DIS.ARKANSAS.GOV

Arkansas

A State of Technology

One Capitol Mall | Little Rock, Arkansas 72201 | 501.682.2701

Department of Information Systems

DIS.ARKANSAS.GOV

THE PREMIER
INFORMATION TECHNOLOGY PROVIDER
FOR THE
STATE OF ARKANSAS

2012 ANNUAL REPORT

Vision

Customer satisfaction every time.

Mission

Provide technology leadership and solutions to assist our customers in their delivery of public services.

Values

Integrity, Customer Focus, Teamwork, Communication, Innovation, Credibility, Continuous Improvement.

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Governor's Quality Award

GOVERNOR'S AWARD 2011

DIS in 2012

Building for the future requires innovative thinking to ensure that Arkansas state government adjusts to the rapidly evolving digital world. As the premier provider of technology services for state agencies, board and commissions, K-12 public schools, and administrative components of higher education, the expert team of customer-focused information technology professionals at the Department of Information Systems (DIS) constantly examines technology trends impacting Arkansas and looks for solutions to guide the state away from the silos of the past toward a coordinated approach that leverages collaborative tools and shared services to more effectively streamline government and implement cost-effective solutions.

This level of drive, focus and commitment earned DIS the 2011 Governor's Quality Award for Performance Excellence. This achievement, the first by a government agency, motivated us to further challenge ourselves in 2012 to meet new citizen expectations for government to be ready to deliver and receive information and services through multiple channels. With Arkansas's population leading the nation in the percentage of wireless only households and accessing public services on mobile devices at greater rates each year, we recognize the significance of mobile technology upon the consumer landscape and its impact in creating both challenges and opportunities for government data to be accessible to its citizens anytime, anywhere, on any device.

Whether an agency is supporting a citizen looking to license a vehicle or a teacher is looking for an innovative learning solution for his students, DIS initiatives are influenced by the need to achieve high-performance, highly secure, reliable information technology services to build upon and improve the delivery of public services to the people of Arkansas. DIS consistently works to build upon its catalogue of technology services that enable public entities to provide high-quality digital government information 24-hours-per day, seven days per week, and to cultivate the vital customer relationships that enable us to innovate together and discover new tools and techniques that establish a 21st century government equipped to more effectively and efficiently serve Arkansans.

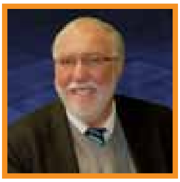
Claire Bailey

Claire Bailey

Director
Chief Technology Officer

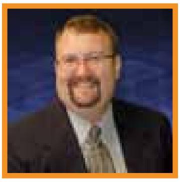
Executive Leadership Team

Claire Bailey
Director



Herschel Cleveland
Deputy Director

Nancy Jauernig
Customer Relationship Management Administrator



Jeff Dean
Chief Operations Officer

Nancy Turner
Chief Financial Officer

Kym Patterson
Chief Security Officer

Anthony Black
General Counsel

Scott Utley
Chief Enterprise Architect

Penny Rubow
AWIN Program Director

"Fiscal responsibility has always been a top priority for DIS. Technology enables us to implement practices that eliminate manual, paper-based processing, electronically monitor and track transactions which improves the customer experience and reduces costs while maintaining compliance with state and federal regulations."
--Nancy Turner, Chief Financial Officer

About DIS:

The Arkansas Department of Information Systems (DIS) is a cabinet level agency of Arkansas state government that provides information technology services to more than 300 customers within Arkansas's public sector. DIS works 24 hours per day, 365 days per year, to ensure that public services provided by the state's largest agencies such as the Department of Finance and Administration and the Department of Human Services, as well as the services of smaller state agencies, boards and commissions, K-12 public schools, institutions of higher education, and city and county governments, are always available to the citizens of Arkansas.

Another vital aspect of our job is to manage the interoperable, wireless, digital, public safety radio communications network, the Arkansas Wireless Information Network (AWIN). In the event of a disaster, DIS works in coordination with the Arkansas Department of Emergency Management (ADEM) to restore communications to over 21,400 first responders and other public safety organizations across the state.

DIS hosts the state's official web portal, Arkansas.gov, on behalf of the Information Network of Arkansas (INA). This web site is the front door for citizens to access online public services. It is also an important catalyst for us to showcase the state's economic benefits and exceptional quality of life to visitors of our state and to prospective business and industry. Arkansas.gov was named as the top government web site in the nation, receiving the 2011 Best of the Web award, from the Center for Digital Government.

DIS services include:

- Internet Connectivity
- Secure Data Center Hosting (Mainframe, Unix, Windows)
- Virtual Private Cloud for Public Sector
- Data Analytics
- Telephone
- Voice Mail
- Audio & Video Conferencing
- E-mail
- Tape, Data Storage and Backup Services
- Network Security
- Windows Desktop Support
- Application Development
- Business Continuity
- Disaster Planning and Recovery
- Systems Integration

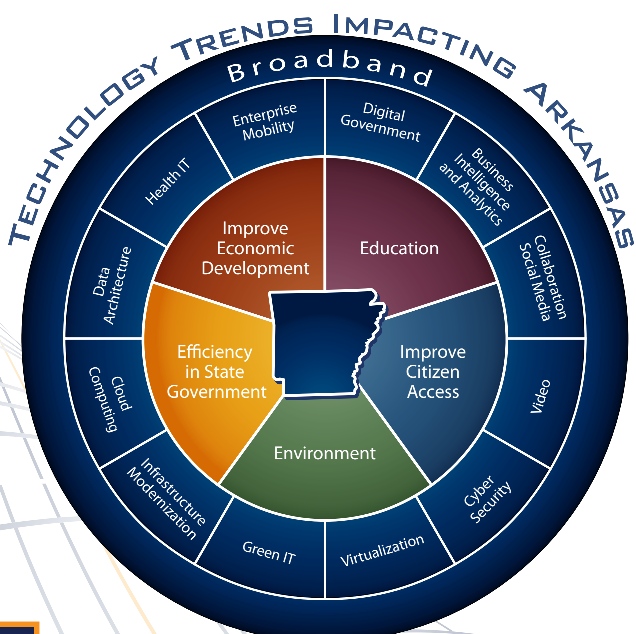
Our certified IT professionals are committed to excellence and offer products and services in the following categories:

Arkansas Approach:
State Technology Council Enterprise Architecture

Act 648, by the 2009 Arkansas General Assembly, set forth a coordinated approach for technology acquisitions to meet the needs of the state and to maximize standardization and cost effectiveness. This methodology is known as enterprise architecture (EA).

EA works to foster a shared approach to developing and delivering services and managing data to accelerate the adoption of new technologies, lower costs, reduce duplication and to ultimately eliminate fragmented procurement and development practices by individual entities that are inefficient and waste taxpayer dollars. The enterprise approach augments the state's ability to more effectively leverage its buying power with vendors and service providers and enables a more interrelated partnership with the Department of Finance and Administration's Office of State Procurement to streamline purchasing mechanisms.

Each biennium, the EA office at DIS on behalf of the Arkansas State Technology Council (STC) leads the statewide technology planning effort in partnership with state agencies, boards and commissions that culminates with the creation of a State of Arkansas Strategic Plan for Information Technology. The plan details both the initiatives and projects for future technology investments setting the course for information technology (IT) in Arkansas state government.
This coordination across agencies helps improve citizen and employee interaction with government information and services, and elevates the level of efficiency of citizen engagement with state government with their experiences when engaging with the private-sector.



http://stc.arkansas.gov

Strategic Goals: The Five E's

DIS has established a set of Five E's that comprise the strategic goals for information technology across Arkansas state government. We are continually working toward these five objectives:

1. Workforce Excellence

We are aware that the strength of our people equals strength for our organization. To ensure that strength, we will:

- Increase employee engagement and satisfaction
- Be a great place to work

2. Customer Service Excellence

Our agency vision is customer satisfaction every time. To fulfill our vision, we must:

- Establish appropriate customer expectations
- Build depth in customer relationships

3. E-Leadership

We want to provide leadership in all technology initiatives across Arkansas state government. As part of this effort we will:

- Coordinate technology efforts within state government

4. Financial Excellence

We operate as a cost recovery agency. To achieve financial excellence we must:

- Improve operating efficiencies
- Improve enterprise financial health and broaden revenue mix

5. Operational Excellence

We want to set the standard for IT in Arkansas state government.
To assist us in doing this we must:

- Improve the customer experience
- Strategically focus DIS resources to increase customer satisfaction

Strategic Goal One: Workforce Excellence

Employees are the most valuable asset for DIS. Their superior experience, commitment, caring, and competence has enabled DIS to realize consistently increasing levels of customer satisfaction ratings collected each year through an annual survey and enabled DIS to become the first state agency to earn the 2011 Governor's Quality Award for Performance Excellence.

In 2012, DIS employees witnessed, firsthand, how their work directly impacted the life of a 12-year-old medically homebound boy in Northeast Arkansas. The event occurred when DIS was contacted by the technology coordinator for the Paragould School District seeking connectivity from the student's home to provide bandwidth for a closed video system. When it was discovered that DSL service was not available to the home or the school, DIS employees worked with an area service provider to install a point-to-point T1.

This collaborative effort, combined with the help of a portable robot, enabled the student to operate the robot on the school campus from home by remote control giving him the ability to participate in classroom learning and activities with other students. This accomplishment captured television and newspaper coverage.

To the benefit of employees and DIS, the department has embarked upon an organizational development project. This project will:

- Help develop internal bench strength
- Reduce future costs of recruiting and training new talent
- Provide training and skill development at all levels of the organization
- Provide the expertise and capabilities for employees to be successful in driving productivity while simultaneously achieving their professional goals
- Maximize capital resources by reducing turnover
- Retaining employees by continually working to improve the organizational culture

DIS recognizes that organizations that successfully leverage the knowledge and ability of employees not only navigate through challenging times and change, but benefit from increased creativity and innovation toward attaining operational goals.

Strategic Goal Two: Customer Service Excellence

DIS constantly works to cultivate cohesive relationships with its customers. With more than 2,500 locations on the state network, state agencies, public schools, and ultimately the citizens they serve, depend on the availability of services the moment they are needed. We work everyday, 24-hours a day, to ensure that our customers' needs are met and that our customers are satisfied with the service they receive. Each year, DIS conducts a customer satisfaction survey to pinpoint and identify strengths and opportunities for improvement.

Arkansas Digital Government Summit

In November 2012, DIS co-hosted the third annual Arkansas Digital Government Summit. Over 200 information technology professionals from across Arkansas state government attended the one-day summit to learn more about increasing government efficiency and expanding citizen access to public services.

"With the Arkansas Digital Government Summit, we work with an advisory council to identify the relevant topics and IT trends impacting Arkansas," said Claire Bailey, DIS director and Arkansas chief technology officer.

The 2012 summit covered a wide range of topics related to the public sector including Cloud Computing, Mobile Device Management, and Transitioning to a Paperless Government.

"She gave real-life examples about transitioning to a paperless government and spoke from experience about working with employees who are not ready to embrace paperless systems," said summit participant Debra Buckner, Pulaski County treasurer of her session speaker.

Top: Keynote speaker Cathilea Robinett
Bottom: Keynote speaker Clay Jenkinson as President Theodore Roosevelt

Keynote speaker Cathilea Robinett, executive vice president for the Center for Digital Government and Government Technology magazine, addressed technology trends on the near horizon and said mobility would be a powerful driver impacting the delivery of public services and forecasted that e-mail would be obsolete in the near future. Keynote speaker Clay Jenkinson portrayed President Theodore Roosevelt and cited examples of how Roosevelt embraced the technological innovations of his time.

The annual summit is an example of how DIS strives to be the technology leader on behalf of the state and works to build partnerships and work with industry leaders to help build upon Arkansas's capacity as a digital state.

Malvern Pioneers VoIP for ADC

One of the largest Voice over Internet Protocol (VoIP) installations for DIS was completed in 2012 at the Ouachita River Unit (ORU) of the Arkansas Department of Correction (ADC) in Malvern.

ORU was a prototype that could revolutionize communications between ADC facilities across the state as the benefits of VoIP versus traditional telephone service are fully realized.

Since the Malvern location is a medical facility, ADC is monitoring key factors such as 24x7 availability, reliability, and the cost stability of VoIP versus traditional telephone lines to determine the feasibility of future VoIP expansion throughout other ADC facilities. DIS could also utilize the project as a model to demonstrate the advantages of VoIP to other customers, especially those with multiple, geographically segregated facilities.

The success in planning, coordinating, engineering, and installation of the system was achieved through a collaborative partnership between customer relationship management account representatives, network support engineers, and leadership from the Arkansas Department of Correction.

DIS/DWS Partner to Complete Two-Year Project

A project for the Department of Workforce Services to upgrade an outdated, integrated voice response system (IVR) was completed in 2012. The automated system, ArkLine, is the system used by citizens for filing weekly unemployment insurance benefits by phone. The improved system enables citizens to call in, enter data, and receive information over the telephone either by touch tone or by speaking into the telephone system. The system eliminates the need for an employee to answer the call and record the information and features voice prompts in both English and Spanish. ArkLine can also be used to verify when weekly claims are processed.

As a second component to upgrading ArkLine, DIS also assisted DWS in merging and aligning the information entered into ArkLine with that entered into ArkNet, DWS' web-based system for filing weekly unemployment claims. Whether filing by telephone utilizing ArkLine or submitting information for benefits online through ArkNet, the experiences are similar for the user.

C✴MPASS

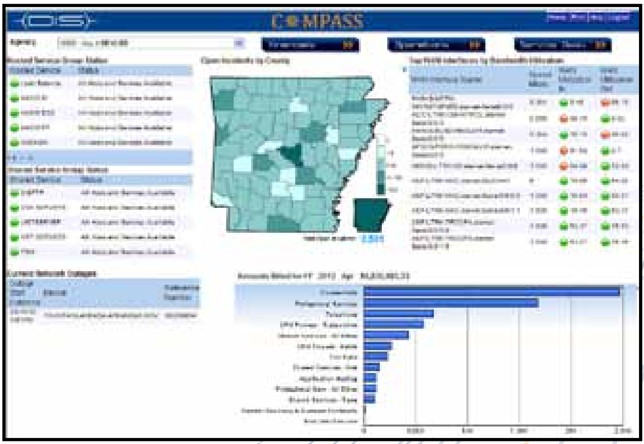
COMPASS Dashboard Released to DIS Customers

The Centralized Operational Monitoring and Performance Analysis Support System (COMPASS) was released to customers in 2012. This DIS enterprise dashboard for employees and customers was designed to:

- Provide a visual display of information for ease of use
- Consolidate information from multiple DIS systems for easy access
- Enable at-a-glance monitoring of key metrics and DIS-hosted systems
- Provide the ability to see the operational status of service areas hosted by DIS including:
    - Financials
    - Service Desk (Open call center incidents)
    - Performance Measures (DIS performance measures, scorecard and trends)
    - Operations
    - Executive Overview
    - Time Reporting

The COMPASS team at DIS worked to ensure a smooth deployment of the dashboard to customers through efforts to affirm security, user authentication, and data quality.

Arkansas school districts are next in line to be given access to COMPASS. The procurement of a multi-authentication license key will allow schools to log in to view district information. The COMPASS team will then partner with the appropriate district personnel to provide training to school technology coordinators. The target is to provide access to schools by the end of the 2012-13 school year.

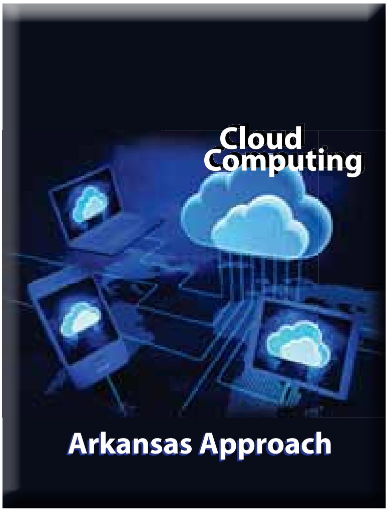


Strategic Goal Two: Customer Service Excellence *continued*

Working Groups Integrate Customers into Planning Process

DIS continually strives to integrate its customers into the process of increasing efficiencies in state government by inviting them to become active participants in working groups. In addition to already established working groups for state network, SharePoint, security, and enterprise architecture, two new working groups were established in 2012.

In June, IT professionals from across the state were invited to participate in an accessibility working group. This group was formed to help educate state agencies about the compatibility and deployment of technologies created for use by the visually impaired. State legislation requires state agencies to configure software applications, operating systems, and Web-based intranet and internet information and applications in a way that is accessible to visually impaired employees and citizens utilizing state services.



In August, DIS invited state IT planners to join a cloud working group. The group worked from September-December to draft a strategy for agencies to utilize as best practices when utilizing cloud-based services.

DIS Hosts Customer Forums

Learning from customers about the central issues of concern is a guiding principal that enables DIS to continually improve, learn and grow. Customer input improves DIS' ability to identify and assess its strengths and opportunities for improvement.

In early 2012, DIS stakeholders, including deputy directors and division administrators, were invited to participate in a focus group to articulate and convey their thoughts, concerns, needs, comments, ideas, and suggestions to DIS in advance of the department's annual strategic planning meetings. During the customer focus sessions, the strategic mission of DIS was reiterated in conjunction with group dialogue about business issues and trends public entities may face in the future.

Strategic Goal Three: E-Leadership

Several key strategies are included in our goal to continually provide technology leadership for the state of Arkansas. We want to work across state government to promote disaster-resistant technology services, implement green IT practices, cultivate technology synergy among state entities, and design solutions using technology innovations to meet our customers' needs.

DIS Pilots 4G Integration with BEE to Bolster K-12 Connectivity

DIS piloted the concept of integrating 4G as part of the Bandwidth for Educational Enhancement (BEE) program in 2012 as a potential connectivity solution for K-12 public schools in areas of the state where there are limited options for consumer grade or low cost bandwidth services. Working collaboratively with major telecommunications vendors, pilots were successfully conducted in four locations. Where service was stable, the pilots proved that 4G service would be a viable option. As of early 2013, work began to formulate a pricing model that would make implementation acceptable.

BEE was first offered by DIS as a service to K-12 public schools in 2010. BEE provides affordable, secure bandwidth through a bandwidth aggregator (a collecting, sorting, routing device) capable of distinguishing between business critical applications versus general Web browsing. The aggregator then routes user requests to either a "business class" or "consumer class" connection based on the appropriate level of priority.

BEE
Bandwidth for
Educational
Enhancement Initiative

AWIN
the
Arkansas Wireless Information Network

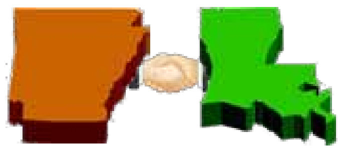
Arkansas Wireless Information Network has an approximate coverage of over 93 percent of the state population, using 74 transmitter sites, and approximately 21,400 mobile and portable radios on the network, representing over 500 public safety agencies. (AWIN is targeted to have 90-100 transmitter sites, with approximately 20,000 mobile and portable radios and 750 agencies that will operate on the network.)

AWIN is monitored 24-hours a day, 365 days per year to ensure that it is available whenever the first responder needs it. The AWIN staff is highly trained and dedicated to ensuring the system is available every second of every day. AWIN affords the public safety community in Arkansas over 99 percent network reliability.

Strategic Goal Three: E-Leadership *continued*

AWIN/LWIN: Neighbor Helping Neighbor

Arkansans and Louisianans are no strangers when it comes to coping with Mother Nature's fury. Whether hurricanes, flooding, tornadoes, or fire, helping neighbors during times of crisis is an integral part of the Southern culture. The creation of an interstate public safety communications connection between the Arkansas Wireless Information Network (AWIN) and the Louisiana Wireless Information Network (LWIN), in essence, dissolved the boundary separating the two states and expanded the kinship and instinctive response for helping neighbors across state lines.



The connection dramatically increased the ability of the two states to work in partnership in the evacuation of Gulf Coast residents and other public safety emergency situations. Building on GulfWIN, the network put in place to respond to the 2010 Gulf Coast oil spill, a gateway device was installed in southern Arkansas that allowed the two state systems to be bridged together. The solution was successfully tested during a multi-state hurricane evacuation exercise held in April 2012. Emergency management personnel from both states were able to successfully send and receive messages throughout the duration of the exercise. This accomplishment will not only assist in a more rapid, efficient evacuation process, it will also enable first responders from both states to coordinate emergency response efforts for smaller events that are localized to the state's borders such as the wildfire outbreak in the summer of 2011. Caddo Parish district purchased 100 radios to be programmed with the AWIN mutual aid talk groups which will be deployed when these events occur. Some command staff within the public safety agencies will be permanently assigned the radios.

AWIN Launches New Web Site

A new web site for the Arkansas Wireless Information Network (AWIN) was unveiled in February 2012 at a quarterly meeting of the Arkansas Interoperable Communications Committee. The new site designed by the Information Network of Arkansas (INA) maintains the common look and feel of other web sites affiliated with Arkansas state government. The address for the new site is www.awin.arkansas.gov.

Next Generation 9-1-1/Public Safety Broadband on the Horizon for Interoperable Communications in Arkansas

In early 2009, Congress directed the Federal Communications Commission (FCC) to develop a National Broadband Plan to ensure every American has "access to broadband capability." Congress also required that this plan include a detailed strategy for achieving affordability and maximizing use of broadband to advance public safety and numerous other critical areas. The plan recommendations for public safety and homeland security include the following:

- Support deployment of a nationwide, interoperable public safety mobile broadband network.
- Promote innovation in the development and deployment of next-generation 9-1-1 and emergency alert systems.
- Promote cyber security and critical infrastructure survivability to increase user confidence, trust and adoption of broadband communications.

Arkansas has formed a Public Safety Broadband (PSBB) working group to develop a PSBB Plan for the state. The group distributed a PSBB survey to gather input and is working to identify requirements for the PSBB network in Arkansas. A preliminary state public safety broadband plan was completed at the end of 2012. The PSBB working group is ensuring the public safety broadband governance structure is in place, monitoring the federal First Responder Network Authority (FirstNet) activities, and being responsive to Firstnet's requests for information.

Next generation 9-1-1 refers to an initiative aimed at updating the 9-1-1 service infrastructure in the United States and Canada to improve public emergency communications services in a wireless mobile society. In addition to calling 9-1-1 from a phone, it intends to enable the public to transmit text, images, video and data to the 9-1-1 center. The U.S. Department of Transportation (DOT) has been leading a research and development project to produce a design for a next-generation 9-1-1 system capable of voice, data, and video transmission from different types of communication devices into public safety answering points (PSAPs) and on to emergency responder networks such as AWIN. DIS is supporting the Arkansas Department of Emergency Management in understanding the state's needs and planning for a potential implementation should the funds become available.

The Arkansas State Cyber Security Office (SCSO) at DIS sets cyber security standards and policies for state agencies and administrative sections of institutions of higher education and is the front line of defense in protecting over 2,000 agencies, boards, and commissions, higher education, and K-12 public schools on the state network. Legislatively mandated to coordinate security measures to protect the resources of governmental entities, SCSO monitors and manages security mechanisms of the state network, notifies organizations of suspected infected computers, provides computer forensic services, and assists customers with security issues.

Network and Organizational Cyber Security

SCSO serves as the focal point for all state cyber security issues and monitors organizations on the state network for the presence of malicious software (malware) and infected computers.

In monitoring the state network for suspicious network traffic, SCSO detected computers exhibiting malicious behavior that could result in botnets, spamming activities, denial of service (DOS) attacks, or a breach of sensitive data that could be used for identity theft. To protect sensitive state data and machines from unauthorized enterprises and malicious activity, SCSO helped develop a state Domain Name System (DNS) infrastructure with a malicious traffic filter to recognize infected machines and prohibit their communications with hackers.

The promulgated standard set forth in 2012 required public entities whose traffic crossed the state network destined for the Internet to use the DNS infrastructure. The necessary system adjustments helped ensure that information was not inadvertently routed to a server outside of the United States to better safeguard and protect the state's assets and the privacy of Arkansas citizens.

DIS manages 1,100 fire walls for organizations on the state network. On any given day, these firewalls typically block 17 million unauthorized network attempts.

Arkansas Continuity of Operations Program (ACOOP), overseen by SCSO, provides methodology, hardware, software, training, and user assistance for the development, maintenance and testing of business continuity plans for Arkansas agencies, boards and commissions, institutions of higher education, K-12 public schools, and city and county governments. These plans are intended to ensure that essential services will continue to be provided after any disruptive event. Over 2,000 planners maintain approximately 3,000 plans for organizations and locations across the state.

ACOOP
Arkansas Continuity of Operations Program

SuperCOOP Planning Tool Nationally Recognized

SuperCOOP, the disaster recovery (DR) software tool used across Arkansas government agencies, was selected as a 2012 award finalist by the National Association of State Chief Information Officers (NASCIO). The tool was created by ACOOP staff and an independent developer to provide a functional, compliant, cost effective, navigational tool for managing disaster recovery and continuity of operations planning.

The NASCIO Recognition Awards for Outstanding Achievement in the Field of Information Technology in State Government honors successful technology initiatives that deserve to be highlighted and shared to promote innovation, foster better government, and engage citizens.

Projects and initiatives from NASCIO member states, territories, and the District of Columbia were eligible for nomination, and finalists were selected by NASCIO's Awards Committee from a field of more than 120 nominees. SuperCOOP was selected as a finalist in the risk management initiatives category and competed for the award with projects from the states of Michigan and North Carolina. A mobile application for SuperCOOP is in development that will provide organizations access to its DR plans via a mobile device.

Strategic Goal Three: E-Leadership *continued*

Disaster Recovery Sites Maintained by DIS

Multiple levels of redundancy add additional “safety nets”. DIS has established disaster recovery hot sites for email and other critical state systems and conducts 80-hours of annual and semi-annual disaster recovery testing to verify business continuity processes. The disaster recovery site has duplicate systems and backups of user data in the state data center. In the event of a disaster or network failure, systems will be restored at one of the alternate recovery sites. A team of employees from DIS and from customer agencies participate in the tests, both offsite and in Little Rock, to recover critical services hosted in the state data center.

NLE 2012 Simulates Response to a Different Kind of Crisis

National Level Exercise (NLE) 2012 simulated the loss of Internet connectivity in Central Arkansas. Employees from DIS and other agencies participated in the tabletop exercise hosted by the Arkansas Department of Emergency Management (ADEM) and Infragard. Chief Security Officer Kym Patterson of DIS served as facilitator.

Rick Martin of DIS takes notes during NLE 2012.

NLE 2012 examined the state’s ability to coordinate and implement prevention, preparedness, response, and recovery plans and capabilities pertaining to a significant cyber event or a series of related cyber events. Unique to NLE 2012 was an emphasis on the shared responsibility among the federal government; state, local, tribal nations and territories (SLTT); the private sector; and international partners to secure cyberspace and respond together to a significant cyber incident.

Green IT

As a result of our determination to be a leader within state government in the responsible use of technology to minimize the impact of energy and natural resources, DIS became the first Arkansas state government agency to become an Environmental Protection Agency (EPA) ENERGY STAR partner. As part of the partnership requirements, energy consumption is measured, tracked, and benchmarked.

Statement of Policy

It is the policy of DIS to purchase products that minimize environmental impacts, toxins, pollution, and hazards to worker and community safety to the greatest extent practical, and purchase products that include recycled content, are durable and long-lasting, conserve energy and water, reduce greenhouse gas emissions, are mercury-free, and lead-free, use agricultural fibers and residues, and use wood from sustainably harvested forests.

Energy Team

The DIS energy team is comprised of 18 representatives from a cross section of the organization. The energy team meets semi-annually to discuss strategies and policies that can help carry out the agency's Strategic Energy Plan (StEP).

Strategic Energy Plan Goals

- Reduce the agency's annual maintenance and operating budget devoted to energy consumption (usage) in accordance with Executive Order 09-07.
- Promote agency operations and practices to reduce the agency's environmental impact.
- Integrate energy use considerations into maintenance and capital improvement plans.
- Promote StEP time line.

2012 Energy Outcomes

State data center: Overall electrical usage reduced 13.92 percent compared to FY08 total kWh usage. An overhead network cabling project in conjunctions with a major cooling system upgrade is planned for the data center and in FY13-FY14.

DIS warehouse: Natural gas consumption for FY12 versus FY08 reduced by 42.36 percent. Electrical consumption for FY12 versus FY08 reduced by 7.08 percent. Overall, the site's energy intensity had a 35.06 percent reduction in kBtu for FY12 versus FY2008.

Fleet vehicles: Seven fleet vehicles are maintained by DIS. Mileage from July 1, 2011-June 30, 2012 was 60,804. Total fuel expense for this period was $9,105. At the 2012 Arkansas average price of $3.35 per gallon for gasoline, vehicles averaged approximately 19.13 MPG.

Office Equipment: Twenty-three percent of the agency's computers, printers, copiers are ENERGY STAR® / EPEAT certified.

Paper Usage: DIS reduced internal paper consumption by almost 21 percent in FY12.

Strategic Goal Four: Financial Excellence

DIS operates as an Internal Service Fund, or cost recovery agency, to provide telecommunications and data processing services to customers. Through the budget process, our agency receives appropriation only and bills customers for provided services. State and federal rules and regulations mandate that we only recover our costs. Over-recovery of cost are managed by reducing user rates/charges based on customer utilization and agency costs.

Our goal of financial excellence includes maintaining compliance with all federal, state, and internal guidelines, securing funding to accomplish our goals, increasing operational efficiencies, and providing accurate and timely financial information to customers.

The Fiscal Division is responsible for the overall financial health of the agency, including budgeting, compliance, cost recovery management, asset management, accounts receivable, accounts payable and planning.

Financial Compliance

- Execute and ensure compliance of financial reporting deadlines
- Manage and monitor internal and external financial deadlines
- Department of Health and Human Services Office of Management and Budget Circular A87 compliance and cost recovery review
- Perform and produce risk assessment every biennium in support of the Comprehensive Annual Financial Report (CAFR), which provides a report of the state's financial status as well as a method for the national credit markets to determine the state's credit worthiness

Cost Allocation and Cost Recovery

- Track cost vs. revenue for all services
- Annual reporting to federal Division of Cost Allocation (DCA)
- Comprehensive Annual Financial Report (CAFR)
- Produce financial statements
- Perform time reporting for billing and cost allocation

IT Asset Management (ITAM)

- Manage warehouse and inventory
- Maintain inventory records
- Track assets
- Perform annual audit of agency assets

DIS has two key measures of financial performance: over/under recovery and revenue. Over/under recovery is critical to remain compliant with state and federal regulations. Cost management is critical to ensure DIS is providing cost effective technology services.

Fiscal Year 2012 Budget

Description	ACT 327 FY2011 Authorized	Budgeted: DIS - Operations	Budgeted: Innovation & Product Development	Total FY2013
Regular Salaries	$ 16,161,849.00	$ 16,161,849.00	DFA BUDGET	$ 16,161,849.00
Extra Help	$ 164,000.00	$ 164,000.00		$ 164,000.00
Personal Services Matching	$ 4,459,553.00	$ 4,459,553.00		$ 4,459,553.00
Overtime	$ 66,000.00	$ 66,000.00		$ 66,000.00
Labor Related	**$ 20,851,402.00**	**$ 20,851,402.00**		**$ 20,851,402.00**
Operating Expenses	$ 9,519,905.00	$ 9,519,905.00		$ 9,519,905.00
Conference & Travel Expenses	$ 214,321.00	$ 214,321.00		$ 214,321.00
Professional Fees	$ 631,500.00	$ 631,500.00		$ 631,500.00
Data Processing	$ 8,406,866.00	$ 8,406,866.00		$ 8,406,866.00
Capital Outlay	$ 4,500,000.00	$ 4,500,000.00		$ 4,500,000.00
Telecom Tech Delivery	$ 58,450,929.00	$ 58,450,929.00		$ 58,450,929.00
		$ -	$ 215,062.00	$ -
Non-Labor / Operating	**$ 81,723,521.00**	**$ 81,723,521.00**	**$ 215,062.00**	**$ 81,723,521.00**
Total DIS	**$ 102,574,923.00**	**$ 102,574,923.00**	**$ 215,062.00**	**$ 102,574,923.00**
Funding Source		**Cost Recovery**	**Misc Fund Account**	

Fiscal Year 2013 Budget

Description	ACT 165 FY2012 Authorized	Budgeted: DIS - Operations	Budgeted: Act 281 Innovation & Product Development	Total FY2013
Regular Salaries	$ 16,381,745.00	$ 16,381,745.00	DFA BUDGET	$ 16,381,745.00
Extra Help	$ 164,000.00	$ 164,000.00		$ 164,000.00
Personal Services Matching	$ 4,502,238.00	$ 4,502,238.00		$ 4,502,238.00
Overtime	$ 66,000.00	$ 66,000.00		$ 66,000.00
Labor Related	**$ 21,113,983.00**	**$ 21,113,983.00**		**$ 21,113,983.00**
Operating Expenses	$ 9,519,905.00	$ 9,519,905.00		$ 9,519,905.00
Conference & Travel Expenses	$ 214,321.00	$ 214,321.00		$ 214,321.00
Professional Fees	$ 631,500.00	$ 631,500.00		$ 631,500.00
Data Processing		$ -		$ -
Capital Outlay	$ 4,500,000.00	$ 4,500,000.00		$ 4,500,000.00
Data Processing - Misc.	$ 8,406,866.00	$ 8,406,866.00		$ 8,406,866.00
Telecom Tech Delivery	$ 58,450,929.00	$ 58,450,929.00	$ 220,757.00	$ 58,450,929.00
Non-Labor / Operating	**$ 81,723,521.00**	**$ 81,723,521.00**	**$ 220,757.00**	**$ 81,723,521.00**
Total DIS	**$ 102,837,504.00**	**$ 102,837,504.00**	**$ 220,757.00**	**$ 102,837,504.00**
Funding Source		**Cost Recovery**	**Misc Fund Account**	

Strategic Goal Five: Operational Excellence

Strategic goal five focuses on the factors in achieving operational excellence throughout the agency. We want to work to implement and integrate appropriate tools for technology services, continually improve change management, provide consistent availability of the state data center and hosted systems, and put the right people with the right skills in the right positions.

Our IT Operations

Call Center

- 8 Call Center agents
- 109,936 customer trouble calls and e-mails
- 63,809 service tickets
- 17,998 service tickets created by automated systems

Data Center

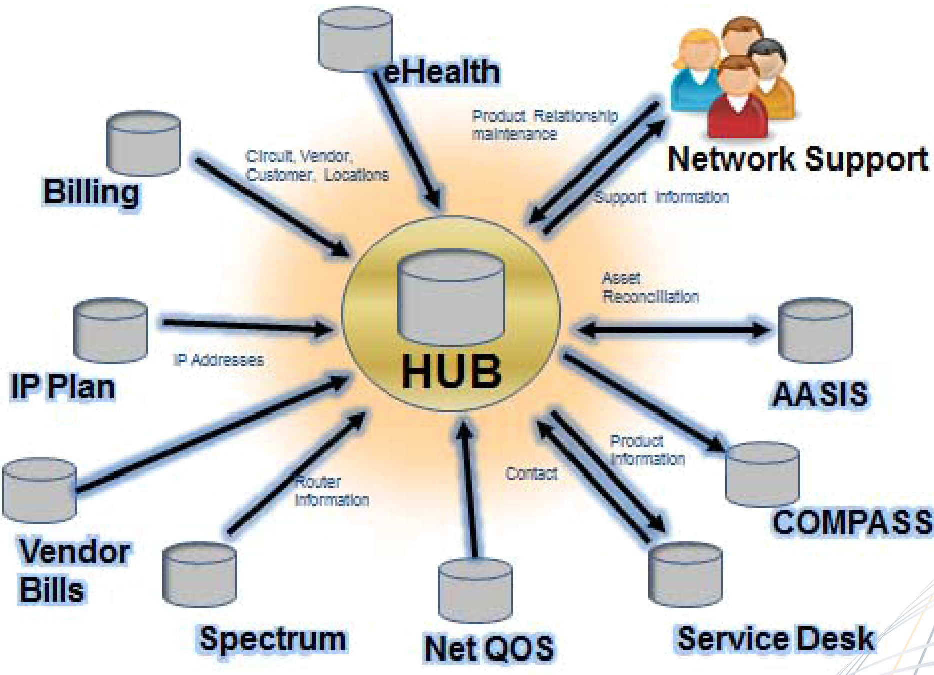
- 12,800 square feet secure area
- Available 24 X 7 X 365

DIS Field Support Regions

Field support provides training to school technology coordinators when needed and provides onsite desktop, server, and network support for public schools and other DIS customers. Field support also assists with electronic voting equipment during elections and technical support in disaster response situations.

The 'HUB' Centralizes DIS Data

'The HUB' , was a DIS project implemented to breakdown divisional data silos and replacing them with a single, centralized location where core data flows in from other systems such as DIAMONDS, Spectrum, and ServiceDesk, and is accessed by multiple work groups. The primary objective of 'The HUB' was to maximize the quality of core data needed for network support through measures such as eliminating multiple entry points for the same data, implementing governing processes for maintenance of high quality data, and leveraging technology towards more rigorous control over reference data. The outcome from this unified depository of interrelated information is more effective and efficient customer service; streamlined use of time and resources by field support technicians and network support staff; faster invoicing and billing resolutions and others.



Next Generation State Network

Next Generation State Network Deployed to DIS Customers

Rollout of the state's new high-speed network with a multiprotocol label switching (MPLS) core, known as Next Generation State Network (NGN), began at sites across the state in 2012. When completed, 2,100 sites will be upgraded for the new network.

To maximize the cost efficiency of the statewide rollout, DIS coordinated closely with vendor partners to install new routers and disconnect old equipment at local customer sites where feasible, minimizing travel costs for DIS technicians and preventing an overlap of service costs to switch out the old routers to new.

The target date for the implementation of the new network for K-12 schools is June 2013. The target for completion of the whole state network is December 2013. The new network is expected to significantly reduce the complexity of the core network with increased reliability, cost effectiveness, and improved network performance capacity.

Map App Keeps Customers Informed about Network Migration

Pinpointing migration of the state's new high-speed network with a multiprotocol label switching (MPLS) core, known as Next Generation State Network (NGN), has been made possible by an interactive map application created through a collaborative effort between the Arkansas Department of Information Systems (DIS) and the Arkansas Geographic Information Office (AGIO).

Available as a free download in the App Store as ArcGIS, the map enables users to view and track the deployment of NGN. The legend on the NGN map is coded to enable the user to view the progress of network conversion by site, deployment, status, and availability of the public network service by DIS. A future feature in the discussion and planning stage is for the app to display an organization's bandwidth consumption which will aid in network planning.

Grant for State Video Network Expands Services, Reduces Costs

The state video network managed by DIS is helping Arkansas leverage the power of video technology to tear down geographical barriers to educational, employment, economic development, and entrepreneurial possibilities for Arkansans. Video technology also carries the capacity to deliver state government services with greater cost effectiveness, mobility, accessibility, and efficiency, through an environmentally responsible approach.

The video network initially offered enhanced scheduling, improved security and off-net call connectivity with digital conference recording capabilities. A $500,000 Video Network Grant awarded to DIS by the U.S. Department of Agriculture was used to locally manage and expand services on the existing state video network. DIS worked to purchase network infrastructure devices, intended to reduce the total cost to schools and agencies that use the network for distance learning and other public services. The equipment also allowed for the expansion of video conferencing services across the state. Future features for the network include desktop video conferencing support and mobile video conferencing. There are approximately 550 sites on the state video network.

State Video Network

Approximately 32,000 conference hours per month

550 room systems

Strategic Goal Five: Operational Excellence *continued*

Cloud Computing: The Arkansas Approach

The state of Arkansas is seeking ways to take advantage of the benefits cloud computing offers. While the existing model of hosted services has and will continue to provide critical state services, cloud computing offers another option to procure information technology (IT) hosting services. Due to the nature of the cloud, not all state processes and data are suitable for the cloud. The decision to use cloud computing is primarily a business decision as the cloud can offer benefits ranging from financial to enhanced productivity. Costs and agreements with cloud providers should also be evaluated to ensure compliance with Arkansas law. Sensitive Arkansas data is controlled by many external security mandates and cloud providers must be compliant with these mandates.

Government users can access government services via the Internet, which can increase government availability. Organizations should fully evaluate the benefits and risks cloud computing presents before moving data and applications to the cloud. This document discusses potential cloud considerations in order to help organizations make good decisions.

DIS has embraced a cloud-based approach when applicable such as building the private cloud for Arkansas's public sector. IT planners from the public sector formed a cloud working group and drafted a strategy for agencies to utilize as best practices when utilizing cloud-based services.

The vision for cloud services is to leverage the benefits of the cloud while ensuring the proper levels of security to protect state assets. DIS envisions a future where private clouds, such as the one at DIS, will be interoperable with public clouds to provide the maximum level of flexibility and cost savings to consumers and stakeholders.

A Future Look

State Data Center

A data center is a facility used to house computer systems and associated components, such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, humidity control, fire suppression) and security devices. Data center modernization involves customizing data center strategies according to business plans, regulatory requirements, skills availability and changing technology issues.

A risk assessment by engineers for two initiatives, an upgraded generator project and a cooling system replacement, evaluated the risk associated with not updating the components. The assessment showed that sufficient mitigation existed for the electrical systems in "all but a catastrophic failure." The risk assessment further stated that, without mitigation, failure to execute on the cooling system replacement could lead to "a catastrophic failure and subsequent data center downtime".

A $2 million loan from Arkansas Building Authority's Sustainable Revolving Loan Program will enable DIS to conduct long needed upgrades to the cooling system for the state data center. The chilled water system remediation and upgrade project encompasses three sub-projects which include:

1. Remediation of the existing chilled water system serving the state data center.

2. Replacement of existing computer room air conditioning (CRAC) units serving the data center and other auxiliary areas

3. Replacement of the data center floor (if funds allow)

The data center and its electrical and cooling infrastructure were designed in the 1970s and are insufficient in supporting present day advances in information technology and energy consumption standards. When completed, the upgraded cooling system will result in a two-fold benefit for the state of Arkansas; energy savings and ensuring critical state services are available.