

FY 2008 Statewide Strategic IT Plan



Government Information Technology Agency



FY 2008 Statewide Strategic IT Plan

Note from Director Cummiskey:

Over the past year, Arizona has continued its national leadership role in government innovation and technology. From “Innovation America,” Governor Napolitano’s signature initiative as chair of the National Governor’s Association, to a new State partnership with Google, Arizona remains vigilant in its efforts to use technology to make government more efficient and easier to access.

This Statewide Strategic Information Technology Plan outlines the State’s path to stay on the cutting edge of government innovation. For FY 2008, the State will continue to prioritize secured information and data, accessible government information, improved public service delivery, modernized IT infrastructure and enhanced project management.

If you have any questions about this plan, please contact GITA’s Information Technology Planning Manager at 602-364-4784.



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Government Information Technology Agency

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EXECUTIVE SUMMARY

Strategic planning is essential to achieve better technology performance in the State. The 2007 Statewide Strategic Information Technology Plan considers the major initiatives, both potential and underway, that will move the State to an innovative future Information Technology (IT) environment. Providing annual feedback on statewide IT goals ensures not only that agencies are working toward the same goals but enables collaboration and synergy to develop between organizations. The 21st century demands a high level of service from State government and has initiated a new era in secure information technology. Many agencies are caught in a conundrum of competing needs: shrinking budgets, customer demands for increased technology, a lack of technical staff to administer IT, and heightened concerns regarding IT security and privacy protection.

State core values and guiding principles have laid the foundation for the five IT goals adopted by GITA for FY 2008 through FY 2010. This plan identifies and elaborates on the statewide strategic IT goals for FY 2007 based largely on an extraction of executive agency IT goals submitted in the past year combined with Governor Napolitano's statewide goals. Stakeholder consultations have also revealed a list of potential issues and suggested directions for the future. As these goals are long-term and may not be accomplished in a single year, this plan focuses on last year's accomplishments and any deviations from strategic direction.

The sophistication and sheer number of Internet users necessitates increased capability and intelligence at the website interface. Growing computer knowledge on the part of the public is propelling government to move towards providing better and timelier information and services online. Arizona has been at the forefront of e-government services development, especially online licensing, online searching, and secured payment.

In her 2007 State of the State address, Governor Janet Napolitano enumerated three key areas that she believes will determine the State's future success: education, foundation and innovation. According to the Governor, **innovation** "will increase the ability to create and lead the industries of the future". In addition, she states that "cultivation and stimulation of new technologies" including the adaptation of IT will set Arizona apart in the future.

The State is taking an innovative approach toward alleviating the isolation of rural Arizona through the use of online communication, especially through the use of broadband. Responsive communication also plays a great role in mitigating the impact of disasters, particularly in Arizona's annual fire season. The implementation of the Arizona 2-1-1 online and 2-1-1 emergency call centers are a key example of Arizona's sharing of information on health and human services and timely updates during emergencies.

Many agencies are caught in a conundrum of competing needs: shrinking budgets, customer demands for increased technology, a lack of technical staff to administer IT, and heightened concerns regarding IT security.



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Continuing Governor Napolitano's insight in her other two key areas of education and foundation, a new state certification program for IT project managers has recently been established under the auspices of GITA and State Government University (AZGU). GITA is also analyzing existing state services to identify common elements which will form the backbone of a service-oriented architecture for the State. This direction is expected to improve government efficiency and reduce future development costs of technology.

Identity theft and privacy concerns have become every Arizonan's concern. Although technology has become a strategic resource, it has created some tactical vulnerabilities. Efforts are being focused on both IT security and privacy through continuity of government efforts and agency business continuity planning as well as the development of secure interoperable first responder systems throughout the state in coming years. The State is leading efforts to prevent and respond to threats against Arizonans, employees, and its assets.

In keeping with President Bush's federal program to automate health records and services nationwide over the next decade, Arizona was the first state to generate a roadmap to achieve a statewide electronic health data exchange. The Arizona Health-e Connection has brought together insurance companies, health care providers, and consumers of health care to create a strategic vision for e-health in Arizona. Other states and the federal government are vitally interested in Arizona's approach to this problem. Electronic record keeping in the medical community is paramount for access to accurate and timely patient information yielding more efficient and safer care through interoperability between facilities.

Major state agencies rely on mission-critical legacy software systems, many of which are twenty or more years old. These systems will require replacement or major upgrades in the next five to seven years at an estimated cost of between \$350 - \$400 million. GITA is in the process of identifying and prioritizing system replacements.

This statewide IT plan also summarizes state executive agencies' FY 2005 – 2007 IT plans in terms of trends, issues, goals and objectives. Statewide agency trends are consolidated and agency strategic IT goals are compared across the last three years. The two new statewide IT goals this year were the result of the new emphasis on consolidation and improved methodology. In addition, recommendations are also made based on review of the agencies' IT plans at the end of this document. Through successful strategic IT planning, the State will reap the benefits of agency IT programs that play a more cohesive role in agencies' fulfillment of their missions and future visions.



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STATE OF ARIZONA'S IT VISION

“Our economy is poised for a transformation from one that relies on labor and sunshine to one that runs on knowledge and innovation.” Governor Janet Napolitano, State of the State speech January 2007

Arizona's IT vision is based on the use of technology as a tool to improve processes, share information, and deliver timely services to its citizens. Economic growth expands opportunities and with it, the need for government services. The sharing of IT resources enables agencies with limited time, money, and personnel to deliver services more efficiently and more effectively.

Accomplishing the goals of Arizona's IT vision will require effective short-term and strategic planning based upon defined standards and processes and entailing meaningful metrics. This Statewide Strategic Information Technology Plan communicates key goals for guiding Arizona State government's IT future.

The statewide IT vision centers on three foci for FY 2008; namely 1) thought leadership, 2) efficiency and accessibility and 3) oversight and control. Themes under thought leadership include the transformation of government through innovation, improvement of government processes for the public, setting a statewide strategic direction and continuing consulting efforts with agencies. The efficiency and accessibility theme encompasses user-friendly customer service delivery, responsiveness and accessibility to agency and public needs, perhaps through breaking down barriers and finding ways to improve automation. Oversight and control themes address protection of state assets and securing the IT infrastructure as well as privacy protection for vital data.

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ARIZONA'S CORE VALUES

"One Arizona' ---a place where families are confident and secure in the knowledge that we are constantly moving forward, together." Governor Janet Napolitano, State of the State speech January 2007

Values influence how decisions are made, reflecting which qualities are held important, how the world is viewed and what beliefs are significant. The core values for GITA are:

Integrity – a belief in honesty, fairness, and accountability in all interactions.

Right to privacy – a recognition that since State government holds information, which is private; unauthorized release of that data is a violation of the public trust.

Freedom of access – a belief that the public has a right to ease of access to public information.

Cooperation – an expectation that partnership, trust, and collaboration between political entities and the private sector is fundamental to effective use of technology.

Respect – a conviction that all individuals deserve our respect.

Quality: the establishment of a system of proper standards for state IT systems and services is one of our fundamental objectives.

Efficiency: a belief that State government should constantly strive to act effectively with minimal waste.

GITA's Core Values

Integrity

Right to privacy

Freedom of access

Cooperation

Respect

Quality

Efficiency

ARIZONA STATEWIDE IT GOALS

"In short - Our challenge is to innovate." Governor Janet Napolitano, State of the State speech January 2007

The Statewide information technology goals reflect the desired end result of using IT in targeted areas over the next decade; thereby setting the strategic direction for the State of Arizona in 2007 and years to come.

Governor Napolitano has indicated that the state must magnify Arizona's innovation capacity to ensure that all agencies of state government are working together on critical growth issues and invest in research and development that is focused on using technology to make a difference in people's lives.

For FY 2008, GITA continues the FY 2007 statewide strategic IT goals with the addition of improved service delivery and methodology and a modernized state IT infrastructure, as follows:

- 1. Secured Information & Data:** *increasing both IT privacy and security for Arizonans by protecting state government information, strategic IT assets, and personnel.*
- 2. Accessible Government:** *making services more accessible to the public and state agencies through e-government solutions.*
- 3. Improved Public Service Delivery:** *enriching quality of life for Arizonans through improved automation of health and human services and development of rural telecommunications infrastructure.*
- 4. Modernized State IT Infrastructure:** *enhancing cross-agency efficiency and effectiveness through exploitation of enterprise-wide IT solutions.*
- 5. Cost Savings through enhanced IT Project Management:** *heightening productivity and reducing risk by providing exposure to and training in best practice IT methodologies will save IT dollars in the long term.*

Working in concert with the executive branch agencies and other stakeholders in the State, GITA is committed to achieving these goals by adhering to the objectives and initiatives outlined in this strategic plan. Information technology support for the executive branch of Arizona will operate as a seamless enterprise, delivering consistent, cost-effective, reliable, accessible and secure services that satisfy the needs of its diverse public and private customers, including its citizenry, its business communities, and its public sector agencies.



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GOAL 1: SECURED INFORMATION & DATA: *Increasing both privacy and security for Arizonans by protecting state government information, strategic IT assets, and personnel.*

Information security and privacy are key factors in quality of life for the Arizona public. Since Arizona has consistently scored high in identify theft, the State is taking steps to increase data protection. Addressing IT security has become a necessity for government organizations since they are primary repositories for trusted citizen data. As the State thrusts forward to improve service delivery through e-government, the importance of secure data increases dramatically.

Homeland security efforts are being addressed through the use of technology and common business processes and procedures for sharing critical information on physical and cyber threats, both within the state and external to Arizona. In addition, upgrading communications interoperability and improving business continuity, disaster recovery, and emergency preparedness planning are essential to rapid response and recovery from these threats. Both continuity of government and identification of critical functions at major agencies for infrastructure protection are being addressed to create a prioritized, coordinated suite of activities should the need arise.

Information security and privacy are key factors in quality of life for the Arizona public.

Statewide Objectives

- Development of a statewide IT security and privacy office overseeing and coordinating security efforts including security & privacy program development, security standards oversight, compliance management, risk analysis, incident response, and training/awareness.
- Identification of alternate redundant service delivery means, for every *critical* agency business function throughout the state through business continuity planning and IT disaster recovery; i.e., redundancy by design.
- Enhancement of statewide security policies, standards, and **best practices** relating to IT operations and network architecture to align with Homeland Security and business-driven privacy initiatives.
- Initiation of a statewide IT disaster recovery plan encompassing all state critical business functions and its related infrastructure within the next two years.
- Improved IT security at state agencies based upon security awareness training and adherence to statewide security policies and standards.

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Statewide Performance measures

- Secure statewide IT infrastructure to protect both privacy and data integrity through assessment of key agency IT systems ensuring security standards and procedures are in place. The aim is for the 30 major agencies (aka Group 1) to assess their current and projected IT processes in 25 different categories, ranging from security plans to enterprise architecture implementation. This target was met through the second year of operation of the online Technology Infrastructure and Security Assessment (TISA) application on the GITA website. All agencies were able to complete 110 questions of the survey this year, with an 80% approval rate. The target for FY 2008 is an 85% approval rate with 5% increase in subsequent years. It is expected that this measure will level off in FY 2010 with a value between 95% and 99%, as 100% is an unrealistic expectation given the nature of security vulnerabilities and ever-changing threats.
- Increased IT standards compliance across state executive agencies from an overall average of 75 to 90 percent, as measured by the application of the annual TISA survey. These surveys placed the large mission-critical agencies at 92% overall compliance level with statewide standards and at a 93% compliance specifically with respect to IT security standards. Last year's target was to be at 70% security compliance, so it was exceeded by 22%. The target for FY 2008 is an overall 95% compliance level for Group 1 agencies to statewide standards. Performance in subsequent years will fall in the range of 95 to 100 percent.
- Improved business recovery capability from disaster through business impact analysis, business continuity planning, training, and identification of key essential and critical business functions. The target was to have 95 to 100% of critical business functions and associated IT processes identified and covered by an IT Disaster Recovery Plan by the close of 2006. This stretch goal was met in 2006 with 97% of the State's large mission-critical agencies now having Business Continuity Plans (BCPs) in place covering 100% of the State's critical business functions. Ninety-four percent of the state's large agencies, encompassing all of the state's critical business functions have approved BCPs. Furthermore, 48% of the small agencies, boards and commissions have submitted Business Continuity Plans with at least a 'Medium' readiness level. The State will strive to maintain the goal of 95% of the state's eighteen mission-critical agencies having compliance levels with their BCPs. In addition, 60% of the small agencies, boards and commissions and 100% of the state's large agencies are anticipated to possess BCPs with at least a 'Medium' readiness level.
- Successful disaster recovery testing of state agencies in a simulated emergency situation. This goal has been met at a handful of agencies but needs to be more seriously addressed in FY 2008, especially in the area of backup testing which may require design changes to infrastructure and

Newer technologies enable people who are less technical to spend less time gathering data and more time analyzing information.



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long-term funding at some agencies. Although all major agencies are backing up their information on a daily or weekly basis, not all of these agencies are testing the backup media to ensure that they are actually recoverable. The target for FY 2008 is for 95 to 99% of the Group 1 agencies to be testing their backups on at least a weekly basis.

Current Initiatives Underway

Statewide Information Security & Privacy Office (SISPO): Due to the recognition of the increasing importance of information security and privacy, GITA is seeking legislation to establish a Statewide Information Security Office to oversee IT security across all state agencies. The Office will perform strategic planning and policy development functions as well as provide independent IT security and privacy governance and oversight. SISPO would also facilitate IT security training, planning and implementation in the state agencies although the individual agencies will remain responsible for their security programs and operations. A statewide risk assessment is one of the initial deliverables for the phased implementation of this new office.

In conjunction with these efforts, State CIO Chris Cummiskey participates as a member of the Governor's Homeland Security Cabinet. This year, the IT Security Advisory Committee recommended implementation of a SISPO serving all executive state agencies. Furthermore, the Governor has established the Emergency Preparedness Oversight Council (EPOC) to determine overall emergency preparedness within Arizona, consolidate emergency activities across agencies, and assign responsibilities for such activities in the future as part of **continuity of government** efforts.

Business Continuity Planning (BCP): All executive branch agencies are required to submit Business Continuity Plans as well as test and maintain them. The statewide BCP program is coordinated by the Department of Emergency and Military Affairs (DEMA), working in partnership with the Arizona Department of Administration (ADOA) and GITA. This tri-agency team analyzes the BCPs and generates overall readiness scores to validate agency BCPs on a biennial basis.

IT Disaster Recovery Plans are part of the individual BCPs. In partnership with key agencies, there has been significant progress achieved on IT disaster recovery projects such as MAGNET 2 development, standardization of backup drives, disk mirroring across agencies, statewide disaster recovery tests, and a pilot for Open Systems and servers. Furthermore, three major agencies are working jointly on the coordination of an out-of-state disaster recovery facility which will include many of the smaller agencies as well. Some independent Disaster Recovery projects have also been undertaken at small and medium agencies.

"Arizona is improving homeland security efforts by using technology for sharing critical information..."



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During 2006, the majority of the State's sixty-three small agencies, boards and commissions have focused on business continuity and IT security awareness training and compliance. For its second year, GITA held four sessions of IT security training during July and August, capturing nearly two-thirds of the smaller agencies. The remaining third have been reached through personal discussions in order to close the awareness gap.

Communications Security: The need to communicate efficiently and securely, when preparing and responding to emergency situations, is extremely critical for first responders, state government, and the public. Due to the importance of communications interoperability to support statewide emergency response, the State is addressing both long-term microwave (radio and data) infrastructure enhancement requirements and tactical communications procedural gap closure needs. The long-term goal is to create a sustainable Public Safety Interoperability Communications system allowing intercommunication between all of the state, local, federal, and private sector entities in support of planning, preparedness exercises and response to and recovery from emergencies.

In collaboration with the new Arizona Department of Homeland Security, DPS, DEMA, GITA, and local safety organizations are providing consulting support services for three-digit N-1-1 "one call" resource centers; e.g., 2-1-1, 3-1-1, 5-1-1, and 9-1-1. Arizona State government recognizes that an efficient and interoperable information technology infrastructure is essential for a sustainable **continuity of government** capability and improvement of collaborative Homeland Security efforts for first responders, emergency management, public safety, welfare, and transportation functions.

Integrated Criminal Justice: Coordinated efforts with the Arizona Criminal Justice Commission between the State, local courts and law enforcement agencies are underway to leverage State assets and information to protect the public of Arizona.

GOAL 2: ACCESSIBLE GOVERNMENT: making services more accessible to the public and state agencies through e-government solutions.

E-government increases the public's accessibility to government and enables it to run more efficiently. Government services must be made widely available through multiple delivery channels. The State's goal is to provide accessible, reliable, and cost-effective government services to the Arizona's public electronically. A majority of the agency IT plans mentioned improved information accessibility through the Internet as the primary vehicle envisioned for improving customer service. Sharing data and services through the Internet indicates a positive trend towards collaboration among state and local government agencies. The following four ongoing activities promote accessible

Data and intellectual property are the state's primary assets.

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government:

- Collaboration and communication among agencies and municipalities;
- Architecting of a framework to support both enterprise and distributed e-services delivery with an emphasis on online licensing;
- Development of statewide standards for web-related initiatives;
- Leveraging of enterprise technical resources through the implementation of an e-services framework;

Arizona @ Your Service (AAYS), a leading-edge web portal has offered Arizonans improved access to government agency information and services over the Internet since 2001. The AAYS Portal is now the center of the state's e-government initiative providing the public access to Arizona's government organizations from a single web site. Currently, more than 150 Arizona state, county, and municipal agencies leverage the capabilities of the Arizona Web Portal.

A review of agencies' business functions determines the feasibility of migrating selected functions to the Internet. Many agencies save money and provide better service by using proven web application development expertise and the infrastructure of the Portal. The primary physical infrastructure of the Web Portal has been moved from Texas, where the vendor has been maintaining it, to Arizona for improved disaster recovery and program management purposes. The AAYS Portal operations contract is being competed in 2007 to support expansion and acceleration of Arizona's e-government program.

To further augment agency needs, GITA provides the services of its webmaster to state agencies both for training and website enhancement services. These services promote government efficiency and accessibility through the practical application of technology in support of the Governor's directive to reduce costs and improve service delivery to the public. One of the state agencies' key trends in recent years has been the use of the Internet to provide information and services as well as the growing recognition of the power of e-government.

Statewide Objectives

- Encourage agency use of the State Web Portal.
- Provide a sound business model for online service delivery.
- Improve the look-and-feel of the navigation, consistency and search capabilities of State websites.

"Ultimately, the State will provide Arizonans and businesses with 'one face' to Arizona government."



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- Enable agencies to use online E-Licensing services, in addition to such enterprise technical resources as a search engine and payment processing services.

Statewide Performance Measures

- Number of transactions accessible on the Internet via the web portal. The goal for FY 2007 was to have at least 80 transactions available on the Internet. An increase of at least ten transactions for each succeeding fiscal year is expected. As of April 2007, there were exactly 80 transactions available on the web.
- Support agencies in development of online licensing initiatives. The goal for FY 2007 is to have at least 22 agencies providing online license renewal services. In succeeding years, an increase of seven agencies each year is desired. Thus far in 2007, there are twelve agencies using various components of the portal for online licensing. This lag is largely due to the transition of the web portal to another location.
- Promote the use of a standard 'look-and-feel' to yield a positive experience for the public. The goal for FY 2007 was to have 75 agencies using the standard web design style guide with an increase of ten agencies in each succeeding fiscal year. At present, there are 71 agencies using the standard web design style guide. Meeting this goal is anticipated before the end of summer 2007.
- Improve access for the public to government by increasing the average number of inquiries to 'Contact Arizona' from 75 per month in FY 2006. Presently, inquiries to 'Contact Arizona' serve as an indicator of potential improvements as to how or where to find information on the website. In all of 2006, the inquiries averaged 88 per month.
- Number of agencies using the standard Internet designation to the .gov format. Although 120 agencies have requested a standard .gov naming convention, currently 114 .gov domains are in use representing 58 state agencies. The Governor's request for a more standard addressing scheme for state agencies is driving this initiative. The target for FY 2008 is to have all of the 120 agencies using a standard .gov naming convention for their Internet designations.

One of the state agencies leading trends was the use of the Internet to provide information and services...

Activities Underway

Web Portal: Original selection of a business partner for Web Portal development and maintenance was made in 2001. The initial operations contract was extended in 2006 to allow a RFP for a long-term contract to be developed, competed and transition to an Arizona location. The new contract is planned for award in summer of 2007.

Through use of the web portal, agencies can realize benefits from reengineering and streamlining of their business processes through use of the common payment and registration services already provided. Identification of common needs among agencies has identified new opportunities for a shared component architecture to promote the following capabilities:

- Increase accessibility to information and services through 24/7 access to state government resources
- Promote economic development through ease of access to timely data sharing.
- Enhance government efficiency and public convenience through secure electronic transactions.

The shared architecture now includes a Google search engine, custom application development as well as a secure gateway, secure payment processing, and hosting.

Online Licensing: Bolstered by the successes of online renewals for both the Department of Real Estate and the Registrar of Contractors; several new agencies have added online license renewal via the state web portal. The licensing application, Common Licensing System, unifies online licensing at a single website. Using this strategy, to implement online licensing truly enhances government efficiencies as studies indicate that 30% of electronic transactions occur outside of agency regular business hours.

Smaller agencies such as the Boards of Osteopathic Examiners, Dental Examiners, Dispensing Opticians, and Optometry were implemented through the Arizona Government University website. In addition, the Boards of Cosmetology, Technical Registration, Pharmacy, Naturopaths, Physical Therapy Examiners and the Radiation Regulatory Agency have all developed their own licensing sites. The state annually issues over half a million occupational and professional licenses. Growth of the Common Licensing System has made it possible for over 70% of licensees to renew their credential over the Internet. The target for FY 2008 and in subsequent years is to increase the percentage of online license renewals by ten percent.

“The Web Portal assists citizens by improving their access to web-enabled services.”



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Notice of Intent (NOI): Governor Napolitano directed all agencies to coordinate web development initiatives through GITA. The process of informing GITA of the web development or maintenance effort is done through a NOI. This directive is intended to ensure that agencies are:

- Employing cost-efficient means in deploying all web-related services,
- Evaluating and expanding the services offered through the AAYS Portal,
- Adhering to published statewide policies and standards,
- Maintaining a consistent look-and-feel in the website designs.

During 2006, there were 24 NOI's submitted to GITA. As a move to improve delivery times, the Smart NOI was developed to permit contractors for Arizona Department of Environmental Quality to file their NOIs online. Using an automated mapping solution to check on planned construction locations also avoids potential damage to the fragile Arizona environment. The success of the Smart NOI has led to the online submittal of Notices of Transfer of Ownership (NTOs) for onsite wastewater treatment facilities. When completely implemented, the NTO application will also allow online payment of the transfer fee and produce a printable receipt. These automated functions permit agency staff to handle more applications and transfers and produce daily accounting reports as well.

Agency E-mail Naming standards: As part of Governor Napolitano's policy regarding government efficiency, standardization of agency e-mail and website addresses has been encouraged. The .gov naming convention is recommended for all Arizona State agencies, boards and commissions to standardize web addresses and e-mail, giving the public assurance that they are accessing an official state government website. An approval process was created to limit domains to Arizona government organizations at the state and local level. *azagencyname.gov* is now the standard for all state agencies.

Arizona 2-1-1 Project: The first phase of a statewide 2-1-1 system, Arizona 2-1-2 Online, has been implemented by Arizona Health Care Cost Containment System (AHCCCS), in conjunction with the Governor's Office, as well as the Departments of Economic Security and Health Services and GITA. The second phase of the system, a permanent 2-1-1 call center, is in the collaboration stage of establishing a public/private partnership. Already 2-1-1 call centers are in use during State-declared emergencies.

Arizona's 2-1-1 system currently enables easy web searching by the public of a health care and social services provider database. The website also supports searches by information & referral and social

"Any e-government initiative should be based upon principles of convenience, efficiency, security, accessibility..."



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service professionals using standard Alliance of Information & Referral Systems taxonomy categories and codes. The emergency response components of the system allow posting and searching of homeland security and bio-terrorism bulletins by county and by city throughout Arizona.

At completion of Phase II, anyone in the state will be able to dial 2-1-1 to access a network of community-based call centers along with the web-enabled database; thus providing timely information on health care as well as pertinent information in times of disaster. The strategic goal is to complete Phase II of 2-1-1 by close of FY 2008.

GOAL 3: IMPROVED PUBLIC SERVICE DELIVERY: *enriching quality of life for Arizonans through leveraged automation of health and human services and development of rural telecommunications infrastructure.*

Through modernization of the state's IT infrastructure, inter-agency efficiencies can be achieved. Governor Napolitano identified improved education and promotion of comprehensive growth planning as her top priorities in 2007. Information technology infrastructure is crucial for economic development in Greater Arizona and broadband availability helps to break down both time and distance barriers in conducting business. It is also a key factor in job creation outside the metropolitan areas. [Broadband is defined to be a telecommunications connection of at least 1 Megabit per second (1 Mbps).] Treating telecommunications as a critical state infrastructure is the first step in support of the Governor's Council on Innovation & Technology's efforts to expand broadband throughout the State and foster job growth in Arizona's rural communities. Such ventures as the Telecommunications Privatization Program, wherein state agencies will use a common telecommunications infrastructure, and the CANAMEX Corridor WiFi implementation are two initiatives already well underway in this area.

Application of IT to the medical sector can lead to a reduction in health care costs and improved service. Absence of readily available, comprehensive, patient-centric health information and access to clinical knowledge negatively affects health care at every level. Less than one-quarter of physicians are using either full or partial Electronic Medical Records (EMRs) in their practice, although statistics indicate less than ten percent of physicians currently use their full capability. By automating all four of the basic EMR functions; i.e., 1) computerized orders for prescriptions, 2) orders for tests, 3) reporting of test results and 4) physician notes, medical practices stand to truly improve service while reducing overall costs.

"In the past year, broadband services have come significantly closer to reality for the Arizona public."



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In 2005 Governor Napolitano convened a steering committee of public and private health care stakeholders to determine and implement a strategy to achieve the vision of 100% electronic health data exchange among payers, healthcare providers, consumers of healthcare, researchers, and government agencies. The development of a statewide roadmap for e-health has involved hundreds of people, and led to the establishment of a not-for-profit organization, Arizona Health-e Connection, which will continue to accelerate the initiative. An additional study of the inherent privacy issues in electronic medical recordkeeping was recently completed by GITA under a Federal grant.

Arizona must continue to innovate in the area of IT and adopt industry-wide best practices and standards, if it is to continue to lure business to the state. Moreover, the need for education in key areas of information technology has been identified repeatedly by state agencies in their IT plans. In fact, during FY 2007 55% of agency objectives listed in the agency IT plans were concerned with staff training.

Statewide Objectives

- Promote sharing and consolidation of telecommunication networks.
- Aggregate cross-jurisdictional government needs for broadband services.
- Solicit demand through community activism to speed broadband deployment.
- Foster competition to encourage better services at lower broadband prices to under-served areas of Arizona.
- Increase State's use of E-rate subsidies to fund both Internet connectivity and network infrastructure within Arizona's schools.
- Promulgate use of electronic record keeping by medical facilities and physicians as part of improvement of health services.
- Educate and expose IT personnel and businesses to newer technology and improved IT processes.



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Statewide Performance Measures

- Total amount of Federal grant monies obtained for broadband deployment. A tentative goal of \$1M in Federal grant monies was set for FY 2006, up from the \$500K obtained in 2004. The goal for FY 2007 was to obtain Federal grant monies of approximately \$1.5 to 1.6 Million. In 2006, Arizona captured nearly \$750K due to the reduction in Federal grants for telecommunications by 50%. The target for subsequent fiscal years is to continue to increase Federal grants for telecommunications.
- Number of successful broadband infrastructure projects underway or implemented in Arizona. Successful broadband implementation was the measure of success of economic growth for FY2007. At least five broadband projects either underway or completed was the stretch goal for FY2007. Arizona achieved this goal with the ongoing broadband projects in Superior, Peoria School District in Peoria, Goodyear, Sahuarita and Copper Square in the City of Phoenix. Others will soon follow in central Pinal County and elsewhere. The target for subsequent fiscal years is an increase of at least ten broadband projects statewide each year.
- Percentage of participation of *eligible* school districts and libraries in applying for E-rate subsidies within Arizona. Once education officials have determined their eligibility for obtaining Federal Communication Commission (FCC) E-rate subsidies, the goal for participation by eligible schools in FY2007 is 80%. This goal was not reached in 2007 due to eligibility changes by the government. Federal eligibility rule changes now permit a school application every two out of five years, thus reducing the eligible schools in Arizona by nearly 50%. However, it is believed that the dollars being returned to Arizona schools and libraries have doubled over last year. The target for subsequent fiscal years is an increase in Arizona's participation in this important program.
- Number of Health Information Exchanges (HIE) developed or underway. In 2005, an e-health initiative produced a roadmap for Arizona to establish HIEs throughout the state as part of an ongoing effort to promote electronic medical records exchange. The target for FY 2008 will be to have at least one HIE under development. In future years, the target is to have at least five HIEs implemented or under development each year.

Current Initiatives Underway

Formation of Communications Infrastructure Advisory Committee: The Governor's Council on Information and Technology (GCIT) has formed the Communications Infrastructure Advisory Committee (CIAC) to advance a number of telecommunications policy recommendations from 2005



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and 2006. Since broadband deployment is both a state and local community issue, one of CIAC's goals is to provide leadership and aid to communities interested in applying for grants, subsidies and loans within Arizona. In the past, Arizona has lagged behind other states in the acquisition of federal grants, subsidies, and loans directed at broadband deployment. Efforts are underway to close this gap.

Statewide Strategic Telecommunications Plan: Community and regional telecommunication assessments have been funded by the Legislature in past years. Findings from these assessments have been incorporated into a Statewide Strategic Telecommunications Plan. The new plan enumerates priorities, identifies policy changes and highlights areas of telecommunications deficit to set the course for long-term telecommunications solutions over the next decade. The Arizona Telecommunication and Information Council (ATIC), as well as many regional business and planning councils, are key partners in the effort to develop an effective statewide telecommunication infrastructure.

Establishment of a Broadband Authority: A bill authorizing the creation of the Arizona Broadband Development Authority, along with a Broadband Infrastructure Revolving Fund is being prepared by industry stakeholders for the 2008 Legislature. This Authority will be empowered to issue bonds, grants, low cost loans, and long-term financing using monies from the fund to encourage private sector development of *middle mile* and *last mile* broadband telecom solutions.

Middle-mile includes high capacity trunk lines and associated infrastructure connecting Internet Service Providers (ISPs) to the Internet while *last-mile* covers the Internet connection between the ISP and end users. Middle-mile development has been an obstacle to rural linkage in the past due to the reluctance of telecommunication providers to spend the prolonged length of time to achieve their return on investment. Although an increasing number of companies have expressed interest in providing last-mile services in underserved or un-served rural areas, the lack of reasonably priced middle-mile connections thwarts success.

The Broadband Infrastructure Revolving Fund is envisioned to overcome this serious obstacle as it would include revenues from broadband infrastructure fees, service charges, legislatively appropriate monies, assistance agreement monies, interest and penalty payments on broadband provider loans, payment under agreements with Federal and State governments, investment interest from the fund itself and private sector grants, gifts, and appropriations. These monies would go toward the construction or acquisition of broadband infrastructure projects, broadband provider loans, assistance agreements, and administrative costs. In FY 2007, efforts continued as strategic planning and task



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groups are being established to further these objectives. It is expected that the Broadband Authority, and its associated fund, will be established by the close of FY 2008.

Right of Way Policies impacting Telecommunications. The exploration of numerous right of way access issues related to broadband and telecommunications is essential to advancement of the broadband infrastructure in the State. A task group under CIAC has been investigating changes and is recommending changes to rights of way policies. One of the key premises of these changes is that the citizen pays only once.

E-rate Subsidies: An alarming downward trend in E-Rate subsidies for Arizona schools and libraries was discovered in FY 2004. The Federal E-rate program provides 20% to 90% discounts on telecommunications services and equipment targeting schools and libraries that serve children of low-income families. The subsidies are based on the percentage of students participating in the federal school lunch program. Annual federal allocations of \$2.25 Billion from consumer phone taxes collected by the Universal Service Administrative Company (USAC), under the auspices of the FCC, is available nationwide to provide schools and libraries throughout the US with high-speed Internet and telephone services.

Recent Federal rule changes have reduced potential E-rate subsidies for Arizona schools by allowing a school district to apply for funding only two out of every five years. In addition, Arizona had been receiving less than other states due to the failure to renew the statewide carrier service contract in sufficient time for school districts to qualify for applications processed against it, as a qualified USAC-470 contract. Hence, school and library personnel were forced to issue their own '470-certified' RFPs, as required by USAC policy, compelling schools to make a hard choice between the cost of a competitive RFP and the benefits derived from such an application. In addition, once school districts qualified, many of their budgets were changed creating a problem due to the federally-required 10% to 40% matching funds. With the new eligible statewide contract award in early 2006, the cost for schools to qualify for E-rate subsidies in the future will be substantially reduced.

Arizona Telemedicine Program: The Arizona Telemedicine Program was recently invited to participate in a White House-hosted meeting, where two of its more innovative projects were discussed; namely eHealthU and UltraClinics. E-HealthU is a web portal planned to provide a variety of health-related training programs and telehealth services over the Internet. The project is using the latest in web-based technologies to expand and enhance distance-education programs and will be headquartered on the College of Medicine's Phoenix campus. E-HealthU will also provide state agencies a means to collaborate on various programs in disease prevention, public education,



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correctional telemedicine, children's health care and home-health nursing. Among other benefits, this approach will increase access to teaching and training for geographically underserved populations.

The UltraClinics concept will link medical imaging technologies with virtual group practices to provide more efficient clinic visits. Improvement in quality of health care and cost reduction is the expected outcome for this program. It will serve as the national testbed for 'rapid throughput' clinics in collaboration with the Arizona Telemedicine Program.

Arizona E-health Initiative: The Arizona Health-e Connection project, created in 2005 by Governor Napolitano, to adopt a statewide e-health infrastructure will both improve the quality and reduce the cost of health care in Arizona by ensuring health information is available at the point of care for all patients, thus reducing medical errors and avoiding duplicative medical procedures. This initiative will also improve coordination of care between hospitals, physicians, and other health professionals, further health care research and provide consumers with their own health information to encourage greater participation in their own health care decisions. By striving to control health care costs, the Arizona Health-e Connection is also key to reducing state expenditures and enhance the business environment for large and small employers. Estimates by the U.S. Department of Health and Human Services suggest that savings of nearly 10% of total health spending could be achieved through health information technology (HIT) by lowering health care administrative costs, avoiding errors in care and reducing duplicative care. This statewide initiative is consistent with President Bush's vision calling for widespread adoption of interoperable electronic health records by 2014.

A Federal grant to explore potential solutions to privacy problems in sharing health care records was awarded to GITA in June 2006. That grant, in partnership with the National Governor's Association, provided resources to assess business practices affecting legal and privacy obstacles, as part of the Arizona Health Privacy project. This assault on the costs of health care through the use of e-records will aid Arizonans in keeping medical expenses down and facilitate safety through accurate, timely, and **secure** data exchange.

In addition, GITA recently awarded \$1.5 M in Rural Health IT Adoption grants to seven different communities across the state. These grants are intended to facilitate adoption of health IT by rural health care providers in an attempt to improve both quality and efficiency of their health care delivery. Building on the success of the Arizona Health-e project, AHCCCS recently received \$12M in Federal grant monies to modernize their medical delivery system through development of a secure web-based electronic health records system.



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IT Training Initiative: The State Procurement Office recently awarded an IT Training contract providing a list of ten to fifteen vendors experienced in IT training available to state agencies and their staffing to update them on information technology and future trends.

GOAL 4: MODERNIZED STATE IT INFRASTRUCTURE: *enhancing agency efficiency and effectiveness through exploitation of enterprise-wide IT solutions.*

Arizona's IT infrastructure includes its hardware (mainframes, servers and attached platforms), interconnecting networks, all associated software (operating systems, applications, both custom and off-the-shelf) and the databases interacting with clients (both web and local). Agencies have been upgrading their hardware infrastructure as technology has matured in the last few decades. The concept of an enterprise architecture (EA) was developed in 2003 as a pragmatic roadmap for assessment of digital innovation opportunities for Arizona. It has evolved into a suite of standards to provide a common strategic direction and structure for agencies promoting interoperability, flexibility, scalability and open-standards based technologies. Since that time, giant steps have been taken to promote interagency collaboration and sharing of data within Arizona executive agencies. With new concerns regarding IT security, a change in direction towards more modular service interfaces is transpiring. The effectiveness of a Service-Oriented Architecture (SOA) has been proven in industry and now will aid the state of Arizona in moving towards a more efficient infrastructure.

Migration towards a Service-Oriented Architecture across the enterprise will not only promote better information sharing but improve overall cost effectiveness through software reuse. The ease of implementation of a SOA makes it feasible even within those legacy systems which are well-documented. Since this is a 'break and fix' strategy rather than an 'add-on effort' as in adding a new application, it holds promise in quickly streamlining systems. A majority of state agency IT plans mentioned improved efficiency as an IT goal for FY 2007, in addition to their goals for staying ahead of the technology curve.

Statewide Objectives

- Leverage IT resources across agencies.
- Enable interagency deployment of customer services.

Arizona's Enterprise Architecture provides the "technology building code" necessary for interoperable, enterprise-wide information technology solutions.



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- Decrease the complexity and improve the connectivity of the State's IT environment by streamlining agency business processes and services.

Statewide Performance Measures

- Promote open policies and standards for hardware, software, and associated infrastructure to drive the state infrastructure toward an inter-communicating, interoperable enterprise architecture. Statewide IT standards in the areas of management practices, quality assurance, web development, enterprise architecture and security have been developed and are published on the GITA website. Overall adherence of major state agencies to the Enterprise Architecture standards was just over 92% in FY 2007, exceeding our target of 80%. The goal for FY 2008 and all years thereafter is an overall agency compliance to Enterprise Architecture standards of at least 95%.
- Encourage agencies to implement target technologies when upgrading infrastructure. The ultimate goal is to have at least 95 percent of agencies using both the Target Technology standard and the questionnaire. Due to limited funding and hardware upgrade refresh cycles generally extending over three years, this goal is far from being met. Almost 43% of the major agencies were using published Target Technologies within the State in FY 2007. The target for use of technology standards is to reach at least 50% by FY 2008 and to experience a ten percent or more increase in subsequent years.
- Ensure all IT organizations follow the Enterprise Architecture through the Project Investment Justification (PIJ) process. The goal is to assess 100 percent of incoming PIJs to comply with the Enterprise Architecture standard. Although all incoming IT projects are assessed to compliance with EA standards, overall adherence to the domains is increasing very slowly due to limited IT funding. In FY 2007, all *approved* PIJs complied with the EA standards.
- Streamline agency business processes. The goal is to implement SOA trial projects through either software reuse and/or business process reengineering at two agencies in FY 2008. The target in subsequent years is to increase use of SOA at state agencies by at least 100% each year.

"... large-scale and high-risk projects are monitored toward successful implementation using lifecycle analysis as well as quality assurance methodologies and industry best practices."

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Current Initiatives Underway

Technology Building Code: Arizona's Enterprise Architecture provides a "technology building code" necessary for interoperable enterprise information technology solutions. An enterprise architecture lays out a broad "city plan" view of guiding principles to help move the organization from its current state to the desired future state. FY 2004 saw the initial development of policies and standards by GITA, in partnership with the Arizona CIO Council, to promote communication and interoperations between disparate agency IT systems as the first step toward providing more efficient, responsive government.

Policy documents are published online at www.azgita.gov/policies_standards/ defining the overall architecture program with emphasis on the five domains of network, platform, software, data and security. In today's heightened security environment, a renewed emphasis on software applications, productivity tools, database access, and especially data exchanges is now the primary focus. The application strategy directly supports the business strategy, while business strategic requirements for flexibility, scalability, security, integrity, availability, responsiveness and accessibility are met by the infrastructure. The architecture helps to demonstrate how these strategies are interconnected in a coherent overall business framework.

A fresh look at service delivery architecture models is also underway, whereby agencies are encouraged to consider the web services behind a Service-Oriented Architecture (SOA) as a viable approach toward reaching an ultimate statewide Enterprise Architecture. The next step of SOA will include reuse of common services and repositories throughout state agencies and with possible use of an Enterprise Service Bus. With the implementation of SOA using the AAYS web portal and proliferation of agency websites and services, business processes and services will ultimately be able to cross agency application boundaries and significantly improve service delivery. A monthly series of SOA vendor sessions were held with the CIO Council to cultivate broad exposure to industry's current offerings. Now a portfolio of potential sample projects is being identified among the major agencies to establish initial efforts for a pilot project.

Policies, Standards and Procedures (PSPs): The State's strategic perspectives are reflected in the statewide IT policies and standards that, in turn, provide a framework for individual agencies to establish their own policies, standards, and procedures. Development and updating of statewide policies, standards, and procedures continues, with emphasis this year on a new privacy policy reflecting new legislation in this area. Policies, Standards, and Procedures (PSPs) were designed to improve the timeliness, quality, and efficiency of State government IT systems as well as provide

A fresh look at service delivery architecture models is underway



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direction to agencies on IT architectures, infrastructure, strategies, usage, and operations. In addition, many of the PSPs address IT security concerns in one form or another.

GOAL 5: COST SAVINGS THROUGH ENHANCED PROJECT MANAGEMENT:

Heightening productivity and reducing risk by providing exposure and training in best practice IT methodologies will save IT dollars in the long term.

More consistent project management practices not only improve productivity but ensure efficiencies necessary to preserve quality of service in the face of limited budgets. Risks of exceeding schedule and/or costs as well as developing the desired system are reduced by following state-of-the-art methodologies. Agencies, both small and large, are being exposed to new IT methodologies and concepts geared to better manage IT as a key resource. The development of effective IT systems and timely procurement of quality IT products and services is also a measure of movement toward more efficient government in Arizona.

Resource and information sharing is a key ingredient in achieving overall interagency efficiencies. The transition to a statewide enterprise architecture is accelerated by an online technology table supporting agencies in their assessment of new IT purchases at www.azgita.gov/enterprise_architecture/, which includes both target platforms and target software. Agencies are strongly encouraged to use common products, not only for volume cost savings, but to enhance interoperability and diminish overall maintenance costs. Communities-of-interest are in initial stages of common data element identification and formatting for future information sharing. The 2-1-1 project has been instrumental in initiation of this paramount process.

Agencies are strongly encouraged to use common IT products, not only for volume cost savings but to permit interoperability and reduce overall training and maintenance costs.

Statewide Objectives

- Integrate the IT and business planning processes to ensure better alignment of IT with business goals.
- Ensure IT project success by providing increased project oversight for high-risk projects.
- Improve the project management process by training and certifying qualified state employees in current best practices in project management methodology.
- Advance use of quality assurance and project management methodologies statewide.



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Statewide Performance Measures

- Move information technology planning toward integration with business planning. Although the ultimate goal is to eventually have 100 percent of agencies' business planning in alignment with IT planning, in view of the extensive turnover of State IT staff, this goal may be unrealistic. In FY 2007 47 percent of major agency IT plans indicated integration with internal business planning. The target for FY 2008 is to have at least 55 percent of agency IT planning integrated with business planning with an increase of at least five percent in each subsequent year leveling off at 90%.
- Increase use of planning and certified project managers for IT projects. The goal is to have 100 percent of executive agencies using the IT planning tool, PARIS (Planning Application for Reporting IT Strategy) on the GITA website. In FY 2007, 100% of all executive agencies updated their IT plans. In addition, classes in effective IT project management are being planned by GITA and Arizona Government University (AZGU) to promote state-certification in project management for desiring agencies. The target for FY 2008 is to have at least twenty certified IT project managers available for critical projects at Group 1 agencies with an increase of ten certified project managers each year thereafter.
- Accurate tracking and maintenance of statewide IT inventory. The goal is for all executive branch agencies to use the online IT inventory tool, ISIS (Information Services Inventory System) on the GITA website. In FY 2007, 100% of executive state agencies updated their inventory using the ISIS online tool. In addition, a reduction in the use of 'other' as a category has improved the usefulness of database searches using the tool. The intent is to propagate new products, especially software items, in the database thus eliminating the need for the 'other' category. The target for FY 2008 and subsequent years is to have 100% of state executive agencies updating their IT inventory.

Project management training increases professionalism, ensures that benefits are realized and improves the likelihood that projects are delivered on time and within budget.

Current Initiatives Underway

Project Investment Justifications: Agencies are required to submit a Project Investment Justification (PIJ) for all IT projects expending over \$25,000. The PIJ is a business case supporting the benefits and plans for a specific IT project. Projects under \$1 million dollars are reviewed by the GITA director, while those \$1 million and over are reviewed and approved through an independent IT Authorization Committee (ITAC). Enterprise architecture compliance is a key part of the PIJ as are a detailed schedule and cost projection. Throughout FY 2007 as many as 167 projects at once, encompassing nearly half a billion dollars in total costs, were being monitored. Of the over 1200 IT



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projects submitted and approved during GITA's existence, 1123 or 93% were successfully completed. The remaining projects are either still underway or on hold for a variety of reasons.

Strategic IT Planning: All state agencies are required to perform annual IT strategic planning to ensure effective use of their IT resources. As such, an IT plan is required by state statute to be submitted by September 1st of each year. As in years past, each IT plan identified the agency's business goals and associated IT goals along with objectives and performance measures to be met in the next three years. Changes to this philosophy were introduced last year to provide a more measurable effectiveness of the statewide standards. A revised focus by GITA on the major IT developers and users and those agencies possessing critical processes (Group 1 as listed in Appendix A) was introduced to provide a clearer picture of statewide gaps and issues, especially in the area of IT security.

A self-assessment by agencies of their compliance level to specific security, enterprise architecture and quality assurance standards over the current and next three years revealed several areas in need of statewide change and common funding. These areas included the need for a more realistic implementation of encryption standards, better testing of backups, and improved IT security awareness training.

Project Oversight: IT projects are monitored and mentored toward successful implementation statewide by GITA. Additionally, large-scale and high-risk projects are given special attention encouraging use of successful implementation methodologies including life-cycle analysis and other best practices. Outstanding issues are reviewed by both GITA and ITAC with timely recommendations for improvements or corrections being provided. Focal points of the initial and periodic review include project scope, management, roles, responsibilities, reasonable schedules, change control, cost containment, and effective utilization of resources. These reviews help ensure the projects are managed in an appropriate manner and that sound business practices are being followed from both IT and financial perspectives. Finally, agencies are encouraged to integrate quality assurance (QA) into project development either by designating qualified staff or contracting for third party services.

The top ten IT projects currently active at state agencies as of mid-April are listed in order of overall cost in Appendix B. In addition, Appendix C summarizes the overall IT projects by development cost within state agencies. State agencies rely on mission-critical legacy software systems, many of which are twenty or more years old. These systems will require replacement or major upgrades in the next five to seven years at an estimated cost of between \$350 - \$400 million. GITA is in the



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process of identifying and prioritizing system replacements based on age, condition, criticality and life and safety concerns.

Project Management: Project management training increases professionalism, ensures that benefits are realized, and improves the likelihood that projects are delivered on time and within budget. To that end, education of State agencies concerning the benefits of modern project management methods and techniques, including those developed by the Project Management Institute (PMI) is underway. Both Departments of Transportation and Revenue have internal training programs already in place for their project managers. In addition, GITA held a highly attended Project Management Symposium in October 2006. As a follow-up to the popular forum, GITA has initiated a training program based on PMI but customized to state agency project management parameters. This AZGU-conducted program will certify agency-nominated state employees as project managers after completion of 35 hours of training and passing a comprehensive test. In the future, high risk projects will be required to use state-certified project managers.

Quality in Project Management: GITA will continue to provide thought leadership and focus to the State's quality assurance direction. Raising the awareness of the benefits of a robust quality and project management program will provide government with a perspective on best practices and the current state of IT. Examples of successful QA programs and lessons learned from other agency's implementations will be used to leverage and supplement individual agency initiatives.

SUMMARY OF EXECUTIVE AGENCY IT PLANS

Although in past years, agency IT plans have increased in both levels of maturity and business-orientation, this year reflected a substantial change in overall advancement. Recognition of the power of the Internet and the evolving technology surrounding it was at the forefront in past years, but this year IT security and the use of IT planning as a business management tool are acknowledged.

Five major areas of emphasis were mentioned this year:

- Recognition of the evolving technology and the way business is being conducted.
- A need for specialized staff and enhancement of their skills.
- A provision for more information and services online to better serve stakeholders, their customers, and the general public.
- Improvement and protection of the IT infrastructure along with software, hardware and IT security upgrades.
- Enhanced automation yet, at the same time, frustration due to rapid technology changes and costliness of retention and ongoing training of IT staff.

Distinguishing between Goals & Objectives

The Governor's Office for Strategic Planning and Budgeting (OSPB) defines strategic planning based upon mission, vision, goals, and objectives. GITA uses this methodology in strategic IT planning, and is in turn reflected by the executive agencies in their IT plans.

While *mission* addresses the organization's identity and, as such, is all encompassing and rarely changes, *vision* reflects the agency's compelling conceptual image of its desired future. *Mission* is basically the ultimate rationale for the existence of the agency, board or commission while *vision* represents a global, continual purpose for the organization.

By contrast, an organization's *goals* provide a framework for more detailed levels of strategic planning. *Goals* are more specific than the *mission* statement, yet general enough to stimulate creativity and innovation. *Goals* describe the desired "to-be" state of the agency and are the planning targets. An agency's strategic issues may lead to strategic planning goals. For example, a strategic

State government can bypass many business inefficiencies by implementing strong quality assurance practices.



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issue may be difficulty in dealing with rapid IT technology changes, while the *goal* might be an IT training program.

Objectives reflect the specific and measurable activities necessary for accomplishing agency *goals*. As opposed to goals, objectives are specific, quantifiable and time-bound. The key word is quantifiable, since performance measures are typically associated with objectives in order to assess progress in achieving the overall goals. Objectives represent activities while goals are desired states.

SUMMARY OF EXECUTIVE AGENCY IT TRENDS

The ***use and influence of the Internet*** through more sophisticated customer expectations seems to have touched almost all agencies. Last year, agencies' IT plans were focused on IT training and IT staff retention while this year customer-service orientation predominates. Although 66 percent have goals reflecting more efficient operations, 73 percent of agencies have goals dealing with customer service. In addition, some form of website improvement was mentioned in 75 percent of agency IT plans.

A promising trend emerged as State agencies referred to ***collaboration and working across boundaries*** to achieve shared services and also improve government efficiency through interoperability. Communications are also a key component in this equation. The growth of wireless and broadband has jump-started many new possibilities in this growing area. The use of statewide enterprise architecture targets and the new service-oriented architecture theme will also make collaboration more successful in the long run.

Improvement to agencies' infrastructures have been prominently called out beginning in FY 2003 but seems to fall further down the list each year as these changes have been implemented. Now these goals are addressed in terms of bandwidth expansion, telecommunication improvements for wireless, PDAs, and remote telecommuting capabilities. The ***application of evolving technology to the rural regions of Arizona*** has also come to the forefront. Agencies have incorporated new ways of doing business through the use of remote communications and laptops, making jobs more rewarding and staff more effective. The acceleration of change is apparent, especially in the arena of producing an economy increasingly based on knowledge. Use of new WAN technologies can enable enterprises to use the WAN more efficiently and defer WAN bandwidth upgrades by more than three years.

... Goals are more specific than the mission and address the desired 'to be' state of the agency whereas objectives are activity-oriented and reflect targets for achieving goals...



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As in past years, Internet delivery of information and services has been an important theme. It was the most often mentioned trend in both FY 2004 and FY 2005 and now again in FY 2007. Key trends across state agencies this year include the following:

- 72 percent of agencies see the Internet as a positive trend in delivering information and services to customers.
- 67 percent of agencies have objectives for new system development.
- 60 percent of agencies have goals to improve their connectivity.
- 40 percent of agencies consider IT security as a positive influence for improving their environments.

During the planning process, agencies are asked to list any trends that they foresee impacting their IT program's ability to support the business of the agency. The top IT trend categories for the last four years have been slowly evolving from 'use of the Internet' and 'remote connectivity' to 'evolving technology' and the '**recognition of a growing need for collaboration between agencies and with customers**'. Gartner stated recently that "collaboration and mobility will be key to driving productivity, but ironically, because these are soft benefits or reside outside the IT department, expenditures in this area have been slow in coming."

Evolving Technology

The trend most often mentioned in past years dealt with the use of the Internet to provide information and services. However, in the last two years, the focus seems to have moved beyond the Internet alone to evolving technology. In general, this is seen by GITA as a broadened IT awareness on the part of the State agencies that the Internet is only part of a changing paradigm. Agencies seem to be recognizing that more than infrastructure improvements are required to truly incorporate IT into the business process. This trend is part of a growing awareness of the need to re-engineer business processes to better incorporate information technology.

A common thread of document imaging to capture records retention issues was also noted. IT as a management tool has also crept into agency goals, a new theme altogether. New systems development and connectivity were popular objectives this year, perhaps reflecting innovation and making better use the capabilities of IT. One agency stated "business process owners are increasingly dependent upon IT to refine and improve their efficiencies and effectiveness. IT work now focuses heavily on soft skills...high levels of creativity, fusion of industry knowledge and business process expertise. Impact to the existing legacy staff has been dramatic."

... Sharing data and services is seen as the first step in moving towards operating the state as a true enterprise...

Enhanced Staff & Training Needs

Enhanced staffing and training needs was again among trends across state agencies this year although not as strong as last year. Budget concerns tied this year with staffing and training as issues for agencies, especially smaller Group 2 agencies, as shown on the chart on next page. Not only smaller agencies, boards and commissions are in need of higher skilled IT staff but also larger agencies are realizing that increasingly specialized and systems engineering skills are needed rather than their previous focus on hard skills such as mainframe and operations. More personal interaction with end-users, cross discipline, complex procedures, and an understanding of highly integrated systems is required of today's IT technologists. Increasingly, the question is "Do we have the right-skilled people available to implement these major projects?" Strategies need to include both developments plans for key people and sourcing methodology that ensures that the right external resources are selected and managed effectively. In particular, experienced project managers are a scarce resource today.

Difference in Focus by GITA

In the key areas of Project Investment Justification and project oversight, GITA is increasing its focus on higher risk projects as defined by project size and scope, and critical functionality. Hence, agencies with projects in these categories were required to update their IT plans with performance measures, while other agencies responded to an online checklist covering pre-formatted trends, issues, goals and objectives with an emphasis on IT security. Appendix A lists the Arizona executive agencies broken into two categories; namely, Group 1 entailing agencies with major risk projects and Group 2 composed of all others.

With the new focus on major risk, all statistics reflect the thirty Group 1 agencies. As in the past, major agencies set goals for the next three years in their IT plans. In addition, the process still includes identification of one or more objectives associated with each IT goal. Again, objectives are defined as activities necessary to achieve goals and are required to be measurable.

The remaining sixty-three smaller boards, commissions, and agencies submitted a streamlined IT plan, no performance measures were requested at this time. The streamlined IT plan included a pull-down list of possible trends, issues, goals and objectives. Each of the smaller agencies had the option of writing in additional trends, issues, goals or objectives as well.

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Trend Summarization

Citizens embracing new technologies are compelling agencies to improve their websites, a continuing trend across the state. The following table summarizes the top nine most frequently mentioned categories within state agencies across the last three fiscal years. The only clear trend depicted over the past three years is a rising focus on IT security.

Table 1 Top IT Trends identified by agencies in FY 2005 through FY 2007

Trend Category	FY 2005	FY 2006	FY 2007
Use of Internet to provide information and services	60%	48%	72%
Enhanced staff & training needs	58	76	63
Remote connectivity to agency network	13	67	60
IT security	22	33	40
Evolving technology	28	52	33
Citizens embracing new technologies	24	27	30
Sharing data with other agencies	22	6	27
Infrastructure improvement*	20	46	25
Productivity*	n/a	47	10
Note: Infrastructure improvement and productivity were included to show the change from 2006 to 2007.			

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SUMMARY OF EXECUTIVE AGENCY IT ISSUES

Each year, state agencies list issues having an adverse impact on their IT program's ability to strengthen and support the business of the agency. These issues, as identified by each agency, are analyzed and categorized into five general concerns. Not surprisingly, many of the same issues emerged as in previous years. Both a lack of funding and a lack of IT staff appear among the top two issues mentioned overall. Interestingly, both new technology and integration of business and IT planning follow closely behind, emphasizing the nature of the skills that are in short supply. The top IT issue categories and response percentages identified by state agencies across the past three fiscal years are listed in the following table:

Table 2 Top Agency IT Issues over FY2005 through FY 2007

Issue Category	FY 2005	FY 2006	FY 2007
Lack of funding	62%	42%	63%
Lack of IT staff	58	76	63
Integration of business & IT Planning	n/a	n/a	47
New technology	40	36	47
IT security concerns	40	48	31

Although inadequate IT funding was again most often identified as having a negative impact on being able to support the agencies' mission for all fiscal years. Lack of qualified IT staff has been among the top four issues for the last three years but slipped a bit this year, perhaps due to raises for state employees in late FY 2006. This category was often expressed in conjunction with problems in staff retention, recruiting qualified IT staff, and IT training. Several medium and small agencies mentioned that they did not even have full-time positions for information technology. The fact that this issue has been prominent for so long suggests a need for some sort of shared pool of personnel for the smaller agencies in this area.

A need for adequate IT security was identified by almost one third of agencies, although this is a decrease from responses in past years. For some agencies, this deficiency means developing and implementing business continuity and disaster recovery while others need to address specific security standards such as backup testing, written procedures, user authentication, awareness training and data exchanges.

The annual online Technology Infrastructure and Standards Assessment (TISA) questionnaire answered by agencies appears to be raising overall awareness of the important role of IT security in



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today's Internet and IT world. TISA guidelines now require major agencies to assess their current capabilities by percentage of compliance with each statewide standard. Since more than half of the statewide standards deal with security and/or privacy this area is a primary focus, especially for the Group 2 agencies which receive an annual security awareness training class from GITA.

AGENCY IT GOALS & OBJECTIVES

Summary of Most Frequently Cited Agency Objectives in FY 2007:

- 75% of agencies have objectives referring to website improvement
- 67% of agencies record objectives concerning development of new systems
- 64% of agencies have objectives dealing with upgrading IT equipment
- 60% list objectives related to connectivity
- 55% of objectives are concerned with staff training

Recognition of need for Strategic IT planning

While in FY 2006, agency IT plans became increasingly customer-focused; FY 2007 brought even greater improvements in the arena of customer concerns and aligning technology and business goals. In particular, agencies grew better at articulating their business reasons for IT.

New system development and re-engineering of older systems remained important from FY 2006 to FY 2007 with more than two-thirds of the major agencies identifying objectives dealing with system development. The top three agency **goals** cited in FY 2007 were customer service at 73%, efficiency at 66%, and data sharing/data quality and/or data integrity at 61%. These goals are being achieved through the **objectives** enumerated above; i.e., development of new systems, improving websites, upgrading IT equipment, and connectivity. In addition, the training in IT staff factors into the overall equation more than half of the time. These objectives underscore nicely the importance of reaching customers through the Internet and the maturity of systems development in data and service sharing.

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The following table shows the top goal categories and percentage of agencies with at least one goal in those categories:

Table 3 Top IT Goals listed by agencies FY 2005 through FY 2007

Goal Category	FY 2005	FY 2006	FY 2007
Improve customer service	20%	58%	73%
Improve overall efficiency	27	59	66
Data sharing/quality/ integrity	13	18	61
Communications	39	12	40
Enhance IT security	17	33	37
Enterprise architecture aligned with business	n/a	9	34
Enhance IT infrastructure	19	46	25

Some of the most popular goal categories have changed dramatically over the past few years, while others simply increased or decreased in prominence. Three clear trends stand out in the agencies' goals; namely, improved customer service, improved focus on overall efficiency and more emphasis on data sharing. GITA views all of these trends as very positive. The statewide goal of government accessibility was derived in part from agencies' continuing convergence toward better customer service. The goal of improving overall agency efficiency seems to be on a steady upward trend, possibly a result of the Governor's focus and the fact that it has been a statewide goal for the past three years. Data sharing is now mentioned by over half of the agencies, an exciting change and one long overdue in the state. The ability to share data across agencies portends higher levels of IT maturity.

The goal category dealing with communications is seeing resurgence from last year. In addition, IT security continues its skyward trend undoubtedly due to increasing identity theft and privacy concerns. Alignment of Enterprise architecture with the business process is a relatively new goal but an important one. Surprisingly, the focus on enhancement of agency IT infrastructure dropped dramatically this year to almost its previous FY 2005 level.

Overall these IT goals reflect very desirable movement towards a statewide integrated architecture better serving the public.



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AGENCY IT PLAN SYNOPSIS

As a national leader in information technology, Arizona was one of the first states to create a state chief information officer. Arizona sets the standard for best practices in government information technology planning and has received multiple awards for its advanced thinking. The State's practices have become a model of efficiency and accountability. The benefits of these efforts have been felt in the State in the form of improved customer service, increased accessibility to State government, and greater access to information technology. National recognition has been achieved for Arizona's IT accomplishments including ongoing awards from the Center for Digital Government in Information Technology. For the past two years, Arizona has sustained a strong fifth place among the forty or so states competing for these awards. In addition, the state's web portal was a Best in the Web finalist in 2006.

Building on the foundation laid by the last seven years of planning and oversight, Arizona is focusing on streamlining government efficiency through e-government initiatives. IT planning and coordination is already serving as the cornerstone of Arizona's homeland security and business continuity efforts. The new strategic direction in IT planning should make the process more objective and measurable in the future thus facilitating progress.

Agencies are asked to incorporate goals and objectives set forth in this Statewide Strategic IT Plan into the development of their own business and IT plans. Although the direction of IT planning has been modified, agencies are encouraged to carry on the established process of IT planning started six years ago by GITA. These collaborative efforts will ensure that Arizona sets the standard for excellence in the delivery of government services to its people, enabled by strong processes and stronger information technology practices.

Based upon review of agencies' IT plans, there seems to be a growing recognition of the value of shared services moving them to collaboration and working across boundaries that will ultimately improve overall efficiencies. Communications fits into this equation as a key component. The growth of wireless and broadband has jump-started many new possibilities in this fertile area. The use of statewide enterprise architecture targets will make these attempts more successful in the long run.

Recognition of the **power of evolving technology and the influence of the Internet** seems to have affected almost all agencies. In the past, when agencies' plans were focused on business issues, they were predominantly customer-service oriented; however, this year the business issues seemed to be broader incorporating the three goals of customer service, improving agency efficiencies as well as data sharing.

"...The most important development shown in IT plans over the last two years is the growing awareness, on the part of the agencies, of the power of IT as a tool."



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In summary, information technology has moved from the sole domain of large firms to an integral part of almost every business in Arizona. Access to information will be at the heart of economic development throughout rural Arizona. The importance of bringing information technology to rural Arizona has been recognized. Not only is more information about services and related links being provided to the public but the speed and power of the Internet is also driving more autonomy to the website.

FINDINGS FROM AGENCY IT PLANS

After careful review of the state agency's IT plans, the following findings highlight items that need to be addressed as part of their annual IT planning process.

- Although multi-agency integration of services is still not addressed directly in agency IT plans, these kinds of IT projects have the largest potential for providing enhanced services to the public at the same time as reducing the costs and time to provide those services. Elimination of individual agency perspectives within government thinking is essential to efficient operations as an enterprise.
- Re-engineering of business processes will accomplish more to truly incorporate IT in the business process than mere infrastructure improvement. This trend is based on the ever-widening number of state agencies mentioning re-engineering of their business processes.
- Growing use of new technologies by the Arizonans is viewed as positive by most agencies. These agencies plan to take advantage of this trend by offering more Internet services. Many state agencies acknowledge that they are being driven by expanding Internet maturity and heightened expectations of their customers.
- Inadequate IT funding was most often identified as having a negative impact on being able to support agencies' missions over all fiscal years. However, this year differs from years past in that there is recognition on the part of agencies that funding will never be sufficient to do all that is desired and that collaboration and data sharing may provide common answers.
- Hiring and retention of qualified IT staff has been a prominent issue for the past five years on the part of both larger and small agencies. This year, for the larger agencies in particular, improvements in salary were addressed; now staff education is needed. This issue also emphasizes a need for some sort of shared pool of IT personnel for smaller agencies, boards and commissions.

- Consideration of shared IT consulting services for the smaller agencies would clearly be in the best interests of the state to improve service delivery as well as the efficiency, security and effectiveness of many of the boards and commissions.

RECOMMENDATIONS BASED ON AGENCY IT PLANS

These recommendations are meant to guide future IT planning efforts on the part of all executive agencies, boards and commissions.

Identification of risks, especially technology-related risks, to delivering strategic outcomes is needed now that agencies are integrating their IT planning with their business planning processes. Addressing risk management is the next logical step following strategic planning since many strategies assume there is only one possible future environment. Robust strategies explicitly spell out the dangers that could be encountered including risks with causes outside the IT organization, usually in the business organization including the use of non-standard IT components, poor data quality, architectural inefficiencies, and poor execution. In addition, failures within the IT organization that may adversely affect customers include information security issues, ineffective vendor management and inability to access necessary skills.

Agencies must continue to explore ways to integrate services and share data to better serve the public. A statewide standard for an enterprise IT architecture to promote consolidation of data and sharing of services has been in place in Arizona for four years. Additionally, the State web portal has been established and provides opportunities to expand portal services among smaller boards and commissions. Agencies should consider the use of the Internet and e-government to improve more of their services.

State decision makers and financial planners need to recognize and respond to the clearly inadequate salary structure for State IT personnel. Agencies have indicated each year for the past four years, the lack of highly qualified IT personnel to manage the State's multi-million dollar IT development projects. It is pennywise and pound-foolish to believe that the State agencies can effectively manage the State's IT agenda without adequate staff to carry out these functions.

Appendix A

AGENCIES BY GROUP

Group 1 Agencies

Administration, Arizona Department of
Agriculture, Arizona Department of
Arizona Health Care Cost Containment System
Attorney General, Arizona Office of the

Corporation Commission, Arizona
Corrections, Arizona Department of

Economic Security, Arizona Department of
Education, Arizona Department of
Emergency and Military Affairs, Arizona Department of
Environmental Quality, Arizona Department of

Game & Fish Department, Arizona
Gaming, Arizona Department of
Governor, Office of the

Health Services, Arizona Department of
Industrial Commission, Arizona
Juvenile Corrections, Arizona Department of

Land, Arizona Department of
Liquor Licenses and Control, Arizona Department of
Lottery, Arizona

Parks, Arizona State
Public Safety, Arizona Department of
Radiation Regulatory Agency
Revenue, Arizona Department of
Registrar of Contractors, Arizona
Retirement System, Arizona State

Secretary of State, Arizona
Tourism Office, Arizona
Transportation, Arizona Department of
Veterans' Services, Arizona Department of
Water Resources, Arizona Department of



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Group 2 Agencies

Accountancy Board, Arizona
Acupuncture Examiners Board
Administrative Hearings, Office of
Appraisal, Arizona Board of
Arts, Arizona Commission on the
Auto Theft Authority, Arizona

Barbers, Arizona Board of
Behavioral Health Examiners, Arizona
Biomedical Research Commission
Building, Life, & Fire Safety, Arizona Department of

Charter Schools, Arizona State Board for
Chiropractic Examiners, Arizona Board of
Citizens Clean Election Commission
Commerce, Arizona Department of
Cosmetology, Arizona Board of
Criminal Justice Commission, Arizona

Deaf and Blind, Arizona School for the
Deaf and Hard of Hearing, Arizona Commission for the
Dental Examiners, Arizona Board of
Dispensing Opticians Board

Equalization, Arizona Board of
Executive Clemency, Arizona Board of
Exposition and State Fair, Arizona

Financial Institutions Department, Arizona
Funeral Directors & Embalmers Board

Geological Survey, Arizona
Government Information Technology Agency, Arizona

Historical Society, Arizona
Homeopathic Medical Examiners Board
Housing, Department of

Indian Affairs, Arizona Commission of
Insurance, Arizona Department of

Medical Board, Arizona

Group 2 Agencies (Cont'd)

Mine Inspector

Mines & Mineral Resources

Naturopathic Physicians Examiners Board

Navigable Stream Adjudication Commission

Nursing, Arizona Board of

Nursing Care Examiners Board

Occupational Therapy Examiners Board

Optometry, Arizona Board of

Osteopathic Examiners, Arizona Board of

Personnel Board

Pharmacy Board, Arizona

Physical Therapy Examiners Board

Pioneers Home, Arizona

Podiatry Examiners Board

Postsecondary Education

Postsecondary Education, Private

Psychologist Examiners Board

Racing, Arizona Department of

Real Estate, Arizona Department of

Regents, Arizona Board of

Residential Utility Consumers Office

Respiratory Care Examiners Board

School Facilities Board

Structural Pest Control Commission, Arizona

Tax Appeals Board, Arizona

Technical Registration, Arizona Board of

Treasurer, Arizona State

Veterinary Medical Examiners Board, Arizona

Water Infrastructure Finance Authority

Weights and Measures, Arizona Department of

Appendix B

TOP TEN AGENCY IT PROJECTS AS OF APRIL 2007

This appendix enumerates the top ten strategic IT projects at Arizona executive agencies. The projects are listed in order of projected development costs with a brief description of the type of project, its benefit to the state, past accomplishments and current status.

1. RV01016 – BRITS, Business Reengineering/Integrated Tax Systems - \$145M

Overview - The Department of Revenue contracted with a vendor in 2003 to replace its legacy systems with a comprehensive integrated revenue processing, collection, accounting and reporting system. The development and operations cost of the project is uniquely funded through a 'gain sharing' arrangement, whereby the vendor finances system development and implementation. Payment for the system will come in the form of allocating a percentage of increased tax collections to be split 85% to the vendor/ 15% to State until the complete system is fully paid. Although originally estimated at \$124M plus interest; an 18 month extension was recently approved to extend the contract allowing time for training of Revenue personnel in maintenance and operation of the new system and completion of development of the fourth and final application.



Status - The first tax application, Transaction Privilege Tax, was successfully implemented in January, 2004. Implementation of Withholding tax was completed in June, 2004, while the larger corporate tax system was completed in July 2006. Implementation of individual income tax system is to be completed in early 2008. Total benefits realized through 2006 are over \$230M.

2. RT01001 – PERIS, Public Employees Retirement Information System - \$30M

Overview - In 2001, the Arizona State Retirement System (ASRS) began the process of implementing a comprehensive plan to upgrade its legacy systems and move completely off of its Unisys platform to an ORACLE-based solution. In addition to eliminating data redundancy inherent



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in maintaining multiple systems, ASRS sought to enhance data integrity, improve responsiveness to members and streamline operational processing while enabling the flexibility and growth potential to better support the state's growing retirement population.

Status - ASRS is well on their way to achieving their original objectives, having increased productivity, timeliness and quality with the projects that have been completed to date. ASRS is currently using a Unified Process methodology to manage multiple projects still underway. To date, twelve applications have been completed, three of which are in their second phase, while four others are in various stages of development and implementation. Target date for completion of all applications is July 2008. ASRS plans to move off the Unisys platform as soon as conversion efforts will allow.

3. RT01002 – ASRS Imaging System - \$9M

Overview - In 2001, ASRS began a project to implement an enterprise-wide Electronic Document Imaging Management System (EDIMS), along with Document Conversion of existing microfilm, fiche and paper records, and links to an Automated Workflow process to be used throughout the agency. For the past 18 months, the primary focus of this project has been to complete the Back File conversion process, migrating all member file images on-line, in order to improve productivity and service levels, while reducing risk in a disaster recovery situation.



Status – As of January 2007, the last of the member file images was released into the ASRS environment. In total, over 18 million microfilm, fiche and paper document images have been created. While final costs have yet to be tallied, the project is expected to come in under budget, and has already had a significant impact on ASRS' ability to service their membership in a timely manner.

4. DT05028 – Intelligent Transportation System - \$7M

Overview – The first phase of this Arizona Department of Transportation (ADOT) project was completed in June of 2005. The ITS employs closed circuit television cameras, electronic variable message signs, detectors, ramp meters, Traffic Operation Center monitoring, the AZ511 web site, and the 5-1-1 phone system as needed in both Urban and Rural areas around the State. The continuation of this multi-year project will allow ADOT to



install this technology on additional miles of freeways and roadways, continuing to expand and update the system to improve traffic flow and emergency response, and to enhance communication of adverse conditions to the public.

Status – Design and construction must complete before installation of system components at various locations throughout the state can be fully integrated. Although priorities and funding estimates have changed, the project is still scheduled to complete by the end of FY 2010.

5. PS06004 – AZAFIS Upgrade, Automated Fingerprint Identification System - \$7M

Overview - The Fingerprint Identification Bureau of Arizona's Department of Public Safety (DPS) operates the Arizona Automated Fingerprint Identification System (AZAFIS) to support DPS and other law enforcement agencies throughout the State. Fingerprints are collected from numerous sources and stored in AZAFIS databases, which can then be searched and transmitted electronically as needed for various public safety functions.

Since the system was initially implemented in 1995 and last upgraded in 2001, a major upgrade is needed at this time. The new system will provide faster and more accurate search and identification capabilities and can be expected to improve law enforcement efforts, criminal investigations and public safety in Arizona once implemented.

Status – The AZAFIS project officially started in November 2006. The DPS Records and Identification Bureau is working very closely with the vendor to complete implementation of the system upgrades by July 2007. Specifications are being finalized, hardware is being procured, system development and data migration activities are all underway at present.

6. AG04003 – AGO Case Management System - \$6M

Overview - The Arizona Office of the Attorney General (AGO) decided to replace its existing application software with an integrated case management system, consisting of nearly 80 applications interacting with an Oracle 8i database. The project began with a complete business reengineering of the business processes of the AGO in 2004.

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Status – Vendor selection was made in May 2005. The new case management system has been realigned in the past three years, primarily due to requirements that weren't originally envisioned. The project has entered its final phase with data conversion tasks and is expected to finish by July 2007 within the current budget.

7. DE07006 – DES Enterprise Document Management System – \$4M

Overview – The Arizona Department of Economic Security (DES) plans to implement an enterprise-wide document management system to allow more comprehensive access to document images. A pilot document management system was initially implemented in select business units to determine the feasibility and benefits of a document management system. The enterprise-wide system is estimated to take three years.

In addition, DES expects to complete a document imaging and management system in Family Assistance Administration (FAA) District 1 by July 2007 for an additional \$2M. Plans to extend this system throughout FAA Districts 2 through 6 have recently been approved.

Status – The Enterprise Document Management Project was begun in late January 2007 and is expected to be completed by close of the fiscal year in July 2010.



8. AD07010 – AZNet Infrastructure Investment Projects- \$4M

Overview – In 2004, Arizona Department of Administration contracted to outsource telecommunications services for State government agencies with the intention of upgrading statewide networks and supporting technologies, and the consolidation of disparate networks and business processes as part of an overall effort to improve service delivery. The AZNet Project creates a statewide telecommunication network for existing executive branch agencies, both large and small. The AZNet infrastructure investment projects include upgrading switches, bandwidth improvement, and WAN consolidations to both enhance the IPT technology and save costs for the state. This work will continue the build-out of the statewide converged network.

Status – The Infrastructure Investment project was recently approved and will begin shortly. This particular project is expected to complete by July 2008.

9. DE07008 – Tri-Agency Disaster Recovery Phase II Disk Mirroring – \$3M

Overview – In 2003, the Arizona Department of Administration in conjunction with the Departments of Economic Security and Public Safety began a cooperative effort to implement shared disaster recovery capabilities for the State's mainframe systems at an out-of-state location. Phase II is a continuation of this effort to provide continuous disk storage duplication for both Tier 1 and 2 data centers. The Tri-agency Disaster Recovery project is one of three related projects to create a disk mirroring capability at an offsite location for disaster recovery purposes. The disk mirroring will periodically backup data and ultimately, substantially reduce overall recovery time.



Status – The project was initiated in December 2006 and is intended to be completed by July 2007.

10. HS07006 – DHS Data Center Refresh - \$3M

Overview – The Arizona Department of Health Services (DHS) intends to upgrade their current Data Center to a fault tolerant and concurrently maintainable (Tier IV) facility. Since the facility has dual active power, cooling and communications paths as well as standby generators and UPS, its uptime availability is estimated at 99.995% including planned shutdowns for system maintenance.

Status – The Data Center Refresh Project was activated in November 2006 and is to be completed by January 2008. The project objectives, approach and impact have been completed and the procurement of hardware, software, facility and services is underway. Implementation of a new storage environment has also begun with a planned completion date of mid-June 2007. Migration from Novell to Microsoft is also being undertaken.

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Appendix C

SUMMARY OF ACTIVE IT PROJECTS BY CATEGORY & COST AS OF APRIL 2007

Agency Category	Responsible Agency	Total Cost (\$K)
EDUCATION		
	Deaf and Blind, Arizona School for	193.0
	Education, Department of	2825.3
	Post Secondary Education, Board of	952.5
GENERAL GOVERNMENT		
	Administration, Department of	5360.2
	Attorney General, Office of	7427.8
	Corporation Commission	261.1
	Governor Highway Safety, Office of	668.5
	Lottery, Arizona	663.2
	Retirement System, Arizona State	35,544.9
	Revenue, Department of	173,801.8
	Secretary of State, Arizona	225.0
HEALTH & WELFARE		
	AHCCCS	2280.7
	Economic Security, Department of	22,693.5
	Environmental Quality, Department of	475.0
	Health Services, Department of	15,176.2
INSPECTION & REGULATION		
	Dental Examiners, Board of	146.2
	Equalization, State Board of	305.0
	Financial Institutions, Department of	526.8
	Insurance, Department of	406.2
	Medical Board, Arizona	305.0
	Real Estate, Department of	98.3
NATURAL RESOURCES		
	Game & Fish, Department of	1235.2
	Land, Department of	532.2
	Parks, Department of	107.3
	Water Resources, Department of	675.0
PROTECTION & SAFETY		
	Corrections, Department of	95.4
	Juvenile Corrections, Department of	608.4
	Emergency Management, Department	150.0
	Public Safety, Department of	15,668.1
TRANSPORTATION		
	Transportation, Department of	12,376.5



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