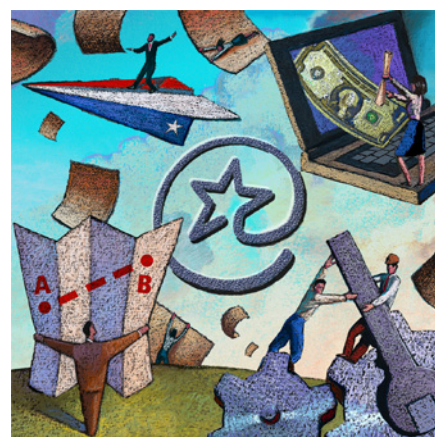


In Brief: Shared Results

Excerpts from the 2006 Biennial Performance Report



- Enterprise Transformation
- Critical Issues
- The Texas Approach

MESSAGE FROM THE STATE'S CHIEF TECHNOLOGY OFFICER

November 1, 2006

Texas government has taken the first steps toward establishing a statewide technology enterprise. The Texas Legislature set a solid foundation for this transformation through major technology legislation in its 79th session. The state has made notable progress in guiding this transformation and will continue delivering results through the next biennium. Our successful outcomes are directly linked to three core principles we apply to all of our strategic initiatives—a business approach, a collaborative environment, and accountability for results.

The Texas Legislature has consistently communicated the need for efficient management of the state's approximately \$1.9 billion investment in technology. The ability of state government to effectively deliver value-driven services to Texas citizens and responsibly manage its technology investment requires ongoing commitment and accountability from all agencies, including DIR.

Shared Success, the 2005 State Strategic Plan for Information Resources Management, described the state's enterprise approach to managing its technology resources. The 2006 Biennial Performance Report, *Shared Results*, presents outcomes from our *Shared Success* initiatives both at DIR and at state agencies and institutions of higher education. This "In Brief" document provides excerpts from the full document, focusing on critical state policy issues.

DIR is committed to making technology deliver on its potential in Texas. We stand ready to work with all facets of state and local government to more effectively leverage statewide investments in technology.

Thank you for your continued support. I look forward to working with you in the future.

Larry A Olson
Texas Department of Information Resources

Enterprise Transformation

The 79th Texas Legislature signaled a clear mandate to restructure roles and responsibilities for the state's investment in information and communications technology. The Information Resources Management Act—Chapter 2054, Texas Government Code (TGC § 2054)—was restructured through enactment of several technology bills. The new laws provide the basic tools to strengthen the enterprise and establish the foundation for a shared technology infrastructure that will improve the delivery of state services to citizens.

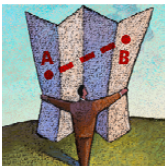
Texas has made substantial progress toward fulfilling the vision of leadership; however, several opportunities and challenges remain that must be addressed to advance the state's current capabilities. These include the following:



1. **Ensure the security of critical information and data.** Safeguarding the state's data and information resources is a shared responsibility that requires continuous, coordinated, and focused efforts. Texas state government's infrastructure is a critical resource and additional provisions will ensure that it remains functional and secure.



2. **Improve state procurement and contract management.** Texas already wields substantial purchasing power and can improve that position through new competitive contracting methods. By enhancing the Technology Cooperative Contracts program, state agencies will benefit through improved goods and services at reduced costs.



3. **Evaluate options for statewide enterprise resource planning implementation.** All state agencies are required to manage finances and human resources using sound business principles. Implementation standards and a statewide plan can improve the alignment of budgeting and expenditure reporting across the enterprise.



4. **Improve methods for collecting, reporting, and sharing technology information.** Coordinated strategies and data collection methods will ensure that oversight agencies collect the information needed to effectively manage the state's technology investment, while reducing the burden on state agencies for reporting redundant information.



5. **Set the stage for the next generation of online business and citizen services.** The TexasOnline.com infrastructure, which provides the online face of state agencies and local governmental entities, must be adaptable and capable of acting on opportunities to benefit citizens and businesses.

Implementing the recommendations related to these critical issues will enable Texas to move forward as a unified enterprise. This enterprise transformation will advance the state's ability to manage and leverage its resources and protect its assets, enabling agencies to focus on their core missions to better serve Texans.

Today's most pressing challenges to delivering the maximum benefit from dollars invested in technology are presented in this section, with recommendations for consideration by the Texas Legislature. Details on the following recommendations may be found in *Shared Results: Strengthening the Enterprise*, the 2006 Biennial Performance Report.



Issue 1. **Ensure the Security of Critical Information and Data**

The security of information and communications technology resources, which includes both the physical and logical security of the state's data systems and networks, is a shared responsibility that requires continuous, coordinated, and focused efforts. Improvements to the state's information and network security programs are needed to reduce the vulnerability of the state's infrastructure to attacks, which are increasing in number, complexity, and severity.

RECOMMENDATIONS

1.1 Improve the State's Capacity to Identify and Address Security Threats

To cope with information security attacks, DIR and state agencies must work together to constantly identify and assess vulnerabilities and remediate potential risks to keep the state's networks open, operational, and secure.

Require Vulnerability Assessments and Reports

Agency heads are ultimately responsible for the safety and security of all technology resources that are entrusted to their care. To meet this responsibility, agencies must regularly assess their operations to identify vulnerabilities and reduce risks. The Network and Security Operations Center (NSOC) at DIR conducts external vulnerability assessments that can help agencies meet their security-related responsibilities.

- 1.1.1** Require the agency official responsible for information security to report the results of any network vulnerability and risk assessments that the agency conducts to the agency head and the state's Chief Technology Officer (CTO).
- 1.1.2** Require state agencies and other eligible entities to use NSOC external vulnerability assessment services annually unless exempted by the state's CTO.
- 1.1.3** Require state agencies to submit comprehensive reports of both suspected and confirmed security breaches to DIR to enable the analysis of security breach patterns and detection of security vulnerabilities across the state.
- 1.1.4** Extend the authorization to conduct a confidential statewide assessment for state leadership on technology security resources and practices on a biennial basis.

Increase Security Levels for Data and Information

The proliferation of mobile devices such as laptops and personal digital assistants has increased the ability of remote users to access the same resources that local users find on their desktop computers. For these

systems, security is often a challenge because mobile devices have poor security when access to internal network resources is not sufficiently guarded.

- 1.1.5 Require agencies to address procedural and technical standards and requirements for mobile computing security. Options and cost requirements would be developed following publication of the rules to support agencies in establishing appropriate security solutions that meet state and national standards.

Maintain the Integrity of Critical Security Information

The Open Meetings Act has no provision to allow the DIR Board of Directors to meet in executive session to discuss security issues. By being allowed to meet in executive session to hear security information, the board could make informed decisions based on documented threats to the state's critical infrastructure, without risking information falling into the wrong hands. Additionally, informing appropriate prospective vendors about these same issues through limited disclosure would enable accurate cost estimates for security-related bid requests.

While DIR has the authority to conduct criminal background checks on potential or current technical staff, other agencies, including the Lottery Commission and school districts, are authorized to conduct criminal background checks on all employees.

- 1.1.6 Authorize the DIR Board to meet in executive session to discuss confidential network security issues and related information that is defined as restricted information.
- 1.1.7 Authorize DIR to disclose limited confidential network security information to certain prospective vendors involved in selected procurements that have met DIR requirements and security screening standards. Any such disclosure would be of limited duration, would remain the property of the state, and would be secured to prevent unauthorized release.
- 1.1.8 Authorize DIR to obtain criminal history record information on all DIR employees, applicants for employment, interns, volunteers, and contractors.

1.2 Standardize Security Levels for the State's Technology Infrastructure

A consistent, enterprise approach is needed to protect sensitive government and personal information and its associated infrastructure, including applications and databases, and the physical machines where they reside.

Establish Standards to Identify and Protect Sensitive Data and Infrastructure

One key element of protecting the state's technology infrastructure is to ensure that agencies identify and implement standards to secure sensitive information, such as personally identifiable information.

- 1.2.1 Require agencies to perform risk assessments that identify databases and applications that contain sensitive data and to establish security procedures to protect this data from unauthorized access.
- 1.2.2 Require that all agency servers and mainframes that contain sensitive data reside in environments that meet or exceed security and disaster recovery standards established by the department by January 31, 2008, to be implemented by January 31, 2010. Authorize the state's CTO to establish alternative provisions for certain classes or instances of servers or mainframes in development of these standards.



Issue 2. Improve State Procurement and Contract Management

While many contracting responsibilities appropriately reside at the agency level, tools established by the 79th Legislature, including the Texas Project Delivery Framework, provide processes that could further support agencies in developing more effective procurement practices and contracts. State law established the Contract Advisory Team to review agency requests for major contract solicitations to ensure that planning and contract formation practices are properly considered.

RECOMMENDATIONS

2.1 Expand the Benefits of the Technology Cooperative Contracts Program

Although state law holds DIR accountable for all technology purchasing in the state, some state functions related to this responsibility remain with the Texas Building and Procurement Commission (TBPC).

Transfer all Technology-Specific Procurement Authority to DIR

The Catalog Information System Vendor (CISV) program is a technology-specific listing of vendors that are eligible to provide goods and services to public entities. The Texas Multiple Award Schedule (TxMAS) program adapts existing, competitively-awarded government contracts, either federal or any other governmental entity in any state, to the procurement needs of Texas government.

- 2.1.1** Transfer authority for managing and operating the CISV program and the technology portion of TxMAS to DIR as part of its overall technology procurement responsibilities.
- 2.1.2** Authorize DIR to modify or eliminate the CISV and TxMAS functions and develop administrative rules as necessary to support an integrated state technology procurement process.

Expand Eligibility for the Technology Cooperative Contracts Program

Although nonprofit organizations are eligible to purchase commodities and services through TBPC, they are not eligible to purchase technology commodities through DIR.

- 2.1.3** Authorize nonprofit organizations to purchase technology goods and services through the Technology Cooperative Contracts program. Limit eligibility to nonprofit entities defined as assistance organizations by TGC § 2175.001.

2.2 Improve the Planning and Execution of Certain Major State Contracts

Texas Project Delivery Framework requirements apply to major technology projects, but not to business process outsourcing contracts. In these contracts, the provider is responsible for performing and managing the outsourced function or process on behalf of the customer.

Apply Texas Project Delivery Framework Principles to Additional Major Contracts

By leveraging the tools and processes of the Framework for multi-year contracts with multiple deliverables, agencies will be equipped to better plan, procure, and manage contracts with substantial complexity.

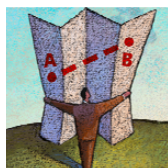
- 2.2.1** Extend specific requirements for planning, solicitation, and contracting tools used for technology projects to major state contracts for business process outsourcing, regardless of whether the business services include a major information resources project component.

- 2.2.2 Require the Contract Advisory Team to develop standards that include the use of appropriate Framework elements to support effective contracting.

Create State Training for Competitive Sourcing Strategies

By using new sourcing strategies and related tools, contract managers can better leverage planning, evaluation strategies, and competitive intelligence to help lower costs for technology goods and services.

- 2.2.3 Require the Contract Advisory Team to develop contract manager training requirements on the use and application of advanced sourcing strategies, techniques, and tools.



Issue 3. Evaluate Options for Statewide Enterprise Resource Planning Implementation

All state agencies, as stewards of public funds, are required to manage finances and human resources in a way that supports sound business principles. State law requires agencies to report their expenditures in a format established by the Comptroller of Public Accounts (CPA), using the Uniform Statewide Accounting System.

Enterprise Resource Planning (ERP) is the term that refers to systems that integrate financial and human resources across the enterprise. Industry consolidation by major ERP software vendors threatens the viability of maintaining existing agency ERP applications because key state software applications may no longer be supported beyond the next five years. Texas must be prepared for this contingency.

RECOMMENDATIONS

3.1 Establish Uniform Standards to Improve State Reporting

The fact that agencies manage information in different systems and formats using various terminology limits the state's ability to reconcile data needed to effectively administer human resources and financial initiatives.

Establish Standards for ERP Implementations or Modifications

While the CPA has existing authority to establish reporting requirements and direct replacement of certain systems, clearer standard-setting authority will move the state forward during this time of rapid ERP software vendor consolidation.

- 3.1.1 Amend current statute (TGC § 2101.036) to grant specific rule-making authority to the Comptroller to prescribe standards for agency ERP implementations or modifications in accordance with uniform accounting and financial reporting procedures.

Establish a Statewide Plan for ERP Implementation

A statewide ERP solution would include a blueprint for the entire government enterprise to improve alignment between budgeting and expenditure reporting and help identify problems, risks, and opportunities for reducing costs related to financial, accounting, and human resources systems and processes. It would also help agencies integrate and consolidate agency business functions such as financial and human resources management, and allow them to better collect, analyze, and share critical information and data.

- 3.1.2 Authorize the Comptroller to create and publish a Statewide Enterprise Resource Management Plan that documents key requirements, constraints, and alternative approaches. Require agencies to provide any information needed by the Comptroller to develop this plan.
- 3.1.3 Establish an ERP advisory group, led by the Comptroller and including DIR, the Health and Human Services Commission (HHSC), and other key stakeholders, to help develop a vision and approach related to the plan.



Issue 4.

Improve Methods for Collecting, Reporting, and Sharing Technology Information

DIR's *Statewide Technology Management: Opportunities for Improvement* report, mandated by the 79th Legislature and published in 2005, showed that technology data collection and reporting are not aligned in a way that supports the need for comprehensive, timely information on technology assets, projects, and expenditures.

The report called for the creation of a Technology Information Alignment Committee, which has convened to find ways to standardize statewide technology information data models, collection methods, and reporting processes. The committee comprises representatives from DIR, the Office of the Governor, the Legislative Budget Board (LBB), the CPA, TBPC, and the State Auditor's Office (SAO).

RECOMMENDATIONS

4.1 Coordinate the Collection and Reporting of Technology Information

The Technology Information Alignment Committee has begun analyzing how data is collected and reported, and is conducting work sessions on the standardization of data and processes. The vision is to "collect once, use often," eliminating redundant data collection and improving the value of technology information at all levels of state government.

Clarify and Simplify Technology Data Collection

Oversight agencies' systems and data collection methods could be better coordinated to ensure that state leadership has the information to evaluate the overall impact of technology projects, initiatives, and operations.

- 4.1.1 Require DIR, in coordination with Technology Information Alignment Committee members, to coordinate efforts to establish data-sharing methods that improve the ability of oversight agencies to share relevant technology information, utilize common terms, and modify existing systems as needed to support streamlined data collection.
- 4.1.2 Extend the existing requirement that DIR report to state leadership on progress toward streamlined reporting goals on a biennial basis.

Reduce the Reporting Burden on State Agencies

State agencies are required to periodically submit technology-related data to the state using at least 23 reporting instruments, some of which are submitted in formats that do not support effective analysis.

- 4.1.3 Require DIR, in coordination with Technology Information Alignment Committee members, to coordinate efforts to establish processes and Web-based reporting tools that enable agencies to submit technology reports online and support advanced analytics.

4.2 Improve Technology Strategic Planning and Performance Reporting

Strategic planning and performance reporting requirements are housed at various oversight agencies and are not integrated among the various reporting instruments. The sequence of reporting deadlines requires agencies to complete—within a very limited time period just prior to each regular legislative session—the following: agency strategic plans to LBB and the Governor’s Office; legislative appropriations requests and information technology details to LBB; and information resources strategic plans and business case templates associated with the Framework to LBB, SAO, and DIR.

Modify Reporting Requirements to Improve Strategic Planning

The Governor’s Office and the LBB jointly prepare instructions for agency strategic plans, which agencies must complete and submit biennially. While this plan is not specifically technology-related, it does require agencies to engage in a strategic planning process that articulates the primary factors affecting the agencies and identifies their long-term goals.

- 4.2.1 Reintegrate agency information resources strategic plan instructions with the agency strategic plan instructions and consider earlier sequencing of agency strategic plans.
- 4.2.2 Authorize DIR to collect agency information related to technology assets and compliance during odd-numbered years to reduce the bottleneck of reports prior to legislative sessions.

Improve Project Planning and Evaluation

The Quality Assurance Team relies heavily on the Texas Project Delivery Framework to perform quality assurance reviews of technology projects. Current statute that requires state agencies to complete internal quality assurance procedures is outdated and inadequate for integration of the Framework with agency-level project management practices.

- 4.2.3 Eliminate existing quality assurance and project management statutes that are not consistent with the Texas Project Delivery Framework and develop an integrated replacement.

Consolidate Technology Performance Reporting

The Biennial Performance Report should include all technology-related performance reporting required in statute to the extent possible.

- 4.2.4 Consolidate technology performance reporting into the Biennial Performance Report, including the TexasOnline.com and E-Learning biennial reports, and statutorily-required security reports.
- 4.2.5 Transfer strategic planning and performance reporting requirements related to telecommunications to the State Strategic Plan and Biennial Performance Report, respectively, and re-charter the Telecommunications Planning and Oversight Council as a customer advisory body.



Issue 5. Set the Stage for the Next Generation of Online Business and Citizen Services

TexasOnline.com provides online services to citizens, businesses, state agencies, and local governments through a collaborative effort across all levels of government. To reach more citizens with vital information about government benefits and opportunities, the TexasOnline.com infrastructure will need to be even more adaptable and capable of acting on new opportunities to benefit citizens, state agencies, and local governmental entities.

RECOMMENDATIONS

5.1 Integrate Payment Options for Citizens

State law requires agencies to use a common e-payment system established by TexasOnline.com; however, this system has not been officially extended to support offline transactions, citizens have different experiences online and in person, and in many cases, agencies have to support multiple, redundant payment systems.

Establish the E-Payment System as an Option for all Credit Transactions

An expanded e-payment system would simplify steps for agencies and improve a citizen's experience with government.

- 5.1.1** Authorize the e-payment system to include credit card transactions by citizens for state goods and services both online and at government offices.

5.2 Support Continued Growth of TexasOnline.com Services

TexasOnline.com has grown dramatically, both in number of services available and number of visits by citizens and businesses—now more than two million per month. In spite of this success, the integration of cross-agency processes and information can still be significantly improved.

Improve the Ability of Citizens to Access Information

Today, the ability of citizens to move easily from TexasOnline.com to agency Web sites and back is hampered by a lack of coordination. Directing improved coordination will set the stage for true citizen-centered government.

- 5.2.1** Authorize DIR, in conjunction with agencies, to establish standards related to the development and deployment of Web sites to ensure a consistent citizen experience and improve integration between TexasOnline.com and agency Web sites.

The Texas Approach

Shared Success, the 2005 State Strategic Plan, described the state’s enterprise approach to managing its technology resources. The outcomes presented in *Shared Results* strengthen the successful transformation of state government through commitment to the Texas Model of the Enterprise and foundational core principles.

Statewide Vision and Strategic Goals

Shared Success articulates the vision to establish an enterprise approach for managing the state’s technology investment. It also establishes the following strategic goals for the State of Texas:

- reduce government costs,
- drive effective technology contracting,
- leverage shared technology operations,
- promote innovative use of technology that adds value, and
- protect technology and information assets.

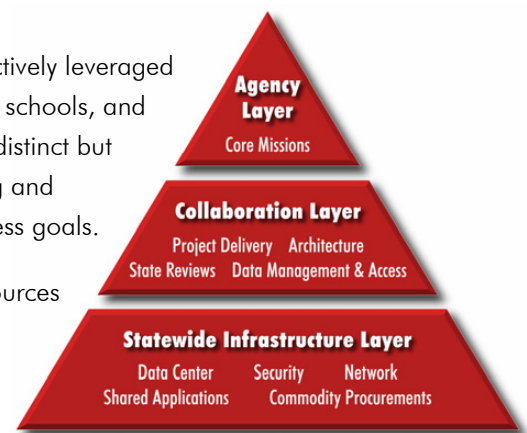
The Texas Model of the Enterprise

Shared success is realized when technology resources can be effectively leveraged across all sectors of government—including state agencies, public schools, and other political subdivisions. The Texas Model, composed of three distinct but unified layers of the Enterprise, provides a paradigm for managing and aligning the state’s investment in technology with the state’s business goals.

The **statewide infrastructure layer** establishes shared statewide resources to leverage in the delivery of technology programs and services. Similar to utilities, these operational services are needed by all agencies; they are not unique or specific to an individual agency.

The **collaboration layer** establishes the programs, standards, and practices that guide technology use across the enterprise. Through shared development of guidelines and best practices, this layer promotes collaboration, inter-operability, and reuse across government.

Leveraging the two preceding layers, the most important part of the model is the **agency layer**. This layer contains the unique functions and services that each agency manages to successfully support its mission.



Texas Model of the Enterprise

Core Principles

As Texas government moves to this new technology planning and service delivery model, successful enterprise transformation depends firmly on three core principles:

- **Business-driven approach** – Adopting sound, proven business practices to drive real value that is aligned with statewide strategic goals and objectives.
- **Collaboration** – Engaging stakeholders to maximize resources, knowledge, and expertise that is shared across the enterprise.
- **Accountability** – Applying a consistent method for assessing outcomes against clearly defined benchmarks for successful project execution.

For Additional Reading

This document is an abridged version of the 2006 Biennial Performance Report, *Shared Results: Strengthening the Enterprise*, published November 1. The full report contains more information on the following:

- Statewide Vision and Strategic Goals
- The Texas Model of the Enterprise
- Core Principles in Practice
- Data Center Services – A Case Study
- Agency Information Resources Strategic Plan Analysis
- State Technology Expenditures
- Progress on Statewide Initiatives: Data Center, Security, Network, Shared Applications, Procurement, Project Delivery, Architecture, State Reviews, Data Management+Access

The 2006 Biennial Performance Report, *Shared Results*, will be available on the DIR Web site at www.dir.state.tx.us/pubs/bpr2006/.

The 2005 State Strategic Plan, *Shared Success*, is available at www.dir.state.tx.us/pubs/ssp2005/.

ABOUT THIS EXCERPT

The Information Resources Management Act requires the Texas Department of Information Resources to prepare and submit to the Governor and to the Legislature a biennial performance report on the use of information resources technologies by state government, including recommendations (Texas Government Code § 2054.055). This is an excerpt of that report.

The biennial performance report has been distributed in compliance with the State Depository Law and is available for public use both online and through the Texas State Publications Depository Program at the Texas State Library and other state depository libraries.

Note: For the purposes of this report, the term “state agency” is used to indicate a state agency or a state institution of higher education; the term “technology” is used to indicate “information and communications technologies.”