CITY OF WESTON

FLORIDA



Technology Strategic Plan 2022–2025

Executive Summary

Any strategic plan for information technology (IT) must examine and define the role of technology within the business/government operation. The role of IT within the City of Weston is to support the City's business objectives and to promote efficient and effective services to our constituents. This plan provides a broad framework for the effective management of information technology in line with the City's broader and long-term "Strategic Value and Business Plan".

The City's previous Technology
Strategic Plan led to investments and innovations which were recognized nationally by The Center for Digital Government. The City of Weston was ranked #1 City in the 2019
Digital Cities Survey for populations up to 75,000.

CENTER FOR DIGITAL GOVERNMENT





The COVID-19 pandemic changed the world forever and accelerated digital transformation and adoption globally, especially across all sectors of government. Thankfully, The City of Weston was in a great technology posture to adapt to the rapid changes and demands in order to keep staff and the public safe, while minimizing any impacts to our delivery of services. There were many lessons learned and many opportunities for business process improvements which we are incorporating into this new Technology Strategic Plan.

The overarching goal of our new
Technology Strategic Plan is to
leverage innovation and technology
to continuously improve our internal
operations and enhance our delivery
of services to our constituents.



Introduction

Background

Since its inception, the City of Weston's management philosophy has been to hire exceptional people and provide them with the resources they need to excel.

The City has minimized the number of full-time City employees while emphasizing efficiency, effectiveness and flexibility. The City has only ten (10) official City employees and contracts with private service providers to perform most City services including Police, Fire, Permitting, Code Enforcement, Communications, Planning & Zoning, Engineering, Parks, Public Works, Landscaping, IT and Administrative Services.

The City's ten employee's primary function is to deliver the best services by carefully monitoring and managing the contract service providers.

As such, it is essential that the City employees and contract staff have access to tools and technology that streamline their operations and ultimately enhance their ability to provide exceptional services to our constituents.

In addition, the City recognizes that our constituents are digitally-aware and expect to interact with the City with the same ease offered in the consumer environment. The City's information and services should be easy to access, from anywhere, at any time and from any type of device. The City has committed to a philosophy of "Online" vs "In line". If we can save you a trip to City Hall, we will! The City has also adopted an "Experience-Driven Government" philosophy which is continuously improving through customer engagement and feedback.



Technology Goals and Guiding Principles

Goals

The City has established an approach that focuses on leveraging technology to promote the following four key goals:

- 1. Promote Efficiency and Efficacy
- 2. Improve Service Delivery
- 3. Increase Transparency
- 4. Mitigate Risk

The City has developed this

Technology Strategic Plan based on
a shared vision for technology and a
set of shared goals and guiding
principles. An investment strategy is
further defined within the City's
overarching "Strategic Value and
Business Plan".

GOAL 1: Promote Efficiency and Efficacy

 Offers a positive return on investment (ROI) and/or reduces future expenditures



✓ Improves internal productivity and/or simplifies operations

GOAL 2: Improve Service Delivery

 Improves accessibility while decreasing complexity to City services, resources, and/or officials



✓ Improves the quality, responsiveness and/or usability of City services with a focus on customer service

GOAL 3: Increase Transparency

✓ Improves accessibility of public records and decision-related materials



✓ Promotes constituent engagement and collaboration initiatives

GOAL 4: Mitigate Risk

- ✓ Improves cybersecurity, internal controls and privacy measures
- Improves resiliency through disaster recovery and continuity of operations



 Proactively mitigates risk associated with software and/or equipment useful lifecycles



Guiding Principles Central Review and Coordination of IT IT investments should be coordinated at a Citywide level to leverage development efforts, reduce duplicative costs, and ensure compatibility of systems. When assessing new software solutions, commercial off-the-shelf (COTS) software packages that adequately meet the business requirements of the City are preferable to custom-developed applications. IT will expand/reuse before it buys and buy before it builds. **Technology Standards** Hardware, software, and methodologies for management and development should adhere to City standards defined by the Director of Technology Services. Hardware and software should adhere to open (vendor autonomous) standards to promote flexibility, interoperability, cost effectiveness, and to mitigate the risk of dependence on individual vendors, where applicable. Access to Information and Services Information and services should be provided using web-based, selfservice architecture with standard navigation tools and interfaces where appropriate. Data integration should be promoted. Data should be captured once and shared to reduce cost, duplication of effort, and potential for **Continuous Business Process Improvement** When implementing commercial off-the-shelf software packages, the City should adopt and implement industry best practices, redesigning business processes as required to improve operations, minimize customization, and speed the delivery of new business applications. The City's technology decisions are best approached incrementally within an overall strategic perspective and include measurable key performance indicators. **Privacy and Security** The City should adopt and implement an effective IT security policy that articulates the manner in which it collects, uses, and protects data, and the choices offered to protect personal and sensitive information within the constraints of public disclosure law. Reasonable, cost-effective measures should be implemented to protect data, hardware, and software from inappropriate or

unauthorized use, alteration, loss, or destruction.

Auditable security measures should be part of the initial architecture,

and design as IT solutions are developed and implemented.

Public Sector Trends

Cybersecurity- The City considers cybersecurity a top priority and has invested in several solutions to mitigate the risks and challenges of today's highly interconnected, Internet-driven world. The City manages a diverse ecosystem of technologies in which cybersecurity solutions and controls are layered into the technology stack at all levels. This multi-level threat protection model includes a combination of next-generation firewalls, cloud-based antispam/anti-malware, and endpoint protection. In addition to hardware and software, sound internal process controls and security policies are being put in place to further minimize risk. Security must not be viewed as a single project or piece of technology but an ongoing and adaptive process that must be continually revisited and fortified.

Civic Engagement- The use of social media in government communications is no longer a luxury, or something to be considered as an afterthought. Social media such as Twitter, Facebook, Instagram, and numerous others are now mainstay forms of communications for millions of Americans, especially members of the younger generations. Other forms of digital communications such as blogs, RSS feeds and e-alerts also provide multiple ways for users to communicate and engage with municipal governments and vice versa. The effective use of social media for communications and resource management in numerous emergency situations has been well documented over the past few years and presents a very real opportunity for governments to "harness" community action and knowledge.

Mobile Workforce and Mobile Friendly Services- City agencies increasingly rely on mobile technology to carry out their field operations and missions. In addition, the need to deliver information and services to the public via mobile-friendly solutions has dramatically increased. Smartphones, tablets, and other mobile devices are fast replacing computers as the primary means for users to access the Internet, and new "cloud" computing models will allow data, information, and applications to be accessed anywhere, anytime, from any device.

Transparency, Open Data and Self-Service- New developments in web technologies are having a profound impact on government agencies at all levels. Constituents are increasingly demanding greater transparency, accountability, and access to information which is a driving force behind what is known as the Open Data movement in government. Open data is the notion that government data should be freely available to everyone to access via the web. In addition, constituents are digitally-aware and expect to interact with



the City with the same ease offered in the consumer environment. The City's information and services must be easy to access, from anywhere, at any time and from any type of device. The City has committed to a philosophy of "online" vs "in line". If we can save you a trip to City Hall, we will!

Disaster Recovery/ Continuity of Operations Planning- The City's ability to function during a disaster depends upon a resilient IT infrastructure that keeps critical agency applications running, data accessible and secure, and telecommunications networks operating. The COVID-19 Pandemic was an opportunity for the City to expand its remote operations capabilities while minimizing any negative impacts to service delivery.

Geospatial/Geographic Information System (GIS) Integrations- Almost every City service and asset can be tied to a location on the map, making GIS an increasingly valuable tool. Besides its traditional internal use in helping local governments visualize data and make correlations, it has now become a common tool for the public.

Business Intelligence (BI) and Operational Analytics- Information is one of the most valuable City assets. Providing the right information, to the right people, at the right time, can help the City gain more context-based insight and drive better operational decisions and outcomes. In addition, data integration and visualization using BI tools has simplified analysis of large data sets empowering decision makers with insights into their daily operations.

Cloud Computing- Cloud computing has held great promise for the public sector, but it only recently has become realizable with proven technologies and business models driven by the largest commercial players including Google, Amazon, Microsoft, and others. The City's transition to cloud services should be done in a phased approach and be directly aligned with the City's overall IT security framework.

Industrial Internet of Things (IIoT)- The capacity to improve public services by collecting data and applying related analytics is within reach for the City as the IIoT expands. If a device can connect to the Internet, it likely will in the future. From transportation to supervisory control and data acquisition (SCADA) systems, the City can have access to real-time data that supports effective and efficient operations and decision-making. Any IIoT implementation must also comply with the City's overall IT security framework.



Technology Stack

The City of Weston manages its technology infrastructure as an integrated "technology stack". Each layer of the stack is dependent on the underlying layers. The foundations of the technology stack are typically hardware layers which support the top software/application layers. Like all City infrastructure, technology stack components have a useful life and must be maintained through a strategic planning process.



Applications

Databases

Operating Systems

Hypervisors/Virtualization

Compute/Servers

Storage

Network

Network



2022-2025 Technology Strategic Objectives and Key Initiatives

| Goal 1: Promote Efficiency and Efficacy | | |
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| Objective 1.1 | Implement and expand innovative technologies to improve internal operations. | |
| Initiatives | Enterprise Resource Planning (ERP)- Complete implementation of ERP solution to streamline internal operations including Accounting, Accounts Receivable, Accounts Payable, Budget, Business Tax, Contract Management and Purchasing. Weston@Work Sharepoint Intranet Site- Enhance and refresh internal intranet site to include more interactive web parts such as staff bulletin boards and online polls. Master Data Framework- Enhance master data framework/data warehousing to guide the acquisition, creation, distribution, presentation, use, integration, and storage of key data assets. A data framework will further facilitate Business Intelligence tools and e-Government services. Business Intelligence (BI) and Decision Support- Enhance and develop meaningful BI tools using various data analytics and visualization techniques. Industrial Internet of Things (IIoT)- Expand IIoT devices including SCADA, digital signage, Building Automation Systems (BAS), etc. Enterprise Content Management (ECM)- Expand ECM capabilities to align one-content repository integration with core City applications, mobile solutions and GIS while maintaining legal records retention and compliance. Voice Over IP (VoIP)- Decommission legacy analog PRI phone systems and fully expand VoIP/SIP Citywide. Deploy e-Fax solution. | |
| Goal 2: Impro | ve Service Delivery | |
| Objective 2.1 | Leverage web, social media and mobile technologies to enhance service delivery | |
| Objective 2.1 | and promote the City's "online" vs. "in line" e-Government initiatives. | |
| Initiatives | City Website- Enhance City's content management system (CMS) to improve usability, accessibility, and content delivery. The City's website is considered our "Virtual City Hall" and designed to focus on simplifying access to City e-Services and information. E-Permits- Enhance e-Permitting system including electronic plan review, virtual inspections, and special events. Virtual Queuing System- Allow customers to schedule and wait for access to City services and staff in a virtual environment. Estoppel Report Request System- Deploy online estoppel report request system to streamline lien requests and payment processing. Mobility and Mobile Applications- Enhance mobile applications to provide content and functionality uniquely suited to mobile devices including "Weston Works" citizen service requests, reservations, payments and alerting. Parks and Recreation Reservation System- Deploy online Parks portal to streamline online reservations for facilities and programs. Parks Sports Events Online Video Streaming- Deploy online streaming infrastructure of sports events at City parks. Vendor Self-Service Portal- Deploy vendor self-service portal to streamline contract administration, payment status and maximize e-Payments. Bid Solicitation & Management System- Deploy bid management system to streamline procurement process linking solicitation process to contract management within the City's ERP system. | |

2022-2025 Technology Strategic Objectives and Key Initiatives

| Objective 2.2 | Leverage Geographic Information Systems (GIS) to enhance service delivery and | |
|---|---|--|
| Objective 212 | spatial analysis capabilities. | |
| Initiatives | Enterprise GIS Architecture- Complete re-architecture of enterprise GIS environment including migration to the Cloud. GIS Executive Operations Dashboard- GIS dashboard to track progress on preventive maintenance work orders and time-sensitive projects. GIS Data and Map Portal- Enhance City's GIS Portal including map applications, static maps and open GIS data for internal and external use. | |
| Goal 3: Increase Transparency | | |
| Objective 3.1 | Leverage web, social media, and mobile technologies to promote transparency and | |
| Objective 3.1 | accessibility to public records, news and events. | |
| Initiatives | Open Data Portal- Deploy self-service public records portal for commonly requested City reports and records. Open Checkbook- Deploy online open checkbook system for easy access to City spending. Open Budget- Deploy online open budget system for interactive budget analysis. Meeting and Agenda Automation- Deploy e-Agenda and meeting system to enhance accessibility, reduce paper-based processes and streamline meeting logistics. City Podcasts- Introduce City Podcasts to reach and educate additional audiences in the City of Weston of its many programs and activities. | |
| Goal 4: Mitiga | | |
| Objective 4.1 | Maintain and enhance the IT infrastructure to promote reliability, agility, | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | scalability, and end-user satisfaction of systems. | |
| Initiatives | Technology Refresh- Develop a long-range capital plan for IT including funding for lifecycle technology refresh in sync with the City's Strategic Value and Business Plan. City Fiber Optic Network Upgrades- Upgrade City's existing fiber optic local area network (LAN) from an 8 to 96 strand ring network. This increased capacity supports the City's expanding network capacity needs supporting virtual desktops, video conferencing, network segmentation and Disaster Recovery. Anything as a Service (XaaS)- Cloud-only sourcing strategy that embraces acquiring the full range of IT services on a subscription basis including Infrastructure as a Service (IaaS) and Software as a Service (SaaS). Virtual Desktop Interfaces (VDI)- Expand use of VDI technology to simplify IT operations, enable remote access and improve desktop experience for users. Disaster Recovery and Continuity of Operations -Enhance, operationalize, and periodically test the IT disaster recovery and continuity of operations plan. | |

2022-2025 Technology Strategic Objectives and Key Initiatives

| Objective 4.2 | Provide a stable and secure computing environment that ensures data privacy, |
|---------------|---|
| | data integrity and mitigates cyber-security threats. |
| Initiatives | IT Security Audit and Plan- Conduct a comprehensive IT security audit/assessment and develop a security plan using best practices to help address challenges with data security, network security, disaster recovery and compliance issues. Standard Operating Procedures (SOPs)- Develop and document SOPs for all major IT functions and add them to IT Operations Manual. Security Education and Awareness- Educate the City's workforce on cyber-security threats and codify policies and procedures. Advanced Threat Protection (ATP)- Enhance ATP to proactively detect attacks and exploits using advanced behavioral analytics and machine learning. |

Tracking Progress and Impacts

Objectives and key initiatives were developed with measurability in mind, and specific metrics will define success on two levels: 1) tracking the progress of each initiative, and 2) assessing the impacts achieved.

- 1. **Tracking Progress:** The initiatives are the fundamental action steps for this plan, and their progress will be tracked through internal project management.
- 2. **Impact Assessment:** Key performance indicators (KPIs) are being developed for each objective to measure how effectively it is being addressed. These KPIs will contain a mix of quantitative and qualitative metrics and are constructed around the central challenges and opportunities each objective addresses.

Going Forward

The City of Weston's Technology Strategic Plan provides proactive direction for information technology and is intended to integrate with the City's Strategic Value and Business Plan. The nature of technological advances and changing City needs will mandate plan revisions keeping it flexible and always forward-thinking.

Technology has proven to be the foundation of all strategies for improvements in this post-pandemic era. Through continued support from our City Commission, guiding vision from our City leadership and enthusiastic embrace of technology to leverage continuous improvement by our staff, we will continue to be a #1 Digital City!





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