

FY 2010 Statewide Strategic IT Plan

Government Information Technology Agency



Note from the State CIO

Arizona's FY 2010 Statewide Strategic Information Technology Plan addresses the major initiatives, both future and already underway, that will move the State to an innovative Information Technology environment in the future. This plan provides guidance to State agencies on statewide information technology issues related to:

- *Alignment of the State IT infrastructure to a common statewide model – Enterprise Architecture*
- *Improvement of public service delivery and expansion of accessibility to government – Web portal and leverage cost savings to expand infrastructure*
- *Advanced management and technology to promote efficiency yielding cost savings*
- *Saving environmental impact and cost avoidance through technology*
- *Secure State data and infrastructure through the promotion of privacy protection*

The 21st century demands high levels of service from State government and has initiated a new era in secure information technology and, at the same time, raising citizens' expectations of government. Many state agencies are caught in a conundrum of competing needs: shrinking budgets, customer demands for improved technology and services, a lack of technical staff, and heightened concerns regarding IT security and privacy protection. This plan provides a guide for agencies to follow as they continue to evolve their information technology infrastructure toward common goals across the state. The overarching theme this year is to harmonize IT and business process planning into an integrated vision.

If you have any questions related to this plan, please contact GITA's Strategic Information Technology Planning Manager at 602-364-4784.

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Executive Summary

With GITA at the helm for building a sensible information technology program of infrastructure and services, the Governor and the Legislature have established the framework on which to build a sensible information technology program. Technology projects involve executive leadership and a host of IT personnel in providing services to thousands of Arizona's in an efficient and effective manner. Therefore, Arizona's IT Strategic Plan needs to be developed in the context of state initiatives and business priorities for the executive branch of state government.

GITA's IT Strategic Plan represents a partnership between business processes of state government and the technology that provides business deliverables. Governance and Technology leadership in Arizona is shared among the State CIO, Chief Information Officers of state agencies, boards and commissions and the Information Technology Authorization Committee (ITAC). This IT Strategic Plan is the product of collaboration and collective guidance with the governance body and tells the story of who we are and where we are going.

All organizations rely on strategies and state agencies have been building strategic plans for decades. Typical strategic plans include – values, principles, mission, vision, strategies, goals, objectives and performance measures which have served the state well, but Arizona needs more. The State CIO is committed to working closely with the state's business leaders to ensure that business needs drive the framework and infrastructure of technology. The state has a diverse environment of technology that supports a variety of business services and programs.

Varied industries in Arizona are creating a rich base of services and information for Arizona citizens that affect the way individuals live, work, and communicate through technology. State government should be part of the same transition and transformation. Arizona has long recognized the advantages of using information technology (IT) for public and private demands of services and benefits.

The State CIO is committed to working closely with the Governor, Agency Directors, and Legislative Officers to ensure that business needs drive the direction of technology. Therefore, Arizona's IT Strategic Plan has been developed in the context of business priorities of state agencies, effective leadership and the utilization of prior IT investments. The IT Strategic Plan represents a partnership between the business functions of government and the technology activities that deliver on those business priorities.

In order to achieve this level of excellence, Arizona must continue to find enterprise-wide opportunities for consolidation of services and information and pursue opportunities in an operating framework that engages programs, encourages a service-based focus for IT, and enables a paradigm shift from agency silos to a single enterprise.

In order for agencies to achieve their business goals, they rely on strategy which sets the direction toward a more productive future. As state initiatives and business goals continuously evolve, agencies need to make tough choices through strategies to survive.

GITA has developed five key technology strategies that will establish the future direction of IT for Arizona. These strategies anticipate a future in which Arizonans and government will

be highly dependent on the access of multi-media information and services that are now available and easily accessible over the internet and continually improved upon.

As Arizona meets the challenges of the future, the following five strategies set the framework of this plan and the IT community, as well as IT direction for the state.

The five IT strategies are:

1. **Reliability of Information Technologies and infrastructure** – Through the alignment of technologies through Enterprise Architecture, allow state leadership to focus on business services and operations with the expectations that IT services will be provided by a professional IT organization.
2. **Fulfilling Arizona's Web Portal potential to further transform services for public delivery** – Open and accessible online government services ensure that the state is meeting the expectations of its citizens for greater transparency.
3. **Public and Private Governance for e-government** – Provide the ability to engage citizens and businesses through outreach activities and best practices.
4. **Information is an Asset** – State agencies and community of interests have a wealth of public and private information that can be shared for improved accuracy and reuse to better inform the public and government.
5. **Privacy of Personal Information** – Implement a comprehensive statewide information privacy and security program that includes administrative, procedural, physical, and technical safeguards.

These five strategies and accompanying goals empower state leadership and employees to realize a future in which government uses information technology to better fulfill the task of governing for the delivery of services and benefits to the public and private sectors.

Arizona's IT Vision

Arizona's vision for Information Technology is based on the use of technology as a tool to improve both processes and services for the State. According to January 2009 Government Technology Magazine, Public CIO, highest priority of today's public CIO should be the adoption of "technology that streamlines systems, improves processes and increases visibility and collaboration". For current and future fiscal years, Arizona's efforts will focus on three major activities: 1) effective leadership, 2) efficiency and accessibility and 3) oversight and compliance. Effective leadership includes the transformation of government services through innovation and improvements to infrastructure to streamline process and deliverables. Efficiency and accessibility for both the state and the public can be achieved by reducing barriers and creating ways to improve automation. Oversight and compliance are quality assurance efforts to complete IT projects on time, within budget for project activities, events and product configurations that comply with the IT standards of the State.

Core Values and Best Practices

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:

1. Strengthen and broaden stakeholder engagement
 - A. Demonstrate agility to meet the needs of large and small stakeholders.
 - B. Strengthen our partnerships through periodic customer satisfaction surveys.
 - C. Leverage state influence to promote best practices across public and private organizations.

2. Streamlining processes
 - A. Ensure accountability through performance measures.
 - B. Deliver positive measurable results.
 - C. Continuously refining policies, standards, and best practices for better business processes and target technologies.

3. Grow our influence based on strategic priorities
 - A. Champion the benefits of economies of scale for IT infrastructure, services and procurement.
 - B. Research and identify emerging technologies for future deployment.
 - C. Collaborate with key stakeholders.

4. Maintain a knowledgeable, experienced and accountable team
 - A. Provide key deliverables which add value.
 - B. Maintain awareness of industry standards and best practices.
 - C. Encourage continued education and training to meet every changing demand.
 - D. Serve as a trusted and impartial advisor.

5. Promote transparency and integrity
 - A. Clear, concise and open communications
 - B. Equal access and information to all interested parties.
 - C. Responsive to all inquiries.

Arizona Statewide IT Goals

Goal #1: Efficiency and Cost Savings

Since the implementation of the TPO/AZNET program in 2005 and its many achievements in migrating state agencies to a converged, secured, cost effective network infrastructure, the state should continue to broaden the scope of AZNET to support future opportunities and efficient cost savings that are scalable and extensible for the state.

Telecommunications technology is speeding forward as fast as light through fiber-optic cable, and the state should be prepared to optimize, standardize and upgrade the network for state agencies. Should the scope of recommended network improvements not fall under the jurisdiction of AZNET, other public and private organizations may participate as well. Lists of network improvements are as follows:

- **Rural Broadband Development** – The advancement of rural broadband technology in Arizona is a robust alternative for connecting all public and private

organizations for information and services as well as individuals in rural and remote areas of the state. GITA will continue to coordinate Broadband grant requests with the Federal Government and serve as an information clearing house for innovations in telecommunications and broadband programs. In addition, advocate Economic Development with public and private organizations related to Broadband Telecommunications before various seminars, conferences, and forums.

- **Public Safety Interoperable Communications (PSIC)** – Enable real-time, interoperable communications between local, county, state, tribal, and federal public safety organizations in the State of Arizona. This will be the first of what Arizona intends to be with a coordinated blueprint and opportunity for all levels of government to come together with a consolidated plan for communications needs based the following principles:
 - promote the development and use of standards-based radio systems
 - capitalize on resource-sharing opportunities
 - apply best practices and lessons learned
 - provide effective, reliable, and sustainable radio communications among local, county, state, tribal, and federal public safety entities
 - Build a statewide, interoperable emergency communications infrastructure that will improve emergency response times and increased radio coverage to protect the life and safety of the citizens of Arizona and to protect its critical infrastructure.

- **Arizona Web Portal** – A comprehensive e-Government program for agencies that provides consulting services, application development, website design, project management, hosting and customer support. Primary focus for cost savings and efficiencies are as follows:
 - Provide and leverage online ‘utility’ services (such as credit card processing) for the benefit of all agencies
 - Provide cross-agency applications (such as occupational and professional e-Licensing and Business One-Stop)
 - Provide custom Web-based computer applications for agencies such as DPS Sex Offender Website, GOHS DUI Reporting Statistics, ARRA Radioactive Material Tracking
 - Provide standards and coordination for State agency Web-based projects

- **Virtual Technologies** – Research and develop a public/private “Cloud Computing” environment where technology resources of the state are provided as a service over the Internet. Such services will help state agencies avoid future IT capital expenditures by paying for actual consumption of services through the virtual service. State agencies, in affect would be renting usage from a third-party provider such as TPO/AzNET as an example, and pay for what has been used or consumed as services.

Goal #2: IT Security and Privacy

Continue to promote IT Security and Privacy programs and Business Continuity Plans that adopt long-term risk-based security strategies, principles and standards for the protection of technologies and infrastructure of the state. Increase privacy and protection awareness of personal information among state personnel/contractors.

Faced with increasing cyber threats, a reduced tolerance for service disruption and more demanding citizen expectations, the State of Arizona legislature assigned responsibility to the Government Information Technology Agency (GITA) to develop, implement and maintain a coordinated statewide Information Technology Plan to include security standards as referenced in Arizona Revised Statutes (A.R.S 41-3504).

Executive Order 2008-10 issued by the Governor in 2008 states that agencies are to work with the Statewide Information Security and Privacy Office (SISPO) of GITA to mitigate the risk of privacy and cyber security incidents and promote citizen privacy in the State. Key features of the Executive Order are to protect confidential information acquired from citizens and businesses; develop and implement strategies, policies and procedures to protect all confidential information resources, including electronic, paper and other media; deploy encryption technology for all information resources deemed confidential and/or that contain personally identifiable information; and that state agencies are required to report cyber security incidents to the Statewide Information Security and Privacy Office. A list of security improvements are as follows:

- **IT Security** - Continue to promote a statewide IT security program that adopts long-term risk-based security strategies supported by principles, standards, conventions and mechanisms that information security practitioners should employ.
- **Privacy Protection** - Increase privacy and protection awareness to state agencies on established privacy policies and practices that promote and protect the interests of Arizona citizens and consumers in addition to federal government acts and rules.
- **Network Security** - Secure state networks and infrastructure for the protection of services and information from cyber intrusions and terrorism attempts that may compromise the integrity, confidentiality or availability of any state IT resource.
- **Cyber-Intrusions and Terrorism** - Continue to support the Arizona Counter-Terrorism Intelligence Center and its mission of Homeland Security with respect to cyber-intrusions and terrorism activities.
- **Electronic Signature** - Initiate cross governmental communications for the deployment of pilot projects using electronic signature to ensure the validity and legal effects of electronic agreements and contracts for interstate and intrastate commerce.
- **Single Signon** - Develop and implement a single signon process through ADOA/ISD for access to multiple application systems where state personnel and customers have access to state systems without being prompted to log in repeatedly for other systems.
- **Business Continuity Planning** - Continue to develop and support business continuity plans through Arizona Homeland Security to ensure continuous performance of essential business functions and operations during an emergency or a disruption of services.

- **Personnel Training on Security and Privacy** – Develop and document personnel security policies as well as related procedures that show clear accountability for security administration. Policies and procedures shall be applied to every existing State employee and contractor as well as to new State employees and contractors in order to prevent potential unauthorized access to and misuse of sensitive and confidential information. Policies and procedures shall be made available to all State employees and contractors and should be signed to indicate acceptance and understanding.

Goal #3: Standardization and Reuse

Implement information technologies that are open systems architecture (non-proprietary) interoperable, portable, and scalable for Internet/Intranet and extranet capabilities supporting business programs and services for reuse in state government.

Open Systems Architecture technologies are computers and networks that allow other types of computers and peripheral devices from different manufacturers to connect and operate together. Proprietary systems, such as Microsoft Windows operating system, does not have its core technology available to the public but is included in the open architecture solution category because of the numerous open interfaces available to the public from a variety of sources.

Advantages of using open system architecture product is the standardization of program languages and interfaces that allow the IT industry to generate a variety of innovative, competitively priced, high performance product solutions for application program designers to choose from. Programmers can focus on generating product content instead of creating a framework for interoperability, and development times are significantly reduced because of reuse. Last but not least, open system architecture products are familiar to a larger population of technical resources and is easier to find experienced personnel for IT projects. A list of standardization and reuse improvements are as follows:

- **Statewide Convergence** – Provide a statewide, converge voice, video, and data network through TPO/AzNET to serve the executive branch of state government.
- **Statewide Document Management System** - Implement a statewide Document Management and Imaging System to control agency documents and data/information that includes paper files, application files, computer print files, email, fiche, faxes, x-rays images/objects and web-site input.
- **Statewide Partnerships** - Partnership and combine resources with other states and state agencies to improve the operational efficiency of State Government.
- **Geographic Information System (GIS)** - Continue to develop and enhance the Geographic Information System (GIS) that effectively and efficiently provides necessary spatial information to all stakeholders in the public and private sector.
- **Statewide Email** - Develop and maintain a federated enterprise active-directory of agency email addresses through ADOA/ISD that are updated from agency LDAP's or directly from budget unit email systems to support a statewide email system for the state.
- **IT Asset Management System** – Research, develop and implement an on-line client/server Enterprise IT Asset Management system that provides pre-built reports, dash-boarding, asset categories for various products, audit history and

logging. All information assets are maintained on one system to reduce expenses and unnecessary equipment purchases as well as loss prevention.

- **Open Source Software** - Is application software consisting of programs that are available to programmers/users in a readable format, with the ability to change the program code, and build modified versions of the application to fit the needs of the agency. There are many types of Open Source Software, mainly differing in licensing terms under which (altered) copies of the source code may or may not be redistributed.

Goal #4: IT Training and Personnel Development

Develop and implement IT training programs for the development of managerial and technical skills for IT personnel with opportunities for growth and how their work contributes to the success of the agency with qualitative and quantitative feedback on performance. Such training programs will further increase employee satisfaction, retention and loyalty to state government.

- **IT Training** - Each agency has the responsibility for training and developing its IT Employees in support of agency programs and services as applied to IT operations and the development of applications for services and benefits of the agency. Each agency is responsible for assuring that training programs geared to specific agency IT needs are planned, budgeted and established and that IT personnel participate in these programs. In addition, each agency shall work with other agencies to promote the use of interagency training programs and resources wherever possible.
- **IT Personnel Development** – It is the responsibility agency CIO's, IT Manager's and Supervisors to identify the individual training needs of IT personnel, and work with employees to prepare and effect plans for their development. Such plans should make use of on-the-job training including individual and group instructions by supervisors, formal training and educational activities, and rotational assignment to provide greater depth and a wide base of experience. State employees at all levels ultimately retain an obligation for their own development and education and it is expected that employees will advance their own careers through appropriate self-education and self improvement programs.

Goal #5: Transparency

Provide an open government environment where information technology programs and services of the state are opened at all levels of government for effective public scrutiny and oversight. A list of transparency improvements are as follows:

- Promote and accommodate Social-Networking Services to build online communities of interests and focus groups who share interests and activities of the state.
- Implement statewide reporting systems to track and manage stimulus reporting dollars providing access to this information to the public.

Agency IT Plans

AHCCCS IT Plans

- 1 . Government Accessibility and Improved Public Service Delivery: Re-engineer processes and maximize use of web-based self-help applications to improve customer service, health care delivery, eligibility, provider services, member services, customer care services, and employee services.
- 2 . Electronic Transactions: Transform data exchanges to standard, efficient, and comprehensive electronic transactions.
- 3 . Reporting: Improve AHCCCS data reporting/decision management, financial control, and patient care information integration by enhancing data warehouse and reporting tools.
- 4 . Architecture: Reengineer IT systems to better support program growth, claims processing, medical management, customer service, provider network data, financial reporting, and customized health plan benefit design, and align infrastructure to a common architecture.
- 5 . Partnerships: Combine resources with other states and agencies to improve the operational efficiency of State Government.
- 6 . Improved IT Service Delivery: Develop and maintain the information technology infrastructure to help the agency meet the challenges of the future health and well-being of Arizona citizens by improving/upgrading policies, processes, operations, hardware and software.
- 7 . Project Management Certification: Enhance staff project management skills through training and education to encourage innovative and cost saving IT solutions.

Attorney General's Office IT Plans

- 1 . To provide a timely and effective response to end user trouble issues.
- 2 . To provide timely and user friendly access to Agency data.
- 3 . To provide a secure and stable environment where computer services and data are safe from cyber-threats and system failures.
- 4 . To establish a core set of network services that securely support the sharing of data.
- 5 . Increase the Internet presence of the AGO and make more information readily available to the general public.

Corporation Commission IT Plans

- 1 . Efficient electronic interaction with the public and other governmental entities. Implementation of effective protocols, software and communication with the public to allow them to retrieve and submit data, forms, and all other documents.
- 2 . Effective use of information technologies to enhance intra-agency communications.
- 3 . Improve employees' preparation to use technology and react to their job-specific.

Department of Administration IT Plans

- 1 . Provide Information Technology and services to assist the Agencies in serving customers.
- 2 . Utilize Information Technology to assist the State in attracting, retaining and developing employees.
- 3 . Improve the efficiency of information technology services.
- 4 . To administer and facilitate the telecommunications privatization contract to provide for a statewide, converged voice, video and data network to service all executive branch agencies needs.
- 5 . To facilitate, build consensus and communicate the strategic direction for a converged voice, video and data network to improve the efficiency and reliability of telecommunication services across state government.
- 6 . Close Security gaps that currently exist in the Agency and prevent potential gaps from occurring in the future.

Department of Agriculture IT Plans

- 1 . To become more accessible to the citizens
The availability to the growers and pesticide applicators for form 1080 submission will be made available within 60 days of July 1, 2008. Beyond that, the grower licensing should follow before the end of the calendar year.
- 2 . Increase the skill level of all IT personnel in order to more effectively service the Agency users
Continuing education for all IT personnel will be stressed in order to more effectively service the Agency clients. This will also make the employee more valuable to the Agency when the skill level is increased by making that employee more productive and able to handle more diverse issues and keep current with the evolving
- 3 . Research and implementation of a document management system
A document management system should be implemented in order to more effectively streamline workflows, provide for more accessibility and security to agency documents, and to effectively remove those documents when the life span is reached. The system should, at a minimum perform all these functions with all document types found in the Agency.

Department of Corrections IT Plans

- 1 . Upgrade and expand technology infrastructure to industry standard.
- 2 . Migrate the entire Agency to a homogeneous desktop, network operating system and application development platform.
- 3 . Improve management of enterprise resources to include system and server lifecycle replacement.
- 4 . Improve the technical capabilities of IT staff to reflect current industry standards and practices.
- 5 . Improve Project Management (PM).
- 6 . Develop web based applications to meet the growing customer (Agency) need for real-time data and analysis. These applications are to be developed within the Agency Enterprise Architecture.

- 7 . Eliminate waste of Agency resources.

Department of Economic Security IT Plans

- 1 . Increase protection and privacy for DES information by enhancing IT security.
- 2 . Improve service delivery to the public by enhancing IT systems and expanding electronic access.
- 3 . Increase operational efficiencies, through the implementation of innovative and leveraged IT solutions.
- 4 . Improve the quality of IT service delivery through enhanced tools and methodologies.

Department of Education IT Plans

- 1 . To improve the quality of the Student Accountability Information System (SAIS) data submission process.
- 2 . To provide timely and reliable customer service.
- 3 . To increase the use of data and information technology as a management tool to make better-informed decisions.
- 4 . To provide accurate and helpful information to the public.

Department of Emergency Mgmt & Military IT Plans

- 1 . (ADEM) Install video/audio system using existing network backbone to link SEOC, Recovery, JINC, and Mitigation remote trailers. This will allow dissemination of information during exercises and emergency events to staff at these locations.
- 2 . (ADEM) Project in underway for the planning, implementation, and construction to renovate the current State EOC.
- 3 . (DEMA) To provide professional training to all IT staff.
- 4 . Train existing IT staff member for software assistance to staff.

Department of Environmental Quality IT Plans

- 1 . Revenue Management System (RMS) replacement. The new application has been renamed to the Revenue and Invoice Collection System (RICS).
- 2 . Integrate Water Quality Division (WQD) disparate systems into the agency-wide (enterprise) AZURITE system.
- 3 . Implement a Data Warehouse for Water Quality Division and Tanks Programs Division.
- 4 . Ensure Integrity and Quality of Agency Data and Critical Applications
- 5 . Implement a data base to track recycling and landfill data for Waste Programs; Leadership has voted for this initiative as an agency-wide priority.
- 6 . Implement an enterprise-wide document management system (EDMS) and imaging.

Department of Game & Fish IT Plans

- 1 . Consolidate GIS activities throughout the Department and provide centralized support and software and hardware procurement.

- 2 . Use Information Technology to provide quality services for all customers and stakeholders using e-Government solutions.
- 3 . To leverage technology to provide quality customer service without a significant increase in support staff.

Department of Gaming IT Plans

- 1 . Enhance the Department's IT infrastructure to support departmental efficiency, remote access, and increased inter-governmental / inter-agency electronic
- 2 . Train the Department's IT and regulatory unit staffs in the administration and use of Departmental software and systems. This includes training on electronic game management systems.

Department of Health Services IT Plans

- 1 . Promote and Secure IT Systems at ADHS.
- 2 . Modernize the IT Infrastructure.
- 3 . Improve Public Service Delivery and Data Sharing through the use of Internet Technologies.
- 4 . Improve Information Technology Governance.
- 5 . Improve Information Technology Customer Service to Departmental Users.
- 6 . Accommodate Social-Networking Technologies within the ADHS Enterprise.
- 7 . Create and Implement Data Disposition Strategies.

Department of Homeland Security IT Plans

- 1 . To ensure the Homeland Security website displays accurate, useful and relevant information for our stakeholders.
- 2 . Redesign our website to make it more intuitive and provide additional information to the public and our stakeholders.
- 3 . To automate as many elements as possible of the Homeland Security grant application process.
- 4 . To implement a web-based grants management software application.

Department of Juvenile Corrections IT Plans

- 1 . Implement techniques and strategies that insure the recruitment and retention of IT professionals.
- 2 . Continue to develop and expand client/server environment that allows access to agency mission critical application.
- 3 . Continue to cross train all IT professionals to maintain effectiveness of the department.
- 4 . Research emerging technologies and evaluate their price/value ratio to answer agency needs.

Department of Land IT Plans

- 1 . Develop and maintain a network that effectively and efficiently supports access to the Department's major computer based systems.
- 2 . Develop and maintain enterprise information server hardware and software and

software development environments which support the agency's enterprise information systems.

- 3 . Develop and maintain a productive desktop computer environment for Department users that effectively and efficiently supports the Department's major computer based systems and can be maintained at the lowest possible cost.
- 4 . Develop and maintain a business system that effectively and efficiently provides necessary business information to the Department's internal and external users.
- 5 . Develop and maintain a geographic information system that effectively and efficiently provides necessary spatial information to the Department's internal and external customers.
- 6 . Develop, implement, maintain and provide access to multi-participant GIS standards, data bases and applications for the Arizona GIS community.
- 7 . Lease-purchase network switch, server computers, PC's, and software necessary to develop and maintain the Department's core information systems.
- 8 . Develop and maintain computer and communication systems that meet the needs of the Department's Fire Management responsibilities.

Department of Liquor Licenses & Control IT Plans

- 1 . To provide continuous and current information on the Agency's website for use by the public, government agencies and private sector businesses.
- 2 . Maintain system integrity by having software that is supported by various vendors.
- 3 . To maintain accurate imaged documents.
- 4 . Have licensing forms on our website so the public can have access and cut down on walk-ins.

Department of Parks IT Plans

- 1 . Arizona State Parks relies heavily on IT infrastructure for business practice. The Information Technology section will provide application and network operational support to the Agency.
- 2 . Standardize and improve internal agency processes with Information Technologies (IT), focusing on revenue enhancements and higher labor efficiencies. Recent budget shortfalls at Arizona State Parks underline the importance of informing management of park revenue declines, over expenditures, and inefficient labor
- 3 . Provide a statewide campground reservation system to allow a better management platform for Arizona State Parks. 8/30/06 Currently on-hold pending funding of positions and contracts.
4. Provide policy makers, educators, and partners with land management information affecting the natural, cultural, recreational and conservation themes of State Parks.

Department of Public Safety IT Plans

- 1 . To improve support to DPS, criminal justice agencies, licensing agencies and the general public.
- 2 . To improve Department efficiency through automation and the application of new technology.
- 3 . To support the Arizona Counter-Terrorism Intelligence Center and its mission of

Homeland Security.

Department of Revenue IT Plans

- 1 . DOR recognizes that IT is important to its success and can be leveraged to support the business goals; however, applying technology solutions alone will not solve existing business problems. Only when the program areas look first to identify where current processes can be improved can technology be applied to facilitate the processes, and ultimately result in accomplishment of the corporate mission. DOR will achieve its IT vision by accomplishing the following IT strategic goals and objectives:

Goal #1

Maintain a modernized infrastructure and architecture that are reliable, flexible, scalable and driven by changing business and technological requirements.

- Develop and implement an investment strategy to maintain a reliable and current technical infrastructure.
 - Maintain operational reliability and stability.
 - Address skills gaps and develop a robust capacity and resource utilization plan.
- 2 . Use IT to provide cost-effective means to achieve business results and improve operating efficiency.
 - Enhance software configuration management and release management to improve the level of quality of all software releases.
 - Manage effective systems development and investment planning and control processes.
 - Establish a Software Process Methodology to give the software engineers the means to detect and fix bugs efficiently.
 - 3 . Promote an IT security program that proactively assures integrity, confidentiality, and availability of corporate information.
 - Ensure alignment of agency policies with GITA standards and policies, as well as appropriate laws and regulations.
 - Maintain a strong risk management program through a continuous cycle of assessing and mitigating potential risks.
 - 4 . Provide enabling technologies to improve the way in which the DOR accomplishes its business.
 - Increase ability to quickly deliver new functionality and/or systems in response to business changes.
 - Improve communications originating from IT and transmitted across DOR; provide management and dissemination of timely and reliable information to all stakeholders.
 - Promote an environment where IT research and innovation activities support

Department of Transportation IT Plans

- 1 . Satisfy mutually agreed upon customer requirements.
- 2 . Support professional growth and employee development.
- 3 . Ensure the careful and responsible management of the information and technology resources entrusted to our care.

Department of Veterans' Services IT Plans

- 1 . Develop a new up to date interactive website with current veteran related information updated daily.
- 2 . Manage Information Technology effectively to connect the divisions within ADVS and promote reliable communication.
3. Design a Minimum Level of IT Competency Program to ensure all ADVS personnel are able to utilize the technology necessary to perform their job function.
4. Provide IT services by properly trained, permanent status IT staff.

Department of Water Resources IT Plans

- 1 . To provide the agency with a technological vision anchored in proven and cost effective technology allowing us to rapidly adapt to changing business requirements that makes our staff more productive and benefit the public.
- 2 . Improve our network security to protect our systems and data from intrusion, from both inside and outside the Agency, and loss through ongoing security threat analysis, new hardware and software technologies and additional technical security staff resources and training.
- 3 . To provide a stable and secure network and desktop computing environment, reliable telecommunication services and technical support on all hardware and software used by our customers.
- 4 . To provide superior customer service to agency staff and the public in supporting our technical resources.
- 5 . To develop business database systems and applications capable of collecting, organizing, maintaining and displaying the data required to meet the needs of the agency and its constituents.
- 6 . The improvement of staff development through technical training is very important to retain qualified technical staff and continuing to support new technologies.
- 7 . Network Support: The overall objective of this initiative is to ensure the agency that its information is securely stored, accessed, and transferred on network. We will accomplish this goal by exploiting the industry's best security practices, implementing technology recommended by industry experts, and increasing the awareness and aptitude of staff through training.
- 8 . Network Support: The purpose of this initiative is to increase operational efficiencies by maximizing the agency's investments in server hardware. Consolidation practices and technologies (i.e. VMWare) will be utilized to reduce the total cost of ownership, extend the life of existing and future investments, and reduce hardware investments generally required for software development projects.
- 9 . Network Support: The primarily purpose of this initiative is to ensure the availability of network resources when unfortunate events occur. This will be accomplished via the implementation of redundancy and failover technologies within the environment. This initiative will also yield a "hotsite" preserving a current replica of the agency's operational data for immediate accessibility upon disaster.

- 10 . Network Support: The goal of this initiative is to maintain documented service levels of the agency's investments in servers and infrastructure. A centralized management and monitoring system will be employed that will indicate the real-time status of resources and produce historical reports on their uptime. The system will also alert support staff when systems are offline or if critical resources reach defined
- 11 . GIS & RS: Staying current on our enterprise software supports all strategic goals by maintaining the technological structure that each of these depends upon.
- 12 . GIS & RS: Consolidating ADWR's geographic and related data into enterprise databases improves data integrity and makes the data available which supports G. 2 and makes G. 3 possible.
- 13 . GIS & RS: Internet Web Maps are another tool to provide to the public to support Goals 2 & 3 in presenting water information and making it available to the public.
- 14 . GIS & RS: These server-side programs will increase efficiency and capability that directly supports collecting and analyzing hydrologic data for G. 2
- 16 . GIS & RS: Reviewing our software capabilities for possible workflow advantages should yield improved capability, efficiency and even possible labor and cost savings which support the collection, analysis and distribution of the Department's data in G. 1 & 2.
- 17 . GIS & RS: Improving project management in GIS, as well as the rest of the Department, will provide overall improvement to efficiency and competence that supports all of the strategic goals.
18. GIS & RS: Creating a metadata search tool, for spatial and possibly non-spatial data, would add value to our data by making it more accessible and understandable and usable, which supports G. 2 & 3.
- 19 . GIS & RS: Providing more tools to the public directly supports the accurate and timely information described in G. 3
- 20 . GIS & RS: Improving the efficiency and accuracy of crop collection, storage and processing will support G. 2 & 3 by improving the data and making it more accessible to ADWR staff and the public. This improvement will also improve our knowledge of irrigation water u
- 21 . GIS & RS: Improving the training level of our staff directly supports the statement of G. 2.
- 22 . GIS & RS: Documentation preserves the Department's institutional knowledge which directly supports G. 2.
23. GIS & RS: Improving the workflow and data coordination processes will support the collection of Department data (G. 2), the ability to provide this to the public (G. 3) and will improve collaboration inside ADWR (G. 4)
- 24 . Help Desk: Service Level Agreements would improve our ability to measure the success of our service and provide our customers in the Department with measurable expectations. This would support all goals: G. 1-5.
- 25 . Help Desk: Documentation preserves the Department's institutional knowledge which directly supports G. 2.
- 26 . Help Desk: Centralizing IT Service Requests through the Help Desk would improve efficiency and allow the IT managers to focus on the important programs,

- projects
and operations that are supporting G. 1 - 5.
- 27 . Help Desk: Improving and Adhering to the Department's Inventory System will allow the Department to better track and utilize its resources, which will further all of the strategic goals: G. 1 - 5.
 - 28 . Help Desk: Improving the training level of our staff directly supports the statement of G. 2.
 - 29 . Help Desk: The Help Desk better incorporating the IT Liaisons will further the knowledge transfer (G. 2) and collaboration (G. 4) within the Department.
 - 30 . Help Desk: Reviewing the Help Desk's responsibilities will continue to allow them to expand their abilities (e.g. network privileges), utilizing their time better as well as other IT staff. This will free up staff resources to support all other strategic goals: G. 1
 - 31 . Help Desk: Incorporating Intern support on the Help Desk would help alleviate the staff shortage we are experiencing in this area. This staff is essential to the Department's business, which is tied to technology, and therefore it supports all strategic goals: G. 1
 - 32 . BIZ OPS: Develop an departmental procurement system that improves ITDs ability identify, negotiate, and implement the best rates and terms from the best vendors for ADWR's technology needs. The procurement system will focus on improving decision-making that may improve transaction abilities of organizations, have the ability to manage assets such as inventory management, maintenance scheduling, in-house availability of the product and related services and optimizes agencies production dealing with IT resources production cycle, procuring materials in case inventory is running low, managing supplier contracts and scheduling production equipment.
 - 33 . BIZ OPS: Develop the appropriate record keeping system is crucial for the successful management of the business. A comprehensive record keeping system makes it possible for departments to develop accurate and timely reports that show the progress and current condition of the business and provide management information to use in operating the business.
 - 34 . BIZ OPS: Developing a Strong Matrix Organization will further enhance the Project Management training and create a culture of enhanced integration across functional departments and more effective departmental communication. By creating this culture ADWR will efficiently use agency resources by utilizing the diverse mix of expertise and develop them as project managers will ultimately provide the best solution that satisfies ADWR's business needs.
 - 35 . BIZ OPS: Provides comprehensive workflow, authorization and version control for the development and continued management. Create Automated QA preventing changes from being made without review and authorization. Increase efficient routing of work and monitoring of progress. Ensure that all content is safely retained and cannot be replaced or removed outside of the control of the system.
 - 36 . Web Dev: Support programs as the Water Atlas, and Conservation Toolkit on the web by allowing users to manage their web content.
 - 37 . Supports programs as Modeling, Arizona Mexico Water, Water Atlas, and Conservation Toolkit on the Web by providing an efficient method to provide and find information.
 - 38 . Web Dev: Applications within the Internet web site.

39 .Web Dev: Training

Governor, Office of the – IT Plans

- 1 . Provide a viable web-based solution for Constituents and Government Agencies to communicate effectively and efficiently to and from the Governor's Office.
- 2 . Improve security measures to keep up with increased technology demands.
- 3 . Streamline infrastructure to ensure optimum performance.
- 4 . Increase user efficiency and productivity in using the tools currently available to the general office.
- 5 . Ensure IT business continuity to continue to support the Governor's Office and its constituents in times of need and crisis.

Industrial Commission IT Plans

- 1 . Document existing mission critical applications.
- 2 . Design and development of a fully integrated ICA Information System (ICAIS) to provide the ICA an efficient means of fulfilling the mission and goals of the ICA.

Lottery IT Plans

- 1 . IT will enhance agency efficiency and stability of its network by refreshing hardware and software on a three-year plan. This plan will include updating all security requirements as noted by GITA and MUSL.
- 2 . Keep current a Business Recovery Plan that limits the loss to our agency in the event of an emergency or disaster.
- 3 . IT will use an electronic transfer process to provide billing to our retailers. This will make the entire cycle of billing and payment more efficient for both retailers and Lottery.
- 4 . Install paper saving software to allow electronic transfer of information and reduce printing throughout the agency.
- 5 . Enhance the Lottery Intranet system for internal communications to provide important information to Lottery staff in a timely manner.
- 6 . Write RFP for new print vendor
- 7 . Create a new Public web site and increase security with new code and equipment.
- 8 . Implement a new email system for marketing

Radiation Regulatory Agency IT Plans

- 1 . Provide better online information for citizens, licensees, employers, board members, and supported agencies.
- 3 . Train Network Specialist for future Server and Workstation support.
- 4 . Improve emergency response IT capabilities

Registrar of Contractors IT Plans

- 1 . Maintain a stabilized information technology environment. This is to focus primarily on the Microsoft Exchange Office automation environment and the applicable security environment.
- 2 . Implement the Requirements of the ROCIMS Initiative

Retirement System IT Plans

- 1 . Develop agency applications and consolidate data required to meet key information needs into a single PERIS database supporting re-engineered internal processes and member queries.
- 2 . Improve agency performance and efficiency of member and employer servicing through tactical and strategic initiatives in all applicable service areas by completing process re-engineering tasks driven by PERIS process analysis efforts.
- 3 . Build internet-based member servicing for ASRS based on the Arizona At Your Service model.
- 4 . Provide significant service level improvements through implementation of workflow management and document imaging.

Secretary of State IT Plans

- 1 . Initiate cross governmental communication with deployment and pilot projects using electronic signatures.
- 2 . Meet all federal & state HAVA election requirements.
- 3 . Expand imaging processing to incorporate 90% of record series in agency for public availability.
- 4 . Web design and usability improvements
- 5 . Internal application redesign & usability

Agency IT Trends

Arizona Health Care Cost Containment System (AHCCCS) Trends

E-HEALTH - refers to the use of web-enabled systems and processes to accomplish some combination of the following goals:

- Improve or enhance medical care
- Improve patient involvement in their medical care and their overall satisfaction with the health care experience
- Streamline operations and business practices
- Control expenditures.

A large number of e-health initiatives are underway by leaders in health care, government and hi-tech industries, in an attempt to harness the benefits of combining technology, the internet and health care. The expansion of e-health capabilities will allow medicine and technology to meet, and conquer the same challenges faced by other industries over the past 20 years: 1) the capability of consumers to obtain, view or interact with their information online and 2) improved possibilities for institution to institution transmission of data. Providers will be able to communicate with their patients and each other in ways that are more efficient and that could offer access to more accurate information to positively affect the overall healthcare experience. Increasing evidence shows that electronic systems and processes are truly the vehicle by which healthcare can broaden the accessibility of applications, facilitate user exchange of information, and collapse time, distance, and the "information divide" to better deliver care to the patient population.

Medicaid agencies across the nation are focused on achieving a transformed and modernized health care system for the 21st century. They are building health information exchanges and electronic health records, adding online enrollment, e-prescribing, and clinical decision making, mitigating fraud, providing abuse tracking, and medication management.

AHCCCS has committed funds from one of its Medicaid Transformation Grants to the development of an HIE/EHR for the exchange of data related to the care of AHCCCS members. A second grant will focus on a value driven decision support tool box to provide the right care to every person every time.

EDI TRANSACTIONS - The health care industry standardized several electronic transactions and code sets as part of the HIPAA initiative in 2000. This was a first step in simplifying healthcare operations and integrating the numerous disparate healthcare systems. Today, the standards development organizations are recommending the implementation of upgrades to these standards and several additional transactions during the next two to three years. All require extensive impact analysis for AHCCCS and its business partners. Such changes impact not only transaction processing but more importantly the data analysis and reporting systems that will have to accumulate data from the different code sets into meaningful results.

AHCCCS is currently working on analyzing the impact of the new HIPAA 5010 transactions and the addition of the claims attachment transaction. The goal is to use standard transactions for all electronic transactions we use.

MITA - Medicaid Information Technology Architecture (MITA) is an ongoing initiative of the Centers of Medicare and Medicaid Services (CMS) to modernize the systems which support the Medicaid programs in each state. The MITA initiative envisions moving from traditional MMIS to web-based, patient-centric systems that are interoperable within and across all levels of government. States use the MITA maturity model to assess their Medicaid program capabilities and formulate a vision for the future. AHCCCS has performed this self-assessment. As the results of the assessment are reviewed, we plan to focus on bridging the gaps between our systems and processes and those of the MITA model. This may lead to several MITA gap-related projects.

VIRTUAL OFFICE - Virtual Office is a fully functional worksite that is not bound to a specific location but is portable and scalable, connecting employees to the work process in an advantageous setting rather than having to come to a central office to connect to the work process. It provides an environmentally friendly alternative to the daily office commute. Employees want to work from home because of high fuel costs and the distance from the office; agencies want to reduce real estate and operational costs. More and more organizations are offering virtual office as one of the choices for employment.

While implementing virtual office has had its challenges, and results in a cultural change for both employees and the organization, AHCCCS has found it to be beneficial to everyone. Agency results include increased employee retention, reduced absenteeism, expanded hours of availability, increased productivity, and reduced operational costs. Employee results include reduced stress, increased job satisfaction, improved quality of life, feel respected by leaders, and increased opportunities for homebound and those in rural areas. State results include reduced fuel consumption, reduced pollution, and reduced traffic. In addition, the agency has been able to close

three large facilities, downsize four additional facilities, reduce the number of copiers and printers, and eliminate supplies and cars. Aside from these obvious benefits, however, AHCCCS has found that virtual office employees are also more productive. To enhance the communication and collaboration of all employees, AHCCCS has implemented new tools web conferencing and e-learning.

More than one quarter of the agency is currently working in virtual office, and a similar number work from home or telework one day or more a week. AHCCCS plans to continue to support and expand these worksite alternatives.

Attorney General's Office Trends

1. Replace the AGO Legal Case Management System so that it more closely aligns with the business processes and current information tracking requirements of the Office.
2. Use of on-line legal research services.
3. Use of a common computer automation system for all AGO staff, whether residing at an Office locale, client agency locale, or remote worksite.
4. Migration to internationally accepted standards including the Internet Protocol (IP) and Client Server.
5. The use of Internet by state agencies to inform the general public of agency function and provide public services.
6. Development of compatible electronic information systems to share documents, databases, and reduce redundancy.
7. Establishment of a Personal Computer (PC) refreshment cycle to ensure that technological advancements can be used by the AGO to support the Office mission.
8. Establish a core set of computer services provided to employees when they are away from the Office.
9. Use of Document Imaging to facilitate near instantaneous communications with external entities, and to ease storage and retrieval burdens.
10. Establishment of a Statewide electronic directory with phone, address, email, and agency contact information.
11. Migration to a Microsoft environment.

Corporation Commission Trends

1. Internet: Continual development of agency web pages and statewide web portals for service delivery.
2. Telecommuting will necessitate greater use of the Internet for remote access to agency resources.
3. Higher cost-effectiveness of hardware upgrades.
4. With higher hardware complexity and capability, an increased availability of more

robust Applications.

5. With greater technological complexity, a greater need for specialization, training, and funding for same.
6. Increasingly difficult to attract and retain highly skilled technical personnel.
7. Direct enabled networks.
8. Increasing need for business analysis and project management skills.

Department of Administration Trends

1. **IT SKILL SHORTAGES** - The shortage of critical IT skills is well documented in the information technology industry. In general, governments have difficulty attracting and retaining IT professional staff. This means ADOA must manage its IT personnel resources very carefully. IT professionals desire career paths that include technology training and cross-training opportunities.
2. **SECURITY** - The INTERNET changed everything. Its rapid growth and use, providing newer and more convenient services has caused organizations, and governments all over the world to examine and strengthen their security. The strengthening involves: computing, networking, facilities, personnel, and data. Security is a strategy touching many parts of the enterprise, seeking to ensure operability and viability of the enterprise itself. The enterprise must assess the risk and cost of service outages as well as the obvious damage that can be caused by intrusion. The ADOA must allocate resources to strengthen its levels, types and detection technologies associated with its IT Security.
3. **ELECTRONIC GOVERNMENT** - E-government continues to move from agency-specific, tactical solutions to enterprise wide, strategic services. Collaboration and sharing of data and resources across government boundaries is growing. New government to government agreements and partnerships are becoming standard practice.
4. **SHARED SERVICES** - Multi-platform application hosting, enterprise operations and distributed computing infrastructures comprise the Information Technology landscape, both present and future. The current challenge will be to make the various applications that are emerging inter-operate and ultimately converge. In the meantime, using the principles of shared resources and best practices, data centers must reach outward to become operations centers, serving the total enterprise. This has proven to be a cost-effective model as experienced with the ADOA data center. ADOA intends to continue to adopt and follow this IT Industry trend.

Department of Agriculture Trends

1. Internal workflows becoming more complex; The internal workflow of the average Agency employee is becoming more complex due to the increased level of customer service required By the individual departments combined with the lack of budget to increase staff. Each department is requiring more of the employee in terms of accuracy and timely turn around of any licenses, certifications, or documentation required by the citizen. This results in a more complex workflow to reduce employee errors and supervisor sign offs of these

documents.

2. Continued need for employee training for technology related issues: With the constant influx of new and more complex applications, the employee will be required to master these applications faster and with a high degree of accuracy. These applications include mainly custom written applications. The employee will need to fully understand how to effectively utilize these new applications and also to understand how these applications interact with other applications throughout the enterprise. This will require the IT Staff to institute training sessions, both in a group and individual environment to most effectively communicate these applications to the appropriate employees.
3. The Internet and Intranet: Is the de facto standard for assimilating information worldwide and is the vehicle by which the department will use to register, licenses, view information, download information and forms. The Agency will enhance this medium to be user friendly and available at all times for public use. The Internet will also be the medium by which the public will be able to register and receive feedback from the Agency in the form of either data or a published form created by the Agency.

The Intranet will be available to our employee's at all locations within the State of Arizona. The Intranet will be the norm for disseminating information to the department's employees, with constant updates and the latest information.

4. The citizens' increasing need for online Agency access: As with most other Agencies, this Agency will need to produce more internet accessible material for the citizens. This material will need to include the ability to apply for or renew permits and certifications, Agency documentation for public record requests, and other material like press releases, Agency background information, and general information for any and all projects or initiatives that the Agency is tasked with. In the near future, the ESD Division will begin to accept form 1080 reports from growers and pesticide applicators directly from the individuals through the internet. This will be shortly followed by the licensing of these growers.
5. End User Education: Going hand in hand with the evolving technology and increased capacities the Department of Agriculture will require to operate most efficiently, will be continuing end user education to make the user more self sufficient. This education will extend from the basic operating system operations to the individual applications.

These education sessions will be handled in many methods, including small groups of 10-20 during a 'lunch-and-learn' session to teach a single concept to individual one on one-training for specialized applications. These sessions will cover anything that the user or IT representative feels that user needs to learn to become more efficient and self sufficient in their daily computer tasks. The training will be given by one of the current IT staff members that have expertise in the subject matter at hand.

Department of Corrections Trends

1. CONVERGENCE - In the past, telephony and data networks existed as discrete communication silos. Today, these networks are converging to provide an

ubiquitous and holistic communications platform that allows for a greater integration between processes and people. This platform provides a ubiquitous central nervous system that delivers application and communication services that leverage the technological capabilities of machine and man.

Because protecting the public is a 24x7x365 function, the Arizona Department of Corrections (ADC) must leverage converged data networks to provide real-time data to decision makers inside and outside the organization. The Agency must deliver a Service Oriented Network Architecture (SONA).

2. SECURITY

In the business of security, the Agency network infrastructure must itself, be secure. A significant and alarming percentage of cyber attacks are directed against federal, state and local governments. In the private sector, these attacks risk corporate assets and revenue; however, for the Arizona Department of Corrections, compromised data have loss-of-life and other dramatic implications. While more and more records of the state government are made electronically available to the public, the need to protect the Agency infrastructure, networks, and data assets become even more critical. This protection goes beyond the Agency border, and deep into the user workstation as defense-in-depth.

3. DATA INDEPENDENCE - Information silos handicap the Agency's ability to acquire, organize and act on operations intelligence. Data must be easily available, comprehensive, portable, and accurate. Therefore, information silos must be broken down and reconstructed into relationships, which are interdependent open systems that improve operations and public safety. Consequently, data must exist as an independent, easily transportable (but secure) agnostic element of the Agency network infrastructure.

4. REAL-TIME METRICS - Worldwide, the barriers of time are evaporating. Data from vital banking and finance industries now flow as integrated intelligence along with regional weather and news. Just-in-time has been replaced with real-time. For the Agency, effective tactical decisions require accurate real-time data.

Therefore, data must be quickly collected, immediately updated, and easily analyzed and reported on for decision makers to respond tactically as well as develop policies and procedures, which reflect our Agency's strategic plan, goals and objectives.

Department of Economic Security Trends

- 1 . Business Continuity
- 2 . Business Intelligence
- 3 . Collaboration Tools
- 4 . Content Management
- 5 . Digital Signature Technologie
- 6 . E-Government
- 7 . Electronic Document Management
- 8 . Enterprise Data Storage
- 9 . E-Training
- 10 . Geographical Information Systems

- 11 . Information Security and Privacy
- 12 . Integrated Data Management
- 13 . Integrated Services, Systems and Infrastructure
- 14 . Inter-Agency Leveraging of IT
- 15 . IP Telephony and VoIP
- 16 . Mobile / Wireless Technology
- 17 . Open-Source Technology
- 18 . Security Awareness
- 19 . Server Virtualization
- 20 . Service Oriented Architecture
- 21 . Video and Web Conferencing Technology
- 22 . Virtual Office / TeleWork

Department of Education Trends

- 1 . IT governance and data governance
- 2 . Continual improvement of ADE asset securitization, both at rest and in flight
- 3 . Securitized electronic data exchange
- 4 . Support real-time data driven decision making
- 5 . Enterprise-wide project management
- 6 . Centralized data management
- 7 . Identity management
- 8 . Intelligent segregation of networks
- 9 . Web-based content delivery and data visualization
- 10 . Mature the SDLC and associated tools
- 11 . Mobile computing
- 12 . Service Oriented Architecture (SOA)

Department of Emergency Mgmt & Military Affairs Trends

1. (ADEM) Develop video/audio system linking SEOC, Recovery, JINC, and Mitigation Office. This would provide emergency staff with a vehicle to attend briefings without having to leave their place of duty.
2. (ADEM) Initiating project for the planning, implementation, and construction of State EOC.
3. (DEMA) The Information Technology arena is constantly changing and the Department IT staff must attend training to maintain a professional level of expertise.
4. To develop and train an IT staff member to act as software technician and assist Department staff with software and application issues.

Department of Environmental Quality Trends

- 1 . Continued interest, involvement and commitment from the agency's leadership team for setting clear priorities for the departments information and business technology teams.
- 2 . ADEQ end-users have embraced "ownership and responsibility" for the quality of their data. To this end new data quality governance team, a major stakeholder and dedicated staff have been engaged to address ongoing data quality issues, develop standards and implement policy to ensure quality data yields usable information for the agency and public consumption.
- 3 . National and regional climate change initiatives will most likely drive information needs required by ADEQ over the next 2-3 years. There are many business drivers not yet settled that are subject to change the direction of the overall IT Strategic Plan without sufficient lead times during 2009-10.
- 4 . ADEQ continues to leverage sister agencies for data acquisition to meet information needs. Utilizing these datasets enable ADEQ to maintain data quality, improve developer utilization and reduce maintenance costs. The agency's portfolio of acquired data include Department of Education, Secretary of State, Corporate Commission and Department of Health Services.

Department of Game & Fish Trends

- 1 . Agency will replace nearly 180 PC's during the period July 2008 to June 2009.
- 2 . Continue implementation of High-Speed Internet connections for remotely stationed Department employees. In July 2008, all but 15 remote employees have high speed internet via cable, DSL or satellite. We continue to work with local carriers to complete this project.
- 3 . SAN was upgraded in April 2008 to increase total storage space to 22TB.
- 4 . Centralize GIS activities and consolidate GIS servers. In June 2008, GIS staff began a project to outsource our internet based GIS applications in order to improve performance and maintain customer support.
- 5 . In June 2008, an award was made for the agency's e-commerce RFP. However, the vendor could not secure a performance bond and the award was terminated. The agency is working to re-issue the RFP or develop the e-commerce applications in-house.

Department of Gaming Trends

- 1 . Gaming device and casino management technology are advancing at a rapid rate, necessitating upgrade and/or replacement of information technology infrastructure (software, hardware and network).
- 2 . The lower cost and increased security provisions of broad-band networking technologies present the opportunity to establish wide-area network connections to gaming facilities in Arizona and provide secure remote access for more efficient and effective regulation.
- 3 . Technology and systems that enable on-line monitoring of gaming devices and casino revenue information is maturing and being employed by other gaming jurisdictions.

- 4 . Network and computer attacks (viruses, malicious programs, etc.) and email "spam" continue to burden IT infrastructure.
- 5 . Document imaging systems now provide cost effective means to electronically retain official records.

Department of Health Services Trends

- 1 . Evolving Technologies and the Increasing Need to Support Mobile Users and Provide Remote Access to System. Because of the Agency's expanding health services and emergency preparedness roles and responsibilities, ITS will increasingly deploy and support new health services systems that must be highly-available and allow for remote access. A growing number of users inside and outside of the Agency now rely on DHS business systems outside of normal business hours and outside of DHS locations. These increasing support responsibilities will have a direct impact on DHS ITS infrastructure, physical facilities, and staffing.

- 2 . Increasing Need for Inter-agency Collaboration for Data Sharing.

As State Agencies begin to tackle similar challenges it presents the need for improved inter-agency collaboration on information technology solutions and opens avenues for information sharing. Similarly, evolving Federal and State interoperability standards present new opportunities for improving data sharing and compliance reporting, but also pose challenges for the Agency to retrofit existing systems or incorporate the standards into new application make / buy decisions. ITS needs to consider collaborative services and federated security and identity management services.

- 3 . Increased Use of the Internet to Provide Information and Services.

As the availability and use of the Internet expands among Arizonans; the use of the Internet by the Department to deliver services has expanded. With the growth of wireless and broadband services the Department is utilizing the Internet more to collect and deliver information. In addition, expanding eGovernment initiatives provide exciting opportunities to streamline internal Agency business process while also dramatically improving the public's experiences and perceptions in dealing with the Agency. The Governor's eHealth initiative anticipates extensive data sharing and online services available via the Internet. The Department is currently working to bring key Agency services on-line, to include such eCommerce options as ordering certified copies of birth and death certificates, the ability of physicians to view newborn screening information, and the application and renewal of health and child care facility licenses.

- 4 . Promote the Security and Integrity of Information and Data.

In today's economic and political environment, addressing security has become a core necessity for all State Agencies, especially considering we are the primary repositories of trusted citizen data. As the Department obtains faster and more efficient service delivery systems from eGovernment, eHealth and other technology initiatives the importance of secure and reliable data controls increases. The increased reliance on the Internet to provide information services creates additional application security requirements. The need to maintain a

central enforcement authority that has the ability to act on agency wide incidents and track agency levels of incident response and lessons learned increases; this includes having the resources to enforce effective oversight in the implementation of security controls.

5 . Introduction of Social-Networking Technologies Forcing IT to Become More Flexible.

“Consumerization” of the enterprise—today there is less demarcation between what people do with computers and electronics at home and what they do at the office. Access to streaming video sites such as YouTube used to be restricted because of the bandwidth required; files such as this are now used as a part of doing business.

6 . Increasing Need for Additional Storage.

The creation of electronic documents and the automation of manual processes continue to require the addition of electronic storage. This is compounded by human nature’s desire to never archive/delete information for fear that they won’t be able to access it in a timely fashion.

Department of Homeland Security Trends

- 1 . Public awareness of local and national homeland security through the Internet including travel advisories and current security issues and concerns.
- 2 . Public awareness of cyber security and cybercrime throughout the nation.
- 3 . Increased interoperability among local, state and national first responders for improving communication.
- 4 . Use of webinars in lieu of on-site meetings/conferences to save travel costs and staff time.

Department of Juvenile Corrections Trends

- 1 . Agency continues to grow and resources are limited. End of year funds have allowed DJC to upgrade desktop systems, servers, and infrastructure.
- 2 . Youthbase software is expanding as our agency needs grow. More Web Development is occurring during initial programming of new Youthbase features. The focus now becomes setting up web portals for users to begin accessing Youthbase and converting new and existing apps to .NET
- 3 . Hardware replacement continues and will continue as funding becomes available. All Staff CPU's less than 3.0 GHZ will be upgraded this fiscal year.

Department of Land Trends

- 1 . Higher speed computers and networking hardware will allow the Department to incorporate more information into its internal systems for analysis and decision making
- 2 . New technologies will make managing user desktops easier in the future and lower the total cost of ownership.
- 3 . Distributed data base technologies will allow the Department to easily exchange data with key cooperating agencies such as ADWR and ADEQ and allow data from such agencies to be readily incorporated into internal systems.

- 4 . Technologies which couple RDBMS and GIS technology with Web browser interfaces will allow more efficient delivery of enterprise applications internally and will allow for internet based delivery of key land and lease information to the Department's external customers.
- 5 . Geopositioning satellite technology and high resolution imagery will help bring information from the field to help the Department do a better job in analyzing and monitoring Arizona's land and resources.
- 6 . The Department 's investment in data development coupled with advances in computing power and analysis software will allow for increased abilities to analyze the Department's land and resources assets for faster and more informed decisions.
- 7 . Consolidated statewide telecommunications contracts will allow the Department to deploy its enterprise information systems to remote offices, field personnel and telecommuters with much more efficient services.
- 8 . Increased use of GIS technology by state, local and federal government agencies and the private sector will continue to create a paradigm for integrating data vital to the Department's ability to increase the number and quality of its land and resource decisions.
- 9 . Advancing standards and open systems initiatives should allow an easier integration of GIS data between various public and private sector users of GIS technology.

Department of Liquor Licenses & Control Trends

- 1 . Implement a new E-Licensing Control System.
- 2 . Implement new backup system using a networked attached system in the recently converted environment.
- 3 . Mobile/Wireless access to our computer system
- 4 . Digital fingerprinting.
- 5 . Implement internet capabilities to accept payment by credit card.
- 6 . Implement Videoconferencing between Phoenix and Tucson.

Department of Parks Trends

- 1 . Rapid pace of technology reduces the lifecycle of hardware and software.
- 2 . Methods of productivity by employees are evolving. Personal productivity products, web viewers and languages, remote accessibility, and internet appliances are changing the traditional desktop model of personal computing. Often, productivity methods through the use of technology are provided by multiple entities and employees outside the local realm of government relationships.
- 3 . Software manufacturers tend to target modern hardware, making it difficult to integrate older equipment into an IT standard.
- 4 . Apple Computer remains a healthy but niche provider of desktop productivity hardware and operating systems. OS X Unix operating system released in March, 2001. Open standard Unix applications are becoming more accepted worldwide.
- 5 . Infrastructure attacks are increasing from viruses, worms and hacker threats focused primarily on Microsoft software. Security will need to be enhanced throughout the system using blended forms of defense and a degree

of platform diversity.

Department of Public Safety Trends

- 1 . Internet, Intranet and Extranet solutions are becoming the architecture of the future for performing business processes.
- 2 . Digital networks are replacing analog systems at economical rates and provide orders of magnitude in data transmission speeds. TCP/IP architecture has enabled a common transport protocol over commercial and state facilities including fiber optics.
- 3 . Web technology will be used for integration of existing and new applications. Mainframe legacy systems will be accessible through the use of browser and web services technology.

Department of Revenue Trends

- 1 . The DOR has discovered that using advanced analytics in a collaborative environment will enhance business performance. The use of an Enterprise Data Warehouse (EDW), which provides uniquely correct and detailed answers to questions, will allow for cross-agency interaction and shared services, improving government efficiency. Data warehousing, stronger reporting tools, and an efficient means to gather more specific statistics, trends, and analytics will support the overall goals of the Agency and the State. Statewide Enterprise Architecture (EA) targets and Service-Oriented Architecture (SOA) will make collaboration more successful and eliminate individual agency perspectives, allowing government agencies to function together as a comprehensive enterprise.
- 2 . Explosive growth in data volume and complexity, with terabytes of sensitive taxpayer information, sparks security concerns, even as IT security threats continue to grow. Agency CIOs will take strong measures to protect their enormous data assets – eternal vigilance is the cost of doing business. The implementation of a strong information security presence with applicable policy, procedure, standards, and measurements will be developed to meet the rigorous requirement for assurance. Once these are in place, security will turn to a risk management issue. Instead of being a function that installs firewalls and enforces rules, IT security will become part of an overarching strategy to minimize strategic and legal risks. Additionally, assigning rules and rights over IT data creation, collection, analysis, and use will become more standard across agencies. Organizations that have an information governance process in place will be more effective at collecting high-quality data and processing it than those that don't, gaining more value from their information.
- 3 . IT organizations will no longer be viewed as a support function, but a strategic one. A focus on process improvement, coupled with CIOs who have substantial agency experience, will bring IT units into a more tactical role, with CIOs making a bigger contribution to overall agency effectiveness. DOR business process owners increasingly depend upon IT to refine and improve their efficiencies, simultaneously increasing revenue, reducing costs, and improving productivity. Re-engineering of workflow processes will aid in incorporating IT into the agency structure, rather than leave IT in its previous role of infrastructure improvement. Rules-driven, event-triggered, exception-based reporting will be required of every agency, as stakeholders (taxpayers) become increasingly knowledge-savvy. Process owners will adopt event detection mechanisms to optimize a variety of business processes,

and better processes mean increased reaction time with enhanced flexibility, and ultimately, better customer service.

- 4 . Organizations are adopting Internet-delivered Web services and SOAs and moving toward virtual servers and storage in an effort to integrate and consolidate information. These architectures deliver the capabilities needed to improve business processes and avoid duplication of information. Organizations are investing in data and application integration tools to alleviate duplication, thus decreasing the amount of storage space needed. For DOR, this is a "break and fix" strategy, not an "add-on" effort. Many agencies don't have the foundation to implement SOA, which requires a well-designed architecture as well as deep data integration. Systems must scale and include the ability to analyze the data.

Broadened IT awareness on the part of the state agencies confirms that the Internet is only part of a changing paradigm. Use and influence of the Internet is pushing customer service. More sophisticated customer expectations and requests for improvement of agency websites mean that the more information and services that are online, the better we serve our stakeholders, customers, and the general public.

Department of Transportation Trends

- 1 . Providing solutions to support home-office, telework, web & video conferencing and remote access.
- 2 . Advancing organizational maturity through the implementation of standardized and repeatable processes using the Capability Maturity Model® Integration (CMMI) framework.
- 3 . Heightening productivity and reducing risk through enhanced project management.
- 4 . Using Service Oriented Architecture (SOA) to promote reuse of common services and improve information sharing.
- 5 . Improving information security and privacy measures.
- 6 . Employing enterprise content management solution(s) to manage the capture, storage, security, revision, retrieval, distribution, preservation and destruction of documents and content.
- 7 . Improving business continuity and disaster recovery capabilities.
- 8 . Reducing storage related costs via the introduction of tiered NAS/SAN architectures and data lifecycle management software.
- 9 . Lowering desktop total cost of ownership (TCO) through the application of proven server based computing, thin-client hardware, and software as a service (SaaS) models.
- 10 . Expanding citizen access to information and service offerings via interactive, dynamic, customer-focused, personalized and easy to navigate web-based delivery channels.

Department of Veterans' Services Trends

- 1 . Information Technology (IT) is changing rapidly and costs are difficult to estimate for far-reaching budget requests. The Arizona Department of Veterans' Services IT Department does not have its own budget which makes future planning impossible.

- 2 . The agency lacks an agency-wide training program to improve/update employee job skills, and provide promotional opportunities within the agency.
- 3 . Customers and stakeholders are requesting expanded access to the agency.
- 4 . Having the US Dept. of Veterans Affairs (VA), the State of Arizona, HCFA, NASDVA, and other information resources available on the Internet would be of considerable value to Department employees.
- 5 . The constituent base (veterans service organizations and others within the veteran community) is fragmented with varying agendas. The agency needs to better focus its efforts to unify the veteran community.
- 6 . State agencies compete with each other for scarce financial resources and competing public policies.
- 7 . Nursing Care industry is moving to Electronic Documentation and new procedures need to be put in place, training and equipment needs to be put in place to accommodate this trend.

Department of Water Resources Trends

1 . NETWORK SECURITY.

Network security continues to be a major focus and likely will be in the future. With the rising number of sophisticated network threats and activities, we are constantly making hardware, software and process improvements that enhance the security of our network systems.

We have deployed a new, more effective anti-virus solution, with more frequent updates, and much better visibility of attacks and trends. With central console management and an increase in the type of threats detected, this solution has reduced the incidence of problems caused by viruses, Trojans and spy ware.

We have upgraded our spam email appliance solution that also effectively traps viruses and Trojans before arriving at our customers' desktops significantly reducing these threats.

We have recently deployed a method of patch management that allows us to proactively manage security and software patches and updates to our network systems by automating the collection, analysis, and delivery of patches.

Technical staff maintains their knowledge of vulnerabilities announced through research, NIPC and SIPC notifications and are able to respond quickly to prevent an attack. Identified trends in virus and Trojan attacks detected by our systems are reported to ADOA Security to help combat these threats cooperatively.

Continuous security and transaction analysis of logs and research are a few of the more common, security-related tasks we perform on a daily basis. We continue to add software and hardware tools to our inventory to detect, repel and track intruders.

Continuous network monitoring and the use of more effective security tools have enabled us to improve our security defenses and better assess our vulnerabilities.

2 . NETWORK RESOURCES and INFRASTRUCTURE.

We have made significant improvements in our technical infrastructure and architecture. These changes have increased our network performance and defenses and better allow us to provide the agency with a stable and secure environment. Downtime due to network problems has been significantly reduced and, at the same time, maintenance downtime has been all but eliminated.

We continue to plan changes and improvements to our network architecture, including a change in platform of some of our systems, which will enhance performance and reduce ongoing operational costs. Antiquated server hardware has been refreshed to later technology to enhance the performance of applications and file sharing.

The data requirements of our agency has been increasing substantially. To properly support these demands we've implemented Storage Area Networks (SANs) that are scalable to meet future requirements.

A web architecture utilizing Secure Socket Layer (SSL) encryption has been implemented to provide secure web-enabled applications to the public. This three tiered architecture ensures the agency that the users of these applications have trusted secure connections.

3 . COMMUNICATION and CUSTOMER SERVICE.

We have improved customer service by aligning IT with the business areas within the agency. During the next year we plan to further centralize service requests through our Help Desk. This will ensure proper communication across all IT groups regarding new and existing user issues.

We've implemented several systems that strengthen IT's relationship with the Department's user community. These systems allow IT to better understand the business needs which provides for better solutions. These systems also provide a means of communicating IT related system changes that, if left uncommunicated, could impact user productivity.

4 . INTERNET/INTRANET TRENDS.

We have had a fully developed Internet web presence for almost 10 years. We've established a Website Redesign Project encompasses management's vision that will provide new features and applications to enhance the web user's experience.

The Web Development team is working to define areas of improvement and web-enabled applications that would offer the public more opportunities to do business with the agency online. To support this effort, we have designed an architecture that will allow us to deploy these applications in a safe and secure manner.

Non-technical staff now have the ability to add documents and updates to both the Internet and Intranet websites without waiting for technical staff to become available to make changes.

We're planning to replace the current document management system with a

solution that's easier to use and manage. This solution will also facilitate improved communication, sharing, and updating of information.

We have developed and deployed a robust and full-featured Intranet to keep staff up to date on important issues within the agency. Continuing improvements will make the Intranet the information hub within the agency.

The new Microsoft Exchange email system allows us to continue to provide internet email access to our users. Users are permitted to securely connect to the system and access their email without threat of being compromised by intruders.

The Web Development group will be further refining their skills with the latest programming technologies to provide enhanced capabilities to our users and the public. Skill development will be obtained via training in the technologies and/or self study.

5 . BANDWIDTH and STORAGE DEMANDS.

With the recent deployment of IP telephony, we have made significant improvements in our bandwidth to meet the increased traffic demands and better serve our customers. We will continue to monitor and tune our traffic to effectively manage and utilize our bandwidth.

We are upgrading our remote sites with high-speed fiber back planes and the latest versions of network cabling and network hardware capable of fully utilizing these improvements. We will continue to look for solutions that complement these enhancements.

While we expect to add only a small amount of additional disk storage this year to maintain our reserves, we continue to have a need for additional capacity to our tape backup capability to reduce the amount of time required to fully backup all of our systems.

In the past year we've taken advantage of the MAGNET2 offering by AZNet. This technology has provided gigabit fiber connectivity between our host and several remote sites. We've seen a significant increase in overall network performance and throughput since the adoption of this technology. We plan to increase the bandwidth to the remote sites that are too distance to leverage MAGNET2 if those circuits become consistently over utilized.

The agency has implemented Storage Area Networks (SANs) to address increasing data storage demands. In addition to utilizing SANs for personal and shared data storage, a project has begun to centralize all data backup processes disks or SAN.

6 . STAFF COLLABORATION.

The IT Division has made significant strides over the past year in collaborating with the business units to provide solutions that are better aligned with the Department's business goals. Recently, this has been accomplished through project planning sessions with the business units. Many of these sessions will

continue to become active projects, but all of these sessions have yielded an improved understanding of the business needs of the agency by the IT staff, which will continue to provide more on-target solutions.

7 . INFORMATION TECHNOLOGY POLICY.

We continue to update and strengthen our IT policies. We still have a lot of work in this area but should, by the end of this fiscal year, have re-written all of our old, outdated policies in order to fully comply with statewide policies and standards. This is a considerable effort that is needed to insure that our staff understands the importance of relevant IT policy compliance.

IT management has formulated updated computer use and email policies. These agency policies, along with the relevant GITA policies, will be communicated to all users. Upon observation, users will be required to consent to the policies. In addition, a network login disclaimer will be used to continuously keep users informed on policies and where they can be found.

8 . INFORMATION TECHNOLOGY STANDARDS and PROCEDURES.

As we have grown and become more technologically sophisticated, we have a greater need for our systems to be better documented in terms of standards and procedures. Using statewide standards as a base, we have begun building upon them to better manage our own agency-specific standards. These standards are necessary to establish, support and enforce the proven methods we use to support technology efficiently with a relatively small staff.

With the recent reorganization of our network staff, that better supports both our customers and the infrastructure of the agency itself, procedures are important to uniformly sustain our support efforts. Cross training of staff, maintaining a current and accurate inventory of hardware and software, automation of a number of support and administration processes all depend on well documented procedures. We have barely scratched the surface on the level of standardization we need, but are committed to working towards this our goal.

Over the past year, along with IT management changes, standards and procedures are being implemented, changed, or planned. The goal of several of these is to ensure the agency is in compliance with the GITA's standards and procedures. Standards have been addressed in the areas of remote (VPN) connectivity, hardware and software, software development, security, encryption, and database management. Over the next year we plan to continue hardening the agency's compliance to GITA's standards and procedures.

9 . TECHNOLOGY REFRESH and NEW TECHNOLOGY.

We have completed the migration of our network operating system from Novell to Microsoft. This migration also included movement from the Novell GroupWise email system to Microsoft Exchange. Regarding migrations, we're in the process of moving our Linux environment from Suse to RedHat. We believe that the efforts we have made to update our systems and stay current in technology are

important to our success. We will continue to research emerging and evolving technologies in order to deliver a quality product to our customers.

10 . EXPANSION of GEOGRAPHICAL INFORMATION SYSTEMS and REMOTE SENSING.

With the continued consolidation and expansion of GIS and Remote Sensing at ADWR, there has been a corresponding growth in IT to support these methods and technologies. Adding the spatial component to the Department's data is an important factor in being able to present complete and accurate information to the public in an understandable format. GIS and remote sensing also provides further insight into important trends through analysis, which allows the Department, outside entities and the public to make more informed decisions.

11 . EXPANDED USE of TECHNOLOGY in the FIELD.

Since many of ADWR's responsibilities include field data collection, it is necessary for the staff to record on-site, detailed spatial and attribute information on a wide variety of water-related features. ADWR has continued to revolutionize these field data collection methods by replacing manual processes with more efficient solutions based on technology. These efficiency increases are primarily realized because the in-office, data entry and review is greatly reduced by entering the majority of the data once, while on site. Staff have also found this results in more complete data with less frequent need for follow-up visits. Having the ability to navigate to field sites via GPS displayed in conjunction with topographic maps, aerial photography or satellite imagery also make sites easier to locate, e.g. sites with coarser location information.

12 . Network and Endpoint Encryption.

Recognizing that security threats to an enterprise are much higher because of network interconnectivity and mobility we are in process implementing some of the top Network and Data Encryption technologies to create a comprehensive network and endpoint data protection solution tailored to the needs of our Agency.

This solution will further leverage the newly created Active Directory enterprise infrastructure which has enhance our IT administrator's ability to achieve centralized control, scalability, and rapid deployment.

The overall goal is to minimize the costs of security administration and support, while reducing the potential for data security gaps through the alignment and integration of data protection policies. Protecting data, controlling access to it, and verifying its authenticity while maintaining its availability is one of main priorities

Encryption is increasingly used to protect digital information, from business priority details, personal information held on a computer networks to financial details transmitted over the Internet. The solution that we are developing protects against loss or theft of data on laptop and desktop PCs.

13 . Configuration Management System.

Lack of the appropriate tools and procedures to standardize Network Design and Desktop configuration are rapidly becoming the major barriers to the deployment of reliable, secure, and correct computer system. We are in the process of implementing a configuration management system that would prevent such problems by design.

The Configuration Management System that will be implemented will be used with industry best practices to ensure that all information systems be design around three concepts: Reliability, Security and Correctness.

We are deploying a comprehensive solution for change and configuration management for our Information Technology Platforms that will allow our IT administrators to perform task such as deploying standardized approved operating systems, software applications, software updates, provide the ability to Meter software usage, Assess variation from desired configurations, Take hardware and software inventory and allow Remote administration of computer systems.

The new Configuration Management Solution will allow queries and reports to consolidate information throughout our organization and provide management of a wide range of Microsoft operating systems, including client platforms, server platforms, and mobile devices.

14 . Collaborative Enterprise Portal.

We plan to implement a solution that will improve collaboration by centralizing and sharing business intelligence tools and information across our entire organization. As our Agency grow so does the amount of the files. It becomes difficult to keep track of the multiplying documents and their locations. The new solution overcomes this by allowing employees to store and locate files in a central site.

Today's work occurs over multiple locations, whether it is in different remote AMA office locations , separate departments or at home office. Our new collaboration solution will enables teams and individuals to connect and collaborate together regardless of where they are located.

15 . Improve ROI with Virtualization.

We plan to create Virtualized computing environments that allow our Agency to run multiple operating systems and multiple applications on the same computer at the same time, increasing the utilization and flexibility of hardware. Virtualization essentially lets one computer do the job of multiple computers, by sharing the resources of a single computer across multiple environments.

This new solution will create Virtual Server that will allow our Agency to host multiple operating systems and multiple applications locally and in remote AMA locations. In addition to energy savings and lower capital expenses due to more efficient use of our hardware resources, we are expecting to get high availability of applications, better desktop management, increased security, and improved disaster recovery processes once we have completely build-out our virtual infrastructure.

16 . Disk Based Backup.

Vulnerable to environmental factors such as humidity and heat, and data not always restored perfectly due to these and other factors are reasons why we are implementing a faster performing, more durable backup solution than tape.

Disk Based Backup solutions will allow us to restore data much more quickly than the previous solution. The new backup solution will improve backup window, decrease business risk by providing hard ware redundancy, RAID protection, and high availability that helps ensure the Agencies data is restored quickly and accurately.

Governor, Office of the - Trends

- 1 . Internet and Intranet becoming a common source of communicating internally to our employees and externally to other agencies and constituents.
- 2 . Increasing demand for security of electronic data and resources.
- 3 . Increased focus on e-government initiatives. (Eg. Web/DB Apps)
- 4 . Increased demand for VPN and other telecommuting solutions

Industrial Commission Trends

- 1 . Continued enhancement of the Internet Web, and the addition of a Commerce server, or interface for the ICA will facilitate a faster and more efficient means of providing information and service to the workers' of Arizona.

Lottery Trends

- 1 . Technology refresh will occur at regular intervals.
- 2 . Agency will continue to offer innovative products such as enhancements to the instant and online systems. Information Technology is mandated to support technology requirements.
- 3 . The agency will add one new computer system this year. this will replace an older system that will be re-purposed for disaster recovery mitigation.

Radiation Regulatory Agency Trends

- 1 . Technology is constantly changing
- 2 . The use of the Internet as an information provider is critical to convenience.
- 3 . Information Security is becoming a more complex and critical process as attacks increase in complexity and frequency.

Registrar of Contractors Trends

1. Improved Service Delivery – The ROC seeks to utilize state of the art technologies as part of its upcoming ROCIMS implementation. This initiative will make services available to both the citizen and the contractor in ways in which were not previously attainable. Such services include – but are not limited to:
 - a. 24 hour “soup to nuts” online services that previously required mail-in or face to face interaction with ROC personnel;
 - b. Instructional videos posted on the ROC website describing services offered by the ROC;
 - c. Remote kiosks at field offices with access before and after normal work hours for contractors to utilize services (in the event they do not have computing resources at their place of business);
 - d. Replacement of its 24 year old COBOL database License Management Application. The new system will be a holistic interlaced system providing state of the art workflow enabled services to all business areas of the ROC;
 - e. Replacement of the current telecommunications infrastructure which include antiquated voice and data networks.
- 2 . Virtual Office Enablement – The ROC desires to equip its employees with the tools necessary to conduct business operations from alternate locations (remote offices, home, or any place other than their assigned duty post).
- 3 . Paper Reduction – The ROC desires to greatly reduce and/or eliminate the volume of paper being produced (photo copied) either as an external requirement by other agencies (e.g. Office of Administrative Hearings) or internally as a consequence of customary practices which may no longer be required.
- 4 . Teleconferencing – The ROC will utilize Qwest Web Conferencing to bring together its employees from its 8 regional and field offices for training and meetings. This is in support of the Governor’s directive to reduce travel costs and carbon emissions.

Retirement System Trends

- 1 . Development of enhanced applications, including web-based and workflow management applications, to meet and exceed member customer service through the use of Oracle tools and industry standard tools.
- 2 . Highly trained and experienced staff to utilize the tools needed for effective applications.
- 3 . The use of a dedicated business analyst team that provide a more detailed analysis of business requirements coupled with business process re-engineering to improve overall successful implementation of IT solutions.
- 4 . Commitment of the agency to spend training dollars for technical personnel expedites application development, helps insure that systems are efficiently utilized, and aids in the long term planning of getting the most out of our applications investments for the future.

Secretary of State Trends

- 1 . The state’s IT role in election management has increased dramatically.
- 2 . Information users are becoming more self sufficient if given adequate technology

tools

- 3 . Security concerns are escalating surrounding access, personal information storage, and election integrity.
- 4 . Information users 'expect' that they should be able to access most data via the Internet.
- 5 . Requests for public records are increasing and calling for more/better information than just images/paper.
- 6 . Technology is a proven method to improve government processes.

Agency IT Issues

Arizona Health Care Cost Containment System (AHCCCS) Issues

- 1 . **IT Budgets and Resources:** Business needs, technological changes and refreshing of equipment continue to challenge agency IT budgets. With a new generation of IT arriving every 18 months (per Gartner Group), the continued lack of funding for technology refresh and infrastructure improvements impacts our ability to maintain quality service, increases our maintenance costs, and leads to increasing production problems impacting our critical business functions. During the past ten years, our technology refresh plan has only been funded for one year, leaving the agency with outdated poor performing equipment. Only with a well-funded technology plan will we be able to effectively support the dynamic nature of the agency.

As an alternative to the continuing purchase of PCs, we have replaced many PCs with thin client devices. Thin clients have less moving parts and last longer than the traditional PCs; they are also more secure. This change helps to reduce replacement costs per unit, and increase the longevity of the investment. We have also begun to virtualize servers and PCs as another alternative in reducing replacement costs and increasing the longevity of our investment.

Another budget concern is the continual shortfall of agency funds for the increasing costs of operating our mainframe systems at the ADOA Data Center. Our projected expenditures are never fully funded. The agency has routinely had to search for other funding to accommodate these under funded expenses. The cost projections for AZNET continue to be a concern.

- 2 . **Aging System:** Our legacy system, the Prepaid Medical Management Information System (PMMIS), is seventeen years old and operates on an older technology. It is becoming increasingly more difficult to implement the necessary changes as required by our nationally recognized health care program. The database and programming languages are currently supported, but no major improvements are planned in the near future. There are limited trained resources, most being trained in-house. With two states to consider, it is necessary to develop an overall strategy for the future that addresses the expected life of the system (or individual components), the direction of the market as a whole, statewide enterprise architecture, service oriented architecture, e-Health, MITA, and federal and State regulations.

As stated elsewhere in this plan, AHCCCS has performed a MITA self assessment and prepared a roadmap of systems enhancements to reach an increased level of process maturity. We are also identifying new and innovative ways to address ineffective, inefficient, and wasteful processes, procedures and legislation that force us to operate in a sub-optimal manner. It is important that we begin to put these plans into action before our existing aging system can no longer meet our needs.

- 3 . **Retention and Recruitment of Staff:** A continuing issue facing IT management today is the retention and recruitment of staff. Without technical resources, long range plans such as this IT Plan will not be accomplished. Enterprises worldwide are requiring additional resources to adopt new technologies and remain competitive in the marketplace. At the same time there is an overall shortage of IT skills, there are hiring freezes in government, and private enterprises are offering salary increases with which the government cannot compete. The need of government to change its personnel management to reflect private sector practices, e.g., frequent pay raises based on market rates, performance bonuses, simplified job/salary classifications, and streamlined hiring (and firing) procedures, has been recognized.

Retention and recruitment is not just an IT problem, but is common in many divisions across the agency. To help combat this issue, AHCCCS recognized the need to invest in advanced technology to support distributed work processes. Telecommuting has been made available as a work-site alternative, and many employees telecommute one or more days per week. In FY2006, a virtual office pilot was implemented where employees work in their homes on a permanent basis. To date about one third of the agency work at home permanently.

Attorney General's Office Issues

- 1 . Juggling the prioritization of incoming support requests and the installation of new equipment and software.
- 2 . Deploying new technology while retaining stability and reliability of the computer automation
- 3 . Meeting higher levels of customer expectation while computer automation system increases in size and complexity.
- 4 . Retaining quality IT staff long enough to satisfy expansion and upgrade efforts.
- 5 . Providing remote access to agency data for telecommuters while ensuring that data integrity and system security are retained.
- 6 . Providing ample electronic storage that is highly available.
- 7 . Obtaining funding to implement increasingly complex computer network systems to satisfy the expanding collection of State information technology standards and policies.

Corporation Commission Issues

- 1 . Expanding Internet-based business expectations.
- 2 . Skill level of new hires is sometimes lacking and subsequent training is insufficient. No newly appropriated funds for training; insufficient staff time available for training.
- 3 . Low pay relative to private sector leads to low skill levels of new hires and subsequent high turnover.

- 4 . Systems security and reliability.
- 5 . Ever-increasing State technical oversight with minimal recognized benefits and no resources appropriated commensurate to requirements.

Department of Administration Issues

- 1 . Alignment of Technology and Business Need.

Technology components are one substantial factor in today's business environment. However, exclusive attention to purely technological solutions is simply a potential cause for failure. Information technology services must be delivered under the guidance of informed, normal business processes, using contemporary project management techniques. Business solutions are crafted and driven by the combined experience of technicians, analysts and managers. When shared, their decisions are supported by knowledge gained from common information systems.

Today's workplace is characterized by increased demands for data processing and access to information. Repositories are needed which hold, store and process the information. Also required are the facilities and media that transport and provide a means of access to the information. Government can benefit greatly from the shared experiences of its knowledge workers.

- 2 . IT Workforce Attraction and Retention.

Knowledge workers and other personnel with object oriented programming skills, networking skills, and client-server skills are in very high demand and difficult to hire and retain. These workers will continue to mature into higher degrees of specialization, and their specialization will change over the course of time. Support for on-site training and certification may be sought to minimize the loss and departure of these employee skills. Ultimately, however, the lack of hard-monetary compensation equal, or comparable to the private sector for skilled IT technicians will harm the Department's competitiveness in the current labor market.

Additionally, the skill base of current technology workers is an area of grave concern. Fundamental to the issues surrounding their true skill and delivery capabilities are many organizational issues such as, incentive, tenure, morale, and compensation. How much perceived salary disparity can an organization tolerate between these specialized jobs and core business process jobs? Are such trade-offs worth it? Agencies that respond incorrectly to these issues or choose to ignore them entirely will lose and undermine the value of their investments.

- 3 . IT Billing and Pricing.

A business case for funding statewide, enterprise projects providing benefits to all entities is required. A satisfied customer base is the goal of every agency.

Agency service rates will improve to be competitive with other service providers. Current service rates are due, in part, to charges that do not relate to service provision but are added to the base rate. For the division to be competitive it must seek to streamline processes in order to provide attractive service rates to

its customers and potential customers.

- 4 . Security requirements in applications cannot be overlooked are ever present and growing. Important parts of a normal enterprise-wide security program involve user authentication, access control, data integrity and adherence to agency statutory requirements, administrative rules and business rules. The challenge is to find the proper balance between the right to privacy and the right for full and open access to information while ensuring technological efficiency and process
- 5 . Information Technology Budgets and Resources.

The management of consolidated information services is becoming technically complex, sometimes controversial, and expensive. Resources are consumed by enterprise management needs, customer problems, and service operations. The knowledge skills and abilities to meet all such needs are rising as well. Applications are continually being refined and improved. ADOA will continue to acquire genuine skills and tools of this type to remain viable, competitive and meet continuous service expectations. Budgets and resources must be managed and controlled in order to meet customer demand.

Department of Agriculture

- 1 . Consistent and adequate funding for the Information Technology Group to carry out agency goals.

Funding is a major issue in order to maintain vital areas such as networks, internet, intranet, email, remote access capability, current software and equipment to current levels of compatibility with current industry standards.

The IT Department has recently been given control over a small, fixed costs budget, but has no discretionary funds. Therefore IT cannot control how technology dollars are spent, leading to the possibility of losing control over the main focus of the IT Department.

Additionally, the IT staff is underpaid and understaffed. In order to adequately support the Agency employees and to produce quality applications for internal and web use, we must hire and educate the best potential job candidates available. Under the current pay scales and budget restrictions, this is not likely to provide the level of skill in an employee and will also result in a high level of turnover. Additionally, with the probable inclusion of the Structural Pest Control Commission into the Department, this will place an additional load on staff resources to the point of critical mass,

- 2 . IT Staff continuing education

With the speed of evolving technology, the IT Staff must be constantly educated in the new techniques and technologies that are available. The education required to master these new technologies does not come cheap, and a method by which the employee may attain the level of expertise at no expense to them must be formed.

Most educational curriculum in this arena is in a classroom setting and is expensive to the employee, even with reimbursement. Many of these classes can run well over \$1000 for a 5 day event, and most cannot afford that out of pocket

expense, even with reimbursement coming at a later date. With the current state of budgetary resources, this study must be self funded, there are no reimbursement funds available. Therefore the Department cannot insist on this training, but make it a required qualification of future hired staff members.

3 . Methods to train remote site personnel

An effective method to deliver technology training to those employees located outside the main Agency building must be conceived and implemented. The issue is that the remote sites are generally populated by 2-5 employees during any shift, and to travel to these sites to deliver training is not an effective use of time and dollars. Additionally, the employees cannot take time from their daily duties to attend training, since there are a limited number of employees per shift, and the tasks must be completed as demand occurs in order to prevent delays at the sites. As a related issue, many Agency employees are not located at any facility, rather they work from home in very remote parts of the State. These people are in the main office only 4 times per year as a group, and the schedule for these meetings is quite full, leaving no time for training.

Department of Corrections

1 . INFRASTRUCTURE UPGRADES

While the network has expanded into all operational areas, much of the cable plant, telephony and network equipment remains EOS (End of Service) or EOL (End of Life). In order to continue the delivery of network services and achieve data-telephony convergence, these infrastructure elements must be replaced or upgraded.

2 . LIFE CYCLE MANAGEMENT

From the cable plant to the desktop, lifecycle management remains difficult to fund. From fifty year old copper wiring buried under collapsed conduit, to legacy Windows 95 systems, the ADC is struggling to achieve the infrastructure necessary to support the eventual migration to an Open Systems enterprise solution.

3 . OPEN SYSTEMS

Most of the data for the Agency is stored on the mainframe at Arizona Department of Administration (ADOA) Adult Inmate Management System (AIMS). For the Agency to improve operational effectiveness through remote/mobile access data must be moved to an open system architecture for improved data flows and inmate metrics, analyses and reporting to substantially improve productivity and lower costs.

4 . SOLUTIONS DEVELOPMENT

The Agency Network Operating System (NOS) network is currently Novell 6.5. All new application development is being performed in ASP.NET 2.0. Currently, some users must have dual client licenses to access both Microsoft and Novell resources. Proposed solutions to move Agency data to an Open System require a Microsoft NOS platform. Consequently, the Agency is migrating its NOS Architecture from Novell to Microsoft as well as migrating enterprise services such as email and voice mail to a Microsoft based solution.

Department of Economic Security Issues

- 1 . Aging and Antiquated Systems
- 2 . Attracting and Retaining High-Quality IT Staff

- 3 . Commitment to the Enterprise IT Vision
- 4 . Complete and Quick Recovery from a Major Disaster
- 5 . Complying with Increased Information Security Requirements
- 6 . Coordinating Delivery of IT Solutions for Integrated Services
- 7 . Coordinating New Enterprise-wide IT Solutions
- 8 . Effective and Efficient Information Sharing
- 9 . Electronic Records Retention
- 10 . End of Life Software Support
- 11 . Increased Expectations for IT Services and Performance
- 12 . Increasing Bandwidth Requirements
- 13 . Insufficient Business Process Re-Engineering
- 14 . Integration of Business and IT Planning
- 15 . Investment in IT
- 16 . Meeting Business Needs within Existing Resources
- 17 . Succession Planning
- 18 . Telecommunications - Privatization and Service Delivery

Department of Education Issues

- 1 . Increasing demand for unplanned, unfunded services
- 2 . Integrating disparate legacy data stores
- 3 . Managing security of IT systems and operations
- 4 . SAIS's ability and appropriateness to meet user expectations
- 5 . Project management and operations oversight
- 6 . Significantly increased demand for information stewarded by ADE
- 7 . State's inability to be competitive in vying for high-quality IT staff resources.
- 8 . Organizational culture that is not readily supportive of centralized information management

Department of Emergency Mgmt & Military Issues

- 1 . (ADEM) Install necessary audio/visual on existing network backbone that would allow video conferencing between the SEOC, Recovery, JINC, and Mitigation remote trailers.
- 2 . (ADEM) Project to completely renovate the State EOC.
- 3 . (DEMA) Professional training is key to maintaining a skill set that provides personnel the tools necessary to analyze, troubleshooting, and resolving network issues.
- 4 . The need has developed to a member of the IT staff to be knowledgeable in various software applications and provide assistance to Division staff.

Department of Environmental Quality Issues

- 1 . Staff alignment: Skills needed vs. capabilities to support newer technologies; our succession plans, which will include addressing the increase in key personnel eligible for retirement, will be a major challenge over the next few years.
- 2 . Adequate funding for training.
- 3 . Competitive IT salaries
- 4 . Hiring and retaining high quality IT talent

Department of Game & Fish Issues

- 1 . Rapidly changing technology requires continual training for network technicians to maintain technical proficiency for providing quality customer service. New employees are being trained to maintain current and future technology assets.

- 2 . Inequities in rural "build-out" of telecommunications infrastructure and non-competitive rates for carrier services to provide connectivity to Regional Offices, Wildlife Areas and Fish Hatcheries create obstacles in providing quality network services. Partnering with other state agencies to leverage economies of scale for rural and remote connectivity is imperative.

New statewide contracts with major carriers have allowed opportunities to provide high speed internet access to all remote employees. However, the cost is very high for satellite service. We learned in 2007 that satellite services do not support VPN connections to our network due to poor bandwidth performance.

Department of Gaming Issues

- 1 . Increased complexity of the Department's IT infrastructure and projected growth will require specialized, highly-skilled IT workers.
- 2 . Current gaming compacts and legislation require the Department to implement an electronic Joint Monitoring System to access and store gaming device information for Phoenix and Tucson casinos. This will require the Department to purchase and deploy system hardware, software and network security equipment.
- 3 . Increased computer viruses and attempts to spread malicious programs require that we continually assess and improve our network and computer security.

Department of Health Services Issues

- 1 . Attracting & Retaining Information Technology Personnel.

Recruitment and retention of capable IT professionals with new and emerging technology skills continues to challenge the IT division's ability to meet departmental business needs. There are issues of a hiring freeze, below market hiring ranges, salary inequities, and the lack of a performance pay process tied to employee evaluations.

- 2 . Keeping Pace with Training for Emerging Technologies.

The Agency has committed that design and development of new or replacement systems will, to the extent possible, be built using the Microsoft .Net framework. This n-tier architecture – necessary for the Agency's long-term strategy to Web-enable the enterprise – represents a dramatic change in methods and tools for project teams experienced only in mainframe or client- server programming methods. DHS ITS have provided and continues to provide training opportunities to current staff. Nevertheless, it is a lengthy retooling process and budget limitations

- 3 . Integration of Business and IT Planning.

DHS ITS is going through a culture shift in an effort to align the Department's business strategy with the IT strategy to allow ITS to better serve internal customer needs. This change will require a greater involvement by both IT and business decision makers in the prioritization of projects. In addition, ITS will require a higher level of project and portfolio management and improved business analyst skills. This shift is an evolution in the organization from traditional system design and development to a project management / business analyst model.

4 . Need for Infrastructure Improvements.

The Department currently has an aging infrastructure that supports the information technology systems. To support these key systems, the Department is currently evaluating potential co-location services for applicable systems and is determining the necessary upgrades to the existing server room to support specific localized needs for file and print services. In addition, the Department is in the process of replacing end-of-life server, storage, and tape back-up

Department of Homeland Security Issues

- 1 . Limited options and high costs of available grant management software.
- 2 . Lack of adequate support for software currently being used for grant management.
- 3 . Budget constraints compromising the ability to purchase, implement and maintain grant management software applications.

Department of Juvenile Corrections Issues

- 1 . IT is responsive by nature. Paperwork, administrative reporting, and procedures inherent in a state agency take a toll on limited resources and time. Development of a ticketing system has assisted in being more reactive to end users issues.
- 2 . Continued system growth will continue to put extreme pressure on staff to maintain acceptable user and network service levels. Staffing continues to be very lean. With additional pressure of hiring freeze this year, projects are taking longer to complete with limited staff resources.

Department of Land Issues

- 1 . Lack of skilled human resources is hindering the timeliness of IT development in certain areas.
- 2 . The Department's complex systems are dependent on highly skilled IT staff who are highly susceptible to other employment opportunities. The loss of key individuals could significantly effect the development of IT within the Department.
- 3 . Rapid change of pace in technology is difficult for even experienced staff to absorb.
- 4 . The Department's enterprise information systems are complex due to the complexity of the land and resource management process.
- 5 . Increased sophistication and technological literacy of Department users are presenting difficulties in standards compliance.
- 6 . Long budget cycles for technology acquisition mean dramatic technology change that is both difficult to absorb and difficult in the maintenance of legacy systems.
- 7 . The cumulative effects of increased requirements for reporting on budget, strategic plans, IT status and many other administrative tasks assigned from outside the Department are beginning to effect our ability to deliver timely IT services to our customers.
- 8 . Increased security concerns are beginning to take significant amounts of staff time away from development and maintenance of user applications and technology. Management and Staff users continue to require maintenance of current and development of new applications which they see directly. Security work is largely invisible to users thus decreasing users perception of the
- 9 . Despite advances in open systems standards and technology enabling easier data exchanges exchanging data will continue to be a challenge for the

Department because of legal and administrative issues related to exchanges. More work is needed by the GITA, ASLD and cooperating agencies in order to facilitate such efforts.

Department of Liquor Licenses & Control Issues

- 1 . Ability to maintain contracts for existing hardware and software for our current licensing system.

Department of Parks Issues

- 1 . Agency staff have an increasing dependency on technology within job roles not heretofore associated with IT resource planning and allocation.
- 2 . Some agency staff have a low tolerance for change of equipment, software and processes, yet others idealize the potential of new technologies. Determining the context and viability of new technology is very difficult for staff since zealous advertising by manufacturers is so prevalent. The impact of any new technology on proposed users and other agency staff must be evaluated.
- 3 . The autonomous environment of Arizona State Parks allows for a less structured approach to project development which may result in IT staff not being consulted when the project involves information technology resources. Such unplanned actions cause project failures and equipment/software scope modifications that were not anticipated.
- 4 . HRIS Integration. Awaiting self-service phase of implementation to all staff members.
- 5 . Fund sources available for the agency IT budget have recently been reduced, swept or discontinued. Operation and development of agency Park and Partnership programs are currently not in balance with their associated IT support costs.

Budgeting for projects will remain a challenge for the foreseeable future. Reducing overhead and costs will a high priority as the State budget issues reduce our overall capability to serve our customers.

Department of Public Safety Issues

- 1 . The Department of Public Safety maintains a Criminal Justice Data Center and secure statewide network that is not designed to be consolidated with other non-criminal justice agencies. This data center is absolutely essential to maintain the trust of participating criminal justice agencies when storing and processing sensitive information concerning crime and criminal activities.
- 2 . Business Continuity is of vital importance to the first responding agencies that AZDPS serves. A back up, fail over capability, to provide disaster recovery, is needed in the event of a terrorist incident or natural disaster. In June 2005, we completed our first disaster recovery test with IBM in Boulder, Colorado. A second test was successfully completed in August 2005. Since that time, two other disaster recovery tests have been successful, January 2007, and August 2007. In June of 2008, AZDPS installed a remote Storage Area Network (SAN) at ADES and began mirroring data to the backup SAN. Funding for the IBM recovery site is needed while AZDPS and ADES implement a redundant system at the ADES mainframe and transition off of the IBM backup site. Estimated completion date to be off of IBM backup site and functional at the ADES
- 3 . The Department of Public Safety is the hub for the criminal justice network in

Arizona. We provide data storage, network infrastructure, applications programming, and message switching for national, state, and local law enforcement agencies. The demand for our services has continued to increase over the past five years. The Information Technology Bureau needs additional funding to support the increasing demands of the Arizona digital law enforcement network and to maintain the network infrastructure required. In order to properly support this critical public safety network, additional employees are required.

Department of Revenue Issues

- 1 . Training/Skills Improvement. In August 2002, the DOR IT Division experienced a dramatic shift in agency expectations when a contract was awarded to Accenture to assist in updating the agency's processes and computer systems. Known as the BRITS Project, the effort called for enhanced human performance, as indicated by business performance; specifically, the advance of technology in supporting management decision making.

Using advancing technology through the BRITS transformation, the type of work required by IT staff shifted from hard skills, such as mainframe and operations, to soft skills that require high levels of creativity, fusion of industry knowledge, and business process expertise. Staff knowledge must now encompass the ability to effectively complete projects requiring highly iterative development processes. Most work now involves:

- a high degree of personal interaction with end-users or clients;
- projects that span multiple business units;
- applications needing a high degree of integration with other systems;
- analytical tasks, leading-edge research, and high-level decision-making;
- high management interaction;
- business analysis and process design; and
- integration of technology and systems.

Legacy application programmers and the people who lead them have had to learn how adults acquire new concepts in developing computer systems. The development process has changed from top-down, hierarchical thinking to iterative cycles of object use. That is, computer routines and other elements are reused and repeated as part of the software development lifecycle. This new learning process demands an infrastructure that supports an environment where the elements are available to and easily identifiable by others who may need to use them.

DOR performed an assessment of DOR IT that portrayed: 1) all systems that need to be supported by DOR IT, 2) current staffing levels available to support the systems, and 3) technical skills required to support them. An outside vendor also conducted a formal, independent technical skills assessment of IT staff. Subsequently, formal training was provided via an external vendor for those skills requiring attention. In July 2007, we conducted a follow-up assessment and plans are underway to provide additional formal training to be completed by end of FY08. While significant progress has been made in many knowledge areas, the Application Support and Technical Operations teams are still not proficient in the skills required to independently support BRITS.

Management has developed a staffing matrix to address the knowledge

gaps identified in the initial assessment. These gaps have precipitated a need for reorganization within the division so that newly-acquired skills are best matched with evolving job descriptions and roles. Additionally, a co-sourcing arrangement is being developed with the vendor to ensure that after the system is fully in production, adequate staffing with appropriate technical skills remains to support the system. A strategy to address the current as well as future staffing requirements is a major concern of DOR

- 2 . Infrastructure Inadequacies. DOR has become more dependent than ever on Data Center Services due to the transactional, Web-based, global economy that impacts taxpayer expectations. The current DOR IT infrastructure is not adequate to effectively support the current production equipment housed at the DOR downtown facility. The BRITS project infrastructure requirements - servers, data storage requirements, etc. - have put a strain on the existing Uninterrupted Power Supply (UPS). This, coupled with air conditioning failures and physical space limitations, severely limits the integrity of the systems maintained at DOR.

In addition, critical production servers are running without a disaster recovery site identified. While regular backups of the data are sent offsite for storage, no alternative location exists, nor is equipment identified for restoring the data. These deficiencies would compromise critical DOR operations and business continuity should a disaster occur.

- 3 . Funding. Demonstrating the return on investment (ROI), the value of an IT project to the agency after investments have been made, is always difficult. It is a common problem across IT divisions, as the most popular methods used to measure IT ROI are usually ineffective. Unfortunately, in most cases, ROI must be established before additional funding can be obtained. Without adequate funding for resources of all types, IT cannot effectively support the agency's mission.
- 4 . Talent Management. To optimize DOR IT's ability to achieve sustained excellence, DOR must recognize the need for proactive talent management and implement a systematic way of accomplishing it. Currently, an incoherent mosaic of unconnected, incomplete, missing, and inconsistent assessment, planning, and development tools and methods exists to manage the IT talent pool (i.e., employees). The strategic direction set by DOR must include strong talent management through competency and performance development to successfully support the newly-implemented systems.

CIOs across all agencies are struggling to find and keep talented workers. Increasingly, IT workers must be business-savvy, with substantial knowledge of the industry and processes in which they work, in addition to keeping abreast of current technology trends. The skills required to support the new technologies implemented with the BRITS system are in higher demand in the marketplace than traditional mainframe skills. As a result, DOR is competing with the private sector to attract skilled professionals from a limited talent pool.

Based on current market data, DOR salaries are an average of 21% below the market median for resources working in environments similar to that of the new systems. This salary pressure, coupled with competition from the private sector, makes it extremely difficult to attract and retain qualified IT personnel. If we are unable to attract or retain qualified individuals, we can anticipate an increase in our training and/or consulting budgets to offset any training deficiencies

and/or shortage of permanent resources.

Once employees are hired, the challenge continues to retain and motivate them to achieve their highest potential - something that is often difficult to do within the limits of a state government atmosphere. Proper assessment tools and a clear career path that is understood by both the employee and the manager would go a long way in keeping an employee interested in the changing technological atmosphere and alleviate training issues at crunch time.

If we are unsuccessful at training and/or recruiting the skill sets necessary to support the new system, the agency may be forced to engage qualified contract resources to ensure IT service levels are met. Our training strategy must include both development plans for key people and sourcing methodology that ensures the right external resources are selected and managed effectively.

- 5 . IT Governance. Traditionally, the handling of IT management by agency executives with limited technical experience meant that complex, key IT decisions were deferred to IT staff. IT governance implies a system in which all stakeholders, including agency executives, IT management, internal customers, and related areas, have input into and are responsible for the IT decision making process. This allows all stakeholders to benefit from decisions made in the best interest of all groups concerned and the development of a system that performs as expected.

As the BRITS program completes the IT release, the Department will be transitioning the BRITS oversight from the contractor to an IT Governance model. IT Governance will make program oversight more transparent to its users, as the Department will be able to provide better customer service and meet its Service Level Agreements (SLAs).

Department of Transportation Issues

- 1 . Competitive compensation to attract and retain employees with the appropriate skills.
- 2 . Replacing mission critical high impact legacy systems.
- 3 . Funding for professional education and training.

Department of Veterans' Services Issues

- 1 . Computer users at Arizona Department of Veterans' Services (ADVS) frequently lack the basic skills required to perform their required IT functions.
- 2 . The US Dept of Veterans Affairs faces significant backlogs in processing benefit claims.
- 3 . Turnover for the agency has been extremely high, making training and the transfer of knowledge more difficult.
- 4 . The ADVS IT Department does not have it's own budget and relies on each division to appropriate funds. This makes IT planning very difficult if not impossible.

Department of Water Resources Issues

1 . SECURITY ISSUES and VULNERABILITIES.

We are committed to discovering and eliminating all network security vulnerabilities and issues as quickly as they are discovered. This is a difficult task in today's environment, particularly with the continued growth of the Internet, but must be done.

We have placed an added emphasis on security of network resources over the last several years and we continue to strengthen our defenses against threats from inside and outside. Physical security has been significantly enhanced in our new office location and we continue to assess our current office environment.

We continue to conform to statewide security policies as closely as possible, but also continue to strengthen our own policies and standards. Staff resources focusing on security have been increased.

We are continuously updating and strengthening our agency business continuity plan (BCP) that, while meeting statewide requirements, will also contain all necessary emergency response documents and information we may need during an emergency situation.

In order to maintain security of our network, we must strengthen our security at the desktop. To do this we have a number of policies, procedures and standards to be written, or re-written, to provide our staff guidance. Security awareness training and more accurate maintenance of system access requests, staff changes and terminations have a bearing on security and need improvement. While we comply with all statewide security-related policies, procedures and standards, in many cases we will exceed those standards.

Currently, our primary security focal point is on data. The goal is to ensure data is only accessed by the permitted individuals with appropriate permissions. Since migration to the Microsoft Network OS, we've begun a data reorganization project which will facilitate improved manageability. A data encryption project will be underway later in the year, which aims for data confidentiality and integrity. In addition, we will be training our users on the security practices

2 . DATA INTEGRITY.

As the demand for water in Arizona increases, the demand for ADWR's data becomes more and more essential. In order to maintain and further establish the confidence levels of the water resource decision makers and the general public, it is essential that the Department's data is as consistent, complete, integrated and accurate as possible. Formal efforts to continuously correct bad data are being implemented in IT and the business-unit organization is being modified to further identify and maintain a better understanding and responsibility for the maintenance.

3 . TECHNICAL STAFF RESOURCES.

Maintaining a capable and experienced technical staff continues to be critical to the success of our business processes and the agency. We continue to attract and retain qualified staff, but have seen the disparity between state government

salaries and the private sector grow considerably over the four or five years. This disparity between pay levels continues to be a problem when seeking qualified candidates for job openings.

With continued improvement in the economy of the state, and budget within the agency, we have had the opportunity to increase the level of training for our staff. We have also made progress in purchasing tools capable of improving the level of performance of our staff, which is also an important factor in our ability to keep up with the pace of increasing business demands. Morale, which has seen only minor increases over the last year, remains a concern. Hopefully, we can demonstrate our commitment by offering staff the training and tools to make them successful.

Over the past year we've been unfortunate to lose several staff members to retirement. Stringent state budget circumstances prevented immediate rehiring causing a difficult strain on a depleted staff. After finally receiving approval to fill some of the positions, we found it challenging to be adequate candidates. We've realized that many IT professionals don't know about the state's job website thus they're aware of how to apply for state jobs. This year as we undertake several projects staff will be trained to appropriately utilize and support the technologies. In addition to training classes staff will have access to manuals and virtual labs.

4 . TELEPHONE SYSTEM ISSUES.

Since the transition of the agency to the statewide voice over IP (VOIP) telephone system provided by, and managed by, the AZNet statewide contract. We have had, and continue to have, reliability related issues with the system and would like to see some substantial improvements made to this important statewide resource. While we understand that VOIP technology is, generally, not as dependable as a traditional digital telephone system, it is important that network outages be minimized. Improvements and upgrades to the statewide infrastructure are desperately needed to improve uptime within our agency.

The uptime of the VOIP phone system has improved significantly of the past year. Phone calls are more reliable, and the call quality is exceptional for most users. We've found that service at sites on the MAGNET2 fiber ring is excellent. However, our distance sites not on fiber have reliability and quality problems at times. At some point we will implement a unified messaging project to leverage the capabilities of VOIP with our Exchange email system.

5 . BUSINESS CONTINUITY PLANNING.

In today's world it is imperative that the department, and the state, continuously develop and maintain a viable Business Continuity Plan (BCP). These plans must be constantly maintained and tested, requiring additional resources, including staff, to do this important work. To keep this plan up-to-date is a significant effort for already burdened staff.

IT management has updated the BCP to reflect the recent network, system, and staff changes. The BCP is being hardened via the implementation of system and network redundancy. Redundancy will ensure the availability of agency resources whenever building power and the AZNet network is available. We will further strengthen the BCP by strategically developing a hot site that will hold a

live copy of the agency's data. The chosen hot site will be one of the agency's remote sites on the MAGNET2 fiber ring.

6 . BUSINESS PROCESS IMPROVEMENT.

The shortage of staff resources, paired with the ever-expanding responsibilities of protecting Arizona's water future, has made efficiency a primary focus for the agency. The incorporation of information technology into business processes has been and will continue to be crucial to modernizing and streamlining our systems. Examples of these improvements are the adoption or development of applications that streamline workflow and improve data quality, mobile applications that improve the data collected through field work and a simplified and improved network that is more dependable and easier for our users to utilize.

7 . EMERGING TECHNOLOGIES.

With the rapid growth in technology, it is becoming increasingly difficult to maintain an up-to-date network and desktop environment. Major software versions are often released annually making support difficult with a small staff, particularly when software is released with operational and security problems.

IT will incessantly evaluate emerging technologies for capabilities that will improve current business processes. Habitually major system or software upgrades are assessed to determine if new features are warranted. This year we will be upgrading our Linux and database systems so developers can leverage new capabilities. Virtualization has proven to improve operational efficiencies, hardware ROI, and total cost of ownership resources. We will be leveraging this technology to realize these benefits.

8 . Service Outages

Almost half of all unplanned service outages happen because of system configuration mistakes or oversights. With that in mind we are in the process of deploying several useful tools to help you keep configuration issues under control in our environments. These tools provide both the technology and the guidance the Agency needs to get started managing configuration.

To manage change effectively while ensuring that all systems are up-to-date and secure, we will implement an automate processes that will allow change management to occur automatically, with little or no IT staff intervention. This will require centralized, scalable tools that drive down existing costs while adding new value to network services. With the appropriate Configuration Management System these needs will be addressed and provide help to effectively manage change in our dynamic IT infrastructures.

9 . Hardware Lifecycle

The most important reason for lifecycle management in IT is budgetary. As budgets are decreased Server and PC life cycles are extended, which in many cases can place our Agency behind when it comes time to upgrade those four- and five-year-old Servers and PCs. Outdated hardware systems are vulnerable to attacks at sign-on. Security fixes and vulnerability patches are often no longer available for older systems. The overall security risk for older systems is increased due to a lack of available technical support and defensive measures.

Virtualization is a technology being widely applied today with excellent operational and financial results. Virtualization increase utilization of existing hardware from 10-15% up to 80%. This will allow our Agency to extend the life of our hardware while securing any vulnerabilities with a limited restrained budget.

Governor, Office of the Issues

- 1 . Budget constraints are limiting new purchases to only business critical areas and are impacting on-going support, training, education, personal development for personnel.

Industrial Commission Issues

- 1 . Addition of responsibility for new Minimum Wage law required reallocation of resources to meet statutory timelines. The impact of the reallocation was two fold; conversion efforts slowed briefly, however, Minimum Wage product leveraged updated technology and provided additional resources to be used in conversion processes.

It is anticipated that no additional statutory changes will occur to impact the goals and objectives outlined in this plan during the FY2008 period.

- 2 . Budget requests will be considered, permitting IT plans to be fulfilled and implemented.
- 3 . MIS staff will receive training to update skills and remain abreast of new trends and technologies applied to fulfill the mission of the ICA.
- 4 . Review and implementation of IT Personnel Pilot Program is in progress.
- 5 . Agency staff will receive training to update computer usage skills for in-house and third-party software products.

Lottery Issues

- 1 . Lottery sales have been increasing the last three years and the number of projects has also increased. We need to review the need for more extensive training for staff.
- 2 . Increase sales by \$106 million in one year.

Radiation Regulatory Agency Issues

- 1 . Agency has limited resources to remain current with updated technology. We have been able to complete objectives mainly with successful grant applications, with help from GITA on portal projects, and in cases that required only labor, not additional funding for equipment.
- 2 . The diverse computer skill levels of employees require different training methods.
- 3 . Since only one employee is devoted to all aspects of IT, new implementations and upgrades can take longer to complete.

Registrar of Contractors Issues

- 1 . Interagency Data Exchange - The ROC has a requirement to validate information pertaining to contractors, as well as any individual associated with a particular contractor license. Additionally, information regarding individuals posing as licensed contractors must also be validated.

For the most part, this validation is currently performed by contacting various public and private entities by phone or manual web site searches. In some cases validation may require contacting such entities by mail.

As an example, the verification of the corporate status of either the contractor or a qualifying party affiliated with the contractor license is initiated with the Arizona Corporation Commission.

Specifications:

In order to validate such information, the ROC desires to use state of the art Services Oriented Architecture (SOA) technologies which include web services based upon XML, SOAP or other similar protocols. Additionally, the system must provide similar validations to private and public sector entities in a reciprocal fashion.

Retirement System Issues

- 1 . The number of service requests far exceeds available staff. User community has many tasks to handle, and with parallel/interfaced applications, they don't always have the time available to test/adjust/approve new systems.
- 2 . Level of expertise to optimize systems continues to grow--difficult staying up with changes and upgrades to Enterprise software.
- 3 . Increasing pressure to provide updated information to more members in various areas around the state.
- 4 . Legislative mandates, state budget management issues, and inconsistent market performance pressure the agency and require a dynamic and easily modifiable information technology

Secretary of State Issues

- 1 . Dependencies on legacy platforms are difficult to break.
- 2 . Integration across agencies/counties is hampered by architectural differences.
- 3 . Revisions to statutes and practices are required to take advantage of new technology.
- 4 . Security overhead is increasing and vendors on not able to keep up with exploits.
- 5 . Electronic Records storage requirements are increasing at an alarming growth rate.
- 6 . Business dependence upon technology is expanding faster than the transfer of resources to IT
- 7 . Information technology vendor support is decreasing, forcing more reliance on other internal or external resources.

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
Homeland Security, 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

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

Early Childhood Development and Education, Arizona Board of
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
Mine Inspector
Mines & Mineral Resources, Arizona Department of

Naturopathic Physicians Examiners Board
Navigable Stream Adjudication Commission
Nursing, Arizona Board of
Nursing Care Examiners Board

Occupational Therapy Examiners Board
[Group 2 Agencies \(Cont'd\)](#)

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 FOR FY10 (These projects need to be verified by Oversight Personnel for 2010)

This appendix enumerates the top ten strategic IT projects during the past year at Arizona executive agencies. The projects are listed in order of planned project 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 through increased revenues collected by the new system. 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 approved to extend the contract in 2007.

Status - The final tax application, Individual Income Tax, was successfully implemented in early 2008. Training of Revenue personnel in maintenance and operation of the new system is underway.

2. **DE07013 – ASRP Arizona Systems Replacement Project - \$52M**



Overview - In mid-2007, Department of Economic Security began development of an integrated system to replace three major legacy systems developed independently over past years. The Arizona Technical Eligibility Computer System (AZTECS) software, currently supporting 5000 users on a mainframe using COBOL on an ADABAS database with terminal emulation, will be combined with the Jobs Automated System (JAS) software and the Arizona Child Care Case Automated Tracking System (AZCCATS) web-based software using a business process reengineering approach.

Status – As of January 2008, the reengineering of the AZTECS was begun and will continue throughout the next two fiscal years including functionality from the other systems; namely JAS and AZCCATS. An RFP will be issued following the collection and analysis of new system requirements.

3. 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 its Unisys platform to an ORACLE-based solution. In addition to eliminating data redundancy inherent 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 –With the completion of its last application, Contribution Posting, ASRS will have achieved their original objectives, having increased productivity, timeliness and quality throughout the agency and will no longer require its legacy Unisys platform. To date, sixteen applications have been completed, many in multiple phases. The target date for completion of the last application is early FY 2009.

4. PS06011 – Analog Microwave Replacement System - \$10M

Overview – The Arizona Department of Public Safety (DPS) plans to adapt and/or replace all of its analog radio towers and microwave equipment in the State to accommodate digital transmission. Each of the new sites will be fully compatible and interoperable with the DPS network as well as with Federal, county and municipal law enforcement agencies and first responders. The full system replacement has been estimated to take more than five years, at a total cost of \$52.7M of which 11.1M is allocated for technology.



Status – The Analog Microwave Replacement Project was begun in 2007. Although progress has been hampered by funding and procurement issues as well as obtaining building permits from various landowners, the necessary equipment for the first nine hops of microwave has been ordered and planned for implementation by end of October 2008.

5. DT05028 – Intelligent Transportation System - \$7.4M

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 schedules have continued to change, a number of implementations are underway. The project is still scheduled to complete by the end of FY 2010.

6. PS06004 – AZAFIS Upgrade, Automated Fingerprint Identification System - \$7.3M

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 was needed. The new system will provide faster and more accurate search and identification capabilities, thus improving law enforcement efforts, criminal investigations and public safety in Arizona once it is fully implemented.

Status – The AZAFIS project officially started in November 2006 and implementation of the upgraded system was completed in March 2008. An ancillary effort to add hardware and software modifications for the Crime Laboratory’s FASTID systems for DNA purposes will extend the original effort until close of FY 2008.

7. AG04003 – AGO Case Management System - \$5.7M

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. Vendor selection was made in May 2005.

Status – The new case management system has been realigned in the past four years, primarily due to requirements that weren’t originally envisioned. The project has entered its final phase with rollout and testing currently taking place.

8. HC08003 – AHCCCS Health Information Exchange & Electronic Medical Records Project – \$5M

Overview – The Arizona Health Care Cost Containment System (AHCCCS) plans to create a web-based electronic health records system as part of an eventual health information exchange infrastructure (HIE). The development of an Electronic Medical Records (EMR) database with its associated exchange process for only Medicaid providers and payers is also one of the state’s initial SOA pilot projects. The database extraction system is expected to be completed by the end of FY 2008.



Status – The Phase one of the HIE Project was begun in early October 2007 and is expected to be completed by close of the fiscal year in July 2008. Phase two will implement the EMR database for its full membership followed by phase three which includes online medical management tools, automatic adjudication of claims, clinical decision support tools and other aids.

9. AD07010 – Infrastructure Investment Charge Projects- \$4M

Overview – In 2004, Arizona Department of Administration began a planned series of infrastructure upgrades with the AZNet Project, creating a statewide telecommunication network for ninety-four executive branch agencies, both large and small. The infrastructure investment projects continue with upgrade of switches, bandwidth improvement, and WAN consolidations to both enhance the IPT technology and save costs for the state. In addition the IPT cluster will be enhanced, aging generators upgraded and five new air conditioners added. This work will continue the build-out of the statewide converged network.



Status – This phase of the Infrastructure Investment project was begun in late June of 2007 and is expected to complete by May 2008.

10. PS07009 – DPS Mobile Video Cameras for Patrol Vehicles – \$4M

Overview – The Arizona Department of Public Safety (DPS) plans to implement mobile video cameras in patrol cars. As part of the settlement agreement for a Federal suit against DPS, the agency agreed to install mobile video systems in patrol vehicles. Mobile video cameras and recording devices have been successfully deployed in hundreds of law enforcement agencies throughout the nation. As part of this project, DPS plans to install the video equipment, train its officers in their use, and create a secure video archive facility. The scope of the overall effort involves installation of up to 150 mobile video cameras per year over the next five years, as funding allows.



Status– The Mobile Video Camera Project was begun in late April 2007 and is slated to be complete by close of the fiscal year in June 2011. The acquisition and deployment of 79 cameras, servers and other related equipment for FY 2007 was completed in early August. The deployment of an additional 94 cameras, servers and other related equipment for FY 2008 is in process.

Appendix C

SUMMARY OF ACTIVE IT PROJECTS BY CATEGORY & COST FOR FY10

(These projects need to be verified by Oversight personnel)

Agency Category	Responsible Agency	Total Cost (\$000)
EDUCATION		
	Deaf and Blind, Arizona School for	269.1
	Education, Department of	3834.5
	Post Secondary Education, Board of	952.5
GENERAL GOVERNMENT		
	Administration, Department of	19406.4
	Attorney General, Office of	7682.3
	Corporation Commission	2663.0
	Criminal Justice Commission, AZ	200.0
	Department of Gaming, Arizona	100.0
	Governor Highway Safety, Office of	381.0
	Lottery, Arizona	150.0
	Retirement System, Arizona State	38,469.5
	Revenue, Department of	172,962.2
	State Treasurer, Arizona	508.4
HEALTH & WELFARE		
	AHCCCS	20227.6
	Economic Security, Department of	93,676.2
	Health Services, Department of	17,554.9
	Veterans' Services, Department of	428.9
INSPECTION & REGULATION		
	Cosmetology, Board of	250.7
	Dental Examiners, Board of	146.2
	Equalization, State Board of	305.0
	Medical Board, Arizona	673.8
	Registrar of Contractors	5747.0
NATURAL RESOURCES		
	Game & Fish, Department of	1235.2
	Land, Department of	570.8
	Parks, Department of	107.3
PROTECTION & SAFETY		
	Emergency Management, Department	150.0
	Public Safety, Department of	42,129.0
TRANSPORTATION		
	Transportation, Department of	12,476.5
GRAND TOTAL		443,257.0