



south dakota



# 2013 Annual Report

[bit.sd.gov](http://bit.sd.gov) | [blog.bit.sd.gov](http://blog.bit.sd.gov)



# Mission

The Bureau of Information and Telecommunications (BIT) strives to partner and collaborate with customers in support of their missions through innovative information technology consulting, systems and solutions.

# Vision

Through our highly motivated staff, we will be a leader and valued partner in providing technology solutions, services and support that directly contribute to the success of our customers.

# Goals

## 1. Provide a Reliable, Secure and Agile Infrastructure.

*Technology assets must be high performing and dependable to insure services are always available. Centralization, standardization and collaboration are vital to leveraging investments to the highest degree of efficiency. To maintain the public trust, we must secure our data through leading security tools and policies.*

## 2. Deliver Valuable Services at Economical Costs.

*Develop innovative and cost-effective solutions through collaboration and cooperation with our customers.*

## 3. Recruit, Build and Retain a Highly Skilled Workforce.

*Invest in mentoring, training, cross training and professional development for staff. Provide meaningful employee recognition, rewards and evaluations.*

## 4. Provide e-Government Solutions and Evolving Technologies.

*Provide constituents and employers in South Dakota access to state government information through social media, the cloud and other mobile technologies. "People should be online, not waiting in line."*

# Overview

## **Executive Summary**

Learn more about how our services, products, cost reductions and secure infrastructure contribute to building strong customer partnerships across state government.

## **Commissioner's Message**

Check out what David Zolnowsky has to say about his first full year as the BIT Commissioner.

## **Customer Satisfaction and Testimonies**

Our number one goal has always been to provide customers with the information and technology services they need to achieve their business objectives. Check out the feedback we received from our newly implemented Customer Satisfaction Survey.

## **Administration | Data Center | Development | South Dakota Public Broadcasting | Telecommunications**

Review the 2013 accomplishments for each division within BIT.

## **2013 Employees of the Quarter**

Each quarter, division directors submit nominations for staff who maintain a standard of excellence across BIT. Check out who made the list in 2013!

## **Challenges Ahead**

Learn more about the challenges facing BIT in 2014 from cyber security to mobility.

# Executive Summary

*customer services. elite products. cost reductions. secure infrastructure.*

What do these key areas mean to our customer partnerships and for the State of South Dakota? **Everything.**

When it comes to providing information and technology services, dependable and reliable products, cost reductions and a secure infrastructure, BIT is here. Our delivery of information and technology services provides ways of achieving more with less while continuing to consolidate and centralize key services for the entire enterprise. We remain focused on the bureau's strategic direction as we align business needs and goals with technology options available within state government.

The **Project Management Office** focuses on our customers and strives to **build strong partnerships with state agencies**. Project management follows a uniformed methodology to improve timeliness, accountability and responsibility of complex technology projects. Customer service and effectively managed projects are a top priority for each and every service BIT delivers.

In an effort to **improve online services and transparency in government**, our development staff rewrote and implemented the Supplemental Nutrition Assistance Program (SNAP) and Medicaid application allowing citizens to apply or renew their benefits for these two programs all online. The newly implemented Administrative Rules website, part of the **Governor's mission to streamline government and promote openness**, includes an archive section for rules that have previously been approved, links to audio and minutes from public rules hearings and interim rules committee hearings, hearing notices, hearing dates, drafts of the rules packages and effective dates.

**Server performance** may not mean much to the average customer, but to BIT's Data Center staff it is at the forefront of what they do every single day. The state's virtualized environment utilizes one of the **most elite products available**; providing several benefits to the State of South Dakota, including, but not limited to:

- ✓ Reduction of physical server costs; saving the state \$3.3 million each year through the use of virtualization.
- ✓ Reduction of daily operating costs by using less power.
- ✓ Reduction of loss due to down time; keeping systems up and operational while routine maintenance takes place.

**Security** is integrated throughout every service provided within BIT. The demand in today's business environment to allow employees access to certain state systems, from anywhere at any time, creates significant **risks towards the protection of state government data**. Cyber security continues to be the number one challenge for BIT due to the fact that our state's data and technology systems are an attractive target to organized crime. We must secure these targets from criminals, hostile foreign governments and malicious cyber-attacks. Firewalls, patches and updates, desktop anti-viruses, strong passwords and intrusion monitoring are all layers of security that must be incorporated in every part of our infrastructure in order to keep the integrity of our state's data secured.

**South Dakota Public Broadcasting (SDPB)** received several service awards, one of which was to honor Julie Anderson with the **2013 Distinguished Service Award** from the South Dakota High School Activities Association for her direction and quality coverage of South Dakota High School achievement. SDPB's local TV and radio programming continues to be a vital community resource; producing and broadcasting high-quality, commercial-free programs and valuable community outreach projects that educate, enlighten and entertain.

From year to year, we continue to **provide core services that embrace customer service, efficiency, security and cost effective solutions to meet the business needs** for the State of South Dakota. As you read through the 2013 BIT Annual Report, you will see how accomplished we have become as **one of the nation's leading centralized state information and technology organizations**, how we strive for **continuous improvement** and how the business needs and challenges we face are similar to those faced by our customers.

# Message from the Commissioner

*David Zolnowsky*



First, I must mention how thankful I am for having the opportunity to serve the State of South Dakota this past year as Commissioner for the Bureau of Information and Telecommunications. Each day, I am reminded of the impact information and technology services have on our customers, our infrastructure and the citizens of this great state.

Our customers have high expectations when it comes to the latest technology; and they should. They expect to connect to “everything from everywhere at any time.”

Building common technologies to support the increasingly mobile customer base is complicated, expensive and expected. We strive to meet those needs every day from year to year. Mobile connections are as important to us as they are to our customers.

This year we began requiring management approval to connect mobile devices to state email services. We implemented a service to provide encrypted email service on request. In the coming year we will provide agencies the ability to implement their mobile security policies through Mobile Device Management (MDM) services.

Daily, I am truly grateful to the staff for their stewardship and work ethic in providing quality customer service, reducing costs and inefficiencies and for their strategic visions that continue to improve and secure our state’s information and data.

Within these pages, we chronicle highlights and accomplishments from 2013. We also share our concerns for the coming year.

As you review this report, we hope you will learn more about us, discover how we support state government agencies and come to recognize and relate to us as individuals.

Thank you,  
David

# Customer Satisfaction

*98% of our customers agree that BIT provides excellent technology assistance.*

Our number one goal has always been to provide customers with the information and technology services and support they need to achieve their business objectives. With a wide array of centralized technology services, BIT provides business analysis and application development, project management, technology integration, software and hardware, hosting, email capabilities, voicemail and phone services, document imaging, network storage, Help Desk support services, GIS, ongoing technology maintenance and much more.

While many of these services are done well, in early 2013, we surveyed Cabinet members and found out what they appreciated and which areas needed refinements.

**82% OF RESPONDENTS AGREED THAT BIT IS DEDICATED TO MEETING AGENCY TECHNOLOGY NEEDS.**

👍 Those in agreement with this statement generally view BIT “as doing a good job.” We take pride in this healthy baseline position.

**IN RELATIONSHIP TO THE ABOVE FINDING, 69% OF RESPONDENTS ALSO AGREED THAT BIT STAFF “ARE EXTREMELY KNOWLEDGEABLE, RESPONSIVE, HELPFUL AND HAVE THE EXPERTISE TO MEET AGENCY TECHNOLOGY NEEDS.”**

👍 Those in agreement with this statement also commented that “staff need to continually look at ways to increase knowledge; as this is a never ending venture.”

👍 We do not dispute that comment and continually look at ways to provide staff mentorships, increase professional development and enhance cross-training opportunities within BIT to provide quality customer service and support needs for our customers.

**PROVIDING OUR CUSTOMERS WITH STRATEGIC PLANNING INFORMATION ON FUTURE TECHNOLOGIES AND PRODUCTS IS AN AREA WE STRIVED TO IMPROVE UPON IN 2013 AND WILL CONTINUE TO DO SO IN THE YEARS AHEAD.**

👍 The Technology Roadmap is a newly developed strategic planning process providing customers with technology related information that could impact agency strategic plans and budgets. In short, it is a snapshot of each state agency’s technology world; providing an inventory of applications and systems. The roadmap is updated on a biannual basis and distributed to our customers for advanced planning and future budgeting of technologies and products.

*“I am very happy with the support we receive from BIT. Staff understand our priorities and work hard to fulfill our needs and meet our timelines.”*

–Andy Gerlach, Department of Revenue–

*“BIT is very helpful. Employees are prompt, courteous & professional.”*

–Larry Zimmerman, Department of Veterans Affairs–

*“BIT folks are capable, work hard and care about our business needs.”*

–Matt Clark, State Investment Council–

# Customer Testimonies

*"I am impressed with how quickly BIT responds to my requests and appreciate the positive interaction and attitude."*

-Michelle Martin, Department of Education

*"It takes multiple people to sign off on the recent migration of the final Legacy application into Odyssey with the statewide implementation of the Protection Order System. I have great appreciation for the effort and time the BIT organization provided to make this a success."*

-Kent Grode, Director of Information and Technology, Unified Judicial System

*"I never hesitate to call the BIT Help Desk. The staff always help me above and beyond what I need."*

-Debbie Branaugh, Department of Health

*"Thanks to everyone at SDPB, especially those of you in charge of the Statehouse activities during Legislative Session. I've always appreciated the services brought to our citizens via SDPB, but this is one of the best. You make democracy accessible to the public."*

-Patty Bacon, Executive Director, South Dakota Habitat for Humanity

*"Margie Newling was extremely helpful getting us through issues with AT&T and assisting our staff with phone operations. Too often we bring up the shortcomings without recognizing the good things our fellow state employees do for us."*

-Scott W. Bollinger, Director of Operations, Department of Corrections

*"Twyla Millin is always professional and very helpful when I have questions or need clarification about a service. She is a pleasure to talk to; especially when we have telephone issues."*

-Cindy, Division of Wildland Fire, Department of Agriculture

*"Randy Slama, Sarah Gates and Miguel Penaranda listened to and implemented our wishes for a new agency website. Sarah was outstanding in carrying out what we wanted. She has been an excellent resource to staff as we develop our respective pages and is very responsive to our calls and emails. We cannot say enough about her level of expertise and her immediate response. Thanks for sharing your team with us."*

Larry Zimmerman, Secretary and Audry Ricketts, Public Information Officer, Department of Veterans Affairs

*"Thanks to BIT and the K-12 Data Center. The trainings are extremely useful and you all do a fantastic job of managing all of the logistics. I know a tremendous amount of work goes into making the magic happen during the five days we are here."*

-Seth Loofbourrow, Freeman

*"Samantha Pedersen has done a very good job with our website and development needs."*

-Department of Agriculture

*"Great team!"*

-Sioux Falls School District

*"We are fortunate to have such great service and support from the K-12 Data Center Team."*

-Rob Honomichl, Madison Central

*"I am always impressed at how smart the BIT staff are. Every time they help me they are so kind. I am not computer smart, but they never make me feel inadequate. They are always pleasant and accommodating."*

-Sue Chaney, Department of Social Services

*"Doug Mckillip provides good follow up on email account requests and has been very helpful to move us forward on updated technologies (Voltage, Listserv) by getting us set up to test when the technology is ready."*

-Tom Valentine, Deputy Director of Administrative Services, Department of Revenue

# Administration

The Division of Administration is responsible for key administrative areas of the agency; budget and financial operations; coordination of security efforts; special projects and initiatives; legislative support and activities; strategic planning; state agency partnerships; project management and points-of-contact responsibilities; a system of mass communication services including public and press relations, marketing and social media; implementation and oversight of information and technology policies within state government. The Commissioner and Deputy Commissioner provide administration and direction to all areas and functions of BIT.

## 2013 Significant Accomplishments

✓ Issued over \$555,000 in technology grants to 66 Community Anchor Institutions across the state as part of the federal Department of Commerce's National Telecommunication and Information Administration's (NTIA) State Broadband Initiative (SBI). Project funding provides technology improvements in the areas of: firewalls to protect computers against malware, spyware, viruses and other threatening content; network switches to ensure uptime and stability; wireless equipment for mobile connectivity and increased performance; and new or additional laptops and desktops to provide access to broadband services.

✓ Continued security improvements through refined policies, improved configurations and education. External reviews continue to provide an independent perspective for evaluating our posture and readiness. BIT partners with many public and private entities to stay informed and current regarding threats and attack vectors.

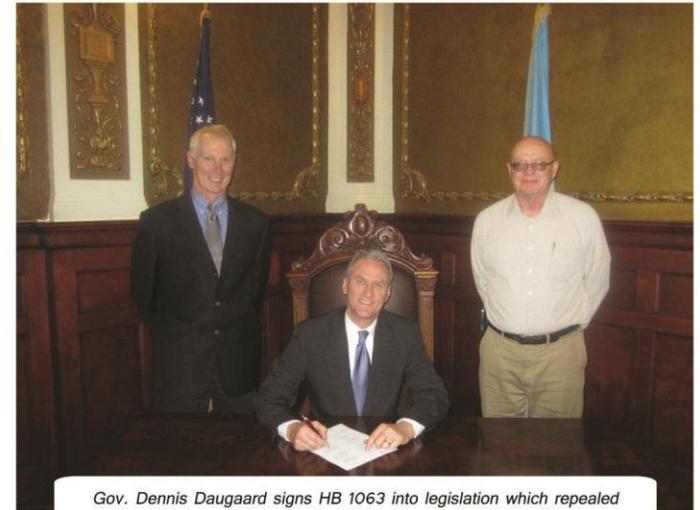
✓ Streamlined strategic recruitment efforts and partnerships with campuses across the state to increase interest in BIT job opportunities. YouTube videos were also created to aide in the recruitment efforts and include staff members who explain the opportunities available within BIT and provide more relatable content about what our staff do on a daily basis.

✓ Provided support services to oversee and manage the bureau's budget and financial operations; including the accounting and financial reporting, technology inventory procedures, logistical administrative functions and centralized procurement services. The federal OMB Circular A-87 establishes cost principles and standards to provide a uniform approach for determining allowable costs for Federal awards carried through cost reimbursement contracts that are established with the State of South Dakota. Each quarter the BIT Finance Office analyzes the revenues and expenditures associated by each cost center to ensure compliance with the A-87 guidelines.

✓ Implemented quarterly government communications meetings for public information officers across state government. July's meeting focused on the implementation of social media strategies in government and October's meeting focused on press relations which included speakers from across different agencies.

✓ Implemented two different Customer Satisfaction Surveys: one for the Cabinet which provided feedback on an agency's overall experience with BIT staff and services and the other to state agencies which evaluated the BIT Points of Contacts. Results from both surveys allow us to analyze trends, uncover customer perceptions and needs, improve customer loyalty and trust in BIT staff and services, identify areas of improvement and continue to provide openness and transparency among BIT and our customers.

✓ Continued cyber security awareness and education through social media and other online approaches to state agencies.



Gov. Dennis Daugaard signs HB 1063 into legislation which repealed certain outdated and obsolete provisions regarding BIT. Jim Edman (left) and David Zolnowsky (right) are also pictured.



Brandy McBride, Jeff Litterick and Jamie Fry are pictured here with Darlene Braun of St. Joseph School in Pierre. Our staff present technology planning grant awards to schools and other Community Anchor Institutions across the state as part of the South Dakota Broadband Initiative.

# Data Center

*The Data Center is responsible for providing application hosting, data storage, backup and retrieval, web support, email and remote desktop and application access. It is comprised of three programs: Database Administration, Technical Administration and Integration, Systems and Operations.*

*Database Administration includes data access, backup and recovery procedures and over a dozen enterprise class database systems. Technical Administration and Integration includes email services, web administration, server and virtual server administration, storage and account management. Systems and Operations includes data and disaster recovery, operational support and client system monitoring.*

## **2013 Significant Accomplishments**

- ✓ Added encryption to the system that coordinates data uploads and downloads between the Mainframe and Windows systems; helping to harden the security for data transfers between computing platforms.
- ✓ Moved database backups from local tape-based systems to geographically remote disk-based backups providing more backup and recovery capabilities.
- ✓ Provided a new service allowing state employees to send and receive encrypted emails from anywhere in the world. This adds a stronger layer of security and control when confidential or otherwise protected information must be shared outside of state government.
- ✓ Simplified upgrades to the state's file system for staff home directories (H: drives). Using this new process, staff moved the state's H: drives to a newer file services technology many times faster than was possible in the past. The state will continue benefiting from this simplified process in future upgrades.
- ✓ Moved the state from an "always open" stance for connecting to the state's core email system, to an "open with management approval" stance in cooperation with the Bureau of Human Resources. This improved the security of the state's email system and continues to safeguard state data.
- ✓ Tightened security requirements for vendors who host application systems.
- ✓ Updated the state's electronic door security systems across the local Pierre campus.
- ✓ Hosted a South Dakota user group each quarter in Pierre focused on the state's standard virtual computing technology; which brought together technical experts from over 20 organizations to share ideas and learn more about the topic. South Dakota entities benefiting from this come from hospitals, banks, manufacturing, local government, two state government jurisdictions, the National Guard, communications, K-12 schools, general health providers and higher education.
- ✓ Upgraded a critical fire suppression system in a state computer facility to continue to protect important state computing systems while using a more environmentally friendly fire extinguishing agent. It was accomplished through a retrofit, saving on the costs of a new system.

# Data Center Continued

- ✓ Upgraded the software that provides end point protection at the desktop and server platforms to take advantage of new security technologies.
- ✓ Migrated the state's email system to a newer technology base offering a richer set of features, such as improved remote use options, as well as a more robust and reliable service.
- ✓ Expanded on the Technology Roadmap process which included a biannual notification to state agencies of pending technology changes and budget planning details. Staff also streamlined and updated the state's information and technology contract and Request for Proposal review process based on customer feedback and experience which has resulted in a more effective and timely process.
- ✓ Signed an enterprise license for the state's standard servers and databases which saves the state up to 25 percent on expected licensing costs for these products over the next 3 years. It also provides a streamlined process of maintaining modernization among these important areas of our core infrastructure.
- ✓ Provided a new product that provides quick, low cost security hardening against database attack methods to improve security while a number of the state's older computer applications are rewritten.
- ✓ Upgraded the Mainframe processor at a 3 year, \$250,000 savings over the cost of not upgrading. This was accomplished by taking advantage of new technology options to reduce operating expenses and licensing costs.
- ✓ Implemented a new tool to track and manage state owned Mainframe computer code; assuring the needed consistency and reliability of code tracking and maintenance for state applications.
- ✓ Completed the annual Mainframe disaster recovery test; which has been conducted successfully for 22 consecutive years.

*From the left: Bonnie Bauder was the recipient of the 2013 National VMUG Service Award; staff at the annual state VMUG conference in Pierre; Sven Lerseth & Dan Maxfield pose with a colleague before a VMWorld meeting; Brent Dowling presenting information on data protection products and standards; Tony Rae speaking to a computer science student at the South Dakota School of Mines and Technology Job Fair.*



# Development

*The Division of Development is responsible for providing application development services to all executive branch agencies, constitutional offices and the Legislative Research Council (LRC). The main focus of our development staff is to evaluate the value, cost and risk of computerization possibilities, then apply application development technologies and best practices to help partners meet their goals, improve performance and lower their costs.*

*Application development services include: providing business analysis, application design, application development, testing, implementation, enhancements and support of information systems. These services are provided on a variety of platforms, including web-based, desktop, mainframe and AS400.*

*Development also supports a number of vendor applications that agencies have licensed.*

## **2013 Significant Accomplishments**

- ✓ Implemented a new Comprehensive Offender Management System (COMS) for the Department of Corrections (DOC) to manage and monitor all of the offenders in DOC custody in any state institution; including the consolidation of juvenile offenders bringing together a more centralized system. This system allows DOC to manage all inmate activity while incarcerated within the state prison system and even some while on probation.
- ✓ Hired 30 new software engineers in 2013 to replace baby-boomer retirements and to fill all vacant positions.
- ✓ Worked with state agencies to identify future software engineer staffing needs. With agency support and backing, nine new positions are pending approval from the Legislature for FY15.
- ✓ Completed security scans for every new or updated application to ensure state agency data is being collected safely and securely.
- ✓ Implemented new technology allowing us to connect and share information with the federal Health Insurance Exchange website.
- ✓ Completed the Child Support Locate file as the database was reaching size limitations. Case processing was in danger of running out of space to process transactions. The vast majority of records in this database involve Federal Case Registry (FCR) transactions.
- ✓ Rewrote 50 percent of BIT-written legacy applications to maintain currency and improve application security.
- ✓ Launched and redesigned websites for the following partners: Governor's Office 125th Statehood Anniversary, Bureau of Administration, Bureau of Human Resources, Department of Veterans Affairs and the Legislative Research Council; which improved the user experience with new search capabilities and navigational features.
- ✓ Modified sd.gov to be a responsive website in which the screen size is automatically adjusted no matter what device is being used. This helped to establish standardized mobile web development guidelines for all state agency partners. Responsive web design techniques are ready to be applied to additional state government websites in 2014.
- ✓ Rewrote the state's Online Phone Directory to better serve state government and assist citizens when searching for a state employee, an office or agency. Phone numbers for cities, counties and public schools are also included.

# Development Continued

- ✓ Rewrote the Aircraft Registration and Reservation system for the Department of Transportation.
- ✓ Tested, purchased and implemented a technology that provides a more efficient way to secure old classic ASP applications until they can be migrated to newer technology.
- ✓ Completed multiple updates for the Department of Labor and Regulations' unemployment claims, insurance and tax record systems.
- ✓ Installed nine driver's licensing exam kiosks for the Department of Public Safety; 3 in Sioux Falls, 2 in Rapid City, 1 in Pierre, 1 in Aberdeen, 1 in Brookings, 1 in Watertown.



*Linda Peterson, Director of Development, receives special recognition from David Zolnowsky, BIT Commissioner, for 31 years of dedication and commitment to the State of South Dakota. The longevity of our staff aides in our ability to understand the business needs and processes of our customers.*



*Sarah Gates, Kaitlyn Martinez, Jeff Meyer, Eric Monson, Chad Severson and Donelle Samuelson are pictured here at the annual South Dakota Code Camp Conference at Augustana in Sioux Falls.*

# South Dakota Public Broadcasting

*South Dakota Public Broadcasting (SDPB) is a vital community resource producing and broadcasting high-quality, commercial-free programs and valuable community outreach projects that educate, enlighten and entertain. SDPB is the best source for South Dakota history, documentaries, in-depth news programming and conversations with thinkers and newsmakers. SDPB features news and information on stories that preserve the past, examine the present and look ahead to the future.*

*Learn more about SDPB Television, SDPB Radio, SDPB Online Services, SDPB Education and Outreach and Friends of SDPB by visiting [sdpb.org](http://sdpb.org).*

## ***2013 Significant Accomplishments***

- ✓ Premiered the Antiques Roadshow (recorded in Rapid City in July 2012) nationwide on PBS in April 2013.
- ✓ Won a regional Emmy Award for Antiques Roadshow promotional announcement. SDPB garnered three total Emmy nominations.
- ✓ SDPB Radio News won 6 of 8 Edward R. Murrow Awards offered in its class, including the award for Overall Excellence.
- ✓ SDPB Radio News won 11 Associated Press News Awards from the Associated Press Great Plains Broadcast Association.
- ✓ Hosted StoryCorps in Rapid City, a national oral history initiative that creates programming heard nationally on public radio stations.
- ✓ Redesigned a new Production Control room; which is completely digital and HD-compatible.
- ✓ Completed a \$750,000 WARN grant which upgraded the terrestrial Microwave paths feeding our stations serving in and around the Gettysburg (KQSD), Faith (KZSD) and Martin (KPSD) communities.
- ✓ Completed a \$250,000 WARN grant to replace backup generators in Vermillion's Network Operations Center, Kimball and Vivian microwave tower sites.
- ✓ Redesigned the SDPB website to make it mobile-friendly. The new website incorporates content generated locally and content that is generated through national program providers.
- ✓ Provided live and archived coverage of all Legislative activity in Pierre on SDPB TV, Radio and Online, including live House and Senate sessions, the Governor's Budget and State of the State Addresses, the State of the Judiciary Address, weekly press briefings and a weekly prime time program.
- ✓ Expanded the SDPB-TV weekly public affairs program, "South Dakota Focus," to include an additional 8 programs during January, February and March.
- ✓ Aired over 200 hours of local programming on SDPB-TV. Highlights include the documentaries "Light of the Prairie" and "Images of the Past," high school activities championships, coverage of the anniversary of the death of Gov. George S. Mickelson. Among SDPB Radio's hundreds of hours of local programming, highlights include a series about the effects of art in the healing process, extended conversations about Pine Beetle abatement efforts, live coverage of the launch of Landsat 8 from EROS, and coverage of the Trail of Governors.



# Telecommunications

*The Division of Telecommunications is responsible for providing the network and desktop support infrastructure as well as supporting all desktop and mobile users for state government. The division is comprised of LAN Services, Network Technologies and Engineering. LAN Services manages the state's personal computers, software and peripherals (printers, scanners). Network Technologies designs and administers communication services to state, county and city governments; K-12 and the Board of Regents (along with the public for video purposes only). Engineering provides telephone services (voicemail, long distance), video conferencing sites, state radio tower sites and electronics and South Dakota Public Broadcasting (SDPB) tower sites and electronics.*

## 2013 Significant Accomplishments

- ✓ Standardized a mobile VPN solution for all customers who need remote access to the state government network. Currently, there are over 240 users of the system from the Highway Patrol, Division of Criminal Investigation, Legislative Research Council, Departments of Social Services and Transportation and staff in BIT.
- ✓ Completed Enrollment for Education Solutions; a volume licensing program allowing a school to install the latest Microsoft products on student and educator computers. It also contains the necessary server client licenses for most of the Microsoft back office products such as Windows Server, Exchange and SharePoint. The costs for the program are annual and have the additional benefit of flattening the cost structure for the schools technology budget. There are 96 schools participating in the program with 6,611 educators and 9,471 students.
- ✓ In partnership with the Department of Education (DOE), BIT worked throughout the summer to increase bandwidth to 159 school sites across the state, impacting 122 school districts.
- ✓ Implemented a Voice Over Internet Protocol (VoIP) system to deliver voice communications and multimedia sessions. Installation was completed for the Department of Social Services' Division of Medical Services, Department of Transportation in Mobridge and Custer and for the State Investment Council in Sioux Falls. Added 300 of these systems in 2013, bringing the total to 780.
- ✓ Completed cellular tower construction in Pine Ridge and also replaced a tower in Enning.
- ✓ Completed installation of a newly purchased Renovo scheduling software; which was installed to replace the aging TC Reliance scheduling system. The Renovo Software will communicate with the network servers controlling videoconferences throughout the state.
- ✓ Completed a revision of the Digital Dakota Network (DDN) web content to provide user friendly online forms, frequently asked questions about the DDN, an updated listing of educational courses and other events across the state along with updates to policy manuals and other resources.
- ✓ Partnered with the Board of Regents to expand bandwidth and improve network redundancy services on each of the higher education campuses.
- ✓ Installed 49 additional wireless access points.
- ✓ Standardized both the HP Elitepad and Windows Surface tablets.
- ✓ Updated desktop security to nearly 69,000 K-12 workstations.
- ✓ Entered 100,670 call ticket assignments in the BIT request tracking system; the Help Desk resolved 38.51 percent of these assignments.
- ✓ Migrated nearly 8,900 workstations to Windows 7.

Congratulations to Bob Ensz and his wife Michele for being recognized by the Department of Game, Fish and Parks for their volunteer service related to the state parks. Also pictured are Tonna (far left) and Eric VanderStouwe (far right).



# Employee Recognition

*In the fall of 2011 BIT staff completed an Employee Satisfaction Survey. This survey indicated to management that there was a need to improve individual employee recognition. A committee was formed to evaluate the survey results in which it was recommended that managers include improved employee recognition as a strategic goal and to define a process to recognize employee achievement and performance regularly.*

*On a quarterly basis, each division submits nominations along with an explanation as to why an individual is being recognized, honored and rewarded. Criteria for submissions and recognizing employees was also developed and shared among management.*

## ***2013 Employees of the Quarter***

In honor of their outstanding performance and dedication to BIT, state government and the citizens of South Dakota, we gladly recognized the following staff in 2013 for their high standards of excellence.

- ✓ Debbie Lancaster is a Point of Contact within the Project Management Office for the following agencies: BIT, Department of Education, Department of Public Safety, Legislative Research Council, Legislative Audit, School and Public Lands and Tribal Relations.
- ✓ Miguel Penaranda is an analyst and provides a variety of services to support our staff and customers.
- ✓ Rory Ehlers is the Administrator for Enterprise Application Integration (EAI) and oversees state government's complex application integration projects.
- ✓ Barry Olson is responsible for the z/OS operating system and associated subsystems as well as management of the Mainframe disk subsystem.
- ✓ Randy Johnson (who recently resigned) was the primary contact for the Bureau of Human Resources and directed the annual development of the state's benefits enrollment system.
- ✓ Mark Heier maintains the state's Microsoft SQL Server infrastructure within the Data Center.
- ✓ Diane Kehrwald, who retired halfway through the year after 34 years of service with the State of South Dakota, led the voice team within Telecommunications.
- ✓ Beth Lott is an application developer for the Departments of Transportation and Public Safety.
- ✓ Randy Mertz primarily supports database systems and application services.
- ✓ Steve Patterson is the expert on various systems within the Department of Public Safety.
- ✓ Joy Nye is the Lead Computer Room Supervisor for the BIT Data Center.
- ✓ Martie Stulken manages and programs for many of the the Department of Social Services' applications. Her leadership and strategic visions are an asset to our Development division.
- ✓ Jeff Litterick is a technology engineer supporting key infrastructure activity.

# Challenges Ahead

## *cyber security. policy enforcement. asset management.*

We all understand the importance of staying abreast of [ever-evolving technology](#). Our staff continue to work collaboratively with our customers and partners to gather information on new technologies while weighing the benefits as well as the conflicts. While challenging, this provides an opportunity to improve our systems and processes, better align our security measures and ensure we [recruit, develop and retain a highly skilled workforce](#) to continue achieving our strategic goals.

[Security and the protection of the state's data and information continue to be our number one challenge](#). Cyber security concerns have risen in nearly every industry across the country from banking and healthcare to retail and government. As online services and transactions rise in popularity, businesses and consumers are increasingly concerned about effective cyber security. Our team of cyber security experts continue to protect and defend the state's sensitive data from [malicious cyber-attacks](#) and will continue to educate and inform state employees on the importance of staying safe in cyber space. BIT has accepted the responsibility to effectively secure the state's technology systems, but to succeed, we need [every state employee to take online security seriously](#) and to use safe computing practices both at home and at work; [no matter what device is being used](#).

BIT has developed [policies to provide safety and security](#) for our employees, customers and the IT infrastructure for state government. Policies for parts, contract reviews, security, social media, website development and mobile devices are important aspects that need to be incorporated into the business needs of our customers. Employees are expected to be familiar with policies defined in the [Information and Technology Security Policy](#) located at <http://intranet.bit.sd.gov/policies/>. The most recent policies developed cover the topics of securing data accessed from or stored on a mobile device and data security requirements regarding federal tax information.

[Asset management](#) is a challenge facing BIT and all of state government. [The need for a comprehensive information and technology asset management system is now](#). A powerful asset management solution contains information about every piece of hardware in state government, every piece of software installed on the device, when licenses for that software expire and device ownership/assignment information. We are currently researching and conducting inventory on all areas of this major undertaking.

Our emphasized focus on recruitment has been effective, but we have more to accomplish. [Recruiting and retaining a highly skilled and talented technical workforce](#) is coupled with the need to expand existing staff skillsets to deliver the services required by all areas of BIT.

As the financial oversight for the American Recovery and Reinvestment Act's (ARRA) State Broadband Grant concludes, we will begin the financial oversight for South Dakota's Public Safety Broadband Network Grant.

As we look ahead to 2014 and beyond, [we see these challenges as opportunities for improvement](#) of the state's technology environment.



**Connect with us online!**



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