State of Arkansas Strategic Plan for Information Technology

2013-2015

Arkansas State Technology Council

November 7, 2012

It is my pleasure to present the State of Arkansas Strategic Plan for Information Technology 2013 – 2015. This plan, presented by the Arkansas State Technology Council (STC), showcases the strategic initiatives of state agencies and illustrates the overall direction of information technology (IT) throughout state government. This plan also reflects the technology business drivers and trends affecting Arkansas.

The consumerization of mobile devices such as smart phones and tablet computers is shifting how people access information. At 35.2 percent, Arkansas leads the nation in the percentage of citizens living in wireless only households (2011 National Health Statistics Report, U.S. Centers for Disease Control and Prevention). Through local research, we have also learned that usage from mobile devices on the state portal, Arkansas.gov, is growing rapidly. Mobile payments through the portal are nearing 20 percent and have doubled each year since 2010. The YOUniversal Financial Aid web site that caters to a younger demographic has over 25 percent mobile usage while Arkansas Game and Fish Commission's Game Check web site has over 40 percent mobile adoption during hunting season. A separate study of 36 state web sites in 16 states revealed that Arkansas had six of the top 10 sites in mobile adoption.

These trends prompted Arkansas.gov to adopt a "mobile first" methodology that emphasizes the development of mobile applications to accelerate citizen accessibility to public information and services. Transparency.Arkansas.gov is a prime example of this new approach as it was the first state transparency web site in the country to be optimized for smart phones. The deployment of statewide broadband is also a principal priority for the state.

With guidance and support from the executive and legislative branches, we will continually strive to meet the five major strategic goals of this plan by focusing on solutions that drive innovation, maximize efficiencies, and are responsive to a consumer driven government. Leveraging and maximizing the knowledge, experience, and skills of the state's IT professionals is another key factor essential to build upon the foundation that has already been established and set a course for the future of IT in Arkansas.

On behalf of the STC, I look forward to working collaboratively across agency boundaries to advance the goals and strategies presented in this plan.

Sincerely,

Claire Bailey

Arkansas Chief Technology Officer
Director, Arkansas Dept. of Information Systems

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Executive Summary

Arkansas has been fortunate in its ability to remain on sound fiscal footing amidst challenging economic times. While many states were faced with growing budget deficits and were cutting critical services, Arkansas lawmakers balanced the state's budget without sacrificing its ability to provide an effective level of public services to the citizens of Arkansas.

With guidance and support from the executive and the legislative branches, the 2013-2015 Strategic Plan for Information Technology reflects an effort by technology leaders within state agencies from all facets of state government to work together to shape a vision for Arkansas that delivers effective, flexible, and trusted services through a safe and secure technology infrastructure.

Each biennium, state agencies, boards and commissions participate in statewide technology planning that culminates with the creation of a strategic plan for information technology detailing both initiatives and projects for future technology investments. The projects and plans are analyzed to identify opportunities that support the governor's strategic vision and five major strategic goals:

1. Improve education for Arkansans
2. Improve economic development
3. Increase efficiency in state government
4. Improve citizen access to state services
5. Protect the environment

Gov. Mike Beebe

The state's investment in technology must reinforce the vision that guides us toward reaching these goals and must leverage technology to maximize efficiency in state government.

The categories of information collected during the planning process are:

- Current inventory of hardware and software
- Projected purchases of hardware and software
- Projected IT projects
- Major applications utilized
- Aspects of compliance, security, and facilities for hosted data
- Share services

This strategic plan outlines these five major goals and reinforcing actions to assist the state in achieving a 21st century government capable of providing excellent customer service.

Our Mission

The Arkansas State Technology Council provides statewide leadership with representation from both sectors, private and public, to promote cost savings, elimination of needless redundancies, and better support of state government services and operational efficiencies. The council will also strive to identify and support cost-effective innovation.

We Strive To Be

SERVICE ORIENTED	Partnering with public service entities, technology stakeholders, and citizens
LEADERS	Working with public service providers to move Arkansas forward
FACILITATORS	Communicating effectively with public service entities, technology stakeholders, and citizens
UNIFIERS	Continually looking across public services to unify service delivery and ease of access for citizens
INNOVATORS	Seeking and facilitating innovation in service delivery and ease of access for citizens

Principles of State Technology

To advance sustainable technology solutions and strategies, our principles include the following:

- Connecting citizens to government through expanded engagement and access to services using mobile technologies
- Innovation and improved service delivery methods through strategic partnerships and transformative technologies
- Integration and identification of Shared Services opportunities to reduce complexity, redundancy, and costs
- Bolstering the trust of citizens by strengthening the state's technology infrastructure and privacy practices
- Delivering cost-effective and efficient results through appropriate technology solutions

Technology Governance

Legislation

Formed in 2007 through Act 751 of the 86th Arkansas General Assembly, the Arkansas State Technology Council (ASTC) consists of members from the Arkansas Department of Information Systems, Department of Finance and Administration, and four members appointed by the governor. Two of the appointees represent the public sector and two appointees represent the private sector. The goal of this all-inclusive representation from across the state is to provide insight to technology services and efforts, as well as to focus on improving the delivery of public services.

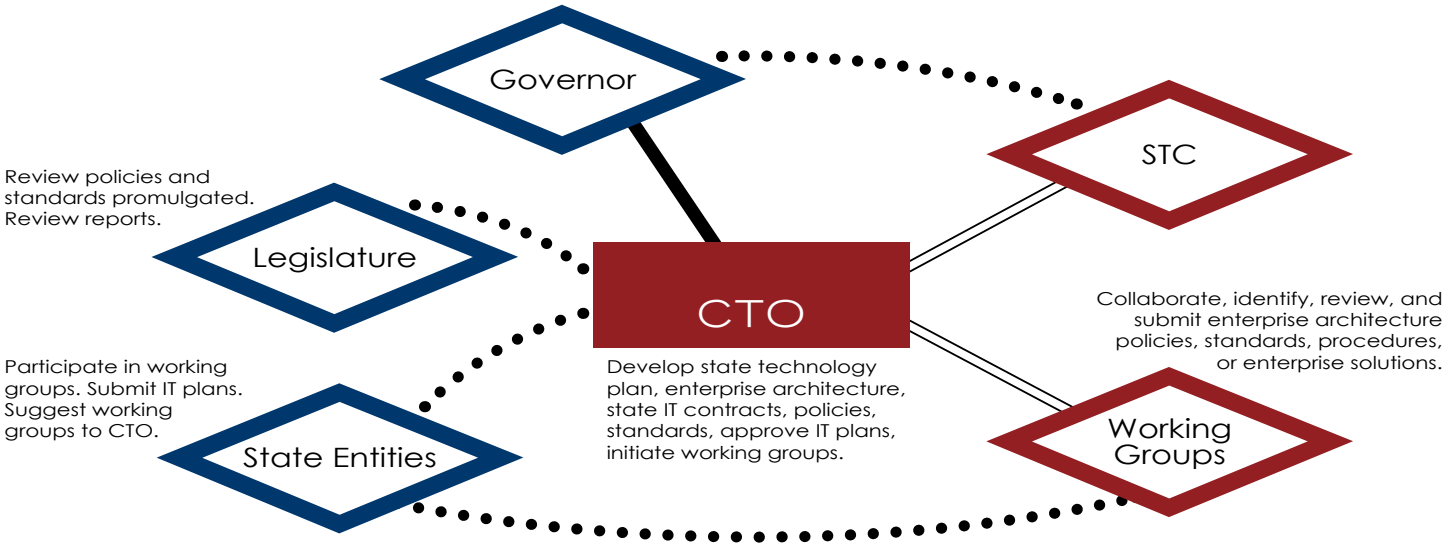
Through Act 648 of 2009, the state realigned the technology governance structure. This centralized technology standards development and oversight helps to ensure maximum operational and cost effective use of technology. The information technology planning function is guided by the chief technology officer. Tasked with the implementation and oversight of enterprise architecture, a key goal of the State Technology Council is to review and approve the state's enterprise architecture and identify technology strategies.

The following is technology related legislation from the 88th Arkansas General Assembly in 2011:

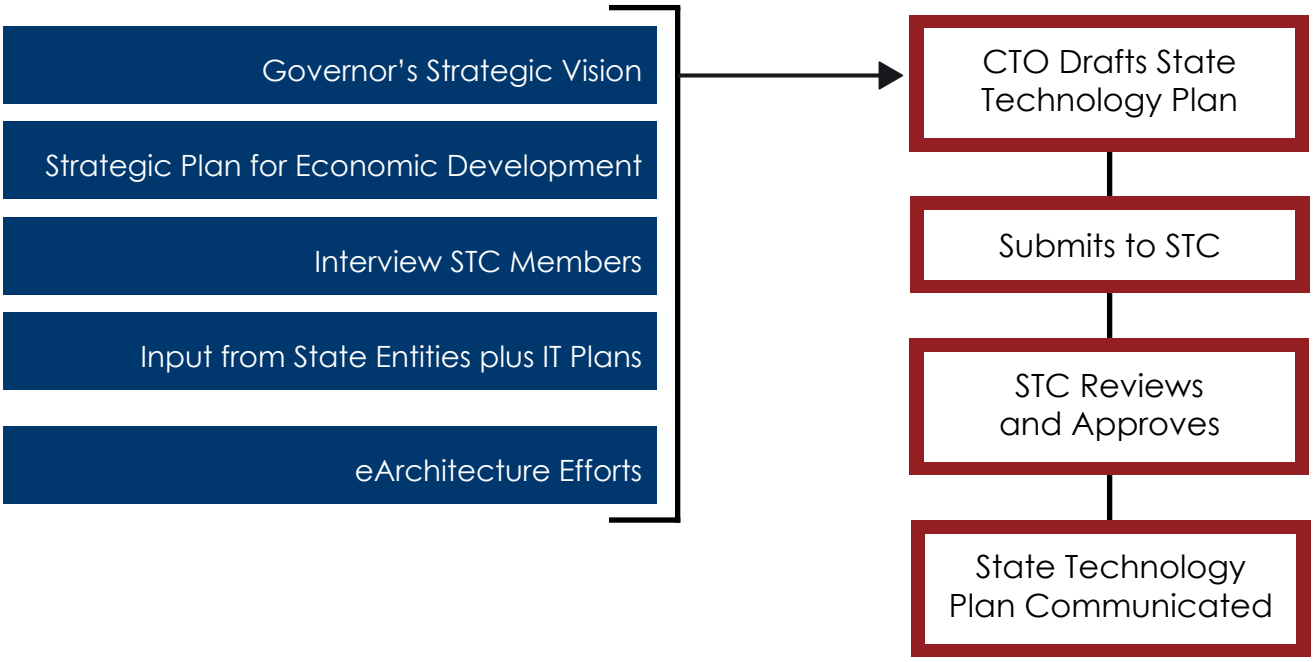
Act Number	Official Title
Act: 1163	Authorizes the Department of Higher Education to operate a website to present the expenditure data of state-supported institutions of higher education.
Act: 173	Authorizes the Public Service Commission to impose a surcharge of up to $0.02 per access line and $.02 per telephone number per month on commercial mobile radio service providers to support the Telecommunications Equipment Fund.
Act: 178	Allows the Department of Health to use radio encryption to protect confidential patient data.
Act: 742	Requires state agencies, constitutional offices, the General Assembly and its committees and state-supported institutions of higher education to file mandated reports in electronic form and to post the reports on the agencies' or offices' Internet websites.
Act: 290	Requires the Public Service Commission to preserve the Arkansas High Cost Fund and promote the expansion of broadband services in rural and high-cost areas of Arkansas. The General Assembly recognizes that the widespread and timely deployment of the broadband infrastructure is vital to the economic, education, health and social interests of Arkansas and its citizens.

Act Number	Official Title
Act: 891	Establishes the Office of Health Information Technology and authorizes the office to form a nonprofit corporation to be known as the State Health Alliance for Records Exchange.
Act: 1224	Makes the offense of unauthorized access or release of information in the Arkansas Crime Information Center database a Class A misdemeanor, rather than a Class D felony, unless the violation is intended to further a crime, affect a legal proceeding, or other.
Act: 1050	Specifically prohibits government entities from providing basic local exchange, voice, data, broadband, video, wireless, or telecommunication service. This does not prohibit a governmental entity from purchasing services directly or indirectly from a private provider through a contract administered and services managed by the Department of Information Systems.
Act: 750	Requires the Department of Information Systems to develop and clarify accessibility standards for the visually impaired necessary to fulfill the assurances of 25-26-203 following the standards for software applications and operating systems provided by 36 C.F.R 1194.21 and the standards for web-based intranet and Internet information and applications provided by 36 C.F.R. 1194.22 as it existed on January 1, 2011.
Act: 904	Allows for two- or three-year registration of personal-use motor vehicles. Renewal of registration would require proof of insurance coverage and payment of property tax for the preceding two or three years.
Act: 905	Establishes the crime of cyber bullying, the electronic transmission of severe, hostile, and repeated communications to another person with the purpose to coerce, intimidate, harass or cause emotional distress; a Class B misdemeanor.
Act: 303	The Arkansas Financial Transparency Act, requiring the Department of Finance and Administration to create and maintain a database of state agency financial information excluding institutions of higher education and presenting expenditure data for each state agency available to the public on a website.

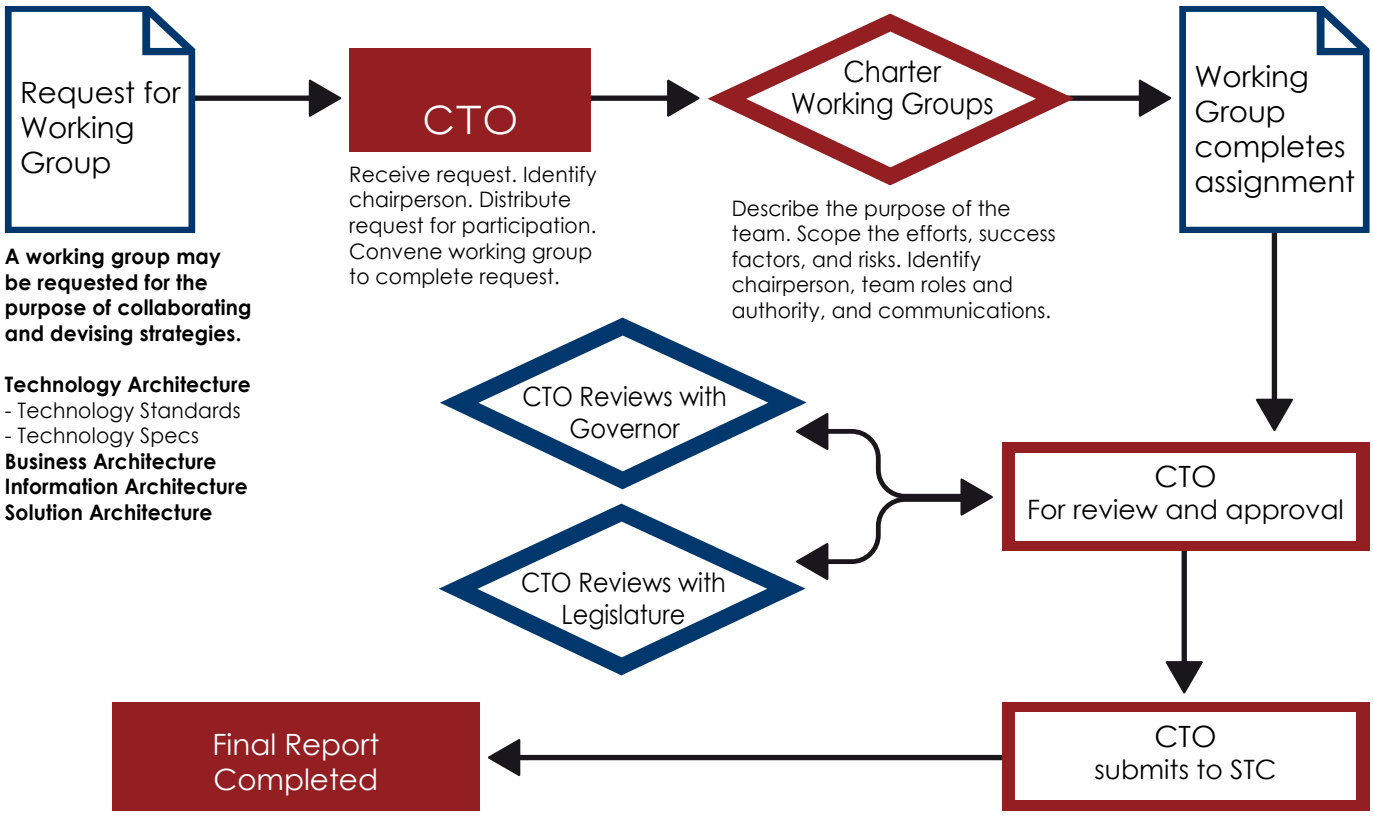
eArchitecture Governance Structure



State Technology Council Member Role
in Approving State Information Technology Plan



eArchitecture Governance Workflow



Goals and Strategies

As part of the information technology planning process to coordinate efforts across state agencies, boards, and commissions, the State Technology Council aligns with the governor's strategic vision to produce a business strategy-based methodology to the service needs of the public.

Goal 1 Improve Education for Arkansans

Providing excellence in education is imperative to the success of Arkansas. Technology can be utilized to create new opportunities in teaching and learning by integrating networking and digital and audio visual technologies. Offering improved access to education will open the doors for increased participation and higher quality education overall. Projects such as enhancing the YOUniversal portal for non-traditional students to apply for aid, electronically consolidating educational transcripts and implementation of a new scholarship application system are among the many ways in which technology can assist in improving education for all Arkansans.

Initiatives and projects such as Arkansas Research and Education Optical Network (ARE-ON), Arkansas Public School Computer Network (APSCN), Partnership For Assessment of Readiness For College and Careers (PARCC) and the distance learning/video conferencing network support the governor's goal to improve education in Arkansas.

Goal 2 Improve Economic Development

Governor Beebe's Strategic Plan for Economic Development postulates that all economic development endeavors are interconnected by five interdependent components: workforce development, business development, infrastructure, competitive business climate and collaborative partnerships. Each component is augmented by a vast array of resources-people, capital, entities and policies-that effectuate economic development.

Governor Beebe's five goals for economic development are:

- Increase the incomes of Arkansans at a growth pace greater than the national average.
- Expand entrepreneurship, focusing on knowledge-based enterprises.
- Compete more efficiently in the global marketplace for new businesses and jobs, and create a business retention strategy to reduce closures.
- Economic development will meet the special needs and take advantage of the extraordinary assets of various areas of the state. It will not be a one size fits all.

- Increase the number of workers with post-secondary training so they are prepared when they enter the workforce and equipped for new jobs in the future.

Arkansas, while not immune from the effects of rising unemployment and economic uncertainty, has fared remarkably well among its state peers. The Center on Budget and Policy Priorities identified Arkansas as one of only eight states that did not face state budgetary shortfalls for fiscal year 2012. In fact, the 88th General Assembly passed several tax cuts, including one-half cent sales tax cuts on groceries and energy used by manufacturers during the manufacturing process, that were signed into law by Governor Mike Beebe.

A focus on building an even stronger infrastructure fosters the opportunity for technology to play a fundamental role in putting Arkansans back to work and increasing business and tourism to the state. Technology improvements, such as implementing a governance model to track spending and progress of awarded grants, will assist in fund management. Upgrading the state data center will control costs while remaining competitive resulting in higher reliability and availability. Even small technology enhancements, such as highlighting Arkansas businesses on a state shopping mall, will provide increased visibility to local businesses and, in turn, increase revenue.

Goal 3 Increase Efficiency in State Government

Efficiency is an accomplishment or ability to accomplish a job with minimal expenditure of time and effort. Technology can play an integral role in enhancing efficiency through automation of processes and centralizing information for easier access. Expanding citizen access to the state's financial data, online resources for driver's license and motor vehicle information, career opportunities with the state, and locating unclaimed property are among the initiatives increasing government efficiency and accelerating Arkansas as a digital state.

Focusing on the strategic goal of improving operational efficiency, Arkansas is increasingly becoming more agile in transforming IT concepts into fully functioning applications that make public information and services more accessible to citizens and maximize state resources.

Initiatives and projects such as the Office of Personnel Management's (OPM) applicant tracking system, and the Arkansas Continuity of Operation Program's Super Coop application links to the governor's goal of improving efficiency in state government.

Goal 4 Improve Citizen Access

Technology is at the forefront of information and service delivery and is vital to improving citizens' access to government. It is critical that information is delivered in a timely manner. In our world of constant change, delivering out-of-date information is unacceptable. Timely access to government services is increasingly important.

The state transparency web site, Transparency.Arkansas.gov, provides the public with a single resource for where the state, their city, town and school district get their money and how they spend it. Information Network of Arkansas (INA) improves online citizen and business access to public services and maintains and hosts the state's official website, Arkansas.gov.

Several innovative initiatives and projects align with the governor's strategic goal of improving citizen access to health services as Arkansas, especially in rural areas, will have greater access to a more agile system for delivering emergency care and greater and better health care resources. These include the Arkansas Trauma System which links hospitals, doctors and ambulances and enables personnel to track availability of doctors and services at participating hospitals allowing transport of the patient more quickly to the appropriate facility for emergency care and the Arkansas Telehealth Oversight and Management (ATOM) project which integrates isolated community anchor networks to expand health care services and broadband.

Goal 5 Protect the Environment

Arkansas takes pride in its nickname "The Natural State" and Arkansans are extremely proud of their state and want to protect the environment for all future generations. Technology is an essential factor in these efforts. As green efforts continue to grow, technology can play a meaningful role, for example, in the establishment of monitoring programs to measure success. In addition, strategies can be deployed for the replacement or recycling, or environmentally friendly disposal of electronic equipment throughout the state. Above all, government employees utilizing environmentally friendly efforts will undoubtedly set a solid example for all Arkansans to adopt.

Public buildings offer prime opportunities for reducing energy use while saving taxpayer dollars. More energy efficient government buildings allow public entities to spend more on public services and less on utility bills. Executive Order 09-07 by Governor Beebe created a comprehensive approach for reducing energy usage within state facilities.

State Enterprise Initiatives

P - primary category O - secondary category State Initiatives	Goal 1 Improve Education	Goal 2 Economic Development	Goal 3 Government Efficiency	Goal 4 Citizen Access	Goal 5 Protect Environment
Arkansas Courts Automation Project (ACAP)			P	O	O
Arkansas Geographic Information Office (AGIO)		P	O	O	
Arkansas.gov Portal			O	P	O
Arkansas.gov Mobile			O	P	O
Arkansas Integrated Revenue System (AIRS)			P	O	O
Arkansas Open Checkbook/Financial Transparency			O	P	
Arkansas Research & Education Optical Network (ARE-ON)	P	O		O	
Arkansas Telehealth Oversight and Management (ATOM)	O	O	O	P	
Arkansas Wireless Information Network (AWIN)			P	O	
Connect Arkansas		P	O	O	O
Correction-Automated Entrance Monitoring			P	O	
Education-Arkansas Public School Computer Network (APSCN)	P		O		
Education-LDS Data System Enhancement	P		O	O	O
Education-Partnership for Assessment of Readiness for College and Careers (PARCC)	P		O		
Green Technology Initiative		O			P
Green.Arkansas.gov		O			P
Health-WIC/EBT			O	P	O
Health Information Exchange (HIE)		O	O	P	O
Health-Electronic Health Records (EHR)		O	O	P	O
Health-Immunizations Registry			P	O	
Health-Vital Records			O	P	
Hwy. & Transportation-Workforce Mgmt. Solution			P	O	
Human Services-Aging & Adult Svcs.-Universal Assessment			O	P	
Human Services-Admin. Services-Enterprise Services Framework for Eligibility and Enrollment with Interfaces to the Federal Exchange			P	O	
Human Services-Behavioral Health Services-Medical Records			P	O	O
Human Services-Behavioral Health Services-Pharmacy Dispensing System			P	O	

P - primary category O - secondary category State Initiatives	Goal 1 Improve Education	Goal 2 Economic Development	Goal 3 Government Efficiency	Goal 4 Citizen Access	Goal 5 Protect Environment
Human Services-Division of Services for the Blind-Blind Services Information System (BSIS)			O	P	
Human Services-Division of County Operations-Enterprise Framework for Eligibility and Enrollment-Supplemental Nutrition Assistance Program (SNAP)		O	O	P	O
Humans Services-Division of County Operations-Document Imaging Project			P	O	O
Human Services-Division of County Operations-Enterprise Data Warehouse			P	O	O
Human Services-Division of Medical Services (DMS)-Arkansas Medicaid Enterprise		O	O	P	O
Human Services-Medical Services-Document Imaging Project			P	O	
Human Services-Medical Services-ICD-10 Remediation Project			P	O	
Human Services-Youth Services-Distance Learning/ Video Conferencing	P		O		
Information Systems-Centrex Procurement			P	O	
Information Systems-Internet Protocol version 6 (IPv6)			P	O	
Next Generation State Network			P	O	O
Public Employees Retirement System-Replacement of Current Pension Administration System			O	P	O
Rural Health Care Program			O	P	
State Data Center Modernization			P	O	O
Schools and Libraries Program (E-Rate)	P			O	
State Fusion Center			P	O	
State Police-E-Ticket/E-Citation			P	O	O
State Police-In Car Video Cameras			P	O	
State Police-Mobile Officer Virtual Environment (MOVE)			P	O	
State Police-Cyber Crimes			P	O	
The American Recovery and Reinvestment Act (ARRA)	O	P	O	O	O
The Governor's Workforce Cabinet: Integrating Education, Workforce and Economic Development	P	O	O	O	O
Workforce Services-FARS Replacement			P	O	
Workforce Services-Unemployment Insurance Claims Conversion			O	P	
Workforce Services-Temporary Assistance for Needy Families (TANF)			O	P	O

Arkansas Research & Education Optical Network (ARE-ON)

ARE-ON's mission is to promote, develop, and apply advanced application and communication technologies to support and enhance education, research, public service and economic development. ARE-ON is the tool that helps to define, empower and leverage the four ARE-ON core agendas-Research, Academic, Telemedicine/ Telehealth and Emergency Preparedness. The overall intent is to be a research and education content provider for electronic knowledge that traverses ARE-ON to commercial infrastructure that serves homes and businesses. ARE-ON does not provide services to homes or businesses. That mission is the sole responsibility of the commercial providers.

Arkansas Department of Education- Limited Data Set (LDS) Data System Enhancement

Expansion and improvement initiatives focusing on deploying improved, more visually-oriented, easy to use tools to end users, augmenting data sources, and building of institutional support is the emphasis of this comprehensive, three-year project. Over the next three years, Arkansas will implement a modern visualization interface to the data warehouse using dashboards, visual analysis, and scorecard techniques supplemented by open source initiatives for some targeted solutions. This system will integrate key data collections related to higher education, teacher licensure, teacher professional development, special education, and child nutrition. The expected completion date of this project is June 30, 2014. The total estimated project costs are $18,998,388. The funding source is 100 percent federal funds.

Arkansas Department of Education- Partnership for Assessment of Readiness for College and Careers (PARCC)

PARCC is a multi-state alliance to develop common assessments serving nearly 25 million students. Its work is funded through a $185 million dollar grant from the U.S. Department of Education. PARCC will help develop the high school component of the new assessment and use it as an indicator of student readiness. PARCC is managed by Achieve, a nonprofit group that works with states to improve student achievement by aligning K-12 education policies with the expectations of employers and the postsecondary community. PARCC's ultimate goal is to make sure all students that graduate from high school are college and career ready. In 2010, Arkansas adopted the Common Core State Standards and became a governing state in PARCC. K-12 and higher education leaders in Arkansas helped to shape PARCC's proposal for a common, next-generation, online assessment system.

Arkansas Department of Education- Arkansas Public School Computer Network (APSCN)

APSCN provides a statewide, shared service supporting fiscal and administrative services for public education in Arkansas and is utilized by 270 of the 271 Arkansas school districts. This application continues through fiscal year 2015 with estimated costs of $28.3 million in FY 2013, $21.3 million in FY 2014 and $22.8 million in FY 2015.

E-Rate

E-Rate is the Schools and Libraries Program of the Universal Service Fund administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC). E-Rate provides discounts that assist schools and libraries to obtain affordable telecommunications and Internet access. It is one of four support programs funded through a universal service fee charged to providers of interstate and/or international telecommunications services. The number of applicants

E-Rate (continued)

increased from 335 for funding year 2010/11 to 343 in funding year 2012/13. Funding requests also increased from 1,385 in 2010/11 to 1,510 in 2012/13. The total requested funding increased from $37,393,697.50 with Universal Service Administrative Company (USAC)approving funds of $34,666,692.47 in 2010/11 to $51,142,605.43 in 2012/13 with USAC approving funds of $46,035,047.07. This information includes public and private K-12 districts/schools, public libraries, and the state's applications.

Human Services-Youth Services-Distance Learning/Video Conferencing

Distance learning and video conferencing will provide extended education courses to youth who will reintegrate into their communities after periods of time in confinement. Today's technology allows for effective and cost efficient ways of providing service delivery that will prepare youth for secondary education and/or the workforce. The system will also allow for video conferencing between facilities to allow delivery of services from a broad area of providers. The agency will be partnering with the Department of Education's Distance Learning Center. The expected completion date of this project is June 30, 2015. The total estimated project costs are $397,340. The funding source is 100 percent state general revenue.

The Governor's Workforce Cabinet: Integrating Education, Workforce, and Economic Development

Several state agencies are dedicated to improving Arkansas's educational system and advancing economic development. The Department of Education, Department of Higher Education, and Association of Two-Year Colleges work to ensure that every Arkansan can attain a world-class education in Arkansas. The departments of Career Education and Workforce Services focus on training citizens in technical and vocational skills and then assist Arkansans by linking job seekers with employers. Finally, the Economic Development Commission and Science and Technology Authority work to recruit new businesses and investments to the state, thereby creating new jobs, helping our existing companies grow, and incorporating leading-edge-technology resources to their benefit.

The primary goal of this cabinet is a prepared workforce and a strong state economy. Under the guidance of the Workforce Cabinet, Arkansas Works, the state's College and Career Planning System, was expanded and helps equip students and adults with the skills and education required for opportunities that await them. This online resource provides tools and new information that will guide career and college plans.

Goal 2 Improve Economic Development

Connect Arkansas

Connect Arkansas is a private, non-profit organization dedicated to the implementation of a community-based initiative to promote fast Internet service for rural areas and increase Internet use in education with a goal of bringing low-cost, high-speed Internet to Arkansas communities. Connect Arkansas has developed a broad-based plan to address state broadband challenges. In collaboration with the Arkansas Broadband Advisory Council, Arkansas Health Information Exchange Council, Arkansas State Library System, Arkansas Literacy Council, and pilot e-Communities, Connect Arkansas addresses broadband access and adoption methods, and tracks broadband investment behaviors. It continues to develop and modify broadband strategies and share information on best practices.

Arkansas Geographic Information Office (AGIO)

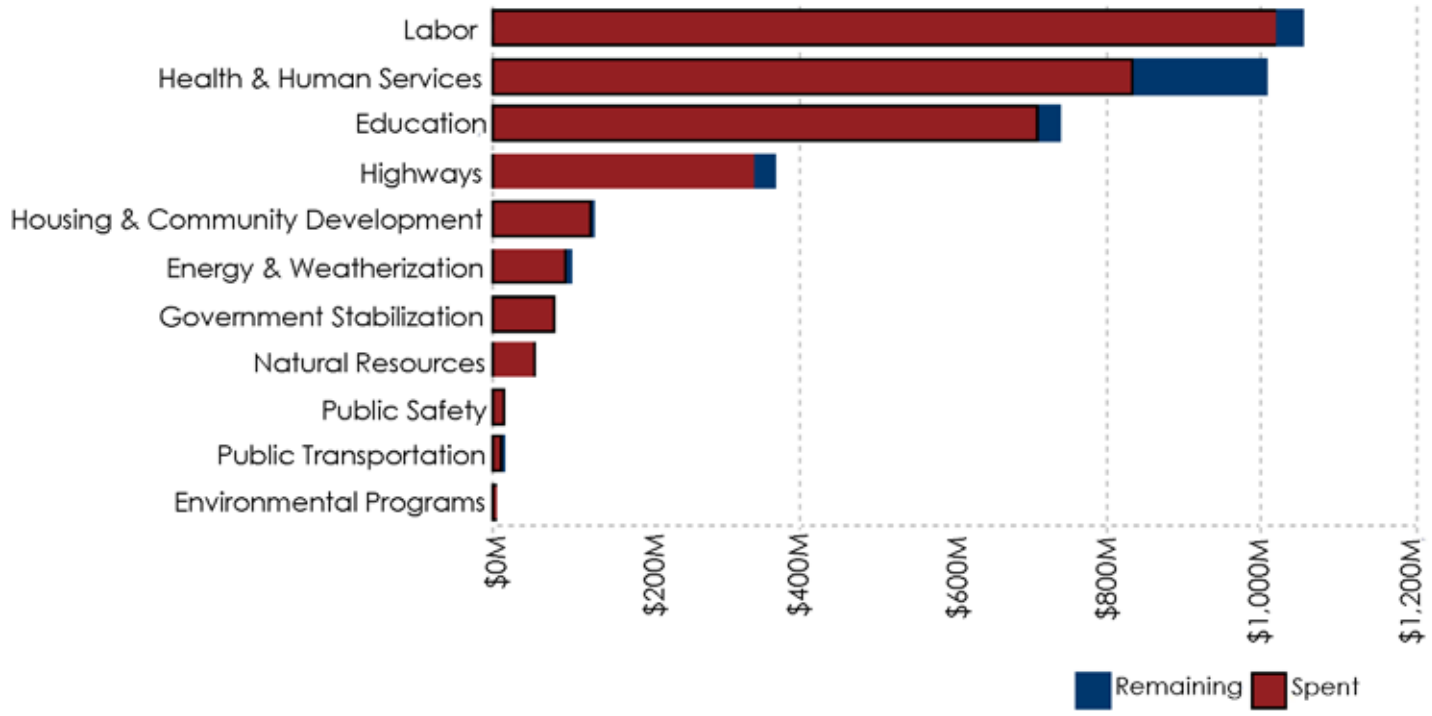
AGIO serves as the functional arm of the Arkansas Geographic Information Systems Board (ACT 244 of 2009). Major activities include providing administrative and technical support to the board. The board supports economic development and an improved quality of life for Arkansas citizens by providing basic spatial data infrastructure, coordinating geographic information activities, and creating short and long-term strategies that will result in improved decision making, effective asset management, and reduced costs. The premier service is GeoStor, which is the state's geographic information systems platform.

AGIO will be launching a grant program that will assist county assessors with funding to get the tax parcel map databases completed. In 2012, the agency began taking steps to implement mobile capabilities that would allow GeoStor to publish map services that can be consumed by smart mobile telephones and tablet devices.

The American Recovery and Reinvestment Act (ARRA)

Recovery.Arkansas.gov is a web site devoted solely to the ARRA in the Natural State. This site covers a wide variety of projects and programs being funded by the Recovery Act in Arkansas, from broad overviews of major programs such as the Recovery Act's support for education, to vendor-specific information on where and how Recovery Act dollars are being spent. Information on the site is updated as new programs begin, funds are invested in Arkansas's economy and the mission of the Recovery Act is carried out.

Total Awarded: $3,593,126,263 Total spent: $3,445,241,690



*Recovery.Arkansas.gov as of October 4, 2012

Arkansas Court Automation Project (ACAP)

Arkansas's judicial system is capitalizing on digital innovations to streamline operations and to share and manage complex, multifaceted information.

The Court Information Systems Division provides technological support to the state's courts, maintains accurate information regarding court caseloads, and manages the Arkansas Court Automation Programs (ACAP). These programs include applications to automate jury and case management, provide online public access to court information, ability to pay court fines and costs online, and allow the electronic filing of case documents.

Contexte is the web-based system in circuit and district courts to manage all aspects of court cases, including judge assignment, parties, violations, docketing, hearings, and accounting. Contexte serves as the conduit for sharing complete, accurate, and timely court information with justice agencies and enables additional services to be provided to the courts and the public. Contexte has processed over $62,000 in eFiling payments since implementation in March 2012. The goal is to have 80 percent of the state caseload on Contexte and to shut down the legacy system by 2016.

CourtConnect is an online public interface to court information and filings. eTraffic provides online traffic ticket payment to courts using the case management system and has processed over $285,000 in payments since implementation in May 2010.

eFiling allows attorneys and the public to electronically submit court filings and the ability for Arkansas courts to process the filings electronically.

eFlex enables the capture of data and documents and transmission of the information, with status results and notifications, between the filer and court. The result of this integrated system is improved efficiency and response time on submissions and greatly reduced manual entry.

eJuror allows members of the public who have been summoned to jury service to interact online with the court from the summons, to jury service and payment of jury duty.

Arkansas Integrated Revenue System (AIRS)

AIRS is a multi-phase Integrated Tax Solution (ITS) to replace legacy revenue systems administered at the Arkansas Department of Finance and Administration (DFA)-Revenue. Phase one completed the modernization of the tax system. Phase two will replace legacy systems in driver's services and motor vehicles to integrate with AIRS. The initial implementation streamlined operations and interaction across tax systems, functions, and processes utilizing 42 physical servers. Working with the vendor and leveraging virtualization, a refresh of the same environment was completed on 13 physical servers (five dedicated database servers and eight virtual server physical hosts running a total of 53 virtual server instances). The expected completion date of this project is September 16, 2013. The estimated total project cost is $12.45 million. The funding source is 100 percent state general revenue.

Human Services-Behavioral Health Services-Medical Records

Procurement of an Electronic Health Records (EHR) system for the Arkansas State Hospital will replace a manual system with a system that will enable clinical staff to electronically monitor services and medications provided to clients. This project has an expected completion date of June 30, 2014. The total estimated cost of this project is $1.5 million. The funding source is 100 percent state general improvement.

Human Services-Medical Services-Arkansas Health Care Payment Improvement Initiative

Arkansas Health Care Payment Improvement Initiative is designed to reward physicians, hospitals and other providers who give patients high-quality care at an appropriate cost. The initiative is an agencywide effort and will also span across multiple agencies. As quality of care is defined, division resources supporting Medicaid services will be utilized in the development of episode models. The process of redefining payment structures based on episode models requires contribution from affected divisions, the Medicaid fiscal agent, DHS data analytic contractors, and Medicaid providers.

Public and private insurers in Arkansas and across the country are facing a financial crisis as health care costs rise to an unsustainable level. DHS, Medicaid, Arkansas Blue Cross and Blue Shield, and QualChioce of Arkansas are jointly working on an initiative to address this issue in a way that works for providers and patients. The collaborating partners developed and refined the episode model over nine months with significant contributions and comment from hundreds of physicians, health care professionals, patients and other stakeholders. This initiative also allows Medicaid to avoid making drastic cuts to the rates it uses to reimburse doctors or to programs on which tens of thousands of Arkansans depend. The project has an expected completion date of December 31, 2016. The total estimated project cost is $40 million and the funding source is 90 percent federal and 10 percent state general revenue.

Human Services-Division of Medical Services (DMS)-ICD-10 Remediation Project

ICD-10 remediation is designed to meet a federal mandate to transition to new coding systems for diagnosis and inpatient procedures, while minimizing operational disruptions and ensuring continued claim processing and payment. Prior authorizations, program integrity reviews, third party liability recoveries and numerous other non-claims processes are significantly impacted and therefore, fall under the scope of remediation and testing. Providers and other entities external to DMS, including other divisions of DHS, are included in the outreach and communications efforts. The expected completion date of this project is June 30, 2015. The estimated total project cost is $7.6 million. The funding source is 85 percent federal and 15 percent state general revenue.

Human Services-Division of County Operations-Document Imaging Project

Document imaging will achieve the ability for the Division of County Operations to maintain paperless case records. Necessary applications and documents to establish eligibility will be scanned in local county offices as part of the on-boarding processes. Clients may submit documentation needed for eligibility determination to any county office. The information will be scanned and filed electronically in the client case record. Caseworkers and others having access to Arkansas's Networked System for Welfare, Eligibility, and Reporting (ANSWER) system will have the ability to pull up case record documents with the click of a button. All cases will be back scanned at the time they are accessed for any reason.

The document imaging and content management project will enhance interviews, re-determinations, quality assurance, transferring of cases, and lessen the likelihood for lost documents. This will equate to better error rates, greater productivity, more streamlined processes, and lessen overdue rates for re-determinations. Arkansans will receive the help they need faster and caseworkers can retrieve the documents they need as they are scanned. This approach increases the division's ability to reallocate caseloads to be in line with staffing levels. The expected completion date of this project is June 30, 2015. The total estimated project cost is $12,894,456. The funding source is 53 percent federal and 47 percent state general revenue.

Human Services-Division of County Operations-Enterprise Data Warehouse

This project is part of an agency enterprise data warehouse and will allow the Division of County Operations to develop timely and accurate reports for management, operations and case managers. The expected completion date of this project is June 30, 2015. The total estimated project cost is $649,221. The funding source is 53 percent federal and 47 percent state general revenue.

Human Services-Behavioral Health Services-Pharmacy Dispensing System

A new pharmacy dispensing system will help control, monitor, and bill medicines used in the hospital. The solution will have 10 dispensing machines at strategic locations in the hospital that store and dispense medications based on orders received for each patient. There will also be 10 mobile carts that allow nurses needing medications to sign in and see the orders available for each patient and allow dispensing of medicines. The expected completion date is January 31, 2013. The total estimated cost is $598,899. The funding source is 100 percent state general revenue.

Human Services-Division of Medical Services (DMS) - Document Imaging Project

Document imaging will enable DMS to become paperless and will provide staff with more immediate access to needed information. More immediate access to information will also benefit citizens of the state. Upon completion of the project, all files and client information will be available online. The expected completion date is December 31, 2014. The estimated total cost is $2.4 million. The funding source is 50 percent federal and 50 percent state general revenue.

Human Services-Division of Administrative Services-Enterprise Services Framework for Eligibility with Interfaces to Federal Exchange

This procurement will be the first step in consolidating all of the applications in DHS (other than financial) into one framework and to continue to provide eligibility determination and enrollment for Medicaid, CHIP, and Supplemental Nutrition Assistance Program (SNAP) while interfacing with the Federally Facilitated Exchange (FFE). The expected completion date is June 30, 2014. The total estimated cost is $36,524,482. The funding source is 84.84 percent federal and 15.16 percent state general revenue.

An additional DHS-Administrative Services project related to the Enterprise Services Framework for Eligibility and Enrollment is to add SNAP. This will be a complete replacement of existing applications-ANSWER, AccessArkansas, and FACTS using the enterprise framework. This project has an expected completion date of June 30, 2014. The total estimated cost is $4,796,978. The funding source is 50 percent federal and 50 percent state general revenue.

Department of Health-Immunizations Registry

The current immunization registry will be replaced with a new system that will provide the ability to use Health Level Seven (HL7) messaging with all of the providers in the state and provide for increased reporting capabilities. HL7 is a standard for exchanging information between medical applications and defines a format for the transmission of health related information. The current immunization registry system is hosted by an external vendor whereas the new system will be hosted by the Health Department. The expected completion date is January 31, 2015. The estimated total cost is $950,000. The funding source is 90 percent federal and 10 percent state general revenue.

Arkansas Telehealth Oversight and Management (ATOM)

Arkansas Telehealth Oversight and Management (ATOM) is a project to integrate isolated community anchor networks to expand health care services and broadband. The network is comprised of institutions such as health care centers and clinics, higher education, public safety, research services and ARE-ON. With ATOM and ARE-ON serving as the foundation networks, the project will add 474 network sites to create a comprehensive statewide network of 441 community anchor institutions to assure 24x7x365 connectivity to all health care sites and will create the South Central Telemedicine Training Center at the University of Arkansas for Medical Sciences.

Department of Information Systems-
Internet Protocol Version 6 (IPv6)

All available IPv4 addresses have been assigned prompting the need to move to IPv6 addresses which will be required for all IP network communications in the future. Arkansas is at risk of constituents not being able to access state resource and citizen facing applications if IPv6 addresses are not put into place. The expected completion date is March 28, 2014. The total estimated cost is $540,000. The funding source is 100 percent Other. Costs will be recovered through DIS service rates.

Department of Information Systems-
Centrex Procurement

The expiration of the existing Centrex contract in June 2013 necessitates a re-procurement of Centrex telephone service available to all state agencies and education. The expected completion date is July 31, 2014. The total estimated cost is $475,000. The funding source is 100 percent Other. Costs will be recovered through DIS service rates.

Next Generation State Network

State network capabilities will be enhanced by the Next Generation State Network as a combination of Multiprotocol Label Switching (MPLS) and Ethernet network elements will be implemented to address future requirements of the state network by providing network transport functions that allow high-performance packet forwarding with minimal overhead. Department of Information Systems (DIS) provides key public safety and public health systems access and support to critical state functions by providing operations 24-hours a day, every day of the year.

The state is currently experiencing a dramatic growth in the demands on the data, voice, video and wireless radio networks. With the need to provide 24-hour a day information access for the Arkansas Crime Information Center, Department of Health, Department of Emergency Management, State Police, Department of Correction, Department of Human Services, and numerous other agencies that support the safety and health of the citizens of Arkansas, this project will enable DIS to begin implementation and maintenance of the next generation enterprise network for Arkansas citizens. The expected completion date of this multi-year project is December 31, 2013 with an estimated total cost of $45.3 million. This figure includes $8.8 million to replace approximately 2,100 routers and other network equipment/software and $35.5 million for bandwidth and services from commercial providers. The funding source is 100 percent Other with cost recovered through DIS services rates.

Arkansas Wireless Information Network (AWIN)

AWIN is a multi-phased program to leverage new and existing wireless resources to create a statewide interoperable digital wireless communications network for emergency responders and public service entities all across Arkansas. The over 21,400 AWIN users consist of law enforcement, fire, and other emergency services at the city, county, state, and federal levels. The P-25 digital 700/800 MHz radio system averages 40,500 calls per day.

This major application continues through 2015 with total application systems support charges of $550,000 each fiscal year.

Data Center Modernization

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, 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. This can include, but is not limited to, activities such as building internal clouds, implementing virtualization and automation, managing storage and the information life cycle, enhancing data center networking and computing devices, increasing high availability, providing energy efficiency, and improving business continuity and disaster planning. It is important to evaluate the technology and vendors to capitalize on opportunities to improve operational and energy efficiency.

Modernization of the state data center will reduce downtime of essential services and benefit all state agencies, boards, commissions, and Arkansas citizens utilizing state technology services. The data center can also provide a secondary/failover site for state agencies and schools that house mission critical information technology assets.

Innovative funding opportunities are being researched for renovating or building a new state data center, as well as determining possible rate impacts to state customers. Modern data centers are more cost effective, more secure, energy efficient, and provide increased availability and reliability for essential state services.

Arkansas State Police-State Fusion Center

State law enforcement fusion centers are central locations where local, state, and federal officials work in close proximity to receive, integrate, and analyze information and intelligence. Fusion centers are instrumental in improving quality of intelligence by closing information gaps that previously hampered counterterrorism efforts at the state and local level. As a result, fusion centers have become a major focus of homeland security programs in several states.

The Arkansas Fusion Center will provide enhanced enforcement capabilities with accurate and timely law enforcement information. Law enforcement, potential crime victims, and the general public benefit from the center. The fusion center will also provide and coordinate terrorist information for law enforcement purposes. The expected completion date of this project is June 30, 2015. The estimated total cost of this project is $789,788. The funding source percentage is 95 percent federal and five percent state general revenue.

Arkansas State Police-
E-Ticket/E-Citation

This project will provide the means to electronically capture ticket and citation information from highway patrol units in real time. Eventually this project will include the court system. Initially, this will be deployed within the state police and, in turn, Arkansas Crime Information Center (ACIC). DFA will be involved from a criminal history and driver services standpoint. The impact of this project will be directly toward Highway Patrol and IT in the use of 500+ officers uploading e-ticket/citation information to a centralized server. Highway Patrol will need to have some process changes and IT will need to manage the system 24-hours a day, seven days a week, to ensure the data is accurate and that data integrity is kept. Eventually, this information will be sent to Administrative Office of Courts (AOC). This expected completion date of this project is June 30, 2015. The estimated total project cost is $4,903,571. The funding source is 100 percent federal funds.

Arkansas State Police-
In Car Video Cameras

New in car digital cameras will be purchased and will, over time, replace existing cameras. Each trooper unit currently has an in car camera. However, due to difficulties and programmatic issues with them, it will benefit the agency to purchase more modern in car digital cameras and will subsequently benefit law enforcement and the public. The video of a stop will show all facets of an officer to the public and vice versa. The expected completion date of this project is June 30, 2015. The estimated total cost of the project is $1,137,000. The funding source is 75 percent federal and 25 percent state general revenue.

Arkansas State Police-
Cyber Crimes

Effective law enforcement requires the tools necessary to prevent Internet Crimes Against Children (Formerly ICAC10). This project specifically targets the prevention of pedophile activity throughout the community and has a direct benefit to the citizens of Arkansas. This project is a cooperative effort among statewide law enforcement. The expected completion date of this project is June 30, 2015. The total estimated project cost is $403,093. The funding source is 100 percent federal.

Arkansas State Police-
Mobile Officer Virtual Environment (MOVE)

MOVE will provide the means to electronically capture ticket and citation information from highway patrol units near real times. MOVE also brings in the ability for an interface with other online systems such as eCrash (real time crash data) and ADVANCE (automatic crash notification vehicle telematics). MOVE will enable officers to know, in real time, if an individual has previously been stopped and issued a citation which is especially helpful for situations involving repeat offenders. MOVE will allow the more than 500 Highway Patrol officers to upload their eticket/citation/eCrash information to a centralized server. Eventually, this information will be sent to the Administrative Office of the Courts (AOC). The expected completion date of this project is June 30, 2015. The estimated total project cost is $4,903,571. The funding source percentage is 100 percent federal.

Department of Correction (DOC)-
Automated Entrance Monitoring

An automated system using smart card and biometric readers for monitoring, approving and tracking the movement of personnel in, out and within all DOC unit locations will, when fully implemented, provide for an easy check-in process for inmate visitors with an automated check on visitor identification, his/her approval to visit the inmate and tracking of arrival and departure times. The system could also be used to track inmate movement within the unit allowing a more accurate and timely status of an inmate's current location. This technology will aid in general security control, help prevent escapes, control access to unauthorized areas, help prevent contraband and help improve other security issues. The expected completion date is June 30, 2014. The estimated total cost is $1,983,060. The funding source is 100 percent state general revenue.

Department of Highway and Transportation-
Workforce Management Solution

The procurement of a Workforce Management System will automate the employee centric process and provide tools to optimize the workforce. The new system will fully automate the current manual processes of paper-based time reporting, keying of time and labor data into multiple systems, and leave processing-Federal Medical Leave Act (FMLA), Worker's Compensation, and benefits time off. The new system will include time and labor, scheduling, absence management, labor activity tracking, data collection, self-service and workforce analytics. This project is expected to be complete by June 30, 2013. The total estimated cost for this project is $3,365,393. The funding source is 100 percent Other (Motor fuel tax).

Department of Workforce Services-
Federal Accounting System Replacement (FARS)

Microsoft Dynamics Great Plains software will be implemented as a replacement for the current unsupported federal accounting system as required by the U.S. Department of Labor. This will automate many manual processes. Tasks that are currently compartmentalized will become common practice in order to easily share duties across areas. The expected completion date is June 30, 2015. The estimated total project cost is $6,526,920. The funding source is 100 percent federal.

Arkansas.gov Portal

Information Network of Arkansas (INA) improves online citizen and business access to public services and maintains and hosts the state's official web site, Arkansas.gov. The site underwent a total redesign and was re-launched in 2011 with content fully optimized for mobility including mobile payment services. Arkansas was the first state in the nation to provide secure payment processing services including, inmate trust account deposits, probation and parole supervision and restitution payments. Arkansas.gov was the first state web site in the country to provide "Text4Help," customer service via mobile text messaging. The site also included an eGov Services Geolocation Widget, pushing government services to

Year	Organization	Award
2011	Center for Digital Government Best of the Web, Arkansas.gov state portal	1st Place
2011	Center for Digital Government, Achievement Award Government-to-Citizen: Arkansas.gov Mobile and online services suite	1st Place
2011	Center for Digital Education Achievement Award, Department of Education Digital Application/Project Arkansas "YOUniversal" mobile applications	1st Place
2011	NASCIO, Digital Government; Arkansas.gov Mobile and online services suite	Finalist
2010	Center for Digital Government Best of Web Award	2nd Place
2010	NASCIO-Cross-Boundary Collaboration and Partnerships – Arkansas Universal Financial Aid Management	Winner
2010	YOUniversal	Top Government Website
2009	Center for Digital Government Achievement Award	Winner - Recovery.Arkansas.gov, iPhone application Honorable Mention - Arkansas Department of Finance and Administration Commercial Driver Alcohol and Drug Reporting System
2008	Center for Digital Government Best of Web	Finalist
2007	Center for Digital Government Achievement Award	Winner: Arkansas Secretary of State Franchise Tax Suite
2002	Arkansas Business Best of the Web	Government Website - 1st Place

Arkansas.gov Portal (continued)

local and community web sites and using geolocation technology to find government services by the user's location. The Best of Web judges were particularly enamored by this feature calling it a "great example of collaboration and really groundbreaking" in terms of filtering local information and services.

Arkansas has leveraged technology in this capacity to make it easier for access to and use of government services. The ever increasing use by citizens of the more than 500 online services offered by Arkansas.gov is evidence of its success. To garner national recognition for innovation further reinforces Arkansas's place as a leader in the development of an online, mobile, user-friendly government.

This site continues to win numerous national awards and receives high rankings compared to other states. Awards and rankings for the site are listed on page 23.

Arkansas.gov Mobile

The explosive growth and demand for mobility, led to the adoption of a "mobile first' development methodology and standardize the use of responsive design, which ensures that all online services will be usable on mobile devices. INA developed Arkansas.gov mobile allowing users to search for most state information and services available through Arkansas.gov from any mobile operating platform. Arkansas was the nation's first state to provide a secure online credit card payment option. In a study of 36 state websites, Arkansas had six of the top 10 sites in mobile adoption. Arkansas uses mobile technology to provide better access to information and services for citizens and businesses, with dozens of applications and web sites now providing streamlined access for mobile users. The state has also established development standards that have promoted a consistent approach to mobile service delivery.

Mobile applications developed by INA for Arkansas agencies include:

YOUNIVERSAL FINANCIAL AID MANAGEMENT SYSTEM-Arkansas Department of Higher Education took 21 unique scholarships and application processes and consolidated them into one unified process. The system automates the awarding processes and integrates with the federal student financial aid system and the state's transcript system, as well as state colleges and universities for enrollment verification and funds disbursements. To date, the system has enrolled over 69,000 users who were awarded over 77,000 scholarships totaling in excess of $338 million.

In 2011, YOUniversal Mobile, a mobile interface was published. The app allows students to search and apply for financial aid, as well as track the status of their application for financial aid award throughout their academic career- all from a smartphone. Recently, 26 percent of students who accessed the site used the mobile app.

Arkansas.gov Mobile (continued)

GAME CHECK SUITE-Arkansas hunters now have the ability to electronically check harvested game (deer and turkey). With over 65,000 downloads, this app by the Arkansas Game and Fish Commission (AGFC)has become one of the most popular in the nation. Over 25 percent of game harvested in 2011 within the state was registered with AGFC using a mobile device. The system provides online, mobile (including iPhone and Android), and call center game checking. The Game Check mobile app ranked number one in a study of 36 web sites in 16 states.

CENTRALIZED ELECTRONIC NETWORK FOR SEX OFFENDER REGISTRIES SYSTEM (CENSOR)- ACIC was tasked with improving the paper- based registration and management process of more than 11,720 sex offenders in Arkansas and providing more timely information to citizens. The system provides a more efficient method for local law enforcement officers and the Department of Correction to electronically register sex offenders and manage sex offender information. CENSOR allows offenders to register electronically, alleviating the state's responsibility to continue sending out certified letters. As a result of this change, the state has realized a cost savings of approximately $55,000 per year and a $17,500 reduction in the manual processing of Verification of Residency forms. A mobile app is also available which allows users both to search for and register to receive alerts of sex offenders in their area.

ARKANSAS.GOV PAYMENT PORTAL- In 2010, Arkansas became the first state government in the nation to publish a mobile payment solution for 32 online payment services. Mobile payments are approaching 20 percent and have doubled each year since 2010. Inmate Trust Account deposits and online parole payments have already exceeded 40 percent mobile usage.

Arkansas.gov now provides payment services for a total of 40 counties on the Hot Check Restitution Payment service and has expanded county tax payment services to include 42 counties. These county services cover over 90 percent of the state's 2.8 million residents. In addition, the state is expanding at the city level to provide services for utility payments, emergency medical services payments, business licensing, and court and traffic fine payments. Grants though INA help fund local initiatives like web sites and other online services.

The enterprise solution for Arkansas.gov and Arkansas.gov mobile provides one payment engine, one payment card industry (PCI) audit, and all government services follow a common look and feel.

VOTER VIEW AND BUSINESS ENTITY SEARCH-Arkansas secretary of state's Voter View application allows Arkansans to search for their voter registration by entering their name and date of birth. Results inform users if they are registered, where to register, and where to vote. The Business Entity Search app allows users to easily search for registered businesses with display of business names and standing statuses.

ARKANSAS WORKS MOBILE JOB AND EDUCATION SEARCH-This application allows users to find employment opportunities, training and education resources as well as career planning services.

Arkansas.gov Mobile (continued)

The funding search application at Recovery.Arkansas.gov enables users to search for projects funded by the American Recovery and Reinvestment Act (ARRA).

READY AR-The Arkansas Department of Emergency Management (ADEM) app features up-to-date information on Arkansas roadway and weather conditions, current threats and emergency planning. The roadway icon links to resources from the State Highway and Transportation Department, including maps and road closure information. Weather information includes current conditions, forecasts and alerts provided by the National Weather Service. Geospatial features align alerts to a user's specific location. Ready AR's planning section features emergency preparedness information. Discussions are ongoing to possibly add more law enforcement information and public health resources.

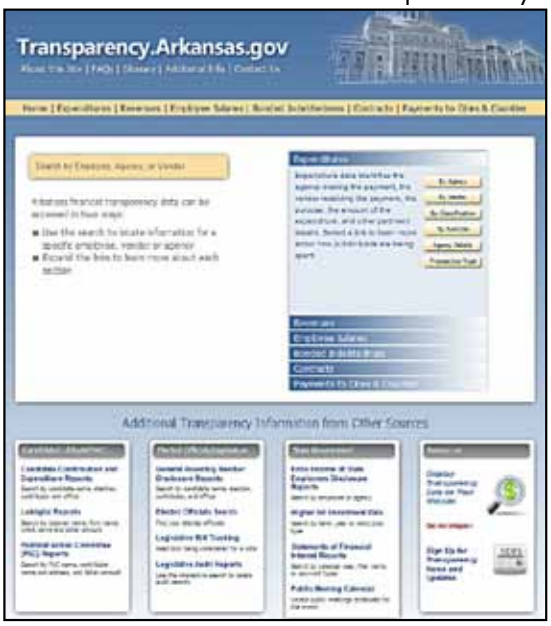
Other agency iPhone applications are also available including the Arkansas Educational Television Network (AETN) app for program schedules, blogs, notices, and videos. The Arkansas Hot Deals app from the Arkansas Department of Parks and Tourism contains coupons for lodging, food, shopping, events and more. The Arkansas Scholarship Lottery app provides winning lottery numbers and locations of ticket outlets.

Text4help Mobile Support

Arkansas.gov was the first state web site in the country to provide "Text4Help," customer service via mobile text messaging to chat with customer service representatives Monday-Friday, 8a.m.-5p.m. Text4help provides customer support through text messaging and is available on the mobile www.arkansas.gov/m portal, including all mobile services.

Arkansas Open Checkbook/Financial Transparency

Act 303 of the Arkansas 88th General Assembly, the Arkansas Financial Transparency Act, required DFA to publish a database of state government expenditures. Transparency.Arkansas.gov is a resource for anyone wanting to know where the state, cities, towns, and school districts get its money, and how that money is spent. The site features several different types of financial data updated on a continuous basis. Expenditure data allows users to view a breakdown of how money is distributed. Revenue data provides a mechanism for site visitors to examine the amount of money coming into the state by source, function, agency, and type. Employee salaries are also available online.



The contracts section offers details on contracts or individual purchase orders for more than $25,000 and construction contracts with a value of greater

Arkansas Open Checkbook/Financial Transparency (continued)

than $20,000. Payments to cities and counties are displayed separately from other expenditure data. The data shows money distributed to local government entities to help deliver constituent services. Bond debt held by the state will also be made available on the web site.

The Financial Disclosure Report allows users access to financial reports filed on paper and online with the Arkansas Secretary of State's Office, including Statements of Financial Interest, Extra Income Disclosures, Disclosure by the Members of the General Assembly, Contribution and Expenditure Reports, Political Action Committee Reports and Lobbyist Reports.

The web site also provides access to the public meeting calendar, institutions of higher education enrollment information, legislative bill tracking and audit reports, state budget information, Arkansas state vehicle inventory search, and other public data.

Transparency.Arkansas.gov is the first state transparency site optimized for mobile devices.

Department of Health-
WIC/EBT

Electronic benefits transfer (EBT) for the Women, Infants and Children (WIC) program will eliminate the use of paper vouchers. Instead, a card with benefits will be issued to citizens and families that receive WIC providing the flexibility to use a portion of the benefits on the card versus all at one time with paper vouchers. The U.S. Department of Agriculture (USDA) wants EBT implemented in all states by 2020. The expected completion date is January 1, 2015. The estimated total cost is $2 million. The funding source is 100 percent federal.

Department of Health-
Electronic Health Records (EHR)

An EHR and management system will allow non-duplication of documentation, billing directly from the EHR, and will dramatically increase patient safety and decrease medication and procedure errors. The expected completion date is January 1, 2015. The estimated total cost is $12,362,999. The funding source is 100 percent state general revenue.

Office of Health Information Technology-
Health Information Exchange

Arkansas Office of Health Information Technology (OHIT) was established to provide leadership for the development of HIE and to direct the implementation of the strategic plan to guide statewide development and utilization of health information technology (HIT). The plan was approved by the Office of the National Coordinator (ONC) in February 2011 and details how Arkansas will establish the State Health Alliance for Records Exchange (SHARE) to support the exchange of secure electronic health information. OHIT is dedicated to improving health care in Arkansas. Through HIT and HIE, consumers and providers will have access to health information in a secured environment. SHARE will improve health care and reduce potential errors. The long term plan is to provide access to core infrastructure developed through SHARE with other state agencies such as Medicaid and the Department of Health.

OHIT received a $7.9 million federal grant. SHARE will be based on proven industry standard technologies utilized across the state coupled with emerging technology to

Health Information Exchange (HIE) (continued)

ensure SHARE will be scalable, interoperable, and encompass standards to meet Nationwide Health Information Network (NHIN) requirements.

In August 2012, Arkansas was recognized by the ONC for leveraging strategic partnerships and innovative thinking to make the most of its federal funding and achieve the following results; first state HIE grantee with a phased strategic and operational plan to move from phase one to phase two and with over 1,100 direct sign-ups in six months and another 5,000 providers waiting to be fully on boarded. The expected completion date of this project is February 7, 2015. The estimated total project cost is $3,300,000. The funding source is 85.72 percent federal and 14.28 percent state general revenue.

Human Services – Division of Medical Services
Arkansas Medicaid Enterprise (AME)

AME replaces the Medicaid Management Information System (MMIS) to improve medical services for all Medicaid eligible citizens. Department of Human Services (DHS) has presented four MMIS, Request for Proposals (RFP) to the Centers for Medicare/Medicaid Services (CMS). These documents represent solicitations for the MMIS Core, Pharmacy, Decision Support System and Project Management Office. Upon CMS' review and approval, these RFPs will be officially posted on the Office of State Procurement web site. The expected completion date is September 30, 2015 with a total project cost of $127 million. The funding source is 85 percent federal and 15 percent state general revenue.

Human Services – Division of Services for the Blind-
Blind Services Information System (BSIS)

A modern web-based application for the BSIS through an RFP process will expedite services to consumers and conserves staff time and other state resources. Compliance with federal mandates for time service delivery by accessing information and securing documentation will also be improved as will information collection for federal reporting requirements. The expected completion date of this project is June 30, 2015. The estimated total project cost is $1 million. The funding source is 100 percent federal.

Human Services – Aging and Adult Services
Universal Assessment

A standard plan of care for clients and to manage providers and their certification will be created through universal assessment. Citizens will receive better, more standard, plans of care and get attention from case managers and nurses. It is an enhanced web program that users will be able to access in the client's home to complete assessments. The system will integrate with ANSWER and MMIS. The expected completion date is June 30, 2013. The estimated total cost is $2,553,320. The funding source is 50 percent federal and 50 percent state general revenue.

Human Services – Division of Administrative Services-
Supplemental Nutrition Assistance Program (SNAP)-Eligibility and Enrollment

SNAP functionality will be added to the Medicaid/CHIP Enterprise Services Framework for Eligibility and Enrollment as the first step in consolidating all of the applications of DHS into one framework COTS product. The expected completion date of this project is June 30, 2014. The estimated total project cost is $4,786,978. The funding source is 50 percent federal and 50 percent state general revenue.

Human Services – Division of County Operations
Enterprise Framework for Eligibility and Enrollment for SNAP

Better tools and technologies will be implemented to support the determination of eligibility and manage the delivery of SNAP benefits by developing automated processes that enhance accurate and timely services to Arkansas citizens. This project will provide for additional functionality not included in the initial implementation. (See the department framework project under the Human Services-Division of Administrative Services for a full description.) The expected completion date is June 30, 2014. The total estimated cost is $10,272,500. The funding source is 50 percent federal and 50 percent state general revenue.

Rural Health Care Program

The Rural Health Care Program is one of the four support programs funded by the Universal Service Fund providing reduced rates for telecommunications and Internet services to eligible rural health care providers. Discounts for basic telephone services, Internet access, advanced telecom services, and wireless services are provided to help ensure that rural providers do not pay more than their urban counterparts for the same or similar services. From the initial funding year of 2006/07 to 2011/12, the number of applicants increased from 61 to 77. Funding has increased from $196,429.70 to an estimated $1,412,217.02. In 2009/10, the Arkansas Telehealth Network received approved funding of $4,217,677.91.

Department of Health -
Vital Records

Legacy applications will be replaced with a web-enable application for vital records to include birth, death, marriage, and divorce certificates. The application will reduce the time required for citizens to obtain vital records and make it available at local health units. The expected completion date is June 30, 2014. The estimated total cost is $2,440,045. The funding source is 80 percent federal and 20 percent state general revenue.

Arkansas Public Employees Retirement System (APERS)
Replacement of Current Pension Administration System

This project will evaluate the current pension administration system, identify functionality requirements to provide current and anticipated future services, and determine how to meet those requirements. APERS will benefit from better workflow, increased overall production, and reduction of human errors. The expected completion date is June 30, 2017. The total estimated cost is $20.57 million. The funding source is 100 percent APERS trust fund.

Workforce Services-
Unemployment Insurance Claims Conversion

Current web-based environments necessitate a conversion involving the modification of mainframe applications to accept data from the web-based programs being developed and implemented. The project will also update current legacy mainframe programs and operations that have not been redesigned or updated as a whole since the late 1980s. The expected completion date is June 30, 2014. The estimated total cost is $2 million. The funding source is 100 percent federal.

Workforce Services –
Temporary Assistance for Needy Families (TANF)

Case management and reporting systems will be automated in determining program eligibility as required by Act 514 of the Arkansas General Assembly. The result will be more accurate, timely, and consistent eligibility outcomes with increased productivity through automating business rules. The new system will also enhance communication between agency personnel and clients resulting in improved performance. The expected completion date is December 30, 2015. The estimated total cost is $9,990,040. The funding source is 100 percent federal.

Green Technology Initiative

Arkansas takes pride in its nickname "The Natural State". Public buildings offer prime opportunities for reducing energy use while saving taxpayer dollars. More energy efficient government buildings allow public entities to spend more on public services and less on utility bills. Executive Order 09-07 created a comprehensive approach for reducing energy usage within state facilities.

Pursuant to the order and tied to the governor's strategic goal of protecting the environment, the executive branch and other state agencies developed individual agency strategic energy plans (StEPs) with the goal of reducing annual maintenance and operating budgets devoted to energy consumption and promoting agency operations and practices to reduce the environmental impact of their overall operation.

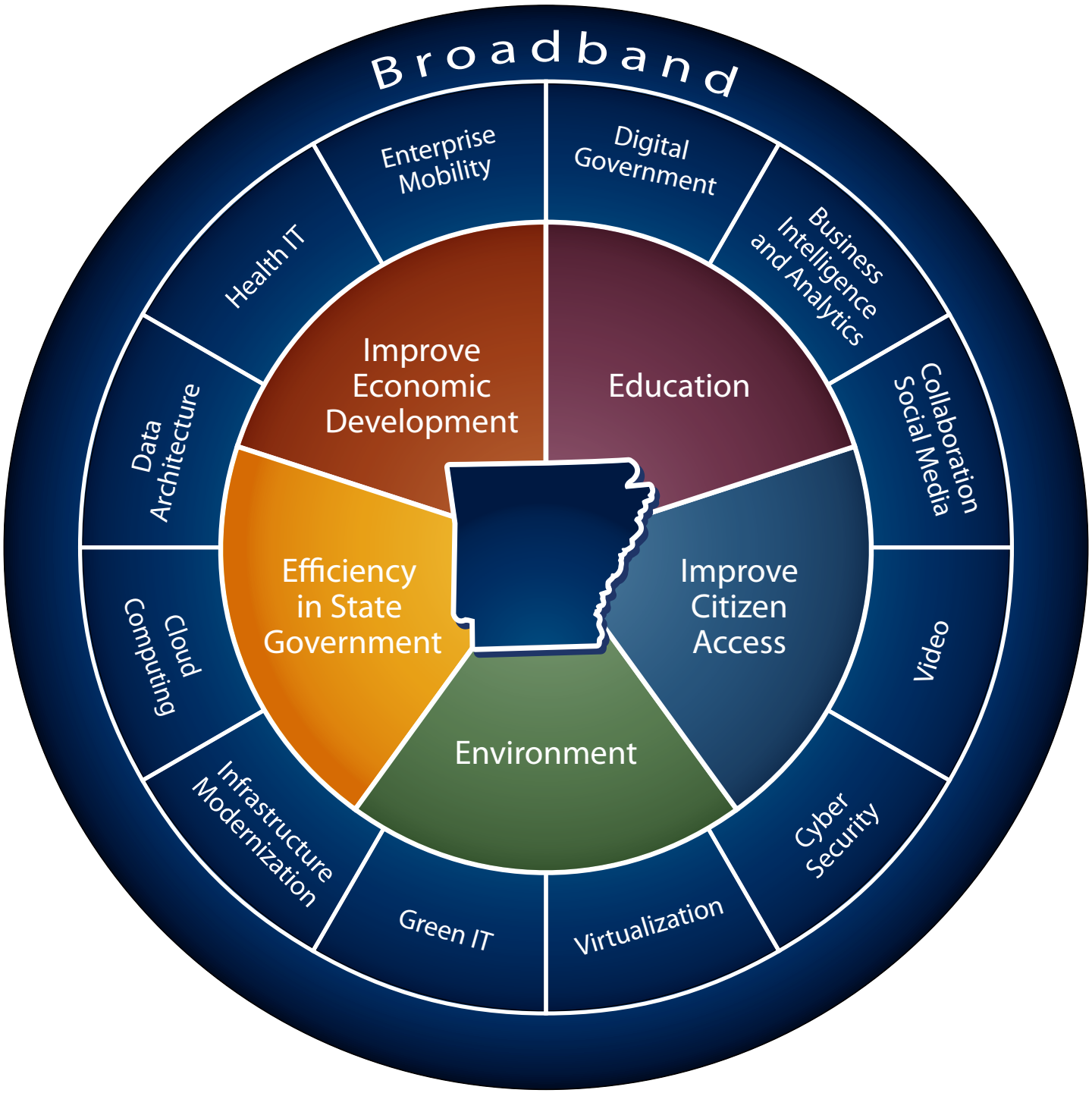
Agencies track and record energy consumption and monthly costs into a free online Energy Star® Portfolio Manager (ESPM) system hosted by the Environmental Protection Agency (EPA). Annual reports are submitted to the Arkansas Energy Office (AEO). A Green.Arkansas.gov web portal serves as a central repository for annual reporting along with information and links to helpful resources.

To demonstrate that Arkansas state government could design and operate its buildings to "lead by example", the Arkansas General Assembly created the Sustainable Buildings Program and the State Buildings Energy Management Program. These programs set forth guidelines to reduce the total energy consumption per gross square foot for all existing state buildings by 20 percent by 2014 and 30 percent by 2017 based on energy consumption for the 2008 fiscal year. As a result of the energy conservation programs implemented, some entities reported a decreased energy consumption ranging from 16 percent - 31.1 percent.

To assist with funding energy saving initiatives (renovations) that exceed $250,000 in state owned buildings, legislation provided a funding mechanism via the Sustainable Building Design Program and its revolving loan fund. The fund was created with $12 million from ARRA.

Environmentally preferable purchasing guidelines have been established by many agencies toward purchasing products that minimize environmental impacts, toxics, pollution, and hazards to workers and community safety to the greatest extent practical, and to 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. Recycling of paper, cardboard, plastic and aluminum is carried out in the majority of state government buildings.

Technology Trends Impacting Arkansas



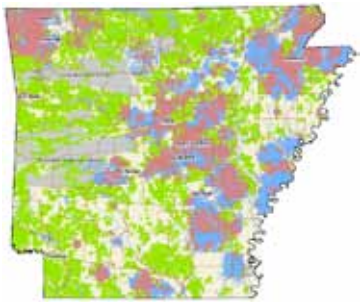
Connecting America-National Broadband Plan

Broadband refers to telecommunications providing a high-speed, 'always-on' service connection to allow large amounts of information to be conveyed quickly, such as digital content, applications, graphic files, and video. 4G/5G pervasive bandwidths and further wireless generations will deliver high-speed, low-latency communications, multiple "pervasive" networks, and interoperable systems. Near Field Communication (NFC) is a short-range wireless technology that will be built into a majority of mobile devices by 2015. Unlike Bluetooth, NFC-enabled devices can interact with passive Radio-frequency identification technology that could be embedded in posters, credit/debit cards, packaging, and products. NFC can also be used peer-to-peer with another NFC device.

The National Broadband Plan, Connecting America, is an important enabler for 21st century care, economic opportunity, job creation, education, health care, energy and environment, government performance, civic engagement, and public safety. It is changing how we educate children, deliver health care, manage energy, ensure public safety, engage government, and access, organize, and disseminate knowledge. Reliable, pervasive access to the network will further drive higher-level trends, such as instant information access, mobile transactions, collaboration, social networking, and the "Internet of things". Initial NFC applications include identification and mobile payment, but usage is expected to expand to include a broad set of entertainment, commerce, and peer-to-peer applications, for example.

Connect Arkansas, ARE-ON, ATOM, and the Next Generation State Network are examples of broadband-based initiatives in the state designed to improve personal lives and economic capabilities, while supporting key strategic efforts for economic development, education, and health care. The existing telemedicine program at University of Arkansas for Medical Sciences (UAMS)has reportedly already produced a significant drop in infant mortality because women in rural areas are receiving better maternal care. In August 2010, UAMS applied for and was awarded a $102 million grant, supplemented by $26.2 million in matching funds, to vastly expand broadband access across the state. People living in the most remote corners of Arkansas will have access to care and benefits from medical specialists through online video chats. Students and faculty at the state's two-year colleges will receive substantial improvements in broadband bandwidth and benefit from the same access to national and international research and education networks currently available to the state's four-year public universities.

Arkansas Broadband Availability



Wireline & Fixed-Wireless

Mobile-Wireless & Satellite

Connect Arkansas (connect-arkansas.org)

Public Safety Broadband Network

The public safety broadband network will help lead Arkansas and the nation in 21st century public safety and homeland security communications. Broadband technologies will give first responders new tools to save American lives. A nationwide public safety broadband wireless network will allow first responders nationwide to communicate with one another at all times and without delay.

AWIN, the state's interoperable, wireless, communications system serves over 18,000 members of the public safety community and is currently planning for the implementation of public safety broadband as mandated by the federal legislation. Planning by the Statewide Interoperability Governing Body (SIGB) includes:

- Rural/urban coverage requirements
- Number of users supported and projected growth
- Applications that will run on the network
- State owned infrastructure hardening
- Network reliability
- Redundancy
- Disaster recovery and continuity of operations
- Reuse of existing state assets to ensure funding is maximized

The AWIN Public Safety Broadband project will develop the strategy for public safety broadband, develop technical requirements for public safety broadband that align with nationwide requirements and will position Arkansas to participate in funding opportunities. This project will provide a plan for implementation of the National Public Safety Broadband Network (NPSBN) in Arkansas which will provide an additional layer of communications to the first responder public safety community. The expected completion date of this project is December 31, 2014. The estimated cost of this project is $1,520.300. The funding source is expected to be federal.

Enterprise Mobility

Enterprise mobility refers to processes and technology focused on managing the increasing array of mobile devices, wireless networks, and related services. Technology advancements and improved design have driven consumers to become new mobile users. In 2013, 80% of business will support a workforce using tablets. By 2014, it is estimated that 200 million tablets a year will be sold. The explosive adoption of Apple's iPad and the huge range of new tablet devices are driving a consumer-led invasion of tablets into the enterprise and an examination of their use beyond personal productivity. The quality of the experience of mobile applications on these devices, which can apply location, motion, and other context in their behavior, is leading clients to interact preferentially through mobile devices.

Enterprise mobility provides quicker secure access to essential public services. Also, the technology provides the foundation for other initiatives such as green IT, cloud computing, and virtualization. The current class of media tablet devices is proving effective as a paper replacement with attendant cost savings in paper-intensive situations such as field service and boards of directors meetings. The media tablet will lead to further disruptions of the publishing industry and the PC market.

Highly portable devices are enabling the workforce (i.e. social workers, health inspectors, etc.) to perform a wide variety of tasks at any location making them more efficient and productive. In addition, new web sites are being developed with cross-platform capability specifically for smartphones and enterprise email servers are providing native support for mobile devices. Arkansas seeks to develop ubiquitous applications that are device independent.

Digital Government

Digital government includes innovative applications that foster improved interaction between government and citizens, such as one-stop solutions, expanded access to government services, and automated and central licensing. Digital government also refers to how document, content, records, and email are managed to support the Freedom of Information Act (FOIA). Increase in FOIA requests will demand systems that can produce reports promptly to citizens without over utilizing human resources. "Open Government Collaboration" is a new term that implies going beyond transparency and letting citizens interact and contribute real time in government operations.

Digital government may accelerate the provision of essential public services like licensing. It may also foster the adoption of green IT solutions which could lead to cost savings and improve compliance for record retention systems.

Through the Arkansas.gov portal, there are more than 500 online services supporting state, county, and city governments including licensing, regulation, and information. Arkansas was the first state in the nation to provide secure payment processing services initially including three high-volume, online government services: inmate trust account deposits, probation and parole supervision and restitution payments, and Pulaski County property tax payments. Arkansas residents can renew car tags via the STreamline Auto Renewal (STAR). Online car tag renewal via the Internet can save residents time and reduce staffing needs.

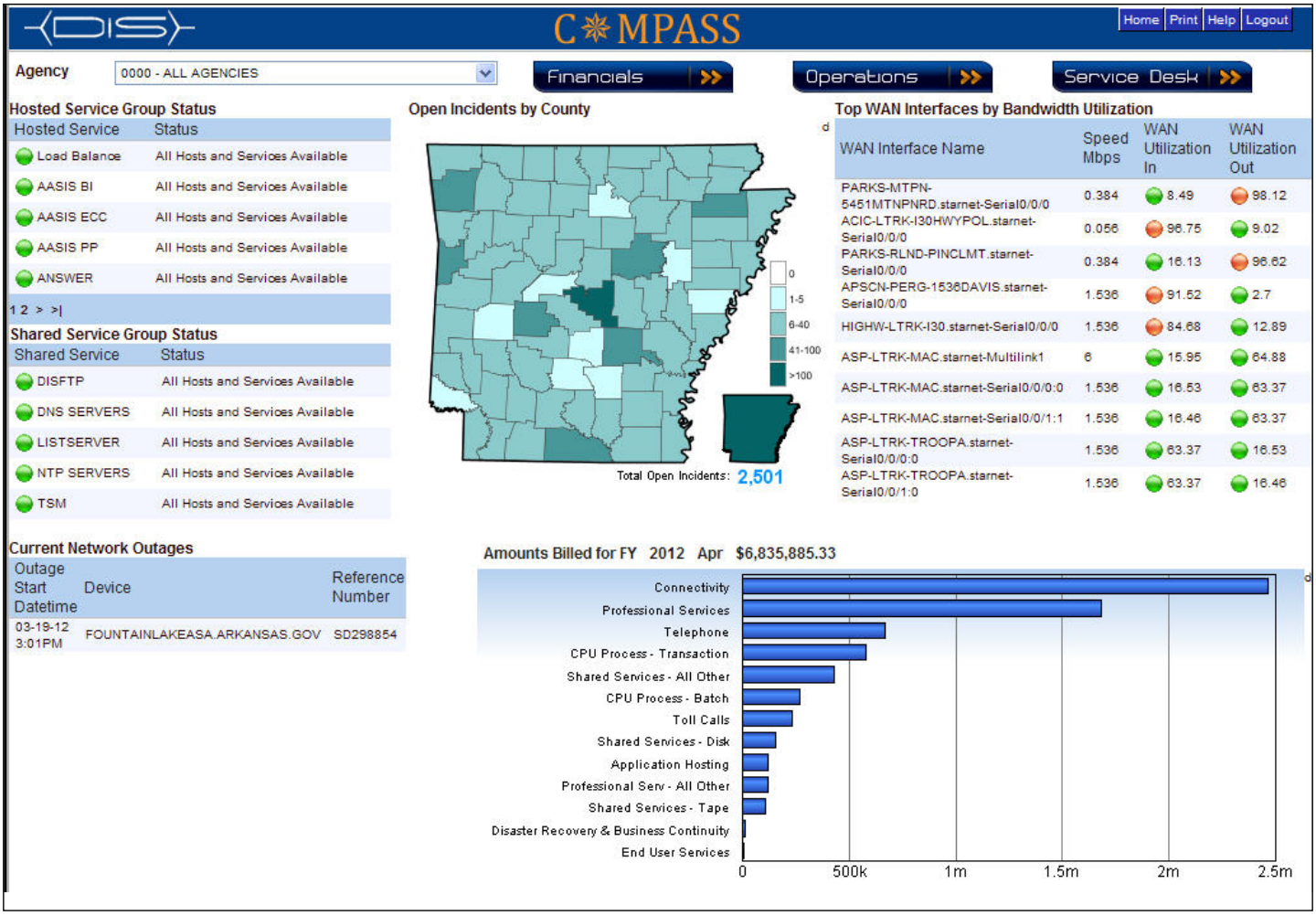
Business Intelligence and Analytics

Business analytics is a technique that makes it easier to visualize and analyze business data to improve decision making. Maximizing decision making increases effectiveness at all levels of the business and contributes to established goals and objectives by enabling its workforce to achieve desired outcomes. A collaborative decision making platform combines BI (business intelligence) technologies, decision tools, social networking, collaboration, and workflow to enable knowledge workers to find the information and expertise they need to work together to define a problem, analyze it, explore options, assess decision outcomes, and record the decision process and best practices for future use. "Big Data" is a relatively new term that refers to data sets that are very large such as phone records and scientific data that doesn't work well with traditional relational databases.

The challenge of turning data into useful analytical information grows as the quantity of data grows. As the amount of structured and unstructured data grows rapidly, business intelligence and analytics is used for performance reporting and as a planning and forecasting tool to gain insight into the future allowing optimization of resources and informed decision making. Master data management, customer analytics, data warehousing, and visual information dashboards are top priorities for turning data into insights that lead to better and faster business decisions.

The amount of data the state is collecting through the services it provides is continually growing. It is more important to turn the data into information for analysis and forecasting to enhance timely decision making effectiveness. Business intelligence tools are in place so that all workers, managers, and senior leaders can take the most effective action in any given business situation. Dashboards, for example, such as the new state COMPASS (Centralized Operational Monitoring and Performance Analysis Support System), are

being created to help personnel create a business practice of visualizing indicators of internal and external processes. COMPASS allows users of state services to view and analyze the operational status and performance of hosted services as well as provide users with financial information including monthly billing and trends; incident reports by county and additional Service Desk statistics. Compliance with electronic discovery is also necessitating the creation of processes for identifying, preserving, and collecting data for legal and regulatory investigations.

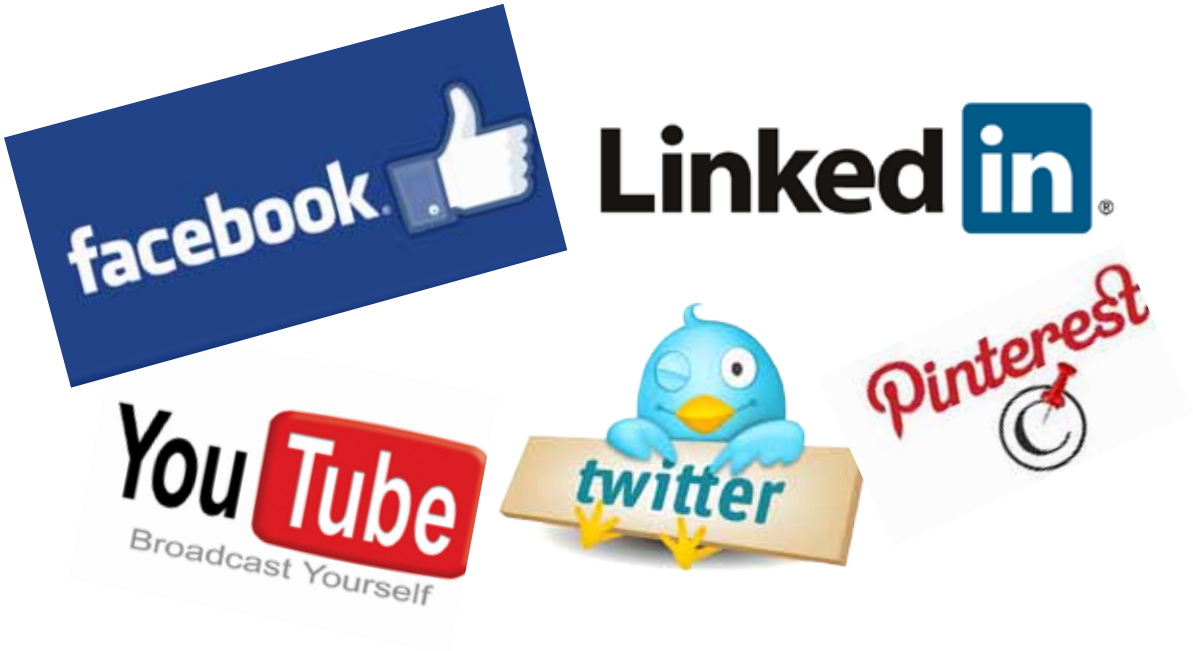


Collaboration/Social Media

Social networking is a state-of-the-art form of communication that will enable the user of public services to evaluate and adopt new tools to promote enterprise-wide collaborative efforts and real-time exchange of data. It will also allow the user to explore and introduce unified messaging, mobile data solutions, and anytime/anywhere models. Social media can be divided into: (1) Social networking-social profile management products such as Facebook, LinkedIn and Friendster as well as Social Networking Analysis (SNA) technology that employ algorithms to understand and utilize human relationships for the discovery of people and expertise; (2) Social collaboration-technologies such as wikis, blogs, instant messaging, collaborative office, and crowd sourcing; (3) Social publishing-technologies that assist communities in pooling individual content into a usable and community accessible content repository such as YouTube and Flickr; and (4) Social feedback-gaining feedback and opinion from the community on specific items as witnessed on YouTube, Flickr, Digg, Del.icio.us and Amazon.

Collaboration tools may directly affect how education is accessed and delivered within the state. The recent development may be contributors in knowledge-sharing and learning efforts across the state. Gartner, Inc. predicts that by 2016, social technologies will be integrated into most business applications. Agencies and institutions may bring together social CRM, internal communications and collaboration tools, and public social media site initiatives into a coordinated strategy.

Enterprise applications and services such as SharePoint, distance learning, video conferencing, and video arraignment are examples of these tools currently in use in Arkansas. Several agencies are using Facebook, Twitter, and other social media software. Information extracted from the current IT planning cycle indicates approximately 35 percent of reporting entities are using Facebook and 24 percent are using Twitter for official business. Going forward, social media usage will expand. The first step in getting value from social media requires organizations to define their goals for the use of social media: what they want to accomplish, where they will engage, what contributions they expect to collect from social networks and how they will use the information.



Video

Video is not a new media form but its use as a standard media type in non-media institutions is rapidly expanding. Technology trends in digital photography, consumer electronics, the web, social software, unified communications, digital and Internet-based television and mobile computing are all reaching critical tipping points that bring video into the mainstream.

Video will become a commonplace content type and interaction model for most users and more than 25 percent of the content that workers see in a day will be dominated by pictures, video or audio.

The state video network has been rebid with the intent of establishing a new enterprise video network for use by schools, agencies, and other institutions. Besides the traditional video conferencing scheduling services provided by the current video network, the new enterprise video network will allow for any to any communication, ad hoc video sessions, and will be device or end-point independent. Other features such as streaming, recording, playback and video indexing will also be provided.

Cyber Security

Cyber security relates to the logical and physical aspects of information security to keep information available, accurate, and where appropriate, confidential.

The number of new threats to electronic information in 2010 was higher than the previous ten years combined. Hackers have transitioned from infecting computers in order to disrupt usage to taking advantage of computer storage and the networks to which the compromised computer is connected. The infected computers are difficult to identify and the information stolen from the computers puts Arkansans at risk of identity theft and the potential loss of finances.

The State Cyber Security Office has deployed intrusion prevention devices to keep known malware from the organizations on the state network. These devices are capable of being controlled locally by state network customers in order to block attackers from local networks. The office recently deployed firewall management software that allows state network customers the ability to see their firewall rules and requests changes. The office is also fortifying the state domain name service resolution (DNS) infrastructure in order to identify compromised computers on the state network. The infrastructure also stops infected computers from sending information from the state network to unauthorized entities.

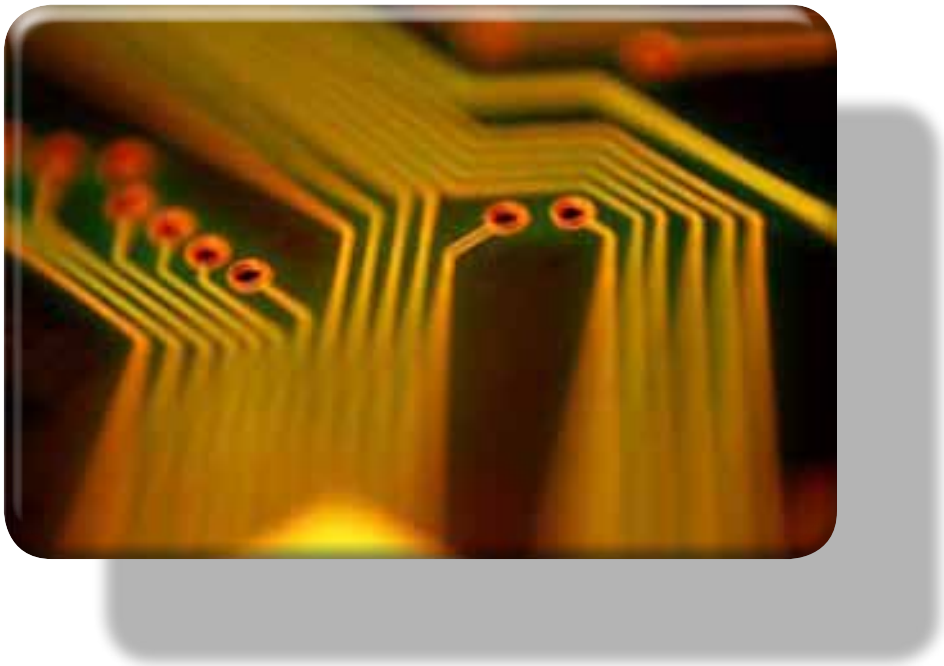
Virtualization

Virtualization is the creation of a virtual form of something such as a hardware platform, operating system, and a storage device or network resource. Virtualization can be viewed as part of an overall trend in enterprise IT that includes autonomic computing, a scenario in which the IT environment will be able to manage itself based on perceived activity, and utility computer processing power will be seen as a utility that clients can pay for only as needed. The usual goal of virtualization is to centralize administrative tasks while improving scalability and workloads. Types of virtualization include hardware, software, memory, storage, data, and network.

Virtualization reduces capital costs and will reduce the cost of operations and enable faster service delivery. It is primarily attractive because it enables agility.

It is not uncommon to see server utilization as low as 8 percent to 12 percent. By utilizing virtualization technology, it is possible to consolidate individual servers and provide for high availability as well as reduce initial and ongoing costs. Using the state enterprise data storage service provides customers with access to highly available storage that protects against loss of critical data. All components are redundant to protect against single points of failure and keep important data available at all times.

The current IT plan data shows a shift toward the use of thin clients in desktop virtualization for state agencies. A thin client is a low-cost, centrally-managed computer devoid of CD-ROM players, diskette drives, and expansion slots. The term derives from the fact that small computers in networks tend to be clients and not servers. Since the idea is to limit the capabilities of these computers to only essential applications, they tend to be purchased and remain "thin" in terms of the client applications they include. As software as a service gains popularity, it is expected that thin clients may replace desktop PCs in many work and educational environments. In general, thin clients are not as vulnerable to malware attacks, have a longer life cycle, use less power, and are less expensive to purchase.



Green IT

Green IT refers to environmentally sustainable computing. The focus on energy efficient methods and processes in the workplace is expected to grow exponentially. Green IT initiatives, such as reducing energy consumption through the use of Energy Star certified equipment and electronic documents, will become widespread as the communication infrastructure advances.

The state will continue to reduce paper consumption through the use of electronic documents and communication, identification and implementation of initiatives to reduce power usage, developing and providing green awareness training for employees, and developing new or revising existing standards and criteria for purchasing materials, products, and services.

Each agency has addressed Governor Beebe's Executive Order as is evidenced by successful initiatives. Multiple agencies shifted to purchasing equipment that meets the ENERGY STAR certification and/ or EPEAT rating requirements. The current IT plan reports that 60 percent of technology equipment utilized in state agencies meets these standards. In addition, the state data center reduced its energy use by 17.11 percent for fiscal year 2011 compared to the benchmark year of fiscal year 2008. As green technologies continue to emerge and education on the benefits of these initiatives is realized, efforts should continue to further reduce energy consumption and keep Arkansas green.

Environmentally preferable purchasing guidelines have been established by many agencies toward purchasing products that minimize environmental impacts, toxics, pollution, and hazards to worker and community safety to the greatest extent practical, and to 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. Recycling of paper, cardboard, plastic and aluminum is carried out in the majority of state government buildings.

Infrastructure Modernization

There is a lot of legacy in many government IT systems today-legacy hardware, legacy software platforms and legacy skills in the workforce to keep them running. But the pressure to modernize and replace this infrastructure with systems that are flexible, scalable and responsive to change is rapidly mounting. Infrastructure modernization should be approached strategically, addressing the ongoing and coordinated evolution of business processes, application and infrastructure and operations itself to create optimized value, cost and risk objectives.

Enterprise data centers house computer systems and associated components, such as telecommunications, servers, applications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, fire suppression) and security devices.

Infrastructure modernization involves customizing data center strategies according to business plans, regulatory requirements, skills availability, and changing technology issues. This can include, but is not limited to, activities such as building internal clouds, implementing virtualization and automation, managing storage and the information life cycle, enhancing data center networking and computing devices, increasing high availability, providing energy efficiency, and improving business continuity and disaster planning. It is important to evaluate the technology and vendors to capitalize on opportunities to improve operational and energy efficiency.

Mobile devices command the need for web development and design professionals and system integrators with the ability to extend the life of applications known as legacy applications that are derived from earlier languages, platforms, and techniques than that of current technology. Success hinges on keeping the legacy application running while converting it to new technology and utilizing service oriented architecture (SOA) to develop software in the form of interoperable services capable of delivering data to any device, anywhere, anytime.

Modernization of the state data center will reduce downtime of essential services and benefit all state agencies, boards, commissions, and Arkansas citizens utilizing state technology services. The data center can also

Infrastructure Modernization (continued)

provide a secondary/failover site for state agencies and schools that house mission critical information technology assets. For legacy application modernization, the services oriented architecture (SOA) approach to creating distributed applications and to making composite applications more flexible gives enterprises more agility. Legacy application transformation aims to retain and extend the value of the legacy investments through migration to new platforms.

Multiple initiatives from the current biennial agency planning cycle support modernization of state infrastructure and modernization of the state data center. A generator upgrade project is necessary to increase the reliability of the state data center and to ensure the operation of critical systems which depend on the state data center. The generator will keep the data center functioning in the event of the loss of commercial power. The new generator will also be more efficient and save energy. A data center cooling loop replacement project is necessary because the current chilled water system is 35+ years old and is in need of replacement. The cooling loop replacement was identified as posing the most risk for business continuity. Chilled water cools the state data center which creates the required environment for electronic equipment. Funding sources are being researched for each of these important projects.

To address legacy applications modernization, the Arkansas Department of Finance and Administration (DFA) consolidated multiple disparate legacy tax systems into an integrated tax solution for taxes-Arkansas Integrated Revenue Systems (AIRS). The Arkansas Department of Human Services (DHS) in conjunction with the Department of Workforce Services (DWS) have embarked on a project to procure an Enterprise Social Services Framework which includes a phase for the eliminating all legacy systems in place to support these services. Arkansas's judicial system is capitalizing on digital innovations to streamline operations and to share and manage complex, multifaceted information. This project includes shutting down the legacy system by 2016.

Innovative funding opportunities are being researched for renovating or building a new state data center, as well as determining possible rate impacts to state customers. Modern data centers are more cost effective, secure, energy efficient, and provide increased availability and reliability for essential state services.

Cloud Computing

Cloud computing is a style of computing in which scalable and elastic IT services are provided as a service to customers using Internet technologies. Cloud computing services exist along a spectrum from open public, to hybrid, to closed private. The next three years will see the delivery of a range of cloud service approaches that fall between these two extremes. Vendors will offer packaged private cloud implementations that deliver the vendor's public cloud service technologies (software and/or hardware) and methodologies (i.e., best practices to build and run the service) in a form that can be implemented inside the customer's enterprise. Many vendors will also offer management services to remotely manage the cloud services implementation.

A private cloud that is accessible only to state agencies could enhance the delivery of critical government services and potentially reduce risks and costs of these services.

ArCloud, the state's private cloud, currently offers services such as Exchange Email, virtualized servers, and backup and recovery services. The state data center hosts 20,102 email accounts, approximately 73 percent of state employees. The state data center also has the data storage capacity to serve as a backup for all essential state data. Some state agencies are utilizing public cloud services for agency specific requirements.

Data Architecture

The objective of data architecture is to define the major types and sources of data necessary to support the business in a way that is understandable by stakeholders, complete, consistent and stable. Data architecture is one of the pillars of Enterprise Architecture. The other pillars are the Business Architecture, Technology Architecture and Application Architecture. The data architecture pillar is the definition or blueprint of the data design which will be used in achieving the implementation of a physical database. The data architecture can be compared to a house design where all of the descriptions of the house structure to be built-from the choice of material, sizes and style of the rooms, roofing, lay out of the plumbing and electrical structures-are described in the blue print. In the same manner, the data architecture describes the way data will be processed, stored and used by the organization(s) that will use it.

Timely access to accurate data is essential to improving the quality and efficiency of enterprise decision making. It is less costly to maintain timely, accurate data in a single application, and then share it, than it is to maintain duplicative data in multiple applications. The State enterprise holds a wealth of data, but it is stored in numerous incompatible stovepipe databases. The speed of data collection, creation, transfer, and assimilation is driven by the ability of the organizations to efficiently share these islands of data across state entities. Shared data will result in improved decisions. Electronically shared data will result in increased efficiency. NASCIO, the National Association of State Chief Information Officers identifies four foundations as the business benefits of sharing governmental information: Information is more accurate, information is timelier, information is more complete and information is more cost-effective. Better information leads to better government.

The current Health IT initiatives in the state including the Health Information Exchange (HIE), SHARE, the Arkansas Medicaid Enterprise, the Health Benefits Exchange (HBE) and other Electronic Health Record (EHR) systems being implemented at the Department of Health and at the Department of Human Services, have common component requirements for Master Person Indexes, Master Provider Indexes and Record Locator Services databases. To enable sharing of these databases and others, the enterprise data architecture is being developed, abiding by a common set of policies, procedures, and standards governing data management and access for both the short and long term. NIEM, the National Information Exchange Model is being envisioned to be the best practice for intergovernmental information exchange. NIEM in not only a tool to be used to solve data integration challenges but it is also valuable as an Information Architecture based approach to data exchange between disparate systems and organizations utilizing agreed upon entities and attributes, agreed upon data definitions and agreed upon formats and domain validations.

Health IT

Health information technology (Health IT) makes it possible for health care providers to better manage patient care through secure use and sharing of health information. Health IT includes the use of electronic health records (EHRs) instead of paper medical records to maintain health information.

Health IT will enable doctors to have accurate and complete information about a patient's health allowing the best possible care whether during a routine visit or a medical emergency. Widespread use of health IT can also make the health care system more efficient and reduce paperwork for patients and doctors, expand access to affordable care, and build a healthier future for the state.

The formation of the Health Information Exchange (HIE), Health Benefits Exchange (HBE), and an upgraded Medicaid system leads to new opportunities for shared information and infrastructure.

HIE is the state's collaborative effort of public and private stakeholders to develop a technology-based, secure HIE system that will improve the health care experience for patients, providers, and insurers. The Arkansas and federal goal for an interoperable HIE will ultimately allow health information to follow individuals whenever and wherever they engage the health care system. HIE will improve access and quality of health care services, reduce inefficiencies and avoidable costs, and create better outcomes. SHARE is a consortium of stakeholders involved in developing, implementing, and supporting the goals of HIE. Arkansas was the first state HIE grantee with a phased strategic and operational plan to move from phase I to phase II. The Department of Health and the Department of Human Services Division of Behavioral Health Services have projects for new EHR systems to be completed in 2014.

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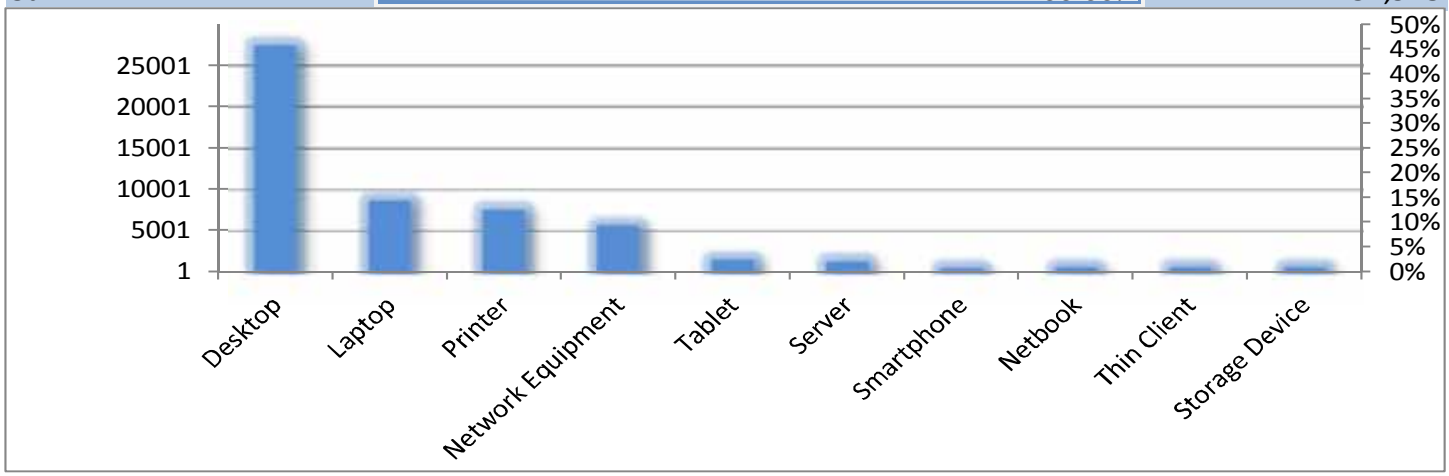
FY14/15 IT Inventory Plan

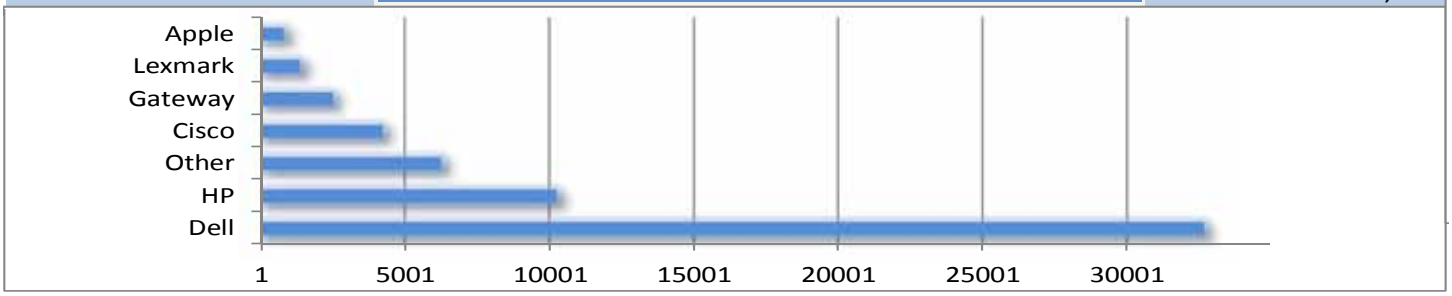
Hardware Type

Hardware Type	% to Total Devices	Quantity
Desktop	48.41%	27,813
Laptop	15.24%	9,051
Printer	13.55%	7,914
Network Equipment	10.25%	5,991
Tablet	3.20%	1,877
Server	2.92%	1,663
Smartphone	1.62%	845
Netbook	1.60%	922
Thin Client	1.60%	924
Storage Device	1.58%	928
Sum:	100.00%	57,928



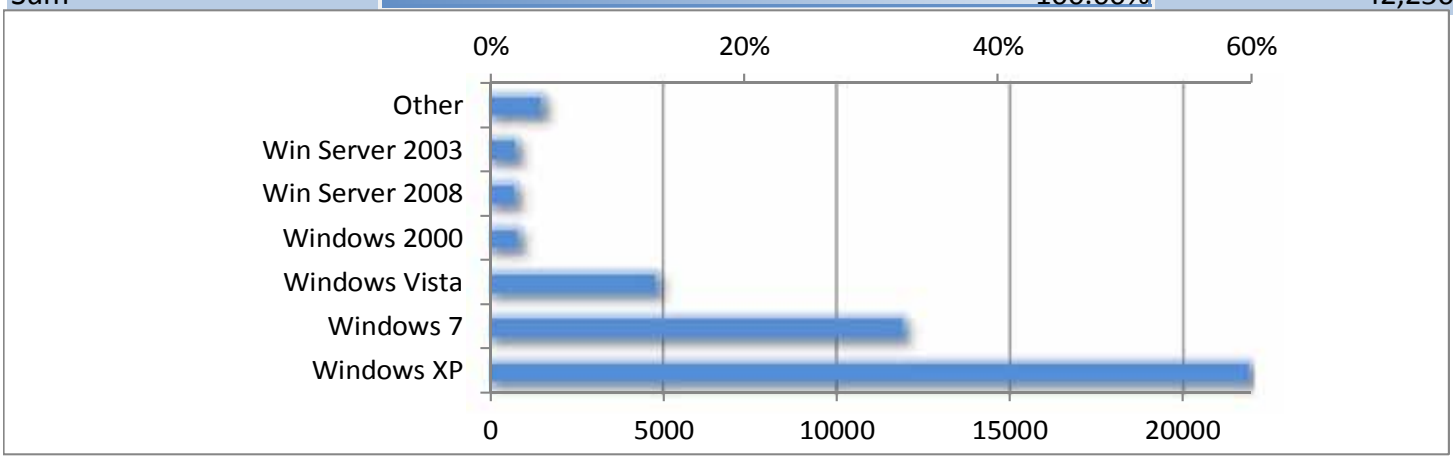
Vendor Summary

Vendor Name	% to Total Devices	Quantity
Dell	56.43%	32,654
HP	17.81%	10,227
Other	10.76%	6,241
Cisco	7.29%	4,191
Gateway	4.01%	2,482
Lexmark	2.35%	1,348
Apple	1.34%	785
Sum	100.00%	57,928



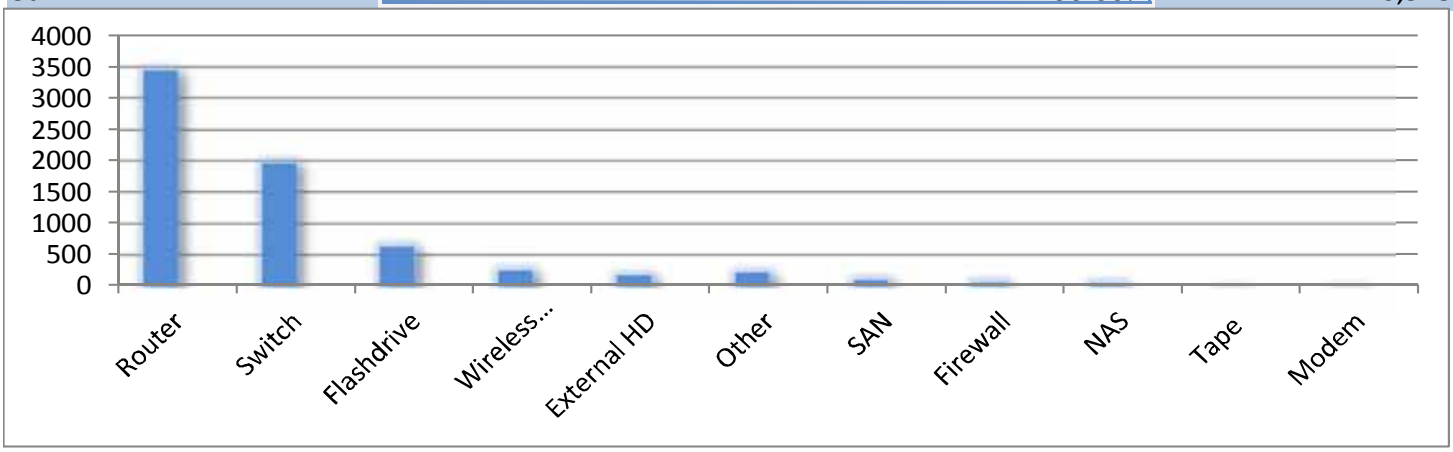
Operating System

Hardware Os	% to Total OS	Quantity
Windows XP	51.83%	21,897
Windows 7	28.15%	11,893
Windows Vista	11.29%	4,770
Windows 2000	1.85%	783
Win Server 2008	1.66%	700
Win Server 2003	1.73%	729
Other	3.50%	1,478
Sum	100.00%	42,250



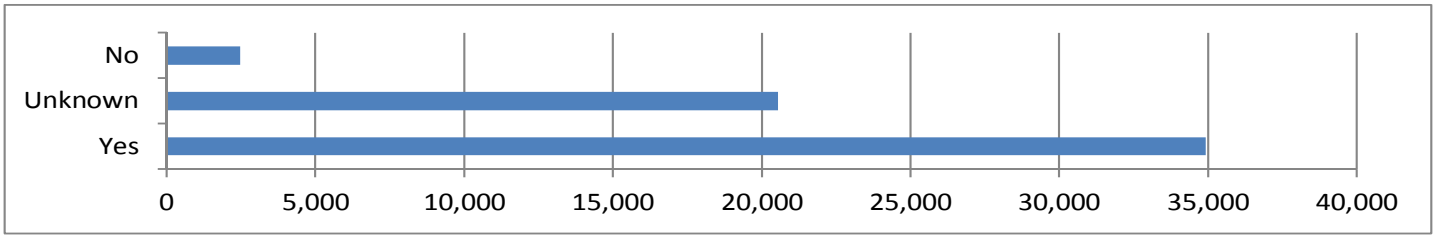
Network Storage Device

Device Name	Percentage	Count
Router	49.83%	3,448
Switch	28.63%	1,981
Flashdrive	9.19%	636
Wireless Access Pt	3.73%	258
External HD	2.53%	175
Other	3.22%	223
SAN	1.40%	97
Firewall	0.78%	54
NAS	0.48%	33
Tape	0.14%	10
Modem	0.06%	4
Sum	100.00%	6,919



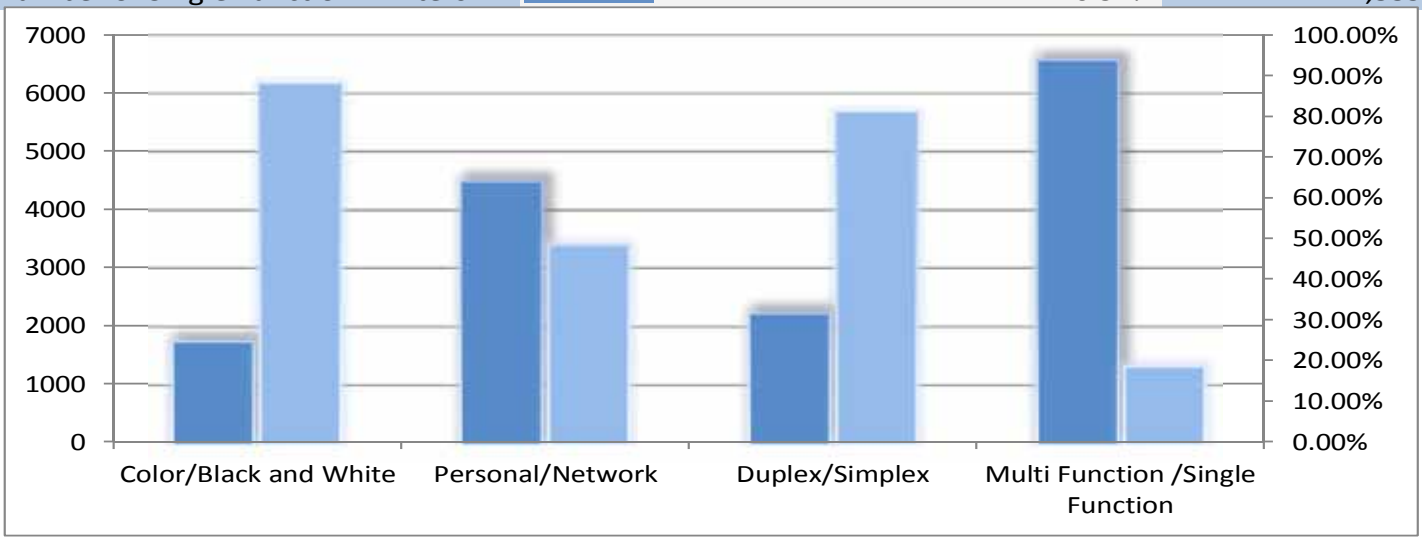
Devices with Energy Star

Yes/No	% to Total Devices	Quantity
Yes	60.28%	34,917
Unknown	35.46%	20,541
No	4.26%	2,470



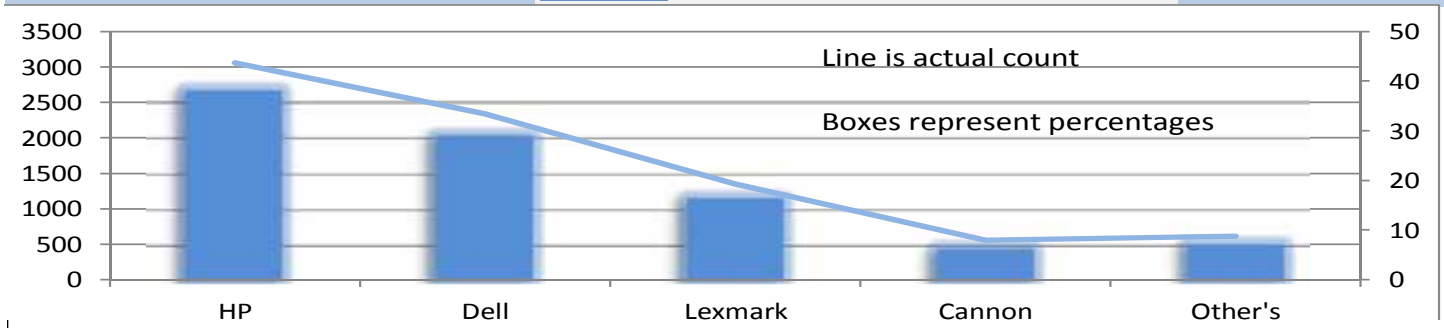
Printer Type

Name	Percentage	Count
Total Number of Printers	100.00%	7,914
Number of Color Printers	22.25%	1,761
Number of B\W Printers	77.75%	6,153
Number of Personal Printers	56.90%	4,503
Number of Network Printers	43.10%	3,411
Number of Duplex Printers	28.34%	2,243
Number of Simplex Printers	71.66%	5,671
Number of Multi Function Printers	83.08%	6,575
Number of Single Function Printers	16.92%	1,339



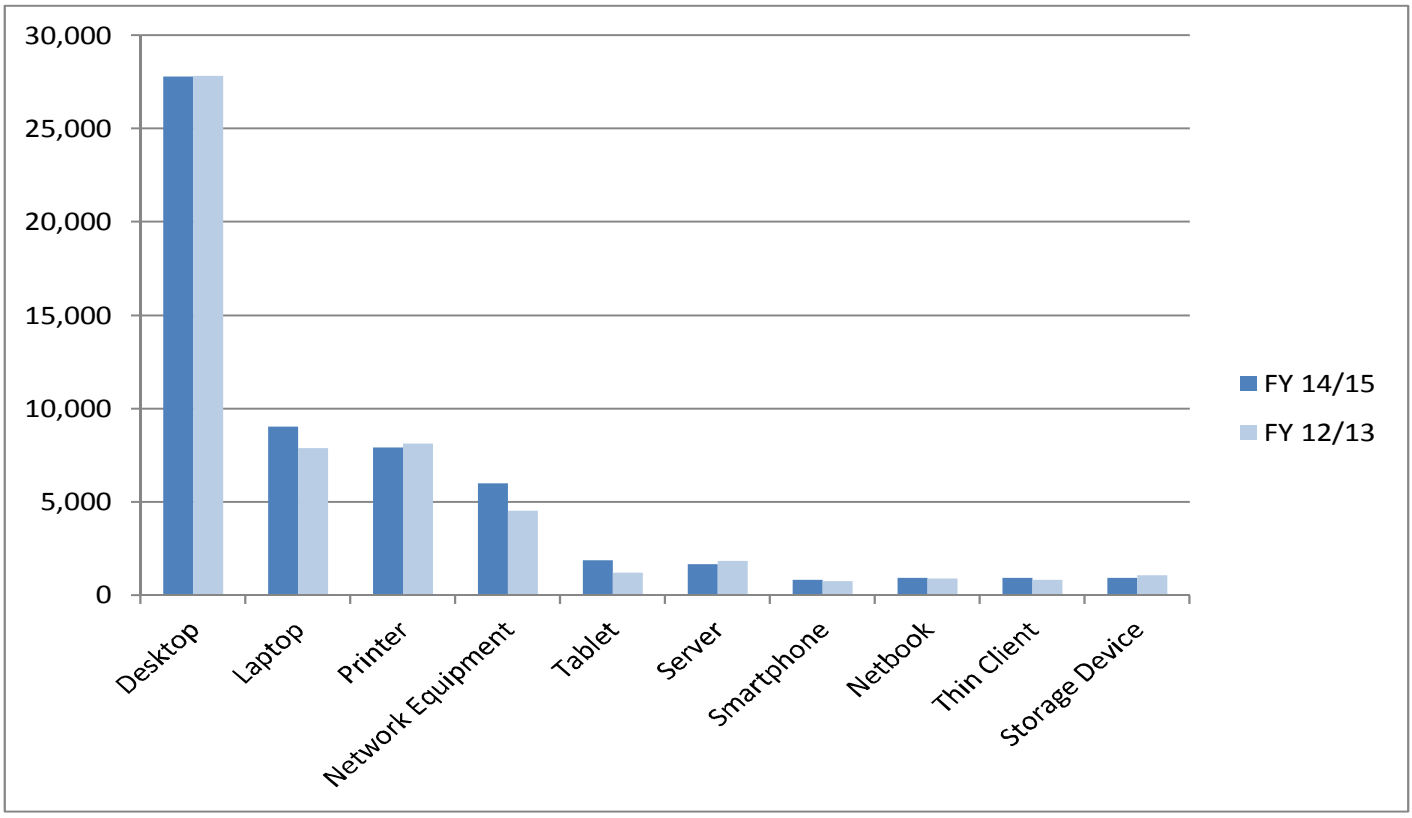
Printer Vendors

Vendor Name	Percentage	Quantity
HP	38.60%	3,055
Dell	29.57%	2,340
Lexmark	17.03%	1,348
Cannon	7.01%	555
Other's	7.78%	616



Inventory Compared to Previous Biennium

Hardware Type	FY14/15	FY12/13
Desktop	27,813	27,844
Laptop	9,051	7,882
Printer	7,914	8,134
Network Equipment	5,991	4,528
Tablet	1,877	1,213
Server	1,663	1,854
Smartphone	845	772
Netbook	922	910
Thin Client	924	841
Storage Device	928	1,064
Sum:	57,933	55,042



Vendor Trends

Vendor Name	FY 12/13	FY 14/15
Dell	31,291	32,654
HP	8,558	10,227
Other	5,993	6,241
Cisco	3,520	4,191
Gateway	4,226	2,482
Lexmark	1,161	1,348
Apple	293	785
Sum	55,042	57,928

Operating System Trends

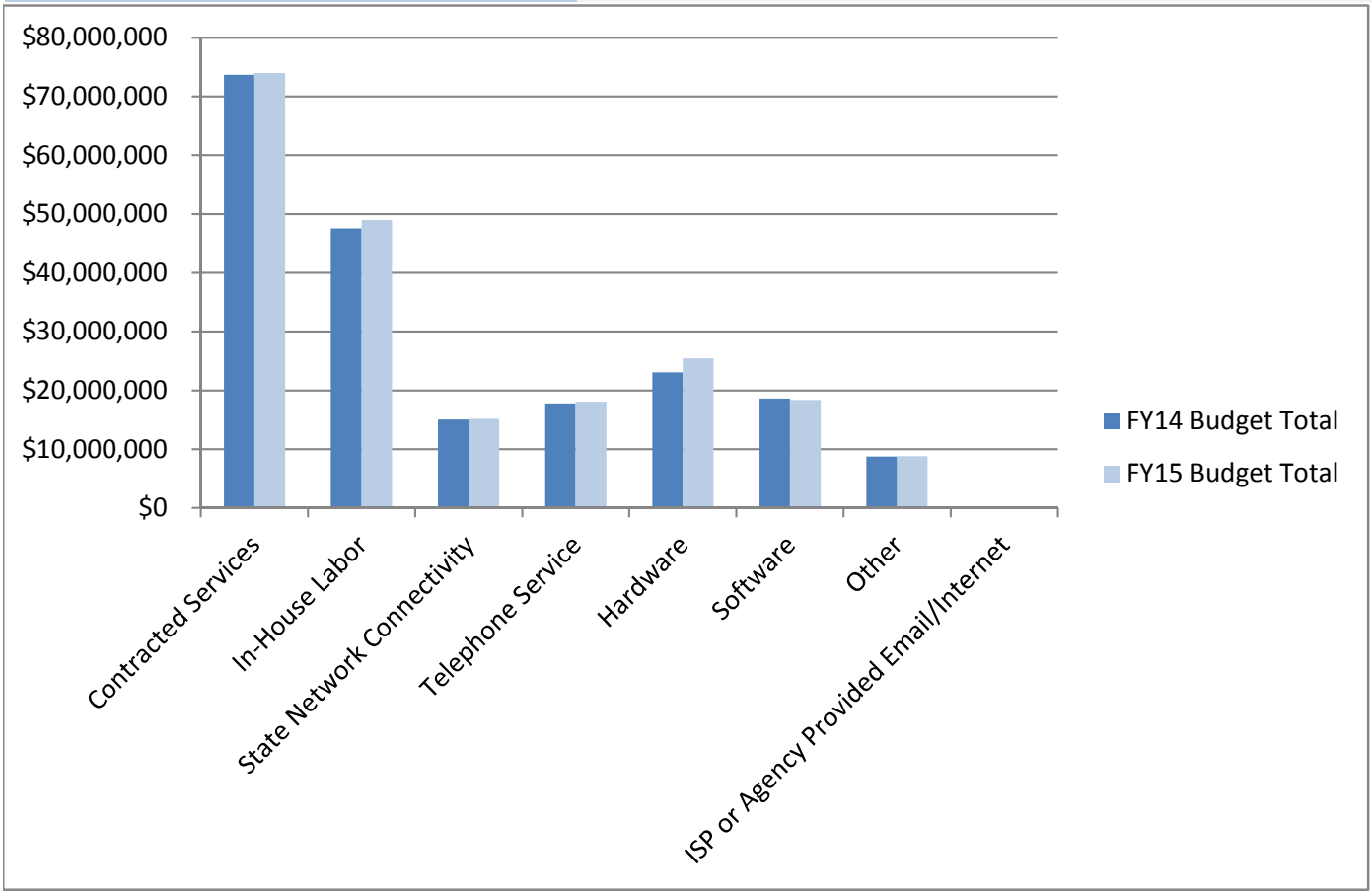
Hardware Os	FY 12/13	FY 14/15
Windows XP	27,940	21,897
Windows 7	2,494	11,893
Windows Vista	7,066	4,770
Windows 2000	966	783
Win Server 2008	505	700
Win Server 2003	1,006	729
Other	567	1,478
Sum	40,544	42,250

Network Storage Device Trends

Network Storage Type	FY 12/13	FY 14/15
Router	2,244	3,448
Switch	1,917	1,981
Flashdrive	864	636
Wireless Access Pt	219	258
External HD	110	175
Other	52	223
SAN	82	97
Firewall	46	54
NAS	32	33
Tape	15	10
Modem	11	4
Sum	5,592	6,919

Support Category

Support Category	FY14 Budget Total	FY15 Budget Total	IT Support Total
Contracted Services	$73,691,812	$73,958,264	$147,650,076
In-House Labor	$47,538,343	$48,942,134	$96,480,477
State Network Connectivity	$15,058,416	$15,163,034	$30,221,450
Telephone Service	$17,787,273	$18,084,448	$35,871,721
Hardware	$23,080,801	$25,441,137	$48,521,938
Software	$18,583,816	$18,379,771	$36,963,587
Other	$8,724,460	$8,833,460	$17,557,920
ISP or Agency Provided Email/Internet	$180,053	$158,775	$338,828
Total	$204,644,974	$208,961,023	$413,605,997



Support Category By Percentage

Support Category	% to Total FY14 C	% to Total FY14 C	% to Total Costs
Contracted Services	55.15	54.57	54.86
In-House Labor	11.94	12.15	12.05
State Network Connectivity	10.28	10.20	10.24
Telephone Service	9.85	9.90	9.87
Hardware	5.78	6.31	6.05
Software	4.70	4.60	4.65
Other	2.20	2.20	2.20
ISP or Agency Provided Email/Internet	0.09	0.07	0.08
Total	100.00	100.00	100.00

Top 10 Major Applications

Agency	Division	App Name	FY14 Costs	FY15 Costs	Total Costs
Human Services	Medical Services	Medicaid-MMIS	$30,030,000	$20,030,000	$50,060,000
Education		Arkansas Public School Computer Network (APSCN)	$21,300,500	$22,800,000	$44,100,500
Finance & Administration		Arkansas Child Support Information System	$13,789,000	$13,964,000	$27,753,000
Finance & Administration		Arkansas Administrative Statewide Information System	$13,185,000	$13,185,000	$26,370,000
Workforce Services		Unemployment Insurance	$4,900,057	$5,100,000	$10,000,057
State Police		Arkansas Wireless Information Network	$5,000,000	$5,000,000	$10,000,000
Finance & Administration		AIRS - Integrated Tax System	$3,750,000	$3,750,000	$7,500,000
Human Services	Administrative Services	Children's Reporting and Information System	$3,051,000	$3,051,000	$6,102,000
State Police		Arkansas FingerPrint Information System 14/15	$3,020,000	$3,020,000	$6,040,000

Top 10 Projects

Agency	Project Name	Est Start Date	Est End Date	FY 14 Costs	FY 15 Costs	Total Costs
Human Services	Medicaid System Update / Replacement	7/1/2011	9/30/2015	$70,000,000	$50,000,000	$127,000,000
Information Systems	Next Generation Network	7/1/2009	12/31/2013	$15,324,361	$0	$45,327,000
Human Services	Payment Improvement Initiative	1/1/2011	12/31/2016	$15,000,000	$15,000,000	$40,000,000
Human Services	Eligibility & Enrollment with interfaces to Fed Exchange	7/1/2012	6/30/2014	$7,573,621	$0	$36,524,482
Public Employees Retirement System	Replacement of Current Pension Adminstration System	7/1/2011	6/30/2017	$5,000,000	$5,000,000	$20,570,000
Education	LDS Data System Enhancement	4/15/2009	6/30/2014	$3,276,000	$0	$18,998,388
Human Services	Document Imaging	7/1/2008	6/30/2015	$1,247,000	$1,247,000	$12,894,456
Finance & Administration	AIRS Driver Services Motor Vehicle Expansion	5/1/2011	9/16/2013	$3,750,000	$0	$12,450,000
Health Department	Electronic Health Records	7/1/2007	1/1/2015	$150,000	$150,000	$12,362,999
Human Services	Enterprise Framework for E&E-SNAP Portion	10/1/2012	6/30/2014	$3,525,250	$4,587,250	$10,272,500

Online Resources

AR Geographic Information Office
www.gis.arkansas.gov/

AR Office of Health Information Technology
www.ohit.arkansas.gov
www.ohit.arkansas.gov/share

Arkansas.gov
portal.arkansas.gov
portal.arkansas.gov/services/Pages/ServicesMobile.aspx

ARE-ON
www.areon.net

ATOM
www.arktelehealth.org/ArkTelehealth/Home.html

AWIN
www.awin.arkansas.gov/

Arkansas Works
arworks.arkansas.gov/

AR Transparency Web Site
www.transparency.arkansas.gov

Connect Arkansas
connect-arkansas.org/

Cyber Secure Arkansas
www.dis.arkansas.gov/security/

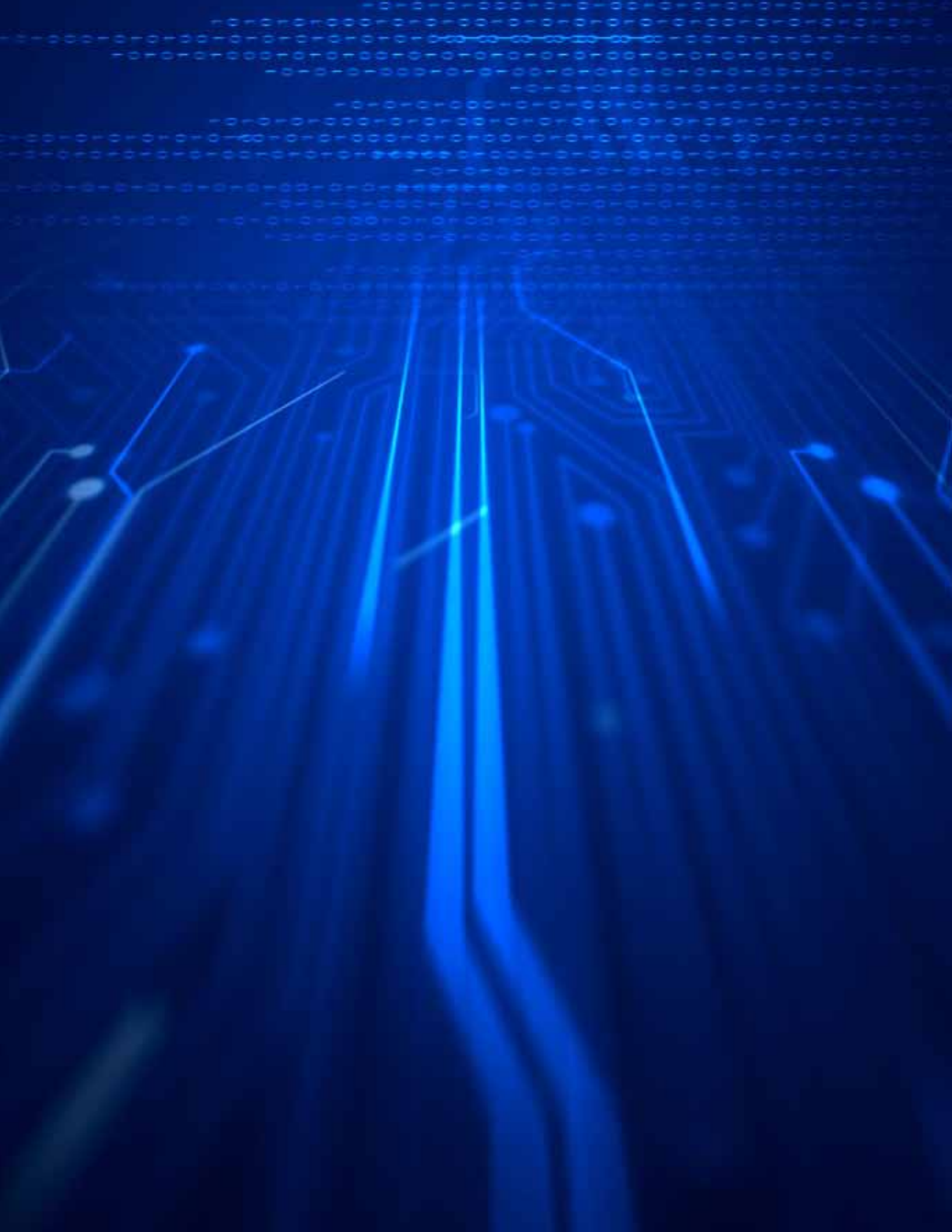
Dept. of Information Systems (DIS)
www.dis.arkansas.gov

E-Rate
www.e-ratecentral.com/

Green.Arkansas.gov
green.arkansas.gov/

Recovery.Arkansas.gov
recovery.arkansas.gov

State Technology Council (STC)
www.stc.arkansas.gov/

UAMS
www.uamshealth.com/

YOUniversal Portal
www.ark.org/adhe_financialaid/login.aspx