

CITY OF JACKSONVILLE

ANNUAL REPORT 2023





June 30, 2023

To: Brian Hughes, Chief Administrative Officer

From: Kenneth Lathrop, Chief of Information Technologies/CIO

CC: Constitutional Officers, Independent Agencies, City Council, Council Auditor, IT Executive

Committee

Subject: ITD Annual Report per Ordinance Chapter 24, Part 7, Section 24.701(i)

Please find attached the Annual Report for the Information Technologies Division per Ordinance Chapter 24, Part 7, Section 24.701(i).

Please contact me at 904-255-8004 if you have any questions or concerns.



Table of Contents

Contents

Table of Contents	2
Information Technologies Division 2023 Annual Report Background	3 3
Strategy	3
Key Accomplishments	3
ITD Customer Billing Model	4
FY2023 - Customer and Infrastructure ProjectsHighlights - Completed Projects	5
Highlights – Projects in Progress	16
Highlights - Planned Projects	29
City of Jacksonville Wireless Infrastructure	32
City of Jacksonville Server Infrastructure	32
Ensuring Technology Security Compliance	32



Information Technologies Division 2023 Annual Report

Background

The Information Technologies Division (ITD) is responsible for the technology strategy and operations, procurement, development, maintenance, and support of all technology products, infrastructure, and services for the City of Jacksonville (COJ). This includes data centers, network and server infrastructure, telephone and wireless communications, public safety radio system, security, data services, desktop, geographic information systems (GIS), and applications.

ITD provides 24 x 7 customer and infrastructure support through our Service Desk and Operations that can be accessed from 255-1818. The Division maintains approximately 7,921 desktops, laptops, rugged laptops, and tablets, 90 physical and 580 virtual servers, 14 communication towers that host Microwave and Radio systems, 11,400 radios, 7,550 telephones, 3,100 cell phones and data cards, network connectivity for all downtown COJ buildings plus 230 remote locations, fiber optic and copper cable infrastructure, 3 data centers and approximately 225 software applications.

Strategy

ITD's objective, through technology and innovation, is to support the City's initiatives to advance Public Safety, Economic Development, Service to Youth, Healthy Citizens and Neighborhoods, and Government Efficiency and Effectiveness. ITD's strategy to accomplish these objectives is through a series of continuous goals that include:

- Assisting customers with meeting their business needs through technology that makes sense.
 - Leveraging vendor Software as a Service (SaaS) and hosted solutions that fit the customer's business needs.
 - Implementing internal business processes within ITD that promote identifying the best and most appropriate products and technologies.
 - Ensuring long-term benefits from implementing products that allow for quicker delivery of services to the customer and the citizens they serve.
 - Filling vacancies through:
 - Contract to hire placing a greater emphasis on hiring application administrators and configurators to align with our vendor SaaS and hosted solutions strategy.
 - Recruitment efforts working with local colleges and universities to hire junior level personnel to train and provide career path.
- Refreshing the City's end-of-life technology infrastructure to provide reliable support for the City's technologies, products, and services. Note: Supply chain shortages, although not as severe during the beginning of COVID, continue to cause project delays.
- Ensuring Technology Security Compliance.
- Enhancing accuracy and streamlining of Customer Billing Model.

Key Accomplishments

- Completed 50 projects for FY2022.
- Completed tickets/requests:
 - o FY2022 39,748
- College Hires and Internships 5 hires, filling positions in the areas of Security, Server, and Application Development.
- Since incorporating drone technology into ITD, we have been able to provide a high level of aerial
 photography and video to departments throughout the city. This footage enhances the visibility of the City
 of Jacksonville and allows ITD to showcase all the city has to offer.



ITD Customer Billing Model

The customer billing model, of which the IT Operations budget is based, continues to evolve with focus on presentation, accuracy, understanding and access to customers. Beginning in FY2017, ITD began sending monthly notifications to stakeholders, which includes customers that are accounted and billed, as part of the Customer Billing System (CBS). The FY2023 CBS continues with this billing methodology that first seeks to identify costs directly attributable and assignable to a particular customer or customers as in the case of shared projects. A capacity/resource planning tool provides additional refinements using estimate of ITD staff time and effort as being direct billable and/or indirect billable in terms of various projects and maintenance activities. Of the time and effort not directly attributable to a particular customer, the billing system employs a modifier to account for the various overhead and indirect costs. Job Categories now accurately reflect the costs of billable resources.

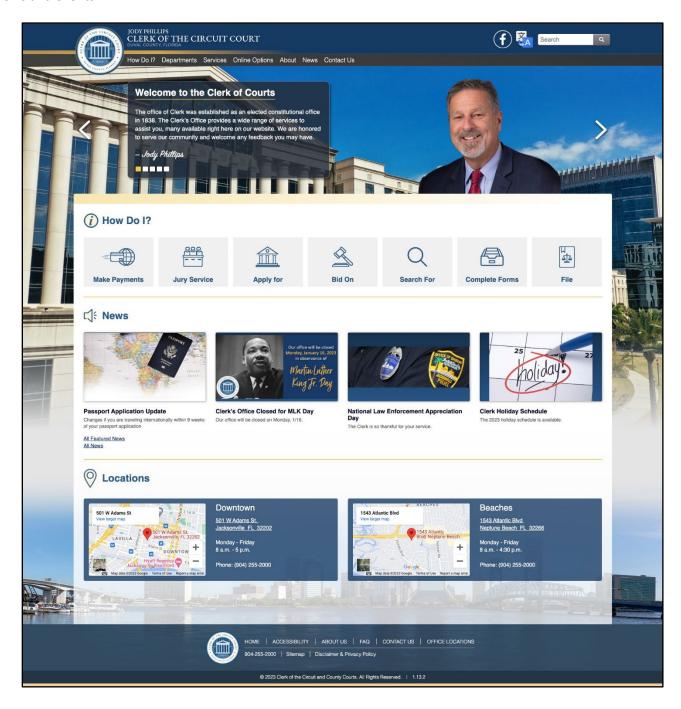


FY2023 - Customer and Infrastructure Projects

Highlights - Completed Projects

Clerk of the Circuit Court Website Rebuild

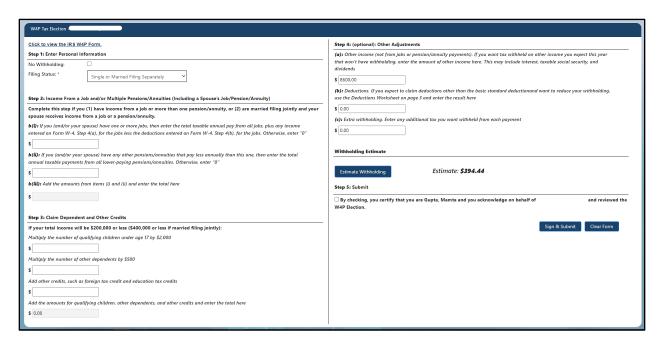
ITD redesigned and rebuilt the Clerk of Courts existing website. The site was rebuilt in Kentico 13, the latest version of the City's content management software. Features included an enhanced look and feel, optimized performance, reorganized navigation for ease of use, enhanced ADA compliance, unified social media presence, and featured news and events.





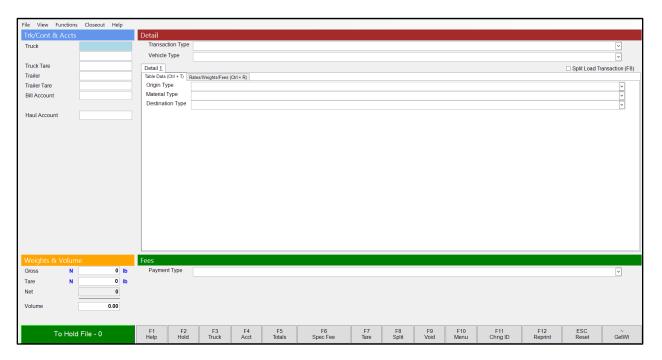
Pensioner's Tax Withholdings in 2023

In 2022, ITD redesigned COJ's pensioner website. This project implemented the new formula behind the withholding calculations, ran mass conversions, and provided the ability for pensioners to submit their W4-P electronically.



Solid Waste Disposal - Landfill Software & Hardware Upgrade

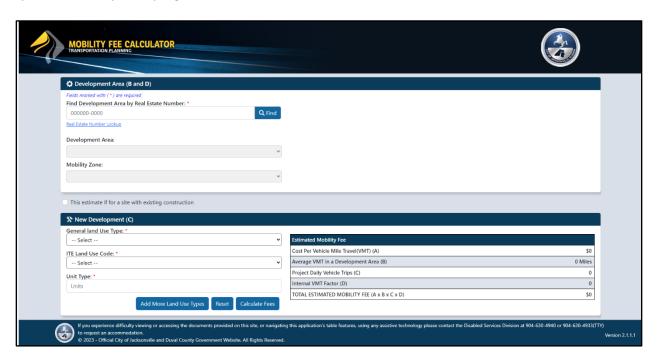
ITD performed an upgrade to the software and hardware for the application that is used by the Solid Waste Division. This upgrade allowed the vendor, CompuWeigh, to continue their service along with ongoing support. In addition, during the upgrade process, the infrastructure including servers, workstations, and DVR were upgraded.





Mobility Fee Calculator - Compliance with Ordinance 2022-909

The Concurrency and Mobility Management System Office (CMMSO) for COJ was established as the result of the 1985 Growth Management Act by the State of Florida legislature. Mobility is considered new development, or increased intensity of use that places demand on public infrastructure. As such, the purpose of this project was to implement the last phase of the Mobility Fee Calculator, which consisted of enhancing the system with the ability to quantify and assess the fiscal impact of development on affected City facilities. In addition, the fee assessment was also applied toward public infrastructure projects that are located within the same Mobility Zone for any new development that may be in progress.



TAS (Time and Attendance System Enhancements)

Various enhancements to TAS were implemented to improve the validation and accuracy of the Time and Attendance information. These enhancements encompassed various rules surrounding leave, overtime, and holiday hours.

Jacksonville Fire Rescue Department (JFRD) Staffing Integration with ReadyOp

Staffing systems are part of an essential plan an organization puts in place to identify and acquire the talent that is needed in any given department. ReadyOp is a vendor product that provides an interpersonal communication platform. ITD was able to form an integration between these two, by establishing an outgoing data feed to run at a certain frequency to consistently keep up with all the staffing information.

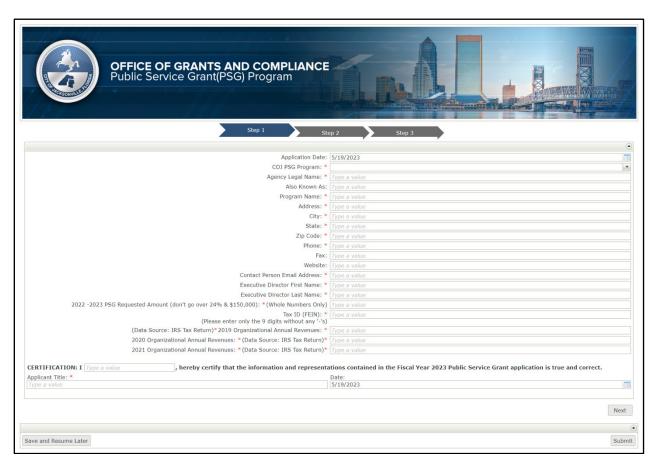
FY2022 – Network Equipment Refresh

This annual refresh replaced outdated network equipment for various City agencies. The network refresh ensured that all networking equipment was updated, supported, and maintained. This provided COJ with enhanced security and manufacturer's support. The FY2022 refresh consisted of two major data center core components, and nineteen devices within the Duval County Courthouse.



Public Service Grants Application Rewrite

The solution originally utilized by Grants Management was implemented using SharePoint 2010 and K2 workflow technology. However, effective April 2021, SharePoint 2010 reached end of life, causing security updates and technical support to no longer be available. The purpose of the project was to implement a solution using modern technology (K2 Technologies) to ensure that technical support and technology updates can be received as necessary.



Debris Tracking System Redesign

ITD's GIS Team redeveloped the Hurricane Debris Tracking System and its various system functions/capabilities. The new system is more modernized with enhancements coupled with a more effective and efficient workflow. The new system has been designed to take advantage of mobile device technology for end-users who are required to carry "smart" mobile devices for their day-to-day responsibilities. In addition, the system has been enhanced with capabilities that will allow both staff and management to manage and track the progress of the debris cleanup effort. Major functions handled through debris cleanup process includes creation of Load Tickets for various types of debris, the ability to demonstrate what has been completed versus what is yet remaining, in-depth cost tracking and improved reporting required to secure reimbursement funding from FEMA and the State of Florida.

Computer Aided Dispatch (CAD) Upgrade 2021

ITD performed an update to the CAD/Mobile dispatch Software Application. The agency's training system has been upgraded for testing and approval prior to the updated production. The software update includes cumulative updates, issue resolutions, new functionality, and hardware and software requirements conformation for upgrades (i.e., memory, NET Framework, ArcGIS, and SQL).



Special Events Permitting (SEP) Rewrite

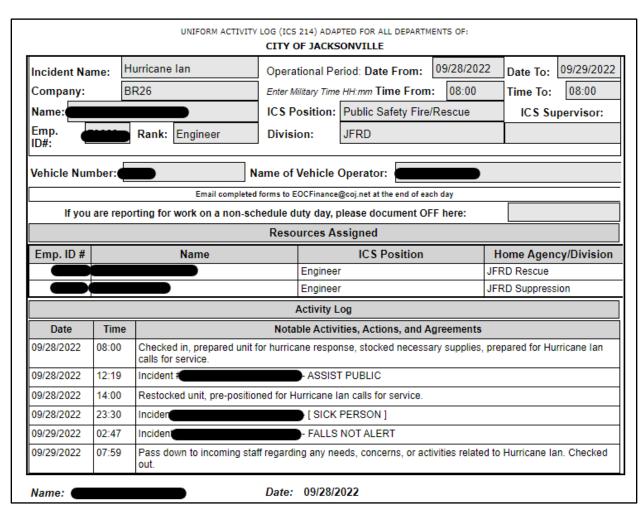
The SEP system was originally implemented using SharePoint and K2 workflow technology to allow submission, review, and approval of Special Events Permits. The new solution includes existing functionality in addition to enhancements that improve performance, create efficiencies in agency business processes, and incorporate integrations with disparate systems. The system was rewritten as another module within the permitting enterprise web-based solution that was developed in-house.





FEMA ICS-214 Forms for JFRD & JSO

The Incident Command System, also known as ICS, is used by public agencies to manage emergencies. The Uniform Activity Log, also known as the FEMA ICS-214 form, records details of notable activities at any ICS level. Due to the volume of the forms needed to submit to FEMA by JFRD and JSO, manual entry was next to impossible. A quick solution was provided by ITD to fill out the forms automatically by pulling the resource and incident activity log from different systems.



Courthouse Complex Distributed Antenna System (DAS) Replacement

ITD installed new DAS equipment in the Duval County Courthouse. The upgraded solution provides in-building cellular service, and two-way radio connectivity for Law Enforcement officers, Fire and Rescue personnel, Circuit Judges, Bailiffs, Clerk of Courts employees, and citizens.

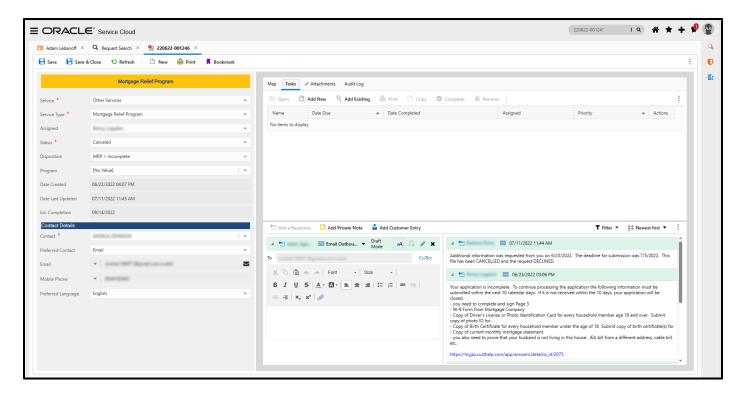
Moncrief Community Center (MCC) STEM Hub Buildout

Kids Hope Alliance (KHA) provides a STEM (Science Technology Engineering and Mathematics) hub focused on bringing real-life workforce development, in areas such as coding and robotics, for teens in the area. ITD assisted KHA with the evaluation, installation, and support for AV, network, Wi-Fi, security, and associated cabling as a part of the MCC STEM Hub buildout.



Mortgage Relief Program (MRP)

COJ launched the Mortgage Relief Program on March 31, 2021. This application was developed to distribute \$4.25 million of federal funds to assist Duval County homeowners (approximately 1,200 individuals/families) who had not been able to pay their mortgage due to a loss of income related to COVID-19.



Fire Station(s)

As COJ continues to grow, the resources to keep the citizens of Jacksonville safe continue to be a high priority. Jacksonville Fire & Rescue Department (JFRD), a main resource for the COJ citizens and visitors has maintained its designation as an ISO Class 1 department. A Class 1 rating represents the best fire protection a department can offer and given Duval County's massive 900-plus square mileage, this is necessary for the safety of the citizens of Jacksonville. Jacksonville is the largest ISO Class 1 department in the world. ITD continues to work with JFRD when there is a need for a new/renovation of a fire station by providing specifications, coordination, equipment, and services to integrate and install the following:

- Purvis Fire Station alerting system, FCRS radio, badge access for doors and gate, desk phones, networking switches, Wi-Fi access points, desktop computers.
- Coordinate installation of Comcast, AT&T circuits, Xerox printers.
- Specifications for structured cabling, grounding, communication infrastructure, data closet configuration and HVAC.
- Quality control audit of IT systems

Part of keeping this class 1 designation is establishing and enhancing new and existing fire stations.

• **Fire Station 65** – Located off Atlantic Boulevard near Arlington Road, the station houses a fire engine and a rescue unit. Station 65's resources will help meet the growing demands for emergency service in the busy Atlantic Boulevard corridor.



FY2022 - P25 Radio - Microwave Network Radio Sites (Year 4 of 4)

The project aimed to replace Microwave Indoor Radio Units installed in 12 COJ's two-way radio Microwave Network Towers. The existing Microwave Indoor Units were discontinued for purchase in 2013 by the Manufacturer and were considered at end of life.



FY2022 - Mobile Radio Refresh (Year 7 of 7)

ITD refreshed 220 radios for Jacksonville Sheriff's Office (JSO), 139 radios for JFRD, and 226 radios for General Government agencies. Mobile radios are two-way radios that are installed within vehicles. These radios were at end of life and required replacements. FY2022 was the final year 7 of a 7-Year Project, to replace the mobile radios. The American Rescue Plan Act of 2021, a financial package designed to help with the recovery from the COVID-19 pandemic, allowed this project to be accelerated by 1 year reducing the original timeframe from 8 years to 7.



FY2021 - PC Hardware Refresh and Windows 10 Upgrade (Year 4 of 4)

ITD deployed new computers to various COJ departments for year 4 of the 4-year PC refresh project. The project aimed to replace aging devices throughout the City while providing the latest operating system software that was being supported. All refreshed computers now have a Windows 10 operating system and Office 365 or Office 2019 depending on the using agency. ITD successfully deployed 972 computers.



FY2022 - Portable Radio Refresh (Year 4 of 5)

ITD successfully refreshed 1331 radios for JSO, 397 radios for JFRD and 188 radios for General Government agencies. These portable radios were at end of life and required replacements. FY2023 is Year 5 of a 5-Year Project to replace portable radios. This project was accelerated by 3 years with support from ARP Funding. Some radios include new smart features, including SmartConnect, SmartMapping, SmartLocation, and SmartProgramming. These smart features allow for efficiency, accuracy, and scalability. In addition, these radios will have increased battery life, Bluetooth, GPS, improved auto quality, and Wi-Fi capabilities.



Recycling Awareness and Education Software Implementation

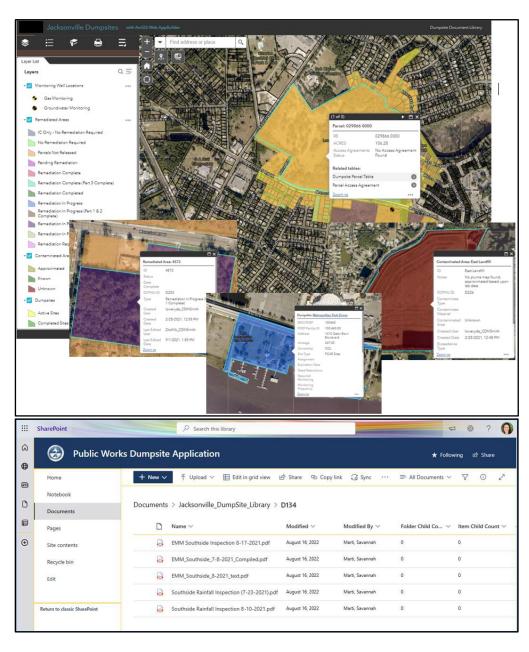
This project implemented 3 products: Waste Wizard, Collection Calendar, and a Mobile App, for Public Works Solid Waste Division. Each product provides a unique set of benefits designed to educate, engage, and inform the citizens about essential information regarding recycling coupled with communicating collection schedule changes easily, fast and in digital real-time via a mobile app.





Public Works Dumpsite GIS Application

The purpose of this project was to replace an online web-based vendor solution by developing an in-house application to manage ash/contaminated dump sites and the associated long-term Operations and Maintenance (O&M) Program tasks required by the Federal Department of Environmental Protection (FDEP). The in-house solution allows Public Works to maintain all current and associated information for remediations plans and parcel data. In addition, the system was built with a "SharePoint Workroom", which is used for storing all required documentation for each ash/contaminated dump site maintained within the system. Furthermore, the solution provides the end-user with the ability to link directly to "Oculus" which is a site maintained by FDEP for obtaining current information regarding petroleum and other environmental issues. The system is now operational and being utilized by Public Works.





Enterprise Resource Planning (ERP)

• **Project and Grants Configuration Modification** – Projects and Grants are a large component of the City's financial business. This modification included changes in business processes and reconfiguration of the project and grant modules which streamlined the transaction processes and improved reporting capabilities on City initiatives, grants analysis, and delivered capital projects.



Highlights – Projects in Progress

FY2023 PC Hardware Refresh

The City of Jacksonville has adopted a PC Refresh policy that ensures computer devices throughout the City are operational in support of the COJ mission-critical applications and services. The project aims to replace aging devices throughout the City while providing the latest operating system software that is currently being supported. Maintaining the PC fleet at COJ is an essential component in maintaining security, application/platform compatibility, and system availability. ITD will deploy new computers to various COJ departments. At the end of FY2023 ITD will have successfully deployed a total of 661 computers.

VoIP Phase VI Call Center Manager Upgrade FY2022

The Cisco Unified Communications platform provides phone, voice mail, and contact center services for COJ, and the JSO. Upgrading this application provides additional feature sets, increased stability, increased security, and supportability from the manufacturer. This project includes the upgrade of 18 servers with minimal downtime to voice services and is currently 95% complete. The remaining part of the project is pending the completion of the 630CITY Call Center Enhancement project, that allows for voice interaction.

Medical Examiner (MEO) New Building Infrastructure

MEO is currently in the design stage of constructing a new facility. ITD is assisting the MEO with technology related recommendations: equipment closets, phone service, network connectivity, security, and audio visual. The design stage is currently at 98% completion. All requirements will be finalized, and budgetary quotes will be obtained prior to the next step, breaking ground.

Public Defender (PD) 10Gb Backbone Upgrade

ITD is working with the PD's Office to upgrade core network connectivity to 10Gbps. This will provide increased performance for bandwidth intensive bodycam footage review, and the PD's servers housed in the data center. The PD upgrade also is in line with the proposed Citywide 10Gbps network upgrade. Continually changing technology has increased demand for network resources, including bandwidth and additional physical connections. This project required an RFP submittal, which was accomplished and advertised.

Network Refresh FY2023

ITD established a recurring refresh cycle to replace network devices each year resulting in all network equipment being replaced every eight (8) years. Each year the network replacement strategy is reviewed to identify efficiencies and improvements in hardware/software technology based on infrastructure bandwidth, customer capacity, and trending technologies. There will be a total of 26 devices refreshed during FY2023.

Radio System Upgrade P25

The intent of this project is to upgrade the P25 ASTRO radio system software version 7.17 to 2019.2 and replace 23 end of life Motorola routers at 16 Public Safety Dispatch Centers. P25 ASTRO system software upgrades are performed every two years. In addition, based on Motorola's end-of-life schedule, other critical devices of the P25 ASTRO network are also replaced. The Radio System Upgrade P25 is scheduled to be completed in FY2023.

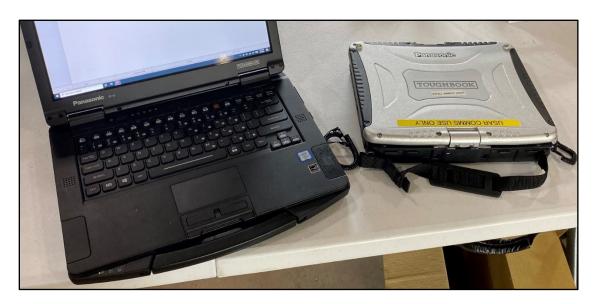
JFRD Mobile Gateway

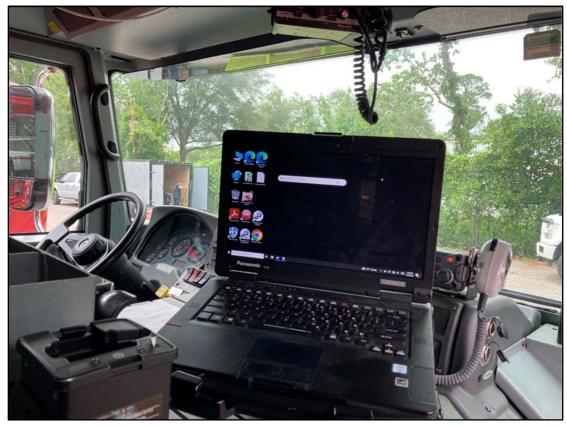
The project aims to design, acquire, and implement a cloud managed solution for mobile Wi-Fi gateways in all JFRD apparatus. This will consolidate and replace all hot spots, Mi-Fi, and air cards currently utilized by JFRD. In return this will simplify management, security, and reduce overall cost of wireless communications for emergency vehicles and is currently 35% completed.



FY2023 JFRD Mobile Data Terminal (MDT) Refresh

The project aims to replace aging MDTs throughout the Jacksonville Fire and Rescue Department. This ensures computer devices throughout JFRD are operational in support of the COJ mission-critical applications and services. These devices are essential to public safety as they are used by JFRD rescue personnel in various environments that include citizen residences and hospitals. Maintaining the MDT fleet at JFRD is an essential component in maintaining public safety, security, application/platform compatibility, and system availability. At the end of FY2023 ITD will have successfully deployed a total of 102 MDTs.







FY2023 - Portable Radio Refresh (Year 5 of 5)

ITD is refreshing 135 portable radios for General Government Agencies, 883 portable radios for JSO, and 77 portable radios for JFRD. These radios will be at end of life and end of support. FY20223 will be the final year of a 5-Year project. This project aims to ensure that Public Safety personnel are operating reliable radios with enhanced security features supported by the manufacturer.

P25 Radio Site Expansion - Montgomery FY2023

COJ implemented the P25 Radio Site Expansion to add new simulcast radio sites to the P25 system. Completion of these projects will increase communication coverage in the surrounding area and will also improve in-building communication for Public Safety officers and General Government radio subscribers. The Montgomery site is the first of five radio site expansion locations and is scheduled for completion FY2024.

Citywide Emergency Satellite System Upgrade

The goal of this project aims to upgrade and expand the existing end-of-life satellite communications system currently in use. The State Emergency Operations Center completed an upgrade of their legacy satellite equipment, which in return caused the City's equipment to no longer communicate with the State EOC via satellite. Until the upgrade occurs, COJ is currently using portable satellite phones to communicate with the State EOC. The new satellite equipment will be installed at multiple locations throughout the city to enhance coordination efforts in the event of an emergency.

P25 Radio - Relocate JEA Master Radio Site

The new and updated Public Safety system will provide the city with a backup, allowing for greater redundancy, greater operational flexibility, and continuous two-way radio communications during City wide emergencies. The project consists of the relocation of the current JEA Master Site to be split from the Master Site to the Ed Ball Building, along with the antennas relocating to the Wells Fargo Building. Additions include new redundant backup Master at Cecil 911 Center, updating to MPLS network labeling, routing, and new microwave connectivity. The Redundant Radio System installation is currently at 60% completion.

City Council AV Replacement Phase 2

The purpose of this project, that is currently 15% completed, is to expand the audio/visual technology in the City Council Chambers, Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A at the St. James Building. In addition, this project will improve visibility for City Council meetings by expanding the functionality to other meeting rooms in the St. James Building. The image quality will also improve for broadcasting meetings by utilizing HD cameras and provide the ability to record/stream meetings from all rooms, over the web, and to Comcast Channel 99.

Kids Hope Alliance AV Upgrade Phase 1

The project's purpose is to expand the audio/visual technology at the Kids Hope Alliance (KHA) multi-purpose events room. The project will improve audio and video capabilities to facilitate large and split-room events and is currently 40% completed.

Emergency Operations Center AV Equipment Upgrade

The intent of this project is to upgrade an unsupported, analog audio-visual system for the City's Emergency Operations (EOC) Center to modern digital technology. These system updates will be used by the EOC to coordinate and communicate with other key City agencies, Departments, and other Federal, State, and Local stakeholders for day-to-day and emergency operations. The project is scheduled to complete December 2023.



JFRD Tablet-based incident Management System

The purpose of this project is to provide a resource management tool for JFRD chiefs while responding to an incident. This solution will leverage integration with other emergency response systems to provide geographic information, incident information, and resource information to a handheld device. This project is a collaboration between ITD and JFRD.

Real Estate Management System Replacement

ITD, in conjunction with the Real Estate Division, has completed the process of gathering detailed requirements to build a software solution to serve as a single, unified database. The database will be used for managing the disposition of surplus property and tracking land acquisitions for temporary and permanent easements for FY2023. In addition, the solution will integrate with system for tracking all covenants and restrictions of City-owned properties. The online system will provide processing efficiencies and reduce spreadsheet-based tracking. In addition, the solution will enable the Real Estate Division to move towards a fully integrated and paperless system for managing properties, improve integration with external data systems, and enhance accuracies in the reporting of real estate. Development anticipated to start Q4 of FY2023.

Citywide Records Conversion

The goal of this project is to convert various legacy media types that are currently stored onsite and/or offsite into an electronic format. Media types consist of microfilm, microfiche, CDs/Discs, etc. Although this project will consist of multiple phases, the initial scope is focused on three Divisions: Accounting, Building Inspection, and Development Services. The progress of this project was impacted by the pandemic. To date, all work has been completed for the Accounting Division. ITD is continuing to work with Building Inspection, Development Services, and the vendor to complete the remaining 30% work needed.

Server Refresh FY2023: Physical and Virtual Environment Refresh

Each year ITD conducts a review of hardware and software to determine items that are scheduled for end of support by our vendors and items that are not operating effectively for replacement or upgrades. These refreshes are necessary to maintain the infrastructure to support applications, connectivity, and services provided by ITD to all the City agencies. This is essential for maintaining effective and efficient business operations to meet the needs of the citizens and businesses of the City of Jacksonville. The refresh for FY2023 is 40% complete and involves replacement of the Advanced Interactive Executive (AIX) hardware, which supports our Human Resource Management (HRM) application. In addition, the refresh will include the replacement of COJ's Network Video Recorder (NVR) and Active Directory Control Server, that both assist with ensuring technology security compliance.

Server Refresh FY2022: Virtual Server & Storage VxRail Area Network (SAN) Replacement

ITD maintains 580 virtual servers that require upgrades on a fixed schedule. This project will replace the current hardware and software of these virtual servers with a new VxRail system. The new technology will allow for faster processing and enhanced security and is currently 75% complete.

Remote Desktop Services (RDS) Upgrade Citrix

ITD will upgrade the current Citrix environment to use the new Microsoft 365 application. Citrix is vital to COJ because it allows employees to access certain applications remotely. In addition, licenses expenditures are reduced by eliminating the need to purchase additional application licenses. ITD will work with other departments to migrate and test their applications in the new Citrix environment ensuring continued supporting and functionality and is currently 40% completed.



JFRD Staffing Integration with Tablet Command

This project is to establish an integration between the JFRD Staffing System and Tablet Command. Tablet Command is a vendor product used by JFRD for incident response. This outgoing data feed will provide staffing updates every fifteen minutes.

Server Refresh FY2023: Load Balancing Enhancement

To ensure maximum efficiency at our disaster recovery site, applications must be available and accessible at their highest level possible. To ensure this, COJ servers are being refreshed with new load balancing enhancements. The new virtual F5 environment will host this load balancing enhancement. A load balancer is a device that helps manage application traffic across several servers. This will provide the City the ability to move applications between locations in the event of a disaster, along with enhancing our system security. Currently, COJ is in negotiations with F5, the vendor, regarding the Statement of Work.

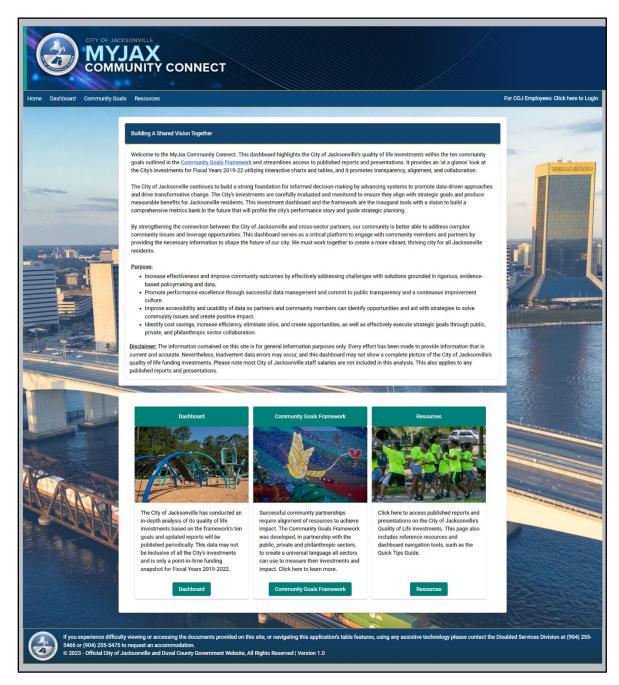
Kentico 13 Rebuild & Upgrade City Sites

The purpose of this project is to rebuild 11 city websites, currently built on Kentico versions 10, 11, and 12 as Kentico 13 (or higher, if available) solutions based on Microsoft's new MVC .NET Core framework. These rebuilds will enhance the speed and functionality of the City's sites and ensure that they will be compatible with future standards, such as HTTP/2 and new versions of SSL/TLS security. In addition, these rebuilds will include a new look, feel, and feature a wider maximum desktop format and stationery left-hand navigation. Plans of implementation scheduled for FY2023.



Community Goals Framework Dashboard

The goal of this project is to develop a public facing website, *The Nonprofit Gateway*, that will provide a dashboard summarizing community goal funding that was allocated for the last three fiscal years. The dashboard represents the alignment of public, private, and philanthropic investments based on ten (10) goals that were identified to improve the quality of life for the citizens of Jacksonville. The data presentation on this website is not inclusive of all city investments and is only a point-in-time of currently captured funding for City of Jacksonville Fiscal Years 2019-2022.





Community Goals Framework Dashboard (continued)



Jacksonville Human Rights Commission (JHRC) Case Management Replacement

The goal of this project is to replace the current in-house developed JHRC Case Management system with a new vendor solution that will allow JHRC to satisfy their business needs by providing the functionality that includes Case Management, Case Tracking Information, emails/notifications, reports, forms, and other documentation related to Human Rights cases. The application will provide services to the residents of Jacksonville/Duval County related to reported matters of discrimination such as employment, public accommodation, HUD, etc., in a timely manner and according to regulatory requirements such as EEOC. Plans of implementation scheduled for FY2024.



Fire Station(s)

As COJ continues to grow, the resources to keep the citizens of Jacksonville safe continue to be a high priority. Jacksonville Fire & Rescue Department (JFRD), a main resource for the COJ citizens and visitors has maintained its designation as an ISO Class 1 department. A Class 1 rating represents the best fire protection a department can offer and given Duval County's massive 900-plus square mileage, this is necessary for the safety of the citizens of Jacksonville. Jacksonville is the largest ISO Class 1 department in the world. ITD continues to work with JFRD when there is a need for a new/renovation of a fire station by providing specifications, coordination, equipment, and services to integrate and install the following:

- Purvis Fire Station alerting system, FCRS radio, badge access for doors and gate, desk phones, networking switches, Wi-Fi access points, desktop computers.
- Coordinate installation of Comcast, AT&T circuits, Xerox printers.
- Specifications for structured cabling, grounding, communication infrastructure, data closet configuration and HVAC.
- Quality control audit of IT systems

Part of keeping this class 1 designation is establishing and enhancing new and existing fire stations.

- **Fire Station 64** Currently under construction and scheduled to be completed October 2023. This fire station is located on Harts Road (Northside).
- **Fire Station 75** Currently under construction and scheduled to be completed July 2023. This fire station is located on Firestone Road (Westside).

Multiple Survivor Pension Benefits:

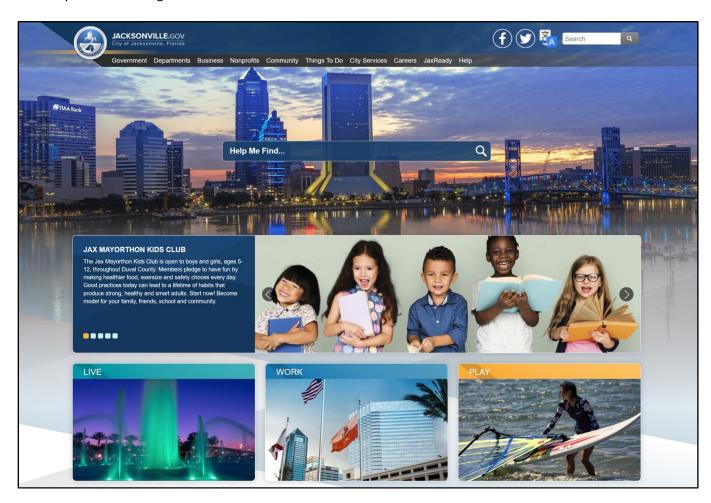
Work is in progress to implement a solution to provide individuals with multiple survivor benefits and generate separate 1099R, COLA, Affidavits, DROP, and W4-P for each.





COJ.net v4 - Kentico 13 Rebuild & Upgrade and Jacksonville.gov

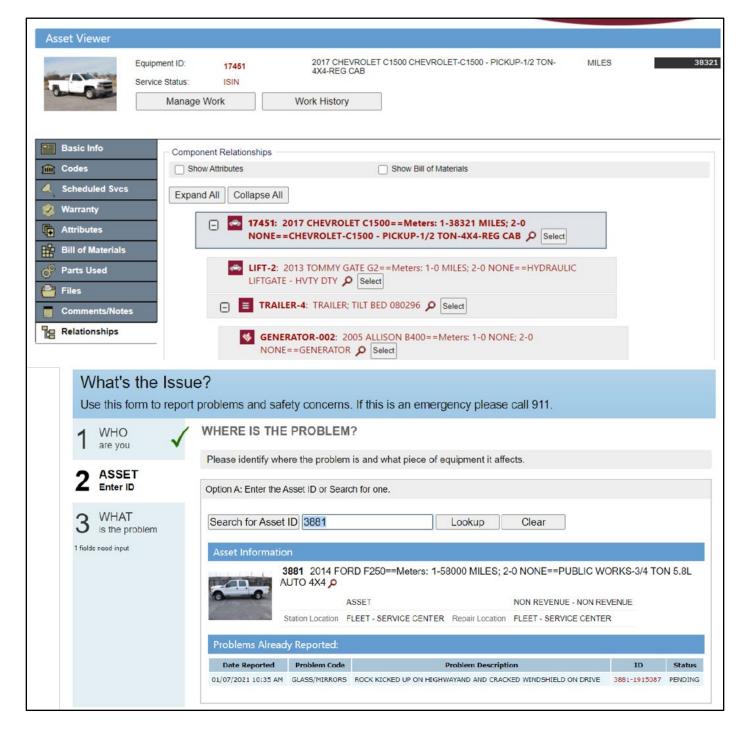
The purpose of this project is to rebuild COJ.net, currently a Kentico 12 solution built on Microsoft's ASP.NET framework, as a Kentico 13 solution based on Microsoft's new MVC .NET Core framework. As part of this project, COJ.net will be rebranded as Jacksonville.gov. This rebuild will enhance the speed and functionality of the City's main website and ensure that it will be compatible with future standards, such as HTTP/2 and new versions of SSL/TLS security. The rebuild will also include a new look and feel, featuring a wider maximum desktop format and stationery left-hand navigation.





Fleet Management System Replacement

The purpose of this project is to replace the current Tivoli Fleet Management System with a solution that will allow the Fleet Management Division to fulfil their business needs. The Fleet specific application will provide the following functionality: Vehicle Services and Repairs, Equipment and Inventory, Fuel Usage and Milage Tracking, Invoice and Billing, and Surplus and Disposal. Currently work is ongoing to finalize the contract terms, confirm the software modules needed, and detail the implementation effort with a current completion percentage of 40%.





Enterprise Permitting and Land Use (EPLU)

• Building Inspection Application (BID) Rewrite

The current system was developed in VB.Net, was implemented in 2007, and supports vertical permitting processes such as building, mechanical, plumbing, etc., as well as other permitting processes such as signs and mobile homes. It is also inclusive of electronic plans review, inspections processes, and building code enforcement. It is being rewritten as a web-based enterprise solution using the latest technology to create a more stable and sustainable product. The new solution will include existing functionality in addition to enhancements to better support agency business processes and required integrations with disparate systems and is currently 75% complete. The final product will provide a more secure and functional user experience.

• Property Inspection & Contract Solution (PICS) Rewrite

The current system was developed by a vendor, implemented in 2008 and is used to manage municipal code enforcement processes such as citation management, abatement procedures and contractors, and special magistrate processes. It is currently in the system rewrite screen design phase and will be a module of the permitting enterprise solution currently under development. The new web-based solution will use the latest technology to create a more stable and sustainable product. The new solution will include existing functionality in addition to enhancements to better support agency business processes and required integrations with disparate systems. The final product will provide a more secure and functional user experience. Initial wireframe design completed/rewrite expected to start Early 2024.

Fires Prevention & Inspections (FPI) Rewrite

The current system was implemented in 2008 and is used to manage the City's annual fire inspection processes. The new solution will include existing functionality in addition to enhancements, including more inspection types to better support agency business processes, and required integrations with disparate systems. It will be rewritten as another module within the permitting enterprise web-based solution that is also being developed in-house. The final product will provide a more secure and functional user experience. Initial enhancements completed/rewrite expected to start Mid 2024.

Concurrency Management System Enhancements

The current system was developed in VB.net and implemented in 2008 and is used in the horizontal development process to track and manage the City's concurrency and mobility applications and payments. Required enhancements to comply with city audit requirements have been completed. It will be rewritten as another module within the permitting enterprise web-based solution that is being developed in-house. The logic incorporated for audit compliance will be included in the system rewrite in addition to new features and functionality to better support the agency's business needs. Initial enhancements completed/rewrite expected to start Mid 2024.

• EQD Collection Permit & Payment System

ITD is in the process of developing a system similar to the Building Inspection permitting application for contractors to upload collection system permits, issue correspondence and collect payments. Functionality will be migrated into the new EPLU solution which will provide better integration between other systems and improve functionality and tracking of permit and payment information. Contractors will be able to view and interact with these permits in the same way they are able to see and process their BID permits though an easy-to-use online portal.

• EPLU: EQD Erosion and Sediment Control Rewrite

The current system in use by COJ's Building Inspection Division is a Microsoft Access database used to facilitate compliance with part of a State-Issued permit for the COJ stormwater system. There are no integrations or user-friendly interfaces into current systems. This application will be integrated into the new EPLU solution to enable easier modifications to permit requirements and allow information to be shared between other areas such as the DSD Civil Plan section. The new solution will also provide a better customer interface for entering information and uploading documents as required by state and EQD regulations.



Enterprise Resource Planning (ERP)

- Formal Sourcing COJ is currently in the progress of implementing Formal Sourcing, a primary component of the Advanced Procurement product. With this implementation, Request for Proposals (RFP), Invitations to Bid (ITB), Supply and Service Bids, and Evaluated Bids are among the various types of formal bids that will all be performed online through the Oracle Cloud solution.
- **Technical Infrastructure Upgrades** COJ is working with Oracle Consulting to upgrade the infrastructure foundation that supports system integrations and database storage. These migration projects are replacing the existing technology in order to enable the 1Cloud system to improve system services, provide new functionality, and implement the latest technology.
- Cash Management Reconciliation COJ is making significant progress improving the ability to automate the cash reconciliation within the 1Cloud system. These configuration adjustments will dramatically improve the capability of the system to auto-reconcile cash transactions, while minimizing human efforts and providing efficiencies to close each period rapidly and accurately.
- Data Warehouse The purpose of this project is to migrate legacy data from various systems into the ERP Data Warehouse. This project will consist of multiple phases that will be in conjunction with ERP project phases. As such, the data warehousing efforts will begin during the latter stages of each ERP project phase noted in the table below. This will allow the design and model to accommodate both historic and new data. Oracle Components required for this implementation include Analytics, Data Integration Platform, and Database Cloud Services-Enterprise Edition. This solution will provide the ability to create and generate reports on the regarding historical and new data from the live Oracle Cloud ERP system.

Phase #	ERP Project Phase
Phase 1	Financials, Projects, Procurement Inventory, Sourcing, Procurement Contracts
Phase 2	HR, Benefits, Payroll, Time and Attendance
Phase 3	Budget
Phase 4	Performance, Goal, Talent and Learning Management, Labor Relations, Grievance, Discipline and Recruitment

- Enterprise Resource Planning (ERP) Annual Comprehensive Financial Report (ACFR)
 The City is working to fully utilize the system to generate this extensive annual financial report from the 1Cloud system. This 350+ page comprehensive report consists of City financial data including Balance Sheets, Fund Statements, Pension Contributions, Financial Trends, Revenue Capacity, and much more.
- Service Oriented Architecture (SOA) Migration The purpose of this project is to replace the current Service Oriented Architecture (SOA) with Oracle Infrastructure Cloud Service (OICS). In March 2022, Oracle announced that SOA will become an unsupported product, which necessitated the migration to Oracle's new infrastructure platform. In addition, this migration is required prior to implementing Phase II ERP Core Human Capital Management.
- Oracle Cloud Infrastructure Data Integration Migration The purpose of this project is to replace the
 Oracle Data Integrator (ODI) with Oracle Cloud Infrastructure Data Integration (OCI-DI) in Oracle Cloud
 Infrastructure (OCI). The ODI will become an unsupported product, which necessitates the migration to
 Oracle's new infrastructure platform. In addition, this migration is required prior to continuing the
 implementation of the Data Warehouse.



Enterprise Resource Planning (ERP) Continued

Core Human Capital Management – The purpose of this project is to implement ERP Human Resources (HR) modules. Modules to be implemented will consist of the following: Human Resources, Benefits Administration, Compensation Management, Employee Self-Service, Leave Management, Manager Self-Service, Payroll, Personnel Administration, Position Control, and Time and Attendance, and ADP Services (Tax, Payments, Garnishments). Currently, the City's Business Systems Analysis (BSA) team is documenting detailed business requirements, which will serve as configuration documentation.



Highlights - Planned Projects

Construction Trades Qualifying Board (CTQB) System Enhancements

The current system is a Microsoft Access System and was implemented in the late 1990s and is used to track and manage business licenses and licensing requirements within the construction industry for contractors, tradesman, journeyman, etc. The new solution will be developed in two stages and result in two major releases. The first release will result in a more secure and functional system by rewriting the existing system as a web-based solution. The second release will provide citizen access to the web solution for license renewals and online payments. The new solution will include existing functionality in addition to enhancements to better support agency business processes and required integrations with disparate systems. It will be rewritten as another module within the permitting enterprise web-based solution that is being developed in-house.

Audiovisual Broadcast & Recording Solution for Civil Service Boardroom

The purpose of this project is to implement an audio/video solution for the Civil Service Board room. This will facilitate more effective presentations, recordings and virtual streaming of Board Meetings, Hearings, Training Sessions, other public meetings held in the Civil Service Boardroom.

Network Refresh FY2024

ITD established a recurring refresh cycle to replace network devices each year resulting in all network equipment being replaced every eight (8) years. ITD's goal for each year regarding the network refresh is to ensure minimized network outages, along with business interruptions preventing productivity loss caused by outdated and unsupported equipment. In addition, this will allow the eliminate unnecessary equipment expenditures due to unsupported devices.

Kids Hope Alliance AV Upgrade Phase 2

The purpose of this project is to expand the audio/visual technology at the KHA main boardroom. The project will improve audio and video capabilities to facilitate large and split-room events.

Brentwood Library Construction Planning

The purpose of this project is to provide basic technology infrastructure for the Public Library administration build out at the Brentwood elementary facility. This will allow the Public Library to relocate its administrative offices in the coming fiscal year.

P25 Radio Site Expansion

COJ implemented the P25 Radio Site Expansion to add new simulcast radio sites to the P25 system. Completion of these projects will increase communication coverage in the surrounding area and will also improve in-building communication for Public Safety officers and General Government radio subscribers. The remaining P25 Radio Site Expansions are:

- Mayport Road Currently scheduled for FY2024.
- Orange Picker Road Currently scheduled for FY2025.
- Crystal Springs Road Currently scheduled for FY2026.
- Bayview Road Currently scheduled for FY2027.



Server Refresh FY2024

ITD will replace needed server infrastructure and equipment including those that no longer have vendor support. The server replacement is reviewed annually to identify efficiencies and improvements in hardware and software technology to virtualize some servers based on infrastructure bandwidth, customer capacity, and trending technologies.

PC Refresh FY2024

The City of Jacksonville has adopted a PC Refresh policy that ensures computer devices throughout the City are operational in support of the COJ mission critical applications and services. The total fleet of 7,921 computer devices' value is estimated at \$12 million (inclusive of MDTs, Laptops, MacBooks, & Desktops). Conducting a full replacement every 5 years requires the City to spend \$2.4M per year (to replace 20% of the fleet annually). At the end of FY2024 ITD will have successfully deployed a total of 2,057 computers.

Fire Station(s)

As COJ continues to grow, the resources to keep the citizens of Jacksonville safe continue to be a high priority. Jacksonville Fire & Rescue Department (JFRD), a main resource for the COJ citizens and visitors has maintained its designation as an ISO Class 1 department. A Class 1 rating represents the best fire protection a department can offer and given Duval County's massive 900-plus square mileage, this is necessary for the safety of the citizens of Jacksonville. Jacksonville is the largest ISO Class 1 department in the world. ITD continues to work with JFRD when there is a need for a new/renovation of a fire station by providing specifications, coordination, equipment, and services to integrate and install the following:

- Purvis Fire Station alerting system, FCRS radio, badge access for doors and gate, desk phones, networking switches, Wi-Fi access points, desktop computers.
- Coordinate installation of Comcast, AT&T circuits, Xerox printers.
- Specifications for structured cabling, grounding, communication infrastructure, data closet configuration and HVAC.
- Quality control audit of IT systems.

Part of keeping this class 1 designation is establishing and enhancing new and existing fire stations.

- Fire Station 47 New construction scheduled to start June 2023 and will be located on Lannie Road (North of JIA).
- **Fire Station 12** Remodeling scheduled to start in July 2023 and is located on Atlantic Boulevard (Southside).
- **Fire Station 22** New construction scheduled to start August 2023 and will be located on Jammes Road (Westside).
- **Fire Station 39** New construction scheduled to start August 2023 and will be located on Metro Park (TIAA Stadium).
- Fire Station 17 Remodeling scheduled to start in August 2023 and is located on Huron Road (Westside).
- **Fire Station 36** New construction scheduled to start January 2024 and will be located on Lipia Road (Northside).



Enterprise Resource Planning (ERP)

- Enterprise Contracts The purpose of this project is to replace the legacy system and manual processes for
 tracking and managing contracts. The goal of the project is to design a systematic end-to-end process to
 manage and track contracts in Oracle Cloud Services. This solution will utilize the already acquired
 Procurement modules to fully integrate formal contracts, digital signatures, and online approvals to improve
 efficiencies, streamline processing and provide transparency into the status of each contract.
- Advanced Human Resources The purpose of this project is to implement Oracle advanced features of HR.
 These features will include Labor Relations, Goal Management, Career Development, Learning Management,
 Performance Management, Risk Management, Succession Planning and Talent Management.
- Advanced Collections The purpose of this project is to implement Advanced Collections module of Oracle
 Cloud which will facilitate a process which empowers the Accounting Division to identify and resolve
 delinquencies and collect money faster. This project will streamline processes that apply the best practice
 collections methods to enable the City of Jacksonville to manage collection risk.

• Employee Information System (EIS) Analysis and Requirements

The purpose of this project is to document system requirements and identify an ERP (SaaS or On Premise) solution to replace the existing Jacksonville Sheriff's Office (JSO) Employee Information System (EIS), which was developed in-house. The goal will be to ensure that the solution identified is capable of enforcing Contract and/or Union rules governing pay and differential practices coupled with ascertaining accurate payroll processes. In addition, the new system will be responsible for providing enhanced reporting and analytical capabilities, eliminating manual processes, and addressing all required interfaces.

JaxPension Analysis – General Pension

The purpose of this project is to document system requirements and identify a solution to replace the City's existing in-house developed General Employees' Pension Plan (GEPP) system. The goal will be to ensure that the solution identified must be capable of supporting both the Payroll and Administration functions performed by the Pension Staff. In addition, the solution will include self-service features, enhanced reporting capabilities, and all supporting functions associated with calculations, retiree benefits, refund contributions, and on-going payments. The solution will also address all required interfaces, both internal and external.

• JaxPension Analysis - Police & Fire

The purpose of this project is to document system requirements and identify a solution to replace the City's existing in-house developed Police and Fire Pension Plan System. The goal will be to ensure that the solution identified must be capable of supporting both the Payroll and Administration functions performed by the Pension Staff. In addition, the solution will include self-service features, enhanced reporting capabilities, and all supporting functions associated with calculations, retiree benefits, refund contributions, and on-going payments. The solution will also address all required interfaces, both internal and external.

• Enterprise Asset Management

The purpose of this project is to document system requirements and identify an enterprise-wide asset management solution to replace the City's existing Asset Management solution with the intent of improving overall effectiveness and efficiency. The goal will be to ensure that the solution identified is capable of accounting for all assets for all departments and divisions, determining location of assets, and establishing and tracking the entire asset lifecycle.



City of Jacksonville Wireless Infrastructure

The City of Jacksonville currently supports over 400 wireless access points servicing customers throughout the city. Wireless access points provide a cable free means of accessing network resources such as printing services, and access to file storage as well as Internet access. They are located throughout the city in various locations such as: libraries, fire stations, courthouse, public parks, tax collectors, and even in public parks.

City of Jacksonville Server Infrastructure

ITD will conduct a review of hardware and software each year to ensure that applications are running on vendor supported systems and to address any changes in security to address cyber-attack concerns. This review is part of ITD overall strategy of a five-to-six-year system refresh. This will allow ITD to replace or upgrade both hardware and software to meet the needs of the City of Jacksonville, FL.

Ensuring Technology Security Compliance

With the increase of threat actor activity on US critical infrastructure and state and local governments; now more than ever ITD remains committed to initiatives that focus on the security goals of the City's data and systems. ITD is committed to reducing risk to an acceptable level as we continue to focus on confidentiality, integrity, and availability as our core goals.

Ensuring public and employee safety is our priority. Continued improvements to the security of our facilities are a priority through investments and advancements in our physical security controls and technologies.