City of Cypress
Technology Master Plan

For the Five Years of
FY 2024-25 through FY 2028-29

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INTRODUCTION

Honorable Mayor and Members of the City Council,

We are pleased to present the City's five-year Technology Master Plan. The Plan provides a blueprint for technology investments; much like the Capital Improvement Program (CIP) does for facilities and infrastructure. It also aims to enable the city to enhance the delivery of core municipal services to our community and promote organizational effectiveness.

Plan Overview

The Technology Master Plan projects are funded through a variety of sources including the City's Technology Investment Fund, which was established nearly a decade ago to provide start-up capital for new technology projects. Additionally, there are accumulated replacement funds set aside (largely from the General Fund) and some restricted monies (such as federally funded police grants) which are available for the replacement of existing technology. The first year of the proposed Technology Master Plan calls for investing $131,000 from Accumulated Replacement Funds, $151,000 from the City's General Fund, and $250,000 from the Storm Drain Fund.

The technology projects are classified into four categories:

- Customer service projects, which enhance the City's abilities to serve its customers.
- Organizational efficiency/transparency projects, which provide internal process efficiencies and enhance access to records and information through the City's website.
- Technology infrastructure projects, which provide for the replacement of vital existing equipment and invest in anticipated future needs.
- Unfunded future projects (if any) are of interest to staff and may be submitted to the City Council for future consideration. These projects may have significant funding requirements and/or legal barriers to consider prior to inclusion as a funded project in the first year of future Technology Master Plans.

Plan Objectives and Considerations

Enhancing public safety and maintaining a secure and safe environment is a top priority for the city and one of the goals outlined in the City's Strategic Plan. The current iteration of the Technology Master Plan includes numerous projects which focus on enhancing public safety at city facilities and throughout the city at large. By utilizing new technologies to better inform city staff and operations, the city will be better able to provide additional transparency and safety for all.

Maintaining a regular city-wide hardware refresh cycle is crucial to ensure city personnel can work effectively, and to ensure Cypress' infrastructure remains secure from hardware vulnerabilities and outside cybersecurity threats. Projects to meet this crucial goal are also incorporated into this plan. Notable replacement projects for this year include an update of the City's network switches, wireless access points, and storm water control system.

Conclusion

Now a decade old, the Technology Master Plan has been a key driver for introducing and maintaining technology for the city. Just as the plan has matured since its inception, so have the technology infrastructure and investments that were initially deployed through the Plan. To date, several major technology infrastructure replacements that were introduced in early Plans have already had to be updated and replaced. This serves as a reminder of how quickly technology needs and advancements evolve, and require constant monitoring and evaluation. Continued funding of the Technology Master Plan is crucial to ensure resources are available to make needed improvements to the City's technology infrastructure. We look forward to the successful implementation of these projects and appreciate the City Council's vision and ongoing commitment to the investment in the items contained in the Technology Master Plan.

FIGURE 1: TECHNOLOGY PROJECTS INITIAL OUTLAY INVESTMENTS

Project Description	2024-25	2025-26	2026-27	2027-28	2028-29	5-Year
CUSTOMER SERVICE PROJECTS						
Online Public Records Request System	$ 1,000	$ -	$ -	$ -	$ -	$ 1,000
Website Enhancements	-	50,000	-	-	-	50,000
Customer Service Subtotal =	**$ 1,000**	**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ 51,000**
ORGANIZATIONAL EFFICIENCY/TRANSPARENCY PROJECTS						
City Facility Security Improvements	$ 125,000	$ 125,000	$ 125,000	$ -	$ -	$ 375,000
Community Development Paperless Digitization	25,000	-	-	-	-	25,000
Park Facility Security Improvements	-	75,000	75,000	75,000	-	225,000
Storm Water Pump Station SCADA System Upgrade	250,000	-	-	-	-	250,000
Org Efficiency/Transparency Subtotal =	**$ 400,000**	**$ 200,000**	**$ 200,000**	**$ 75,000**	**$ -**	**$ 875,000**
TECHNOLOGY INFRASTRUCTURE PROJECTS						
City Data Center Infrastructure	$ -	$ -	$ -	$ -	$ 355,000	$ 355,000
City Desktop/Laptop Computers	-	-	-	-	200,000	200,000
City Facility Conference Room Audiovisual	-	-	30,000	-	-	30,000
City Facility Multi Funtion Copiers	-	-	-	70,000	-	70,000
City Facility Network Security Firewalls	-	-	40,000	-	-	40,000
City Facility Network Switches	105,000	-	-	-	-	105,000
City Facility Wi-Fi Access Points	26,000	-	-	-	-	26,000
Community Center Audiovisual System	-	100,000	-	-	-	100,000
Police Digital Audio Recorders	-	28,000	-	-	-	28,000
Police In-Car and Bodyworn Video System	-	-	-	-	136,000	136,000
Police Vehicle Mobile Data Computers	-	-	-	250,000	-	250,000
Public Works Digital Plan Review Workstations	-	-	-	20,000	-	20,000
Public Works Large Format Plotter	-	-	-	7,000	-	7,000
RCS Large Format Plotters	-	-	8,000	-	-	8,000
Senior Center Audiovisual System	-	25,000	-	-	-	25,000
Senior Center Lab Computers	-	-	7,200	-	-	7,200
Infrastructure Subtotal =	**$ 131,000**	**$ 153,000**	**$ 85,200**	**$ 347,000**	**$ 691,000**	**$1,407,200**
TOTAL =	**$ 532,000**	**$ 403,000**	**$ 285,200**	**$ 422,000**	**$ 691,000**	**$2,333,200**

FIGURE 2: TECHNOLOGY PROJECTS ONGOING MAINTENANCE/SERVICE COSTS

Project Description	2024-25	2025-26	2026-27	2027-28	2028-29	5-Year
CUSTOMER SERVICE PROJECTS						
Online Public Records Request System	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 40,000
Website Enhancements	-	-	-	-	-	-
Customer Service Subtotal =	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 40,000
ORGANIZATIONAL EFFICIENCY/TRANSPARENCY PROJECTS						
City Facility Security Improvements	$ -	$ -	$ -	$ -	$ -	$ -
Community Development Paperless Digitization	-	-	-	-	-	-
Park Facility Security Improvements	-	-	-	-	-	-
Storm Water Pump Station SCADA System Upgrade	15,000	15,000	15,000	15,000	15,000	75,000
Org Efficiency/Transparency Subtotal =	$ -	$ -	$ -	$ -	$ -	$ 75,000
TECHNOLOGY INFRASTRUCTURE PROJECTS						
City Data Center Infrastructure	$ -	$ -	$ -	$ -	$ 58,000	$ 58,000
City Desktop/Laptop Computers	-	-	-	-	-	-
City Facility Conference Room Audiovisual	-	-	-	-	-	-
City Facility Multi Funtion Copiers	-	-	-	16,000	16,000	32,000
City Facility Network Security Firewalls	-	-	13,300	13,300	13,300	39,900
City Facility Network Switches	6,500	6,500	6,500	6,500	6,500	32,500
City Facility Wi-Fi Access Points	2,900	2,900	2,900	2,900	2,900	14,500
Community Center Audiovisual System	-	6,000	6,000	6,000	6,000	24,000
Police Digital Audio Recorders	-	2,700	2,700	2,700	2,700	10,800
Police In-Car and Bodyworn Video System	-	-	-	-	136,000	136,000
Police Vehicle Mobile Data Computers	-	-	-	-	-	-
Public Works Digital Plan Review Workstations	-	-	-	1,000	1,000	2,000
Public Works Large Format Plotter	-	-	-	-	-	-
RCS Large Format Plotters	-	-	-	-	-	-
Senior Center Audiovisual System	-	2,000	2,000	2,000	2,000	8,000
Senior Center Lab Computers	-	-	-	-	-	-
Infrastructure Subtotal =	$ 9,400	$ 20,100	$ 33,400	$ 50,400	$ 244,400	$ 357,700
TOTAL =	$ 17,400	$ 28,100	$ 41,400	$ 58,400	$ 252,400	$ 397,700

FIGURE 3: TECHNOLOGY PROJECTS BY FUNDING SOURCE FOR FY 2024-25

Project Description	Technology Investment Fund	Accumulated Replacement Fund	City General Fund	Other	Total
CUSTOMER SERVICE PROJECTS					
Online Public Records Request System	$ -	$ -	$ 1,000	$ -	$ 1,000
Customer Service Subtotal=	$ -	$ -	$ 1,000	$ -	$ 1,000
ORGANIZATIONAL EFFICIENCY/TRANSPARENCY PROJECTS					
City Facility Security Improvements	$ -	$ -	$ 125,000	$ -	$ 125,000
Community Development Paperless Digitization	-	-	25,000	-	25,000
Storm Water Pump Station SCADA System Upgrade	-	-	-	250,000	250,000
Organizational Efficiency/Transparency Subtotal =	$ -	$ -	$ 150,000	$ 250,000	$ 400,000
TECHNOLOGY INFRASTRUCTURE PROJECTS					
City Facility Network Switches	$ -	$ 105,000	$ -	$ -	$ 105,000
City Facility Wi-Fi Access Points	-	26,000	-	-	26,000
Technology Infrastructure Subtotal =	$ -	$ 131,000	$ -	$ -	$ 131,000
	$ -	$ 131,000	$ 151,000	$ 250,000	$ 532,000

CUSTOMER SERVICE PROJECTS

Project Title: **Online Public Records Request System**

Requesting Dept.: Administration

One-Time Cost: $1,000

Ongoing Cost: $8,000 Annually

Recommended Year: FY 2024-25

Funding Source: City General Fund

This project is the proposed implementation of an online public records request system that would allow the public to submit requests for public records online, as well as provide staff with a fully integrated solution to efficiently route, monitor and respond to pending requests. The City's current public records request process is completely manual and requires the public to submit requests via a manual form either in-person or via email. An online public records system will increase efficiency and make the process of requesting public records easier for the public. As part of this project, the city would need to procure a software system and budget for annual service/maintenance costs in future budget years.

Project Title: **Website Enhancements**

Requesting Dept.: Administration

One-Time Cost: $50,000

Ongoing Cost: N/A

Recommended Year: FY 2025-26

Funding Source: Technology Investment Fund

The project is the proposed review and update to the City's website as it relates to the text copy and information displayed throughout the website. A third-party copy/content writer service will be used in conjunction with staff to rewrite information on the website to be up to date, accurate, and consistent throughout the site. This service should also provide guidelines and templates for staff to create new copy content in the future. The goal of this project would be to ensure that information displayed on the city website is clear, concise, and consistent throughout for the effective and efficient use of the public.

ORGANIZATIONAL EFFICIENCY/TRANSPARENCY PROJECTS

Project Title:	**City Facility Security Improvements**
Requesting Dept.:	Public Works
One-Time Cost:	$125,000 Annually
Ongoing Cost:	N/A
Recommended Year:	FY 2024-25 through FY 2026-27
Funding Source:	City General Fund (Infrastructure Reserve)

Included in this multi-year capital project will be replacement and/or addition of security cameras, access control systems (keycards), motion sensors and intrusion detection, and other security components and hardware/software as identified in the comprehensive review of City Facility Security Systems.

Project Title:	**Community Development Paperless Digitization**
Requesting Dept.:	Community Development
One-Time Cost:	$25,000
Ongoing Cost:	N/A
Recommended Year:	FY 2024-25
Funding Source:	City General Fund

This project digitizes and indexes services for development project plans and permits. Digitizing is necessary prior to the east wing seismic retrofit, so files will be available digitally for reference. Project files will be imported into the existing record management system improving record management and accessibility.

ORGANIZATIONAL EFFICIENCY/TRANSPARENCY PROJECTS (cont.)

Project Title:	**Park Facility Security Improvements**
Requesting Dept.:	Public Works
One-Time Cost:	$75,000 Annually
Ongoing Cost:	N/A
Recommended Year:	FY 2025-26 through FY 2027-28
Funding Source:	CRPD General Fund

Included in this multi-year capital project is the replacement and/or addition of security cameras, access control systems (keycards), motion sensors and intrusion detection, and other security components and hardware/software as identified in the comprehensive review of City Facility Security Systems.

Project Title: Storm Water Pump Station SCADA System Upgrade

Requesting Dept.:	Public Works
One-Time Cost:	$250,000
Ongoing Cost:	$15,000
Recommended Year:	FY 2024-25
Funding Source:	Storm Drain Fund

The existing SCADA (Supervisory Control and Data Acquisition) system for the pump stations is over 10 years old, is no longer supported by the manufacturer, and vulnerable to security breaches. The "brains" of the pump stations will need upgrades to various system and hardware/software components such as rack mounted servers, workstations, and routers to operate effectively and securely. This system is critical for flood management.

TECHNOLOGY INFRASTRUCTURE PROJECTS

Project Title:	**City Data Center Infrastructure**
Requesting Dept.:	Finance & Administrative Services
One-Time Cost:	$355,000
Ongoing Cost:	$58,000 Annually
Recommended Year:	FY 2028-29
Funding Source:	Accumulated Replacement Funds

The City's servers and storage appliances were replaced in 2024 and need to be replaced in FY 2028-29 to ensure continued operation of the City's servers and applications. Servers and storage appliances are used to house the City's data, backups, host printing services, manage file permissions, and run applications for all departments.

Project Title:	**City Desktop/Laptop Computers**
Requesting Dept.:	Finance & Administrative Services
One-Time Cost:	$200,000
Ongoing Cost:	N/A
Recommended Year:	FY 2028-29
Funding Source:	Accumulated Replacement Funds

Desktop and notebook computers and Microsoft Office software were replaced in 2024 and will need to be replaced in FY 2028-29. The PC replacement is necessary to stay current with industry standard hardware, software, and security standards. This project includes the replacement of all staff desktop computer workstations, laptops, and accompanying Microsoft Office productivity software.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **City Facility Conference Room Audiovisual**

Requesting Dept.:   Finance & Administrative Services

One-Time Cost: $30,000

Ongoing Cost: N/A

Recommended Year: FY 2026-27

Funding Source: Accumulated Replacement Funds & Technology Investment Fund

This project is the proposed purchase of replacement or addition of audiovisual technology for the city's conference rooms located at all city facilities (including CRPD). Once audiovisual technology in each city facility conference room reaches end-of-life, new wall mounted displays will be installed with small form computers and peripherals. This allows for meetings that are more efficient and allow for online meetings and webinars to be conducted, reducing the need for in-person meetings at city facilities.

Project Title: **City Facility Multi Function Copiers**

Requesting Dept.:   Finance & Administrative Services

One-Time Cost: $70,000

Ongoing Cost: $16,000 Annually

Recommended Year: FY 2027-28

Funding Source: Accumulated Replacement Funds

This project is the replacement of the City's copier fleet, which will be nearing end-of-life in 2028 and will no longer be supported by the manufacturer at that time. These copiers provide high volume scanning, copying, scan to email, and scan to fax capabilities as well as advanced printing functionality throughout all city offices.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **City Facility Network Security Firewalls**

Requesting Dept.:   Finance & Administrative Services

One-Time Cost: $40,000

Ongoing Cost: $13,300 Annually

Recommended Year: FY 2026-27

Funding Source: Accumulated Replacement Funds

The City's firewalls will reach their end-of-life in 2027. These appliances provide defense from unauthorized inbound access and allow for outbound communication. The appliances also protect the sensitive data in the Police Department from the rest of the City's local area network to ensure compliance with the California Law Enforcement Telecommunications System (CLETS).

Project Title: **City Facility Network Switches**

Requesting Dept.:   Finance & Administrative Services

One-Time Cost: $105,000

Ongoing Cost: $6,500 Annually

Recommended Year: FY 2024-25

Funding Source: Accumulated Replacement Funds

The City's network switches will reach the end of life in 2024 and need to be replaced in FY 2024-25. A network switch connects each device on the City's network (PCs, notebooks, tablets, etc.) The switches are used to interconnect to the City's file, print, and application servers with endpoint devices and the internet.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **City Facility Wi-Fi Access Points**

Requesting Dept.:   Finance & Administrative Services

One-Time Cost: $26,000

Ongoing Cost: $2,900 Annually

Recommended Year: FY 2024-25

Funding Source: Accumulated Replacement Funds

The City's Wi-Fi access points will reach end-of-life in 2024 and will need to be replaced in FY 2024-25. A Wi-Fi access point connects each mobile device on the City's network (phones, notebooks, tablets, etc.) The access points are used to connect to the City's laptops and other mobile devices as well as serve the city's public Wi-Fi at all city facilities.

Project Title: **Community Center Audiovisual System**

Requesting Dept.:   Recreation & Community Services

One-Time Cost: $100,000

Ongoing Cost: $6,000 Annually

Recommended Year: FY 2025-26

Funding Source: CRPD General Fund

The audiovisual (AV) technology in the ballroom of the Community Center was updated in 2021. The current AV is expected to be out of date with current standards and reach end-of-life in 2026. This project will add new digital connection types and replace all AV related hardware deemed end-of-life.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **Police Digital Audio Recorders**

Requesting Dept.:   Police

One-Time Cost: $28,000

Ongoing Cost: $2,700 Annually

Recommended Year: FY 2025-26

Funding Source: Accumulated Replacement Funds

The Cypress Police Department will need to replace its handheld digital audio recorders when they reach the end of life and end of support by the vendor in 2025. Digital audio recorders are necessary in routine police activity to record and save interviews with the public by a Police Officer

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Project Title: **Police In-Car and Bodyworn Video System**

Requesting Dept.:   Police

One-Time Cost: N/A

Ongoing Cost: $136,000 Annually

Recommended Year: FY 2028-29

Funding Source: City General Fund

The Cypress Police Department will need to replace its in-car and bodyworn video equipment when the hardware warranty expires in 2029. In-car and bodyworn video recordings are necessary to chronicle police activity and are activated by vehicle speed, the initiation of lights and siren or manually activated by a Police Officer.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **Police Vehicle Mobile Data Computers**

Requesting Dept.:   Police

One-Time Cost: $250,000

Ongoing Cost: N/A

Recommended Year: FY 2027-28

Funding Source: Accumulated Replacement Funds

The Cypress Police Department will need to replace its mobile computers when the hardware warranty expires in March 2028. Purchased in August 2022, the expected life of the current mobile devices is 5 years. These devices are used 24 hours a day for police patrol operations and are necessary to transmit criminal information to the mobile police units, maintain communication with dispatch, run plates, check identification, map the location of the police cruisers, check for warrants, etc.

Project Title: **Public Works Digital Plan Review Workstations**

Requesting Dept.:   Public Works

One-Time Cost: $20,000

Ongoing Cost: $1,000

Recommended Year: FY 2027-28

Funding Source: Accumulated Replacement Funds

Digital workstations consisting of a monitor and tablet allow Public Works to review and mark-up plans digitally at the counter, at desks, and bring that information in the field. The review process allows City staff to support its existing online permitting plan check system and continue digital submissions and corrections. The current digital plan review workstations are expected to need replacement in FY 2027-28.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **Public Works Large Format Plotter**

Requesting Dept.:   Public Works

One-Time Cost: $7,000

Ongoing Cost: N/A

Recommended Year: FY 2027-28

Funding Source: Accumulated Replacement Funds

This project is the proposed replacement of the large format Public Works printer. The plotters are typically used for plans and large signage for project notices. The current large format printers are expected to need replacement in FY 2027-28.

Project Title: **RCS Large Format Plotters**

Requesting Dept.:   Recreation & Community Services

One-Time Cost: $8,000

Ongoing Cost: N/A

Recommended Year: FY 2026-27

Funding Source: Accumulated Replacement Funds

This project is the proposed replacement of the large format printers located at the community center and senior center. The plotters are typically used for large signage and posters throughout the centers for various programs and services offered to the community. The current large format printers are expected to need replacement in FY 2026-27.

TECHNOLOGY INFRASTRUCTURE PROJECTS (cont.)

Project Title: **Senior Center Audiovisual System**

Requesting Dept.:   Recreation & Community Services

One-Time Cost: $25,000

Ongoing Cost: $2,000 Annually

Recommended Year: FY 2025-26

Funding Source: Accumulated Replacement Funds

The audiovisual (AV) technology in the multipurpose room of the Senior Center was updated in 2019. The current AV is expected to be out of date with current standards and reach end-of-life in 2025. This project will add new digital connection types and replace all AV related hardware deemed end-of-life.

Project Title: **Senior Center Lab Computers**

Requesting Dept.:   Recreation & Community Services

One-Time Cost: $7,200

Ongoing Cost: N/A

Recommended Year: FY 2026-27

Funding Source: Accumulated Replacement Funds

The Senior Center offers computer and internet access to its patrons in the form of eight all-in-one desktop computers located in the computer lab. These computers were installed in 2021 and are expected to reach the end of their useful life by 2026 due to their aging operating system and hardware components. These PCs will be replaced with new all-in-one PCs with the latest operating system and current hardware technology.