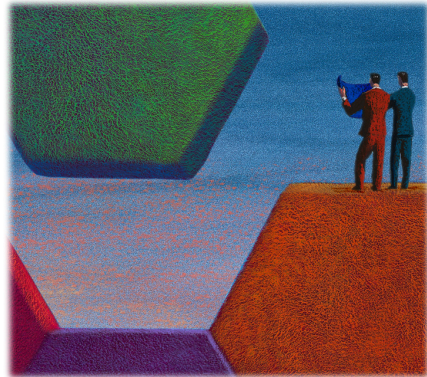


# **Fiscal 2007 Data Center Services Report**



AUGUST 31, 2007



# Fiscal 2007

## Data Center Services Report

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### Introduction

House Bill 1516, 79th Legislature, Regular Session (HB1516), ushered in a new era for Texas information resource management. It directed state agencies to take an enterprise view of information technology (IT) and build a secure, reliable, cost-effective technology infrastructure that could be leveraged across multiple agencies. Over the past two years, DIR has worked with agencies to fulfill these objectives and deliver on the promise of this technology vision as codified in TEX GOVT CODE §2054.375, *Subchapter L. Statewide Technology Centers*.

DIR prioritized 27 agencies for initial participation in the data center services (DCS) program. These agencies bring to the project some of the largest public technology environments in the state, and data center expenditures for these agencies totaled approximately \$155 million annually. Together with these agencies, DIR developed, issued, and evaluated responses to a Request for Offer (RFO) for a service provider to consolidate and upgrade data center operations. The enterprise RFO enabled Texas to capture significant economies of scale and incorporate multiple agencies' requirements into the contract. Additionally, evaluating the RFO established the basis of data center governance as agencies worked together to determine how to define and measure effective performance. As required by HB1516, this report describes the status and plans for data center consolidation.

### Transition, Transformation, and Consolidation

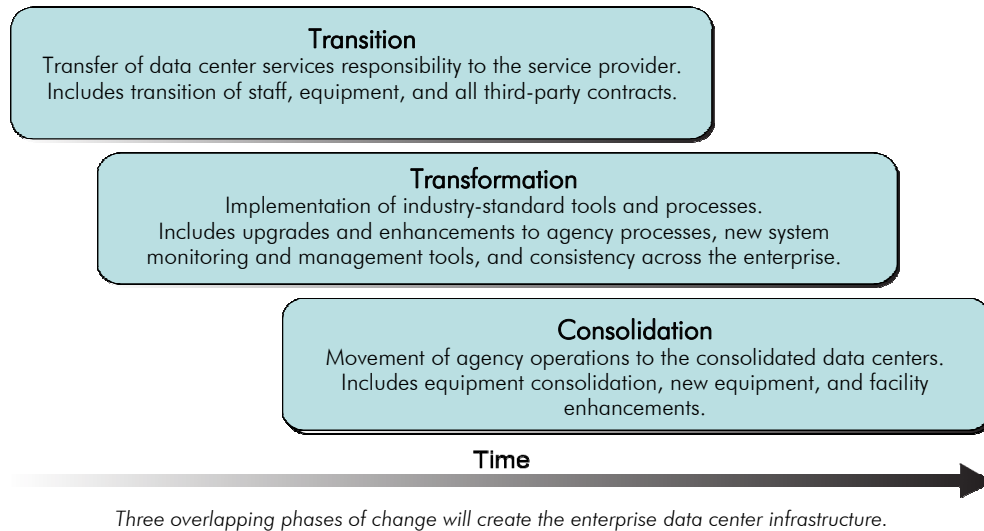
On November 22, 2006, DIR executed a contract with International Business Machines Corporation (IBM) to provide data center consolidation and operations for the prioritized 27 agencies. The contract commenced on March 31, 2007, and expires on August 31, 2014, with three optional, one-year extensions. The agreement includes transition of in-scope services in 31 legacy data centers, careful and methodical consolidation of these services to two commercial-grade facilities, and ongoing operations in a high-performance environment. As a result of the contract, all 329 affected state employees were offered positions by the service provider. The state retains ownership of all assets until end of life and retains ownership of all data on the in-scope systems.

IBM's partners in the contract, collectively called Team for Texas, are Unisys, Pitney Bowes, and Xerox. In addition, the contract contains additional subcontractors with more than 20 percent of contract value subcontracted to Historically Underutilized Businesses (HUBs). IBM provides overall program management for the contract and has responsibility for strategic planning, IT operations, risk management, communications, and training. Unisys has responsibility for IT operations, infrastructure build out, and data center and support center management. Pitney Bowes oversees mail operations management and mail services

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transformation. Xerox is responsible for print operations management and the transformation of print services.

The state's goals for the DCS contract include effective management of in-place services, migration of services to the consolidated data centers, and improvements to services, security, and disaster recovery capability. IBM organizes these activities into three phases: transition, transformation, and consolidation. As the picture below illustrates, these distinct phases overlap in time.



## TRANSITION

*Transition*, defined as the transfer of responsibility for data center services to the service provider, takes place in two major phases. The first transition, which occurred on March 31, 2007, affected agency-operated services and transitioned agency staff to the Team for Texas. The second transition will transfer services previously operated under the state master services agreement with Northrop Grumman (NG) and includes the transition of critical NG staff with knowledge of Texas operations. Both transitions include review and assignment of third-party contracts, completion of asset inventories, initiation of service level agreements, and establishment of enterprise procedures for service and change management.

The following agencies transitioned their operations to the DCS contract on March 31, 2007:

- Department of Aging and Disability Services (DADS)
- Department of Assistive and Rehabilitative Services (DARS)
- Department of Information Resources (DIR)
- Department of State Health Services (DSHS)
- Health and Human Services Commission (HHSC)
- Office of the Attorney General – Administrative and Legal Division (OAG-AL)
- Office of the Attorney General – Child Support Division (OAG-CS)
- Office of the Secretary of State (SOS)
- Public Utility Commission (PUC)

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- Railroad Commission of Texas (RRC)
  - Texas Youth Commission (TYC)
  - Texas Alcoholic Beverage Commission (TABC)
  - Texas Building and Procurement Commission (TBPC)
  - Texas Commission on Environmental Quality (TCEQ)
  - Texas Department of Agriculture (TDA)
  - Texas Department of Criminal Justice (TDCJ)
  - Texas Department of Insurance (TDI)
  - Texas Department of Licensing and Regulation (TDLR)
  - Texas Department of Transportation (TxDOT)
  - Texas Education Agency (TEA)
  - Texas Higher Education Coordinating Board (THECB)
  - Texas Parks and Wildlife Department (TPWD)
  - Texas State Library and Archives Commission (TSLAC)
  - Texas Veterans Commission (TVC)<sup>1</sup>
  - Texas Water Development Board (TWDB)
  - Texas Workforce Commission (TWC)

The following NG services are scheduled to transition at midnight on August 31, 2007:

- Mainframe operations and disaster recovery for HHSC, OAG-CS, TDCJ, TDI, TEA, and TxDOT
- Mainframe disaster recovery services for the Department of Public Safety (DPS), RRC, and TYC
- Server operations and disaster recovery for Angelo State University (ASU),<sup>2</sup> DIR, HHSC, OAG-CS, TBPC, TDA, TDCJ, TWC, and TxDOT
- Server Disaster Recovery Services for DSHS, SOS, TABC, and TCEQ

The Department of Family and Protective Services (DFPS) operations are scheduled to transition services on December 1, 2007. DFPS services are currently operated by NG.

## TRANSFORMATION AND CONSOLIDATION

Many of the benefits of the DCS contract are delivered through *transformation*, the implementation of improved processes and tools, and *consolidation*, the migration from 31 separate data centers to two upgraded facilities. Transformation provides the foundation for consolidation by establishing enterprise processes and common tools and by providing management control and visibility into services. Consolidation includes migration of physical assets to the data center facilities and consolidation of the assets for efficiency. These two

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<sup>1</sup> The Texas Veterans Commission was not included in the DCS contract or the original count of 27 agencies. They have signed an Inter-Agency Agreement (IAC) with DIR and joined the DCS contract.

<sup>2</sup> Angelo State University was not included in the DCS contract or the original count of 27 agencies. They have signed an IAC with DIR and joined the DCS contract.

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highly interrelated activities have already begun: transformation activities will be completed in 2008 and data center consolidation will be completed in 2009.

### MAINFRAME CONSOLIDATION

When the DCS RFO was issued, the state operated 16 mainframes across the 27 participating agencies. Several of these mainframes were at end of life or were no longer supported by their manufacturer. Many did not utilize the latest data management technology. The mainframe consolidation project will replace 13 current mainframes with six new machines while decommissioning three machines. In addition, aging, isolated, disk storage devices and tape storage environments will be centralized into shared, state-of-the-art storage environments in each of the data centers. Further, during the transformation phase, all operating systems that are no longer supported, as well as any related program products, will be upgraded to bring the agencies up to date.

The following table describes the current schedule for mainframe migration. The activities include initial planning, procurement lead time, and installation in the data centers. Other mainframe operations are already conducted from the data center facilities.

AGENCY	START DATE	END DATE
TYC	July 23, 2007	October 7, 2007
OAG-AL	To Be Determined (TBD)	TBD
TWC	July 15, 2007	TBD
RRC	October 15, 2007	TBD

### SERVER CONSOLIDATION

The server consolidation project will upgrade the state's server technology while reducing the total number of servers from more than 5,300 to approximately 1,100 for improved management and control. During this process, many servers will be replaced with newer models to reduce risk and the overall age of the total server population. Depending on the useful life and technology profile of the server, consolidation activities will involve one or more of the following:

- Upgrades to the server operating system
- Refresh/replacement of server hardware (moving a current server workload to a new physical server)
- Virtualization (moving the current server operating environment to a virtualized environment, where multiple server instances are configured to operate on a single server)
- Relocation of server hardware (moving existing servers from the agency location to one of the data center facilities)

The Team for Texas will develop a technical solution document for each agency detailing the steps and timing of the server consolidation. The servers will be moved to the data centers in waves, or agency groups, to facilitate coordination and manage workloads. The waves and agency wave assignments are currently scheduled as follows:

WAVE	AGENCIES	START DATE	END DATE
One	DIR, TBPC, TSLAC, TYC	July 2, 2007	December 27, 2007
Two	PUC, SOS, TABC, TDA, TDCJ, THECB, TPWD, TxDOT	October 1, 2007	March 14, 2008
Three	OAG, TCEQ, TDI, TEA, TWDB, TDLR, TDA	March 14, 2008	September 9, 2008
Four	RRC, TVC, ASU, TWC	September 9, 2008	February 11, 2009
H	DARS, DSHS, DFPS, DADS, HHSC	October 1, 2008	March 4, 2009

## Moving Forward

The issue date of this report, August 31, 2007, marks five months of service under the DCS contract. This transition period has involved hundreds of state and Team for Texas staff to coordinate the handoff of the numerous data center operations tasks while developing and documenting a new way of doing business. This effort continues today with the implementation of new tools, opening of the Austin data center, development of the Policies and Procedures Manual, and the transition of NG-managed services to the contract.

DIR will deliver a detailed report on the implementation of enterprise data center services after the fiscal year end NG transition is complete. The full report will provide details on the contract and the status of implementation, including a review of service level requirements, customer service to agencies, security and disaster recovery improvements, and mechanisms for tracking savings.

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