2021
ANNUAL REPORT
CITY OF JACKSONVILLE

ITD INFORMATION TECHNOLOGIES DIVISION

June 30, 2021

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.

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Information Technologies Division 2021 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, 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 9,370 desktops, laptops, rugged laptops, and tablets, 105 physical and 549 virtual servers, 14 communication towers that host Microwave and Radio systems, 11,050 radios, 7,500 telephones, 2,900 cell phones and data cards, network connectivity for all downtown COJ buildings plus 221 remote locations, fiber optic and copper cable infrastructure, 3 data centers and approximately 200 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.
- Ensuring Technology Security Compliance.
- Enhancing accuracy of Customer Billing Model.

Key Accomplishments

- Completed 58 projects for FY2019 and FY2020 (Projects are defined as over 40 hours of resource allocation)
- Completed tickets/requests:
  - FY2019 – 35,623
  - FY2020 – 34,358
- College Hires – 9 hires, filling positions in the areas of Business Analysis, Application Development, Security Administration and Server Infrastructure.

ITD Customer Billing Model

The customer billing model, on 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 FY2021 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.

ITD FY2020 BUDGET

$36,391,706	53101 - IT Operations
5,002,121	53102 - Radio Communications
213,037	53103 - Technology System Development
2,460,330	53104 - Technology Equipment Refresh
3,510,355	53105 - Radio Equipment Refresh
34,517,916	53106 - Technology System Development
$82,095,465	TOTAL

ITD FY2021 BUDGET

$39,917,534	53101 - IT Operations
3,773,449	53102 - Radio Communications
0.00	53103 - Technology System Development
2,628,891	53104 - Technology Equipment Refresh
3,481,295	53105 - Radio Equipment Refresh
35,004,371	53106 - Technology System Development
$84,805,540	TOTAL

FY2021 - Customer and Infrastructure Projects

Highlights - Completed Projects

COVID-19 Relief Programs

The City of Jacksonville implemented numerous programs that were designed to bring relief to our citizens who were suddenly unemployed or significantly underemployed as a direct result of the COVID-19 pandemic. The programs were designed to provide financial assistance to individuals, families, seniors, and small businesses that were able to demonstrate that they met specified criteria as required. Such programs included the following:

- **Mortgage, Rent, & Utilities Relief Program**
  The purpose of this program was to provide $40,000,000 in relief to the citizens of Jacksonville through the COVID-19 Mortgage, Rent, and Utilities Relief Program, a web based, fully secured solution was established for scheduling appointments and issuing payments to qualified citizens.

- **Small Business Relief Grant Program –** The program provided $9,000,000 in relief to small business ($2,000.00 per business).
- **Senior and Disabled Assistance Program** – The program provided $1,998,600 in relief to seniors and disabled citizens ($300.00 per senior/disabled individual).
- **Vystar Small Business Loan Program –** The program provided fixed interest rate loans and financial assistance to eligible small businesses with a maximum loan amount of $100,000.
- **Mortgage and Rent Assistance Program –** The program provided up to six months of delinquent mortgage/rent payments (not to exceed $5,000.00) to individuals and families.

Duval County COVID-19 Exposure Map

A new web application was developed and implemented to show the daily updated COVID case data per the requirements of the Emergency Preparedness Division (EPD). This Duval County COVID-19 Data Dashboard was updated daily using a direct feed to State of Florida Department of Health data. It also pulls Test Site location data directly from an application used by EPD through a data link created internally.

The image below represents a prototype of the actual application.
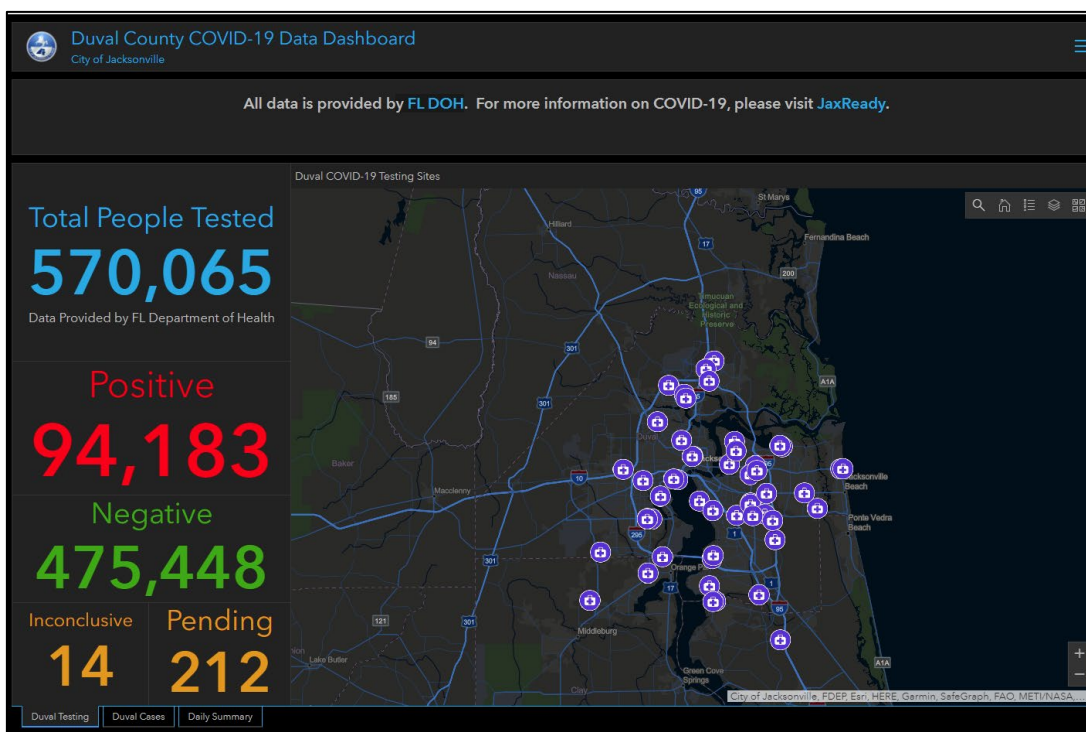
Families First Coronavirus Response Act

In compliance with the Federal Families First Coronavirus Response ACT (FFCRA), implemented a solution for providing COJ employees with Emergency Paid Sick Leave, Emergency Paid Family and Medical Leave for specified reasons related to COVID-19 using the City's Time and Attendance System.

FY2019 and FY2020 - PBX – Voice over Internet Protocol (VoIP) Phone System Refresh (Years 3 & 4 of 5)
The VoIP phone migration completed years 3 and 4 of a 5-year refresh strategy that has been planned for specific City locations. Migration has been completed for approximately 4,500 Cisco phones which were purchased to replace Legacy phones. FY2019 included the St James building and all JSO locations (2,100 phones). FY2020 locations included: JFRD headquarters, Yates's building, Tax Collector Gateway, Main Library, University Park Library, and Victim Services (835 Phones). These locations are now on a Cisco centralized telephone system enabling efficient management and administration of the desk phones which allow for more reliable communications.

FY2019 and FY2020 - Network Equipment Refresh (Years 6 & 7 of 8)
Completed years 6 and 7 of an 8-year Strategic Plan to replace legacy end of life network devices at various locations across the City. This annual refresh replaced outdated network equipment for various City agencies. Maintaining a solid infrastructure to support the applications, connectivity and services provided by ITD to all City agencies is essential for effective and efficient business operations.

FY2019 and FY2020 - P25 Radio – Microwave Network Radio Sites (Years 1 & 2 of 4)
Successfully replaced Microwave Indoor Radio Units installed in 8 City of 23Jacksonville's two-way radio Microwave Network Towers. The existing Microwave Indoor Units were discontinued for purchase in 2013 by the Manufacturer and are considered End of Life (EOL). This is part of ITD's on-going strategy to replace all microwave tower radios over the next few years. Tower Locations are Community Hall, Crystal Springs, Firestone, Greenland Road, JEA Plaza, JEA Systems Operation Control Center (SOCC), Kernan Road, and Yellow Water Road.

FY2019 and FY2020 - PC Hardware Refresh and Windows 10 Upgrade (Years 2 & 3 of 4)
ITD successfully deployed 3,641 new computers to various COJ departments for years 2 & 3 of the 4-year PC refresh project. The project aims to replace aging devices throughout the City while providing the latest operating system software that is currently being supported. All refreshed computers will have a Windows 10 operating system and Office 365 or Office 2019 depending on the using agency.

FY2019 and FY2020 - Mobile Radio Refresh (Years 4 & 5 of 8)
FY2019 ITD successfully refreshed 253 mobile radios for Jacksonville Sheriff's Office and 79 mobile radios for Jacksonville Fire and Rescue. FY2020 ITD successfully refreshed 253 mobile radios for Jacksonville Sheriff's Office and 80 mobile radios for Jacksonville Fire and Rescue. These radios were at end of life and support and required replacements.

FY2019 and FY2020 - Portable Radio Refresh (Years 1 & 2 of 8)
FY2019 Year 1 of an 8-year project; ITD successfully refreshed 406 portable radios for Jacksonville Sheriff's Office and 105 portable radios for Jacksonville Fire and Rescue and 64 portable radios for General Government agencies. FY2020 ITD successfully refreshed 402 radios for JSO, 105 radios for JFRD and 62 radios for General Government agencies. These portable radios were at end of life and support and required replacements. This is part of ITD's on-going strategy to replace all portable radios over the next 8 years.

Implementation of Web Licensing for Animal Care and Protective Services (ACPS)
ITD implemented the Web Licensing add-on module for HLP Chameleon used by ACPS for animal shelter management and operations. Citizens can now apply and pay for animal licenses online as well make donations to ACPS online.

Digitization of COJ Budget Office Books
ITD worked with the COJ Budget Office to digitize some of its paper documents for the budget years between 1912 - 2004. These documents were only available in hardcopy form, and many were starting to degrade due to their age and physical wear and tear. The documents have now been preserved electronically.

Fire Station Alerting System (FSAS)
Tasked with the preservation of life and property within the City of Jacksonville, which is one of the largest cities (in area) in the continental US, and the largest city in Florida, the Jacksonville Fire and Rescue Department (JFRD) faces all the challenges of a busy urban environment but spread out over 800 square miles. With a significant annual call volume for emergency services, JFRD must have the ability to appropriately manage and respond to all calls quickly and efficiently. JFRD replaced its antiquated alerting/dispatch capabilities with a state of the art, turn-key, fully automated IP-based system that integrates with the Department's Computer Aided Dispatch (CAD) system, Motorola radio system, and existing network. The selected PURVIS system was installed in 58 JFRD fire stations, and the radio component was also installed into six mutual support stations (two in Clay County; two in St. Johns County; and two on Navy bases). A mobile FSAS kit was also procured for contingency operations.

Increase Computing Bandwidth and Fiber Connectivity to Various COJ Locations
This is an ongoing effort to reduce Internet and Network access costs and to increase network performance to City locations where fiber has not been previously available. Due to newer industry technologies and applications that require higher network performance, this project is to migrate COJ locations that remain on legacy DSL (Digital Subscriber Line), Wireless, and Old Metro-E systems to ASE (AT&T Switched Ethernet) Fiber. The business value is providing high speed to locations that is targeted for City Recreation Management (Vermont POS) systems and VoIP (Voice over Internet Protocol). Currently these old sites will not be able to efficiently operate with their legacy slow speed circuits. The cost for these circuit upgrades will be offset by the savings the City will gain by renewing the current ASE contract. ITD migrated an additional 20 Public Libraries (E-Rate) and 34 City locations from legacy circuits to ASE (AT&T Switched Ethernet) Fiber in FY2019, while completing the migration in 2021. At this time bandwidth at all legacy systems have increased to 10Mbps-100Mbps (depending on the office and location) using industry standard switched Ethernet technologies.

Disaster Recovery
In 2019-2020, ITD has completed the setup and configuration of an out of state information technology disaster recovery location capable of running all essential technology functions. Backup and Recovery is currently enabled, and the new location contains synchronized system backups for all information systems and is configured for year-to-year growth as additional applications and projects may require. The project completed the recovery for the first set of critical applications in 2021 with on-going additions and recovery testing throughout the current year and 2022.

Consolidated 911 Backup Center
ITD assisted with the technology and network to establish a combined 911 backup center for the City's Sheriff and Fire Rescue Departments. Both agencies utilize this facility when issues arise with their call taking and with dispatching primary sites. The backup center location includes redundant systems for 911 calls, CAD dispatch and the P25 radio system. This communication center, also known as a Public Safety Answering Point (PSAP), is located at Cecil Field. The project was completed end of FY2020 and has been in operation since.

Enterprise Resource Planning (ERP) – Financial, Procurement, and Budget
The City implemented the Financial and Procurement applications of the Oracle Cloud solution. These applications are fully integrated and include the following modules: General Ledger, Budgetary Control Encumbrance Accounting, Fixed Assets, Accounts Payable, Accounts Receivable, Project and Grant Accounting, Cash Management, Expenses, Annual Comprehensive Financial Report (ACFR), Informal Purchasing, Vendor Management and Supplier Portal. Due to COVID and resource challenges, we have extended the stabilization period to work with the Implementer and Oracle to reconfigure some functionality to better meet the needs of the City.

This project is an on-going initiative with a goal to replace several other outdated systems under one unified platform.

By implementing the City's ERP 1Cloud system, we are already achieving significant benefits and expect to realize even more as the project progresses. These benefits include:
•   Modernizing our technology platform by eliminating disparate software applications in use today.
•   Streamlining City business processes to improve our efficiency and effectiveness to both our Constituents and internal stakeholders.
•   Increasing visibility; placing decision making information in the hands of the business.
•   Allowing for greater access to information for City executives and managerial staff.

Computer Aided Dispatch System (CAD) Replacement
In November 2019, The Sheriff and Fire and Rescue Departments upgraded their existing separate Motorola CAD Premier systems into a single Motorola PremierOne system. The consolidation of all call takers into a single system to handle all 911 emergency calls resulted in a more efficient and effective public safety system.

Public Defender Data Center Relocation
ITD relocated the Public Defender's servers, networking connectivity, and data protection into the City's consolidated Data Center. This new location provides increased fire suppression, 24x7 operations support, redundant power and cooling and reduced operating costs.

Project and Portfolio Management Solution (PPM)
In July 2019, ITD implemented the Daptiv Project and Portfolio Management Software as a Service (SaaS) Solution to reengineer business processes and deliver transparent insight into the IT business portfolio. This system serves as the core system for tracking all IT work related and was designed to provide project management, portfolio management, demand management and resource management. In addition, Phase II of the project was implemented in August 2019, which included integration with CA Service Desk ticketing system) for issues and requests, Time and Attendance for tracking of planned versus actual work efforts, and the internal customer billing system.

Real Estate Surplus Properties
A fully secured and public facing website was established for the Real Estate Division to publish a list of surplus properties available for sale on a regular basis. This is fully integrated with the GIS maps providing details of location, dimensions, zones, and council district etc. This also allows COJ administrators to manage the status of the properties as these are auctioned.

Customer Relationship Management (CRM)

In August 2019, the City replaced its legacy Citizen Active Response (CARE) system with Oracle CX which has enabled citizens to use multiple channels to report issues, make requests and get information. The channels available are web, mobile, text, phone, and social media. The new system provides real-time information to citizens via web and mobile and to the City via live dashboards and reporting.

Enterprise Permitting and Land Use Management (EPLU)
The City completed an RFP process with the goal of obtaining an enterprise permitting and land use solution to upgrade, consolidate and unite disparate systems. After a rigorous evaluation process, the contract was awarded to the highest scoring vendor as per competitive bid requirements. However, after contract execution, a gap analysis disclosed loss in functionality that would be incurred in addition to other limitations which resulted in the City's decision to terminate the contract. To avoid loss in functionality, incorporate needed enhancements, and establish required communication among disparate systems, a rewrite of the impacted applications will be completed in-house. Each system will be rewritten as a web-based solution, with a uniformed look and feel, and with the required interfaces and database links to establish an enterprise environment.

Medical Examiner Office (MEO) Application Upgrade
The City replaced the District IV Medical Examiner's Office (MEO) antiquated application. The new vendor solution supports workflows, alerts, chain-of-custody rules, robust system security, data/image storage and encryption, and further advance MEO's goal to go paperless. The system went live on January 1, 2020.

Value Adjustment Board (VAB) Application Migration
ITD implemented a new vendor solution for the City Council's VAB appeals process and management. The previous application experienced problems and resided on older technology. The new application is more robust and stable. Citizens can go online to file petitions with VAB and pay fees electronically.

630City and Tax Collector Call Center Systems and Phone Refresh
Tax Collector and 630CITY call centers were successfully migrated to Cisco Call Center in FY2019. The 630CITY migration included CTI (Computer Telephony Integration) with Oracle Service Cloud, allowing caller information screen pops based and phone control within the Oracle application. ITD is currently working on enabling speech recognition to further enhance the 630CITY capabilities.

Public Service Grants – Online Public Service Grants Applications
ITD implemented an interim solution for Public Service Grants (PSG) to allow potential grantees to apply online for Fiscal Year 2020 Public Service Grants. The solution allows applicants to review information that they are required to provide such as Program Overview, Program Activities, etc. and then directly enter and attach all required information. Once an application is submitted the system workflows automatically routes the application to the PSG organization to review and approve/deny an application. In addition, the solution enables COJ and the citizen(s) to work interactively to address any outstanding requests and requirements and conclude with the application decision.

Security Camera & Video Upgrade
This project upgraded, replaced, and installed new video and camera equipment as part of the City's enterprise video camera solution. The scope of this project included JSO, JFRD, Public Parking, Public Works, Jacksonville Public Library, Duval County Tax Collector, and Fleet. ITD facilitated the project oversight, RFP generation, Lenel System modifications, walk-through, vendor consultation, and vendor management.

Urban Forestry on COJ.net Redesign

ITD enhanced the existing Urban Forestry section on COJ.net which added functionality and visual appeal unique to the needs of Urban Forestry. This included adding custom navigation, news, events, employee profiles, methods for uploading documents, and direct links to interactive services such as 630-CITY, the Tree Plotter and Canopy Planner map, Tree Mitigation, Tree Trimming, Tree Removal, and other services. This aims to provide a simple, user-friendly section on COJ.net for urban forestry with the intention of increasing Urban Forestry's web presence while adding functionality to make the pages easy to maintain and navigate.

JAX Ready Website & Mobile App
https://www.jaxready.com/
ITD created a new standalone website for the Emergency Preparedness Division with custom navigation and tools which make it easier to update and maintain. Updates were also made to the JaxReady mobile application that include the integration of NOAA forecast weather information and data from other external sources. The mobile app also has also been upgraded for enhanced performance during high web traffic spikes. Web content is synchronized between the website and the mobile application.

Tax Collector's Website
https://taxcollector.coj.net/
ITD has created a stand-alone website that aims to increase the Tax Collector's overall web presence and usability. To streamline online Tax Collector processes, custom features such as an Important Links Carousel and Live Office Wait Times were added to the site.

Pensioners' 1099-R Statements Online

The 1099-R statements were established online through the secured Pension Portal to report the distribution of retirement benefits such as pensions, annuities, or other retirement plans. The pensioners are now able to view, download, and print the statements anytime, anywhere using any device.

Employees' and Pensioners' DROP (Deferred Retirement Option Plan) Statements Online

The DROP statements were established online through the secured Pension Portal to report the DROP balance, conversions, adjustments, and payouts. The Corrections and Police and Fire employees as well as pensioners are now able to view, download, and print the statements anytime, anywhere using any device.
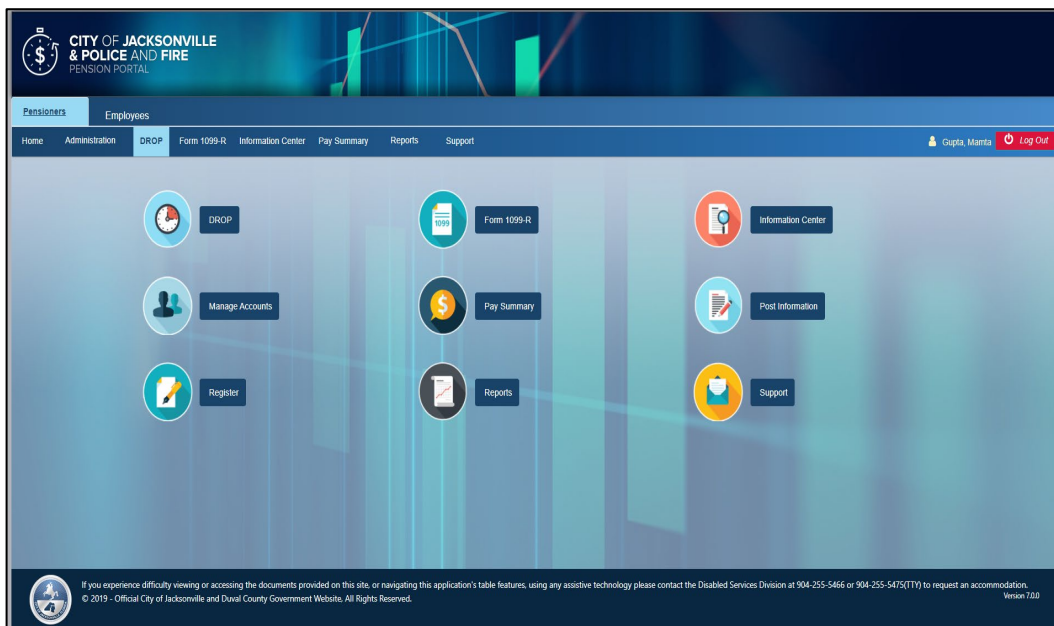
Online Voting System for PAC and CPAC

The online voting system was established to elect the members of Pension Advisory Committee (PAC) and Corrections Pension Advisory Committee. The voters from COJ, JEA, and JHA now can vote in a specified election window anytime, anywhere using any device.
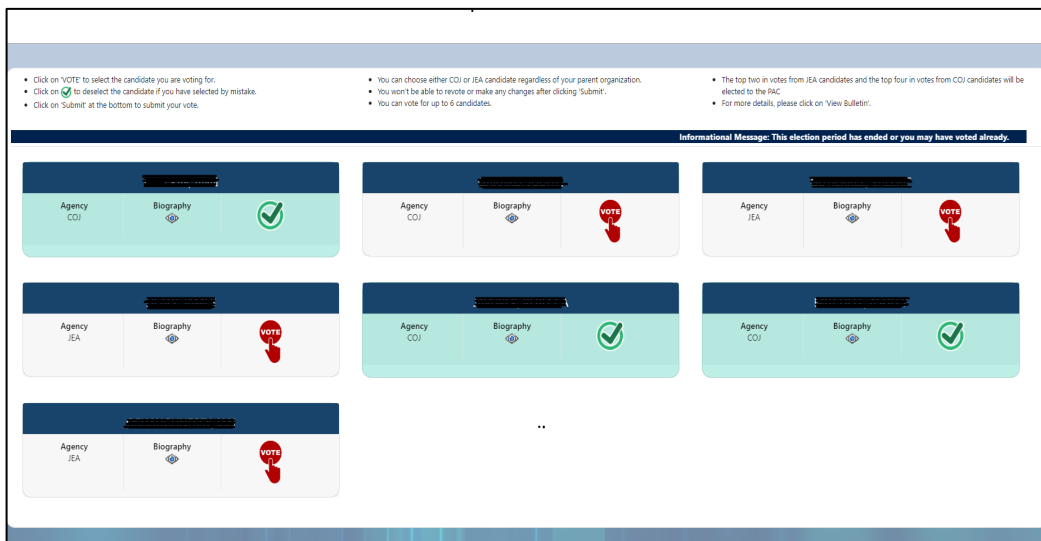
Limited Retirement Option

In April 2021, ITD enhanced the existing Pension Portal system to comply with the Early Retirement Ordinance 2020-529. The enhancements made were designed to allow COJ, JHA, and JEA employees to make their early retirement option via the portal.

Neighborhood and Adopt-A-Road Cleanup Programs

This website provides the ability for citizens, business, industry, civic, youth & nonprofit organizations to adopt an area of roadway or neighborhood for monthly litter control. They can request cleaning supplies and provide post cleanup information for trash and debris pickup online.

Public Records Request Solution - GovQA

ITD implemented GovQA for the City, which is a Public Records Software Management solution that works across all departments. The solution implemented will allow the City to centrally manage all public records requests while enhancing citizen engagement through user-friendly tools. Other notable features include automated actions via customized workflows and processes, data protection, and the ability to redact documents easily and securely prior to their release.

Fuel Terminal Software Upgrade

The scope of this project included updating the software and replace ten (10) fuel terminals that had reached end of life and support. This project was critical for the operations of Fleet Management.

Environmental Protection Webpages on COJ.net

ITD enhanced the existing Environmental Quality Division section on COJ.net. The purpose was to add navigation features that make exploring the Environmental Quality pages more intuitive, as well as highlight upcoming events from the Environmental Protection Board. Users are encouraged to learn more about resource management activities and help to keep Jacksonville clean.

JUD4.org Fourth Judicial Circuit Court Website Rebuild

The Fourth Judicial Circuit Court Website had not been updated since 2014. This rebuild, improved usability for end users with the following functionality: new look and feel, wider maximum page width, enhanced mobile styling and navigation, search, Google Translate, and enhanced performance.

Kids Hope Alliance Website Rebuild

ITD rebuilt and rebranded the KidsHopeAlliance.org website. The site had previously been an externally hosted site and is now an in-house developed, Kentico website hosted on COJ servers. This rebuild included enhanced look and feel, enhanced ease of use, and increased security.

JFRD Hydrant Inspection Mobile App

ITD's GIS Team created a JFRD Fire Hydrant Inspection Mobile App. The purpose of this app is to enable JFRD field staff to work with fire hydrants to complete inspections, identify and track maintenance needs, and visualize and improve the hydrant locations as shown on the map view. A process has been created to sync up the hydrant data between JFRD and JEA (the agency ultimately responsible for the hydrants). Separate versions of the app were also created for the Fire Prevention team specifically concerned with privately owned hydrants, and for JEA maintenance management to allow them to track and update the status of hydrants out of service. Below are selected screenshots showing some views of the app.
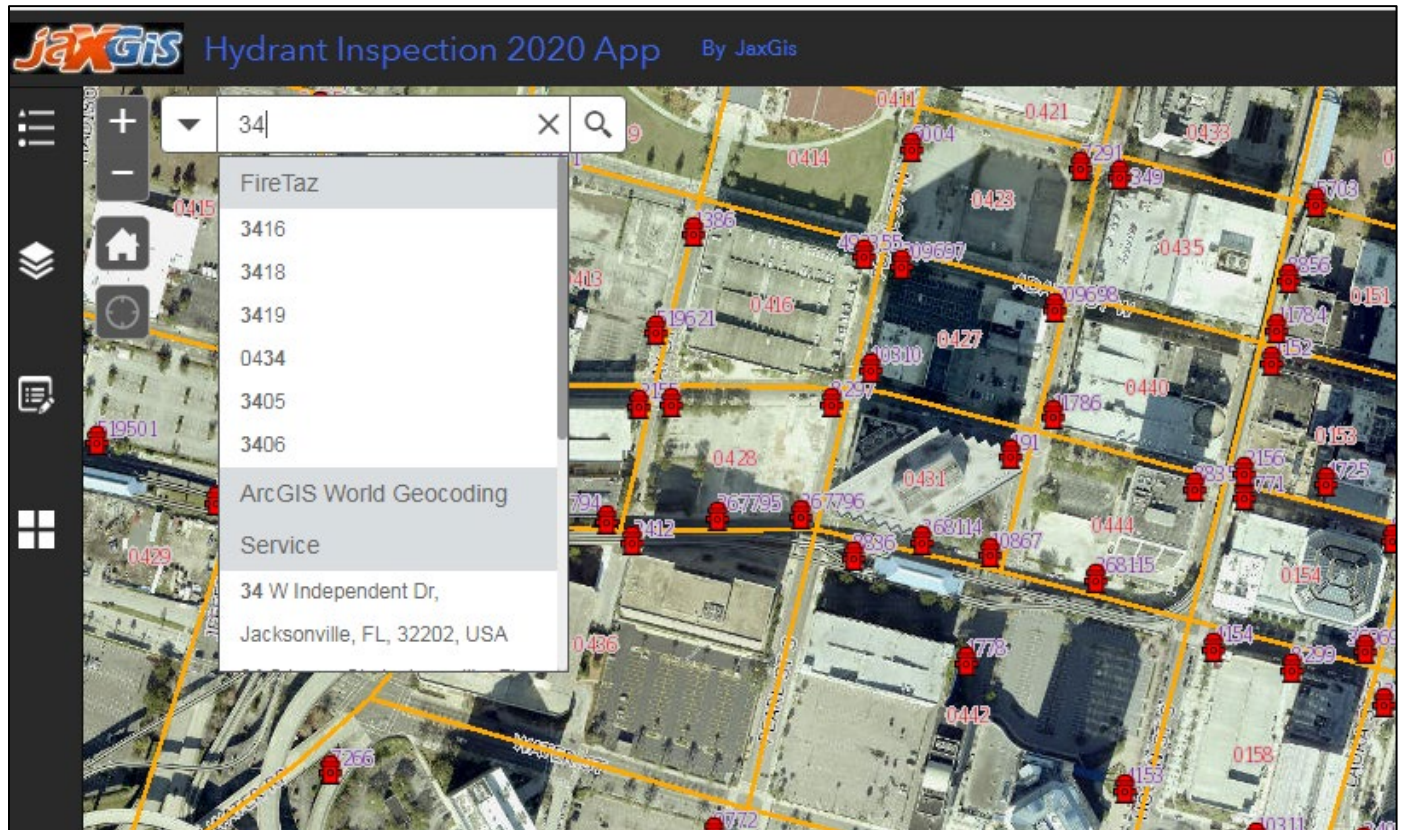
Library Service Area Map Analysis Tool

The ITD GIS team has developed a mapping application for the Public Library. It allows users to model and analyze library coverage based on current and potential library locations. By defining new "service areas", they can see areas covered and uncovered, and get information about the number of people that have to drive more than X miles (as defined by user input or using pre-defined distances) to get to their closest public library. The system shows where "library deserts" (areas deemed to be uncovered by a local library) are, and how the community could be better served by new libraries established in new hypothetical locations.

This GIS Application also gives the Library staff the ability to perform other types of GIS analysis, including the provision of demographic data and reports for current or user defined service areas or other user areas defined on the interactive map. Additionally, users are also able to determine the number of citizens "covered" by library locations in a specific Council District.

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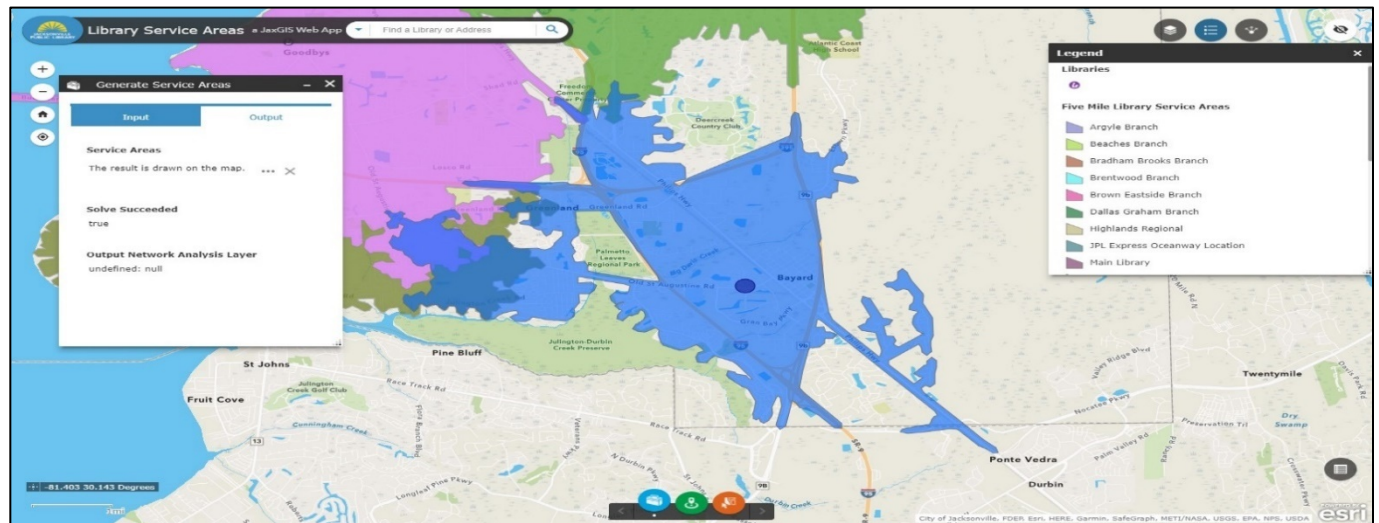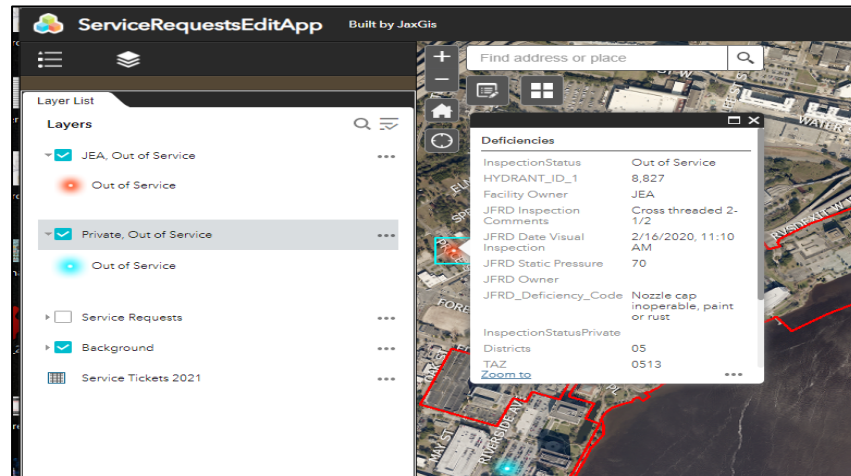
the interactive map. Additionally, users are also able to determine the number of citizens "covered" by library locations in a specific Council District.

Highlights – Projects in Progress

Enterprise Resource Planning (ERP) – HR, Payroll and Benefits
The City of Jacksonville is in the process of moving from our current on-premise Human Resources, Payroll, and Benefits administrative systems to Oracle's leading-edge cloud solution. This Enterprise Resource Planning (ERP) initiative supports our business transformation goals to adopt industry best practice standards and improve City-wide business processes. ITD is currently performing a deep-dive analysis of the City's current processes and procedures to ensure that the City's overall functions are accounted for in the new ERP solution.

Enterprise Resource Planning (ERP) – Learning Management System, Talent Management
The City of Jacksonville is in the process of replacing the Training Management System with Oracle's Cloud Learning Management module. This module includes the ability to automate the assignment of learning initiatives based on department/division, position, COJ onboarding requirements or other business rules, along with improved talent development of COJ employees through the creation of learning paths and the automated recording of competencies or certifications achieved upon course completion. These are but a few of the improvements that will be achieved through this module.

Mortgage Relief Program (MRP)
The City of Jacksonville launched the Mortgage Relief Program on March 31, 2021. The program will distribute $4.25 million of federal funds to assist Duval County homeowners (approximately 1,200 individuals/families) who have not been able to pay their mortgage due to a loss of income related to COVID-19. The maximum amount payable is $7,500.00 of past due mortgage payments.

FY2021 - PBX – Voice over Internet Protocol (VoIP) Phone System Refresh (Year 5 of 5)
ITD is continuing VoIP refresh strategies that have been planned for specific City locations. Migration is in progress for 800 desk phones and 50 Power over Ethernet (POE) network switches, at 84 locations to include public libraries, community centers, and Supervisor of Elections. This year's refresh concludes the VoIP phone system refresh.

FY2021 - Network Equipment Refresh
Currently in year 8 of the Strategic Plan to replace legacy end of life network devices at various locations across the City. This annual refresh will replace outdated network equipment for various City agencies. Maintaining a solid infrastructure to support the applications, connectivity and services provided by ITD to all the City agencies is essential for maintaining effective and efficient business operations. There are 28 network devices to be refreshed in FY2021.

FY2021 - P25 Radio – Microwave Network Radio Sites (Year 3 of 4)
ITD is replacing Microwave Indoor Radio Units installed in two-way radio Microwave Network Towers. FY2021 is Year 3 of a 4 Year Project to replace microwave radio equipment.

FY2021 - Mobile Radio Refresh (Year 6 of 8)
ITD is refreshing 253 radios for Jacksonville Sheriff's Office (JSO) and 76 radios for Jacksonville Fire and Rescue (JFRD). These radios are at end of life and support and require replacements. FY2021 is Year 6 of an 8 Year Project, to replace mobile radios (Mobile radios are two-radio installed in vehicles).

FY2021 - Portable Radio Refresh (Year 3 of 8)
ITD is refreshing 419 radios for JSO, 105 radios for JFRD and 20 radios for General Government agencies. These portable radios were at end of life and support and required replacements. FY2021 is Year 3 of an 8 Year Project to replace portable radios.

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 satisfy their business needs by providing a Fleet specific application with the following functionality: Vehicle Services and Repairs, Equipment and Inventory, Fuel Usage and Milage Tracking, Invoice and Billing, and Surplus and Disposal. The Request for Proposal (RFP) was released, responses received and scored, and the project team is in the second phase of evaluation, preparing the remaining two vendors for on-site demos. Once the on-site demos are completed and scored, a vendor will be chosen, and the contract process will begin.

Maximo Upgrade 2021

ITD is currently in the process of upgrading Maximo, the City's Enterprise Asset Management solution, from 7.6.09 to 7.6.12. This upgrade is required due to IBM's announcement that the current version utilized by the City will reach end of life/service in September of 2021.

2010 Migration to Cloud

ITD is migrating sites and content from on-premise SharePoint 2010 to the Microsoft 365 SharePoint Online environment. The SharePoint 2010 environment Is no longer being supported by Microsoft. The new SharePoint environment features updated functionality to help users with file management and collaboration.

Debris Tracking System Redesign

ITD's GIS team is currently redeveloping the Hurricane Debris Tracking System and its various functional elements. The new system will be significantly modernized and enhanced and enables a simplified but more effective and efficient workflow. The approach for this new system takes advantage of mobile device technology and the fact that the City employs 3rd party "Monitors" who are required to carry "smart" mobile devices for work use. The system is a combination of a "back end" PC application and a mobile app that staff and management involved in debris cleanup would use to manage and track the progress of the debris cleanup effort. The major functions handled through this process include the creation of Load Tickets for various types of debris, the ability to mark "Pass Completion" by street and grid to show what has been completed versus what is yet remaining, and the in-depth cost tracking and reporting needed to secure reimbursement funding from FEMA and the State of Florida.

Courthouse Complex Distributed Antenna System (DAS) Replacement

ITD is replacing the DAS equipment installed in the Duval County Courthouse that provides cellular carrier and two-way radio connectivity for Law Enforcement officers, Fire and Rescue personnel, Circuit Judges, Bailiffs, Clerk of Courts employees and citizens.

Real Estate Management System Replacement

ITD in conjunction with Real Estate Division is in the process of gathering requirements to acquire or build a software solution to serve as a single, unified database 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. 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.

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, those being, the Accounting, Building Inspection, and Development Services Division.

Computer Aided Dispatch (CAD) Upgrade 2021
ITD is currently in the process of performing a full upgrade to the CAD Software Application which will enable the Purvis interface (acknowledgements) and resolve a reported issue by both JFD & JSO.

Solid Waste CompuWeigh Software – v5 to v6 Upgrade
The purpose of this project is to upgrade the City's Solid Waste Disposal System from CW5 to CW6 due to version CW5 reaching end of life and support. The upgrade includes all currently owned licenses, modules, and customizations. In addition, the upgrade is necessary to continue receiving the required annual maintenance and support. This project will ensure that the Solid Waste Division will be able to provide disposal services and accurately bill and collect revenue for the services provided. In sum, the upgrade will provide increased efficiencies and improve the overall flow of operations.

CareWare Transition to on Premise Hosting
In conjunction with the COJ Social Services Division – Ryan White Part A team, ITD is transitioning the HRSA CAREWARE application in-house. Taking the application in-house will enable Social Services to continue its mission to provide the best possible services to Ryan White HIV/AIDS Program recipients and providers.

Environmental Quality (EQD) – GIS Public Water Quality Website Creation
This project is currently in progress and the goal of the project is to develop a web application that will automate several time-intensive functions being performed manually by EQD staff and which generally encompass the process of entering and tracking water body inspection data, managing testing functions, monitoring, and reporting results, and meeting requirements from State and Federal regulatory institutions. This application will absorb and replace the current EQD Locations module and provide the public the ability to: learn about water quality issues, determine the health of the local creek, access data for science projects, and to view photographs. The greatest advantage, however, would be the existence of all data needed for State and Federal reporting requirements in one database and accessible through one application. To date, a sizable effort has been put forth in gathering current and archived data from disparate sources, designing a single new database to house past and future data, and reconciling and merging the data into a new required format. The anticipated project completion date is September 2021.

Physical and Virtual Environment Refresh
Each year the ITD team conducts a review of the city server hardware and software to determine items that are coming up on end of support by our vendors and items that are not operating effectively for replacement or upgrades. These refreshes are necessary to maintain a solid infrastructure to support applications, connectivity and services provided by ITD to all the City agencies and essential for maintaining effective and efficient business operations, to meet the needs of the citizens and businesses of the City of Jacksonville Florida.

Highlights - Planned Projects

FY2022 - P25 Radio – Microwave Network Radio Sites (Year 4 of 4)
ITD will continue to replace Microwave Indoor Radio Units installed in two-way radio Microwave Network Towers. FY2022 will be Year 4 of a 4 Year project.

FY2022 - Mobile Radio Refresh (Year 7 of 8)
ITD will continue the refresh strategy to replace mobile radios for General Government Agencies, Jacksonville Sheriff's Office (JSO) and radios for Jacksonville Fire and Rescue (JFRD). These radios will be at end of life and support and will require replacements. Mobile radios are two-way radios installed in vehicles. FY2022 will be Year 7 of an 8 Year project.

FY2022 - Portable Radio Refresh (Year 4 of 8)
ITD will continue the refresh strategy to replace portable radios for General Government Agencies, Jacksonville Sheriff's Office (JSO) and radios for Jacksonville Fire and Rescue (JFRD). These radios will be at end of life and end of support. FY2022 will be Year 4 of an 8 Year project.

FY2022 - P25 Radio – Redundant Backup System/Relocate Master Radio Site
ITD will relocate its current Master Site radio system to the Ed Ball and Wells Fargo buildings and implement a new P25 redundant backup system. This new system will provide the City with a backup, allowing for greater fail-redundancy, greater operational flexibility, and continuous two-way radio communications in the case of system failure. The Redundant Radio System installation is scheduled for FY2022 and completed in FY2023.

P25 Radio – Radio Site Expansion
The intent of this project is to add 5 new simulcast radio sites to the P25 system. Completion of this project will increase communication coverage areas throughout Duval County and will also improve in-building communication for Public Safety officers and General Government radio subscribers. FY2023 will be Year 1 of a 5 Year project.

Kentico Upgrade – City Sites
The purpose of this project is to rebuild COJ.net, currently a Kentico 10 solution built on Microsoft's ASP.NET framework, as a Kentico 13 solution based on Microsoft's new MVC .NET Core framework. This rebuild will enhance the speed and functionality of COJ.net 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.

Grants Management
The goal of this project is to implement a city-wide Grants Management Software for various types of grants. The system will equip leadership with the tools necessary to provide strategic alignment, effective organizational collaboration additional internal controls and improved decision making. This solution is intended to be utilized by grant personnel across the City working in various departments and agencies. This solution will include pre-grant award and post-grant award capabilities enabling the ability to manage sub-recipients through a portal. This system will manage local, state, and federal grant (direct and pass-thru) awards. The City is in the process of acquiring a City-Wide Grants system with plans of implementation scheduled for next FY2023.

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.

Building Inspection Application (BID) Rewrite

The current system was developed in VB.Net and 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 will be rewritten as a web-based 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. 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 and 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 will be rewritten as a web-based 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. The final product will provide a more secure and functional user experience.

Fires Prevention & Inspections (FPI) Rewrite:

The current system was developed in C# and 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 a web-based solution using the latest technology to create a more stable and sustainable product. The final product will provide a more secure and functional user experience.

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. The priority is to complete system enhancements to enable the business to comply with city audit requirements. A rewrite will follow in the future. 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.

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 a web-based solution using the latest technology to create a more stable and sustainable product.

Enterprise Resource Planning (ERP) – Formal Sourcing and Enterprise Contracts
The City of Jacksonville is scheduled to implement Formal Sourcing, a primary component of the Advanced Procurement product. With this implementation, Request for Proposals (RFP), Request for Quotation (RFQ) and Request for Information (RFI) will all be performed online through the Oracle Cloud solution. To complete the process, the City will also implement Enterprise Contracts which will complete the cycle for securing multiple types of required contracts for the business. Complete contract tracking and processing will be able to be performed within the system, including the use of digital signatures.

Enterprise Resource Planning (ERP) – Advanced Human Resources
The City of Jacksonville plans to complete the Advanced Human Resources which includes the modules for, Goal Management, Performance Management, Career Development, Talent Review and Succession Planning.

City Council AV Replacement

The purpose of this project is to update the audio/visual equipment and displays in the City Council Chambers, Lynwood Roberts Room, Don Davis Room, Committee Room B, and Conference Room A at the St. James Building. The project is to improve visibility for City Council meetings by providing larger display monitors for the public audience and City Council members. The intent is also to improve the image quality of the broadcast meetings by utilizing HD cameras and provide the ability to record/broadcast meetings from all rooms to all rooms and pre-defined Comcast channels. The project will begin in FY2022.

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

The goal is to keep ITD hardware and software infrastructure current to maintain vendor support and to ensure technical systems availability by completing an annual hardware and software review to determine which items need to be replaced or upgraded to maintain vendors support with a five-to-six-year cycle. Each year, the hardware/software replacement/upgrade strategy will be reviewed to identify efficiencies and improvements in hardware and software technology based on City's needs and newer technologies. This will allow us to address all hardware and software under ITD management.

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 is a priority through investments and advancements in our physical security controls and technologies.