



it

SERVICES

FY2025



LISA KENT
**CHIEF INFORMATION OFFICER
& DIRECTOR**



As the Chief Information Officer for the City of Houston and Department Director of Houston Information Technology Services (HITS), I am pleased to present the Houston IT Services Annual Accomplishments Report for Fiscal Year 2025 (July 1, 2024 through June 30, 2025). Through our team's dedication, innovation, and passion for digital transformation, we continue to advance Mayor John Whitmire's vision for a safer, stronger, more connected and efficient Houston.

Over the past fiscal year, HITS has played an essential role in supporting the Mayor's strategic goals by strengthening our public safety, modernizing and increasing resilience of the City's infrastructure, improving the efficiency of how we run our government, and elevating the quality of life for residents. Our accomplishments this year showcase how technology is a driver of progress and innovation across the City of Houston.

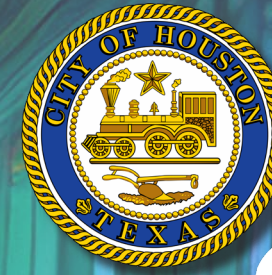
Our key highlighted stories include advancing our cybersecurity protections that help us safeguard sensitive data and critical City systems, expanding our cloud-based platforms to increase resilience and flexibility, and updating core public safety and emergency response technologies to better serve first responders and residents alike. We've also continued to improve in areas such as data governance, streamlining internal processes, and expanding digital services to Houstonians, allowing them to easier connect with their government.

We would not have achieved these accomplishments without the commitment and expertise of our IT staff, the collaboration of our partner departments, and the support of our stakeholders. Together, we are creating an IT foundation that strengthens the public trust in us and empowers our residents, businesses, and employees by making it more secure, innovative, and looking towards the future.

As we look ahead, we remain constant in our goal to provide technology services that are reliable and resilient. By continuing to seek out innovation and collaboration, HITS will ensure that the City of Houston is well-prepared to digitally empower our residents while meeting the challenges of tomorrow.

On behalf of Houston IT Services, I would like to show my greatest appreciation to our teams, City leaders, and partners for their collaborative commitment in making Houston resilient and future-focused.

HITS SENIOR STAFF MEET THE TEAM



it SERVICES

HITS will be a catalyst that
transforms Houston into a
digital city for all



Bert Quarfordt
Deputy Chief Information
Officer, Enterprise
Infrastructure Services

Brandon Williams
Chief Technology Officer
(Public Safety)

Nicholas Curran
Assistant Director, Public
Safety Communications

Dr. Christopher Mitchell
Chief Information Security
Officer

Shannon Hodge
Division Manager, Data
Privacy & Business
Operations Management

Dr. Jane Wu
Deputy Director, Data
Privacy & Business
Operations Management

Lisa Kent
Chief Information Officer
and Director

Summer Xiao
Deputy CIO, Enterprise
Applications Services &
Project Management Office

HITS GUIDING PRINCIPLES

Business needs drive IT solutions. Utilize a governance structure to align efforts with business goals.

Identify and exploit common business functions and processes across departments when implementing new technologies.

Leverage existing technology platforms before procuring new systems that perform similar or duplicative functions.

Leverage process automation and machine learning (ML) to speed operational adjustments & augment human intervention.

Evaluate business processes for re-design opportunities (don't automate bad processes!).

Buy before build-leverage standard commercial-off-the-shelf solutions over highly customized COTS or internally developed solutions.



it
SERVICES

VISION

HITS will be a catalyst that transforms Houston into a digital city for all

MISSION

Provide solutions that serve, protect, and enlighten the residents and visitors of Houston

CORE VALUES

Humility • Integrity • Trust • Service

HITS Strategic Priorities

OPTIMIZE CITY OPERATIONS

Optimize City operations to align business needs to ensure security, reliability, resiliency, cost, and operating efficiencies

Build next generation IT foundation and capabilities to enhance mobility, collaboration, capacity, and agility

- Plan and forecast to right-size IT solutions
- Design infrastructure & applications for resiliency to optimize uptime and availability according to business need
- Implement best practice frameworks to improve efficiency & achieve predictable service delivery
- Choose cloud first where it makes business sense to enable flexible and agile scaling
- Prioritize technology solutions that are modern, supportable, sustainable, and scalable
- Create, communicate, and enforce core IT standards

Security & risk management controls align with the City's risk tolerance and external factors

- Ensure a defensible architecture
- Secure data and applications
- Mature security center operations
- Manage third party risks
- Manage insider risks

Leverage City assets & capabilities to decrease operating expenses, increase the City's competitiveness, and economic opportunities

- Go Digital - reduce and strive to eliminate paper process
- Go Mobile - use IT solutions to enable employees to "work where they are"
- Leverage tech & innovation partnerships to expedite & optimize cost of expanding City operations
- Improve budget efficiency through responsible fiscal management



IMPROVE DATA-DRIVEN DECISION MAKING

Improve data-driven decision making through better data access to produce actionable analysis, better decision making, and transparency

Leverage data & analytics to provide timely & actionable insights

- Establish and grow enterprise data platforms that provide centralized data to enable ease of data extraction, curation, and sharing
- Expand and improve City open data portal and data sets for open and accessible City data to support public engagement and government transparency and accountability
- Establish data governance process to achieve proper data classification, quality, integrity, and stewardship
- Energize the data community to promote a data culture by creating awareness and developing data skills across the City

IMPROVE ACCESS TO CITIZEN SERVICES

Engage citizens through connected mobile and digital experiences to increase accessibility, participation, and satisfaction

Leverage City assets to provide easy and convenient access to City services for all constituents

- Go Digital; Go Mobile: to ensure that citizen-facing services are designed with intuitive user interfaces that simplify the citizen experience and save them time
- Leverage tech & innovation partnerships to provide digitally inclusive experience
- Increase & improve accessibility for all constituents through technology
- Sponsor and promote digital equity initiatives to increase the affordable, high-speed home internet access for residents in Complete Communities

INSPIRE & EMPOWER EMPLOYEES

Inspire and empower employees to do their best work by developing and aligning their skills to support the strategy and leveraging the power of mobility and collaboration

Develop, retain, and recruit top-tiered workforce

- Promote a continuous learning culture and environment
- Provide professional development for business continuity and career mobility
- Promote a customer experience mindset
- Provide creative and innovative learning and research opportunities
- Cultivate innovation through adoption of prototyping, next gen tools, and next gen techniques
- Continuously stimulate collaborative interaction and creative brainstorming



FY25 Houston IT Services Projects

Launch of MyCOH Time – a Citywide Time and Attendance System

In March 2025, the City of Houston successfully implemented a modern, cloud-hosted Time and Attendance system serving more than 20,000 City employees. The new platform enhances security, reliability, and accessibility – supporting mobile, desktop, and on-site clock access. This system replaces outdated manual processes and streamlines key functions such as overtime and leave approvals, improving payroll accuracy and reducing administrative burden. By reducing the number of physical time clocks by 33%, the City projects a five-year cost savings of \$447,000. Employees now benefit from real-time, self-service tools to manage schedules, leave, and overtime from any device, resulting in faster, more accurate pay with fewer delays and fewer corrections.

Modernizing Planning and Historic Preservation Processes

In partnership with Houston IT Services, the City of Houston's Planning & Development Department launched two modern digital platforms to improve efficiency, transparency, and service delivery in plat review and historic preservation processes. The new PlatTracker system simplified subdivision plat submissions, enabled real-time tracking, and strengthened collaboration with regional agencies. Notably, the system automated Planning Commission agenda generation—eliminating hundreds of pages of manual work and delivering substantial time savings for staff. At the same time, the Historic Preservation Tracker enabled property owners and agents to submit and track Certificate of Appropriateness applications online. Integrated business intelligence tools provided enhanced transparency and operational efficiency. Together, these platforms enhanced public access, reduced manual processes, and advanced the City's commitment to sustainable development and the preservation of historic neighborhoods.

Increased Revenue Through Modern Permitting Technology

Since the launch of a modern permitting system in 2020, the City of Houston's Administration and Regulatory Affairs Department has achieved a 250% increase in fee collections over three years—without adding staff. This remarkable growth is attributed to the system's ability to consolidate historical permit data into a single, comprehensive record, enabling both customers and staff to easily identify and resolve outstanding fees. Unlike the legacy system, which dispersed permit histories across multiple disconnected records, the new platform provides clear visibility into account balances and payment statuses. This successful data conversion and integration of historical data have allowed the City to recover years of previously uncollected permit fees, demonstrating the lasting financial and operational benefits of targeted and strategic technology investments.

Advancing Public Service Delivery through Innovation

In FY25, Houston IT Services launched the Public Service Request Center of Excellence (COE) as a pilot initiative to transform how the City delivers technology support for non-emergency services such as solid waste collection, pothole repair, and water leak reporting. This cross-functional effort brings together business and technology experts from multiple departments to drive service improvements through agile, collaborative methods focused on streamlining business processes.

The COE identifies pain points, simplifies workflows, and delivers targeted solutions that enhance speed, transparency, and resident satisfaction. While still in the pilot phase, this initiative is already showing strong potential to drive measurable business value and improve service outcomes. Building on this success, Houston IT Services plans to expand this model by establishing additional business-focused COEs across the City supporting a long-term strategy for continuous innovation and scalable improvements in public service delivery.

FY25 Houston IT Services Projects

Strengthening Cybersecurity Across Operational Technology Systems

In FY25, HITS initiated a strategic project designed to gain improved visibility across operational technology (OT) systems and unify IT and OT security strategies. This initiative will help reduce the OT attack surface by providing real-time insights into vulnerabilities, malicious traffic patterns, and anomalous behaviors. The solution will also enhance the City's overall cybersecurity posture by feeding rich OT telemetry into the Security Operations Center (SOC), enabling centralized cyber risk management, policy enforcement, and incident response across the entire enterprise. This unified approach represents a major step forward in protecting critical infrastructure and ensuring the resilience of City operations.

Houston's Digital Resilience in Action: *Readiness for World Cup 2026 and Beyond*

As Houston prepare to welcome the world for the 2026 FIFA World Cup, the City is undertaking a comprehensive modernization of its digital infrastructure to ensure a secure, resilient, and high-performing environment. With over a half a million visitors expected and heightened global attention, HITS is leading a multi-year effort to strengthen both its cybersecurity operations and network infrastructure. These investments are not only critical for the success and safety of the World Cup, but also lay the groundwork for long-term improvements in service delivery, operational resilience, and public trust.

In FY25, HITS continued modernization of its Security Operations Center enhancing the City's ability to detect, respond to, and recover from advanced cyber threats targeting critical infrastructure, public safety systems, and essential City services. This initiative focused on scaling operational readiness, centralizing threat intelligence, increased automation, and enabling rapid response capabilities across IT and OT environments. At the same time, HITS upgraded the City's network infrastructure to ensure secure and uninterrupted communications across City facilities. By enhancing network security, redundancy, and reliability, the City is building a digital foundation that can support high-demand events like the World Cup while providing enduring benefits for residents. Together, these efforts reinforce Houston's commitment to safety, innovation, and operational excellence in face of today's evolving digital landscape.

Modernizing Telecom Infrastructure for Citywide Resiliency

As part of a multi-year initiative to modernize the City's telecommunications infrastructure, HITS made significant progress in enhancing the resiliency and redundancy of the telecom network circuits by implementing state-of-the-art connectivity. Furthermore, this allows for the City to reduce reliance on outdated, failure-prone legacy circuits. In FY25, a comprehensive assessment of over 340 City facilities was completed to identify and assign the appropriate network tier-level designation for all City facilities, enabling tailored connectivity solutions that align with City department needs. A major milestone included the successful replacement of all legacy T1 network circuits at 68 Houston Fire Department (HFD) stations with high-speed fiber thus dramatically improving network performance and reliability for critical public safety services. The next phase of this project, planned for FY26, will include wide-area network (WAN) circuit upgrades at additional City locations as part of the broader Next Generation Network project. These efforts will deliver long-term benefits by increasing network reliability, scalability, and operational efficiency – providing the foundation for resilient digital services and peace of mind across all City departments.

FY25 Houston IT Services Projects

Next-Generation Emergency Alerting System for Houston Fire Department

In FY25, HITS successfully completed a multi-year project to modernize the Houston Fire Department's (HFD) Emergency Alerting System (EAS) with the implementation of the Mach Alert Fire Station Alerting solution. This robust Commercial Off the Shelf (COTS) platform replaces the end-of-life legacy system and provides enhanced reliability and resiliency to meet the City's critical public safety needs.

This new system is built on radio-based infrastructure with controllers deployed across multiple City locations and fire stations. It features dual communication paths (Network and UHF Backup) and includes redundant server architecture to ensure reliability and resiliency to support critical public safety requirements. The implementation phase, which began in FY24 and completed in FY25, equipped the fire stations Citywide with this next-generation technology.

Across the City's 93 fire stations, Fire Department and Emergency Medical Service (EMS) first responders have only seconds to be geared up and onboard emergency vehicles in response to emergency calls for service – day or night. The Fire Station Emergency Alerting System serves as a crucial means to notify and prepare first responders for their rapid departure. Upon receiving the dispatch alert, this system automatically turns on the fire station lights, audibly announces the details of the dispatch instructions over station intercoms, displays the text instructions on digital monitors for quick reference, and opens the fire station bay doors to enable trucks to roll in a matter of seconds. These technology-enabled steps help shave minutes off the first responder time to arrive on scene, which saves lives and property for Houstonians.

Upgrading Public Safety Communications Infrastructure

In FY25, HITS completed a critical upgrade to the NICE Public Safety Recording system, a key and essential component of the City's public safety operations. Managed by the Houston Emergency Center (HEC), the NICE system records all 911-related calls, playing a vital role in emergency response, incident reconstruction, and public safety accountability. The NICE Infrastructure Refresh Project successfully updated the end-of-life hardware and software with modern, resilient server, storage, and application components. This upgrade enhances system stability, ensures continuity of operations, and strengthens the City's ability to manage and archive emergency communications.

Strengthening Public Safety Through Computer Aided Dispatch Upgrades

In FY25, HITS completed a critical infrastructure upgrade to the Computer Aided Dispatch (CAD) system – an essential and key component of the City public safety solution. The CAD system enables 911 call takers to document 911 emergency calls and relay vital information to first responders in real time. To ensure continued performance and reliability, the HITS infrastructure team replaced the aging, end-of-life CAD server and storage environment. This upgrade enhances system resiliency, improves stability, and maintains high availability for this mission-critical platform while the City prepares for the implementation of a next-generation CAD system. This investment reflects Houston's ongoing commitment to strengthen emergency response capabilities and ensuring public safety services remain dependable and responsive.



FY25 Houston IT Services Projects

Enhancing Radio Infrastructure for Resiliency and Reliability

In response to Houston's unpredictable weather, HITS has proactively upgraded the radio infrastructure, including tower antennas, modern lighting systems, and backup battery systems to maintain high system availability and ensure continued operations.

Radio antennas mounted on towers are the primary link for radio communications for all City's public safety radio system users. These antennas are designed to withstand outdoor conditions year-round and consistently enduring Houston's volatile weather. HITS replaced the radio antennas that have reached the end of their useful life with full antenna systems at three sites this fiscal year.

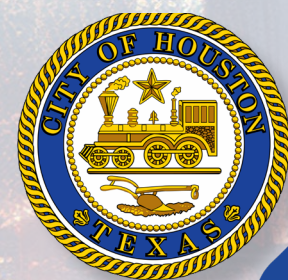
To comply with Federal Aviation Administration (FAA) and Federal Communications Commission (FCC) regulations, all City-owned radio towers must be equipped with functional lighting systems that provide visual indicators for air traffic. HITS is responsible for maintaining these systems across 27 towers that support the City's public safety radio system. Many of the existing lighting systems are built using older technology that consumes significant electricity and is prone to frequent component failures. HITS began a phased initiative to modernize these systems by replacing them with more reliable and energy-efficient LED tower lighting systems. These modern systems offer improved reliability, reduced maintenance needs, and lower energy costs. As part of this effort, HITS replaced five tower lighting systems in FY25. This initiative enhances both air traffic safety and operational efficiency, while demonstrating the City's continued investment in sustainable and resilient public safety infrastructure.

Stabilizing Critical Radio Infrastructure at 61 Riesner

The radio tower at 61 Riesner plays a key role of the City of Houston's public safety communications network, supporting radio coverage for the first responders operating in the downtown and midtown areas of Houston. Originally constructed in 1950, the tower has served as a reliable communications asset through multiple generations of radio systems. During an annual inspection of the tower, structural concerns were identified, including foundational (pier) failures and significant rusting on one of the tower legs. In response, the issue was promptly reported, and a series of non-invasive tests were conducted to assess the full extent of the damage. Based on the findings, a two-phase response plan was developed to ensure safety and service continuity. Phase I of the plan focused on immediate structural repairs that would stabilize the tower to ensure the safety and reliability of ongoing operations. This stabilization provides critical assurance while the City prepares for Phase II, the full replacement of the tower, scheduled to be completed in FY26. This proactive effort reflects the City's commitment to maintaining secure and dependable infrastructure for public safety communication.

Upgrading Public Safety Mobile Radios for Enhanced Connectivity

In FY25, HITS Public Safety Communications (PSC) team continued its multi-year initiative to modernize the City's public safety radio fleet, focusing this year on the replacement of mobile radios installed in Houston Police Department (HPD) and Houston Fire Department (HFD) vehicles. The previous model, originally deployed in 2012, had reached end-of-support status from the manufacturer and was due for an upgrade to align with the City's current radio system. Working in close partnership with HPD Office of Technology Services (OTS), PSC successfully replaced nearly 2,000 mobile radios across HPD and HFD (PSC only). A key innovation of this project was the development of an assembly line approach, enabling the programming of 12 mobile radios every 20 minutes, dramatically improving deployment speed and efficiency. The new mobile radios include built-in Wi-Fi capabilities, allowing technicians to perform remote updates without removing radios from service. This capability reduces programming time from months to weeks and minimizes the downtime for critical patrol and fire assets, ultimately strengthening public safety readiness and operational efficiency Citywide.



it SERVICES



DR. CHRISTOPHER MITCHELL CHIEF INFORMATION SECURITY OFFICER



The Cyber Division is responsible for identifying, protecting, detecting, responding, and recovering from cyber attacks originating from nation states, organized criminals, hacktivist groups, and insiders, against City data, information, and systems. Additional responsibilities include the design, implementation, and operation of a Citywide Security Operations Center (SOC). Select SOC capabilities include:

Real-Time Monitoring and Triage

Cyber Threat Intelligence Consumption,
Collection, Creation, Analysis
and Distribution

Trending Analysis

Threat Assessment

Incident Analysis and Response

Insider Threat Case Investigations

Vulnerability Assessments and Scanning

Security Consulting-

(architecture and software reviews)

Training and Awareness



Roy Turner, Hannah Leon, Dr. Chris Mitchell,
Cristina Lara, Ontariel Lamark, Clinton Huey



SUMMER XIAO
DEPUTY CIO
ENTERPRISE APPLICATIONS SERVICES
& PROJECT MANAGEMENT OFFICE



Enterprise Application Services (EAS) Division

is comprised of Enterprise Resource Planning, Data Management, Enterprise GIS, Enterprise Data Analytics, and Cloud and 3rd Party Application Management. Each is responsible for the ongoing support and implementation of numerous applications and tools that enable Citywide and departmental business functions.

The Project Management Office (PMO) Division plays a crucial role in enabling City departments to achieve their business priorities by helping departments articulate and translate their business needs into actionable technology requirements. By doing so, the PMO aims to drive greater business value by effectively managing the implementation of technology portfolios, programs, and projects.



ALPHABETICALLY - Gaurav Bangia, Brad Barnes, Pat Brown, Lu-Chia Chuang, Mai Fung, Geiby George, Alicia Giles, Dalvin Glover, Patrick Gonzales, Deborah Hoffpauir, Janelle Holgado, Deepak Kizhakkayil, Raphael Louvrier, Jason Lu, Sid Madera, Jimmie Sanders, Pranav Shah, Niyousha Soltani, Brandon Williams, Andrew Quick, Summer Xiao



BERT QUARFORDT
DEPUTY CIO
ENTERPRISE INFRASTRUCTURE SERVICES



The Enterprise Infrastructure Services (EIS) Division

provides mission critical infrastructure services 24/7/365 to the City's diverse group of departments. The EIS Division is responsible for building next generation IT infrastructure and capabilities to enhance capacity, agility, and resilience of the City's technology systems and services. EIS is composed of four major groups: Data Center Services, Network Services, Telecommunication Services, and End User Services.



LEFT TO RIGHT- Sunny Coleman, Jon Phillips, Scott Stevens, Robert Weikel, Bert Quarfordt, Lorena deAlejandro, Omar Farooq, Chris Taylor, Weifang Wang, Alex Jean, Byron Persino, Alexis Westmoreland



NICHOLAS CURRAN
**ASSISTANT DIRECTOR
PUBLIC SAFETY COMMUNICATIONS**

The Public Safety Communications (PSC) Division provides high availability regional public safety radio communications for the Houston Metro area and manages over 20,000 subscriber radios fully interoperable across more than 50 radio tower sites and other regional radio systems throughout the City of Houston's 655 square miles. The PCS Division is comprised of five (5) functional teams: Systems, Programming, Network Operations, Customer Service, and Administrative.

These teams collaborate with various City departments such as the Houston Police Department, Houston Fire Department, Houston Public Works, Solid Waste Department, Houston Airport System, and the Mayor's Office to ensure business needs are met. The PSC Division also works closely with the Houston Emergency Center (HEC) to manage and provide technical support to the HEC, and with external entities such as Harris County Radio, Greater Harris County 911, NASA, Houston Community College, Pearland Police and Fire Departments, as well as other governmental jurisdictions.



JIM HENK, NICK CURRAN, LARVONDA (SHAUN) FONTENO



DR. JANE WU
**DEPUTY DIRECTOR
DATA PRIVACY & BUSINESS
OPERATIONS MANAGEMENT**

The Data Privacy & Business Operations Management Division (DBM) provides, manages, and supports a range of essential operational functions that promotes the integrity and compliance of IT-related processes. DBM oversees the administration and lifecycle management of information technology contracts, conducts detailed contract financial analysis, provides coordination and support for Requests for Council Action (RCA) for IT contracts, and fixed asset management. In addition, DBM ensures compliance with policies, data privacy practices, and audit standards. It supports City eDiscovery matters and Texas Public Information Act (TPIA) requests, ensuring transparency and adherence to legal obligations. As the data privacy landscape evolves and expands, DBM ensures City data privacy and security compliance by City collaborators, vendors, and other third parties through contractual agreements and compliance enforcement.

In fiscal year 2025, DBM processed and received approval for 55 Council Actions from Houston City Council with a total value of over \$165 million dollars in approved contracts. DBM's contract management portfolio currently includes over 120 HITS-managed technology contracts with a total value over \$1 billion dollars.



LEFT TO RIGHT, BACK TO FRONT
John Bowling, Katrina Bell

Ashley Jones, LaShanda Houston, Susan Lopez,
Nettie Rodriguez

Teressa Villarreal, Weona Dean, Sue Anne Kolarik

Jacqueline Yii, Shanna Monckton, Cassandra Brown,
Christopher Fleming

Shannon Hodge, Dr. Jane Wu, Andrea Hernandez



it

SERVICES

FY2025