools
- Provide awareness of federal E-discovery regulations to assist schools in building improved data retention policies

Initiatives
EduTech will provide school administrators and technology coordinators with the resources and skills needed to manage their information technology (IT) risks. Resources will include desktop protection software and focused professional development.

EduTech will continue to seek solutions to minimize the time school technology coordinators spend on information technology (IT) security.

Internet safety and network and data security issues will be emphasized in ongoing communication and professional development for K-12 personnel.
**Accomplishments**

EduTech distributed an integrated, managed desktop security solution to protect North Dakota K-12 school computers. The system includes a firewall, antivirus protection, and intrusion detection and prevention system. All features are configured and managed by EduTech, freeing up valuable school staff time.

EduTech managed virus definitions, checked if machines were being updated properly, configured and applied desktop firewall policies, and provided web installation paths and technical support for the statewide desktop protection project.

EduTech blocked over 132 million virus and spam messages each year in the 55,000 email accounts it maintained for K-12 teachers and students.

EduTech developed Mailwatch for customers, allowing them to view potential spam messages that have been moved into quarantine.

EduTech managed a statewide Internet filtering system that provides a safe Internet environment for students in the state. Filtering, required by the federal Children’s Internet Protection Act, is flexible and allows each school district to determine the level of filtering it wants. The cost savings of the centrally purchased and managed filtering systems was 75 percent. Mobile filtering was piloted in a school district to test its effectiveness for students, staff, and school board members using school-owned mobile computers.

EduTech built a one-hour presentation with an accompanying brochure entitled Good to Know Guidelines. The goal was to better inform customers on acceptable use and Internet filtering.

EduTech worked cooperatively with NDSU to offer a two-day conference specifically dealing with information technology (IT) security in an educational setting.

The North Dakota Educational Technology Council (ND ETC), North Dakota Center for Distance Education (ND CDE) and EduTech maintained ADA compliant websites for their clients.

EduTech services are reliable and stable: frequently reporting no unplanned downtime during a quarter and never exceeding the acceptable downtime limit of 0.5 percent.

EduTech launched an educational campaign to educate customers on phishing.

EduTech server staff continued cooperation with the North Dakota University System on the K-20 identity management project. This project aims to ensure that a single identity (username) is only in use by one person across all higher education campuses and EduTech K-12 service users.

EduTech offered Internet safety training statewide via videoconference. Session topics included Becoming Tech Savvy, Social Networking, Cyber Harassment, and It Takes a Global Village.
Overview
Randall Thursby, Chief Information Officer
North Dakota University System

“Investing in Our Future” is a very appropriate title pointing out how investments made during this last biennium and how Information Technology (IT) investment plans for 2009-11 will benefit students, faculty, staff, residents of North Dakota, and affiliates worldwide. State government, K-12, and the North Dakota University System (NDUS) have a long history of collaboration. This Statewide IT Plan includes several projects that show the collaborative efforts from these three entities and how they will enhance and improve the lives of our constituents.

The legislature made significant investments in NDUS System Information Technology Services (SITS) and the Northern Tier Network for the 2007-09 biennium, as well as having passed HB 1461 that provided authority to the NDUS to manage its technology efforts. Major accomplishments were gained as a result.

In the 2007-09 budget request, ConnectND stability and upgrades were clearly the most critical technology related issue faced by the NDUS. While the system was successfully upgraded, over the next biennium it is prudent to monitor the intended direction of both Oracle and student system software from competing vendors prior to the next major software upgrade scheduled for the 2011-13 biennium.

In the 2009-11 biennium the most critical technology issues will be the need to provide adequate network bandwidth for our institutions both to STAGEnet and to the Internet in general, and completing the Northern Tier network infrastructure for support of university research. The network is the foundation for providing all other technology-based services administrative or academic. Rapid expansion in the use of video both by content providers and our institutions will require a significant increase in funding in the next biennium to accommodate this growth. The completion of the Northern Tier network is critical if the research institutions are to remain competitive for national research grants.

NDUS SITS provides many IT services for NDUS institutions and over time, the need for a particular service may increase or decrease. In March 2008, NDUS SITS conducted a baseline survey of provided services to establish priorities. Low priority and/or non-essential services identified in the survey are being eliminated to free up funding that will be used to improve high priority services, or to take advantage of opportunities for collaboration. The NDUS and its institutions must continue to seek ways to enhance collaboration and provide improved services using the most efficient means available whether they are provided internally or externally through outside providers.

The NDUS established information technology (IT) goals that are sufficiently broad to allow individual institutions and NDUS SITS IT plans to align with them. The overriding NDUS IT goals are:

1. Improve Information Technology-enabled Business Processes and Services while Providing and Managing Resources to Align with University System Goals;
2. Support System Infrastructure Needs;
3. Improve and Enhance Collaborative Efforts;
4. Improve and Enhance Student Learning; and
5. Increase Customer Focus.

The following pages include a snapshot of initiatives included in the individual institutions and NDUS SITS 09-11 biennium IT plans and how they align with the IT goals of the NDUS. Additional information can be obtained at: http://www.ndus.edu/uploads/media/262/NDUS-IT-PLAN.pdf.
Goal 1
Improve North Dakota University System information technology-enabled business processes and services while providing and managing resources to align with strategic goals

Objectives

- Work with state government to stabilize critical core ConnectND functions and implement upgrades and enhancements to the financial/student/human resources management system
- Implement an enterprise project management office including enterprise architecture to provide project management oversight, enterprise architecture administration, and IT planning in conjunction with the NDUS Chief Information Officer (CIO)
- Introduce services, technologies, and initiatives designed to expand user options while enhancing educational experiences. Identify new resources or re-purpose existing resources to enhance current services or initiate new services
- Use enhanced communications capabilities made available by the STAGEnet upgrade to improve services to students, faculty, staff, and North Dakota citizens
- Implement phase one of a converged environment that supports voice, data, video, and collaboration systems
- Provide professional staff to meet NDUS services

In order for campuses to remain competitive and offer information technology support for students, faculty and staff, including research and public service, NDUS will provide and manage information technology resources so that they align with NDUS’ strategic goals. Ultimately, NDUS will strive to deliver the most effective technology within available resources.
Initiatives

System Information Technology Services (SITS) plans to upgrade at least one of the major CND systems by the end of the 09-11 biennium. HRMS will likely be upgraded and depending on what the upgrades entail, the Financials and Campus Solutions will be upgraded.

System Information Technology Services (SITS) will fully deploy FAMIS Xi.

System Information Technology Services (SITS) plans to implement a project management office, including enterprise architecture, to provide project management oversight and information technology planning in conjunction with the North Dakota University System’s Chief Information Officer.

System Information Technology Services (SITS) and the campuses will migrate to a more robust email system that may include a common calendar to enhance communications and scheduling.

System Information Technology Services (SITS) and the campuses are exploring “one-card” systems.

Minot State University Bottineau (MiSU-B) plans to add Residence Hall bundled services for cable TV, telephone lines, and DSL high-speed Internet service.

North Dakota State University (NDSU) will develop an understanding of distributed IT.

University of North Dakota (UND) plans to use a Digital Repository to preserve, manage, and provide accessible images and texts created for or acquired by the institution.

Server virtualization, which is the popular direction for modern computing infrastructures where multiple services share server resources linked by virtualization software, will be implemented at the University of North Dakota (UND). Modern computing infrastructures are moving towards the use of virtual machine environments.

System Information Technology Services (SITS) and Campuses will investigate, evaluate, and implement telecommunications services that include Voice over the Internet Protocol (VoIP), unified communications, presence detection, and call routing, etc.

University of North Dakota (UND) plans to migrate video transmission from analog to digital before the broadcasting industry makes this change in response to the new federal requirements.

Accomplishments

In May 2008, a Voice over Internet Protocol (VoIP) Unified Communications System was installed across the Lake Region State College (LRSC) campus and student resident halls. This converged environment supporting voice, data, and video will foster improved communications and provide an improved framework for assisting students. It offers opportunities for collaboration and meet-me conferences.

In May 2008, improvements were made to Lake Region State College’s (LRSC) network infrastructure backbone to support 10 Gigabit Ethernet for data transfers, providing faster access to data and increased efficiency for both students and employees.

Hardware and software at the Grand Forks (Higher Education Computer Network [HECN] North) data center were updated to improve system response and reliability for ConnectND and Online Dakota Information Network (ODIN).

System Information Technology Services (SITS) implemented a consistent data toolset to improve the management of the Student (Campus Solutions) System.

System Information Technology Services (SITS) successfully upgraded the Finance System from version 8.4 to version 9.0 in conjunction with the Information Technology Department (ITD).

System Information Technology Services (SITS) upgraded the Student (Campus Solutions) System from version 8.0 to version 9.0 on-time and within budget.

System Information Technology Services (SITS) reduced the number of custom modifications in the student system which resulted in significant progress that will be expanded in the upcoming year.

System Information Technology Services (SITS) implemented the User Productivity Kit (UPK) for the Finance and Student Systems to assist with training and user support.

System Information Technology Services (SITS) in conjunction with the Information Technology Department (ITD) upgraded the time and attendance system (Kronos). SITS decided to outsource the system to ITD who hosts the system for state agencies.
The Ad Astra room scheduling system was upgraded by System Information Technology Services (SITS) to improve workflow capability.

System Information Technology Services (SITS) began Disaster Recovery planning for the Student System.

System Information Technology Services (SITS) enhanced the Human Resources Management Software with recruitment and electronic access to information (e-apps).

System Information Technology Services (SITS) conducted the first baseline survey of Higher Education Computer Network (HECN) services with the institutions that identified low priority services that will be phased out to help support improved or new services that are a high priority.

System Information Technology Services (SITS) worked with ITD to transition video support for K-12 and state agencies to the Information Technology Department.

University of North Dakota (UND) Vice President for Research approved a Computation Research Center cluster upgrade adding 16 higher performing compute nodes. A compute cluster server was also added to test Microsoft’s parallel computing offering.

The University of North Dakota (UND) Computation Research Center added a 3D stereo wall with visualization software to enhance a researcher’s ability to view results.

The University of North Dakota’s (UND) campus 802.11 wireless coverage was added to 10 buildings, reaching 59 buildings. Coverage area was increased to 30 buildings with end-to-end coverage providing mobile access to more people in one location and additional access in the most actively used buildings.

University of North Dakota (UND) increased the number of Gigabit Ethernet connections by 25 percent (to 1,250 hosts) which now allows the community to take advantage of the additional Internet2 and commodity Internet increases.
System Information Technology Services (SITS) accommodated increased needs for Internet and campus connections to STAGEnet using primarily the one-time funds for the biennium.

University of North Dakota (UND) telephone system upgrades are moving towards VoIP.

System Information Technology Services (SITS) hired new staff in development, business systems analysis, system operations, and database administration.

As a North Dakota University System (NDUS) provider, NDSU strives to provide top level information technology services and support to all its NDUS customers. NDSU is working with the NDUS to establish service level agreements for the provisioning of university system information technology services throughout the university system.

In August 2007, with a desire to move technology to the forefront, the North Dakota State University (NDSU) created the Division for Information Technology, named Bonnie Neas as Vice President of the division, and moved the Department of Telecommunications into the division.

In a March 2008, Open Forum, the North Dakota State University (NDSU) campus community was asked to help "define information technology (IT)" at NDSU.

Divisional departments were redefined as:

- Information Technology Services,
- Enterprise Computing Infrastructure, and
- Telecommunications and Emergency Support Technologies.

At the North Dakota State University (NDSU), the Information Technology (IT) Council was repositioned to serve as the Division of IT’s strategic planning, policy development, resource allocation, program assessment, and advisory body representative of the campus’ use of IT related to teaching and learning activities, research issues, and IT standards and infrastructure.
Goal 2
Support North Dakota University System infrastructure needs

Objectives

- Offer reliable, cost-effective and appropriate NDUS network services
- Provide middleware tools and data to help people more easily use networked resources and services while ensuring security and privacy of the information
- Prepare the IP infrastructure for the convergence of voice, data, and video along with other collaboration tools on a single network
- Enable libraries to provide easy access to licensed electronic information
- Provide IT enterprise architecture and project management leadership
- Provide linkage through STAGEnet, Internet2, and the Northern Tier Network to national and international research and development networks

Infrastructure holds information technology systems together and allows systems to communicate with each other over a network. It includes such things as security and access control for which guidelines must be developed and updated as needed. Enterprise Architecture provides a blueprint for establishing information technology policies, procedures, and guidelines to promote effective use of information technology.
INITIATIVES

North Dakota State University (NDSU) will ensure stable budget solutions for information technology (IT) services, systems, and infrastructures at NDSU.

University of North Dakota (UND) plans to extend the campus wireless network to service most campus buildings and improve network reliability.

University of North Dakota (UND) will expand its Electronic Door Access system.

Valley City State University (VCSU) will continue to monitor security threats and implement security systems and processes as warranted.

System Information Technology Services (SITS) plans to support the funding request to expand online coursework, enriched video-enhanced instructional technology services, and robust access to digital resources.

System Information Technology Services (SITS) desires approval for a NDUS Security Incident Response Plan.

Working with the CIO Council, System Information Technology Services (SITS) will help develop campus information technology (IT) security plans, based on the current IT security assessments underway at many NDUS campuses.

ACCOMPLISHMENTS

In March 2008, Lake Region State College (LRSC) underwent a successful security audit as part of the NDUS’ review of network controls. This audit was performed by an external security firm to provide assurance to the NDUS and LRSC customers that LRSC has appropriate security measures in place and steps taken to address risks.

Mayville State University (MaSU) migrated services from eDirectory to Active Directory and moved email from Groupwise to Exchange.

Several campuses implemented replacement lifecycles for network hardware and computers.

System Information Technology Services (SITS) and the campuses defined information technology (IT), established IT planning and review processes, implemented project management and oversight for large projects, and developed the IT Strategic Plan.

System Information Technology Services (SITS) implemented TouchNet to handle credit card processing for NDUS units handling credit transactions, providing more security and convenience for students and/or their parents.

SITS upgraded the Parking System.

SITS implemented a web interface for the Housing System.

Identity Management was implemented at the University of North Dakota (UND) to provide a single campus identifier and provisioning for nearly all campus services.

University of North Dakota (UND) IT security activities now include critical system assessment, security workshops, and a campus cyber-security awareness day.

SITS expanded the desktop virus protection contract to add spyware and server licensing.

SITS conducted a base level information technology security review at each institution.

North Dakota University System (NDUS) established a Ruckus Music Service to reduce the incidents of students using peer-to-peer services for illegal music downloads.

North Dakota State University (NDSU) approved $230,000 in general deferred maintenance funds during 2007-09 for its Division of IT’s top priority project: the installation of single mode fiber (Phase 1). The bid for this project was awarded at $216,513. The project will be completed during FY09. Funding will come from the general fund.

North Dakota State University (NDSU) approved $120,000 in general deferred maintenance funds (general fund) and $60,000 in other funds to upgrade the card access security system to accommodate the change to proximity card access from magnetic stripe and to new vendor, CBORD.

North Dakota State University (NDSU) approved $80,000 in one-time funding for a video surveillance system (Telecommunications Priority #3). This amount was not expended during FY08 and will be carried over to FY09 to fund the first year of one full-time employee (FTE) position for the management of emergency support technologies. Ongoing funding has also been approved.

University of North Dakota (UND) approved a $700,000 plan for the final phase of the campus-wide mobile network by summer 2009 using STF network funds in collaboration with students and the University Information Technology Council.
Goal 3
Improve and enhance North Dakota University System collaborative efforts

Objectives

- Continue monitoring the staffing, availability and utility of the North Dakota University System (NDUS) help desk so it supports the majority of user needs
- Improve communications with all NDUS System Information Technology Services stakeholders
- Collaborate with NDUS campuses, K-12, state and local governments, and libraries to identify appropriate learning and research support systems and converged services
- Develop a common architecture that encompasses available educational resources and systems to break down barriers between institutions, libraries, and other learning sources
- Work with the Online Dakota Information Network (ODIN) libraries to expand virtual and digital holdings
- Promote Internet2 and Cyberinfrastructure. (NOTE: The term cyberinfrastructure includes computing cycles and broadband networking, massive storage and managed information, observation and measurement tools, and leadership on shared standards, middleware, and common applications for scientific computation. It facilitates new applications, collaboration, and interoperability across institutions and disciplines.)
- Foster efforts leading to the integration and streamlining of video, audio, and data collaborations in cross-platform environments
- Collaborate with business and industry to identify the need for information technology workers, promote career opportunities, and provide needed education and training

Working together with the State, K-12, and other constituents we are able to bring and support new and existing technologies in North Dakota. Communicating with stakeholders is an important factor and we must work together in making necessary information available to every administrator, faculty, staff, and student across the North Dakota University System campuses.
InItIaTIv es

A number of campuses have submitted initiatives/projects pertaining to enhanced collaboration efforts.

University of North Dakota (UND) intends to purchase a research compliant electronic database for instructional research, which includes human subjects, animal, biological agents, chemicals, and radioactive materials.

System Information Technology Services (SITS) will provide leadership in developing strategic and tactical approaches to academic learning technologies. Bringing these groups together to collaborate will result in better technology resource management.

System Information Technology Services (SITS) will continue working with the Online Dakota Information Network (ODIN) Advisory Council to explore integrated library system options which include monitoring the implementation of the Innovative Interfaces library software for a pilot project at North Dakota State University (NDSU). SITS will also undertake a pilot project to investigate open source library software in order to support all but the largest libraries at lower cost and with improved functionality.

System Information Technology Services (SITS) will explore federated search software to better tie together separate library catalogs and separate databases.

System Information Technology Services (SITS) will collaborate with the State of North Dakota on legislative language that will allow K-12 to use Internet2 through the Northern Tier Network. Currently, there is a separate network connection for Internet2, but this could be merged with the Northern Tier Network at no additional cost which would provide improved service to both the North Dakota University System (NDUS) and K-12.

Bismarck State College (BSC) will partner with the Bismarck Public School District to build a Technology Center on the BSC campus grounds. BSC would provide the technology services associated with BSC programs and personnel located in the facility.

Bismarck State College (BSC) plans to partner with Bismarck Parks and Recreation to build a new aquatic center on the BSC grounds to create a wellness center for students and employees.

Accomplishments

System Information Technology Services (SITS) upgraded the help desk software used at Higher Education Computer Network (HECN) North and South for support of all systems.

System Information Technology Services (SITS) worked with Dickinson State University (DSU) and campuses to pilot and get an endorsement from the institutions for licensing Wimba collaboration software to be used primarily in the academic area.

Through the leadership of North Dakota State University (NDSU), University of North Dakota (UND), and the Information Technology Department (ITD) in conjunction with funding from the Department of Defense and a North Dakota Legislative appropriation for the Northern Tier Network, an initiative is proceeding.

North Dakota State University (NDSU) approved the purchase of a student health information system, which is a joint project with NDSU students who have agreed to pay for the system via a student health service fee. Currently, bids from four vendors are being reviewed. The project is expected to fall within the original estimates of $250,000-500,000.

Students of North Dakota State University (NDSU) continue to invest in NDSU information technology and have input on information technology solutions through their technology fee.

With regard to North Dakota State University, the Northern Tier project received one-time funding of $3.25 million from federal sources and $2.773 million from the State during 2007-09. In July 2008, the State Board of Higher Education approved a $1 million request for ongoing funding, subject to legislative approval, beginning in 2009-11.

The University of North Dakota (UND) School of Medicine and Health Sciences, Division of Continuing Education, and Center for Instruction and Learning Technologies/ITSS came together to provide a single Blackboard Learning and Community instance for all UND students; thereby simplifying student and faculty access and campus support.
Goal 4
Improve and enhance North Dakota University System student learning

Objectives

- Create an environment to enhance learning where opportunities and resources are explored, best practices are collected, and deployment strategies are developed, implemented, evaluated and applied to distributed education, effective use of technology in the classroom, and library linkages
- Create easy, efficient, and reliable access to learning resources and collaboration any time and any place
- Evaluate enhancements to the Online Dakota Information Network’s (ODIN) library systems and services to improve functionality that supports our students’ needs
- Continually improve standards, policies, procedures, and services that facilitate seamless, integrated learning

Initiatives

North Dakota State College of Science (NDSCS) plans to upgrade its 10-year-old keyless entry system using current technology.

Valley City State University (VCSU) wants to create an Interactive Video Network (IVN) classroom in Rhodes and IVN or IP video capable laboratories.

North Dakota State University (NDSU) plans to establish customer relationships and new methods to provide important and innovative information technology (IT) services for students, the campus, related entities, and the State by leveraging resources through collaboration and partnerships to enhance the IT experience using qualified IT staff.

The University of North Dakota (UND) plans to implement a student portal. UND MyCampus will be a portal that encompasses student services.
System Information Technology Services (SITS) will continue to support and expand the Wimba collaborative software and interfaces to the course management system used in the North Dakota University System (NDUS).

System Information Technology Services (SITS) is working with the Director of NDUS-Online (NDUSO) to explore ways to support the NDUSO collaborative efforts.

Bismarck State College (BSC) plans to expand its wireless network to additional buildings on campus.

**ACCOMPLISHMENTS**

In May 2008, a robust wireless data network was installed across the Lake Region State College (LRSC) campus and student halls. Based on 802.11 a/b/g/n technology, students now have an opportunity to use mobile computing with greater access to network services.

In August 2008, Lake Region State College (LRSC) added a fourth mobile, wireless computer lab for students. With mobile laptop computing, faculty can provide computer access in any classroom setting for testing, research, or collaborative activities.

Minot State University (MiSU) enhanced their teaching and learning potential by incorporating substantive technology tools and services. These tools include multimedia applications to make class time activities available all the time with the capture, storage, and cataloging of course content for online delivery or review/playback at a later date. Audio and video is captured by using video camcorders, Tegrity, SmartBoard technology, and digital voice recorders.

Testing security was enhanced at Minot State University (MiSU) through the implementation of a software mechanism that locks down the testing environment within the campus learning management system, BlackBoard CE 8.

Minot State University (MiSU) now provides Remote Realtime Online Captioning (RROC) across campus on an as needed basis. This service translates speech to print, providing accessibility to information presented in classrooms, conferences, workshops, and employment settings.

System Information Technology Services (SITS) established an open source learning management system server using Moodle software. A pilot project was conducted at Williston State College, which included the conversion of course materials to the open source learning management system.

University of North Dakota (UND) was named an iTunes university beginning with 60 podcasts of both video and audio podcasts of lectures, lessons, tutorials, news, and information provided by university professors.

System Information Technology Services (SITS) upgraded the Library System from version 16 to version 18 for the University System, the State Library, K-12, and the public libraries.

System Information Technology Services (SITS) worked to get the North Dakota University System (NDUS) entered into the Microsoft Campus Agreement for NDUS (10 of 11 institutions) to reduce the overall cost of acquiring Microsoft products and to reduce the overhead associated with maintaining license compliance as well as providing flexibility in license use.

The Student Technology Fee improved classroom technology in nine general purpose and seven departmental intermediate classrooms at the University of North Dakota (UND).
**Goal 5**
Increase North Dakota University System customer focus

**Objectives**

- Identify customer characteristics and determine their expectations and needs
- Develop and implement a system-wide customer relationship management system in support of customer needs
- Establish a mechanism that leverages the resources of the North Dakota University System (NDUS) to facilitate education decision-making by customers regarding instruction, research, information access, and service offerings
- Establish a mechanism for gathering feedback from the NDUS user community on services provided by NDUS System Information Technology Services (SITS)

**Initiatives**

*Lake Region State College (LRSC) will work with departments* to evaluate their information technology (IT) needs.

*North Dakota State University (NDSU) wants to define the role of the new Division for Information Technology* and provide technology leadership for the departments comprising the new division as well as the departments and units comprising NDSU. The goal is to improve better communication to all customers; attract and retain qualified staff; realign the division to meet the changing information technology needs of NDSU; develop leadership programs for all divisional employees, including students; and develop an award programs for all divisional employees, including students.

*The University Information Technology Committee at the University of North Dakota (UND) will develop* a three to five year inclusive broad based campus Information Technology (IT) Plan. Partnered decision-making, accountability, and transparency will guide the planning process. The plan will be aligned with the University’s mission; examine the existing IT structure and future university needs, assure a dependable, innovative and upgradable infrastructure; consider service improvements; and identify investments needed for implementation.
System Information Technology Services (SITS) plans to expand functionality of the ODIN Library System which includes an updated user interface for public access and implementation of web 2.0 social networking functionality.

The North Dakota University System and System Information Technology Services (SITS) are working together to build a data warehouse.

System Information Technology Services (SITS) plans to survey customers annually regarding service satisfaction. They will use that feedback to improve services or change their emphasis regarding IT.

Valley City State University (VCSU) plans to implement the North Dakota University System Customer Relationship Management Module (NDUS CRM), if available. VCSU will evaluate needs for a web application that provides web access to forms, email alerts, and dashboard progress reports for each student. However, this is contingent on the Graduate Studies Department completing all forms and a process flow chart.

Bismarck State College (BSC) will develop a centralized information technology (IT) umbrella that involves all campus IT areas. This includes but is not limited to the following services: Information Services, video, voice (land lines and cellular), smart classrooms, rich media developers, web development, IT training, and multi-media services, etc.

**Accomplishments**

Based on a Request for Proposal (RFP) created by System Information Technology Services (SITS), responses were evaluated and a vendor was selected for a Customer Relationship Management (CRM) system for the North Dakota University System’s (NDUS) institutions to use in their admissions offices.
<table>
<thead>
<tr>
<th>Project / Agency</th>
<th>Description</th>
<th>Project Duration</th>
<th>Project Budget</th>
<th>Actual Cost</th>
<th>(Over)/Under Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANF Diversion</td>
<td>The objective of the Diversion Assistance project was to integrate Diversion Assistance into the existing TANF program of the Vision system.</td>
<td>04/06 - 10/06</td>
<td>$246,988</td>
<td>$146,689</td>
<td>40.61%</td>
<td>$100,299</td>
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<tr>
<td>Department of Human Services</td>
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<tr>
<td>Women, Infants, and Children (WIC)</td>
<td>The objective of the project was to modernize the systems that provide automated data processing support for the Iowa and North Dakota Supplemental nutrition Programs for Women, Infants, and Children (WIC).</td>
<td>06/03 - 10/06</td>
<td>$1,681,158</td>
<td>$1,191,923</td>
<td>29.10%</td>
<td>$489,235</td>
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<tr>
<td>Department of Health</td>
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<tr>
<td>State’s Attorney Records Management System (STARS)</td>
<td>The project objective was to purchase and implement a State’s Attorneys records management system that provides a means to electronically manage case information and share data via the existing CJIS Hub.</td>
<td>11/05 - 11/06</td>
<td>$500,410</td>
<td>$500,410</td>
<td>0%</td>
<td>$0</td>
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<tr>
<td>Criminal Justice Information Sharing (CJIS)</td>
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<tr>
<td>STAGEnet Infrastructure Services (SIS)</td>
<td>The project objective was to design a network that could grow with the state’s needs over a five to seven year period while serving the increasing needs of state agencies, K-12 education, universities, and political subdivisions.</td>
<td>01/05 - 01/07</td>
<td>$1,164,013</td>
<td>$1,069,448</td>
<td>8.12%</td>
<td>$94,565</td>
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<td>Information Technology Department</td>
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<tr>
<td>Learning Management System (LMS)</td>
<td>The objective of this project was to produce a web-based solution to facilitate learner access to all e-learning content by WSI's external customers.</td>
<td>08/06 - 03/07</td>
<td>$400,000</td>
<td>$338,125</td>
<td>15.47%</td>
<td>$61,875</td>
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<tr>
<td>Workforce Safety &amp; Insurance</td>
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<tr>
<td>Integrated Tax System (TREND)</td>
<td>The project objective was the migration of all taxes and related functions currently processed in the mainframe environment to an integrated COTS solution.</td>
<td>07/05 - 06/07</td>
<td>$13,791,044</td>
<td>$11,650,704</td>
<td>15.52%</td>
<td>$2,140,340</td>
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<tr>
<td>ND Tax Department</td>
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<td>LASR (Legacy Application System Replacement)</td>
<td>The project objective was to select a viable COTS vendor to replace the current multiple applications used to manage the PERS programs with a single integrated application.</td>
<td>07/06 - 07/07</td>
<td>$590,326</td>
<td>$480,421</td>
<td>18.62%</td>
<td>$109,904.67</td>
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<td>Public Employees Retirement System</td>
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<tr>
<td>Information Technology Transformation Program (ITTP) - Phase I</td>
<td>The project objective was to select a viable COTS vendor to replace the current multiple applications used to manage WSI's programs with a single integrated application.</td>
<td>07/06 - 07/07</td>
<td>$269,500</td>
<td>$237,979</td>
<td>11.70%</td>
<td>$31,521</td>
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<tr>
<td>Workforce Safety &amp; Insurance</td>
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<tr>
<td>Information Technology Transformation Program (ITTP) - Phase II</td>
<td>The project objective was to modify the Medicaid Management Information System (MMIS) to accept the NPI and include it on outbound information.</td>
<td>10/06 - 09/07</td>
<td>$157,002</td>
<td>$134,632</td>
<td>14.25%</td>
<td>$22,370.13</td>
</tr>
<tr>
<td>NPI (National Provider Index)</td>
<td>The purpose of this project is to transition the service and operation of the video conferencing network for K-12 schools, state agencies, and political subdivisions to the Information Technology Department (ITD) in order to streamline service for its users.</td>
<td>05/07 - 10/07</td>
<td>$385,882</td>
<td>$333,567</td>
<td>13.56%</td>
<td>$52,315</td>
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<tr>
<td>Department of Human Services</td>
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<tr>
<td>STAGEnet Video Transition</td>
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<tr>
<td>Information Technology Department</td>
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<tr>
<td>STARS (ORS Replacement)</td>
<td>The objective of the project was to upgrade current ORS core system to an architecture of ASP.NET, VB.NET and SQL Server 2005, and implement enhancements to meet federal and state reporting needs.</td>
<td>07/05 - 10/07</td>
<td>$300,300</td>
<td>$278,306</td>
<td>7.32%</td>
<td>$21,994</td>
</tr>
</tbody>
</table>
# Completed Projects

**July 1, 2006 - June 30, 2008**

<table>
<thead>
<tr>
<th>Project / Agency</th>
<th>Description</th>
<th>Project Duration</th>
<th>Project Budget</th>
<th>Actual Cost</th>
<th>(Over)/Under Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Labor</td>
<td>This project replaced the paper-based time collection process with a web-based, self-serve time and labor solution that will be available to all DOT staff regardless of physical location.</td>
<td>07/05 - 10/07</td>
<td>$300,300</td>
<td>$278,306</td>
<td>7.32%</td>
<td>$21,994</td>
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<tr>
<td>Department of Transportation</td>
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<tr>
<td>PMIS (Project Management Information System)</td>
<td>This project was the initial purchase and implementation of Primavera, a project management software package.</td>
<td>07/07 - 03/08</td>
<td>$310,603</td>
<td>$296,892</td>
<td>4.41%</td>
<td>$13,710.88</td>
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<tr>
<td>Information Technology Department</td>
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<tr>
<td>Children with Disabilities (CwD)</td>
<td>The project objective was to integrate into the Vision, TECS, and MMIS systems the business rules needed to determine eligibility, authorize eligibility, notify the client, pay claims, capture payments, and report information in regards to the new Medicaid Coverage type.</td>
<td>08/07 - 03/08</td>
<td>$284,406</td>
<td>$170,213</td>
<td>40.15%</td>
<td>$114,193.09</td>
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<tr>
<td>Department of Human Services</td>
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<tr>
<td>Election Administration System (EAS)</td>
<td>The project objective was to complete the Secretary of State’s election improvement program by tying together under the umbrella of the PowerProfile EE (P2E2), the uniform election system, including the UOL program, and the State’s Election Management System (EMS).</td>
<td>07/06 - 04/08</td>
<td>$1,523,574</td>
<td>$1,255,692</td>
<td>17.58%</td>
<td>$267,882</td>
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<tr>
<td>Secretary of State</td>
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<tr>
<td>&quot;Automated Fingerprint Identification System (AFIS)&quot;</td>
<td>The project objective entailed the automation of fingerprint files (Livescan) and creation of a link to FBI and state criminal history systems.</td>
<td>07/07 - 06/08</td>
<td>$385,025</td>
<td>$394,825</td>
<td>-2.55%</td>
<td>$(9,800)</td>
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<tr>
<td>Attorney General</td>
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<tr>
<td>Early EMAR (Enterprise Management &amp; Reporting)</td>
<td>This project objective was to implement a selected subgroup of the ACS Enterprise Management and Administrative Reporting (EMAR) solution to be used for monitoring monthly operations and provide the basis for budget projections.</td>
<td>08/07 - 06/08</td>
<td>$374,868</td>
<td>$374,642</td>
<td>.06%</td>
<td>$226</td>
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<tr>
<td>Department of Human Services</td>
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<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>$22,686,411</td>
<td>$19,175,780</td>
<td>$3,510,631</td>
<td>15%</td>
</tr>
</tbody>
</table>
## Terminated Projects
### July 1, 2006 - June 30, 2008

<table>
<thead>
<tr>
<th>Project / Agency</th>
<th>Description</th>
<th>Actual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herakles</td>
<td>Project Herakles was the procurement-planning phase of the Unemployment Insurance (UI) system rewrite. The objectives of this phase were to select a vendor and solution for the build phase of the project, and determine the budget necessary to complete the build phase. As this phase progressed, it was determined that a replacement system was not the appropriate solution to meet JSND business needs.</td>
<td>$311,763</td>
</tr>
<tr>
<td>Job Service ND</td>
<td></td>
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<tr>
<td>Knowledge Base (SOSKB)</td>
<td>The project objective was to acquire and implement a new software application to replace existing technology systems for Central Indexing System (CIS) filings, and business, licensing, and administrative services.</td>
<td>$770,105</td>
</tr>
<tr>
<td>Secretary of State</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Websites & Additional Information

North Dakota Portal
www.nd.gov

Information Technology Department (ITD)
www.nd.gov/itd

North Dakota University System (NDUS)
www.ndus.edu

North Dakota University System Online (NDUSO)
www.nduso.org

North Dakota Interactive Video Network (ND IVN)
www.ndivn.nodak.edu

Online Dakota Information Network (ODIN)
www.odin.nodak.edu

Education Technology Council (ETC)
www.ndetc.k12.nd.us

EduTech
www.edutech.nodak.edu

North Dakota Center for Distance Learning
https://www.ndcde.org

STAGEnet
www.stagenet.nd.gov

North Dakota Geographic Information Hub (GIS)
www.nd.gov/gis

North Dakota Criminal Justice Information Sharing Portal (CJIS)
www.ndcriminaljustice.com

Enterprise Architecture
www.nd.gov/ea

2009-2011 Statewide Information Technology Plan
www.nd.gov/ep/state
North Dakota
Statewide Information Technology Plan
2009-2011
www.nd.gov/ep/state