Memorandum



DATE November 9, 2023

TO Honorable Mayor and Members of the City Council

SUBJECT Technology Accountability Report – October 2023

Please find attached the Technology Accountability Report (TAR) based on information through October 31, 2023. The TAR is a progress report reflecting the performance and operational status of the city in purchasing, implementing, operating, and securing technology to achieve the city's priorities and service objectives.

If you have any questions, please contact William (Bill) Zielinski, Chief Information Officer and Director of Information & Technology Services.

Jack Ireland

Chief Financial Officer

c: TC Broadnax, City Manager
Tammy Palomino, City Attorney
Mark Swann, City Auditor
Bilierae Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizor Tolbert, Deputy City Manager
Jon Fortune, Deputy City Manager

Majed A. Al-Ghafry, Assistant City Manager
M. Elizabeth (Liz) Cedillo-Pereira, Assistant City Manager
Dr. Robert Perez, Assistant City Manager
Carl Simpson, Assistant City Manager
Genesis D. Gavino, Chief of Staff to the City Manager
Directors and Assistant Directors



As of October 31, 2023

Prepared by Information & Technology Services

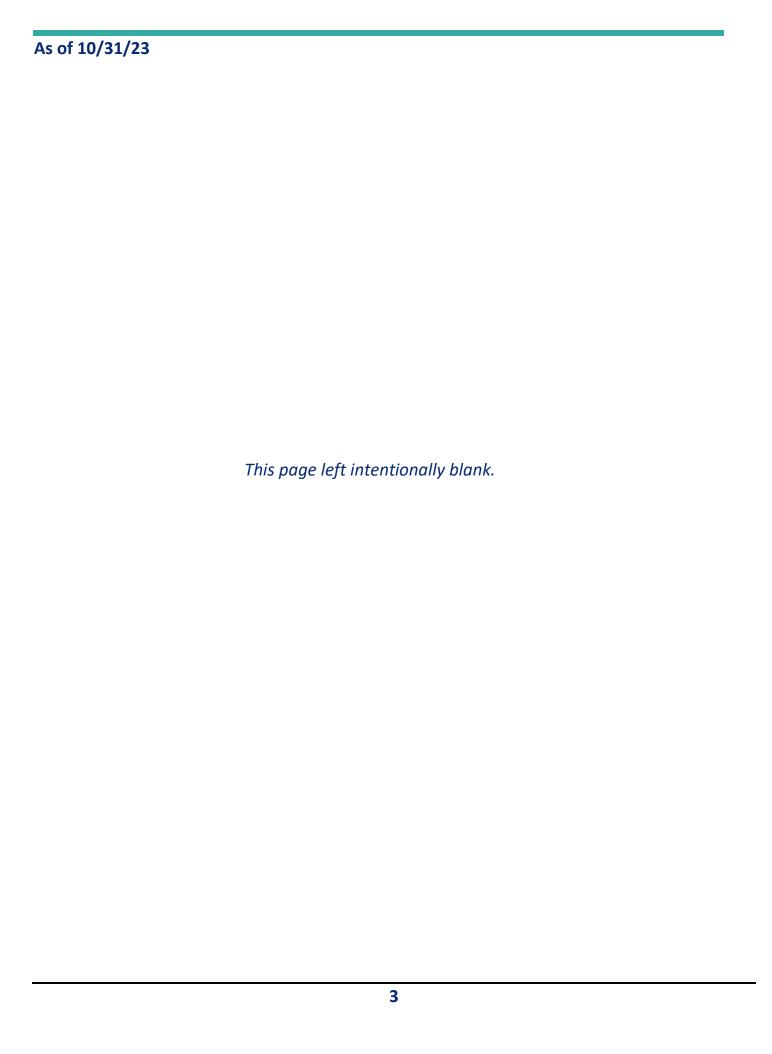
1500 Marilla Street, 4DS Dallas, TX 75201

214-671-9868

Executive Summary

The highlights of the October 2023 Technology Accountability Report (TAR) include:

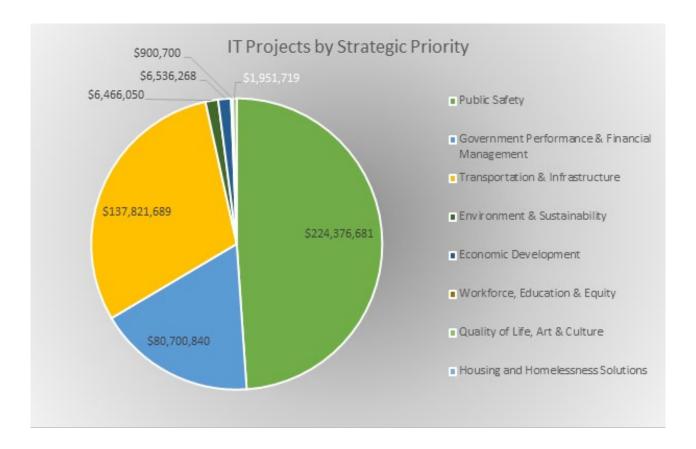
- Section 1: IT Programs & Projects Since the September 2023 TAR report, one major project was completed and removed from the report:
 - The Closed Captioning System for the City Council Meetings project provides live web stream/cable channel for City Council meetings to help meet ADA compliance and the City of Dallas Equity and Inclusion goals. (Previously project #8 on the September 2023 TAR)
- Section 1: IT Programs & Projects Since the September 2023 TAR report, one new major project has been approved:
 - The Snow and Ice Response project supports emergency response during snow and ice events. It will streamline the City's emergency response capability and will allow the Public Works department to quickly provide updated sanding information to other departments, to include Communications Outreach & Marketing, Office of Emergency Management, Dallas Fire and Rescue, and Dallas Water Utilities.
- Section 1: IT Programs & Projects adds a new Subsection 3 that provide an additional breakdown of the total project portfolio measured by the following categories: strategic solutions, optimization and efficiency, technical debt, compliance standards, and operations and maintenance.
- The City of Dallas published the After-Action Review Report (AAR) for the May 2023 Ransomware event on September 20th. The report is publicly available in both English and Spanish versions for download on the City's website at https://dallascityhall.com/DCH%20Documents/dallas-ransomware-incident-may-2023-incident-remediation-efforts-and-resolution.pdf.



Section 1: IT Programs & Projects

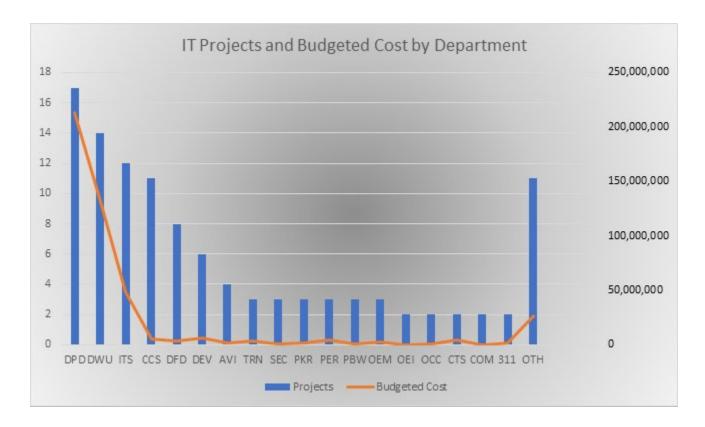
A. Project Pipeline

1. IT Projects by Strategic Priority



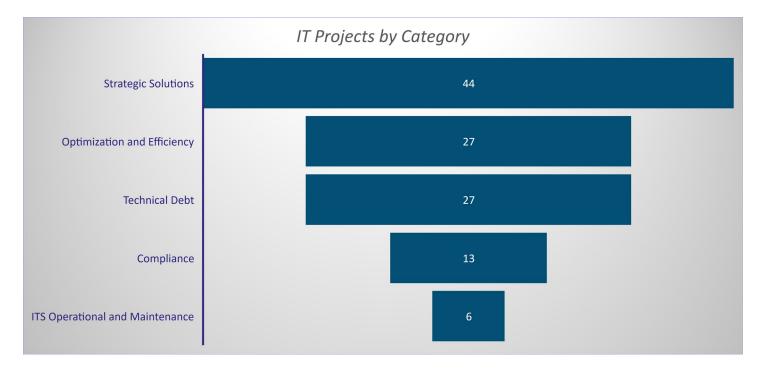
- 1. As of 10/31/2023, ITS has 111 approved IT projects in the pipeline.
- 2. The total budgeted costs for the 111 projects are \$458,753,946.
- 3. Project pipeline includes at least one project in 7 of the identified 8 strategic priorities.
- 4. The highest number of active IT projects are aligned to the Public Safety Strategic Priority with a total of 30 projects at a total budgeted cost of \$224.4M, followed by Government Performance & Financial Management with a total of 27 projects at a total budgeted cost of \$80.7M, Transportation & Infrastructure with a total of 24 projects at a total budgeted cost of \$137.8M, and Environment & Sustainability with 14 projects at a total budgeted cost of \$6.4M.

2. IT Projects and Budgeted Cost by City Department



- 1. Twenty-nine City Departments are represented across the 111 approved IT projects in the pipeline.
- 2. Dallas Police Department has 17 active projects at a total budgeted cost of \$213.6 million, followed by Dallas Water Utilities with 14 active projects at a total budgeted cost of \$131.1 million, Information & Technology Services with 12 projects at a total budgeted cost of \$48.7M, Code Compliance with 11 projects at a total budgeted cost of \$5.4M, and Dallas Fire and Rescue with 8 active projects at a total budgeted cost of \$3.9M.
- 3. Eleven Departments have one active project each, making up the Other (OTH) group in Figure 2 above.

3. IT Projects and Budgeted Cost by Category



- **1.** Forty-four projects implement Strategic Solutions of new products or services with a budgeted cost of \$69.4M.
- **2.** Twenty-seven projects aim to increase Optimization and Efficiency of City processes and systems with a budgeted cost of \$273.3M.
- **3.** Twenty-seven projects focus on reducing Technical Debt with a budgeted cost of \$111.6M.
- **4.** Thirteen projects address Compliance Standards to meet industry regulations, government policies, or security frameworks with a budgeted cost of \$98.9M.
- **5.** Six projects are internal Operations and Maintenance projects with a budgeted cost of \$1M.

^{*}The number of projects spread among these categories total to more than 111 due to some projects falling into more than one category.

B. Major Project Status

**LEGEND:

- Cancelled: The project has not finished, and work on the project will not continue.
- Completed: Work on the project has finished, and all deliverables/tasks have been completed.
- **Delayed:** The project is still active, but we have passed the initial estimated completion date.
- In Process: The project is currently being worked on by the project team.
- On Hold: The project has not finished, and work on the project has been suspended.
- **Ongoing:** The project consists of multiple phases or is an operational project. Some portions have been completed, but the project has not fully reached fruition.

• E Addresses technical debt

PCI project

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
1.	Enterprise Contact Center (ECC) Solution	The Enterprise Contact Center application within the City of Dallas is a secure, reliable, and scalable call platform to meet the high call volumes and growth to meet the needs of city residents. The ECC includes Natural Language Processing (NLP), Knowledge Base, Workforce Management, Interactive Voice Response (IVR), Courtesy Call Back, and other core call center capabilities to support multiple departments across the city. (\$2,134,245)	GPFM	311	TBD	In Process	40
2.	Ethics Point Salesforce Integration	The purpose of this system is to promote and support ethical financial compliance. (\$63,164)	GPFM	ATT	Dec-23	In Process	
3.	Department of Aviation INDMEX AirBOSS Vehicle Tracking	This system provides the airport staff with a user friendly, browser-based means to track vehicle, aircraft movements, increase operational safety, and create a common operational picture. The Vehicle Tracking technology in this system allows the airport staff to track ground vehicles, driver positions while the Runway Incursion Warning System (RIWS) will alert vehicle operators in advance of a possible incident on runways. (TBD)	Transport & Infra	AVI	Mar-24	In Process	
4.	Veoci Dallas Airport System Phase 2 Implementation	This system provides the airport staff with a multifunctional platform providing emergency, safety management systems. This system allows to create, share and manage all information related to unlimited number of emergencies, incidents, events and facilitates emergency mass communications to internal and external stakeholders of Dallas Love Field Airport. (TBD)	Transport & Infra	AVI	Jun-24	In Process	

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
5.	Core Financial System Upgrade	The CG Advantage 3 system is utilized by all departments within the City for processing and recording of all budgets, procurement, and financial accounting transactions and interfaces with many enterprise business applications. This major upgrade will move the City's core financial system to a cloud-based solution providing advanced capabilities and incorporating modern technologies such as robotic process automation (RPA) and machine learning (ML) to improve the quality and speed of financial transactions. (\$22,095,745)	GPFM	ссо	Dec-24	In Process	Ŷ <u>Ġ</u>
6.	Vacant Property Registration Salesforce Platform	This project will develop a registration platform and process for identifying and tracking vacant properties. This City-wide process will be managed by Code Compliance Department. It will also enable citizens to access an online platform to register and pay for vacant properties they own. (TBD)	Environment & Sustain	CCS	TBD	In Process	PC
7.	Asset Management System	The Code Compliance office is seeking an asset management system to manage several different of assets to include ballistic vests, uniform items (pants, belts, reflective vests, shirts, jackets) that they issue officers, and other equipment deployed to their staff to perform their duties. This effort gathers requirements to conduct market research and identify potential solutions to meet the business need. (\$76,000)	Environment & Sustain	ccs	TBD	In Process	
8.	Consumer Protection online Salesforce Application/ permitting system	This system will allow a department to implement an online permit process for seven applications (wood vendor, motor vehicle repairs, credit access, electronic repairs, home repair, scrap tire). Will Allow business owners to access, complete, submit, and track their business permit applications online. (\$318,050)	Environment & Sustain	CCS	TBD	In Process	PC
9.	Envision Connect Replacement Project	This project will replace the current Restaurant Inspection System - Envision Connect. Envision Connect is at the end of life for support. The vendor is requesting to move to their newer application for restaurant inspections. (\$482,611)	Environment & Sustain	CCS	TBD	In Process	PC
10.	Body Worn Cameras for Code Personnel (CCS)	Code Compliance is implementing body-worn cameras to enhance citizen interactions, officer safety, and provide investigatory evidence for field inspections. The department has completed a pilot with limited staff and will move forward with a phased rollout. (TBD)	Environment & Sustain	CCS	Feb-24	In Process	
11.	Short Term Rental Enforcement Database	This solution facilitates compliance enforcement of new zoning and registration ordinances for STRs. It will enable CCS to identify and locate short-term rentals, monitor activity on host platforms, track code violations, issue notices and other administrative documents. (TBD)	Environment & Sustain	CCS	Mar-24	In Process	

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
12.	Cameras at 7901 Goforth	This project replaces an old analog camera system with high resolution cameras. The camera system will provide 360-degree coverage around the building at 7901 Goforth. Cameras will extend into the common areas of the building and the front counter area. (TBD)	Environment & Sustain	CCS	Aug 24	In Process	40
13.	Electronic Citation (eCitation) system	This project will implement an electronic citation system to support the Code Compliance department's operations. The department issues over 69,000 Notices of Violation and over 10,000 citations annually. This system will improve operational efficiency by reducing the amount of time officers spend on-site, reducing paper waste and reducing data entry mistakes from handwritten citations. (TBD)	Environment & Sustain	ccs	Aug 24	In Process	Ŷ <mark>ù</mark>
14.	Convention and Event Services - Office of Special Events - Cust Relation Mgmt System	Convention and Event Services Customer Relation Management System is currently operational but is not currently accepting credit card payments. This project implements PCI requirements to allow the system to eventually accept credit card payments. (TBD)	ECO	ССТ	TBD	In Process	PC
15.	Enterprise Community and Employee Engagement Solution	This solution streamlines the city's ability to inform the public, solicit opinions, and conduct surveys to better support the citizens. It facilitates city authorities' active communication with residents and will help to better inform residents about service changes. (TBD)	GPFM	СМО	Sep 24	In Process	ţ,
16.	RFCSP for Court Case Management System	The current Court Case Management System (Tyler Technologies) contract will expire June 2024. CTS wishes to conduct market research and conduct a competitive procurement to ensure the best solution is selected to upgrade and improve court case management. (\$4,371,720)	Public Safety	CTS	TBD	In Process	40
17.	DAS Inventory Management Tool	Dallas Animal Services manages a large inventory of drugs, supplies and business equipment needed to perform their functions. Currently, inventory management is done through a legacy system database (animal software) or on spreadsheets. The current processes are inadequate in providing appropriate controls and functionality. (\$14,062)	Environment & Sustain	DAS	TBD	In Process	
18.	Development Services Training Simulator	The building permit and inspection process involves several different components operating independently on separate software platforms. The purpose of this project is to develop a training simulator that allows for cross-collaboration across city divisions to improve quality and efficiency of processes. (\$50,000)	ECO	DEV	TBD	On Hold	
19.	Customer Queuing Software	Customers currently walking into the permit center need to be able to "sign in" and set appointments remotely. DEV needs to be able to offer this service to their customers to better track the data associated with their customers' experiences; volume, wait times, types of serviceetc. This project will identify, procure, and implement a customer queue management solution for Development Services. (\$60,000)	ECO	DEV	TBD	In Process	

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
20.	Expand OnBase to the entire SDC Department	The OnBase content management system was originally implemented only for the Building Inspection division within the Development Services Department (DEV). Purpose of this project is to implement the content management system to all divisions within DEV. (\$180,712)	ECO	DEV	TBD	On Hold	
21.	Dallas Now	The city's current permitting system has reached end of life, cannot interact with the new geospatial technology standards, and is difficult to change to support new business requirements, as well as workflows. This project will deploy a new system to replace the existing system and to add efficiencies in the permitting process. (\$9,746,780)	ECO	DEV	Sep-25	In Process	40
22.	Smart Device/Technology Behavioral Health App for DFR members	This project will provide a Peer Support Contact App for Dallas Fire–Rescue (DFR) personnel. At Dallas Fire-Rescue (DFR), the City is promoting whole-person wellness. This new application will supplement existing mental health support services available to the City's DFR members. (\$170,000)	Public Safety	DFD	TBD	In Process	
23.	Telestaff-Workday Integration	Telestaff automated scheduling and staffing system for the City of Dallas Fire Department 24-hr employees' integration with Workday Payroll System. (\$731,238)	Public Safety	DFD	Dec-23	In Process	Ų
24.	Dispatch/ Communications - Video Wall	This video system will be a "video wall" solution to display relevant information regarding Fire and EMS dispatches. It will include Traffic Camera inputs, weather information, and other information to enhance DFR's dispatchers as they work Fire and EMS teams in real-time. (TBD)	Public Safety	DFD	Sep-24	In Process	40
25.	Fire Station Alerting System	Dallas Fire Rescue strategically dispatches resources from 58 fire stations deployed throughout the city. To avoid response delays, DFR relies on a station Alerting System that integrates with our Computer Aided Dispatch (CAD) system to advise firefighter/paramedics of assistance calls. The current station alerting system is end of life, difficult to maintain, and lacks the full range of functionality more modern solutions provide. This project will conduct market research, procure, and implement a new, modern station alerting system for Dallas Fire Rescue. (\$1,860,000)	Public Safety	DFD	Oct-24	In Process	40
26.	IT Infrastructures for New Fire Stations 19, 21, 36, 41, 46, 58 & 59	A total of 8 new and renovated Dallas Fire Stations are being constructed in scope Sta. 46, 36, 59, 41 Temp, 41 Replacement, 19, 58 and 21 FS/AVI Center. All new IT infrastructures including cabling, network, workstations, printers, radio Alerting system equipment, etc., will be activated in line with facility openings. (\$131,688)	Public Safety	DFD	May-25	In Process	
27.	DPD Gun Range Software	This system supports the Firearms Training Center (FTC). It will provide tracking of weapons training, qualifications for rifle, pistol, and shotgun training. It will also need to keep track of weapons maintenance and other information related to officer's firearm training. (TBD)	Public Safety	DPD	TBD	In Process	ţ.

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
28.	Mobile Surveillance Platform Vehicles (Formerly known as Bait Car)	The Dallas Police Department ("DPD") currently operates a fleet of 25 Mobile Surveillance Platform vehicles. These vehicles are deployed throughout the city and serve as "bait cars". These vehicles are outfitted with covert cameras, microphones, GPS, and other capabilities. (\$700,000)	Public Safety	DPD	TBD	In Process	
29.	County CAD Collaboration	Upgrade and expand the city's Computer-Aided Dispatch (CAD), extending it to the County to improve collaboration on emergency 911 call center responses. This project is also required to fully implement and upgrade of the 911 call center's telecommunications infrastructure. (\$0)	Public Safety	DPD	TBD	In Process	Ψŷ
30.	WEB-RMS	This project will migrate DPD's current law enforcement Records Management System (RMS) from the current onsite solution to an upgraded Web-based system. The upgraded RMS will give the department needed functionality that are currently unavailable with on-premise solution. Current limitations require process workarounds creating potential errors and inefficiencies which will be resolved with the upgrade. (\$1,010,000)	Public Safety	DPD	TBD	In Process	
31.	COBWEBS	This project will implement social media investigative software for the Police Department (DPD). The software will provide an efficient tool for investigating social media posts from potential suspects to aid in investigations. (\$93,353)	Public Safety	DPD	TBD	In Process	
32.	P25 Compliant Radio Project	The city's current public safety radio network is 40 years old and not compliant with new standards (P25) for the networks. This project installs allnew infrastructure for a fully P25 compliant radio communications system that will be used by multiple departments within the City and County of Dallas. This system is intended and designed to host external governmental agencies throughout the region. (\$54,898,873)	Public Safety	DPD	Nov 23	In Process	Q _D
33.	Ricoh-Fortis Document Management System Replacement	The DPD Fortis document management system is at end of life and no longer supported. This project will replace and upgrade the DPD document management system. (\$217,633)	Public Safety	DPD	TBD	In Process	
34.	Fusus Devices Implementation for DPD	The Fūsus product suite will provide a video and data collaboration platform to expedite intelligence gathering and efficiency of response to situations as they unfold throughout the community. Further, providing a tool for identifying the location of cameras in proximity that may provide valuable information to aid in the response and/or subsequent investigation. (\$478,589)	Public Safety	DPD	Dec 23	In Process	

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
35.	CAD & RMS Universal Replacement	This project will replace the current Computer Aided Dispatch (CAD) system and the Records Management System (RMS) with a holistic, universal solution to support Dallas Police Department, Dallas Fire-Rescue, and the Dallas Marshal's office. The goal of this project is a solution utilizing industry best practices, while also providing uniformity across both platforms. This will support better tracking of incidents from initiation through investigations to final resolution. (TBD)	Public Safety	DPD	Sep 24	In Process	439
36.	Off-Duty Job Application	This system will manage all elements of off duty jobs for DPD employees including tracking of personnel off-duty jobs, and number of hours worked. It will handle payments to employees for off-duty work and payments to the city for the use of any City assets. (TBD)	Public Safety	DPD	Nov 24	In Process	Ų
37.	In Car Video - Body Worn Camera - Interview Room	There is a Federal Requirement to video record public safety stops. In car systems involve video in patrol cars. Body Worn Cameras involve wearable video cameras systems for officers. Interview Rooms involves replacement of video equipment in Public Safety interview rooms. (\$134,756,801)	Public Safety	DPD	Dec 24	In Process	
38.	Surveillance Cameras and Real Time Crime Center	This project will provide a "Real Time Crime Center" capability within Jack Evans police station. It will include 1) building a new command center video room (Real Time Crime Center), 2) building camera installations, 3) video camera software, video storage and surveillance camera installations at intersections, and 4) Trailer camera installations. (\$16,261,454)	Public Safety	DPD	Dec 24	In Process	
39.	Use of Force - Police Strategies LLC	This project will provide a data analytics platform which produces analytic dashboards which provides comparative analyses by extracting data from incident reports & officer narratives, analyzes the data using established algorithms, and produces written summary reports used by DPD leadership in focusing resources. (\$1,383,800)	Public Safety	DPD	Jul 26	Ongoing	
40.	Unsupported Software Remediation	Identify Servers running unsupported Software, DBs running unsupported versions of software, and applications that will require modifications to bring up to supported software levels. Develop a plan to upgrade, in a sequenced fashion. (\$0)	GPFM	ITS	TBD	Ongoing	ţ
41.	Visualization Engineering Services	Purchase of Visualization Engineering services will provide an authoritative visualization of our Current State and Future States - an effort critical to information data center improvements. The outputs of this engagement will be crucial to the success of planned improvements to Application Portfolio Management in addition to the stated necessity regarding data center improvements. (\$685,972)	GPFM	ITS	Oct-23	Completed	40

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
42.	Apptio IT Financial Transparency SaaS	This project is for a cloud-based solution for the Department of Information and Technology Services (ITS) to gain detailed insight into information technology (IT) expenses, cloud infrastructure / software usage and other IT related costs. (\$1,353,866)	GPFM	ITS	Sep-23	In Process	
43.	Relocate Development Services to New Facility	In September 2022, the City of Dallas purchased a new facility at 7800 N. Stemmons Freeway which will serve as the offices and storefront for the Development Services Department (DEV). This project will provide all new IT infrastructure including cabling, network, workstations, printers, radio equipment, etc. in line with the facility opening. (\$5,000,000)	GPFM	ITS	Nov-23	In Process	
44.	ServiceNow Phase 2	ServiceNow Phase 2 comprises 4 major tasks or subprojects - "IT Software and Hardware Asset Management", "ServiceNow Stabilization and Workflow Improvement", "ServiceNow Fedramp Cloud Migration", and "ServiceNow Version Upgrade to San Diego Q1 2022". (\$1,305,890)	GPFM	ITS	Dec-23	In Process	
45.	Network Unified Communications Upgrade	The City's current collaboration suite is at end of life and requires an update to maintain functionality and reduce risk. This project will upgrade the Unified Communications Management (UCM) to the latest version available. (\$618,180)	GPFM	ITS	Feb-24	In Process	Ų,
46.	PCI DSS Requirements Validation Project	This project focuses on Protecting Cardholder Data with PCI Security Standards. The goal of the Payment Card Data Security Standard (PCI DSS or PCI) is to protect cardholder data and sensitive authentication data wherever it is processed, stored or transmitted. This project initially focuses on currently active projects with PCI components and will expand to cover other projects and systems as necessary. (TBD)	GPFM	ITS	Oct-24	In Process	Pci
47.	IT Project and Portfolio Management Tool	This project will implement a new Project and Portfolio Platform (PPM) tool suite to provide a centralized and automated project management portfolio, assist with project intake, and improve the tracking and management of IT projects. (\$300,134)	GPFM	ITS	Nov-24	In Process	Q _j
48.	Digital Equity Infrastructure	This project seeks to meet the City's vision of ensuring that all Dallas households will have high-speed, reliable internet and access to devices in their homes by seeking commercial telecommunication service providers to develop and implement digital equity infrastructure which addresses established gaps in targeted communities. (\$40,000,000)	GPFM	ITS	Dec-32	In Process	
49.	Enterprise Capital Project Management System (ECPMS) Phase 2	Phase 2 Implementation of the Enterprise Capital Project Management System (ECPMS), IBM Tririga, to support the DWU Capital Projects division. Also, includes the delivery of reporting enhancements and efficiencies to the Phase 1 implementation. (\$2,169,090)	Transport & Infra	DWU	Dec-22	In Process	

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
50.	Enterprise Work Order and Asset Management (EWAMS) Phase 2	Implementation of an Enterprise Work Order and Asset Management System (EWAMS), that can be utilized as the standard for the City of Dallas. The Phase 2 effort of this Enterprise platform implementation will manage Work Orders and Maintenance. (\$4,901,864)	Transport & Infra	DWU	TBD	In Process	
51.	LIMS Acquisition and Implementation Phase 3	DWU is implementing a Laboratory Information Management System (LIMS) for one Analytical Lab, five treatment plants, the Water Quality Division and the Watershed-Reservoir Division to increase regulatory compliance, productivity, efficiency and effectiveness. (TBD)	Transport & Infra	DWU	May-24	In Process	Q.
52.	Enterprise Work Order and Asset Management (EWAMS) Phase 3	This professional service contract allows for continuous consultant services for the expansion of the Enterprise Work Order and Asset Management System (EWAMS). Phase 3 will oversee the implementation of Dallas Water Utilities (DWU) Meter Services division. (\$12,989,751)	Transport & Infra	DWU	May-28	In Process	
53.	Library Website update	The library's website needs to be updated to meet the current and future needs of the library including being able to support additional online content and online programs and education. (TBD)	QOL	LIB	Dec-29	In Process	
54.	Neighborly Expansion - Fair Housing	The purpose of the software is to complete the Fair Housing assessment of housing projects. This ensures we affirmatively further fair housing in the city as required by the Fair Housing Act and HUD. (\$25,700)	WEE	OEI	TBD	Delayed	
55.	Stormwater Compliance Information Management System	OEQ staff currently manage mission-critical and legally sensitive environmental management consent decree (EMCD) /permit-required tasks though a 20-year-old "homemade" information system built on MS Access 2002 and InfoPath. This project will procure and implement a new, modern system which provides timely information through dashboards and reports. (\$49,900)	Environment & Sustain	OEQ	TBD	In Process	
56.	Real Estate Case Management System	This project will streamline the leasing of properties and the utilization of right-of-way by introducing an online application process. It will also give applicants the ability to track progress of their application in real time. (TBD)	Transport & Infra	PBW	TBD	In Process	
57.	Snow & Ice Response	This project supports emergency response during snow and ice events. It will streamline the City's emergency response capability and will allow the Public Works department to quickly provide updated sanding information to other departments, to include Communications Outreach & Marketing, Office of Emergency Management, Dallas Fire and Rescue, and Dallas Water Utilities. ()	Transport & Infra	PBW	Oct-24	In Process	43
58.	Implement Workday Prism	The Workday Prism Project will aggregate historical data from the City's prior payroll system and make it available with new payroll data in Workday. (\$68,995)	GPFM	PER	Oct-23	Completed	ţ,

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
59.	Historical Data Repository solution for select HR system data	This project will provide an approved data warehouse solution for HR data being migrated from offboarding applications. This project will define data governance rules and enable compliant retention of City data from numerous current Human Resources (HR) systems. It will provide for an approved Data Warehouse for operational support, reporting and regulatory (data retention) compliance. The final solution will integrate with the HR Workday (WD) system. (TBD)	GPFM	PER	Oct-24	In Process	43
60.	Replace Human Capital Management System Ph 2	This initiative involves the strategic implementation of HR modules for Performance and Talent Management, Recruiting and Onboarding, Learning Management System, Benefits Administration, and Advanced Compensation. In addition, we are orchestrating a meticulous Data Migration process, ensuring a seamless transition from legacy applications. (TBD)	GPFM	PER	Dec-24	In Process	40
61.	Installation of lighting and security cameras on the Runyon Creek Trail	This project will install cameras and lighting along the Runyon Creek Trail. It will enhance safety for the 2.7-mile Runyon Creek Trail in southern Dallas. (TBD)	QOL	PKR	Nov-23	In Process	
62.	PKR Recreational Management System	Dallas Park and Recreation Department is looking for a recreation management system to manage recreation activities and programs of its 43 recreation centers, 107 pavilions, 19 aquatic facilities and over 200 athletic fields. (\$0)	QOL	PKR	Dec-29	In Process	PC
63.	Payment Vendor (SAP Users - DWU)	This project is to migrate DWU and other user departments of online (Biller Direct) and IVR payments to a new payment platform which provides real-time information for payments and reconciliation. (\$15,000,000)	Transport & Infra	DWU	Apr-24	In Process	PC
64.	DWU Billing CIS and Customer Portal Replacement	DWU's current CIS system, SAP, will reach its end of life in 2025. DWU must replace SAP by 2025 to ensure continuity of billing. (\$0)	Transport & Infra	DWU	Dec-26	In Process	PCİ
65.	SEC Records Inventory Management Solution	Replace the current obsolete unsupported FoxPro database with a state-of-the-art software application (preferably SaaS) that provides full functionality for operating a records center. Replacing this application will improve the management of the 70,000+ (\$231,440)	GPFM	SEC	TBD	In Process	
66.	Build an Ethics Financial Reporting Solution	The purpose of this system is to promote and support ethical financial compliance. (\$15,000)	GPFM	SEC	TBD	On Hold	
67.	Electronic Document Management - EDMS	Project Provides Electronic Document Management and Document Archive System for City Secretary's Office. (\$336,562)	GPFM	SEC	TBD	On Hold	

- **1. Enterprise Contact Center (ECC) Solution.** Project is still in process. Anticipate approximately 3 6 months' work to implement Single Sign On (multi-factor authentication), for final delivery of the Lab (test portion) of the project, and potential re-evaluation of Salesforce integration.
- **3. Department of Aviation INDMEX AirBOSS Vehicle Tracking.** This project is in the initiation phase. End date will be adjusted once planning phase is complete.
- **4. Veoci Dallas Airport System Phase 2 Implementation.** This project is in the planning stage. Completion date will be updated, as necessary, upon completion of planning phase.
- **17. DAS Inventory Management Tool.** The New system will allow the DAS department to perform inventory management and other functions as needed.
- **18. Development Services Training Simulator.** This project is on hold due to competing priorities.
- **22. Smart Device/Technology Behavioral Health App for DFR members.** Project has moved to procurement phase.
- **23. Telestaff-Workday Integration.** Telestaff Scheduling System is operational for Dallas Fire Rescue. TeleStaff Integrations to Workday is scheduled to Go-Live December 2023.
- **26. IT Infrastructures For New Fire Stations 19, 21, 36, 41, 46, 58 & 59.** Project is being implemented in an agile fashion. Next phase is expected to complete January 2024. No. of Fire Stations complete to date include Sta. 46, 36, 41 Temp, 58, 59 and 19. Remaining 41 Main and FS 21/AVI Center.
- **27. DPD Gun Range Software.** This project is beginning the procurement process. Completion date will be provided when available.
- **30. WEB-RMS.** This project is still in the procurement process. Purchase request has been submitted. New date will be provided when available.
- **32. P25 Compliant Radio Project.** The new P25 Public Safety Radio system is now live, operational, and performing as designed. Final migration of all City of Dallas Departments is complete. Team is now working on decommissioning of old systems and equipment
- **33.** Ricoh-Fortis Document Management System Replacement. This project is in the planning stages. New timeline is being developed. New date will be provided when available.
- **36. Off-Duty Job Application.** This project is beginning the procurement process. Completion date will be provided when available.
- **39.** Use of Force Police Strategies LLC. All initial project tasks have been completed. End date of project is 2026 because CoD will continue to provide data on a quarterly basis until the end of the contract.
- **41. Visualization Engineering Services.** Project work is complete, and this project is moving to closure. This project will be removed from the TAR next month.

- **45. Network Unified Communications Upgrade.** Project is being implemented in an agile fashion. Unity Voice Mail portion is now complete. The next phase, "Call Manager" has an estimated completion date December 2023.
- **49. Enterprise Capital Project Management System (ECPMS) Phase 2.** PCR received by Vendor for update requirements/deliverables for linear segments, linear structures and X/Y coordinates; PCR pending review for acceptance and approvals.
- **58. Implement Workday Prism.** Project work is complete, and this project is moving to closure. This project will be removed from the TAR next month.
- **60. Replace Human Capital Management System Ph 2.** The Workday Modules Implementation will be done in three phases. The estimated timeline for Recruiting-Onboarding and Talent-Performance Go-live is Jan-24. Benefits Go-live is Oct-24. Advanced Compensation and LMS (Learning Management System) is Feb-25.
- **65. SEC Records Inventory Management Solution.** Requirements have been developed. Awaiting Council approval.
- **66. Build an Ethics Financial Reporting Solution.** Project date will be updated after this project has completed the procurement process.
- **67. Electronic Document Management EDMS.** The EDMS project is part of a group of projects relying on the Hyland Software System, which are being developed serially. We are currently re-validating project budget, scope, and participating department and will then re-work the schedule.

C. Changes to Major Project Status List

- 1. Major Projects Implemented or Closed since last report.
 - a. Closed Captioning System for City Council Meetings #8 on September 2023 TAR.
- 2. New Projects approved by IT Governance Board.
 - b. Snow & Ice Response #57 on this month's TAR. This Public Works Department project supports emergency response during snow and ice events.

Section 2: IT Operations

A. Outage Report

1. Monthly Service Desk Report

The IT Service Desk functions as the single point of contact (SPOC) between the City's IT organization and its end users. The service desk handles a variety of requests that include distribution to support, setting user passwords, and troubleshooting issues. It assists customers with incident resolution and service request management. The monthly service desk report provides metrics and trends of the IT service desk performance.

Service Desk Call Metrics

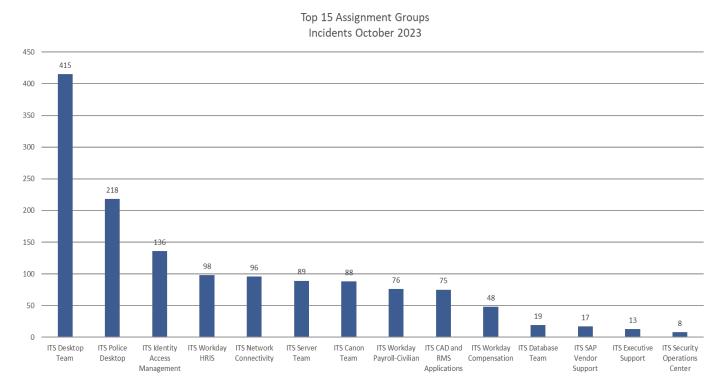
Category	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Total Calls	7151	7222	9694	6969	8230	7319	11740	5528	5698	8195	6344	6228
Answered	6132	6222	7117	6778	8048	7171	7977	5005	5513	7941	6056	6143
Abandoned	1019	1000	1000	1084	182	148	523	523	185	254	288	85
Abandoned (<10sec)	273	408	380	1493	81	65	1398	175	166	172	172	93
Abandoned %(<10sec)	3.9	6	5	8	1	1	17.53	3.5	3.0	2.2	2.8	1.5

Metric	Metric	Current Month		Trend	
Average Speed to Answer – Voice	Average Speed to Answer - Voice	00:08			
Password Related Incidents	Password Related Incidents	20%	18: 2% Aug	18.3% Sept	20. 0% Oct
First Contact Resolution - Incident	solution - Incident First Contact Resolution - Incident 7	73.71%	88%	75%	74%
		0.38 Days	Aug 1123	Sept 1133	Oct 551
Average Duration – Service Desk	Average Duration - Service Desk	551 Minutes	Aug	Sept	Oct
Average Duration – Field Services	Average Duration - Field Services	3.78 Days 5449 Minutes	5246	27327	5449
			Aug 6644	Sept 7236	Oct 6976
Average Duration - PD Field Services	Average Duration - PD Field Services	4.8 Days 6976 Minutes	Aug	Sept	Oct

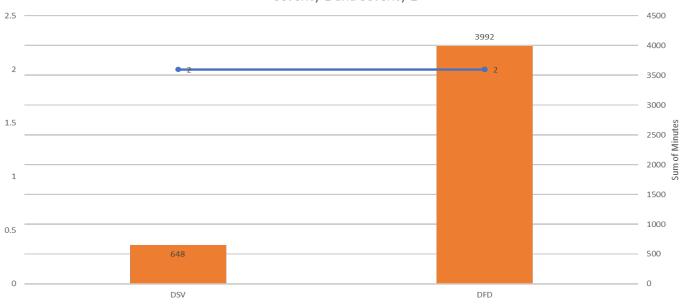
NOTES:

- 1. In October 2023, the IT Helpdesk received 6228 calls for support. This is a slight decrease over September which saw 6344 calls, and slightly below the yearly average of ~7700 per month (excluding May and the impact of ransomware related calls).
- 2. First Contact Resolution (Incidents) for October are relatively unchanged over September, 73.7% and 74% respectively.
- 3. Field Services (excluding DPD) average service duration of 3.78 days in October is in line with prior months, excluding September. Indicating that September was an anomaly most likely impacted by ransomware deployments.
- 4. Field Services for DPD remained relatively stable with average service duration 4.8 days in October and 5 days in September.

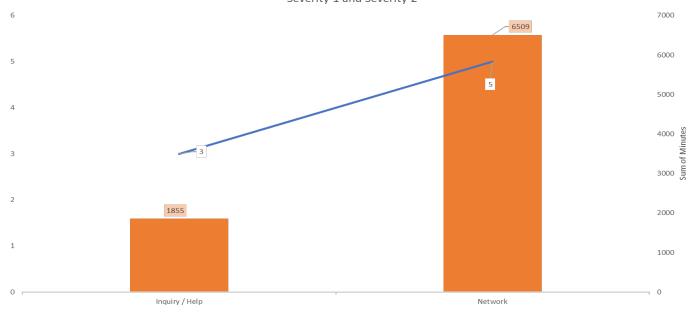
2. Monthly Incident Report (Break/Fix "My Computer doesn't work")



Impact Minutes by Department Severity 1 and Severity 2

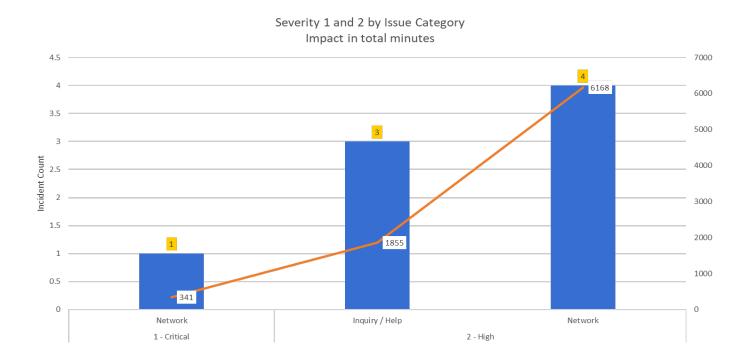


Impact Minutes by Issue Category Severity 1 and Severity 2



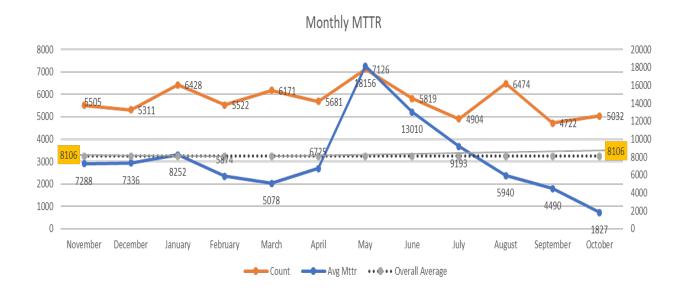
NOTES:

- 1. Severity 1 and Severity 2 incidents are the most severe and most likely result in degraded services or outages that impact the ability of City departments to fulfill their missions.
- 2. This chart tracks the number of reported incidents by department, along with the total number of minutes the incident(s) potentially impacted them.
- 3. The data points are extracted from ServiceNow based upon input by city IT technicians. Our analysis reveals that there are incidents which are resolved but have not been timely or appropriately closed out within the ServiceNow platform, resulting in artificially inflated resolution timeframes. ITS is working with IT service delivery managers to improve documented processes to ensure timely updates to ServiceNow to accurately reflect the actions for the incident and to provide a more representative experience.



NOTES:

1. This chart provides the distribution of major incidents and impact minutes over specific services and delineated by Critical and High Severity.



- 1. This chart provides the trendline for the average mean time to repair (MTTR), an industry standard for tracking the timeliness of resolution on reported incidents.
- 2. Diligence by the technicians to document and resolve tickets in a timely manner is the primary driver of the reduction in MTTR.
- 3. The MTTR reduction post ransomware continues, reaching levels not previously observed.
- 4. September MTTR updated to reflect post month closure validation. October numbers will be updated in November reporting cycle to reflect tickets closed post data compilation.

^{*}Open incidents may impact October MTTR in November report

3. Monthly Major Outage Report

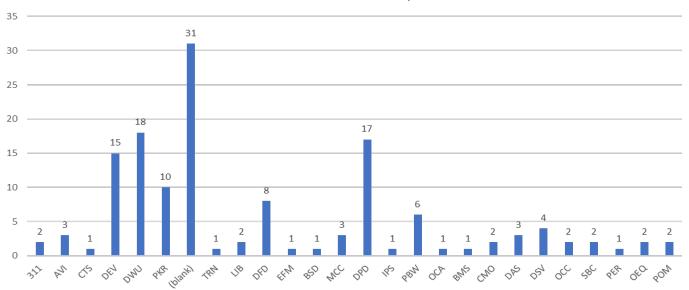
Priority	Description	Department	Primary	Assignment Group	Hours
1 - Critical	Network Users unable to connect to internal networks	DFD	Network	ITS Network Engineers	5.7
2 - High	Maximo Enterprise Asset Management System SaaS unable to run	DWU	Inquiry / Help	ITS Capital Asset Applications	20.1
	reorder due to corrupt records				
2 - High	Network Phone outage	DFD	Network	ITS Network Engineers	60.9
2 - High	Network Network Outage	SAN	Network	ITS Network Connectivity	32.1
	PC Support PayMetric application is not responding. Server name				5.3
2 - High	needs to be restarted APDWUPM01	DSV	Inquiry / Help	ITS DWU SAP Applications	
2 - High	Network Phones and Network availability	SAN	Network	ITS Network Connectivity	4.5
2 - High	Commvault Backups failing	DSV	Inquiry / Help	ITS Server Team	5.5
2 - High	Network no internet or phones	PKR	Network	ITS Network Engineers	5.4

- 1. Major outages are identified as Severity1 and Severity2 that have significant impact to City services or Department's ability to perform critical functions and last over 4 hours in duration. As we mature the process this definition will be better scoped around impact and less around duration.
- 2. Outages with #value are incidents that had over 4 hours of impact, however, are incomplete of details, at the time the report was generated, to identify full impact to departments.
- 3. October 2023 saw a decrease in average time to repair and a slight increase in total outage time for Major Incidents compared to September 2023. October average MTTR of 17.4 hours compared to September of 20.3 hours. October total outage 139.4 hours compared to September which had 121.9 hours.
- 4. Eight major incidents in the month of October, 1 critical and 7 high, an increase of 2 over September of 6, 2 critical and 4 high.

B. Service Requests (including new employee onboarding)

1. New Hire Report

New Hire Requests by Department October Total New Hires Requests 140



- 1. In the month of October, a total of 140 requests tickets were generated for new employees.
- 2. DWU, DPD, and DEV being the top 3 hiring departments. DWU has had 13 consecutive months in the top 3.
- 3. Blank indicates no department match was available for the requested onboarding at the time the report was generated.

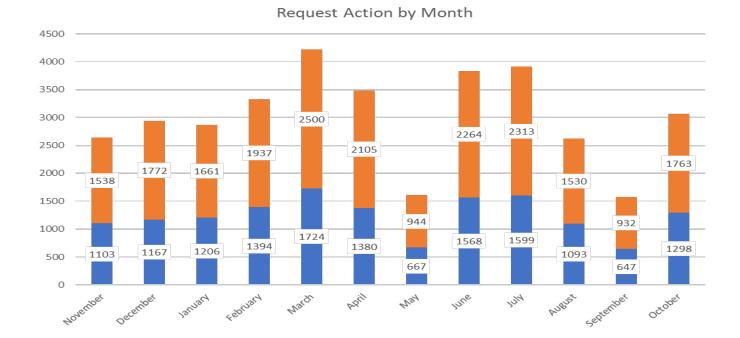
2. Service Request Report (An ask for service – "I need Software Installed")

October 2023 600 487 400 300 210 196 169 200 148 136 110 100 38 31 31 Received for the Author Line Looking For maxmo asset managenent SAP and Biller Direct Ernail Distribution List

Top 15 Requested Items

NOTES:

- 1. October Service Request actions totaled 1858 an increase of 1000+ over September which totaled 773. This report depicts the top 15 Request by type that were selected.
- 2. "I Can't Find What I'm Looking For" is a category used when a service catalog item does not exist for what the user is asking.



NOTES:

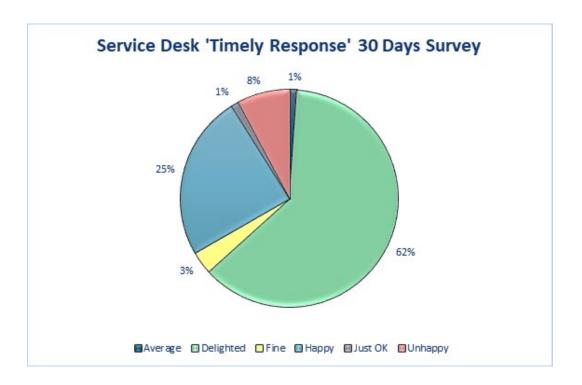
1. This chart illustrates that 1298 Request Tickets generated 1763 Request Actions. Frequently, one request generates multiple actions to be completed by one or more teams to fulfill the ask.

C. IT Service Desk Satisfaction Surveys

The City's IT Service Desk conducts surveys of employees that have submitted incident reports and service requests. These surveys are performed through the ServiceNow platform in the form of email requests directly to the individuals who submitted the request to the IT Service Desk either by calling or submitting through the online ServiceNow platform. Submitters are asked to provide feedback on the timeliness of the disposition of their request and their rating of the overall Service Desk experience. Along with the rating, submitters are asked to provide other feedback which can be used to address specific issues and to improve the overall timeliness and experience.

Starting with the August 2023 Technology Accountability Report (TAR), the monthly survey results will be provided. In subsequent monthly TAR reports, it will also track trends over time from the survey data.

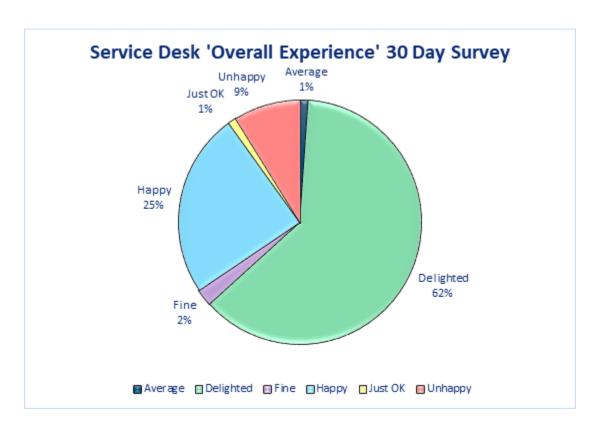
1. IT Service Desk Timeliness Report



- 1. This chart illustrates the overall survey responses to the question of Service Desk timeliness for requests submitted in October 2023.
- 2. While each IT Service Desk ticket submitted results in a survey request to the submitter, not all survey requests receive a response, and these data represent the results from those responding to the survey.
- 3. The survey requests employees that have submitted an incident report or service request to the IT Service Desk to rate the timeliness of the service delivery on a scale along five points; Unhappy, Just OK, Average, Fine, Happy, and Delighted.

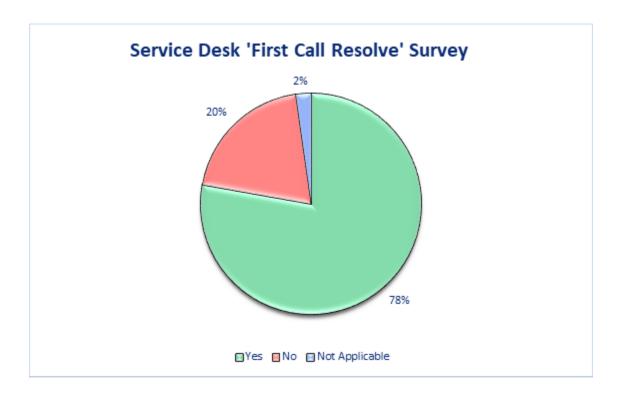
4. For the October 2023 survey, 90% of respondents rated their perception of timeliness of the service to be either Fine, Happy, or Delighted.

2. IT Service Desk Overall Experience Report



- 1. This chart illustrates the overall survey responses to the question of Service Desk experience for requests submitted in October 2023.
- 2. While each IT Service Desk ticket submitted results in a survey request to the submitter, not all survey requests receive a response, and these data represent the results from those responding to the survey.
- 3. The survey requests employees that have submitted an incident report or service request to the IT Service Desk to rate their overall experience of the service delivery on a scale along five points; Unhappy, Just OK, Average, Fine, Happy, and Delighted.
- 4. For the October 2023 survey, 89% of respondents rated their overall experience with the IT Service Desk to be either Fine, Happy, or Delighted.

3. IT Service Desk First Call Resolution Report



- 1. This chart illustrates the overall survey responses to the question of whether the issue was resolved on the first call to the Service Desk for requests in October 2023.
- 2. The survey requests employees that have submitted an incident report or service request to the IT Service Desk on whether the issue was resolved with the first call (Yes or No).
- 3. For the October 2023 survey, 78% of respondents responded that their issue or request was resolved on the first call.

Section 3: IT Budget Execution

IT Budget Execution provides information on the execution of the IT budget, the management of technology procurements, and the management of IT Human Capital. Unless otherwise noted, information in this section is effective through September 2023.

A. Contract/Procurement Management

Upcoming/Recent Contracts Requiring Council Approval

Item on October 25 Agenda:

Sigma Surveillance, Inc. dba STS360 – Supplemental Agreement No. 2 to increase the service contract for purchase and installation of hardware and software for a video surveillance camera system.

- Contract amount \$4,081,989, from \$16,327,955 to \$20,409,944
- Maintenance and support include warranties on all camera hardware, system patches, updates for functionality improvements, and relocation of cameras as necessary to improve effectiveness.

Items on November 8 Agenda:

Netsync Network Solutions — 3-year purchasing agreement for cloud-based security software as a service.

- Contract amount \$510,311.97
- Software as a service that will secure online communication, protect websites, and ensure the authenticity and integrity of digital transactions.

Cellco Partnership dba Verizon Wireless – 2-year purchasing agreement for commercial wireless communication services and equipment.

- Contract amount \$6,803,614.56
- Agreement for wireless cell phone services, smart devices, data and internet services.

Items on November 8 Agenda continued:

Netsync Network Solutions, Inc. – 4-year agreement for purchase of hardware, software, maintenance, and support for a network security management monitoring and response system.

- Contract amount \$2,167,522.05
- Services include network monitoring, software patches, upgrades, on-site technical support, and 24/7 system support.
- This technology will assist in detection, prevention of network security breaches, and destruction from malicious traffic.

Open Solicitations

Fire Station Alerting System

- Stable state-of-the-art internet protocol (IP) Fire Station Alerting System (FSAS) that
 offers pre-alert capabilities, dispatch capabilities, audio, visual features, administrative
 features, and alternative forms of monitoring for Dallas Fire and Rescue (DFR or
 Department).
- Open Date March 20
- Close Date September 29 (evaluations are in process)

Network Cabling

- Five-year contract with two, two-year renewal options for the design, installation, maintenance, and repair of network cabling.
- Open Date September 7
- Close Date October 20

Broadband and Digital Divide

- Eight-year initial contract with four three-year renewal options for Digital Equity Infrastructure and Last Mile Connectivity. The City is looking to select one or multiple solution/service providers qualified to design, build, deliver, and manage scalable fiber infrastructure to connect City facilities and high-priority unserved Census Tracts.
- Open/Advertised Dates September 28 and October 5
- Pre-Solicitation Conference Dates October 23 and November 14 (each at 2:00 p.m.)

Open Solicitations Continued

- Close Date December 15
- Solicitation Evaluations January 3 to February 14

Electronic Lien Filing

- Web-based system capable of electronically processing, submitting, recording, and filling real property lien documents for both receiving and transmitting with Dallas County
- Open Date November 2
- Close Date December 1

Fire Station Alerting System

- Stable state-of-the-art internet protocol (IP) Fire Station Alerting System (FSAS) that
 offers pre-alert capabilities, dispatch capabilities, audio, visual features, administrative
 features, and alternative forms of monitoring for Dallas Fire and Rescue (DFR or
 Department).
- Open Date March 20
- Close Date September 29 (evaluations are in process)

Upcoming Solicitations

Software Master Agreement – Service contract to purchase various enterprise commercial off the shelf (COTS) software products including perpetual, fixed term, subscription, and software as a service with their related software maintenance, support, training, and implementation, and other related services that will be used by the City in support of existing business operations.

Network Managed Services – Managed services for voice and data services, as well as the network support help desk.

Court Case Management System – System to automate and optimize daily work processes for Dallas Municipal Courts; replacement for the current system.

EMS Inventory Management System – System to manage and track acquisitions, distribution of DFR inventory, which include operation/emergency medical supplies, and personnel gear.

B. Budget Performance & Execution – Estimates as of September 2023 1st Close. Final September 2023 actuals will be available after November 27, 2023.

Fund 0191 - 9-1-1 System Operations Estimates as of September 2023 1st Close

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	636,477	636,477	513,486	520,345	(116,132)
Pension	91,413	91,413	77,862	73,980	(17,433)
Health Benefits	61,802	61,802	54 <i>,</i> 767	69,123	7,321
Worker's Compensation	1,658	1,658	1,658	1,658	-
Other Personnel Services	14,262	14,262	119,779	119,779	105,517
Total Personnel Services	805,612	805,612	767,552	784,885	(20,727)
Supplies	201,465	201,465	79,659	79,659	(121,806)
Contractual Services	13,205,665	13,205,665	9,369,183	10,827,183	(2,378,482)
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
Total Expenditures	14,212,742	14,212,742	10,216,394	11,691,727	(2,521,015)

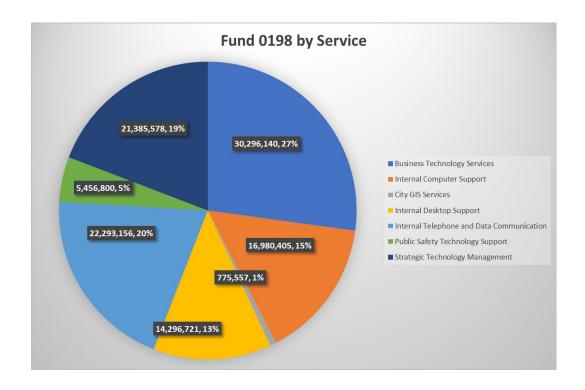
Fund 0197 – Communication Services (Radio Network)
Estimates as of September 2023 1st Close

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	1,963,977	1,963,977	1,685,392	1,706,385	(257,592)
Overtime Pay	51,320	51,320	210,614	210,614	159,294
Pension	282,080	282,080	269,457	257,488	(24,592)
Health Benefits	265,923	265,923	250,708	297,423	31,500
Worker's Compensation	7,197	7,197	7,197	7,197	-
Other Personnel Services	33,819	33,819	39,106	38,030	4,211
Total Personnel Services	2,604,316	2,604,316	2,462,474	2,494,650	(109,666)
Supplies	1,156,482	1,156,482	487,890	487,890	(668,592)
Contractual Services	13,106,759	13,106,759	10,184,708	10,264,917	(2,841,842)
Capital Outlay	_	-	-	-	_
Reimbursements	_	-	-	-	-
Total Expenditures	16,867,557	16,867,557	13,135,072	13,269,944	(3,597,613)

C. Budget Performance & Execution (continued)

Fund 0198 - Data Services Estimates as of August 2023

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	20,152,694	20,152,694	15,603,264	16,307,355	(3,845,339)
Overtime Pay	41,612	41,612	25,860	25,131	(16,481)
Pension	2,858,569	2,858,569	2,219,563	2,296,817	(561,752)
Health Benefits	1,825,634	1,825,634	1,629,867	2,041,999	216,365
Worker's Compensation	49,182	49,182	49,182	49,182	-
Other Personnel Services	1,036,948	1,036,948	476,679	592,178	(444,770)
Total Personnel Services	25,964,639	25,964,639	20,004,415	21,312,662	(4,651,977)
Supplies	759,552	759,552	675,619	678,644	(80,908)
Contractual Services	83,683,424	83,683,424	84,999,623	85,581,883	1,898,459
Capital Outlay	4,156,302	4,156,302	3,911,167	3,911,167	(245,135)
Reimbursements	-	-	-	-	-
Total Expenditures	114,563,917	114,563,917	109,590,825	111,484,356	(3,079,561)



D. ITS Staffing & Hiring Report

1. ITS Funded Staffing Levels

IT Fund	FY 21	FY 22	FY 23	FY 24	FY 25 Plan
Fund 0191 - 9-1-1 Technology Support	7.0	7.0	7.0	7.0	7.0
Fund 0197 - Radio Communications	28.0	30.0	30.0	30.0	30.0
Fund 0198 - Data Services	190.0	204.0	223.0	225.0	230.0
Total	225.0	241.0	260.0	262.0	267.0

2. Vacancies and Hiring Activities

- As of October 31, 2023, ITS had 56 vacancies out of the available 260 positions.
- As of October 31, 2023, of the 62 vacancies, the disposition was:
 - o 12 are in draft posting
 - o 2 are undergoing reclassification to re-align within the ITS Department
 - 16 are awaiting posting
 - 0 are actively posted
 - o 5 were previously posted
 - 3 are under review
 - 0 are at a second round of interviews
 - 2 have pending offers with candidates

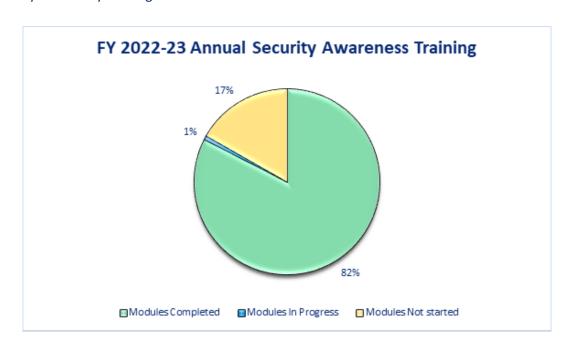
Section 4: Cybersecurity Programs

A. Awareness Training

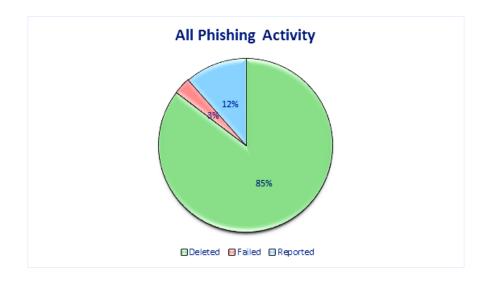
Security Awareness training is measured on an annual basis. Over the last several years ITS has observed a generally positive trend in risk scoring associated with annual employee training. Beginning with each new fiscal year the City will conduct a new set of security awareness courses to meet not only the best practices, but State of Texas House Bill 3834 requirements for all government employees.

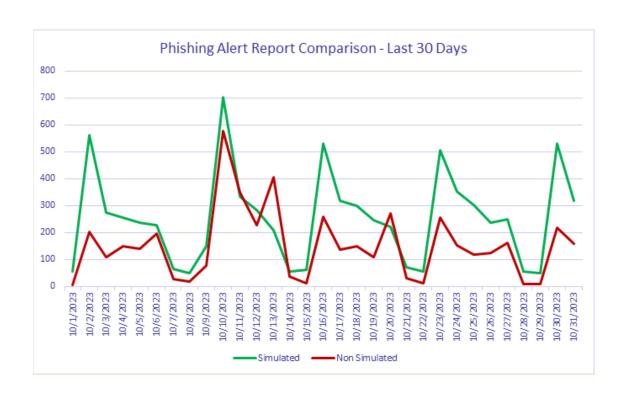
However, each year we see new or enhanced requirements from the Texas State Legislature as the risk environment evolves and becomes increasingly more threatening. As such, our security awareness training program must evolve to reflect the latest requirements and latest threats and it is critical that the security awareness training is completed each year. The information below illustrates the enrollment and completion efforts of employee training over the course of the year. For FY 2021-22 the City completed 99% of 18 training campaigns covering HIPAA, PCI, and Cybersecurity. The FY 2022-23 security awareness training campaign on January 25, 2023, and ITS is tracking its progress and working with City employees to ensure completion.

 Note employees with less than 25% of job function on technology are not required to complete cybersecurity training.



In addition, ITS continuously applies best practices to the employees around phishing and their ability to recognize and appropriately handle phishing incidents. Campaigns designed given real world scenarios, typically taken from recent events are sent out to the employee population to test their ability to distinguish and act. This provides feedback to the employees as well has increased the actual amount of true phishing reported. As well, a "Report phishing" button added to user's Outlook has increased both the numbers of test phish and actual phishing emails.





B. Situational Awareness

Annually ITS assess the overall Security posture of the organization based upon the NIST Cybersecurity Framework (CSF). Each category within the NIST CSF is evaluated for the current level of maturity and expectant maturity level. This process uses current and projected technologies and documented standards and procedures to complete the process. ITS utilizes both internal and external resources to conduct assessments. The results of the assessments are used by ITS to develop security strategy for cybersecurity and privacy. The below figure outlines the maturity model for the CSF. While the TAR does not provide our scores from our self-assessment, ITS can provide this information to Council members and discuss the assessments in depth as requested.

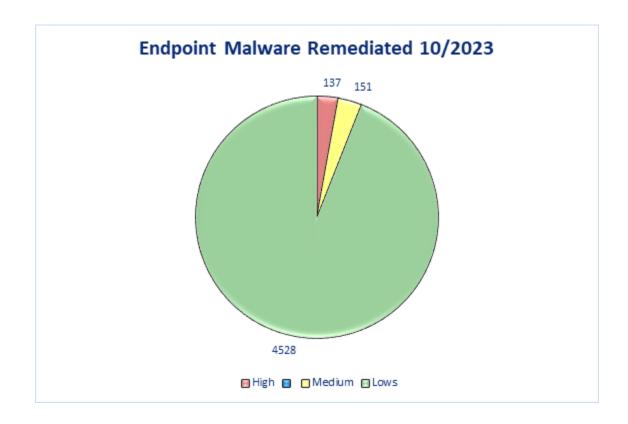
		Level 1	Level 2	Level 3	Level 4	Level 5	
		Initial	Repeatable	Defined	Managed	Optimized	
	Titing to the same of the same	Little to no cybersecurity risk identification.	Process for cybersecurity risk identification exists, but it is immature.	Risks to IT assets are identified and managed in a standard, well defined process.	Risks to the business environment are identified and proactively monitored on a periodic basis.	Cybersecurity risks are continuously monitored and incorporated into business decisions.	
	2000	Asset protection is reactive and ad hoc.	Data protection mechanisms are implemented across the environment.	Data is formally defined and protected in accordance with its classification.	The environment is proactively monitored via protective technologies.	Protection standards a operationalized through automation and advanced technologies	
NISI Cybersecurity Framework Functions	the second	Anomalies or events are not detected or not detected in a timely manner.	Anomaly detection is established through detection tools and monitoring procedures.	A baseline of "normal" activity is established and applied against tools/procedures to better identify malicious activity.	Continuous monitoring program is established to detect threats in real-time.	Detection and monitoring solutions ar continuously learning behaviors and adjustin detection capabilities.	
	Pessono	The process for responding to incidents is reactive or non-existent.	Analysis capabilities are applied consistently to incidents by Incident Response (IR) roles.	An IR Plan defines steps for incident preparation, analysis, containment, eradication, and post- incident.	Response times and impacts of incidents are monitored and minimized.	The capabilities of all I personnel, procedures technologies are regularly tested and updated.	
	decome	The process for recovering from incidents is reactive or non-existent.	Resiliency and recovery capabilities are applied consistently to incidents impacting business operations.	A Continuity & Disaster Recovery Plan defines steps to continue critical functions and recover to normal operations.	Recovery times and impacts of incidents are monitored and minimized.	The capabilities of all I' personnel, procedures, technologies are regularly tested and updated	

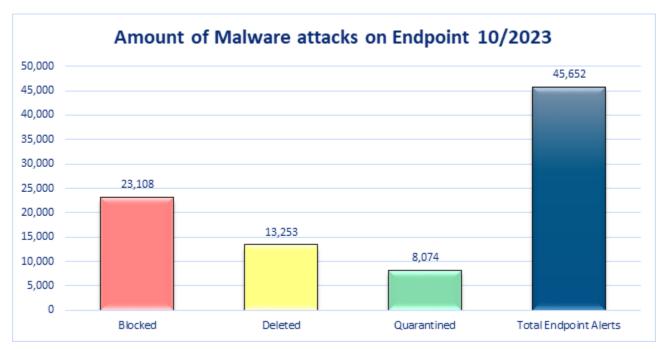
Figure 3: Assessing Cybersecurity Maturity

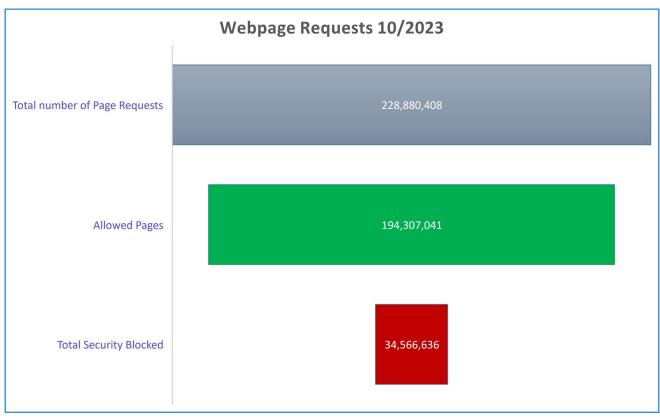
C. Data Protection & Privacy

1. Endpoint Protection

Endpoint protection is one component to the organization's ability to handle daily malware. All devices needing connection to the internet are subject to attacks. Attacks are mitigated through technologies monitoring the systems in real time reacting and responding to those attacks. Technologies like Firewall and Endpoint Detection and Response all are in place to respond to those attacks. Below is the status for endpoint attack metrics.

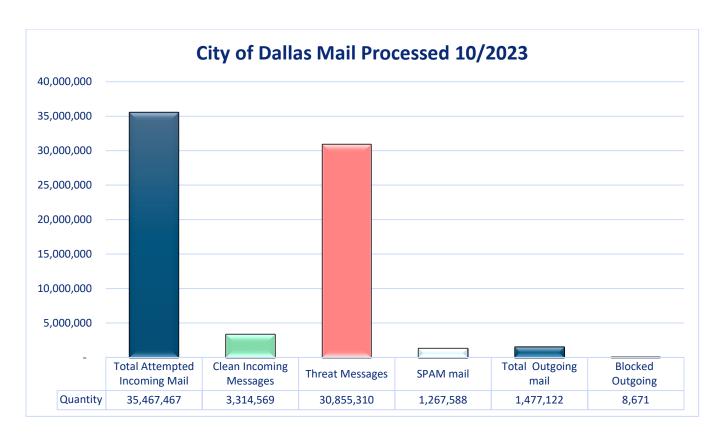






2. Email Screening

The City of Dallas receives and send millions of emails a month. Phishing is an attack vector that is utilized by bad actors in the form of social engineering, to gain internal access to the network. This can then be used to introduce malware, ransomware, and other malicious software to adversely affect City services. Below provides a picture of mail messages processed and remediated prior to user reception.



Section 5: IT Infrastructure

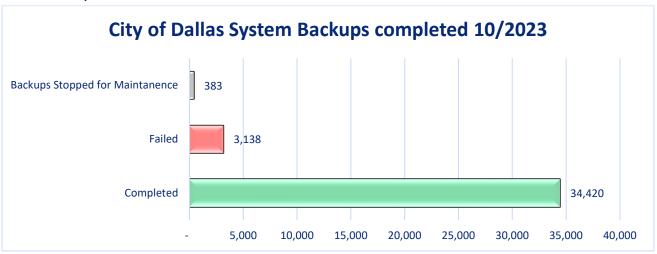
IT Infrastructure information and status updates on efforts to upgrade and improve the IT infrastructure used by the City to reduce technical debt, better meet current needs, and build for future service needs.

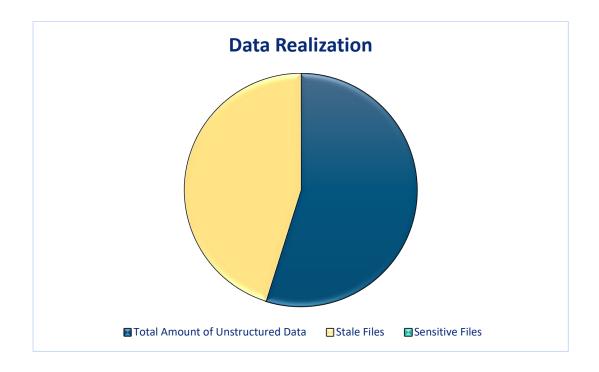
A. Resiliency - Disaster Recovery and Business Continuity

Resilience is essential in the City's IT environment because it ensures that the system can continue to function effectively and efficiently even when unexpected events occur. This can include things like hardware or software failures, power outages, natural disasters, and cyberattacks. Lack of resiliency impacts Local government to prolonged outages, data loss, and security breaches. These can be costly in terms of services to residents, loss of public trust, and regulatory penalties.

Resiliency can be achieved through a combination of redundancy, fault tolerance, disaster recovery planning, and proactive monitoring and maintenance. By designing and implementing resilient IT systems, the City can minimize the impact of disruptions and maintain business continuity, ensuring that critical applications and services remain available. ITS has begun evaluating on opportunities to design the City's IT environment to improve resilience.

A critical component of Disaster Recovery and Business Continuity practices is backing up critical data, testing data backups, and conducting exercises to ensure that data backups can be successfully utilized to restore business services.





Total Data 3.82 PB
Total Backup 1.66 PB
Total 19.3m Folders

B. Audit

Currently the ITS department is working through several audits that impact technology services. Below representative if the Audit remediation efforts and stages.



