Memorandum

CITY OF DALLAS

DATE January 20, 2023

TO Honorable Mayor and Members of the City Council

SUBJECT **Technology Accountability Report – December 2022**

Please find attached the Technology Accountability Report (TAR) based on information through December 30, 2022. 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

[Attachment]

c:
T.C. Broadnax, City Manager	Majed A. Al-Ghafry, Assistant City Manager
Chris Caso, City Attorney	M. Elizabeth (Liz) Cedillo-Pereira, Assistant City Manager
Mark Swann, City Auditor	Robert Perez, Assistant City Manager
Bilierae Johnson, City Secretary	Carl Simpson, Assistant City Manager
Preston Robinson, Administrative Judge	Genesis D. Gavino, Chief of Staff to the City Manager
Kimberly Bizor Tolbert, Deputy City Manager	Directors and Assistant Directors
Jon Fortune, Deputy City Manager	

Technology Accountability Report (TAR)

City of Dallas

As of December 31, 2022

Prepared by Information & Technology Services

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1500 Marilla Street, 4DS   **214-671-9868**

Dallas, TX 75201

Executive Summary

Of note for the December 2022 report is recognition the City of Dallas received from the DallasCIO organization. City Chief Information Officer William Zielinski and City Chief Information Security Officer (CISO) Dr. Brian Gardner were announced as finalists for the 2023 Dallas ORBIE Awards. These awards honor Chief Information Officers and other technology executives for demonstrated excellence in technology leadership in North Texas. Mr. Zielinski is a finalist in the category of Large IT Enterprise CIO and Dr. Gardner is a finalist for the CISO category. Finalists and awardees will be honored at the ORBIE awards in Dallas on February 24, 2023.

The December 2022 Technology Accountability Report (TAR) features several changes and additions:
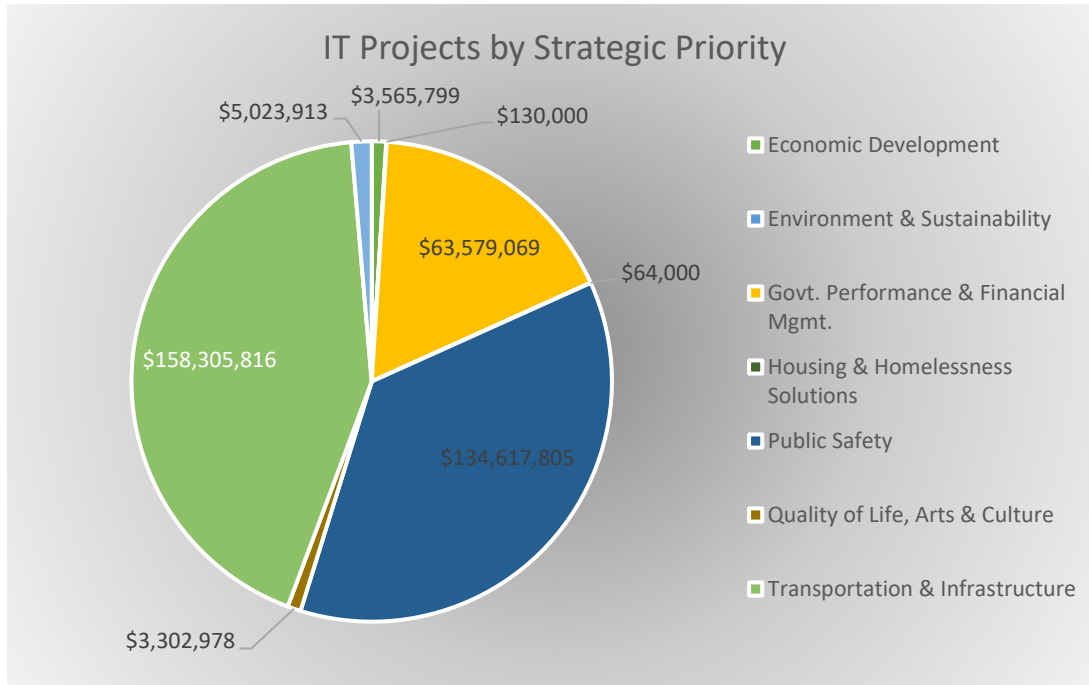
- Additional detailed information on service requests and major outages in Section 2: IT Operations.
- Refinement of major project status and related information.

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Section 1: IT Programs & Projects
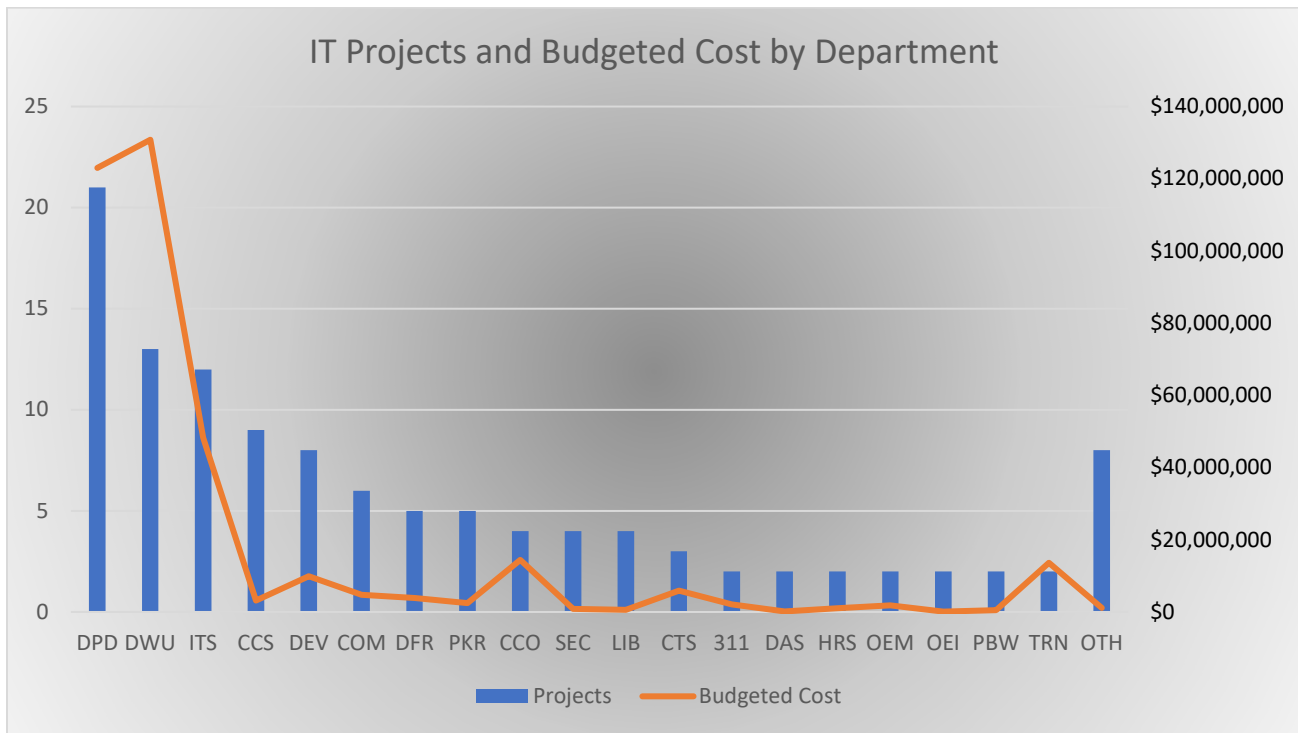
A. Project Pipeline

1. IT Projects by Strategic Priority

IT Projects by Strategic Priority

$5,023,913 $3,565,799 $130,000

$63,579,069 $64,000

$158,305,816

$134,617,805

$3,302,978

Legend:
- ☐ Economic Development
- ☐ Environment & Sustainability
- ☐ Govt. Performance & Financial Mgmt.
- ☐ Housing & Homelessness Solutions
- ☐ Public Safety
- ☐ Quality of Life, Arts & Culture
- ☐ Transportation & Infrastructure

NOTES:

1. As of 12/31/2022, ITS has 116 approved IT projects in the pipeline.
2. The total budgeted costs for the 116 projects are $368,589,379.
3. Project pipeline includes at least one project aligned to every one of the identified 8 strategic priorities.
4. The highest number of active IT projects are aligned to the Transportation and Infrastructure strategic priority with a total of 37 projects at a total budgeted cost of $158 million, followed by Public Safety with 31 projects at a total budgeted cost of $134.6 million, Government Performance & Financial Management with 14 projects at a total budgeted cost of $63.5 million, and Economic Development with 13 projects at a total budgeted cost of $3.6 million.

2. IT Projects and Budgeted Cost by City Department

IT Projects and Budgeted Cost by Department

NOTES:

1. 27 City Departments are represented across the 116 approved IT projects in the pipeline.
2. Dallas Police Department has 21 active projects at a total budgeted cost of $123 million, followed by Dallas Water Utilities with 13 active projects at a total budgeted cost of $130.8 million, Information & Technology Services with 12 active projects at a total budgeted cost of $48.3 million, Code Compliance with 9 active projects at a total budgeted cost of $3.2 million, and Development Services with 8 active projects at a total budgeted cost of $9.9 million.
3. 8 Departments have 1 active project each, making up the Other (OTH) group in figure 2 above.

B. Major Project Status

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	** Project Status
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.	GPFM	311	12/2022	In Process
2	Core Financial System Upgrade	The CGI Advantage 3 system is utilized by all departments within the City for processing and recording of all budget, 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.	GPFM	CCO	12/2023	In Process
3	Code Compliance Management System (CCMS) Phase 2	CCMS Phase 2 provides Code Compliance Services (CCS) with an application to support all operational, mobility, integration with 311 CRM/SAN/CTS, and other supporting departments, in managing service requests from city residents.	Quality of Life	CCS	01/2023	Delayed
4	Consumer Health Payment Portal for Code Compliance	A new payment portal which allows residents using payment cards to utilize a telephonic payment portal to make payments based upon the invoice number and other account information in lieu of going into a physical location to make payments.	Quality of Life	CCS	2/2023	Delayed
5	Code Compliance: Asset Management System (Inventory Management System)	The Code Compliance office is seeking an asset management system to manage a number of different 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.	Quality of Life	CCS	12/2022	Delayed
6	Portable Illegal Dumping Camera Tower and Camera Installation	Fixed cameras installed in targeted zones and utilized by Code Compliance and the City Marshal's Illegal Dumping program. Camera tower will be used to provide surveillance at chronic illegal dumping sites for the purposes of recording violators in the process to aid in potential prosecutions.	Quality of Life	CCS	12/2022	Complete

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
7	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.	Quality of Life	CCS	2/2023	In Process
8	Vacant Property Registration Salesforce Platform	The Department needs to develop a registration platform and process for identifying and tracking vacant properties. This City-wide process will be managed by Code and allows residents to access an online platform to register and pay for vacant property maintenance.	Quality of Life	CCS	1/2023	In Process
9	Automated Nuisance Abatement Work Order Salesforce System	Streamline Nuisance Abatement work order creation, work order processing, and work order completion to accurately generate invoice for lien processing and to enhance operational efficiency. Implement a process within the current 311/Salesforce system to control.	Quality of Life	CCS	7/2023	In Process
10	Consumer Protection online Salesforce Application/ permitting system	This system will allow department to implement online permit process for seven applications (wood vendor, motor vehicle repairs, Credit access, electronic repairs, home repair, scrap tire). Allows business owners to access, complete, submit, and track their business permit applications online.	Quality of Life	CCS	7/2023	In Process
11	Remote Video Streaming	COM is conducting market research for the purchase of equipment to allow live video and audio streaming from offsite locations to the City's control room. This is a frequently requested service by various departments and Council offices and aligns with COM's mission.	Quality of Life	COM	TBD	In Process
12	Closed Captioning System for City Council Meetings	Closed Captioning on the live webstream/cable channel of Council meetings allows the City to remain in compliance with ADA requirements, and our Equity and Inclusion goals.	Quality of Life	COM	6/2023	In Process
13	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.	Public Safety	CTS	12/2023	In Process
14	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, but are inadequate to provide appropriate controls and functionality.	Quality of Life	DAS	TBD	Delayed

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
15	Expand OnBase Content Management to the entire DEV Department	The OnBase content management system was originally implemented 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 in DEV.	Economic Development	DEV	5/2022	In Process
16	Development Services Training Simulator	The building permitting and inspection process involves a number of 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.	Economic Development	DEV	3/2023	In Process
17	Development Services Customer Queue Management Automation	Customers walking into the permit center need to be able to "sign in" and set appointments remotely. DEV needs to offer this service to customers to better track data associated with customer experiences; volume, wait times, types of service...etc. Project will identify, procure, and implement a customer queue management solution for DEV.	Economic Development	DEV	7/2023	In Process
18	Land Management System POSSE replacement project	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, and workflows. This project will deploy a new system to replace the existing system and to add efficiencies in the permitting process.	Infrastructure	DEV	12/2022	Delayed
19	Relocate Development Services to New Facility	In September 2022, the City of Dallas purchased a new facility at 7800 N. Stemmons Freeway to 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.	Infrastructure	DEV	01/2023	In Process
20	Telestaff Workforce Management for Public Safety	Telestaff Workforce Management is a web-based solution designed for the unique challenges of Public Safety Workforce 24-hour staffing. The application assists City of Dallas Public Safety workers manage their complex and dynamic shifts.	Public Safety	DFD	9/2022	On Hold

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
21	Station Alerting System	Dallas Fire Rescue dispatches resources from 58 fire stations strategically 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 alerts 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 into, procure, and implement a new, modern station alerting system for Dallas Fire Rescue.	Public Safety	DFD	9/2023	In Process
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.	Public Safety	DFD	2/2023	In Process
23	IT Infrastructures For New Fire Stations 19, 21, 36, 41, 46, 58 & 59	Eight new Fire Stations are being constructed: #46, #36, #59, #41 Temporary, #41 Primary, #19, #21 and #58. All new IT infrastructures including cabling, network, workstations, printers, radio equipment, etc. will be activated in line with facility openings.	Public Safety	DFD	2/2023	Ongoing
24	Unmanned Aerial Systems (Drones)	The City of Dallas currently has Unmanned Aerial Systems (UAS) units that are deployed during critical emergency response incidents. UAS provides a real-time video that offers crucial information to incident command and executive staff. This information allows for improved incident management	Public Safety	DFD	9/2023	In Process
25	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.	Public Safety	DPD	12/2022	Ongoing
26	Flock Safety-New fixed ALPR Cameras	The City of Dallas currently has fixed Automated License Plate Readers (ALPR) cameras throughout the city of Dallas. The contract for the current vendor has ended and this project will procure a new vendor and expand the number of cameras in use throughout the city.	Public Safety	DPD	1/2023	In Process

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
27	P25 Compliant Radio Project	The city's current public safety radio network is 40 years old and not compliant with new standards (P25) for these networks. This project installs all-new 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.	Public Safety	DPD	02/2023	In Process
28	County CAD Collaboration	Upgrade and expand the city's Computer-aided Dispatch (CAD), extending it to the County to improve collaborate on emergency 911 call center responses. This project is also required to fully implement the upgrade of the 911 call center's telecommunications infrastructure.	Public Safety	DPD	1/2023	In Process
29	DPD WEB-RMS Case Management System	This project will migrate DPD's current law enforcement Records Management System (RMS) case management system from the current onsite solution to an upgraded Web-based system. The upgraded RMS will give the department needed functionality that is not available to the department currently in the on-premise solution. Current limitations require process workarounds creating potential errors and inefficiencies which are resolved with the upgrade.	Public Safety	DPD	2/2023	In Process
30	Axon Air (Drones)	The City of Dallas currently has Unmanned Aerial Systems (UAS) that are deployed during critical incidents. The UAS provide real time video remotely captured that provide critical information to officers and commanders to make the best decisions possible.	Public Safety	DPD	2/2023	In Process
31	911 Telecommunications Network Upgrade -- ESInet	This project will upgrade the City's current 911 telecommunications network to a Next-Generation 911 built on a modern broadband infrastructure. The new infrastructure allows the transmission of photos, videos, and other broadband data between a 911 Caller, 911 Center, and Responder in the field to offer a higher level of service and support to public safety personnel.	Public Safety	DPD	2/2023	**Complete**
32	Real Time Crime Center (RTCC) Video Integration (Previously Starlight)	Builds upon prior initiative to provide an analytics-driven video monitoring platform, capable of alerting the Dallas Police Department's Real Time Crime Center (RTCC) of criminal behavior indicators and activity occurring at local businesses.	Public Safety	DPD	2/2023	In Process

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
33	Surveillance Cameras and Real Time Crime Center	This project will provide a "Real Time Crime Center" capability within Jack Evans Police Headquarters. 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.	Public Safety	DPD	12/2024	In Process
34	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.	Public Safety	DPD	3/2023	In Process
35	COBWEBS Social Media Investigation Software	This project will implement social media investigative software for the Police Department (DPD). This software will provide an efficient tool for investigating social media post from potential suspects to aid in investigations.	Public Safety	DPD	4/2023	In Process
36	Non-City Business Live Surveillance (Fusus)	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.	Public Safety	DPD	9/2023	In Process
37	Early Warning System	This project provides the Dallas Police Department a data-driven, decision-making support application that helps Police leadership systematically identify officers who are showing signs that they are at risk to citizens or of executing law enforcement objectively. The platform utilizes data from a multitude of sources to assess and score risk and provide information to DPD leadership for potential interventions.	Public Safety	DPD	10/2023	In Process
38	DPD - Auto Pound Online Payment System	This project provides a public portal to allow for citizens to pay fines and fees online to the auto pound in order to recover their vehicle. The information from the payment system allows for better management of the DPD Auto Pound.	Public Safety	DPD	12/2023	In Process
39	In Car Video - Body Worn Camera - Interview Room Installation	Implement a holistic solution that integrates all the three components: (1) in-car video, (2) interview rooms, and (3) body-worn cameras into a single hosted solution. The solution needs to be a consolidated and cohesive system rather than disparate components.	Public Safety	DPD	12/2024	Ongoing

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
40	Use of Force - Police Strategies LLC	This project will provide a data analytics platform which produces analytic dashboards which provide 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.	Public Safety	DPD	7/2023	In Process
41	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.	Infrastructure	DWU	TBD	In Process
42	DWU Billing CIS and Customer Portal Replacement	DWU's current Customer Information System (CIS) will no longer be supported as of 2025. This project will perform market research, procure, and implement a new CIS and Customer Portal that needs minimal customization (95% out of the box functionality) for billing Water, Wastewater, Sanitation, and Stormwater utilities.	Infrastructure	DWU	7/2023	In Process
43	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.	Infrastructure	DWU	9/2023	In Process
44	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.	Infrastructure	DWU	5/2028	In Process
45	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.	Infrastructure	DWU	12/2023	In Process

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
46	HUD Income Limits Eligibility Survey - HOU Website	Updates and enhancements to the Housing & Neighborhood Revitalization Department's (HOU) website to help reduce uncertainty or confusion amongst City of Dallas residents when determining their income eligibility for the various programs based on the Housing and Urban Development (HUD) Income Limits.	Economic Development	HOU	2/2023	In Process
47	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.	Infrastructure	ITS	6/2023	Ongoing
48	Network Unified Communications (UC) 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.	Infrastructure	ITS	12/2022	In Process
49	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.	GPFM	ITS	3/2023	In Process
50	DocuSign Use Case Review	Reassess business needs for an e-Notary and X.509 compliant digital signature solution for the City Secretary's Office (SEC), City Attorney's Office (ATT) and the Real Estate Division of Public Works (PBW).	GPFM	ITS	12/2022	==Cancelled==
51	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".	Infrastructure	ITS	6/2023	FEDRAMP portion of project completed. Phase 1 now In Process.
52	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.	GPFM	ITS	4/2024	In Process
53	Visualization Engineering Services	Purchase of Visualization Engineering services will provide an authoritative representation of our Technology Current State and Future State - an effort critical to data center improvements and technical debt reduction.	Infrastructure	ITS	4/2023	In Process

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
54	Data Center Improvement Program	This program provides a comprehensive review, assessment, and cleanup of the City Hall Data Center and all other locations which hold primary and ancillary equipment used for IT operations in the City.	Infrastructure	ITS	4/2024	Ongoing
55	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.	Infrastructure	ITS	12/2023	In Process
56	Infrastructure Upgrade of Dallas LIB system (formerly called E-Rate)	This project will refresh existing, and add new components, to LIB Network Infrastructure. The upgraded infrastructure will dramatically improve the delivery of digital services to LIB patrons.	Quality of Life	LIB	9/2023	In Process
57	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, programs, and education.	Quality of Life	LIB	3/2023	In Process
58	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.	Quality of Life	OEI	3/2023	In Process
59	ADA Software Tracking System	This request acquires a software system to track identified ADA Compliance issues, track barrier removal costs, and to provide public interface to show City's progress toward removing barriers. Public reporting of barrier removal is a federal requirement.	Quality of Life	OEI	3/2023	In Process
60	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.	Infrastructure	OEQ	3/2023	In Process
61	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.	GPFM	PER	5/2022	Delayed
62	IT Infrastructure for Parks and Recreation Sites Phase 2	This project includes the acquisition and installation of IT infrastructure and services for new PKR facilities. New IT Infrastructures include local and metro network, internet, PCs, printers, security systems, point of sale systems, telephones, etc.	Quality of Life	PKR	12/2022	Ongoing

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status
63	IT Infrastructure for Bachman Aquatic Center	Park and Recreation Department is building a new Aquatic Center at 2750 Bachman Drive which requires full IT infrastructure implementation.	Quality of Life	PKR	6/2023	On Hold
64	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.	Quality of Life	PKR	12/2023	In Process
65	Electronic Document Management - EDMS	Project Provides Electronic Document Management and Document Archive System for City Secretary's Office.	GPFM	SEC	12/2022	In Process
66	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 official city records.	GPFM	SEC	11/2022	In Process
67	Boards and Commissions Management Solution	The business objective for this project is to assist and upgrade the City Council's Boards and Commission appointment process in key areas: New Boards and Commission Application Portal and an Upgraded Boards and Commission Tracking/Reporting Solution.	GPFM	SEC	12/2022	In Process
68	Build an Ethics Financial Reporting Solution	The purpose of this system is to promote and support ethical financial compliance.	GPFM	SEC	2/2023	In Process
69	Advanced Traffic Management System (ATMS)	The objective of this project is to transition from the City of Dallas 25+ year old analog traffic management system to a new Advanced Traffic Management System (ATMS). The transition includes a new GUI (Graphical User Interface) and Central Traffic Management system.	Infrastructure	TRN	10/2022	Delayed

**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.

NOTES

1   Enterprise Contact Center (ECC) Solution.   Project is still in process, but we do not anticipate completion during the month of December.   We anticipate approximately 4 months more work to implement Single Sign On (Multi-Factor Authentication), final delivery of the Lab (test portion) of the project, and potential re-evaluation of Salesforce integration.

2   Core Financial System Upgrade.   The contract requirements and project timeline have been finalized and the contract action is proposed for February 22, 2023, Council agenda.

3   Code Compliance Management System (CCMS) Phase 2.   Project delayed due to issues related to Payment Card Industry (PCI) compliance issues.   ITS, working with Code Compliance and the system vendor, have submitted PCI Compliance Remediation paperwork and have performed system and user testing. New implementation date of January 2023.

4   Consumer Health Payment Portal for Code Compliance.   Project delayed due to issues related to Payment Card Industry (PCI) compliance issues.   ITS is working with Code Compliance and the system vendor to complete compliance and fully implement the new system. New implementation date of February 2023.

6   Portable Illegal Dumping Camera Tower and Camera Installation.   Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.

7   Envision Connect Replacement Project. Project delayed due to issues related to Payment Card Industry (PCI) compliance issues. ITS is working with Code Compliance and the system vendor to complete compliance and fully implement the new system. New implementation date of February 2023.

8   Vacant Property Registration Salesforce Platform. Project delayed due to issues related to Payment Card Industry (PCI) compliance issues. ITS is working with Code Compliance and the system vendor to complete compliance and fully implement the new system. New implementation date of February 2023.

11   Remote Video Streaming. Project plan/schedule is being developed. New date will be provided when available.

14   DAS Inventory Management Tool.   Multiple departments have requested an asset/inventory management tool to assist with performing their job functions. ITS is consolidating requirements across departments to perform market research to determine whether an option for a city-wide can be met. Project date will be updated after this project has completed the procurement process.

18   Land Management System POSSE replacement project. ITS, DEV and Vendor have aligned on the SOW. Project should go to Council for approval in late February or early March 2023. Based on proposed high-level schedule of approximately 25 months, new end date, proposed for 09/2025, will show on January TAR.

19   Relocate Development Services to New Facility. ITS has conducted multiple building surveys of new site and is working with vendors on the ordering of new equipment and installation of circuits.

20 Telestaff Workforce Management for Public Safety. Project On Hold awaiting new contract with Accenture for integration support.

25 Mobile Surveillance Platform Vehicles (Formerly known as Bait Car). DPD has recently identified/received grant funds. Contract must now be put into place.

26 Flock Safety – New Fixed ALPR Cameras.   ITS is working with DPD and the vendor to resolve a potential security risk posed by the implementation to the City's network. A solution which remediates the risk has been identified and the program is progressing toward implementation.

27 P25 Compliant Radio Project. Effective with August 2022, the new P25 Public Safety Radio system was live, operational, and performing as designed.   Non Public Safety departments have already been migrated to the new system. DPD, DFR and other Public Safety departments are undergoing final testing and training and will begin migrating to the new system after the State Fair of Texas in November 2022. Final migration of all City of Dallas Departments expected for completion by February 2023.

29 DPD WEB-RMS Case Management System. Vendor is updating SOW for items to be provided in the upgrade. Anticipate project work to commence in Feb 2023.

32   Real-Time Crime Center (RTCC) Video Integration. A vendor has been identified to provide the platform which integrates camera feeds from non-City businesses into the RTCC. The Technology Request (TR) for the purchase was approved by the ITGB on September 15, 2022 and a purchasing request (PR) has been submitted for approval. This item will required Council approval.

33 Surveillance Cameras and Real-Time Crime Center (RTCC). This project will provide This project will provide a "Real Time Crime Center" capability within Jack Evans police station. It is being added to the "Major Projects" portion of this document due to the magnitude of the project and its impact on the city. It is in progress and has an expected completion date of December 2024.

40 Use of Force – Police Strategies, LLC. Vendor services have been procured and ITS and DPD have worked to provide the vendor with data needed to create the initial set of dashboards and provide them to the City in January 2023.

41 Enterprise Capital Project Management System (ECPMS) Phase 2. This project completion date will be extended based on a pending Project Change Request (PCR) for updated requirements/deliverables regarding GIS capabilities.

49 Apptio IT Financial Transparency Software. Project is progressing; working on minor item fixes before it is ready. New estimated completion date March 2023.

50 DocuSign Use Case Review. ITS Business Analyst worked with the departments and determined that the original business cases for this software are no longer valid. This project is being cancelled and will not be on next month's TAR.

51 ServiceNow Phase 2. This project is being implemented in an "Agile" fashion – ie rolling out in numerous phases. Migration to the FEDRAMP was completed in Dec 2022. Estimated completion of next phase estimated June 2023.

52 IT Project and Portfolio Management Tool. Project schedule adjusted in anticipation of Council approval in February or March 2023.

61 Workday Prism. Project On Hold awaiting new contract with Accenture for integration support.

63 IT Infrastructure for Bachman Aquatic Center. This project has been placed on hold due to construction delays. Projected resumption of project in Spring/Summer 2023, with expected completion date of June 2023.

65 Electronic Document Management - EDMS. The EDMS project is part of a group of projects relying on the Hyland software system, which are going to be developed serially. We are currently re-working the schedule and should have a more accurate end date shortly.

69 Advanced Traffic Management System (ATMS). The vendor has substantially completed the required work for this project per the scope of the contract. There are several remaining functions for which ITS and TRN are working with the vendor to establish a go-forward plan to include in subsequent releases or phases of the project.

C. Changes to Major Project Status List

1. Projects Implemented since last report
    a. ESINet – Implementation complete. Project will be removed next month.
    b. Portable Illegal Dumping Camera Tower and Camera Installation – Implementation complete. This project will be removed next month.
    c. The FEDRAMP portion of ServiceNow Phase 2 was completed. This project's next completion date is projected June 2023.
    d. DPD Command Staff Conference AV upgrade was completed. Although not on the Major Projects List, this project will be removed from next month.

2. Projects Removed
    a. No projects were removed from December TAR.
    b. The DocuSign project's requirements analysis has determined that this project is no longer necessary. It is being cancelled and will be removed from the Major Projects list next month.

3. New Projects added to the project Pipeline
    a. Ethics Financial Reportion Solution was added to support the City Attorney Office.
    b. TAC Form Automation project was added to support ITS. This is a no-cost project, so it will not show in the Major Projects list.

D. Other Project Related Topics

1. Project Cost Estimation
    a. Project cost estimates are derived from numerous sources. Initial cost estimates are made by the Business (project requestor), working with ITS, to make initial guestimate. That number is then refined through development of a Statement of Work, Contract Development, or other research. These estimates include, but are not limited to cost of Software, Hardware, Licenses, Annual Maintenance, Documentation and Training. Cost estimates for licenses, maintenance and documentation is projected through years 2 – 6.

Section 2: IT Operations

A. Outage Report

1. Monthly Help Desk Report

Category	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total Calls	7502	7546	8006	7252	7616	7151	7222
Answered	7136	7138	7763	7017	6921	6132	6222
Abandoned	366	408	243	235	695	1019	1000
Abandoned (<10sec)	166	172	115	93	273	408	380
Abandoned %(<10sec)	2.3	2.4	1.5	1.3	3.9	6	5

Metric	Current Month	Trend
Average Speed to Answer – Voice	0:01:01	
Password Related Incidents	15%	10.0% 15.8% 14.5% 14.7% Oct Nov Dec
First Contact Resolution - Incident	81.23%	90% 70% 50% 71% 81% Oct Nov Dec
Average Duration – Service Desk	1.87 Days	1772 822 2715 Oct Nov Dec
Average Duration – Field Services	3.37 Days	4115 3564 4865 Oct Nov Dec
Average Duration - PD Field Services	6.57	6116 10025 9465 Oct Nov Dec

NOTES:

1. In December 2022, the IT Helpdesk received 7222 calls for support. This is a slight decrease from November.
2. First Contact Resolution for December is 81% a dip from November of 95% and below of goal of 85%.
3. Field Services increased the average service duration from 2.4 days in November to 3.37 days in December.
4. Field Services for DPD decreased average service duration from 6.9 days in November to 6.57 days in December.

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

Impact Minutes by Department
Severity 1 and Severity 2
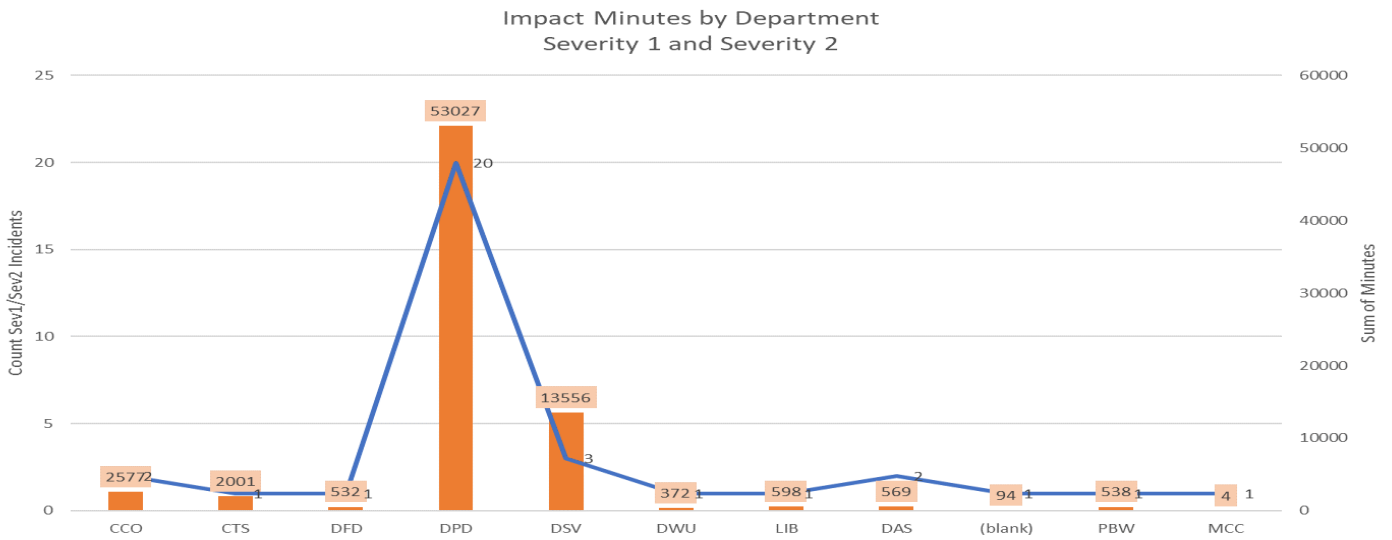
NOTES:

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 minutes the incident(s) potentially impacted them.
3. These data points are extracted from ServiceNow based upon input by city IT technicians. Analysis reveals there are incidents which are resolved but have not been timely or appropriately closed out within the ServiceNow platform, resulting in artificially inflated timeframes. ITS is working with IT service delivery managers to improve documented processes to ensure timely updates to ServiceNow in order to accurately reflect the actions for the incident and to provide a more representative experience.

Severity 1 and 2 by Issue Category
Impact in total minutes
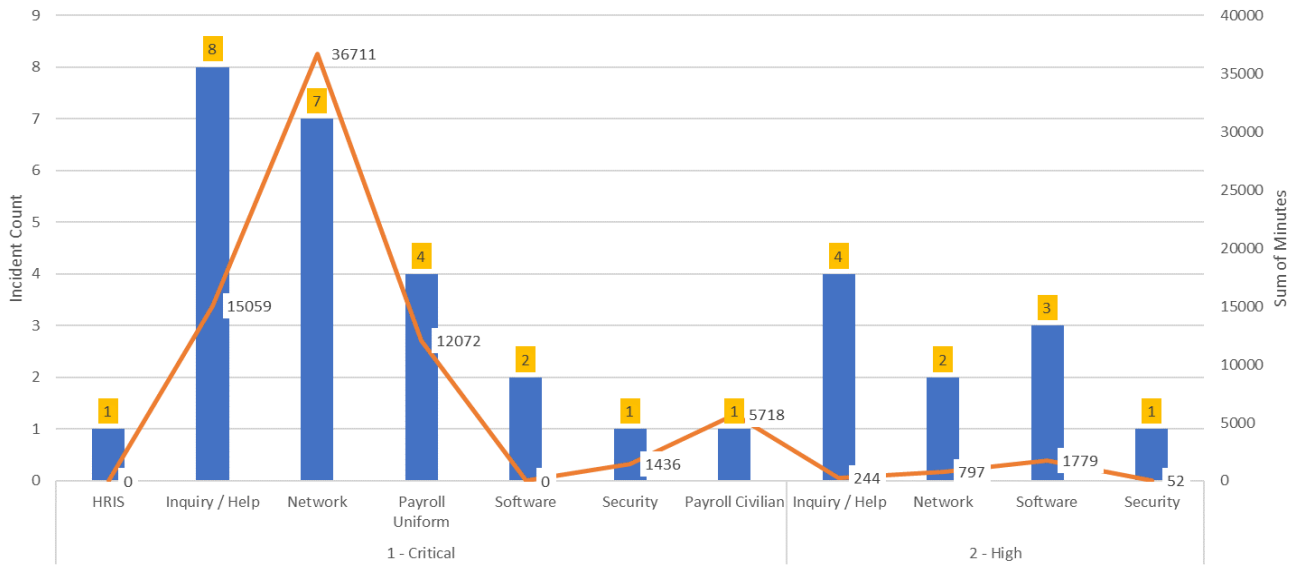
NOTES:

1. This chart provides the distribution of incidents and impact minutes over specific services.

Monthly MTTR
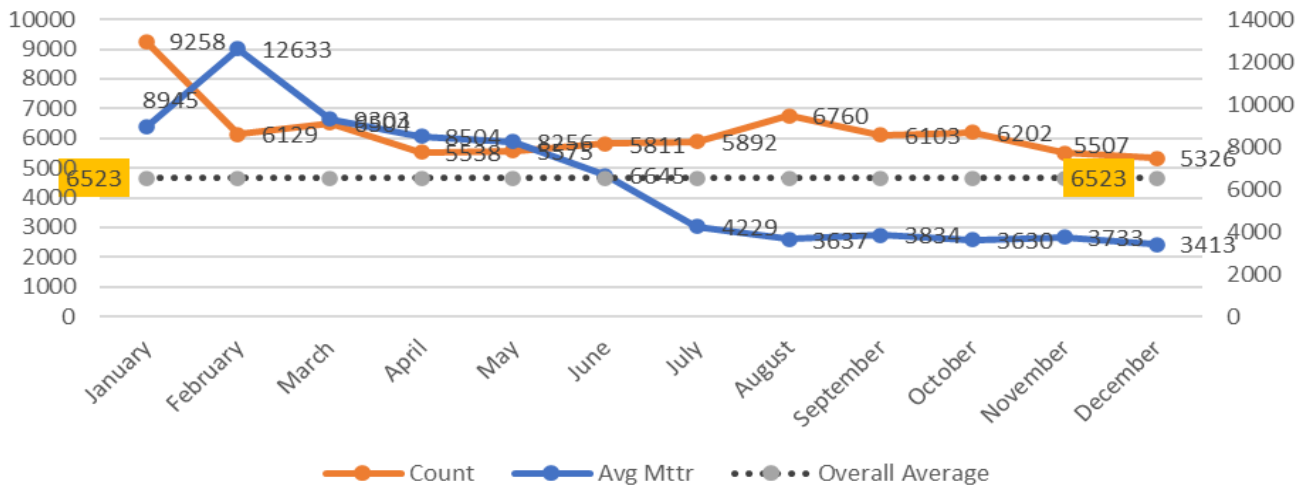
NOTES

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. In December 2022, the trend of reducing average MTTR continued after a slight uptick in November.

3. Monthly Major Outage Report

Priority	Description	Department	Primary	Secondary	Assignment Group	Hours
1 - Critical	WHAT: Unable to login / saying the system is down	DPD	Software		ITS CAD and RMS Applications	#VALUE!
1 - Critical	APPLICATION/SERVICE: RMS down for all users • WHAT: RMS program is down • WHERE: Lewt Sterret Jail	DPD	Network	Outage	ITS CAD and RMS Applications	#VALUE!
1 - Critical	Dept: dpd Issue: Jail and other users are reporting rms down	DPD	Inquiry / Help		ITS CAD and RMS Applications	#VALUE!
1 - Critical	WHAT: unable to access network drives K-Drive is unable to load •	DPD	Network		ITS Server Team	576.7
1 - Critical	SQLDPDFORTIS application is down. Entire police records unit is unable to access server	DSV	Inquiry / Help	Policy/Procedure	ITS DPD Applications	196.2
1 - Critical	R drive is not allowing entire division to access \\cds-web. Affecting 4 divisions including 75 individuals.	CTS	Inquiry / Help	Escalation/Status	ITS Backup Team	33.4
2 - High	CAD Freezing and Unfreezing in 911 and Dispatch	DPD	Software	Troubleshooting	ITS CAD and RMS Applications	11.8
1 - Critical	No library is able to access All files for entire dept Shared Network file drive FSLIB00	LIB	Network	Outage	ITS Server Team	10.0
1 - Critical	DPD intranet home page down Cant reach this page, make sure the web address is correct http://dpd/ All user's affected	DPD	Network	Outage	ITS Web Team	9.9
2 - High	unable to access \\fscty11\pbwdata. No users able to access the folder at the moment	PBW	Software	Missing/Reinstall	ITS Server Team	9.0
2 - High	Locution systems down shows the PC's as "offline" *Station affected so far: station 6, 38, 8	DFD	Software	Troubleshooting	ITS Desktop Team	8.9
1 - Critical	Dallas Fusion Center Description of Issue: All internet is down in the Dallas Fusion Center.	DPD	Inquiry / Help	Policy/Procedure	ITS Network Connectivity	7.9
2 - High	Chameleon system isn't communicating with SalesForce. Error : Calls are not closing in Sales Force	DAS	Network	Outage	ITS Posse Apps	7.1
2 - High	The network switch down affecting six to eight people in the building	DWU	Network	Outage	ITS Network Connectivity	6.2
1 - Critical	if user calls 214 670 1234 number it is not going thru it will end after 5 sec	DSV	Inquiry / Help	Escalation/Status	ITS Network Operations Center	5.8
1 - Critical	Issue Network: K drive not connecting	DPD	Network	Outage	ITS Server Team	1.9

NOTES

1. Major outages are identified as Severity1 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 to identify full impact to departments

B. Service Requests (including new employee onboarding)

1. *New Hire Report*

New Hire Requests by Department
December Total New Hires Requests 161
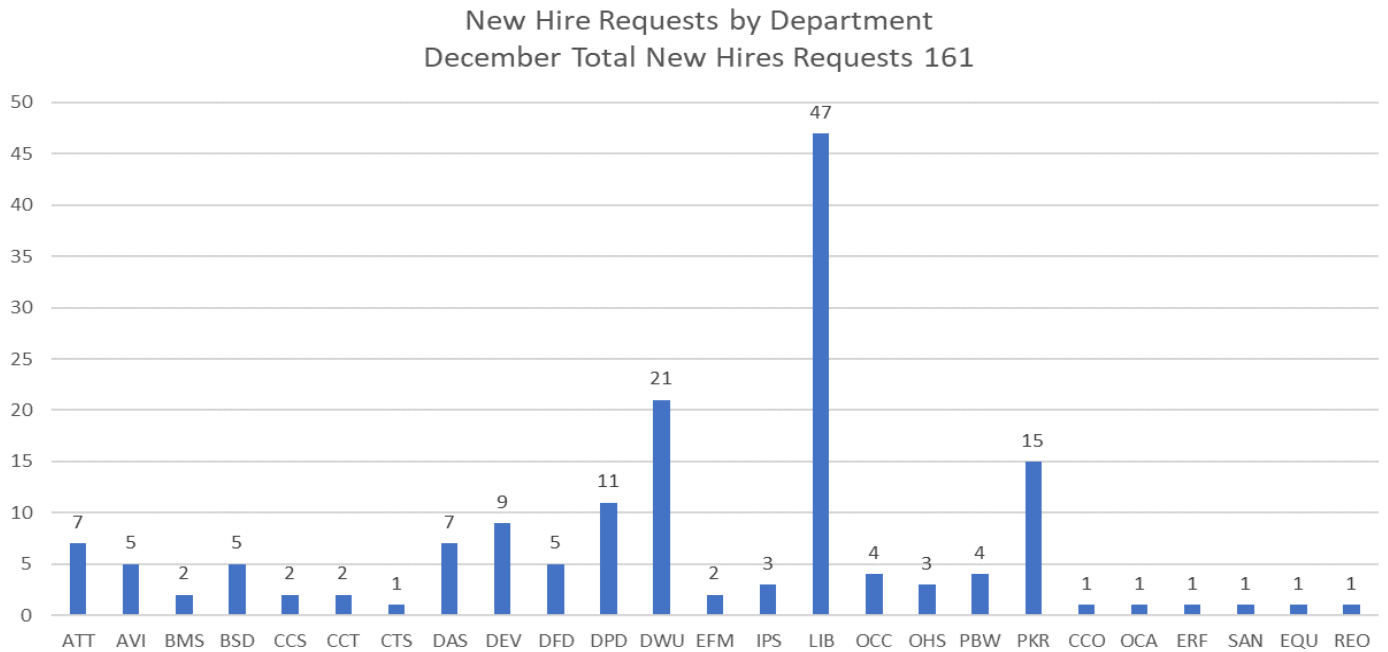

Notes

1. In the month of December, a total of 161 requests were opened for new employees.
2. LIB, DWU, and PKR being the top 3 hiring departments. DWU has had 3 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")*

Top 15 Requested Items
December 2022
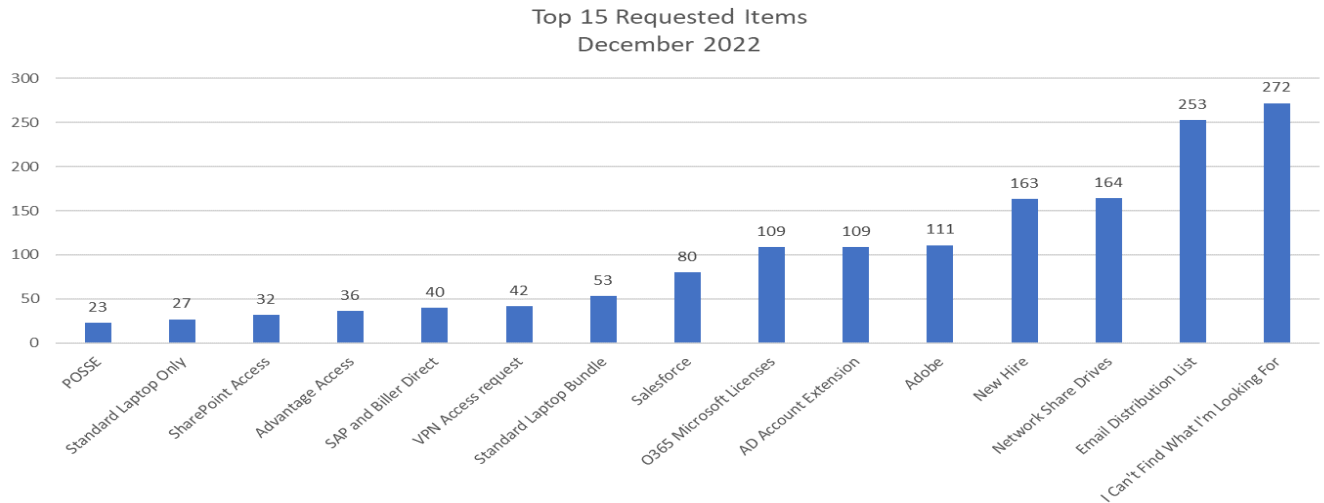
Note

1. December Service Request actions totaled 1167 a slight increase over November which totaled 1103. 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.

Request Actions by Month
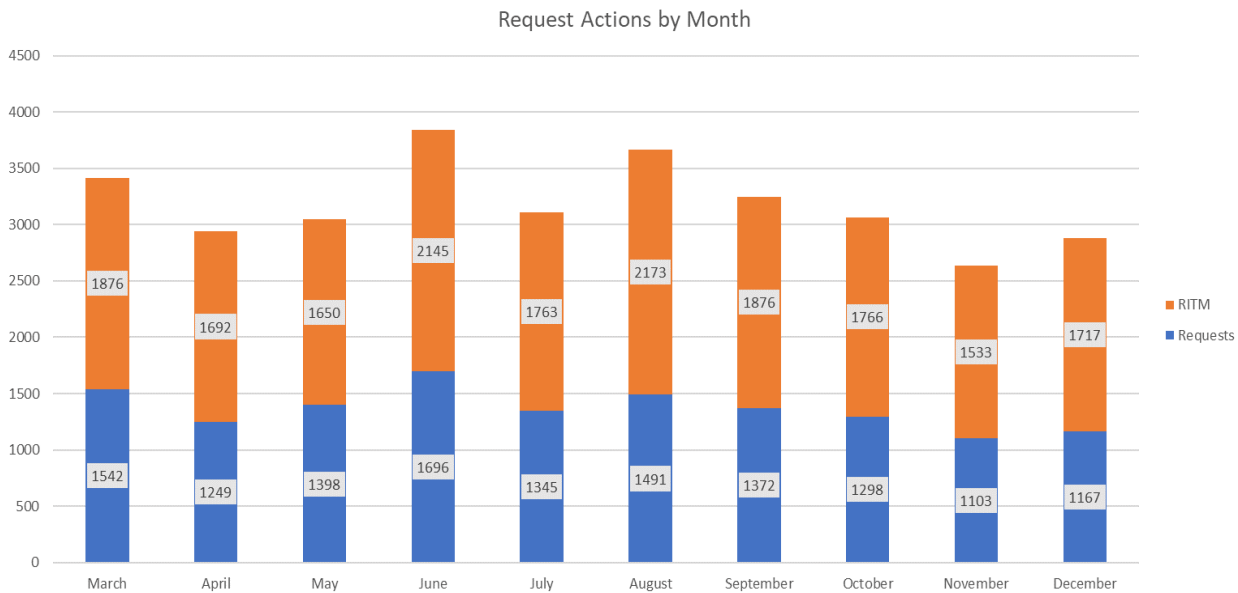
Note

1. This chart illustrates that 1167 Request Tickets, generated 1717 Request Actions. Frequently one Request generates multiple actions to be completed by one or more teams to fulfill the ask.

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.

A. Contract/Procurement Management

Items Approved on December 14 Council Agenda:

CR 22-1783 Ricoh USA, Inc. – Migration of DPD documents from legacy, unsupported Fortis vendor to DocuWare document management system.

- Five-year agreement via Texas Department of Information Resources (DIR) cooperative agreement
- Contract amount $217,632.50
- Directly supports DPD document management

CR 22-1780 Motorola Solutions, Inc. – Purchasing agreement for handheld radios and subscription services

- Three-year agreement via Texas Department of Information Resources (DIR) cooperative agreement
- Contract amount $30,294,793.06
- Supports public safety
- Compatible and operable with P25 Radio Communication System

CR 22-1782 Carahsoft Technology Corp – Purchasing agreement for web-based recruitment tool subscription for Civil Service Department

- Five-year agreement via Texas DIR cooperative agreement
- Contract amount $567,762.50
- Neogov modules

CR 22-1784 Axon Enterprise, Inc – Purchasing agreement for licenses that provide use of body-worn, in-car, interview room camera systems, electronic control weapons, cloud storage and associated software and hardware for Police
department

- Ten-year agreement via Sourcewell cooperative agreement
- Contract amount $134,756,800.67
- Licenses for body and interview room cameras, Tasers, software, and cloud storage

Items Approved on January 11 Council Agenda:

CR 23-0121 Shelby Communications, LLC – Bridge contract for network cabling

- Two-year agreement via Texas Department of Information Resources (DIR) cooperative agreement
- Contract amount $7,213,690.00
- Use of network cabling services has increased dramatically over the last several years, necessitating a bridge contract as the city prepares a longer-term RFCSP

CR 23-0128 Incapsulate, LLC – Exercise the first of three one-year renal options for maintenance and support and hosting of the City's customer relationship management software

- One-year agreement for Department of Information and Technology Services
- Contract amount $412,000.00
- Continuation of the subscription for the 311 module, a managed service delivered on the Salesforce platform

Upcoming Contracts Requiring Council Approval

January 25 Agenda Items:

Microsoft Corporation – Purchasing agreement for Microsoft Unified Enterprise Support Services

- One-year agreement via Texas Department of Information Resources
- Contract amount is $546,714.00
- Comprehensive set of support services including
  - Proactive services to help improve the health of IT infrastructure and operations
  - Service delivery management to facilitate planning and implementations
  - Prioritized 24x7 problem resolution services to minimize downtime

February 8 Agenda Items:

Teqsys, Inc. - Continuous use of the VERITAS eDiscovery Platform
- Five-year agreement (three years + two one-year renewal options) via Texas Department of Information Resources
- Contract amount is $794,683.46
- Provides capabilities for ITS and City Attorney's Office to capture, collect and preserve information from the City's information systems

HLP, Inc. – Chameleon Data Management System for Dallas Animal Services (DAS)
- Three-Year Sole Source contract
- Contract amount $190,560.00
- Directly supports DAS through upgrades and ongoing support of their core operation system

Council Agenda Date TBD:

ePlus Technology – Web Application Firewall (WAF) and Distributed Disruption of Service (DDoS) (contract pending)
- Two-year agreement via TIPS co-op
- Contract amount $514,784.43
- Supports the City Website Redesign Project

TriTech – Supplemental Agreement No. 16 for continued maintenance and support for the existing computer aided dispatch system and disaster recovery synchronization (contract pending)
- Two-year agreement via The Interlocal Purchasing System (TIPS) cooperative agreement
- Contract amount $514,784.43
- Directly supports the Public Safety mission by support of the City's computer-aided dispatch (CAD) system

Dell Marketing, L.P - agreement for the purchase of licenses and installation/configuration and professional services of Planview Project and Portfolio Management Professional software.

- 3-year agreement via Texas Department of Information Resources (DIR) cooperative agreement
- Contract amount $ 287,852.85
- Provides support for IT project and portfolio management

B. Budget Performance & Execution

Fund 0191-9-1-1 System Operations as of 11/30/22

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	643,798	643,798	88,926	632,786	(11,012)
Overtime Pay	-	-	-	-	-
Pension	91,413	91,413	13,053	89,859	(1,554)
Health Benefits	63,870	63,870	5,357	54,481	-
Worker's Compensation	1,658	1,658	-	1,658	-
Other Personnel Services	4,873	4,873	4,899	12,829	1,433)
Total Personnel Services	**805,612**	**805,612**	**112,235**	**791,613**	**(13,999)**
Supplies	201,465	201,465	369	201,465	-
Contractual Services	13,205,665	13,205,665	3,151,698	13,205,665	-
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
Total Expenditures	**14,212,742**	**14,212,742**	**3,264,302**	**14,198,743**	**(13,999)**

Fund 0197 - Communication Services (Radio Network) as of 11/30/22

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	1,995,477	1,995,477	260,363	1,874,364	(121,113)
Overtime Pay	51,320	51,320	35,851	51,320	-
Pension	282,080	282,080	43,011	274,917	(7,163)
Health Benefits	263,086	263,086	19,946	234,423	-
Worker's Compensation	7,197	7,197	-	7,197	-
Other Personnel Services	5,156	5,156	13,023	40,404	6,585
Total Personnel Services	**2,604,316**	**2,604,316**	**372,194**	**2,482,625**	**(121,691)**
Supplies	1,156,482	1,156,482	155,498	991,493	(164,989)
Contractual Services	13,106,759	13,106,759	3,686,493	13,272,082	165,323
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
Total Expenditures	**16,867,557**	**16,867,557**	**4,214,186**	**16,746,200**	**(121,357)**

Budget Performance & Execution (continued)
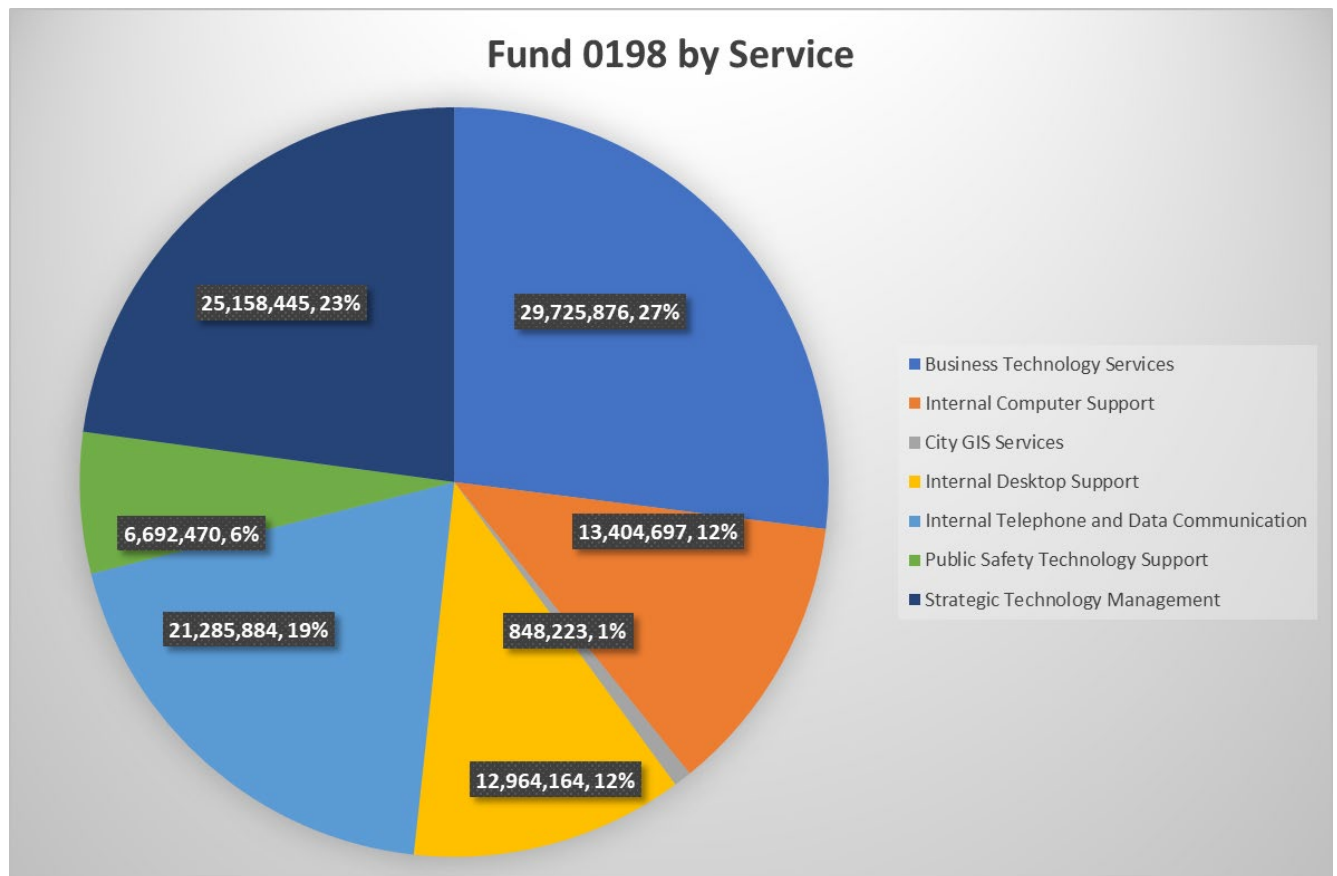
Fund 0198 – Data Services as of 11/30/22

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	2,488,938	19,496,372	(656,322)
Overtime Pay	41,612	41,612	4,783	41,612	-
Pension	2,858,569	2,858,569	358,004	2,779,597	(78,972)
Health Benefits	1,908,328	1,908,328	126,376	1,609,376	-
Worker's Compensation	49,182	49,182	-	49,182	-
Other Personnel Services	737,996	737,996	90,713	1,026,563	(10,385)
Total Personnel Services	**25,748,381**	**25,748,381**	**3,068,814**	**25,002,702**	**(745,679)**
Supplies	759,552	759,552	44,975	773,177	13,625
Contractual Services	83,683,424	83,683,424	28,618,413	84,303,880	620,456
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
Total Expenditures	**110,191,357**	**110,191,357**	**31,732,202**	**110,079,759**	**(111,598)**

Fund 0198 by Service

- Business Technology Services — 29,725,876, 27%
- Internal Computer Support — 13,404,697, 12%
- City GIS Services — 848,223, 1%
- Internal Desktop Support — 12,964,164, 12%
- Internal Telephone and Data Communication — 21,285,884, 19%
- Public Safety Technology Support — 6,692,470, 6%
- Strategic Technology Management — 25,158,445, 23%

C. ITS Staffing & Hiring Report

1. *ITS Funded Staffing Levels*

IT Fund	FY 20	FY 21	FY 22	FY 23	FY 24 Plan
Fund 0191 - 9-1-1 Technology Support	7.0	7.0	7.0	7.0	7.0
Fund 0197 - Radio Communications	28.2	28.5	30.1	30	30.00
Fund 0198 - Data Services	204.0	190.1	204.0	219.0	219.0
Total	239.2	225.6	241.1	256.0	256.0

2. *Vacancies and Hiring Activities*

- As of December 31, 2022, ITS had 61 vacancies out of the available 256 positions.
- As of December 31, 2022, of the 61 vacancies the disposition was:
  - 2 positions are actively posted
  - 18 had been previously posted and are undergoing review
  - 8 are at the interview stage
  - 6 are undergoing reclassification to re-align within the ITS department
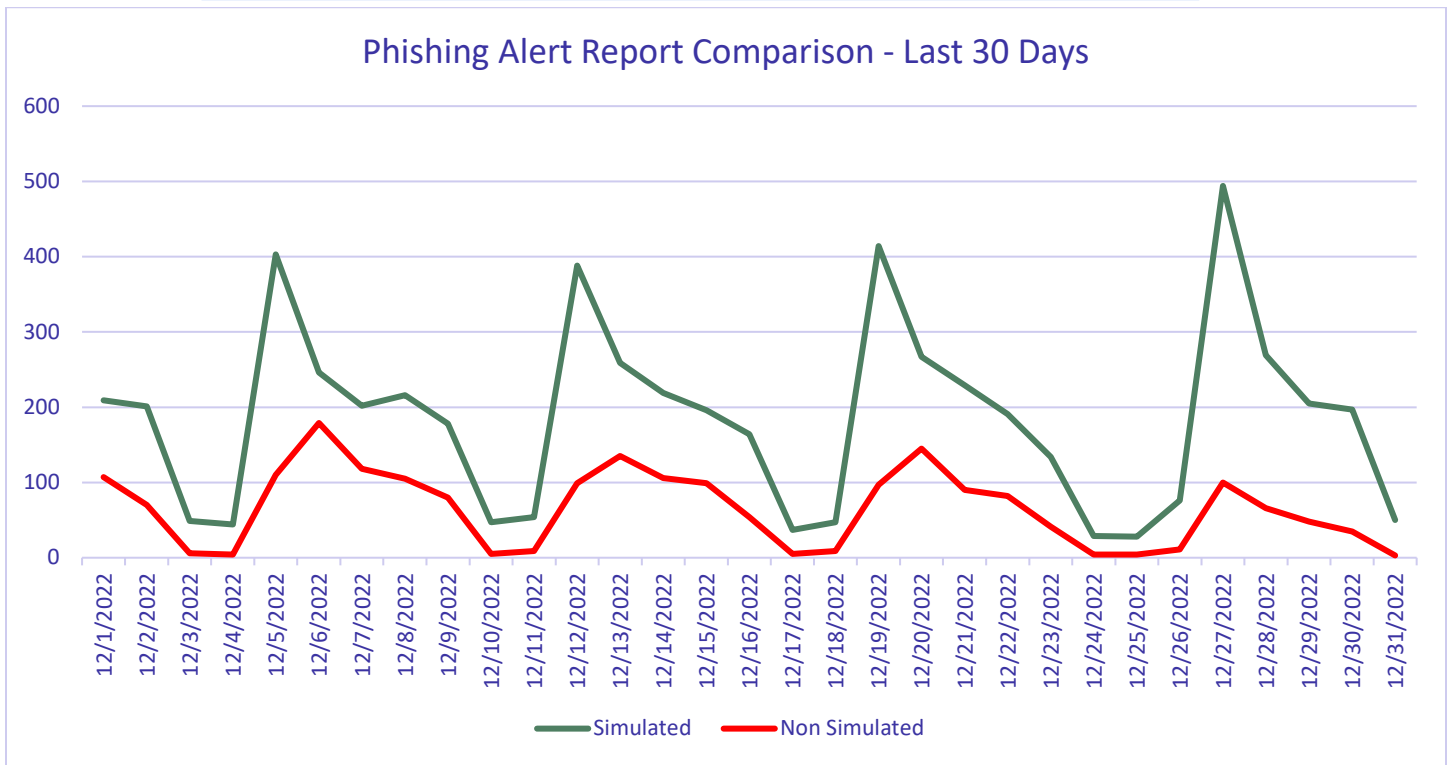 - 33 are awaiting posting

Section 4: Cybersecurity Programs

A. Awareness Training

Security Awareness training is measured on an annual basis. Over the past 12 months ITS has witnessed a steady decline in risk scoring for Employee's annual training. Beginning with each new fiscal year the City will undergo 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. The information below illustrates the enrollment and completion efforts of employee training over the course of the year. FY 2021-22 the City completed 99% of 18 training campaigns covering HIPAA, PCI, and Cybersecurity.

- o 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.

All Phishing Activity

Deleted   Failed   Reported

Phishing Alert Report Comparison - Last 30 Days

Simulated   Non Simulated

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.
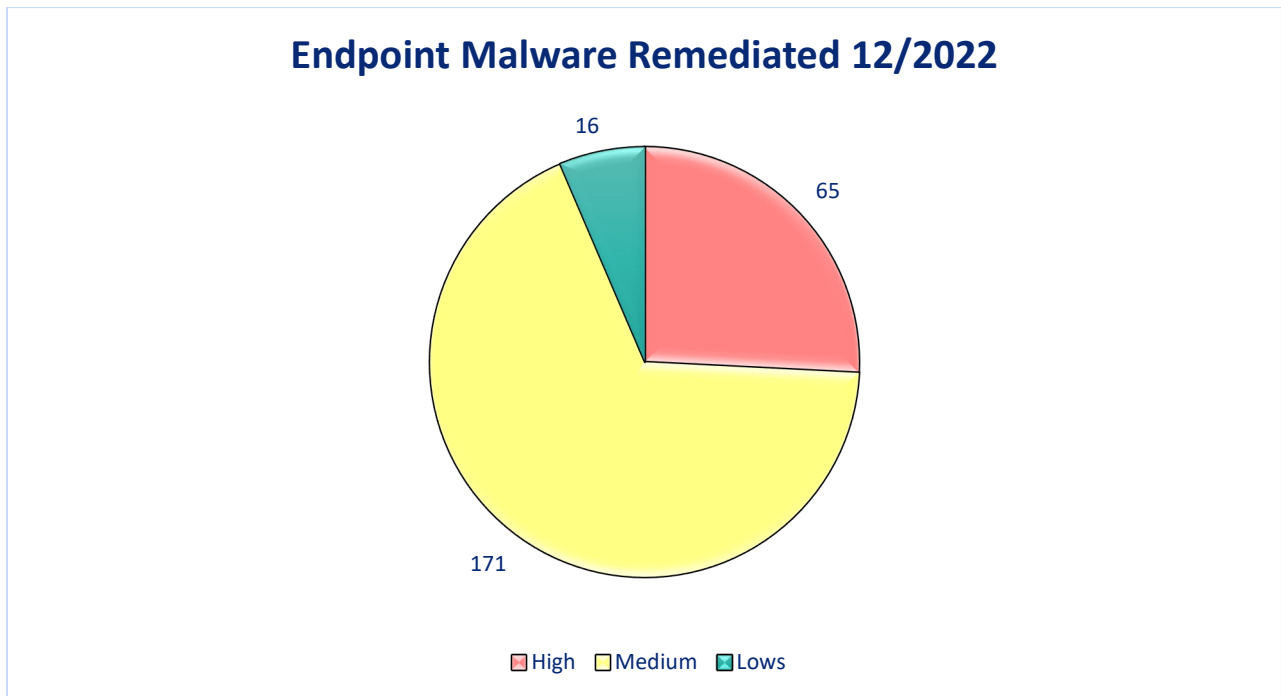
Capability Maturity Model Levels

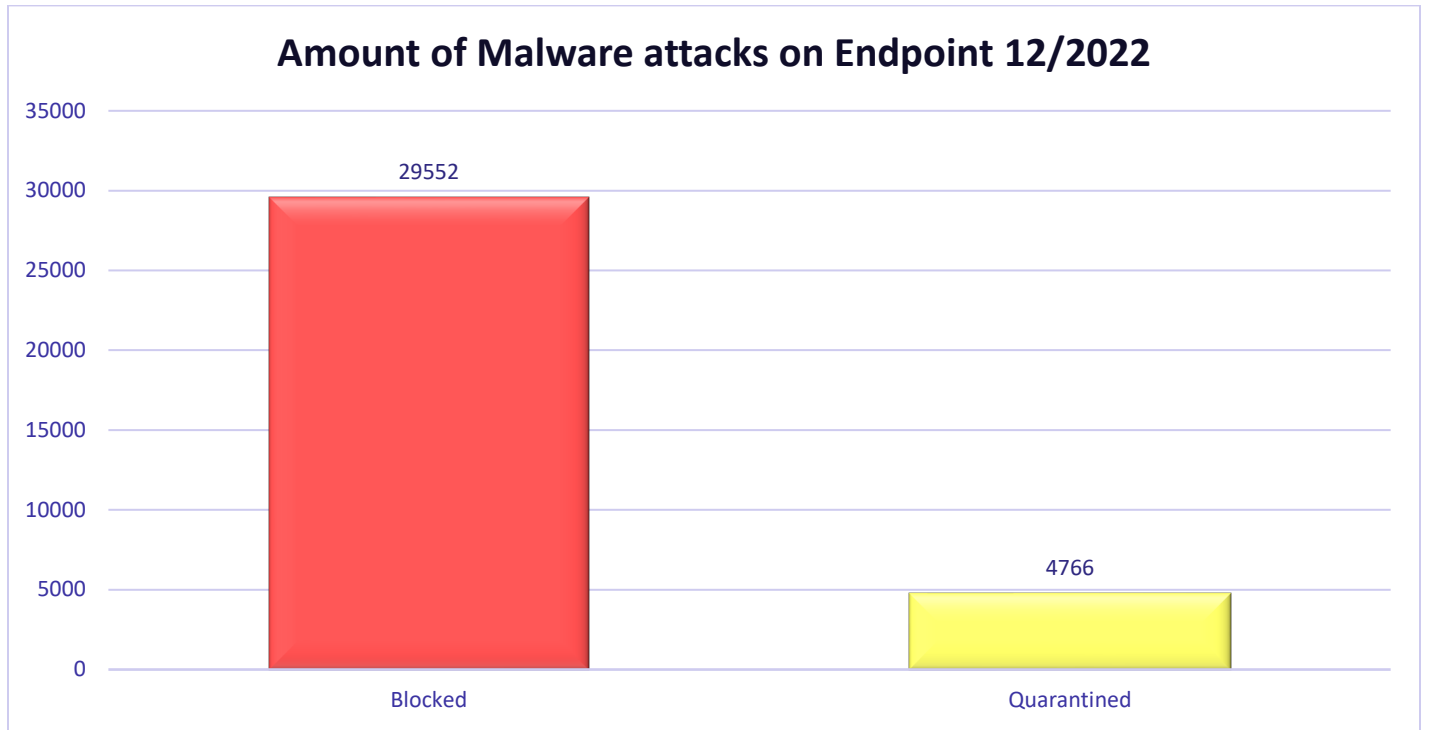| NIST Cybersecurity Framework Functions	Level 1 Initial	Level 2 Repeatable	Level 3 Defined	Level 4 Managed	Level 5 Optimized
Identify	Little to no cybersecurity risk identification.	Process for cybersecurity risk identification exists, but it is immature.	Risks to IT assets are identified and managed 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.
Protect	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 are operationalized through automation and advanced technologies.
Detect	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 are continuously learning behaviors and adjusting detection capabilities.
Respond	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 IT personnel, procedures, technologies are regularly tested and updated.
Recover	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 IT 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 are the current status for endpoint attack metrics.

Endpoint Malware Remediated 12/2022

16

65

171

High   Medium   Lows

Amount of Malware attacks on Endpoint 12/2022

   2. Email Screening

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

City of Dallas Mail Processed 12/2022

	Total Attempted Incoming Mail	Clean Incoming Messages	Threat Messages	SPAM mail	Total Outgoing mail	Blocked Outgoing
Quantity	5,007,858	2,996,608	813,088	1,198,162	38,460	2,568
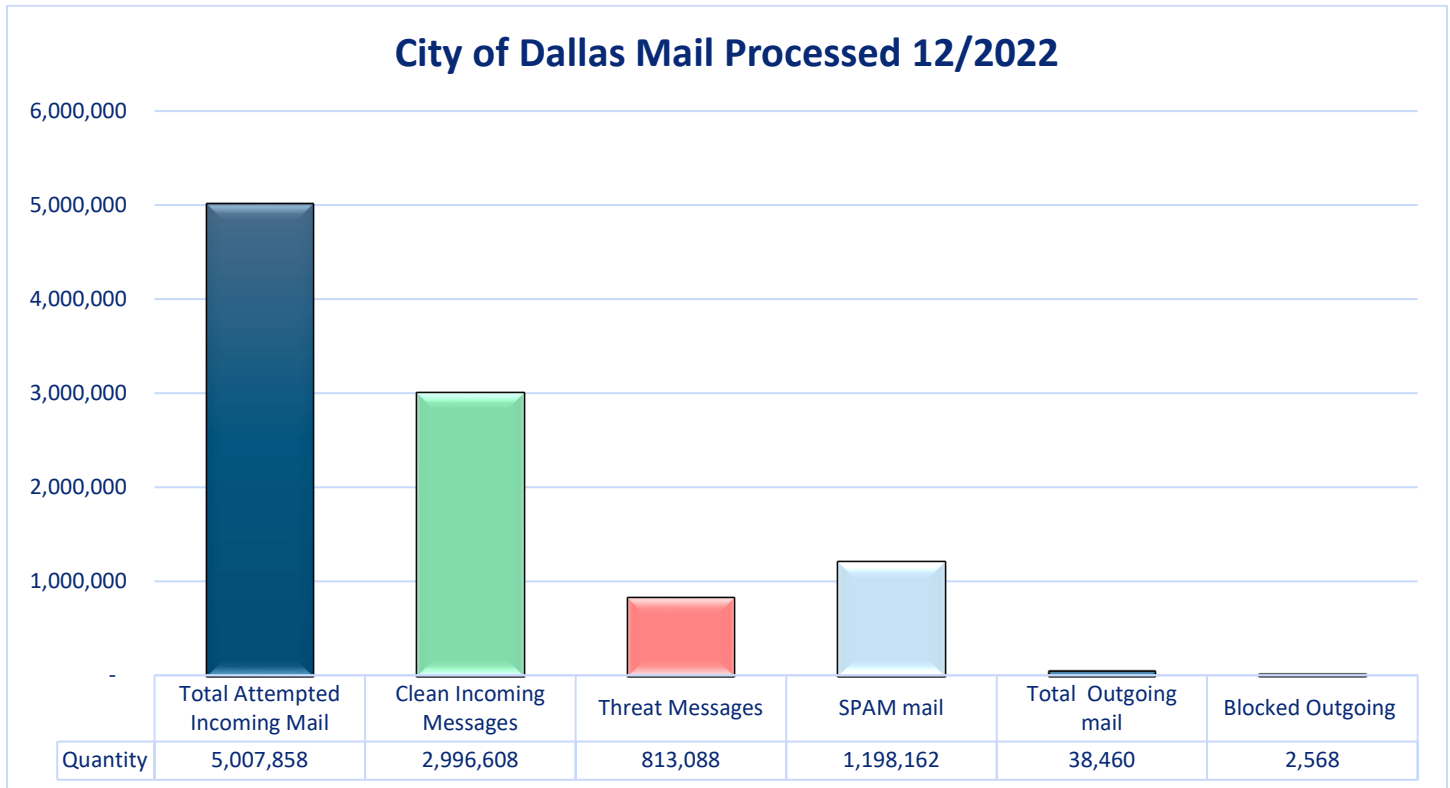
Section 5: IT Infrastructure

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. Network and Telecommunications (December 2022 Activities)

- o All Park and Recreation locations have completed network circuit upgrade
- o All public service teams have been successfully migrated to the new P25 compliant Public Safety Radio System.
- o Burn-in testing for Public Safety layer on the P25 system initiated in December 2022.   City Hall Security team in Courts migrated to Public Safety layer for testing. Migration of Public Safety users will begin following testing. is in process of being scheduled
- o Upgrades to the Emergency Services Internet Protocol Network (ESINet) were completed as an initial phase of the Next Generation 911 system which significantly modernizes capabilities of the City's 911 emergency center.

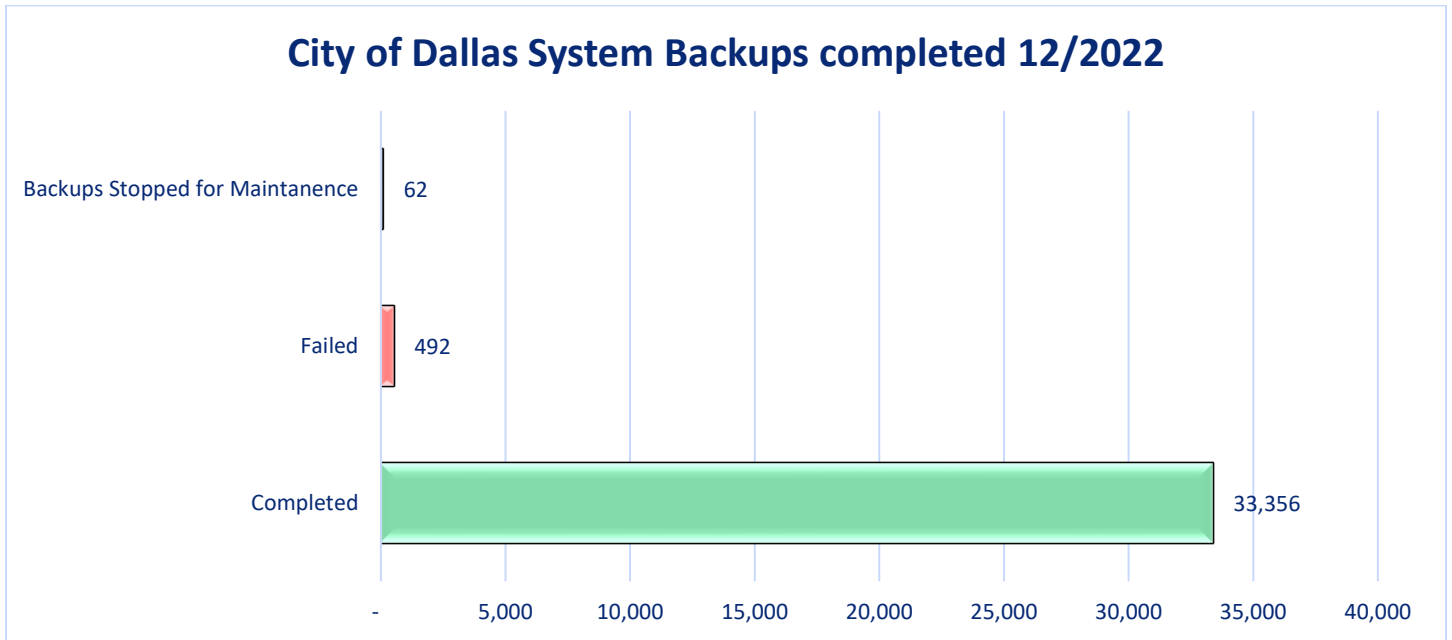## B. Compute & Storage (December 2022 Activities)

- o Completed upgrading the City's virtual environment VCenter ESXi host hardware.
- o Continuing the upgrade of end-user devices to latest operating system image to address security vulnerabilities. Less than 500 devices of inventory remaining to upgrade.

C. Data Center Improvements (December 2022 Activities)

- o Data center access Standard Operating Procedure developed to improve access control. Criminal Justice Information Services (CJIS) certifications now required for access to City's Data Center.
- o Decommissioning of additional hardware on Data Center floor in progress and palettes of decommissioned hardware has been transferred to City Store for disposition.

D. Disaster Recovery and Business Continuity

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.

City of Dallas System Backups completed 12/2022

Backups Stopped for Maintanence	62
Failed	492
Completed	33,356

(x-axis: -, 5,000, 10,000, 15,000, 20,000, 25,000, 30,000, 35,000, 40,000)

E. Audit

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

Audit Remediation 12/22

Legend:
- Low Implemented
- Low Under review
- Medium Implemented
- Medium Not Implemented
- High Implemented
- High Under Review
- High Not Implemented

Audit Remediation Stage 12/22

Legend:
- Implementation in Progress
- No Follow-up Yet
- Closed