

# Memorandum



CITY OF DALLAS

DATE June 9, 2023

TO Honorable Mayor and Members of the City Council

SUBJECT **Technology Accountability Report – May 2023**

Please find attached the Technology Accountability Report (TAR) based on information through May 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.

This report contains information regarding the Ransomware attack launched against the City on May 3, 2023. As there is still an ongoing investigation into this event, only information which can be released publicly is included in this report. Upon completion of the investigation, an After-Action Report (AAR) will be completed to document lessons learned and establish a Plan of Actions and Milestones (POAM) to address findings from the review of the event. A future TAR report will provide information from the AAR and POAM.

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

A handwritten signature in blue ink that reads "Jack Ireland".

Jack Ireland  
Chief Financial Officer

c: TC Broadnax, City Manager  
Tammy Palomino, Interim City Attorney  
Mark Swann, City Auditor  
Billerae Johnson, City Secretary  
Preston Robinson, Administrative Judge  
Kimberly Bizer 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

# Technology Accountability Report (TAR)



City of Dallas

**As of May 31, 2023**

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**Prepared by Information & Technology Services**

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**1500 Marilla Street, 4DS  
Dallas, TX 75201**

**214-671-9868**

# Executive Summary

In May 2023 a major ransomware attack was launched against the City of Dallas, significantly impacting service operations that rely upon technology. This TAR report provides preliminary information regarding the attack and its impacts. As of May 31, 2023, the City continues its recovery operations to fully restore services to a pre-attack level. As there is still an ongoing criminal investigation into this event, only information which can be released publicly is included in this report. Upon completion of the investigation, an After-Action Report (AAR) will be completed to document lessons learned and establish a Plan of Actions and Milestones (POAM) to address findings from the review of the event. A future TAR report will provide information from the AAR and POAM.

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

- Section 1: IT Programs & Projects – During May 2023, 7 major projects were completed:
  - The **Code Case Management System Phase 2 for Boarding Homes** project provided functionality to support service requests and other functions related to boarding homes. The application was completed using the City’s Salesforce platform. The project will be removed from the active project list for the June 2023 TAR. (Project #4 on Major Projects List)
  - The **Court Case Management System for Courts & Detention Services (CTS)** project upgraded the current case management system to improve stability and performance and provide additional functionality to support business functions. The project was implemented on May 26<sup>th</sup> and the team is working to resolve remaining issues. The project will be removed from the active project list for the June 2023 TAR pending final system acceptance. (Project #11 on Major Projects List)
  - The **DPD Auto Pound** project provides a cloud-based public portal to allow residents to pay fines and fees online to the auto pound to recover their vehicles. The project will be removed from the active project list for the June 2023 TAR. (Project #26 on Major Projects List)

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## As of 5/31/23

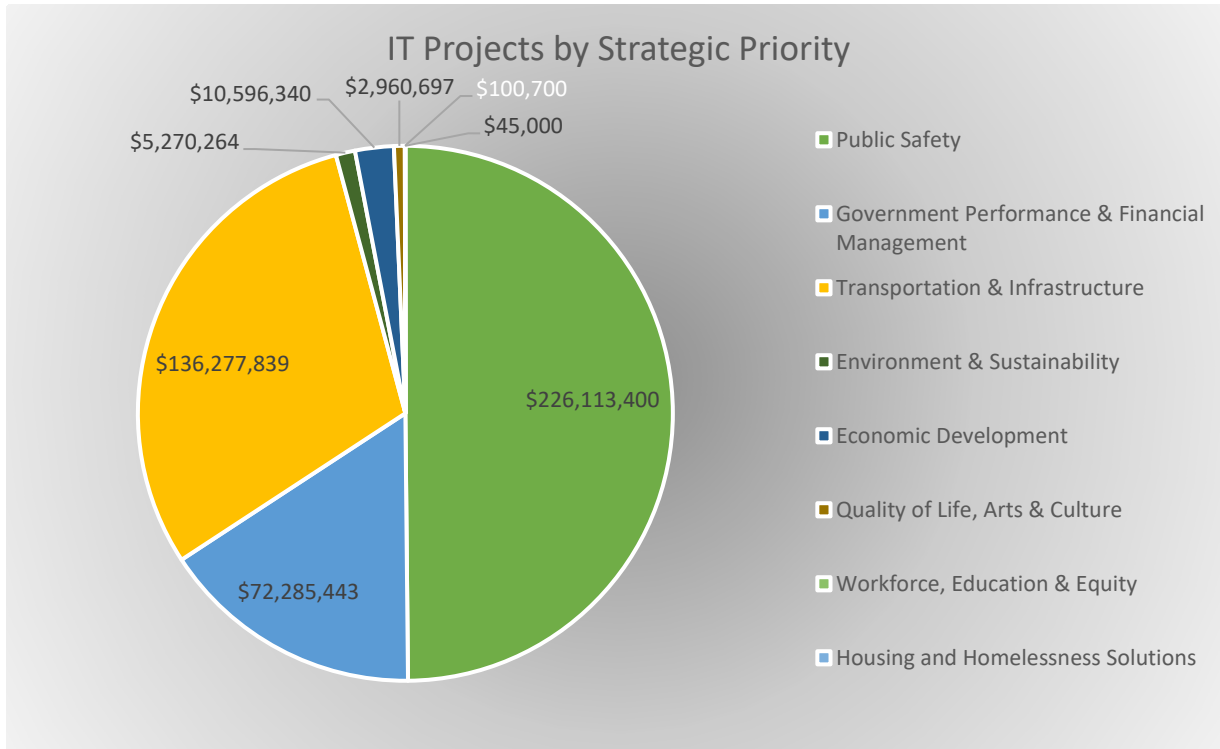
- The **DPD Early Warning System** project provides a data-driven, decision-making support application to assist in the identification of personnel-related training and support needs. The project will be removed from the active project list for the June 2023 TAR. (Project #34 on Major Projects List)
  - The **IT Infrastructure for New Parks and Recreation Sites, Phase II** project provided IT equipment, network and other services for new Parks and Rec sites. The project will be removed from the active project list for the June 2023 TAR. (Project #56 on Major Projects List)
  - The **IT Infrastructure for the Bachman Aquatics Center** project provided IT equipment, network and other services for the Bachman Aquatics Center. The project has been removed from the active project list for this month. (Project #57 on Major Projects List)
  - The **Boards & Commissions Management Solution** project provides a solution to assist with the City Council's Boards and Commissions appointment process. The project will be removed from the active project list for the June 2023 TAR. (Project #61 on Major Projects List)
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- Section 2: IT Operations – The information in the IT Operations portion of the May 2023 TAR does not incorporate the full impact of the May ransomware attack. Additionally, due to the earlier-than-normal publication of the May 2023 TAR, certain information was not yet available at its publication.
  
  - Section 4: Cybersecurity Programs – A section summarizing the May ransomware attack and its impact has been added.

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# Section 1: IT Programs & Projects

## A. Project Pipeline

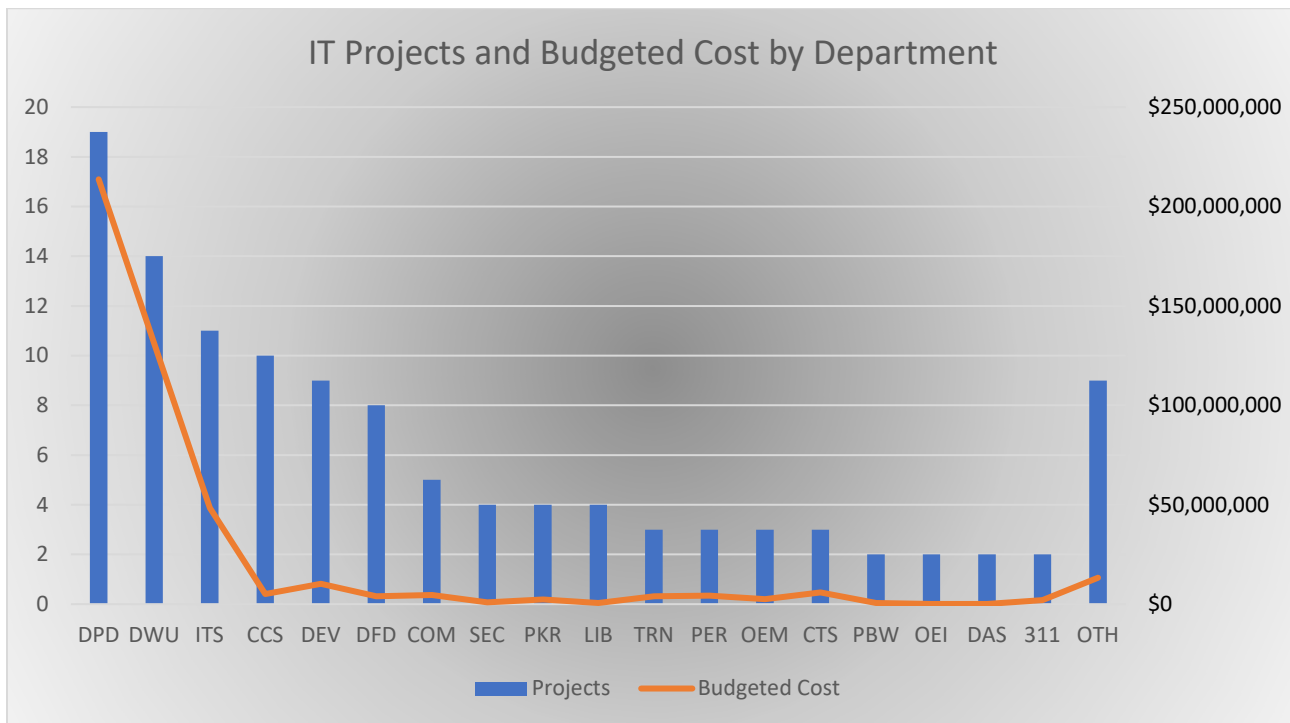
### 1. IT Projects by Strategic Priority



### NOTES:

1. As of 05/31/2023, ITS has 117 approved IT projects in the pipeline.
2. The total budgeted costs for the 117 projects are \$453,767,683.
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 Public Safety Strategic Priority with a total of 33 projects at a total budgeted cost of \$226.1M, followed by Government Performance & Financial Management with a total of 29 projects at a total budgeted cost of \$72.3M, Transportation & Infrastructure with a total of 20 projects at a total budgeted cost of \$136M, and Environment & Sustainability with 13 projects at a total budgeted cost of \$5M.

2. IT Projects and Budgeted Cost by City Department





NOTES:




1. 28 City Departments are represented across the 117 approved IT projects in the pipeline.
2. Dallas Police Department has 19 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 11 projects at a total budgeted cost of \$48.3M, Code Compliance with 10 projects at a total budgeted cost of \$5.1M, and Development Services with 9 active projects at a total budgeted cost of \$10.2M.
3. 9 Departments have 1 active project each, making up the Other (OTH) group in figure 2 above.

## 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.

-  : 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. <a href="#">(\$2,134,245)</a>	GPFM	311	Sep-23	In Process	
2.	Ethics Point Salesforce Integration	The purpose of this system is to promote and support ethical financial compliance. <a href="#">(\$63,164)</a>	GPFM	ATT	Dec-23	In Process	
3.	Core Financial System Upgrade	The CG 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. <a href="#">(\$11,823,168)</a>	GPFM	CCO	Dec-24	In Process	
4.	Code Case Management System Phase 2 (Boarding Homes)	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. <a href="#">(\$344,858)</a>	Environment & Sustain	CCS	Oct-20	Completed	





## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
5.	Asset Management System	The Code Compliance office is seeking an asset management system to manage a number of 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	Delayed	
6.	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). Will Allow business owners to access, complete, submit, and track their business permit applications online. (\$318,050)	Environment & Sustain	CCS	Jul-23	In Process	
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. (\$482,611)	Environment & Sustain	CCS	Aug-23	In Process	
8.	Body Worn Camera's for Code Personnel	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	
9.	Remote Video Streaming	COM is currently exploring acquiring equipment that would allow live video and audio to be streamed from offsite locations to our control room. This is a frequently requested service by various departments and Council offices and aligns with COM's mission. (\$192,166)	GPFM	COM	TBD	In Process	
10.	Closed Captioning System for City Council Meetings	Closed Captioning on the live webstream/cable channel of City Council meetings will help meet ADA compliance and our Equity and Inclusion goals. (\$504,612)	GPFM	COM	Jun-23	In Process	
11.	Court Case Management System: On Prem Upgrades	CCSM upgrades that was going to be done with the Cloud hosted solution is still required. (\$259,016)	Public Safety	CTS	Dec-23	In Process	
12.	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	
13.	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. (\$14,062)	Environment & Sustain	DAS	TBD	Delayed	


## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
14.	iNovah Upgrade	This project upgrades existing software to most recent version and provides new hardware for iNovah, the Point of Sale/cashiering system for Sustainable Development. (\$484,350)	ECO	DEV	Oct-23	In Process	
15.	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	Oct-23	On Hold	
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. (\$50,000)	ECO	DEV	Oct-23	On Hold	
17.	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 service...etc. This project will identify, procure, and implement a customer queue management solution for Development Services. (\$60,000)	ECO	DEV	Jul-23	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. (\$9,746,780)	ECO	DEV	Sep-25	In Process	
19.	Telestaff	Telestaff automated scheduling and staffing system for City of Dallas Public Safety 24-hr employees' integration with Workday Payroll System. (\$731,238)	Public Safety	DFD	Sep-22	On Hold	
20.	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	On Hold	
21.	Unmanned Aerial Systems (Drones)	Unmanned Aerial Systems (UAS) may be used during crucial emergency response occurrences., giving real-time video to improve situational awareness, officer safety, and thermal assessment. They are useful in a variety of special operations, including Haz-Mat, search and rescue, water rescue, and wildland fires, allowing Incident Command and Executive Staff to perform airborne surveys of an incident. (\$111,400)	Public Safety	DFD	Sep-23	In Process	



## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
22.	IT Infrastructures For New Fire Stations 19, 21, 36, 41, 46, 58 & 59	Total of 8 new and rebuild 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. <a href="#">(\$131,688)</a>	Public Safety	DFD	Oct-23	In Process	
23.	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 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 into, procure, and implement a new, modern station alerting system for Dallas Fire Rescue. <a href="#">(\$1,860,000)</a>	Public Safety	DFD	Sep-24	In Process	
24.	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. <a href="#">(\$700,000)</a>	Public Safety	DPD	TBD	On Hold	
25.	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. <a href="#">(\$0)</a>	Public Safety	DPD	Nov-23	In Process	
26.	DPD - Auto Pound	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. <a href="#">(\$311,006)</a>	Public Safety	DPD	Feb-23	Completed	
27.	WEB-RMS	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 will be resolved with the upgrade. <a href="#">(\$1,010,000)</a>	Public Safety	DPD	TBD	In Process	
28.	Real Time Crime Center (RTCC) Video Integration (Previously Starlight)	To provide an analytics-driven video monitoring platform, capable of alerting the Dallas Police Department's Real Time Crime Center (RTCC) of criminal behavioral indicators and activity occurring at local businesses. <a href="#">(\$747,052)</a>	Public Safety	DPD	11-23	In Process	
29.	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. <a href="#">(\$217,633)</a>	Public Safety	DPD	10-23	In Process	

## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
30.	COBWEBS	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. (\$93,353)	Public Safety	DPD	Apr-23	In Process	
31.	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. (\$54,898,873)	Public Safety	DPD	Jun-23	In Process	
32.	Axon Air (Drones)	UAS capture vital information that officers can use to resolve very dangerous situations with in the best possible way. The information can be sent, in real-time, to officers in the field. Also, the data gathered from UAS can be key in an investigation for locating suspects who are wanted for a crime. For example, murder suspect barricades himself in a residence, the UAS will be able to be sent in to let the officers in the field know if there are innocent citizens in danger or if the officers have time to deescalate and talk the suspect out. UAS technologies are used by departments and agencies across the nation. Agencies that use UAS technology have seen great benefits from the information gathered in real time situations. Combining this technology with Axon Air will provide the real time intelligence and evidentiary needs to create the holistic solution. (\$20,160)	Public Safety	DPD	Jul-23	In Process	
33.	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. (\$478,589)	Public Safety	DPD	Sep-23	In Process	
34.	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. (\$302,495)	Public Safety	DPD	Oct-23	Completed	




## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
35.	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	
36.	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	
37.	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	
38.	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	Dec-20	Ongoing	
39.	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	Mar-23	In Process	
40.	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 in regard to data center improvements. (\$685,972)	GPFM	ITS	Apr-23	In Process	
41.	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	Jun-23	In Process	
42.	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	

## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
43.	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. <a href="#">(\$618,180)</a>	GPFM	ITS	Dec-23	In Process	
44.	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. <a href="#">(\$10,700,000)</a>	GPFM	ITS	Apr-24	Ongoing	
45.	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. <a href="#">(\$300,134)</a>	GPFM	ITS	Aug-24	In Process	
46.	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. <a href="#">(\$40,000,000)</a>	GPFM	ITS	Mar-25	In Process	
47.	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. <a href="#">(\$2,169,090)</a>	Transport & Infra	DWU	Dec-22	In Process	
48.	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. <a href="#">(\$4,901,864)</a>	Transport & Infra	DWU	Sep-23	In Process	
49.	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. <a href="#">(TBD)</a>	Transport & Infra	DWU	May-24	In Process	
50.	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. <a href="#">(\$12,989,751)</a>	Transport & Infra	DWU	May-28	In Process	
51.	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. <a href="#">(TBD)</a>	QOL	LIB	Sep-23	In Process	

## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
52.	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-23	In Process	
53.	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	Mar-23	Delayed	
54.	Stormwater Compliance Information Management System	OEQ staff currently manage mission-critical and legally sensitive environmental management consent decree (EMCD) /permit-required tasks through 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	Mar-23	In Process	
55.	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	May-22	Delayed	
56.	PKR-IT Infrastructures for New 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. (\$670,000)	QOL	PKR	Apr-23	Completed	
57.	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	Jun-24	In Process	
58.	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	Dec-23	In Process	
59.	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 in order to ensure continuity of our billing. (\$0)	Transport & Infra	DWU	Jul-24	In Process	
60.	Electronic Document Management - EDMS	Project Provides Electronic Document Management and Document Archive System for City Secretary's Office. (\$336,562)	GPFM	SEC	Dec-20	On Hold	
61.	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 3 key areas: New Boards and Commission Application Portal, Upgraded Boards and Commission Tracking/Reporting Solution. (\$12,675)	GPFM	SEC	Apr-22	Completed	
62.	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	Nov-22	In Process	

## As of 5/31/23

#	Project Name	Description	Strategic Priority	Dept.	Estimated Completion Date	Project Status	Value Adds
63.	Build an Ethics Financial Reporting Solution	The purpose of this system is to promote and support ethical financial compliance. (\$15,000)	GPFM	SEC	Feb-23	On Hold	

### NOTES

**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. Core Financial System Upgrade.** The contract requirements and project timeline have been finalized and the contract action is targeting June 2023 Council agenda.

**4. Code Case Management System Phase 2 (Boarding Homes).** Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.

**5. Asset Management System.** Multiple departments have requested an asset/inventory management tool. ITS is consolidating requirements across departments to perform market research to determine whether an option for a city-wide solution can be provided.

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

**11. Court Case Management System: On Prem Upgrades.** System development was completed on 5/26 and implemented to production. Working through post-implementation issues before the project is ready for closure.

**13. DAS Inventory Management Tool.** Multiple departments have requested an asset/inventory management tool. ITS is consolidating requirements across departments to perform market research to determine whether an option for a city-wide solution can be provided.

**14. iNovah Upgrade.** Project is currently in planning stage. Project date will be updated after the planning phase is complete.

**16. Development Services Training Simulator.** This project is on hold due to competing priorities.

**19. Telestaff.** Telestaff Scheduling System is operational. Telestaff integration with Workday Payroll system on hold for a fully executed Accenture contract.

**20. Smart Device/Technology Behavioral Health App for DFR members.** Following initial software selection review, the project requirements are being re-evaluated.

**22. IT Infrastructures For New Fire Stations 19, 21, 36, 41, 46, 58 & 59.** Project is being implemented in an agile fashion with rolling implementations. Next phase is expected to complete October 2023. No. of Fire Stations complete to date include Sta. 46, 36, 41 Temp, 58, 59 and 19. Two stations remaining 41 Main and FS 21/AVI Center for this project to complete.



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**As of 5/31/23**

- 24. Mobile Surveillance Platform Vehicles (Formerly known as Bait Car).** Awaiting funding to be identified.
- 26. DPD - Auto Pound.** Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.
- 27. WEB-RMS.** This project is still in the procurement process. Purchase request has been submitted. New date will be provided when available.
- 29. Ricoh-Fortis Document Management System Replacement.** This project is in the planning stages. New date will be provided when available.
- 31. P25 Compliant Radio Project.** Effective with August 2022, the new P25 Public Safety Radio system was live, operational, and performing as designed. All City departments have been migrated to the new system as of May 31, 2023. Project closure expected in June 2023.
- 34. Early Warning System.** Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.
- 36. In Car Video - Body Worn Camera - Interview Room.** Budget costs reflect new 10-year contract from Council Resolution 221784 dated Dec 14, 2022.
- 37. 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.
- 40. Visualization Engineering Services.** Phase I completed 4/28/2023. Phase II currently in planning stages. Project date will be updated after planning is complete.
- 41. ServiceNow Phase 2.** This project is being implemented in an “Agile” fashion – rolling out in numerous phases. Estimated completion of next phase estimated June 2023.
- 43. 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.
- 45. IT Project and Portfolio Management Tool.** Project schedule adjusted in anticipation of Council approval in June 2023.
- 47. Enterprise Capital Project Management System (ECPMS) Phase 2.** PCR pending by Vendor for update requirements/deliverables for linear segments, linear structures and X/Y coordinates, working with DWU GIS to finalize requirements.
- 55. Implement Workday Prism.** Project On Hold awaiting new contract with Accenture for integration support.
- 56. PKR-IT Infrastructures for New Parks and Recreation Sites Phase 2.** Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.
- 60. 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.

- 61. Boards and Commissions Management Solution.** Project work is complete and this project is moving to closure. This project will be removed from the TAR next month.
- 62. SEC Records Inventory Management Solution.** Requirements have been developed. Awaiting Council approval.
- 63. Build an Ethics Financial Reporting Solution.** Project date will be updated after this project has completed the procurement process.

## C. Changes to Major Project Status List

1. Projects Implemented since last report.
  - a. Code Case Management System Phase 2 (Boarding Homes) (#4 on this month's Major Projects List). This project will be removed from the list next month.
  - b. Court Case Management System: On Prem Upgrades (#11 on this month's Major Projects List). This project will be removed from the Major Projects list next month but will continue to be tracked until closure.
  - c. DPD - Auto Pound (#26 on this month's Major Projects List). This project will be removed from the list next month.
  - d. Early Warning System (#34 on this month's Major Projects List). This project will be removed from the list next month.
  - e. PKR-IT Infrastructures for New Parks and Recreation Sites Phase 2 (#56 on this month's Major Projects List). This project will be removed from the list next month.
  - f. IT Infrastructure for Bachman Aquatic Center (#57 on April TAR's Major Projects List). This Center opened May 19, 2023. It has been removed from the TAR.
  - g. Boards and Commissions Management Solution (#61 on this month's Major Projects List). This project will be removed from the list next month.
2. New Projects added to the Major Projects List - None.
3. The May IT Governance Board meeting was held on May 31, 2023. The Governance Board was briefed on ITS efforts to bring more Enterprise solutions to the City of Dallas. There were no new projects added during the month of May 2023.

# Section 2: IT Operations

IT Operations provides information and status updates on the IT operations to include outages and incidents impacting city operations. Source data is drawn from the City’s ServiceNow platform which was implemented in April 2021 to better manage incident reporting and resolution and to better track and control requests for IT services. ServiceNow documents incidents and service requests and is used by technicians and departments alike to submit, track, manage, and resolve pending requests and issues.

## A. Outage Report

### 1. Monthly Help Desk Report

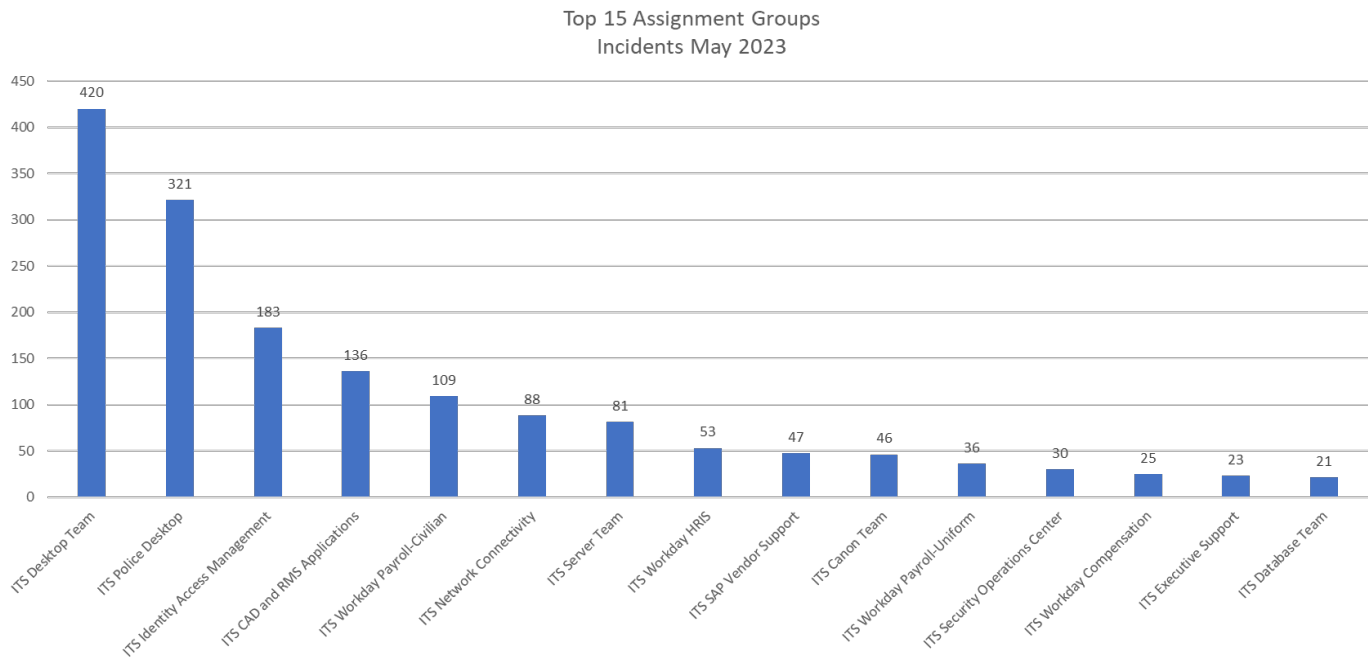
Category	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Total Calls	7502	7546	8006	7252	7616	7151	7222	9694	6969	8230	7319	11740
Answered	7136	7138	7763	7017	6921	6132	6222	7117	6778	8048	7171	7977
Abandoned	366	408	243	235	695	1019	1000	1084	191	182	148	1398
Abandoned (<10sec)	166	172	115	93	273	408	380	1493	81	81	65	
Abandoned %(<10sec)	2.3	2.4	1.5	1.3	3.9	6	5	8	1	1	1	12

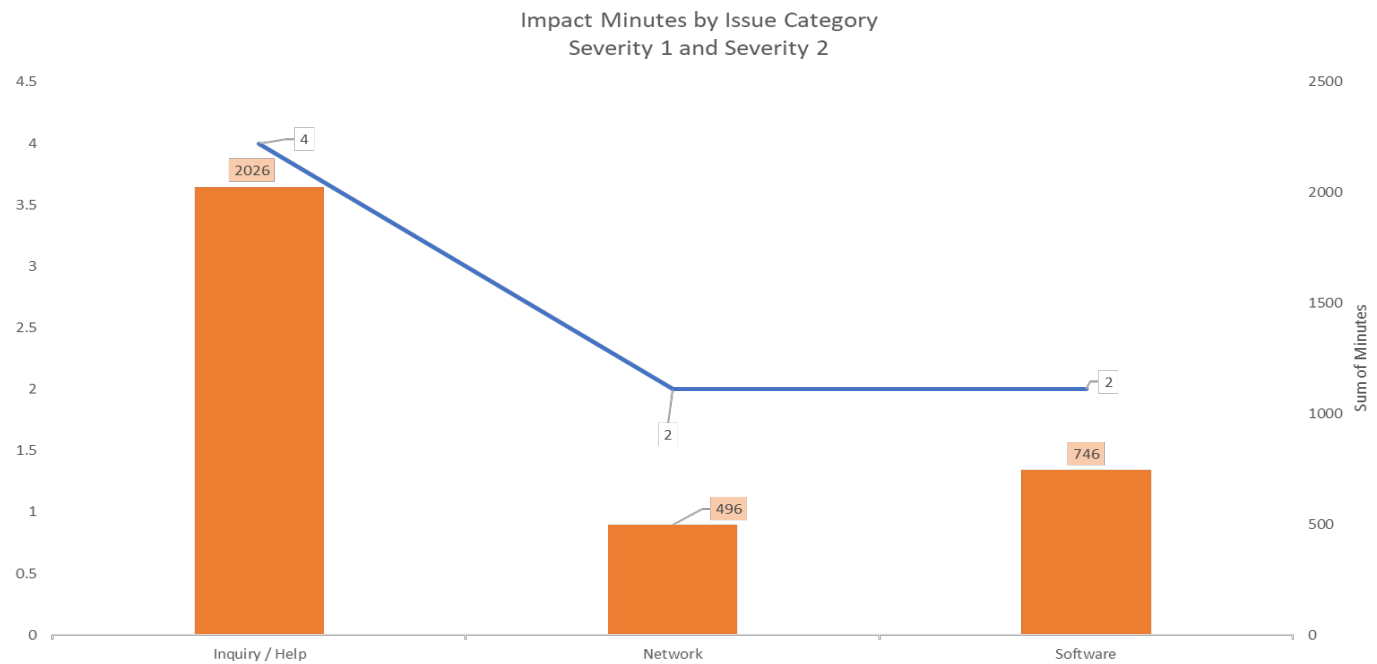
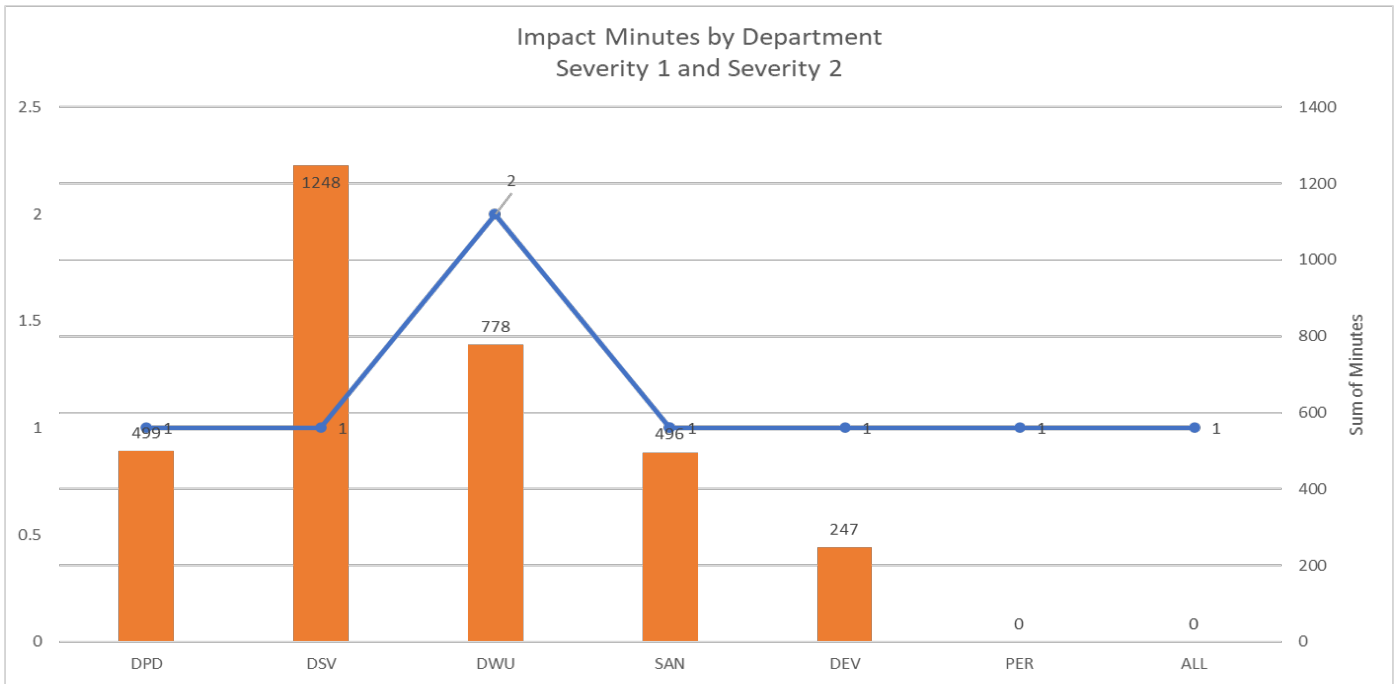
Metric	Metric	Current Month	Trend								
Average Speed to Answer – Voice	Average Speed to Answer - Voice	<b>02:51</b>	* High speed to answer is cause of high volume of calls related to ransomware attack								
Password Related Incidents	Password Related Incidents	<b>56%</b>	<table border="1"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Mar</td><td>59.9%</td></tr> <tr><td>Apr</td><td>58.5%</td></tr> <tr><td>May</td><td>56.3%</td></tr> </table>	Month	Value	Mar	59.9%	Apr	58.5%	May	56.3%
Month	Value										
Mar	59.9%										
Apr	58.5%										
May	56.3%										
First Contact Resolution - Incident	First Contact Resolution - Incident	<b>0.00%</b>	<table border="1"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Mar</td><td>84%</td></tr> <tr><td>Apr</td><td>89%</td></tr> </table>	Month	Value	Mar	84%	Apr	89%		
Month	Value										
Mar	84%										
Apr	89%										
Average Duration – Service Desk	Average Duration - Service Desk	<b>0.3 Days 487 Minutes</b>	<table border="1"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Mar</td><td>626</td></tr> <tr><td>Apr</td><td>989</td></tr> </table>	Month	Value	Mar	626	Apr	989		
Month	Value										
Mar	626										
Apr	989										
Average Duration – Field Services	Average Duration - Field Services	<b>4.7 Days 6788 Minutes</b>	<table border="1"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Mar</td><td>7935</td></tr> <tr><td>Apr</td><td>7875</td></tr> <tr><td>May</td><td>6788</td></tr> </table>	Month	Value	Mar	7935	Apr	7875	May	6788
Month	Value										
Mar	7935										
Apr	7875										
May	6788										
Average Duration - PD Field Services	Average Duration - PD Field Services	<b>3.8 Days 5597 Minutes</b>	<table border="1"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Mar</td><td>9452</td></tr> <tr><td>Apr</td><td>4344</td></tr> <tr><td>May</td><td>5597</td></tr> </table>	Month	Value	Mar	9452	Apr	4344	May	5597
Month	Value										
Mar	9452										
Apr	4344										
May	5597										

**NOTES:**

1. In May 2023, the IT Helpdesk received 11740 calls for support. This is a ~4450 increase over April which saw over 7319 calls, which was generated by the ransomware attack at the beginning of the month and is significantly higher than the yearly average of ~7700 per month.
2. First Contact Resolution (Incidents) for May was not available at reporting time and will be provided in next month’s report.
3. Field Services (excluding DPD) average service duration of 4.7 days in May is an increase from 3.4 days in April. The increase is primarily related to the Ransomware incident.
4. Field Services for DPD saw a similar increase in average service duration 3.8 days in May from 2.7 days in April.

**2. Monthly Incident Report (Break/Fix “My Computer doesn’t work”)**





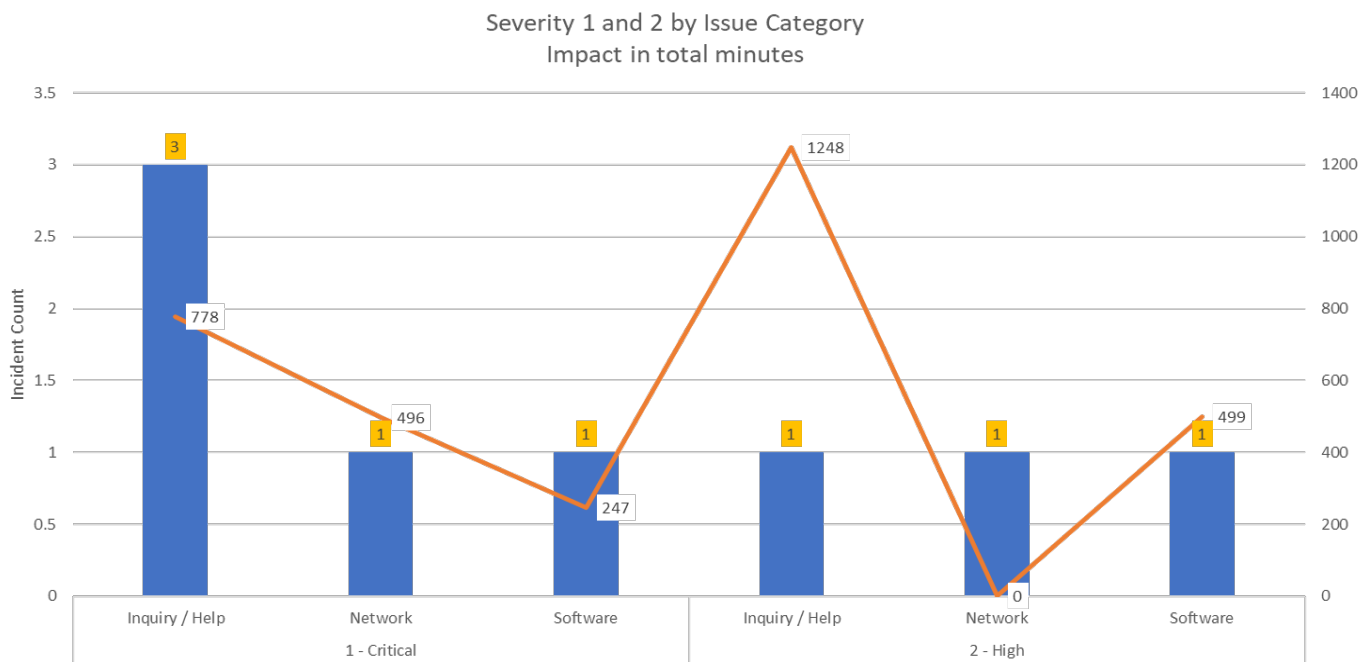
\*Statistics for May do not include Ransomware Incident totals, as incident continued into June and will be reported once closed

**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.

## As of 5/31/23

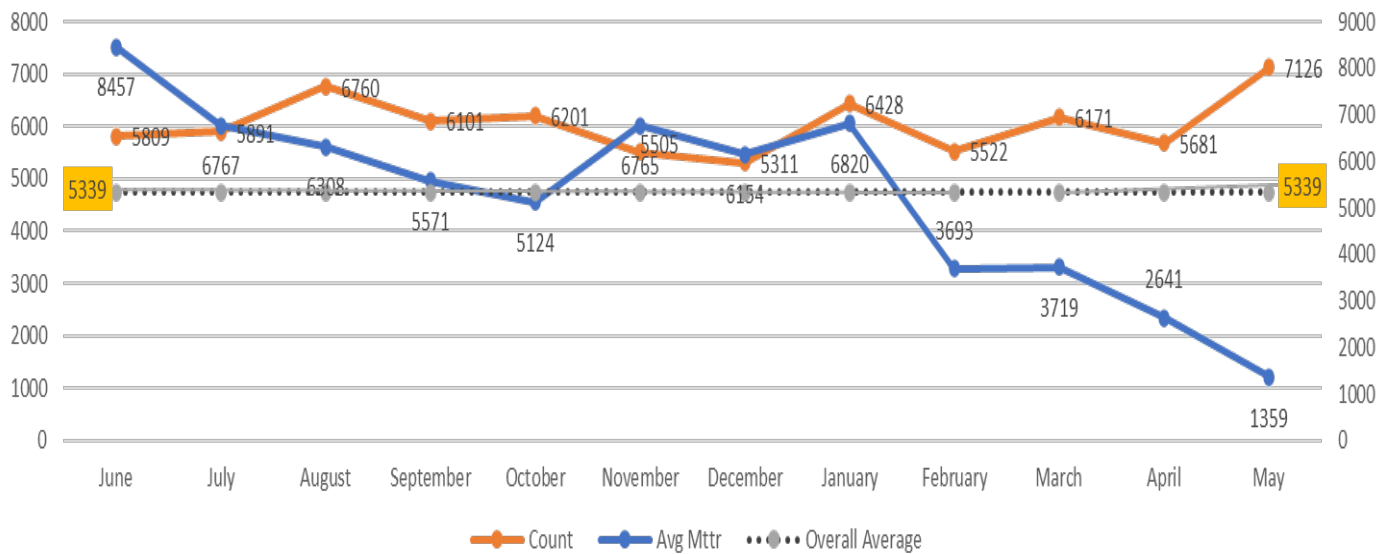
- These data points are extracted from ServiceNow based upon input by city IT technicians. Our analysis reveals that there are incidents which are resolved but have not been timely or appropriately closed out within the ServiceNow platform, resulting in artificially inflated resolution timeframes. ITS is working with IT service delivery managers to improve documented processes to ensure timely updates to ServiceNow in order to accurately reflect the actions for the incident and to provide a more representative experience. As is demonstrated by the reduction in MTRR over the past several months, our efforts in this area are having positive results.



### NOTES:

- This chart provides the distribution of incidents and impact minutes over specific services and delineated by Critical and High severity.

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. Due to the ransomware incident, May 2023, MTTR figures will be calculated and reported in the June TAR report. Current data indicates a high number of incidents reported that have not been resolved and thus skewing the data points.
3. Diligence by the technicians to document and resolve tickets in a timely manner is the primary driver of the reduction in MTTR.

\*Open incidents may impact May MTTR in June report

### 3. Monthly Major Outage Report

Priority	Description	Department	Primary	Secondary	Hours
1 - Critical	Posse: Posse and Outrider are not working they receive an error message	DEV	Software	Troubleshooting	4.1
1 - Critical	Major Outage: Multiple applications unreachable: Citywide	ALL	Inquiry / Help		#VALUE!
1 - Critical	SAP Basis: Issues with Account Locks, Saving information, Time Out & Slowness	DWU	Inquiry / Help	Escalation/Status	8.9
1 - Critical	Network Network phones are experiencing an outage in entire building. Unable to send outgoing or accept ingoing calls. Entire network is down.   7677 Fair Oaks	SAN	Network	Outage	8.3
1 - Critical	Server apfcs00 itron mobile services needs to be restarted	DWU	Inquiry / Help	How To	4.1
2 - High	CAD: Slowness	DPD	Software	Troubleshooting	8.3
2 - High	Network: FSCTY04 not accessible: 1500 MARILLA   See IN0198647	PER	Network	Outage	#VALUE!
2 - High	Courts Phone ringing intermittently   Presidio incident ticket INC10134498	DSV	Inquiry / Help	Policy/Procedure	20.8

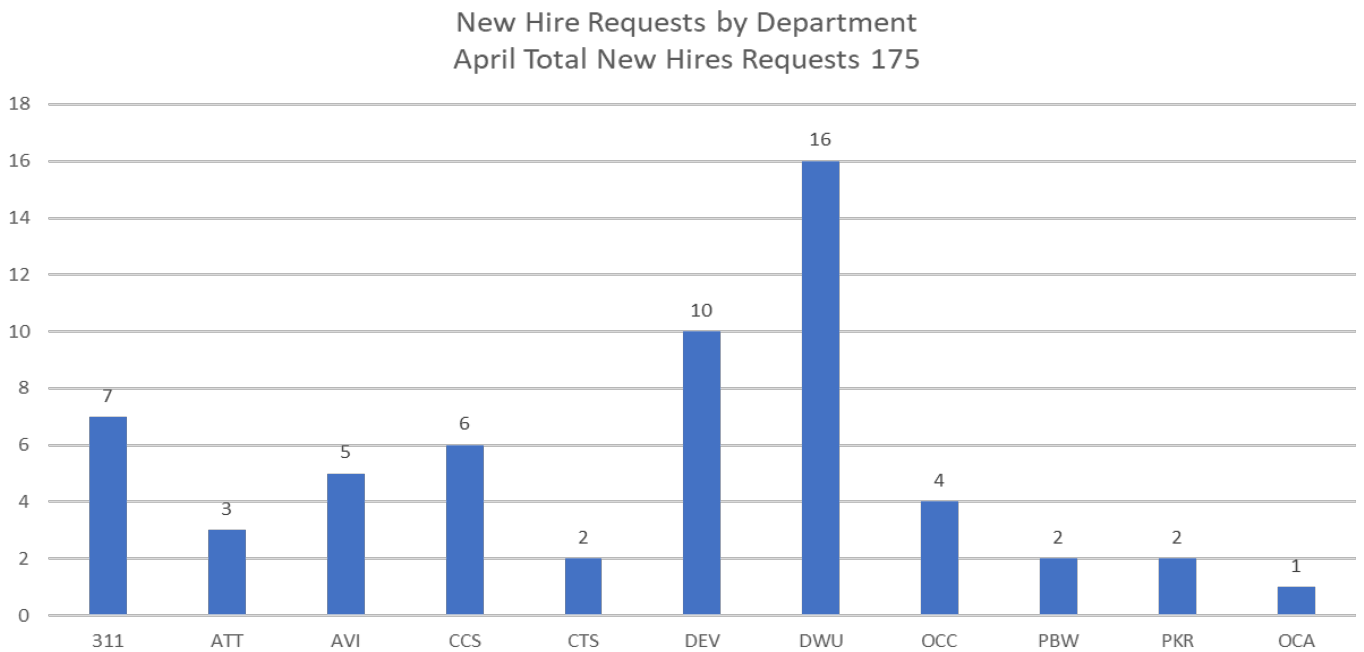
#### NOTES

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
3. May saw an increase in both average time to repair and total outage time for Major Incidents compared to April. May average MTTR of 544 hours compared to April of 42.1 hours. April total outage 3,268\* hours compared to April which had 715 hours
4. May saw 8 Major incidents, 5 critical and 3 high, a decrease of 10 over April of 18, 11 critical and 7 high.
5. NOTE: May 2023 Outage information is severely skewed by the Ransomware attack. Information regarding outage impact caused by the May 3<sup>rd</sup> Ransomware will be documented in an After-Action Review (AAR) report at a future date and provided as a separate analysis in the TAR.



## B. Service Requests (including new employee onboarding)

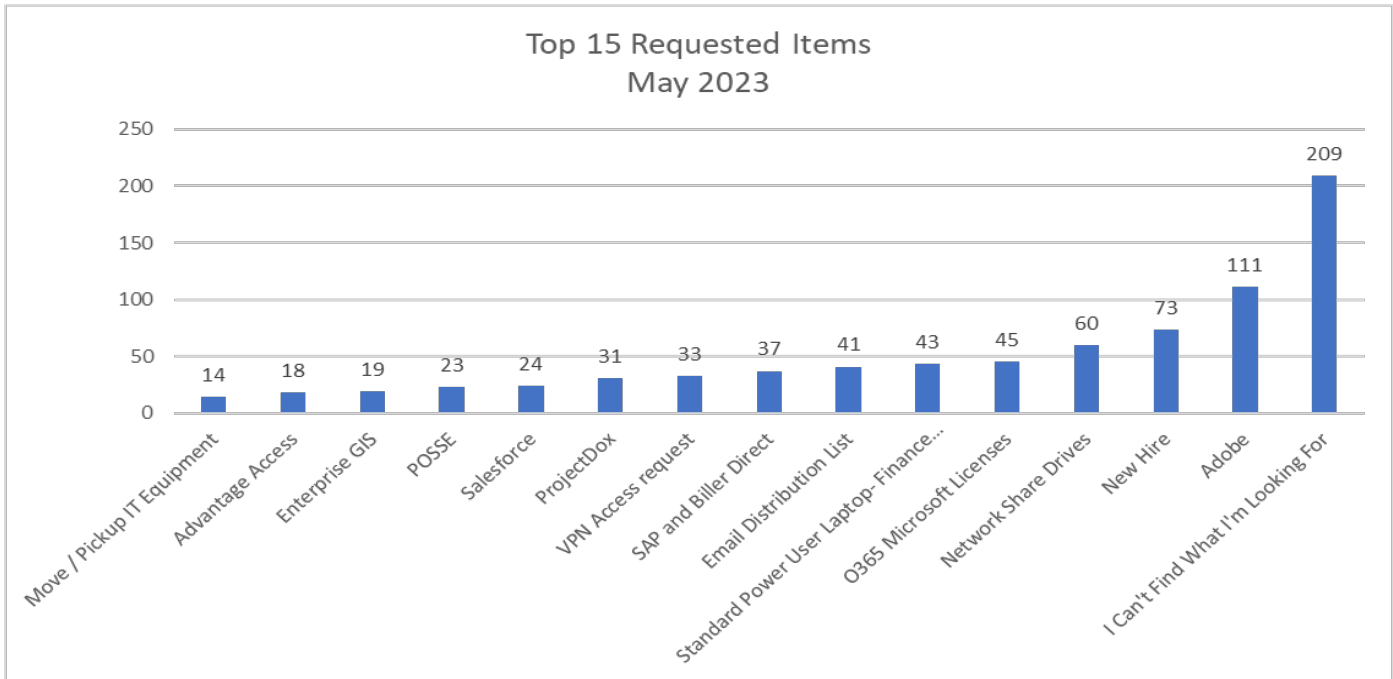
### 1. New Hire Report



### Notes

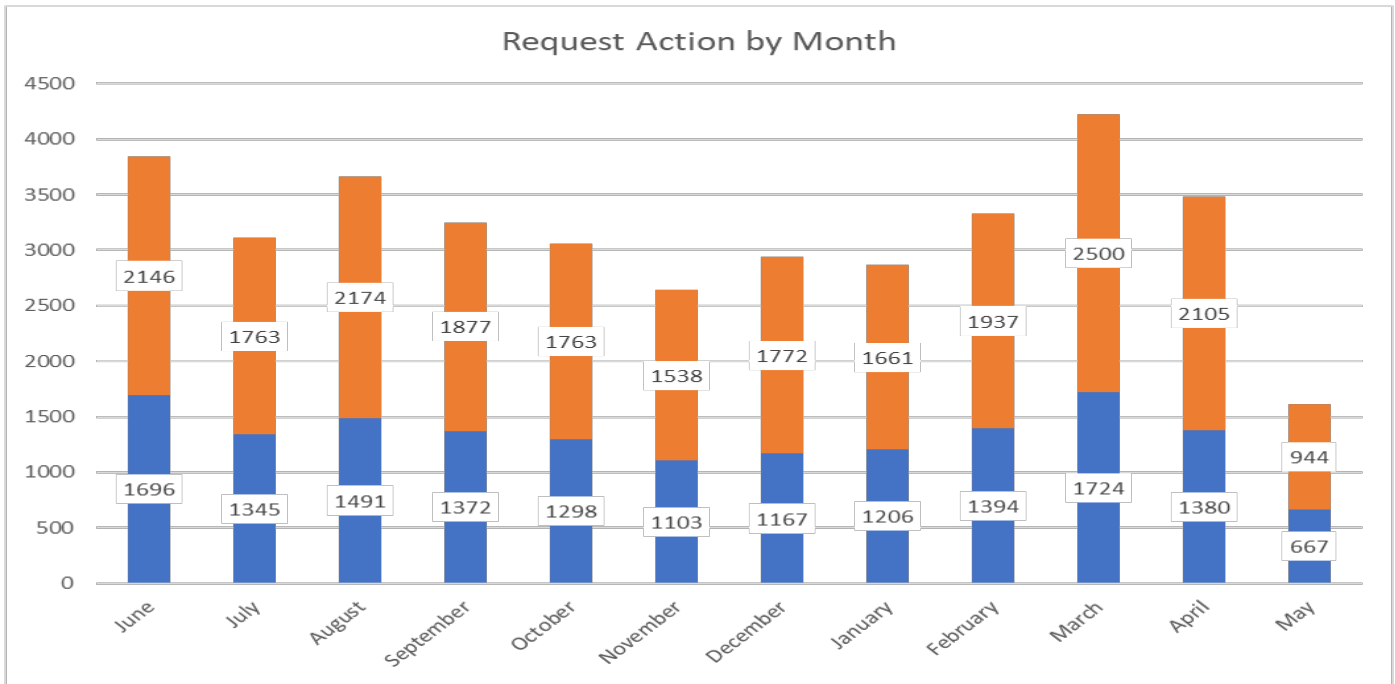
1. In the month of May, a total of 175 requests were opened for new employees.
2. DWU, DEV, and 311 being the top 3 hiring departments. DWU has had 8 consecutive months in the top 3.
3. Blank indicates no department match was available for the requested onboarding at the time the report was generated.

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



**Note**

1. May Service Request actions totaled 667 a decrease of ~1300 over April which totaled 1942. 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.



**Note**

1. This chart illustrates that 667 Request Tickets, generated 944 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. Information in this section is effective through 4/30/2023.

### A. Contract/Procurement Management

#### Upcoming Contracts Requiring Council Approval

Item Approved on May 24 Agenda:

ePlus Technology, Inc – purchasing agreement for acquisition and service maintenance and support of a web application firewall and distributed denials of service protective technologies

- 3-Year agreement
- Contract amount \$514,784
- Adds protective layers to the City’s website
- Allows normal website traffic to flow for normal business use

Items on June 14 Agenda:

Incapsulate – service contract for maintenance and support for the Dallas 311 Customer Relationship Management software

- 1-Year agreement
- Contract amount \$424,360
- Delivered on the Salesforce platform

Paymetric – service contract for the continuation of credit card payment processing services managed by Water Utilities Department

- 1-Year agreement
- Contract amount \$160,100
- Includes conversion/transfer of data for the City’s transition to a new vendor

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## As of 5/31/23

Tritech Software Systems – service contract for continued maintenance and support of the existing computer aided dispatch system, disaster recovery synchronization and a routing server

- 1-Year agreement
- Contract amount \$205,382.69
- Includes a routing server and disaster recovery synchronization

Items on June 28 Agenda:

International Business Machines (IBM) – increase the contract to upgrade the City’s data aggregation platform

- Contract amount \$328,394
- The vendor will upgrade the City’s Big Data platform environments to the latest versions
- Bid Data provides a centralized environment for the City to share, analyze, and visualize data collected from various City systems

Open Solicitation

Fire Station Alerting System (BCZ23-00021813) – system to replace Locution

- Advertised and posted in Bonfire on March 30
- Site visits conducted the week of April 24
- Proposals due by July 28

## B. Budget Performance & Execution

### Fund 0191-9-1-1 System Operations as of April 2023

Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	643,798	643,798	283,967	543,351	(100,447)
Pension	91,413	91,413	43,150	77,228	(14,185)
Health Benefits	54,481	54,481	31,262	54,481	-
Worker's Compensation	1,658	1,658	1,658	1,658	-
Other Personnel Services	14,262	14,262	63,934	67,020	52,758
<b>Total Personnel Services</b>	<b>805,612</b>	<b>805,612</b>	<b>423,971</b>	<b>743,738</b>	<b>(61,874)</b>
Supplies	201,465	201,465	30,951	201,465	-
Contractual Services	13,205,665	13,205,665	7,152,728	13,064,302	(141,363)
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
<b>Total Expenditures</b>	<b>14,212,742</b>	<b>14,212,742</b>	<b>7,607,649</b>	<b>14,009,506</b>	<b>(203,236)</b>

### Fund 0197 - Communication Services (Radio Network) as of April 2023

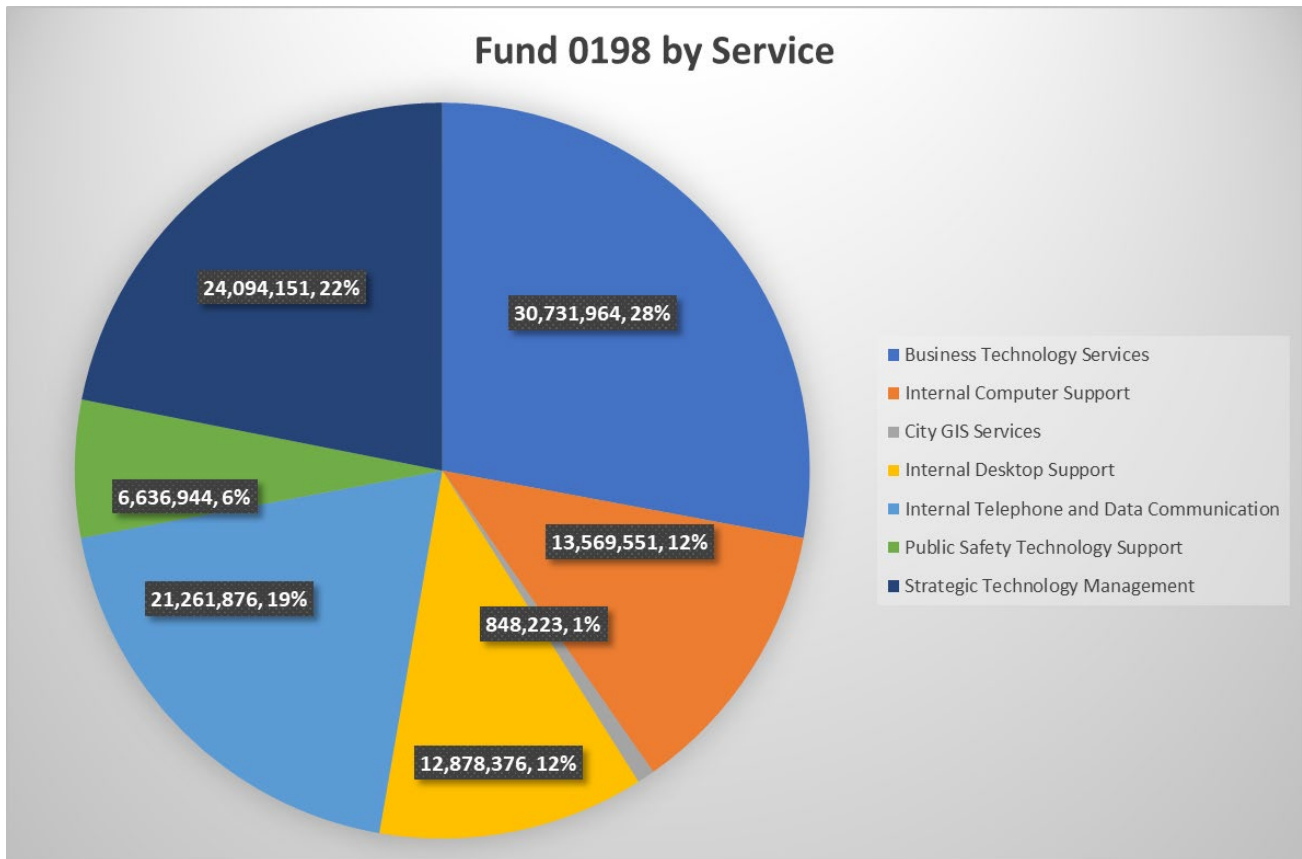
Expenditure Category	FY 2022-23 Adopted Budget	FY 2022-23 Amended Budget	YTD Actual	YE Forecast	Variance
Civilian Pay	1,995,477	1,995,477	962,447	1,801,340	(194,137)
Overtime Pay	51,320	51,320	120,524	128,302	76,982
Pension	282,080	282,080	154,475	264,608	(17,472)
Health Benefits	234,423	234,423	153,872	234,423	-
Worker's Compensation	7,197	7,197	7,197	7,197	-
Other Personnel Services	33,819	33,819	26,893	43,889	10,070
<b>Total Personnel Services</b>	<b>2,604,316</b>	<b>2,604,316</b>	<b>1,425,407</b>	<b>2,479,759</b>	<b>(124,557)</b>
Supplies	1,156,482	1,156,482	391,733	630,348	(526,134)
Contractual Services	13,106,759	13,106,759	3,989,476	13,672,990	566,231
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
<b>Total Expenditures</b>	<b>16,867,557</b>	<b>16,867,557</b>	<b>5,806,616</b>	<b>16,783,098</b>	<b>(84,459)</b>

As of 5/31/23

## Budget Performance & Execution (continued)

### Fund 0198 – Data Services as of April 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	8,626,863	17,075,497	(3,077,197)
Overtime Pay	41,612	41,612	12,837	41,612	-
Pension	2,858,569	2,858,569	1,224,170	2,412,261	(446,308)
Health Benefits	1,609,376	1,609,376	1,006,904	1,598,208	(11,168)
Worker's Compensation	49,182	49,182	49,182	49,182	-
Other Personnel Services	1,036,948	1,036,948	204,797	713,333	(323,615)
<b>Total Personnel Services</b>	<b>25,748,381</b>	<b>25,748,381</b>	<b>11,124,753</b>	<b>21,890,093</b>	<b>(3,858,288)</b>
Supplies	759,552	759,552	3,032,887	804,096	44,544
Contractual Services	83,683,424	83,683,424	57,060,120	87,326,897	3,643,473
Capital Outlay	-	-	-	-	-
Reimbursements	-	-	-	-	-
<b>Total Expenditures</b>	<b>110,191,357</b>	<b>110,191,357</b>	<b>71,217,760</b>	<b>110,021,086</b>	<b>(170,271)</b>



## B. ITS Staffing & Hiring Report

### 1. ITS Funded Staffing Levels

IT Fund	FY 20	FY 21	FY 22	FY 23	FY 24 Plan
<b>Fund 0191 - 9-1-1 Technology Support</b>	7.0	7.0	7.0	7.0	7.0
<b>Fund 0197 - Radio Communications</b>	28.0	28.0	30.0	30.0	30.0
<b>Fund 0198 - Data Services</b>	204.0	190.0	204.0	223.0	223.0
<b>Total</b>	<b>239.0</b>	<b>225.0</b>	<b>241.0</b>	<b>260.0</b>	<b>260.0</b>

### 2. Vacancies and Hiring Activities

- As of May 31, 2023, ITS had 59 vacancies out of the available 260 positions.
- Completed 6 hiring actions and onboarded staff:
  - 2 – Promotions
  - 4 – New external hires
- As of May 31, 2023, of the 59 vacancies the disposition was:
  - 1 is in draft posting
  - 6 are undergoing reclassification to re-align within the ITS department
  - 18 are awaiting posting
  - 11 are actively posted in the month
  - 25 were previously posted
    - 22 are under review
    - 5 are at the interview stage
    - 2 have pending offers with candidates
- 4 Additional positions have been added in support of the Development Services Department effective with January 2023.



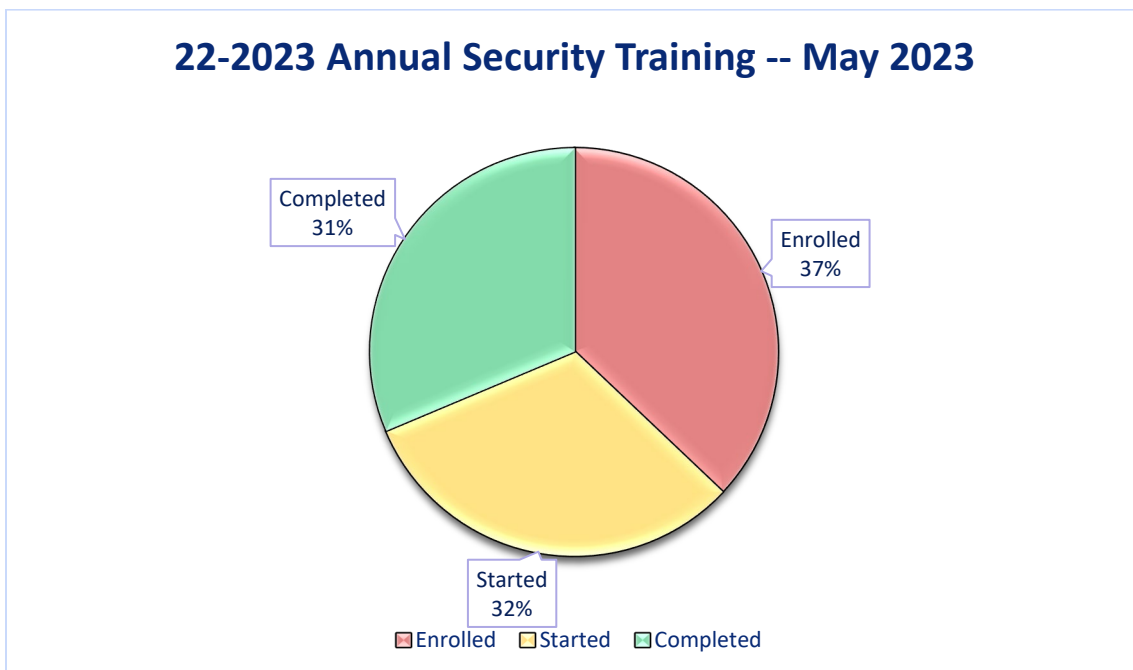
# Section 4: Cybersecurity Programs

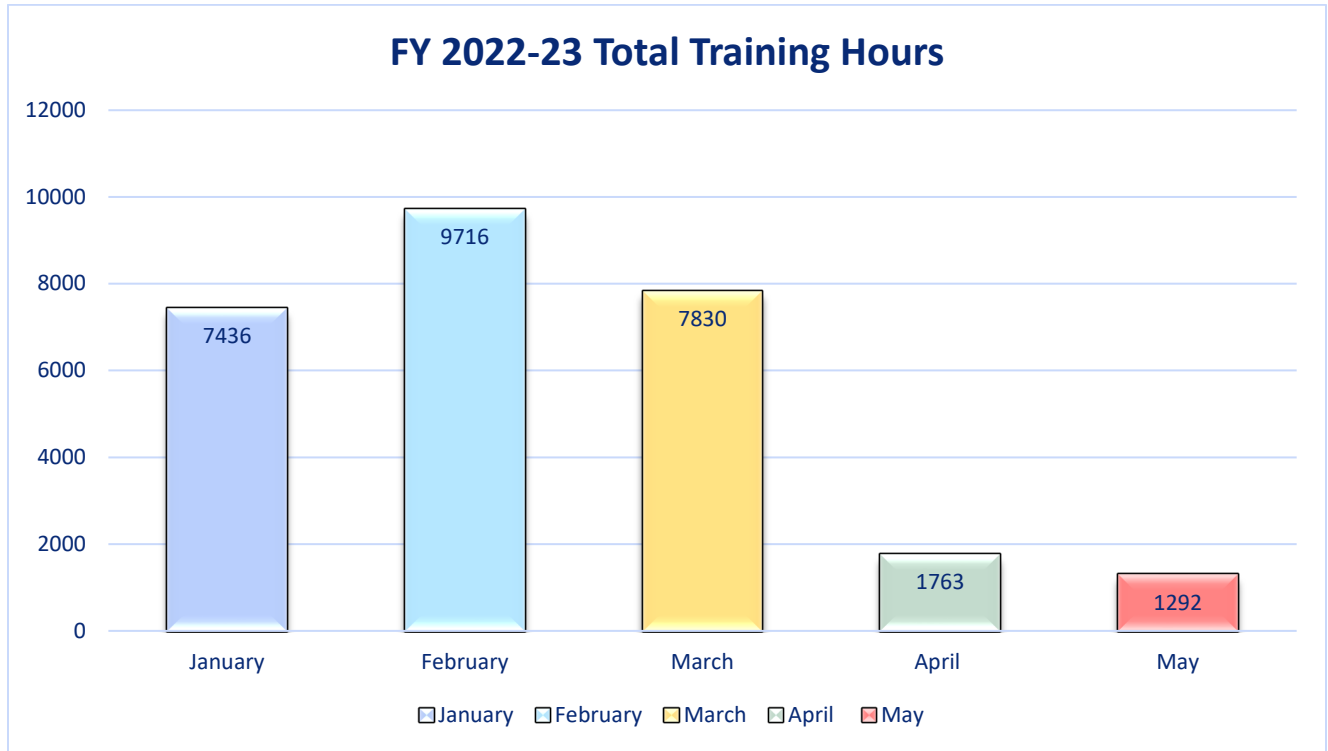
## A. Awareness Training

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.

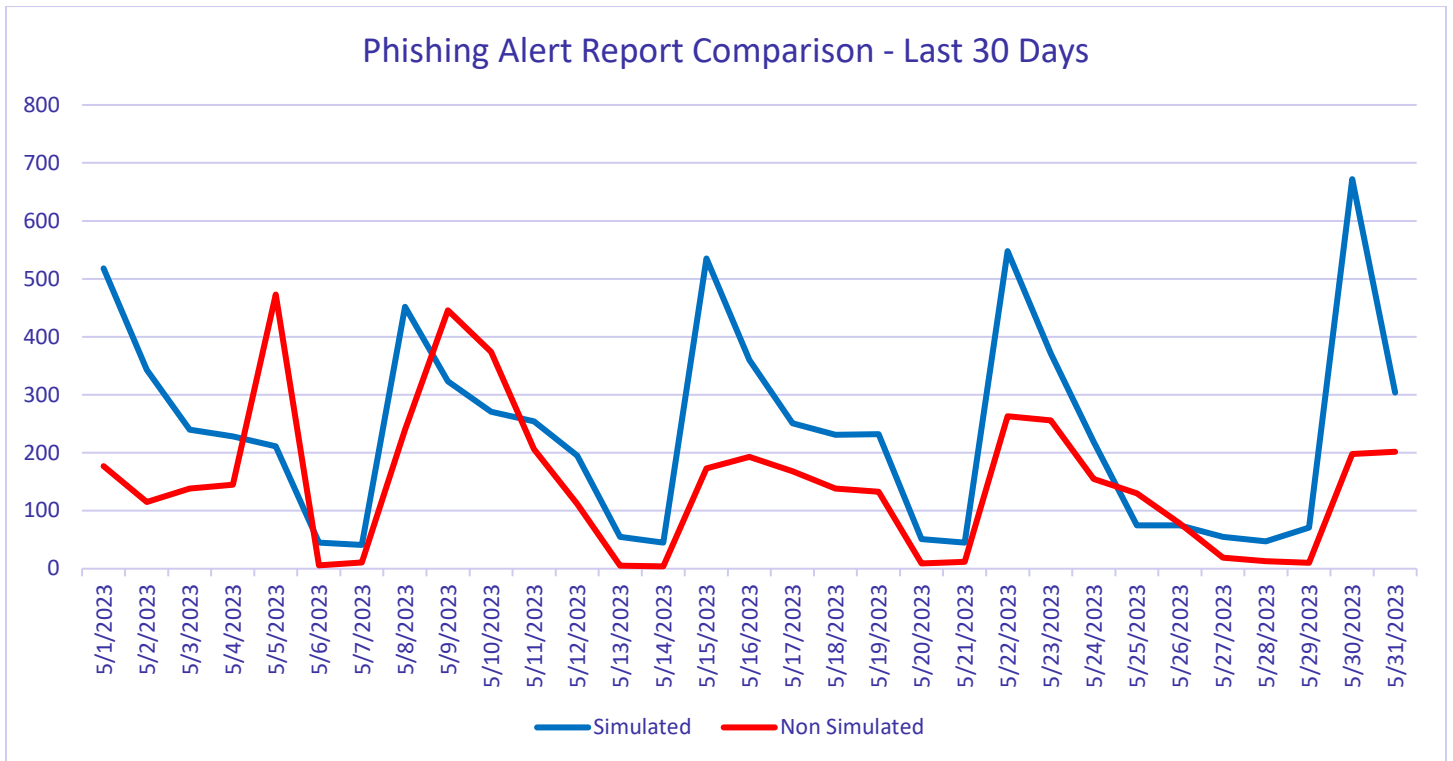
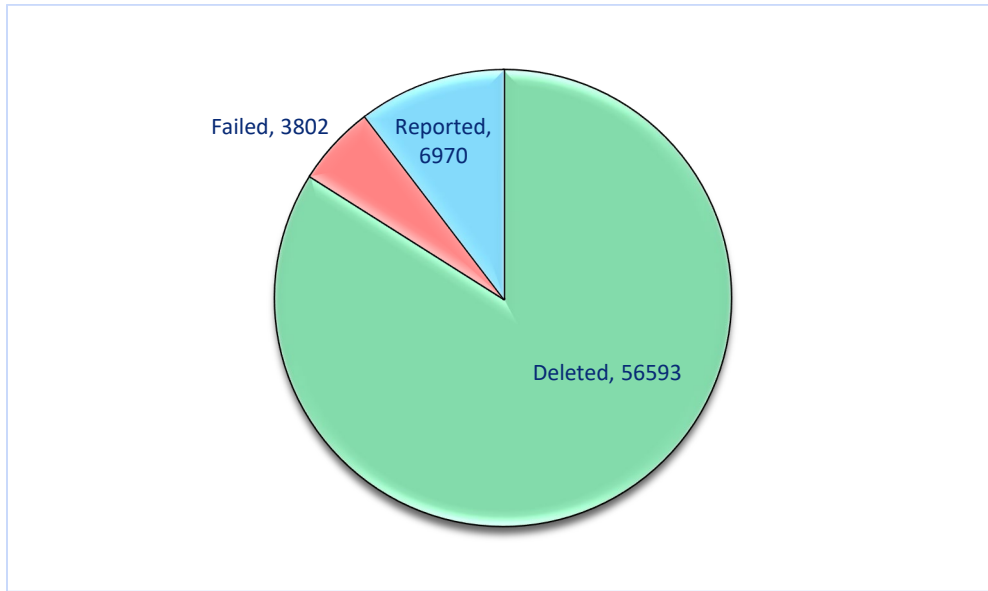
However, each year we see new or enhanced requirements from the Texas State Legislature as the risk environment evolves and becomes increasingly more threatening. As such, our security awareness training program must evolve to reflect the latest requirements and latest threats and it is critical that 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 (May 2023 Ransomware Attack)

### Background

In the early morning hours of Wednesday, May 3<sup>rd</sup> the City's security monitoring tools notified our Security Operations Center (SOC) to the presence of ransomware in the network environment. In the immediate response to the attack, the City's IT team took additional measures to disconnect systems, services, and devices from the City's network to contain and prevent the further spread of malicious software.

The City's Incident Response Plan (IRP) was activated, and the Incident Response Team was assembled to initiate the response to this attack. Additionally, the City organized and mobilized a broader Incident Support Team (IST) through the support of the Office of Emergency Management (OEM) to aid in the management of the recovery activities.

As part of our Incident Response Plan (IRP), the City met all of its obligations for notification. These include notifications to the Mayor and City Council, along with notifications to State and Federal authorities.

The team of internal IT Staff, Cybersecurity professionals retained by the City, and the technology vendors providing many of our services, followed a structured process to stop the propagation and spread of the malware the attacker used, determined the source of the attack, put in place additional defensive measures, and began the process of scouring the environment to find every infected device, system or service and remove the malware before beginning to restore services.

This painstaking work has involved a comprehensive review of each system and device to ensure they are free of malware, the installation and implementation of additional security components and protocols, and the rebuild, re-imaging, and restoration from back-ups of servers and devices where necessary.

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## **As of 5/31/23**

As of May 31, 2023, more than 90% of the work to restore systems and services has been completed. This is based upon the tasks to review, clean, rebuild, re-image and restore systems and devices. This also includes the implementation of additional security software, conducting a full reset of all user accounts, and implementing additional security controls.

### **Service Impacts**

Between the impact of the attack and from removing systems and services from the network in an effort to contain the spread of malware, there were broad impacts to the City in delivering services. In the immediate response, City departments implemented their backup plans and worked diligently to continue to deliver vital services to City residents.

While there has been significant progress in the restoration of services, City departments which reverted to manual processes to continue delivering services in the absence of their critical systems are still working to update the records in their systems.

The full impacts of the attack are still being assessed and will be provided in an After-Action Report (AAR) to be completed at a later date.

As services are restored, updates have been posted to [DallasCityNews.net](https://dallascitynews.net).

### **Investigation and After-Action Review**

Law enforcement, including the FBI, has been notified. Additionally, we have notified the Cybersecurity and Infrastructure Security Agency (CISA), the Texas Department of Information Resources, and the MS-ISAC.

### **Data**

On May 19<sup>th</sup>, the ransomware gang claiming credit for this attack posted a blog to the dark web stating they had stolen data as part of the attack. The impact of this incident and what, if any, sensitive data may have been affected as a result is still being assessed. If the investigation determines that individuals' sensitive information was involved in this incident,

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## As of 5/31/23

we will notify those individuals directly and provide resources to help protect their information in accordance with applicable law.

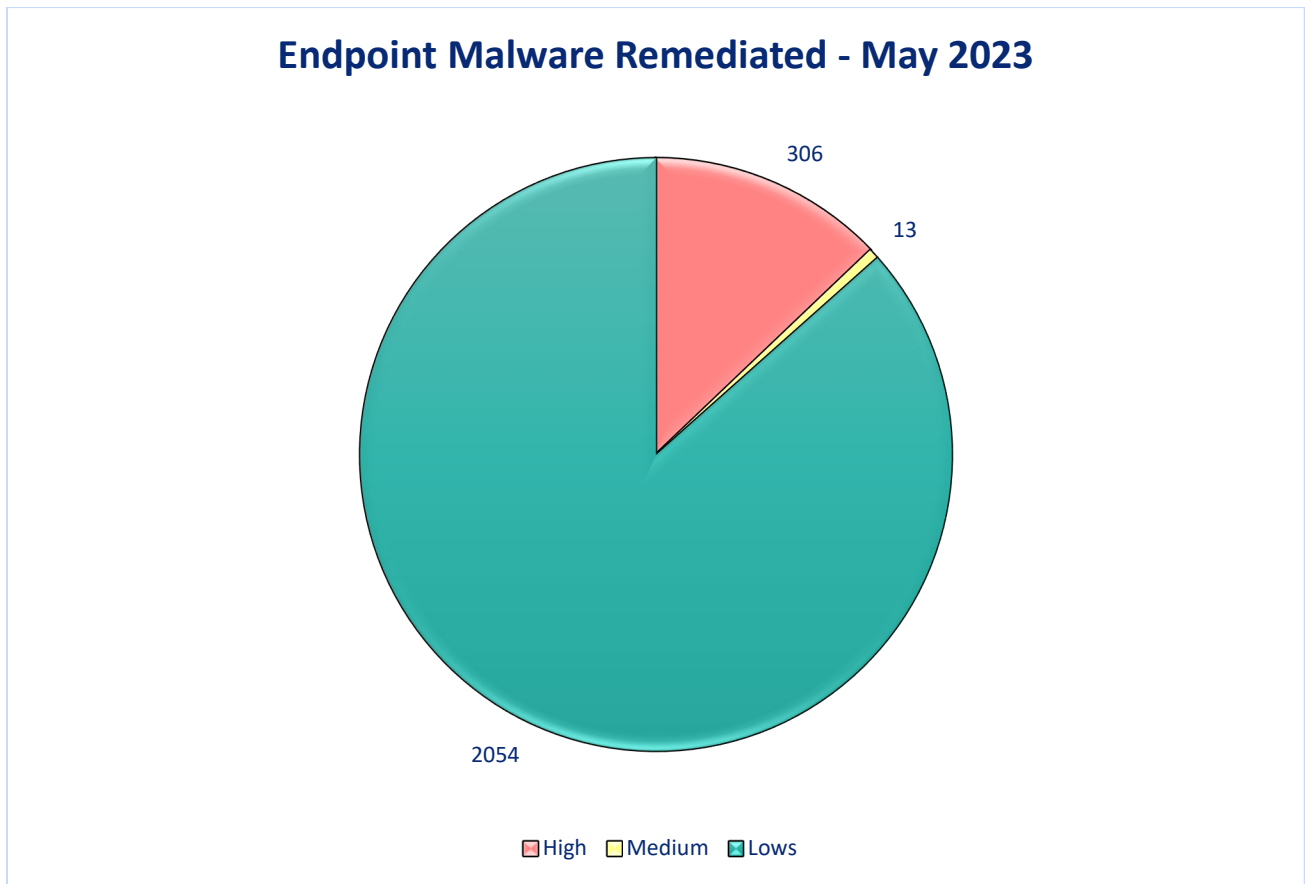
While the investigation remains ongoing, there are steps everyone can take to help keep information secure. These are some best practices individuals may choose to consider:

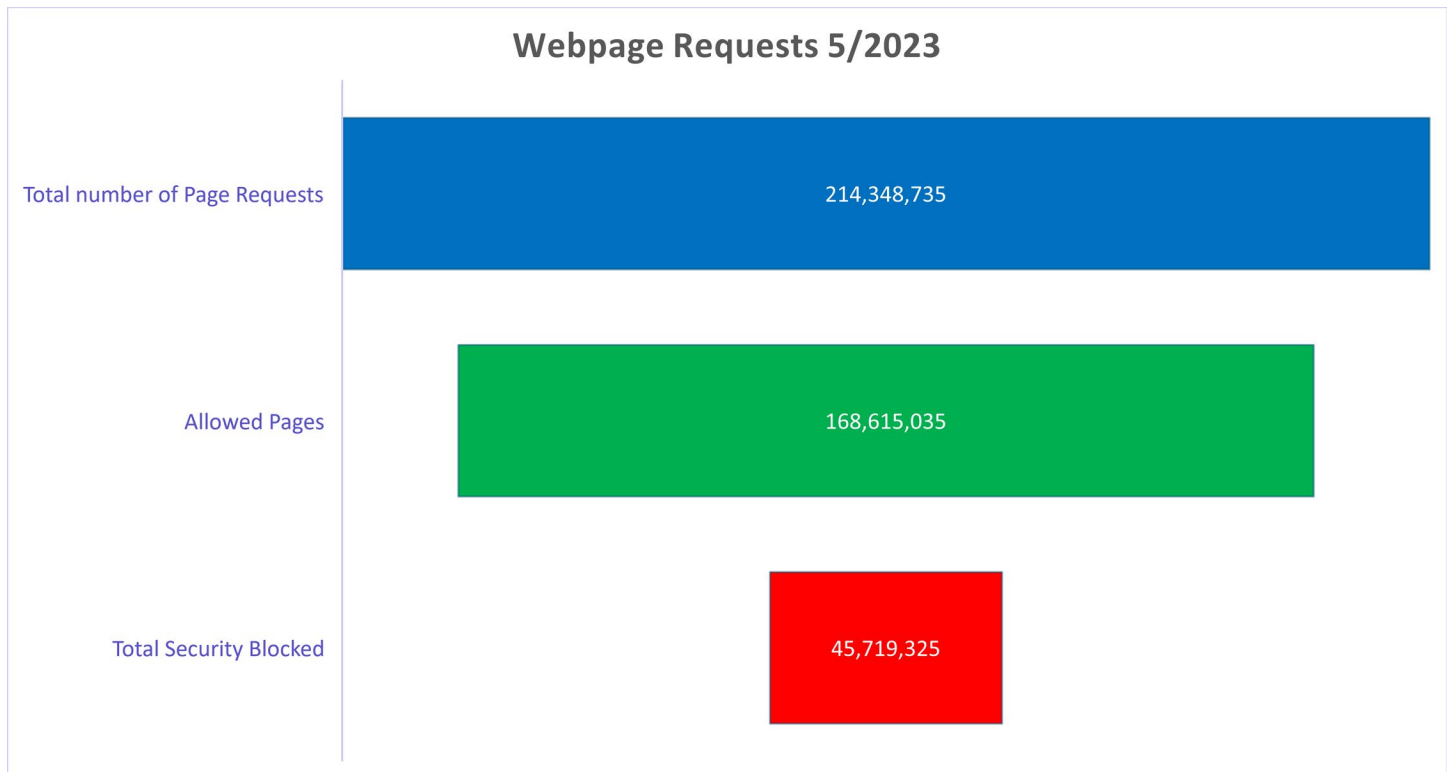
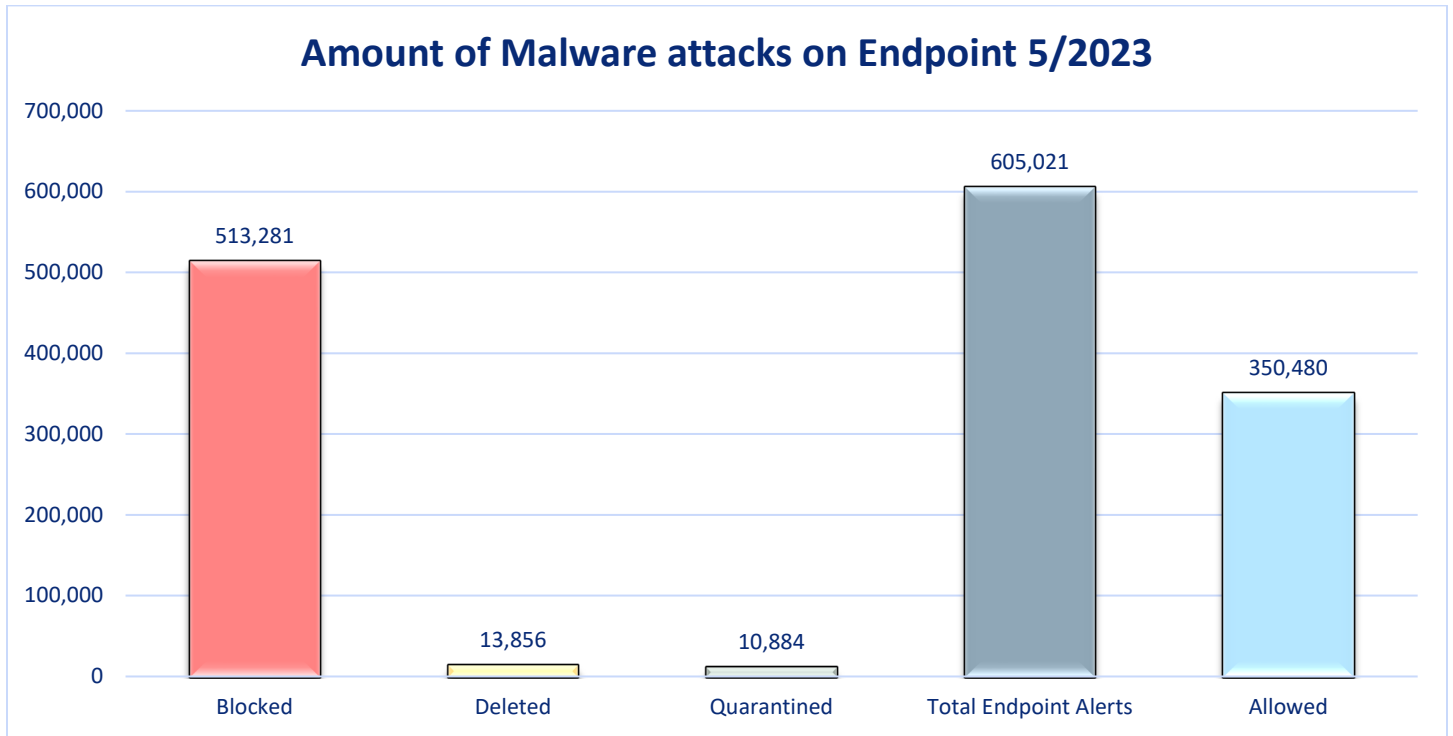
- **It is always advisable to regularly review and monitor your accounts and statements closely.** If you detect any suspicious activity on an account, you should promptly notify the institution and/or the company with which the account is maintained.
- **It is always advisable to be vigilant for incidents of fraud or identity theft** by reviewing your account statements and free credit reports for any unauthorized activity over the next 12 to 24 months. If you see unauthorized charges or activity, please contact your financial institution immediately.
- **You may obtain a copy of your credit report, free of charge,** once every 12 months from each of the three nationwide credit reporting companies. To order your annual free credit report, please visit [www.annualcreditreport.com](http://www.annualcreditreport.com) or call toll free at 1-877-322-8228.
- **You may consider placing a fraud alert on your credit report.** A fraud alert is free and will stay on your credit report for one (1) year. The alert informs creditors of possible fraudulent activity within your report and requests that the creditor contact you prior to establishing any new accounts in your name. To place a fraud alert on your credit report, contact any of the three national credit reporting agencies. Additional information is available at [www.annualcreditreport.com](http://www.annualcreditreport.com).

## C. Data Protection & Privacy

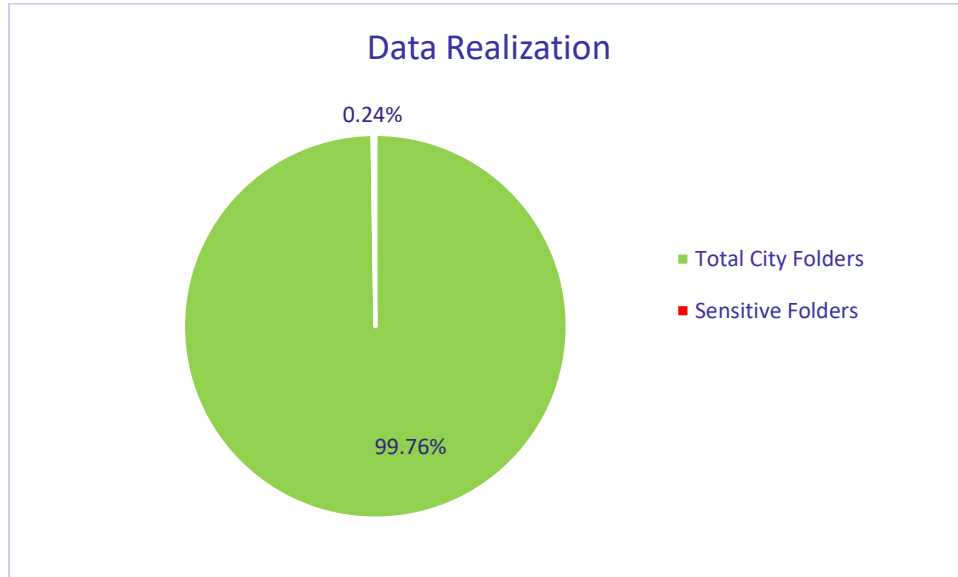
### 1. Endpoint Protection

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 current status for endpoint attack metrics.





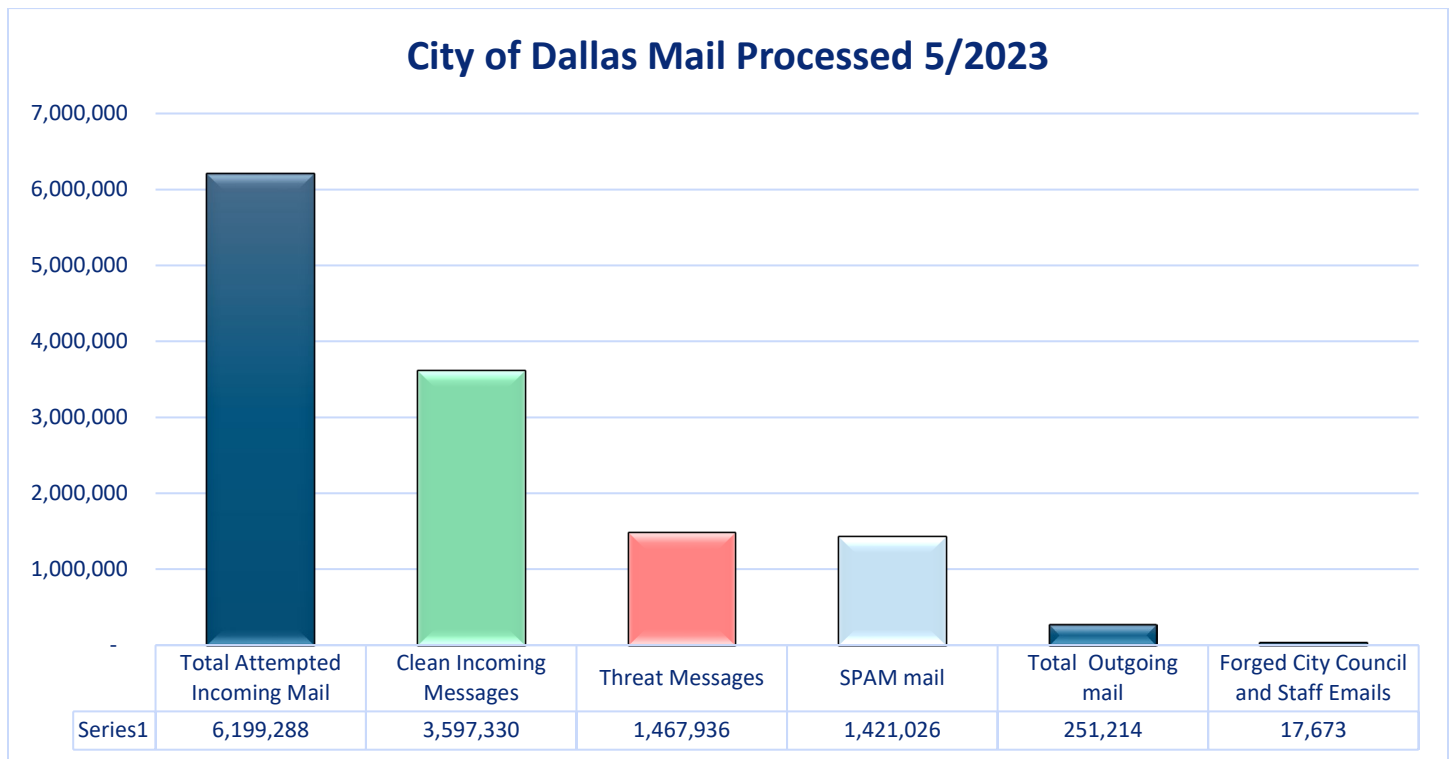




**Total Data 3.8 PB**  
**Total Backup 2.4 PB**  
**Total 5.13m Records**

## 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, as a means 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

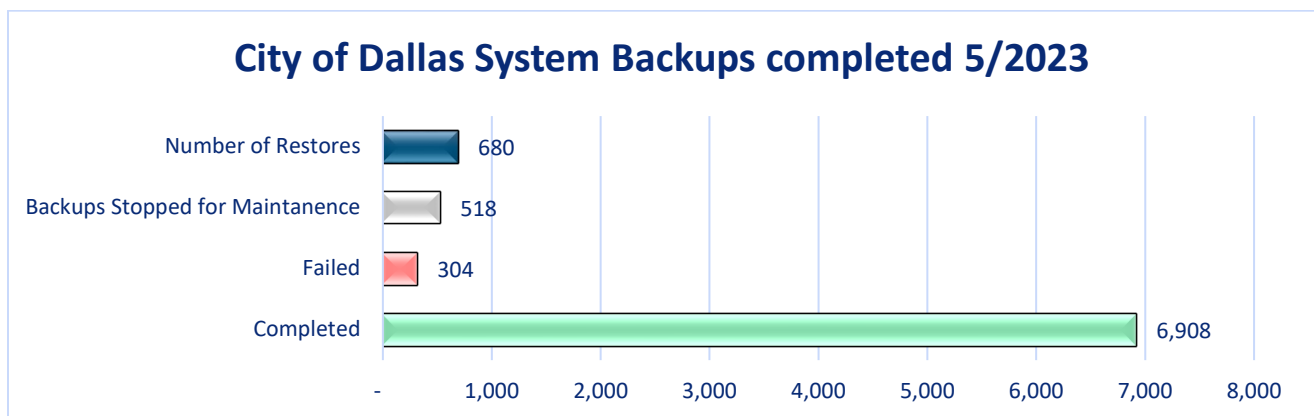
IT Infrastructure information and status updates on efforts to upgrade and improve the IT infrastructure used by the City to reduce technical debt, better meet current needs, and build for future service needs.

### 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 cyber-attacks. 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.

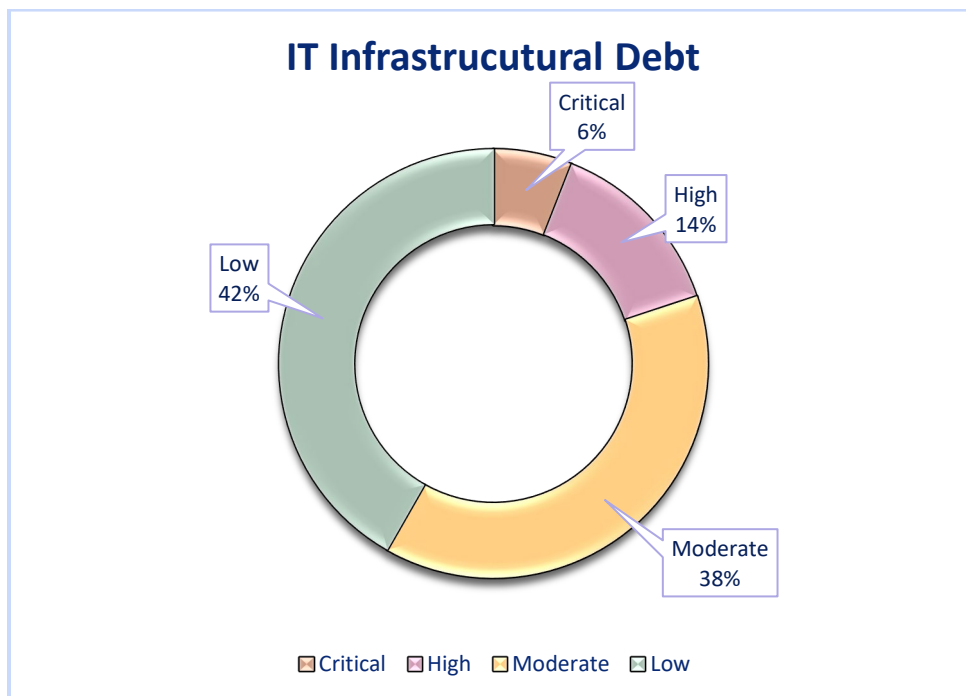
A critical component of Disaster Recovery and Business Continuity practices is backing up critical data, testing data backups, and conducting exercises to ensure that data backups can be successfully utilized to restore business services.



## B. Technical Debt

As a part of the City’s IT Infrastructure improvement direction, a proactive approach has been taken that identifies, tracks, and will communicate the potential risks and costs associated with technical debt to City departments. The City’s Technical debt has accumulated over time, reducing the IT effectiveness for services. This must involve setting aside a time and resources, specifically for the deficit. By ITS developing a comprehensive technical debt management strategy, organizations can prevent the accumulation of technical debt, reduce development costs and timelines, and improve system stability and maintainability over the long term. This leads to a long-term sustainability and maintainability.

As part of the ongoing efforts to assess the health of IT systems, a recently completed review found that up to 20% of the City’s technology systems and infrastructure can be defined at a level of “Critical” or “High” infrastructural debt, requiring attention to upgrade, replace or remediate the risks associated. Further information from the assessments will be provided in the March 2023 TAR report.



### C. Audit

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

