TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS An Internal Audit of the Information Systems Divisions (IS) Audit Report # 17-001

Executive Summary

The Office of Internal Audit (OIA) assessed the TDHCA Information System Division's current compliance with the Texas Administrative Code ("TAC"); reviewed activities of the programmers and technicians; tested appropriate employee access to TDHCA systems; and assessed management and staff time spent on problems with help desk tickets. OIA also observed the areas where the file servers, firewalls, and other network hardware components are deployed. Based on the fieldwork performed, OIA concludes that the Information System Division's functions are generally performed accurately and according to applicable rules; however, the following opportunities for improvement were identified.

Findings and Recommendations

- IS should develop a protocol for testing information systems and designate an individual to be responsible for the internal risk assessment component of the overall governance structure.
- The division should develop and implement a more comprehensive program of IS training for users.

Response:

Responsible Area:

Management agreed with our recommendations.

Information System management

Detailed responses are included in the body of the audit report.

Objective, Scope and Methodology

Based upon our risk assessment and other factors, we selected the Information Systems Division for detailed testing and analytical procedures. This audit was identified in the Fiscal Year 2017 Annual Audit Plan and included the evaluation of the administrative and internal control procedures related to the Information Systems Division.

The current audit covered activities and processes in place during fiscal year 2017. Prior external reviews of IS covered information security and specific program applications. This is the first comprehensive internal audit of IS operations.

Mark Scott, CPA, CIA, CISA, CFE, MBA

Director, Internal Audit

8/24/2017 Date Signed Review of Operations in TDHCA's Information Systems Division Report # 17-001



TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

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8/24/2017

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Board Members of the Texas Department of Housing and Community Affairs ("TDHCA")

RE: REVIEW OF OPERATIONS IN TDHCA'S INFORMATION SYSTEMS DIVISION

Dear Board Members:

This report presents the results of the Office of Internal Audit ("OIA") "Review of Operations of TDHCA's Information Systems Division ("IS")." This audit was identified in the Fiscal Year 2017 Annual Audit Plan. This audit was conducted in accordance with applicable audit standards.

OIA assessed current compliance with the Texas Administrative Code ("TAC"); reviewed activities of the programmers and technicians; tested appropriate employee access to TDHCA systems; and assessed management and staff time spent on problems with help desk tickets. OIA also observed the areas where the file servers, firewalls, and other network hardware components are deployed.

The current audit covered activities and processes in place during fiscal year 2017. Prior external reviews of IS covered information security and specific program applications. This is the first comprehensive internal audit of IS operations.

This report is divided into the following sections:

- A. Introduction
- B. Governance
- C. Components of Information Systems at TDHCA
- D. Funding and Staffing
- E. Information Systems Compliance
- F. Programming
- G. Security



A. INTRODUCTION

The Texas Internal Auditing Act requires periodic audits of a state agency's major systems, including major information systems. TDHCA information systems are managed by IS. According to the Director of IS, the division's two major roles are 1) development, implementation, and maintenance of software and 2) technical support with respect to TDHCA employees and the agency's network. As described further below, both of these areas require constant attention to the security of information resources.

In addition to the Internal Audit Act requirement to perform periodic IS audits, the International Professional Practice Framework ("IPPF"), or Red Book (internal audit guidelines), and the Information Systems Audit and Control Association ("ISACA") both require periodic audits of various aspects of IS operations including Governance. IS Governance is generally defined as "the set of decisions rights and the guiding accountability framework designed to ensure that IT resources are employed appropriately in the organization."

B. Governance:

As noted, IS describes its major services as software development and technical support. Statewide direction in these areas is provided by the information technology oversight agency for all state agencies, the Texas Department of Information Resources ("DIR").

State agencies must interact with DIR and implement directives from that oversight agency. DIR conducts periodic "penetration tests" of the networks managed by state agencies. During these tests, DIR attempts to gain unauthorized access to the agency's systems through various methodologies. In the last penetration test of TDHCA systems, DIR was not able to penetrate the network.

Additionally, DIR has a contract with Gartner, a private company that contracts with the state. Gartner provides various security assessment services for state agencies. Gartner conducted a study for TDHCA during FY 2015 and 2016. This study formed a significant part of the basis for TDHCA's FY 2018-2019 Legislative Appropriation Request ("LAR") for strengthening security. The study indicated areas where TDHCA was in need of improvement, and those security areas were factored in to the LAR, with estimates for information technology hardware, software, and services. It is noted that the request did not reflect the full amount Gartner identified as IS prioritized Gartner's recommendations, performed its own assessment of its ability to address the issues identified, and developed effective solutions for a reduced total cost.

One area that needed attention, based both on DIR reviews and the Gartner assessment, concerned "building in" security as applications are developed. Currently IS deals with programming security primarily by after-the-fact "patches" rather than testing programs along the course of production. This area of risk mitigation is becoming increasingly important as hackers develop more sophisticated methods. Industry guidance in this area is provided by the Open Web Application Security Project ("OWASP") and the United States Computer Emergency Readiness Team ("US-CERT") Build Security In ("BSI") web portal.

Finding and Recommendation:

IS should develop a protocol for testing information systems and designate an individual to be responsible for the internal risk assessment component of the overall governance structure.



Hinding Item Number	Management Comments – Status Pertaining to the Recommendations and Action to be Taken	Target Completion Date	Responsible Party
17-001.01	Management agrees with the finding and will take actions to improve security testing of information systems. The FY 2018 budget includes funding for a new full-time equivalent position that will be filled early in the fiscal year. That position will be dedicated to security testing and quality assurance of agency software applications. IS will also acquire an internal vulnerability assessment tool and implement a new web application firewall to help protect against common attacks. These actions will complement existing security controls and testing activities, including DIR security scans, periodic Internet-based scans of web application software performed by IS, and multiple firewall layers that are already in place. Regarding the internal risk assessment component of the overall governance structure for information security, TDHCA's Information Security Officer has been designated as the person responsible and now coordinates the security risk assessment process.	December 31, 2017	Information Security Officer

C. COMPONENTS OF INFORMATION SYSTEMS AT TDHCA

The components of TDHCA's overall information systems environment include IS staff, TDHCA staff who are users of the systems, hardware, software, and external users. Information systems are like chains, in that the weakest link determines their strength. The weakest link is often considered to be the users. Users are vulnerable to "social engineering" attacks, whereby hackers alleging a variety of scenarios gain access to information systems. Examples include hackers claiming to be technicians making repairs and requesting confidential information from users to complete the repair.

TDHCA provides security awareness training to employees. Internal audit conducted a customer survey of TDHCA staff, and the result indicated desire for more training. Internal audit recommends a more robust training program for users, instruction on how to use software, and ongoing security training. To provide incentives, evaluations could include the taking of training as a scoring item for evaluations or internally posted jobs.

Finding and Recommendation:

The division should develop and implement a more comprehensive program of IS training for users.

Finding Item Number	Management Comments – Status Pertaining to the Recommendations and Action to be Taken	Target Completion Date	Responsible Party
17-001.02	Management agrees with the finding and will take the following actions to aid agency employees in general IS training and information security training: 1) Provide TDHCA division management with assistance in using training budgets for low cost technical training subscriptions offered through DIR contracts. 2) Improve the existing security training program through a newly acquired web-based training service that will be continuously available to all employees.	October 31, 2017	Information Resources Manager



D. FUNDING AND STAFFING

IS received approximately \$1.7 million in 2017 and \$1.88 million in FY 2018 for operations from a direct appropriation in the TDHCA bill pattern Goal, F.1.2 strategy; Information Resource Technologies. The Division had 20 staff members as of April 20, 2017. Two full-time equivalent positions will be transferred to IS in FY 2018 to assist with the Cybersecurity Initiatives capital budget project, which is the primary reason for the increase in FY 2018.

TDHCA also receives appropriations for capital budget projects. For FY 2017 the capital budget for IS was \$189,000. Capital projects may include hardware, software upgrades, and man-hours for internal work to develop software applications and enhancements.

E. INFORMATION SYSTEMS COMPLIANCE

As noted in section B of this report on Governance, parameters for IS compliance are established primarily by DIR and are laid out in 1 TAC Chapter 202.

Exhibit A depicts the division of responsibilities for IS compliance between DIR and TDHCA. The purpose of this area of the audit was to evaluate compliance and recommend improvements. We did not test to an extent so as to determine full legal compliance. The following areas, based on interviews or examination of documents, indicated potential for improvement.

- 1. Line of Reporting of the Information Security Officer ("ISO")
- 2. Spanish Language Accessibility
- 3. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") requirements

Observation:

TAC §202.21 states that the ISO shall report to executive level management. Our review indicated that the ISO has dual reporting relationship; however the organizational chart provided by Human Resources does not show this reporting requirement. IS should revise and update all organizational charts to reflect the reporting requirements per 1 TAC §202.21.

F. PROGRAMMING

TDHCA has a wide array of funding sources and programs. IS maintains an internal administrative system to manage time-keeping, payroll, and other personnel-related areas. The agency also has a variety of systems for managing funds flow from the state and federal sources. Exhibit B lays out the various information systems used by the agency. This exhibit was prepared by internal audit and IS.

G. SECURITY

Information system security has in recent years and months come to the forefront of concerns related to electronic data. Primary concerns include; 1) e-Commerce vulnerabilities, 2) identity theft, and 3) hacking and other matters related to the security of data that is used in our everyday lives.



1) TDHCA does not conduct e-Commerce. 2) The agency has protocols to protect personal identifying information and other protected or confidential information of employees and other stakeholders. The agency has various transactions with program beneficiaries, subrecipients, and other parties. The agency's various systems interact with the Texas Comptroller of Public Accounts and federal funding agencies. IS has various protocols and controls to protect the identity of these parties. 3) The agency utilizes firewalls and other appropriate anti-hacking protections.

OIA extends our sincere appreciation to management and staff of the Information Systems Division for their cooperation and assistance during the course of this audit.

Sincerely,

Mark Scott, CPA, CIA, CISA, CFE, MBA

Internal Audit Director

MS/BE, NS

cc: [note: lower case]

Exhibit A

TDHCA OIA Review of the Information Systems Division, Audit #17-001

SOURCE: Texas Administrative Code ("TAC") Title 1, Part 10, Chapter 202; Texas Government Code Chapter 2054; Texas Department of Information Resources (DIR) website.

PURPOSE: To determine the responsibilities and duties of TDHCA and DIR.

PROCEDURE: Read the TAC and document the responsibilities of TDHCA and DIR.

RESULTS:

Each state agency is ultimately responsible for the agency's information resources. Also, the Executive Director is charged with ensuring that senior management and information-owners, in collaboration with the Director of Information Systems and the Information Security Officer, support the provision of information security for the information systems that support the operations and assets under their direct or indirect control.

Responsibilities Under Texas Administrative Code		
DIR Responsibilities:	TDHCA Responsibilities:	
General Administration:	Responsibilities of Executive Director ("ED"):	
Provide functional support to state agencies	Designate an Information Security Officer ("ISO");	
Employ a statewide data coordinator to improve the		
control and security of information collected by state	·	
agencies; promote between state agencies the sharing	Allocate Resources;	
of information; and reduce information collection		
costs statewide.		
Develop and implement best practices among state	Ensure that senior agency officials and information-	
agencies.	owners support information security and the ISO;	
Appoint a customer advisory committee	Ensure that agency has trained personnel to assist in complying with DIR requirements;	
Provide the leadership in and coordination of		
information resources management within state	Approve high level risk management decisions	
government.		
Develop and publish policies, procedures, and	Review and approve at least annually the department	
standards relating to information resources	information security program; and	
management by state agencies and ensure compliance		
Provide and coordinate an information resources	Ensure that information security management	
management training program for the departments of	processes are integrated with department strategic and	
state government.	operational planning processes.	
Work with state agencies to ensure deployment of standardized contracts.	Responsibilities of the ISO:	
Establish and administer a clearinghouse for		
information relating to all aspects of protecting the	Shall report to Executive level management;	
cyber security of state agency information.		
Develop strategies and a framework for the securing		
of cyberinfrastructure by state agencies and	Has authority for information security for the entire	
cybersecurity risk assessment and mitigation	agency;	
planning.		
Adopt rules for digital signatures	Shall possess training and experience required;	
Provide mandatory guidelines to state agencies		
regarding the initial and continuing education	Whenever possible, has information security duties as	
requirements needed for information resources	primary duty;	
managers ("IRM") and require IRMs to report their		

compliance.	
Establish return on investment guidelines to help state agencies to implement major information resources projects more effectively.	Develop and maintain agency-wide security plan, and information security policies and procedures;
Prepare the state strategic plan, in coordination with the quality assurance team and state agency IRMs.	Provide training and direction of information security personnel;
Prepare instructions for use by state agencies in preparing the agency strategic plan.	Provide guidance and assistance to agency personnel;
Review the Information Resources Deployment Review submitted by state agencies	Ensure that annual information security risk assessments are performed and documented by information owners;
Develop and maintain the Cooperative Contracts Program	Review the agency's inventory of information systems and related ownership;
Adopt rules to implement the removal of data from data processing equipment.	Cooperate and coordinate with the agency Information Resources Manager ("IRM"); and
Adopt data use agreement rules that relate to information security standards for state agencies.	Report, at least annually, to the state agency head, the status and effectiveness of security controls, the adequacy and effectiveness of information security policies, procedures, and practices, and compliance with DIR Information Security Standards.
Establish requirements of what is to be included in the Information Security Program.	Information owners, custodians, and users of information resources shall, in consultation with the agency IRM and ISO, be identified, and their responsibilities defined and documented by the agency.
Establish plans and policies for a system of telecommunications services	The agency shall develop, document, and implement an ED approved agency-wide information security program.
Develop a statewide telecommunications operating plan for all state agencies.	Perform and document a risk assessment of the agencies' information and information systems.
Adopt appropriate policies and standards that govern the cost-effective and efficient management, operation, and use of state telecommunications services.	Public solicitation of bids or proposals is required for interagency contracts and the agency must determine whether the bid or proposal meets DIR criteria.
Manage the operations of statewide technology centers that provide data center services or disaster recovery services for two or more state agencies.	Submit Statements of Work, greater than \$50,000 to DIR, for Cooperative Contracts Services.
Designate a state cybersecurity coordinator to oversee cybersecurity matters for the state.	Provide written notice to the Legislative Budget Board ("LBB") of a contract for a major information system.
Cybersecurity assessments by Controlled Penetration Testing ("CPT")	All users and developers of geographic datasets and geographic information systems must comply with geographic technical standards
Web Application Vulnerability Scanning ("WAVS")	Make a procured public domain geographic dataset (Federal or other) available to the Texas Natural Resources Information System ("TNRIS").
Open Web Application Security Project ("OWASP")	Unless an exception is approved by the agency head or an exemption has been made for specific technologies, all new or changed web pages must comply with standards and specifications, and be tested.
Web Application Security Consortium ("WASC") standards	A state agency must establish an accessibility policy which must include criteria for monitoring its website for compliance with the standards and specifications.

End-user security awareness training	Make a reasonable effort to ensure that Spanish- speaking persons of limited English proficiency can meaningfully access agency information online.
Monthly webinars are hosted for Security Professionals in the Texas state government system	Protect the privacy and personal identifying information of members of the public who provide or receive information from or through the agency website.
Annual threat report to promote awareness of threat actors targeting state assets	Publish a privacy notice that describes applicable provisions of the privacy policy on the home page and all key public points or the site policies page.
Maintain and post the Security Control Standards Catalog	Prior to providing access to information or services on the website, that requires personal identifying information, conduct a transaction risk assessment, and implement appropriate privacy and security safeguards.
State Website Linking and Privacy Policy	Complete an information resources deployment review. Submit an operating plan to the LBB, DIR, the quality assurance team, and the governor each state fiscal biennium.
	Permanently remove data from data processing equipment before disposing of or transferring of equipment. Develop a data use agreement related to information
	security standards for state agencies.

Exhibit B

TDHCA Applications

Application/System Name	Used By or Programs Supported	Description
	Enterprise Commercia	al Off-The-Shelf Systems
HAPPY Housing Pro (Section 8 System)	Section 8	Community Affairs' Section 8 team uses Housing Pro to administer the Section 8 program. Tenant and payment information is managed in the system and interfaced to PeopleSoft Financials once a month. Housing Pro is a product of HAPPY Software. It is installed in TDHCA's network and administered by the Information Systems Division ("ISD"). Housing Pro is available within the TDHCA network; there are currently no external-facing components.
Microsoft Exchange	Agency-Wide	Microsoft Exchange is the agency's email server software. TDHCA employees can access it internally and externally.
Mitas	Financial Administration, Single Family Operations & Services, and other divisions	The two Mitas systems used by TDHCA are the Mitas Loan Origination & Servicing System and the Mitas Accounting System. Mitas is a product of the Mitas Group, Inc. It is installed in TDHCA's network and administered by the Information Systems Division ("ISD"). The Mitas Loan Origination & Servicing System supports all daily loan origination & servicing processes for the agency's in-house special loan portfolio. Mitas is also used to monitor participating servicers under the whole loan portfolio. Monthly billing statements and borrower credit reporting are also generated by the Mitas system. All loan portfolio year-end reporting, escrow analysis, and disbursement processing for taxes and insurance are generated and managed within the Mitas Loan Origination & Servicing System. One Mitas component, the Bootstrap Loan Reservation System, is available on TDHCA's website and provides Colonia Self-Help Centers and certain nonprofits with the ability to reserve funds for the Texas Bootstrap Loan Program. All other Mitas components are accessible internally only.
		The Mitas Accounting System provides monitoring and tracking of all investments (i.e.,

Application/System Name	Used By or Programs Supported	Description
		mortgage backed securities and money markets) related to Single Family, Multifamily, and Special Housing Programs and is used to reconcile with trustees. Mitas is also used to perform monthly posting and create ledger detail for agency housing programs. Mitas is used to develop and generate financial statements and quarterly investment financial reports.
PeopleSoft Financials	Financial Administration and Agency-Wide	PeopleSoft Financials is the accounting system of record for governmental funds managed by TDHCA and agency procurement. It is used to perform grants accounting, accounts payable, and general ledger functions, and it interfaces daily with Comptroller's Office systems such as the Uniform Statewide Accounting System ("USAS"). One of the major FY 18-19 capital budget projects involves an upgrade to the latest State of Texas version of PeopleSoft Financials (the Centralized Accounting and Payroll/Personnel System - Financials, or CAPPS Financials) which is distributed by the Comptroller's Office. PeopleSoft Financials is accessible internally only, with the exception of the daily interfaces.
		In July 2017, TDHCA migrated to the CAPPS Human Resources/Payroll system as a Central Agency, meaning that the Comptroller's Office hosts and administers the system and TDHCA (and other agencies) use the system as a service.
		TDHCA will be a Hub Agency for CAPPS Financials, which means that the Comptroller's Office will provide the software to TDHCA, and we will install it in our network and add customizations needed for agency housing and community affairs programs.
TeamMate	Compliance and Internal Audit	TeamMate is audit management software. The Compliance Division is the primary user of the software, which provides features for organizing and tracking work papers associated with monitoring visits. ISD supports the installation of the software on agency computers, as well as a TeamMate web and database server. TeamMate is available internally only.
Serv-U	Agency-Wide `	Serv-U is secure, web-based file transfer software

Application/System Name	Used By or Programs Supported	Description
	JULI TOUR TOUR TOUR TOUR TOUR TOUR TOUR TOUR	used by many TDHCA divisions for exchanging files with subrecipients and other customers. The software is available internally and externally.
		ems (Custom Developed in Java) interrelated and share a common database.
Community Affairs Contract System ("CACS")	Community Affairs and HOME, for administration of: CEAP, CSBG, WAP, ESG, HHSP, and LIHEAP (and historical ARRA contracts)	The two major modules of CACS are the Contract module and the Subrecipient Reporting module. The Contract module allows TDHCA to setup CA contracts and electronically route them for approval, through subrecipients and various TDHCA approval levels. The Subrecipient Reporting module allows subrecipients to submit performance and expenditure reports to TDHCA for approval and processing. CACS is accessible internally and externally.
CSBG National Survey System	Community Affairs	This system is accessed through CACS and provides CA subrecipients with the ability to enter and submit CSBG national survey information to TDHCA. It is available internally and externally. Note: This system was developed in PL/SQL; the
Compliance Monitoring and Tracking System ("CMTS")	Compliance and Agency-Wide	other Central Database systems are built in Java. CMTS allows TDHCA to enter, track and update compliance and monitoring data and other information associated with people, organizations, and properties for multifamily programs, including Housing Tax Credits, Multifamily Bond, and HOME Rental Housing Development. CMTS is accessible internally only; the CMTS Property Reporting System is accessible internally and externally.
CMTS Property Reporting System	Compliance and Property Owners/Managers	This is the external-facing component of CMTS, through which property owners and managers enter and submit household and tenant data and compliance status reports to TDHCA. Properties that have their own, inhouse systems can use the CMTS Unit Upload feature to submit household and tenant data in batch, thereby eliminating the need for dual entry into CMTS.
Housing Contract System ("HCS")	HOME, Multifamily, Single Family Operations & Services, Financial	HCS is composed of two major components: 1) the Fund Allocation module and 2) the Contract module. The Fund Allocation module is responsible for tracking the distribution of funds

Application/System Name	Used By or Programs Supported	Description
Housing Resource Center Information Clearinghouse ("HRC-IC")	Administration, and the General Land Office, for administration of: HOME, HTF, NSP, TCAP, and CDBG Disaster Recovery (and historical ARRA contracts) Housing Resource Center, Agency-Wide, and open to all website visitors	from external sources, such as HUD or General Revenue, to external housing program subrecipients. The Contract module allows TDHCA to setup and manage contracts and contract activities. External contract administrators login to the system to submit contract activities and draws to TDHCA. HCS is accessible internally and externally. HRC-IC is the system name for the Help for Texans search tool located in the upper left of the front page of the TDHCA website. It provides a way for visitors to find organizations in their area (within Texas) that offer financial assistance for home buying, paying rent, or repairing homes. Visitors can also search for vacancies in properties funded through TDHCA and find assistance for utility bill payments and services for homeless persons. HRC-IC is accessible internally and externally.
Manufact	ured Housing System (Cus	stom Developed in PL/SQL and Java)
Manufactured Housing ("MH") System	Manufactured Housing	Language: PL/SQL Internal and some external use. The MH System includes several modules used for the administration of the Texas Manufactured Housing Standards Act. Internal modules include Licensing, Consumer Complaints, Tax Liens Statements of Ownership, Cash Receipts, and Installations. External modules include Form T, Tax Lien, Texas Inventory Finance Agreement, and Consumer Complaint forms.
MH Search Our Database (MHWeb)	Manufactured Housing Customers	Language: Java Accessible internally and externally. MHWeb is a read-only system that provides customers with views, reports, and downloads of Licensing, Home Ownership, Installation, and Tax Lien Data captured in the MH System. The system is accessed through the Search Our Database link at http://www.tdhca.state.tx.us/mh/index.htm .

Application/System Name	Used By or Programs Supported	Description	
Website and Public Web Applications (Custom Developed in PL/SQL and Java, and some Commercial Off-The-Shelf)			
TDHCA Website	Agency-Wide	Language: HTML and JavaScript Accessible internally and externally. The TDHCA website (www.tdhca.state.tx.us) is administered by ISD and contains pages, documents, and other content on agency programs and services. It also serves as the portal for the external-facing web applications described throughout this list.	
Affirmative Marketing Tool ("AMT")	Compliance, Agency- Wide, and open to all website visitors (targeted toward property owners)	Language: PL/SQL Accessible internally and externally. AMT is an external web application located on the TDHCA website at http://www.tdhca.state.tx.us/pmcomp/forms.ht m that allows website visitors to view demographic data by property or census tract, for the purposes of affirmative fair housing marketing.	
Closing Status Database	Fair Housing, Data Management & Reporting ("FHDMR"), HOME, Single Family Operations & Services, and open to all website visitors (targeted toward subrecipients of housing programs)	Language: HTML and JavaScript Accessible internally and externally. The Closing Status Database (located at http://www.tdhca.state.tx.us/closing-status/index.htm) allows website visitors to track the status of their loans associated with TDHCA housing programs. The data displayed is managed internally through an Access database administered by FHDMR.	
Intranet HR Schema	Agency-Wide	Language: PL/SQL Accessible internally and externally. ISD manages a process that loads a few fields of employee data from the HR System to this table on the intranet, which is used for the staff phone directory on the intranet and the TDHCA website (link near the bottom of the Contact Us page, http://www.tdhca.state.tx.us/au offices.htm). The fields, which include name, division, section, and phone number, are all non-sensitive, public data.	
My First Texas Home ("MFTH") Information Request	Texas Homeownership and open to all website visitors	Language: Java Accessible internally and externally. Simple online submission form for requesting a MFTH information packet, located at	

Application/System Name	Used By or Programs Supported	Description
		http://www.tdhca.state.tx.us/homeownership/ft hb/buyer regs step5.htm.
My First Texas Home Mortgage Qualifier	Texas Homeownership and open to all website visitors	Language: Java Accessible internally and externally. Calculator tool that helps visitors determine if they are eligible for MFTH and what their estimated monthly payments will be based on the price of their home and the interest rate, located at
		http://www.tdhca.state.tx.us/homeownership/ft hb/prequalify.htm.
Multifamily Housing Preservation Clearinghouse	Multifamily, and open to all website visitors (targeted toward property owners)	Language: PL/SQL Accessible internally and externally. The Multifamily Preservation Clearinghouse (located at https://www.tdhca.state.tx.us/multifamily/preservation/) is designed to facilitate the preservation of existing affordable and subsidized multifamily rental properties in Texas. It provides multifamily property owners a format to market their properties to prospective buyers interested in
TDHCA Email List	Administered by External Affairs and Information Systems, and open to all website visitors	maintaining the affordability of a property. Accessible internally and externally. The TDHCA Email List is accessed through the Join Our Email List link on the front page of the website. The software used is L-Soft LISTSERV® Maestro. ISD manages the server hardware and software configuration, and External Affairs oversees the process of sending emails to subscribers.
TDHCA Online Forums	Administered by Information Systems, and available to all website visitors (subject to the status of each individual forum)	Accessible internally and externally. TDHCA Online Forums are accessed through the Featured Items section of the front page of the website. ISD manages the Website Toolbox service that powers the forums. ISD sets up forums for varying topics as requested by management.
TDHCA Public Complaints System	Housing Resource Center, other divisions, and open to all website visitors	Language: PL/SQL. This system has 1) an external component (located at http://www.tdhca.state.tx.us/complaint.htm) that provides the public with a means to submit complaints to TDHCA and 2) an internal component for tracking the complaints.

TDHCA Applications Page 6

Application/System Name	Used By or Programs Supported	Description
Internal	Applications (Custom Dev	veloped in APPX, Java, and PL/SQL)
CDBG Contract Tracking System	Single Family Operations & Services	Language: PL/SQL Accessible internally only. This system is used by the Colonia Initiatives section of the Single Family Operations & Services Division to manage information for contracts funded from the Community Development Block Grant ("CDBG").
Compliance Status System ("CSS")	Compliance	Language: PL/SQL Accessible internally only. The Compliance Division uses the Compliance Status System for tracking compliance scores on multifamily properties funded through the Housing Tax Credit program and other programs such as Multifamily Bond. Links in CMTS help Compliance staff navigate to associated data in CSS.
DAFR and Other Comptroller Office Reports	Financial Administration	Language: PL/SQL Accessible internally only. This is a reporting system that downloads Daily Agency Financial Report ("DAFR") files from the Comptroller's Office and presents them in an easy-to-read format that is accessible on the TDHCA Intranet (for Financial Administration staff).
Federal & Legislative Contact System	External Affairs	Language: PL/SQL Accessible internally only. This system is used to maintain legislator and constituent contact information and associated communication. Included modules: - Federal & Legislative Contact System - Legislator Information System - Legislative Reporting System
Human Resources System and Time & Leave System Hotline Database	Human Resources TDHCA Employees Texas Homeownership	Language: APPX Accessible internally only. These two closely related systems have been used for TDHCA's HR management and timesheet entries for over 20 years. In July 2017, we migrated to the CAPPS HR/Payroll system, which will replace TDHCA's HR System and T&L System after a three month period of parallel entry. Language: PL/SQL

Application/System Name	Used By or Programs Supported	Description
		Accessible internally only. The Hotline Database is used by the Texas Homeownership Division to track information requests for homeownership programs.
Inventory System	Financial Administration and Agency-Wide	Language: APPX Accessible internally only. The Inventory System is managed by the Staff Services area of Financial Administration to track agency inventory. Every TDHCA employee has access to view inventory items assigned to them, which are primarily computers and monitors.
Invoice Tracking System	Financial Administration	Language: PL/SQL Accessible internally only. The Invoice Tracking System is used by Financial Administration to enter and view all invoices received by TDHCA.
Public Information Request ("PIR") System	Legal and Agency-Wide	Language: Java Accessible internally only. Legal is the lead division for PIRs, and they enter and assign PIRs using this system. PIR liaisons in each division also log into the system to enter notes and track the status of assigned PIRs through completion.
Records Management System	Financial Administration	Language: PL/SQL Accessible internally only. The Staff Services area of Financial Administration uses the Records Management System to classify and track agency records.
TDHCA Cash Receipts System	Financial Administration	Language: PL/SQL Accessible internally only. Financial Administration records all non-MH cash receipts using this system. (MH cash receipts are recorded in the Cash Receipts module of the MH System.)
Travel System	Financial Administration	Language: APPX Accessible internally only. The Travel System is managed by Financial Administration to track agency travel requests and expenses. Every TDHCA employee has access to submit travel requests, which are routed to their managers for approval, and then to Financial Administration.
	,	ternal Utilities
IRS-FORM 1099	Financial	Language: PL/SQL

TDHCA Applications

Application/System Name	Used By or Programs Supported	Description
	Administration	Accessible internally only. Financial Administration uses this utility to produce IRS Forms 1099.
IRS 1099 VB	Financial	Language: Visual Basic
application	Administration	Accessible internally only.
		Financial Administration uses this utility to create the IRSTAX.dbf file for submission to IRS once a year.
SPA VB application	Financial	Language: Visual Basic
	Administration	Accessible internally only.
		The Staff Services area of Financial
		Administration uses this utility to download and
		print State Property Accounting ("SPA") information. SPA is a Comptroller's Office
Tookiba Comu	Financial	system.
Toshiba Copy	Administration	Language: PL/SQL
•	Administration	Accessible internally only. The Staff Services area of Financial
	•	Administration uses this utility for recording
		Toshiba copy machine costs.
ISD A	dministration and Reportin	g Applications (Custom Developed)
RPNET (External)	Information Systems	Language: Microsoft .NET
		Accessible internally and externally.
		This application provides the mechanism for
		PDF report generation for some external-facing
		systems, primarily for external-facing MH System
	,	components.
RPNET (Internal)	Information Systems	Language: Microsoft .NET
		Accessible internally only.
		This application provides the mechanism for
		PDF report generation for some internal systems,
		primarily for the internal components of the MH
		System.
TDHCA Intranet	Information Systems	Language: PL/SQL
User Account		Accessible internally only.
Management		ISD uses the UAM System to manage Oracle
("UAM") System		accounts for TDHCA's PL/SQL applications.
		Functions include creating accounts, disabling
		i directons metade creamig accounts, disability
		accounts, assigning roles, and resetting passwords.