

Technology Master Plan

June 2024



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Optimal Technology Guidance

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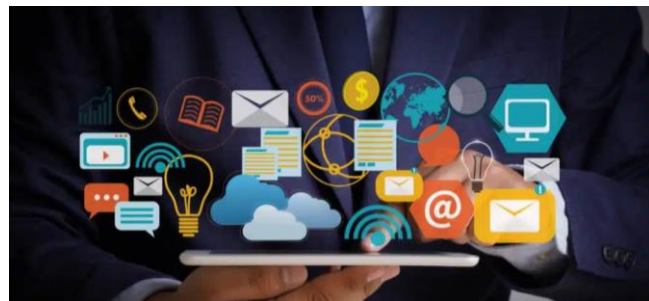
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Engagement Purpose and Background

Technology Master Plan Objective

This Technology Master Plan articulates a vision for supporting the work of the City through efficient technology use. This includes ensuring the proper technical resources and organizational structure to effectively manage information technology and the applications utilized by the departments. This plan identifies strategies for developing and implementing technology initiatives and projects supporting the organization's operational needs. The plan's recommendations focus on improving both the City's IT infrastructure and business applications.

Over several years, a well-documented plan guides the planning, procurement, implementation, and technology investment management for IT functions and City operational departments. It also provides strategies for resources related to operational technology and information technology service delivery.



This plan is the result of a thorough analysis of the following:

- Interviews and workshops involving all levels of the City's operational staff, including the management team, end users, and other stakeholders, as available.
- Existing hardware and network infrastructure, staffing, funding, applications, business systems, projects, processes, telecommunications, training, and other investments and resources currently in use by the City.
- Identification and prioritization of initiatives and projects to undertake over the next five years.
- Identification of the resources required to accommodate current and future technology requirements, such as IT operations and management, legal requirements, cybersecurity requirements, service delivery, cloud computing, staffing, and more.

Deliverables

The assessment and plan includes:

- Project purpose and background
- Methodology for implementation and maintenance of the assessment
- Current technology environment summary
- Key benchmarking metrics
- Strategies, goals, and objectives
- Technology initiatives (projects) by priority
- Key issues
- Timelines
- Technology plan budgets

Methodology and Approach

ClientFirst uses a five-phase methodology for technology master planning. This phased approach serves as the cornerstone of the project by allowing a collaborative process to shape and develop the recommendations.



Technology Assessment Summary

Overview

Technology Best Practices

Following best practices as a part of each technology project initiative is critical to ensuring the initiative's success and allowing the City to realize the potential benefits. The plan details several best practices to ensure the City's future success. Key best practices include:

- **Software Needs Assessment:** Software needs assessments identify and define the detailed needs of the City's users and stakeholders.
- **Business Process Reviews:** A business process review systematically examines an organization's business processes and workflows to identify areas where the City can improve its efficiency and effectiveness.
- **Software Selection:** Selecting the right system and technology is more critical than ever because operational efficiency and effectiveness are directly dependent on the use of business applications. Organizations that follow best practices recognize that they must take advantage of automation to meet growing constituent and staff demands.
- **User Training:** Ensuring the City's staff can utilize the available software applications is critical to ensuring maximum application utilization and adoption to promote efficiency and productivity, thereby reducing and eliminating manual processes and workarounds.
- **Project Management:** Successful implementations follow the same basic formula. As detailed in the plan, utilizing documented and proven best practices will provide the City with a solid foundation for success.

With each of these technology project initiatives, whether improvement or replacement, utilizing a best practice approach to the project will benefit the City. Key benefits include:

- **Improve Chances of Success:** Following best practices improves the chances of successful software implementation because they are based on the experience of others who have successfully implemented software.
- **Reduce Risk of Failure:** Following best practices reduces the risk of a software implementation failure by identifying and mitigating potential risks.
- **Time and Money Savings:** Following best practices streamlines the implementation process and avoid costly mistakes.
- **Improve Quality of Software:** Following best practices improves the quality of the software implemented by ensuring that the software meets the applicable user's needs and is rigorously tested.
- **Improve User Experience:** Following best practices improves the user experience of the software implemented by ensuring that the software is easy to use.

In developing this plan, ClientFirst applied a best practices approach combining decades of public sector technology experience with industry-standard best practices such as Control Objectives for Information and related Technology (COBIT), Information Technology Infrastructure Library (ITIL), and Prosci Change Management. ClientFirst utilized this experience and body of knowledge in the analysis and recommendations throughout this project and planning reports.

IT Infrastructure and Operations

The City has done a good job of leveraging a Computer Equipment Replacement plan to keep major IT infrastructure components up to date. Operational tools are available to assist with most major functions. Log review and patch management can take a significant amount of staff time. Staff have been working to improve log management and patch management tools to reduce staff time spent on these largely manual functions.

Cybersecurity

We found the City's cybersecurity defenses to be very good. Staff have dedicated a significant amount of time to considering and implementing cybersecurity tools. As noted above, these tools come with an operational cost. A move to more automated tools in some areas may reduce staff time required for maintenance and support.

Enterprise Applications

The City utilizes over 120 applications. The core systems – Enterprise Resource Planning, Human Resource Management, Enterprise Asset Management, and Land Management – are all underutilized.

- The Munis Enterprise Resource Planning (ERP) system by Tyler Technologies, used for finance, payroll, and human resources, is able to meet the City's operational needs with some improvements. Some modules within the system are owned but not yet implemented. Additionally, some staff are unable to access information directly. With regard to Human Resources, Munis is not integrated with essential Human Resources software such as NEOGOV, and automations for key processes are partially configured.
- The Tyler Enterprise Asset Management System is also capable of meeting the City's needs once it is fully configured. The Tyler system is robust, fully featured, and capable of meeting the City's needs. Adopting a best practices approach and performing needs assessments for all key users will help ensure a successful transition to the software.
- The new Land Management system is Energov by Tyler Technologies, and it replaced PermitsPlus for both Planning and Building. There are online services or workflows in use, and inspection requests are coming into voicemail.

Ongoing user training and support are needed across all departmental applications. Staff report that many systems are underutilized due to a lack of training. These gaps in user knowledge prevent the City from realizing the productivity gains and cost reductions associated with effective application utilization.

Application Systems Utilization

Over the last several years, many cities' constituents have begun demanding more efficient interaction, online transactions, and transparent information availability, increasing the need to improve enterprise business application utilization and sustain the IT infrastructure that supports them. The City will be better able to meet these demands by improving its approach to business application utilization.

Despite there being over 120 different application systems, there are still numerous examples of processes that are manual or require inefficient use of workarounds and shadow systems such as Excel. A few examples include processes related to budget, work order tracking, receivables, inspection requests, project time tracking, and more.

The City requires a Business Application Training Plan and future business application analyst support staff in the IT Division to support divisional users' ongoing needs.

Staff realize that business application process updates and improvements are necessary to meet constituents' needs. An increased desire to leverage business applications that serve constituents has resulted in a desire to increase investment in technology, leading to the creation of this plan. Over time, we recommend that the City undertake detailed assessments and process reviews to improve efficiency and resident services in most business applications.

Mobility and Collaboration

COVID-19 has also increased the demand for flexible communications, technology, and mobile computing. The demand for more flexible working arrangements remains strong. The City's existing file-sharing methodology should be updated, and staff should be trained to use tools enabling mobility and collaboration. Improving Microsoft O365 OneDrive and SharePoint adoption rates will provide staff with additional tools to improve communication and productivity.

IT Services Demand

Additional investment in improving and managing business applications is necessary to support increased communications, applications, data sharing, and reporting needs. Most major applications require assessment and improvement to provide constituents and staff with the level of service they need. The City recently added an Enterprise Systems Analyst to help the Departments improve application efficiency and utilization. To assist in the recommended improvement plans, the City has also contracted with third-party subject matter experts in some areas. Depending upon the pace of improvements, additional staff with business analyst skills may be required, along with supplemental third-party expertise.

With these many needs, technology governance will be important to the plan's successful implementation. The plan aims to affect a digital transformation in the City, reducing reliance on paper and shadow systems while increasing automation and efficiency.

The City has experienced some issues with the delivery of Help Desk support. An IT single position is dedicated to providing day-to-day support for the user community. We recommend adding additional Technical support staff to provide better IT service delivery.

Current Technology Environment

ClientFirst undertook an extensive analysis of the City's existing technology environment. Additional investments in replacing end-of-life equipment, cybersecurity mitigation efforts, disaster recovery planning, and Internet resiliency are outlined in the plan. The City has moved to Office 365. Staff training has not kept pace, causing limited utilization of the new tools provided by Office 365. Investment in staff training will reduce risk while improving collaboration capabilities and productivity.

We recommend that the City expand capital replacement planning to include all technical equipment and a long-term sustainability plan to institutionalize ongoing investment in technology.

The table below summarizes the current technology environment in the City:

Item	Quantities
Number of Agency Facility Addresses	15
IT FTE(4 IT staff and 1 GIS staff)	5
Number of Employees (FT/PT/Seasonal)	229
User Logins	315
Telephones	272
Mobile Devices	91
Laptops/Desktops	90/229
Printers	96
Physical Servers	7
Virtual Servers	88
Network Devices (e.g., routers, switches, and access points)	293

The City also utilizes over 120 application systems and software modules. Major enterprise application systems include:

Application Functionality	Vendor
Financial Management	Tyler Munis
Human Resources Management	Tyler Munis
Payroll	Tyler Munis
Applicant Tracking	NEOGOV
Enterprise Asset Management (Work Orders and Asset Management)	Tyler Enterprise Asset Management
Electronic Document and Records Management	Laserfiche
Land Management System	Tyler Technologies - EnerGov
Computer Assisted Dispatch/Records Management System	Alliance by Cyrun

Key Statistics and Metrics

The following analysis provides feedback on key measurements regarding technology investments and IT support operations:

Technology Budgeting/Expenditures	Technology Spending vs. Operating-Related Budgets
IT Staffing	IT Staffing Ratios
IT Capital Replacement Schedules	Equipment Replacement Schedules

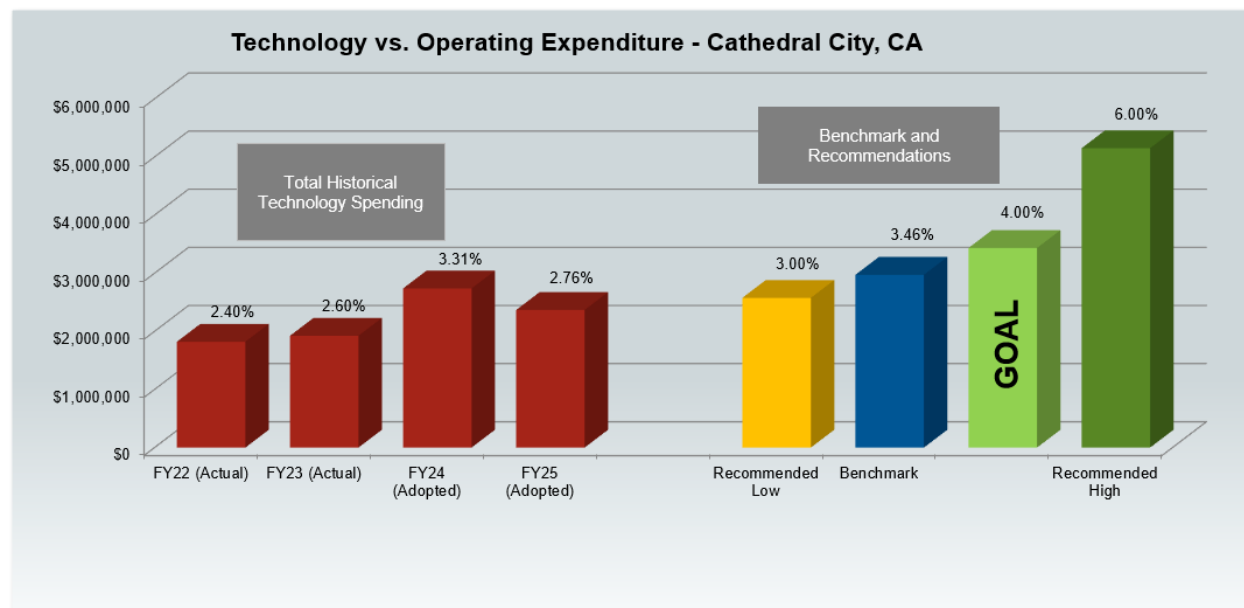
Technology Spending Comparisons

Analyzing technology spending versus operating budgets indicates whether the technology systems and IT support function receive sufficient organizational resources to provide the necessary services. Over time, underfunding typically:

- Reduces the IT Division's ability to respond to requests
- Reduces system availability
- Negatively impacts organization-wide productivity and constituent services

The following table depicts the City's Technology Spending versus Recommended Best Practices and a local government benchmark of 36 agencies.

City FY22 (Actual)	City FY23 (Actual)	City FY24 (Adopted)	City FY25 (Adopted)	Recommended Low	Benchmark	GOAL	Recommended High
2.40%	2.60%	3.31%	2.76%	3.00%	3.46%	4.00%	6.00%



City Operating Expenditures vs. Technology Expenditures

	FY22 (actual)	FY23 (actual)	FY24 (adopted)	FY25 (adopted)
Operating Exp.	\$75,769,399	\$73,969,399	\$82,580,713	\$85,824,382
Technology Exp.	\$1,820,081	\$1,922,253	\$2,736,440	\$2,366,378

The local government technology spending benchmark ranges from 1% to 8% of applicable agency-wide funding. Survey results of 36 agencies show an average technology expenditure of 3.46%. ***The City's technology expenditure has been below local government industry standards.***

The technology spending benchmark is the average of other agencies that utilize ClientFirst as their consultant. Most of these agencies are (or were) underfunding technology. Please note that the above benchmark is a reference point for analysis purposes, not a specific recommendation for the City.

Given the City's unique blend of functional areas, a technology spending goal of 4% of operating expenditures is recommended.

Historically, internal and third-party resource utilization for the implementation of application software has been limited. Improved implementation and enhancement processes are in process to increase application effectiveness and user satisfaction. To close the technology gap created by past underspending, the City will need to spend significantly more than 4% over the next few years to improve legacy systems.

Some under-investment in technology is apparent throughout the City. The plan calls for increased spending on all facets of technology. Increased IT spending will:

- Provide for a cybersecurity focal point at the City
- Improve application utilization and staff effectiveness
- Improve constituent services
- Align City application system selection and implementations with best practices
- Reduce the risk of failed implementation or excessive system replacement activity
- Reduce overall cost-of-ownership by improving quality

Increasing IT expenditures to close the technology gap will result in spending above the recommended benchmark. We expect these infrastructure, cybersecurity, and application system enhancements to increase productivity throughout the City.

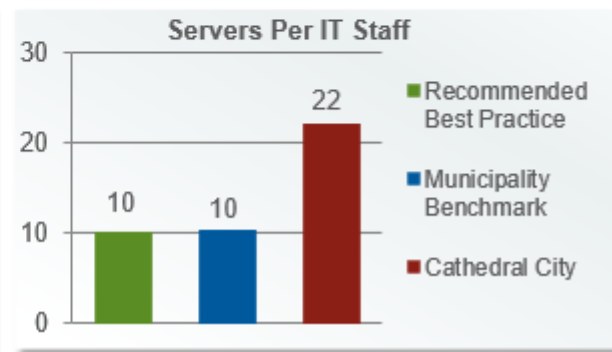
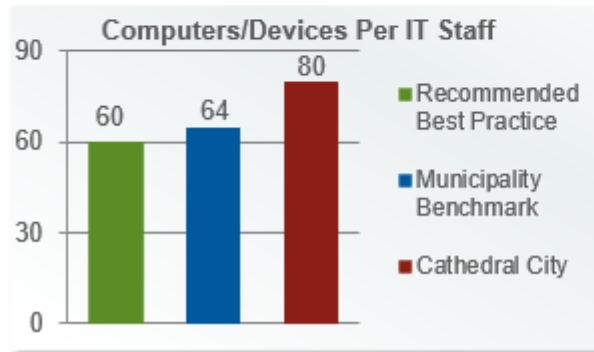
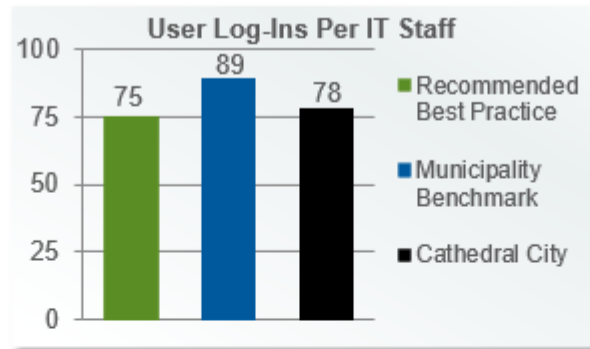
IT Staffing Ratios

The following table depicts the City's IT Staffing Ratios using three benchmarks:

- User logins per IT Staff
- Computers/Devices per IT Staff
- Servers per IT Staff

Seventy-one (71) agencies' data are included in the benchmark. These three benchmarks are commonly used metrics in the industry to validate staffing levels. As the number of logins served and resulting equipment increases, IT staffing levels should also increase, resulting in a smaller ratio.

	Recommended Best Practice	Municipality Benchmark	Cathedral City
User Logins per IT Staff	75	89	78
Computers/Devices per IT Staff	60	64	80
Servers per IT Staff	10	10	22



In this comparison, the City's IT staff supports approximately 50% more servers and 25% more devices than recommended or compared to peer agencies. User logins per IT staff are near the benchmark. Overall, IT staffing is somewhat less than benchmark recommendations. Full service with Police and Fire tend to have more devices and servers than contract cities and, therefore, require slightly more IT staff overall.

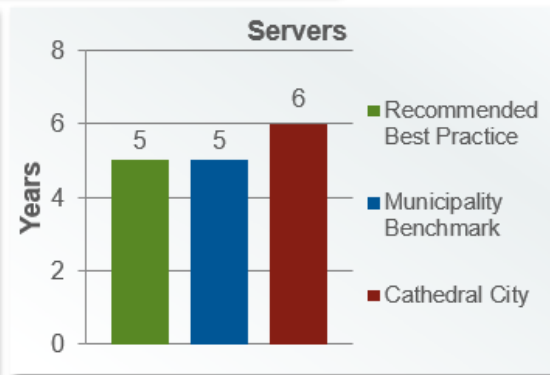
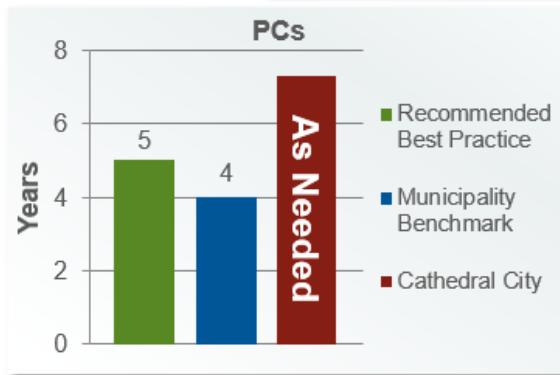
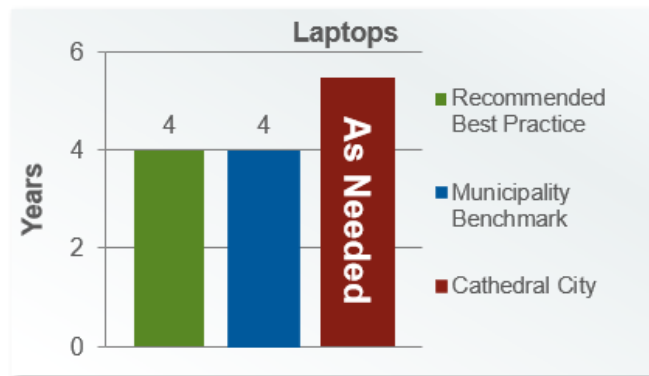
These benchmarks do not completely reflect the City's needs related to closing the deficit created by ineffective business application implementation processes. Department demand is high for digital innovation, improved application integration, constituent service levels, and internal information flow. Staffing recommendations include expanding business systems analysis skills in the IT team to support the expanded need for business applications support (see the "Applications Management Best Practices" initiative).

Equipment Replacement

Capital equipment replacement is an important measure of the ability of the hardware to support the ongoing vendor changes to application software adequately. These changes often require additional resources and more robust hardware. Above-average capital replacement cycles can increase downtime overall and slower system response times.

The following table represents IT equipment replacement recommended best practices and a municipal benchmark of 54 agencies.

	Recommended Best Practices	Municipal Benchmark	Cathedral City
Laptops	4	4	As needed
PCs	5	4	As needed
Servers	5	5	6



The City works hard to update desktops and laptops regularly but does not have a formal replacement strategy. Servers and other technological equipment are replaced on an above-average schedule. We recommend that the City expand computer equipment replacement schedules to include all electronic devices (e.g., audiovisual, door access control, public safety video, and network devices). This report has included a list of electronic devices and their expected life cycles in the "Computer Equipment Replacement" initiative.

Technology Decision-Making Principles

Vision / Mission Statement

The City is dedicated to providing the highest quality and cost-effective, technology-based services. It seeks to sustainably deliver services effectively and efficiently, reflecting the organization's commitment to excellent customer service. The City will maintain its information systems in an integrated, secure environment that supports its information technology advancements and fosters an open, collaborative, and unifying culture.

- The Technology Steering Committee is committed to the values of:
 - ♦ Reliability
 - ♦ Professionalism and Integrity
 - ♦ Efficiency and Effectiveness
 - ♦ Innovation
 - ♦ Excellence
 - ♦ Collaboration and Teamwork
- Given **limited IT resources**, the City will focus these resources on the most productive and cost-effective projects.
- City divisions will agree on a **collaborative long-term IT vision and strategies**, which requires active participation in setting IT priorities through an Information Technology Committee consisting of division leadership.
- The City will strive to **maximize the utilization of existing systems** and prior investments in application software, expand functionality, and seek enhancements to existing applications.
- The City is committed to ensuring **sufficient staff training and application software knowledge** of existing vendor systems.
- **Division ownership** is fundamental to achieving maximum return on investment in applications. Divisions recognize the importance of assuming responsibility for managing and implementing their specific core business applications and modules in collaboration with IT staff. City divisions are committed to taking responsibility for adapting and improving processes to integrate them with the application software.

Technology Strategies, Goals, and Objectives

Highlighted strategies for leveraging and maximizing the City's information system utilization are listed below. Each strategy identifies initial goals and objectives. The reports appended to this Technology Master Plan provide additional strategies and details. Appended to this report are:

- **Technology Current State Assessment Report:** Findings, goals, and objectives translated into specific project initiatives
- **Budget Spreadsheet:** Budgetary costs for each initiative, prioritization, and implementation time frame

Key strategies detailed below include:

- Ensure Technology Governance
- Continue to Improve Cybersecurity
- Improve Application Utilization
- Establish a Citywide Technology Training Program
- Adopt a Best Practices Approach to Software Needs Assessments
- Adopt a Best Practice Approach to Software Selection and Implementation
- Expand Business Analysis Staffing Capabilities
- Expand Backup Systems and Implement Disaster Recovery Capabilities
- Create a Fiber Optic Master Plan
- Expand IT Staffing

Ensure Technology Governance

The City does not utilize a Technology Steering Committee.
A Technology Steering Committee can be an important contributor to the management of this plan.

Goals and Objectives

- Create a Technology Steering Committee to improve technology governance. Focus committee meetings on:
 - ◆ Assisting in the prioritization of technology projects and training needs.
 - ◆ Monitoring the plan and recommending adjustments and budgetary needs on an annual basis.
 - ◆ Improving collaboration on projects and initiatives.
 - Focus on application integration across departments.
 - Identify key business process issues and improve.
- Establish training goals and develop analytical skills throughout the organization.

Continue to Improve Cybersecurity

Continued improvement in cybersecurity threat prevention will be necessary to reduce risk and maintain services and data integrity.

Goals and Objectives

- Over the last few years, cybersecurity incidents in local governments have increased dramatically.
- Cybersecurity insurance carriers are rapidly increasing base requirements for maintaining cybersecurity insurance.
- Additional cybersecurity requirements have been codified for critical infrastructure including water and wastewater.
- The City has made significant improvements in cybersecurity. Additional improvements are necessary to meet these increasing requirements.

Establish a Citywide Technology Training Program

Technology training is critical to improving efficiency and staff utilization of applications.

Goals and Objectives

- All departments requested technology training, including Microsoft Office classes and departmental software applications.
- Utilize the Technology Governance Committee to develop Citywide training priorities and create an annual budget to fund training.
- Incorporate sufficient training in business application improvement or replacement projects.

Adopt a Best Practices Approach to Software Needs Assessments

Detailed assessments are an essential step in evaluating current and future needs for application projects

Goals and Objectives

- Key considerations and resources needed to be successful include:
 - ♦ Identify the assessment objective. Understanding the “big picture” is critical to success.
 - ♦ Identify the appropriate resources/stakeholders to conduct and participate in the assessment process.
 - ♦ Determine the documentation detail level needed to communicate current and potential future needs. Possibilities include:
 - Distributing surveys or information requests to end users and compiling the results
 - Conducting workshops as a group to review the results of questionnaire feedback and identified issues
 - One-on-one interviews with Power Users and/or subject-matter experts
 - Reviewing or observing business processes
 - Documenting detail needs as described above
 - ♦ Develop a plan to implement the findings and recommendations that result from the assessment process.
 - ♦ Obtain third-party subject matter expertise and project management for large complex projects.

Adopt a Best Practice Approach to Software Selection and Implementation

Best Practice software selection, including utilization of third-party subject-matter experts, reduces implementation risk.

Goals and Objectives

- Utilize best practices for selecting and implementing business application systems.
- Focus on reducing the number of separate departmental systems to eliminate the need for custom interfaces.
- Prepare the City to select new and critical enterprise applications.
- Utilize third-party subject matter experts to assist with selecting large/complex application software.
- Consider cloud applications when appropriate.
- Assign an internal project manager for enterprise software implementations or upgrades.
 - ◆ Follow best practice project management methodologies as appropriate.
 - ◆ Increase focus on software training during implementation or major upgrades.
 - ◆ Include contingency funds where possible to meet unforeseen project circumstances.

Expand Business Analysis Staffing Capabilities

Recommended application improvements require additional Business Analyst expertise to maximize application utilization and operational efficiency.

Goals and Objectives

- Consider increasing IT staff to include at least one business systems analyst position to:
 - ◆ Assist departments with business process and procedure improvements
 - ◆ Assist with application assessments and implementations
 - ◆ Work with departments to improve business processes
 - ◆ Develop dashboards, reports, and information sources for staff and constituents
- Depending on the amount of available funding, utilize third parties to assist departments with business process-related improvements.

Expand Backup Systems and Implement Disaster Recovery Capabilities

Implement cloud-based backup and cloud-based restoration. Develop and test Disaster Recovery Plan(s).

Goals and Objectives

- Replace on-premise with cloud-based backup systems.
 - ◆ Develop cloud-based restoration capabilities.
- Create Disaster Recovery Plans with Service Level Agreements for the restoration of systems.
 - ◆ Practice portions of the Disaster Recovery Plan every six months.
- Conduct tabletop exercises with Departments for Cybersecurity Incident Response.

Create a Fiber Optic Master Plan

Create a Fiber Optic Implementation Road Map

Goals and Objectives

- Expand fiber capabilities to City parks and other locations where public safety video would be helpful.
- Expand fiber to all City facilities.
- Investigate the feasibility of fiber to the home.
- Assess broadband coverage for residences and businesses.
- Utilize fiber to support the Internet of Things (IoT).
- Consider flood monitoring devices based on Hurricane Hilary event.

Expand IT Staffing

Additional IT staff and third-party resources will be required to leverage technology better.

Goals and Objectives

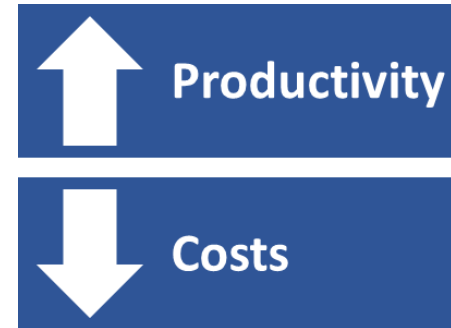
- Additional staff are necessary in all areas of IT:
 - ♦ Project Management assistance is required to manage internally staffed and third-party application improvement initiatives.
 - ♦ Business Analysts are necessary to support division application improvements.
 - ♦ Expand Help Desk Support to improve internal service to Public Safety and other departments.
 - ♦ Cybersecurity-focused staff are required to manage cybersecurity policies, tools, and vendors.
- Depending on the amount of available funding, utilize third parties to assist with many projects.

Technology Initiative Summaries

Introduction

Technology Planning includes assessing, researching, prioritizing, budgeting, and planning future technology initiatives. For example, some initiatives are ready for approval and implementation. In contrast, others require further assessment and research before the City can determine priority, resource requirements, and cost-benefit.

Productivity Improvement – Many of the plan initiatives will directly impact overall productivity within the organization. Some of these initiatives will significantly impact business processes, reducing staff time required to complete specific tasks. In contrast, others will ease or speed up the delivery of services to City constituents.



Reporting and Data Availability – Many initiatives outlined will directly impact the data available for reporting and management decision-making. New application systems and, in some cases, improvement of existing software systems are necessary before additional functionality can be made available.

IT Infrastructure Improvements – The technical initiatives focus on improving the City's technological infrastructure to provide staff and residents with secure, reliable, and supportable network services. IT infrastructure improvements may involve equipment upgrades, cybersecurity enhancements, or operational improvements focused on efficiently and effectively delivering business applications to City users.

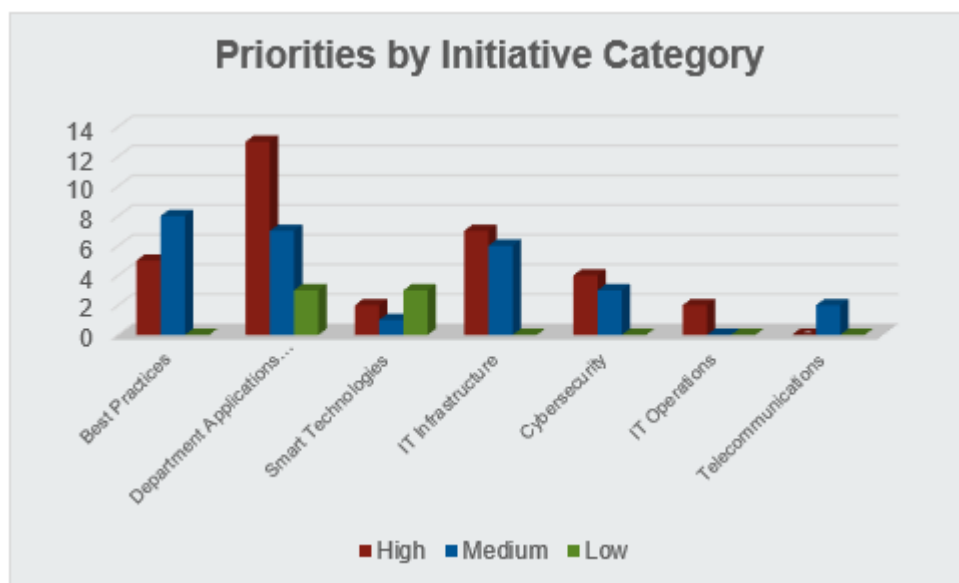
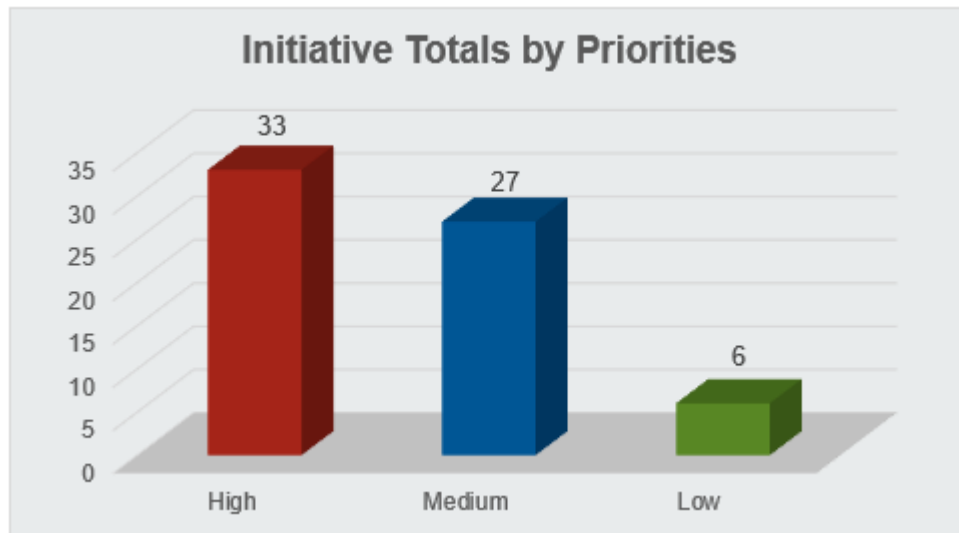
Technology Initiative Categories

The assessment process resulted in 66 major initiatives, projects, and hundreds of recommendations. There are hundreds of findings and recommendations throughout the report, which are included at the end of this document. ClientFirst classified the major initiatives into eight categories, including:



The following are the total initiatives by priority and initiative category, including sub-initiatives that are budgeted separately.

Categories	Priority			Total
	High	Medium	Low	
Best Practices	5	8	0	13
Department Applications and Systems	13	7	3	23
Smart Technologies	2	1	3	6
IT Infrastructure	7	6	0	13
Cybersecurity	4	3	0	7
IT Operations	2	0	0	2
Telecommunications	0	2	0	2
Total	33	27	6	66



Key Issues and Initiatives

The key issues and initiatives identified during the planning process could also be considered high priority. Each initiative listed below either provides long-term building blocks for the plan's success or mitigates risk. Therefore, the City has noted these as the initiatives from this plan to keep at the forefront during the future implementation of this plan.

<p>Enterprise Resource Planning (ERP)</p>	<ul style="list-style-type: none"> • The ERP system is the set of core applications used to operate the City's most common accounting, financial, and human resources operations. • The plan recommends consulting with a third-party subject matter expert and working with Tyler Technologies to develop an improvement plan that captures the City's functionality gaps and additional requirements. • Review applicable manual processes and shadow systems, such as spreadsheets, paper, and other databases, to determine which automation improvements will eliminate or reduce those processes and/or shadow systems and result in labor efficiencies. <ul style="list-style-type: none"> ◆ This process should also include: <ul style="list-style-type: none"> ■ Inventorying all reporting requirements ■ Identifying all integration/interface requirements with other applications ■ Identifying any requirements that the vendor is not capable of providing • Conduct the implementation of the improvements per best practices. Follow the guidelines in the "Application Implementation Project Management Best Practice" initiative.
<p>Enterprise Asset Management Replacement (EAM)</p>	<ul style="list-style-type: none"> • An EAM system comprises a suite of modules in a software application that manages work orders, preventative maintenance, and asset management of City infrastructure, including real property, facilities, streets, sidewalks, parks, trails, bridges, drainage, culverts, and so on. • Asset management systems are one of a municipality's five most complicated systems. The City will reduce risk by contracting with a subject matter expert to assist in the assessment and business process reviews. • Conduct a comprehensive gap analysis to identify EAM system needs and develop an improvement plan to close gaps between the current state and desired functionality. <ul style="list-style-type: none"> ◆ Utilize Best Practices enterprise system assessment methodologies ◆ Determine whether the current system can be improved or must be replaced • Work with each impacted division to implement improvements through: <ul style="list-style-type: none"> ◆ Business process revisions ◆ Configuration changes, including all required functionality and fields needed ◆ Reporting ◆ Improved GIS integration ◆ Staff training ◆ Documentation improvements ◆ Other techniques for application utilization improvements • Conduct the implementation of the improvements per best practices. Follow the guidelines in the Application Implementation "Project Management Best Practice" initiative.

<p>Land Management Improvements</p>	<ul style="list-style-type: none"> • A Land Management System (LMS) is a software suite comprising several applications that manage the creation, issuance, and tracking of development-related activities commonly associated with planning and zoning, permitting, inspections, licensing, code enforcement, and parcel/address management. • Land management systems are complicated systems. The City will reduce risk by contracting with a subject matter expert to assist in the assessment and business process reviews. • Conduct a comprehensive gap analysis to identify LMS needs and develop an improvement plan to close gaps between the current state and desired functionality. <ul style="list-style-type: none"> ♦ Utilize Best Practices enterprise system assessment methodologies ♦ Determine whether the current system can be improved or must be replaced • Work with each impacted division to implement improvements through: <ul style="list-style-type: none"> ♦ Business process revisions ♦ Configuration changes ♦ Improved GIS integration ♦ Staff training ♦ Documentation improvements ♦ Other techniques for application utilization improvements • Conduct the implementation of the improvements per best practices. Follow the guidelines in the “Application Implementation Project Management Best Practice” initiative.
<p>Electronic Content Management System</p>	<ul style="list-style-type: none"> • An Electronic Content Management System (ECMS) is a software system for managing and storing different types of digital media. For example, documents, images, videos, and more can all be stored in an ECMS. • The City needs to scan boxes of historical paper, move plans and permit related information, and other final permanent document storage to Laserfiche. • The plan recommends an assessment and process review to scope the needed improvements properly. It also recommends following a best practices approach to implementing all improvements. • Conduct the implementation per best practices. Follow the guidelines in the Enterprise Applications Implementation Project Management Best Practices Initiative.
<p>Microsoft Office 365</p>	<ul style="list-style-type: none"> • Microsoft Office 365 is a subscription service that is part of the Office product line and is focused on enterprise customers. • Work with a third-party subject-matter expert to develop an MS 365 Improvement Plan and project statement of work (SOW) that captures all the City’s requirements. • It is recommended that the current Office 365 deployment be expanded. • Conduct the implementation of the improvements per best practices. Follow the guidelines in the “Application Implementation Project Management Best Practice” initiative.

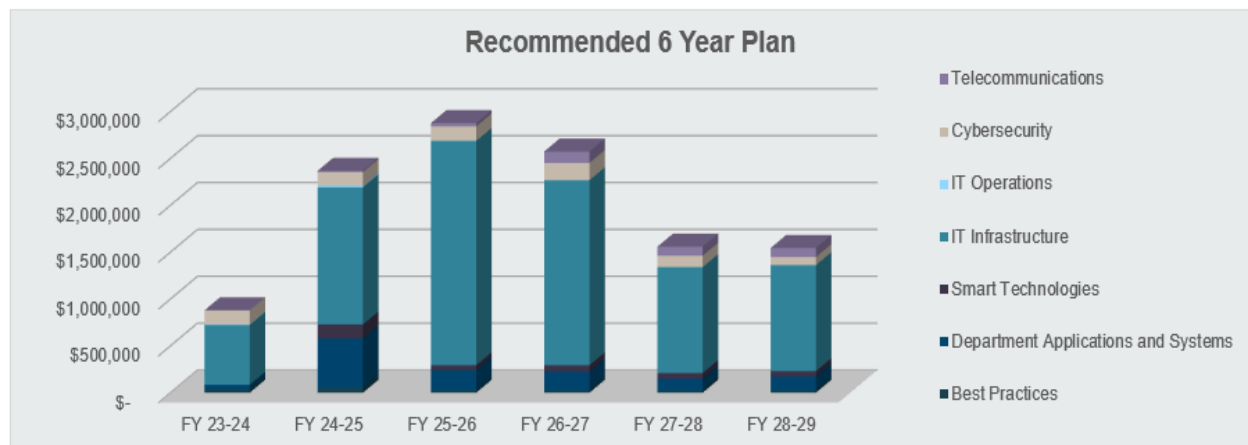
GIS Improvements	<ul style="list-style-type: none"> • Geospatial Information Systems (GIS) are a key strategic component of enterprise asset management, land management, and smart City applications. • GIS also provides critical information and data elements that benefit many of the City's operations, including future Smart Technologies. • GIS systems can be integrated with asset and document management applications to improve field-based information storage and retrieval. <ul style="list-style-type: none"> ◆ Expanded integration with the City's enterprise applications will improve application effectiveness.
Website Improvements	<ul style="list-style-type: none"> • For each department, follow the guidelines in the "Software Needs Assessment Best Practice" initiative to identify and catalog the overall website functionality and training needs for the City. • Develop content management policies and procedures, which may vary by department. • As part of the content management policy, implement standard practices and make website maintenance a component of the Technology Steering Committee's responsibilities to ensure the site is maintained regularly and remains relevant and up to date for the public.
Cybersecurity	<ul style="list-style-type: none"> • Cybersecurity threats continue to expand, requiring additional tools to maintain the security and integrity of resident and staff data. • An extensive revision of the Criminal Justice Information System standard focused on securing Police data becomes effective in October 2024. We expect additional revisions that further tighten cybersecurity requirements for the Police Department. • The additional tools and associated monitoring of those tools require additional staff for ongoing support. • The continued expansion in requirements and necessary cybersecurity tools has created the need for a cybersecurity analyst to provide continued focus on cybersecurity improvements.

Summary Plan Budget Analysis

The Technology Master Plan budget is not an entirely new set of spending requirements. The plan encapsulates City information technology issues and divisional needs. Departments themselves typically fund some project initiatives, and some may already have capital reserves set aside, while others are part of the normal annual IT budgeting process. These are estimated budgets for each project initiative. All project approvals will follow standard City annual budget requests and procurement policy and procedure requirements.

Budgets by Initiative Category

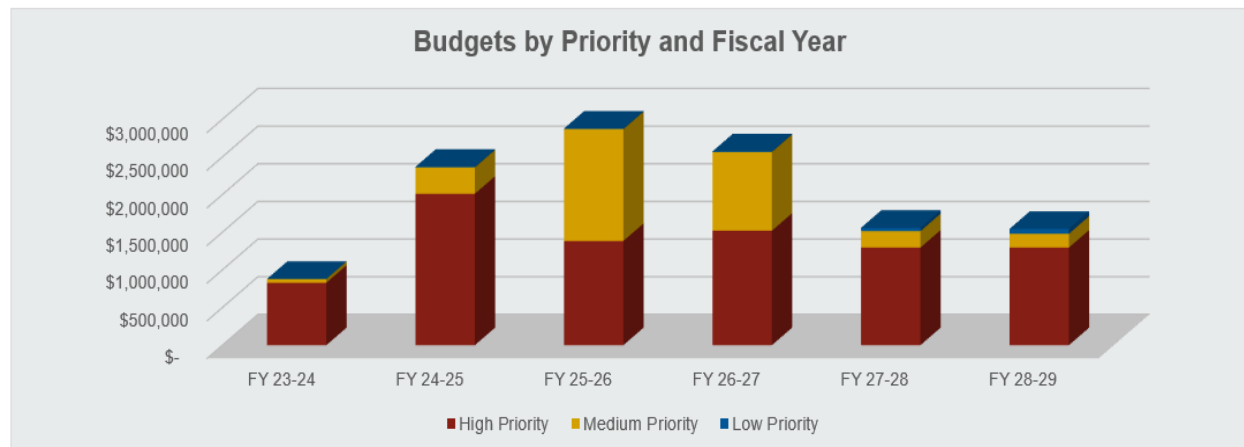
Categories	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	Totals
Best Practices	\$ 35,000	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 185,000
Department Applications and Systems	\$ 50,000	\$ 530,500	\$ 220,500	\$ 200,500	\$ 125,500	\$ 150,500	\$ 1,277,500
Smart Technologies	\$ -	\$ 147,500	\$ 47,500	\$ 67,500	\$ 59,500	\$ 54,500	\$ 376,500
IT Infrastructure	\$ 638,736	\$ 1,465,245	\$ 2,393,439	\$ 1,974,165	\$ 1,129,929	\$ 1,130,732	\$ 8,732,247
Cybersecurity	\$ 150,000	\$ 145,000	\$ 155,000	\$ 185,000	\$ 122,500	\$ 87,500	\$ 845,000
IT Operations	\$ 5,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 20,000
Telecommunications	\$ -	\$ 15,000	\$ 35,000	\$ 121,000	\$ 96,000	\$ 96,000	\$ 363,000
Totals	\$ 878,736	\$ 2,368,245	\$ 2,876,439	\$ 2,573,165	\$ 1,558,429	\$ 1,544,232	\$ 11,799,247



In the initial years of the plan, IT Infrastructure is the largest spending category. IT infrastructure spending is necessary to close an existing technology gap. In the later years of the plan, as staffing reaches appropriate levels, departmental application improvements may become the largest spending category.

Budgets by Priority and Fiscal Year

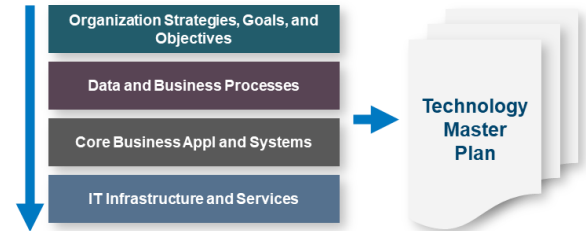
Categories	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	Totals
High Priority	\$ 828,736	\$ 2,010,745	\$ 1,383,939	\$ 1,519,665	\$ 1,295,429	\$ 1,296,232	\$ 8,334,747
Medium Priority	\$ 50,000	\$ 350,000	\$ 1,485,000	\$ 1,046,000	\$ 218,500	\$ 183,500	\$ 3,333,000
Low Priority	\$ -	\$ 7,500	\$ 7,500	\$ 7,500	\$ 44,500	\$ 64,500	\$ 131,500
Totals	\$ 878,736	\$ 2,368,245	\$ 2,876,439	\$ 2,573,165	\$ 1,558,429	\$ 1,544,232	\$ 11,799,247



Next Steps

Moving Forward

Moving forward over the next 18 to 24 months, the key focus areas for information technology include developing disaster recovery plans to take advantage of cloud-based restoration capabilities, implementing technology governance, and expanding the use of Microsoft 365 and Teams.



The software ecosystem in the City encompasses many untapped resources. Underused modules, manual workarounds, and siloed data restrict the efficiency and transparency the City requires to be effective. High-priority improvements are necessary for the Enterprise Resource Planning, Enterprise Asset Management, and Land Management systems. Increased utilization of the ERP system and completing configuration of the EAM and Land Management systems will all propel the City forward to serve its constituents more efficiently.

The City has recently reorganized IT and existing resources and is working with the vendor on continued system improvements. Numerous other applications, as detailed in the *Current State Assessment Report*, will require additional focused resources over the next several years.

This report contains ambitious and costly technology objectives for the City. If the City chooses to implement these systems rapidly, organizational change management and strategic oversight will be critical to the City's success. We often continue to work with agencies on these issues during assessment, planning, and implementation. We have found that slow and steady progress following best practice methodologies leads to an improved likelihood of success, higher quality implementations, and improved staff utilization and data management of new systems.

We expect the projects outlined in this report will result in improved productivity, customer service, resiliency, and sustainability.

Cybersecurity – As additional cybersecurity tools are implemented, resource demands increase, requiring dedicated staffing to maintain operational efficiency. Developing policies and procedures, expanding the City's cybersecurity toolset, and improving resiliency and recoverability are important components of a cybersecurity program that will reduce the risk of compromise and improve recoverability.

Application Utilization – City divisions want to improve their core business processes and fully utilize their applications. Therefore, the City should work to encourage a sense of application ownership and continuous improvement by the divisions. Improved application utilization is the most effective way to increase data availability, facilitate staff productivity, and improve customer service.

IT Staffing – City IT staff have many responsibilities. Expanding business analysis and project management skillsets among staff over time will provide IT staff with additional tools necessary to assist divisions in making business process and application improvements.

Third-party subject-matter experts will be helpful for projects that are high priority, beyond the scope of City skill sets, and/or lacking internal resource availability.

Maintaining the Plan

The City should review and update the plan annually, using an abbreviated version of this assessment and planning methodology. In this way, the plan will be a vehicle to guide the City's information technology activities. Plan updates should be synchronized with the annual budget process to represent technology initiative costs properly.

Benefits

The completed plan is a dynamic tool to be revised and updated as business conditions and requirements change. Objectives may change as the organization and its environment evolve. The City will not realize certain objectives and benefits if the planning function is not ongoing.

Implementing this Technology Assessment and Plan should realize significant benefits, including:

- Increased collaboration and communication on technology projects within the organization
- Transformation of the organization's overall understanding, knowledge, and stewardship of information technology
- Clear direction for IT operations and technology projects for the next several years, focused on meeting the organization's needs
- Citywide division consensus and understanding of all technology initiatives and their priorities
- A roadmap for the selection, implementation, and improvement of business applications to better serve residents and staff

Immediate Next Steps

We recommend that the City establish a technology steering committee to begin work by reviewing the plan and budget and advising on priorities. Next, the City should assign lead and participatory resources to the top-priority technology and other high-priority initiatives. Finally, initiative leaders should report status updates for active initiatives to the technology steering committee as part of each meeting agenda.

The Committee should discuss significant issues for each initiative by providing general feedback, collaboration, and lessons learned, as many initiatives cross departmental boundaries.

We also recommend developing a training seminar series for key division stakeholders and system users to improve application utilization, management, and support. This is an effective way to maintain momentum and kick off the tremendous change that is to occur in enhancing operations and constituent services.

Technology Master Plan Capital Budget

The following section provides the five-year master planning budget detail by project initiative. Please note that these subtotals are not the annual IT Division operating budget. Instead, these are estimated budgets for each project initiative. All project approvals will follow standard City annual budget requests and procurement policy and procedure requirements.

Technology Current State Assessment (Project Initiatives)

The following section contains the Technology Current State Assessment documentation in its entirety. The assessment resulted in 66 major technology initiatives and projects with hundreds of additional recommendations.