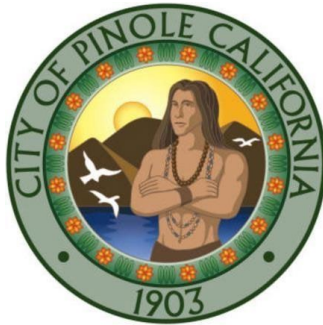


# CITY OF PINOLE

## INFORMATION TECHNOLOGY (IT) PLAN



FISCAL YEAR (FY) 2021-22  
THROUGH FY 2025-26

JUNE 2022

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## Introduction

The term "information technology" (IT) refers to computers, software, and networks used to acquire, process, store, and distribute data. The City of Pinole uses information technology, along with human resources, facilities, other equipment, and procedures, to provide services to the community.

The City must make efficient and effective use of IT to provide efficient and effective services to the public. Key tenets of the City's IT function are efficiency, reliability, and usability. To make efficient and effective use of IT, organizations must engage in regular, periodic strategic planning regarding IT.

In February 2020, the City of Pinole adopted a Strategic Plan 2020 – 2025. The Strategic Plan identified four goals for the community (safe and resilient, financially stable, vibrant and beautiful, and high performance) and 22 specific "strategies" (special projects), to be completed over a five-year timeframe, that would help the city achieve the goals. One of the strategies was to develop a comprehensive information technology plan, which this Information Technology (IT) Plan Fiscal Year (FY) 2021-22 Through FY 2025-26 ("IT Plan") represents.

The IT Plan describes how the City currently manages IT; the City's IT infrastructure; the City's major software systems; recent technology accomplishments; and potential IT projects and budgets for a five-year period.

The City intends to update the IT Plan on a biennial basis, in advance of the budget adoption process.

## IT Management

Responsibility for IT at the City is shared between the Information Technology (IT) Division (“IT Division”) of the City Manager department and the other City departments.

The IT Division is responsible for the following:

- Performing long-term planning for IT, including the creation of the IT Plan;
- Identifying the City organization’s overarching IT needs and determining the appropriate service model and budget for addressing those needs;
- Providing certain overarching IT services to all City departments;
- Assisting departments in selecting and implementing department-specific hardware and software; and
- Helping research and guide City departments and staff towards products and services that are necessary and that will improve efficiency, reliability, and accessibility.

City departments are responsible for participating, with the IT Division, in long-term planning and collaborating with the IT Division in selecting and implementing department-specific hardware and software. In most cases, City departments are responsible for administering department-specific hardware and software.

The IT Division has hired a private firm, Precision IT Consulting, Inc (“Precision”), referred to as a managed service provider (MSP), to assist with long-term planning; assist departments with department-specific hardware and software; and provide foundational network, application, infrastructure, and security administration. Precision has served in this capacity since 2017.

The foundational network, application, infrastructure, and security administration services that Precision provides to all City departments include:

- Procuring and maintaining basic computing devices (desktop computers, laptops, and tablets);
- Procuring and maintaining basic printers, mobile phones, and desk phones;
- Procuring and maintaining the City’s computer networking and storage hardware and software, including internet connectivity; and
- Procuring, maintaining, and administering enterprise software that all City departments use, such as for email, office functions, file sharing, and data security.

To carry out its functions, Precision provides one full-time Systems Administrator at City Hall that oversees the daily operation of the City's systems and provides end-user support. The Systems Administrator is also supported by one vCIO (Virtual Chief Information Officer) and a team of remote engineers and technicians.

Note that under the City's current arrangement, the IT Division and Precision are not responsible for procuring, maintaining, and/or administering all City electronic devices. City departments, rather than the IT Division and Precision, are responsible for some electronic devices that are department-specific and/or do not contain computers, such as audio/visual equipment; two-way radios; specialized printers; electronic building security and surveillance systems; GPS tracking systems for City vehicles; climate controls; body-worn cameras; fingerprint sensors; radar guns; and automated license plate readers, for example. A more complete list of electronic devices that individual departments are responsible for is provided in a subsequent chapter.

## IT Planning and Budgeting Process

The City has historically gone through an annual process, as part of the budget process, of identifying, scheduling, and funding IT projects. The creation of the IT Plan expands the former annual process to cover a five-year timeframe.

The planning process begins with Precision conducting a "Technical Alignment Review," which is a detailed assessment of all major citywide IT systems that results in recommendations on projects to improve the City's IT infrastructure. This review includes computers, servers, network equipment, citywide software, department-specific software, various internet and County connections, internet usage, and phone systems. In addition, each department is asked about its department-specific IT needs.

Once the citywide and department-specific IT needs have been identified, the IT Division and Precision work with other appropriate City staff to determine the priority and timeline of these upgrades and projects. The proposed priority and timeline of the projects are reflected in the IT Plan and proposed annual budget.

All City departments contribute funds toward the foundational IT services that the IT Division provides. This is accounted for through an internal service fund. In addition, City departments pay for the cost of department-specific IT services and projects. The IT Division works with the departments to determine if items should be in a department budget versus the centralized IT budget.

## IT Infrastructure

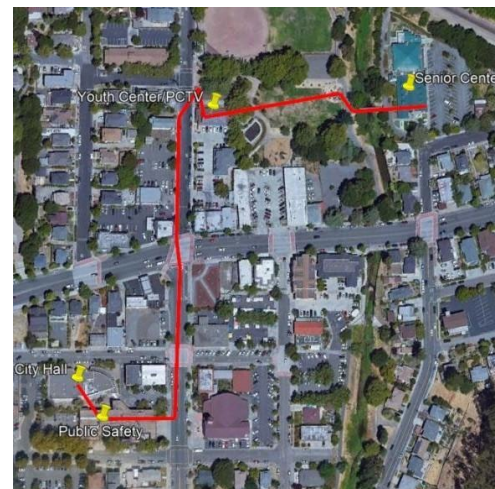
The City's IT infrastructure includes the data network and computers, as described below.

### City Data Network

City departments must be able to transmit and share data across various City facilities and via the internet to provide services. The city has communication links that connect six City facilities: City Hall, Public Safety Building, Corporation Yard ("Corp Yard")/Water Pollution Control Plant (WPCP), Youth Center/Pinole Cable TV (PCTV), Senior Center, and Station 74. These locations, and the data and software housed at each, are connected to one another through either City-owned underground fiber optic cable, City-leased dedicated T1 lines (similar to telephone lines, with greater transmission capability), or commercial internet service connections. Different network technologies are used based on the requirements of the location and costs.

### City-Owned Fiber Optic Network

The City of Pinole owns underground fiber optic infrastructure that connects different City buildings in the downtown area. City Hall, which acts as the hub, is connected via fiber to the Public Safety Building, Youth Center/PCTV, and the Senior Center. Through this network, illustrated in the picture to the right, these facilities can share data housed at any of the facilities and access the internet.



City Hall serves as the City's access point to the internet (AT&T Managed Internet Service (MIS), 100 Mbps). The Public Safety Building is connected to City Hall via fiber that was replaced in 2019 that runs at a speed of 1 Gbps. The Youth Center/PCTV and the Senior Center are connected to City Hall via fiber that was installed in the late 1990s and runs at a speed of 100 Mbps. It is through this network that PCTV can livestream its broadcast through the City's website. The Police Department also has surveillance cameras at Fernandez Park that are connected to the downtown area fiber network described above. The City also owns underground fiber optic cable installed along Fitzgerald Blvd. that supports a network of surveillance cameras used by the Police Department. This fiber network connects back to the Public Safety building. The

Fitzgerald Blvd. fiber infrastructure is maintained by the Police Department and a private contractor.

## Other Communication Connections

Fire Station 74 is connected to City Hall via a dedicated, point-to-point T1 line that the City leases from AT&T. The Public Safety Building has a dedicated phone line connection between the Fire Department and the Contra Costa County Fire Protection District (CCCYPD, “Confire”) for dispatch coordination.

The PCTV studio, located at the Youth Center, has a dedicated Comcast fiber optic cable connection that runs from the studio to the Comcast “headend” (a control center where various signals are brought together), through which PCTV content is transmitted from the studio to the City’s franchise cable television company, Comcast, so that Comcast can broadcast the content on Public, Educational, and Governmental Access (PEG) channels (channels 26 and 28). Similarly, AT&T, the City’s other franchise cable television company, has placed four T1 lines that run from the studio to AT&T’s headend to transport the station’s broadcasts to AT&T. An AT&T cable viewer must then tune into channel 99 and scroll through the listings to Pinole Community Televisions 26 and 28.

The Corp Yard/WPCP is connected to City Hall via a 10 Mbps Sonic digital service line (DSL) connection with a site-to-site virtual private network (VPN) tunnel.

## Servers and Workstations

The City has four physical servers, one in City Hall and three at the Public Safety Building. The server at City Hall hosts all City software except for programs used exclusively by the Police and Fire departments. The City Hall server hosts 8 virtual servers, using a product called VMWare vSphere, and runs the software used by all City staff as well as the specialized software used by non-public safety departments. The Police Department has two physical servers and the Fire Department has one physical server that host applications and files for their respective employees.

Approximately 100 end-user desktop computers are used across all City locations. Most department managers are also issued laptop computers for off-site work. The City recently undertook an upgrade project that replaced all workstations with new Dell desktop computers running Windows 10.

## IT Backup Systems

**Redundancy** - The four physical servers have many redundant features. All servers have redundant hard drives, network cards, and power supplies, and are all plugged into battery backup systems that can provide an hour of uptime.

**Network Switches** – Although the switches are not redundant and cannot failover automatically, there are enough free ports in other switches that if one failed, all connections could be moved from the failed switch to a working switch.

**Data Backup** – The servers at City Hall and the Public Safety Building are fully backed up multiple times each day on dedicated backup devices. City Hall has its own dedicated backup device. The Police and Fire Department servers are all backed up on another device. Each of the backup devices are backed up to the cloud. If a physical server fails, the backup devices can function as a server. If a physical server and its backup device both fail, files can be accessed from the cloud.

**Network Room Power** – The Public Safety Building servers and network equipment are plugged into UPS (uninterruptible power supply) battery backup units. The Public Safety Building also has a generator to keep power up and running in the event of a power outage.

The City Hall server and network equipment are also plugged into UPS battery backup units. City Hall does not have a generator to keep power up and running during a power outage. If there was a sustained power outage, users would still be able to access email outside of City Hall as all email is in the cloud, but server resources and applications in City Hall would be down until the power came back on. If the power outage continued, the City could “failover” to the cloud.

## Software Applications

City departments rely on numerous software applications to provide services. Below is a table that shows all essential applications and data service subscriptions used by City staff.

| Application Name                       | Application Use                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Citywide (IT Division)</b>          |                                                                                                                                                                                                                                                                                                                                                                                |
| Adobe                                  | Document creation and management software                                                                                                                                                                                                                                                                                                                                      |
| Cisco Meraki                           | WiFi system for City Hall and Public Safety Building                                                                                                                                                                                                                                                                                                                           |
| DocuSign                               | Electronic signature management                                                                                                                                                                                                                                                                                                                                                |
| Microsoft 365                          | Email, document sharing, instant messaging, meetings, word processing, spreadsheet, database, presentation software                                                                                                                                                                                                                                                            |
| Microsoft Hyper-V                      | Server Virtualization                                                                                                                                                                                                                                                                                                                                                          |
| Next Generation Anti-Virus Software    | Advanced Anti-Virus/Malware/Ransomware with Endpoint Detection and Response (EDR). Endpoint detection and response (EDR) is a system to gather and analyze security threat-related information from computer workstations and other endpoints, with the goal of finding security breaches as they happen and facilitating a quick response to discovered or potential threats. |
| VMWare vSphere                         | Server Virtualization                                                                                                                                                                                                                                                                                                                                                          |
| Zoom                                   | Virtual meetings                                                                                                                                                                                                                                                                                                                                                               |
| <b>City Clerk</b>                      |                                                                                                                                                                                                                                                                                                                                                                                |
| GovQA                                  | Public records management                                                                                                                                                                                                                                                                                                                                                      |
| Granicus                               | Public meeting streaming                                                                                                                                                                                                                                                                                                                                                       |
| Laserfiche                             | Electronic document management                                                                                                                                                                                                                                                                                                                                                 |
| SIRE FileCenter                        | Electronic document management                                                                                                                                                                                                                                                                                                                                                 |
| Versatile Express                      | File indexing software                                                                                                                                                                                                                                                                                                                                                         |
| <b>City Manager</b>                    |                                                                                                                                                                                                                                                                                                                                                                                |
| CivicLive                              | City website content management                                                                                                                                                                                                                                                                                                                                                |
| Facebook                               | Social media communication                                                                                                                                                                                                                                                                                                                                                     |
| Nextdoor                               | Social media communication                                                                                                                                                                                                                                                                                                                                                     |
| SurveyMonkey                           | Online survey tool                                                                                                                                                                                                                                                                                                                                                             |
| <b>Community Development</b>           |                                                                                                                                                                                                                                                                                                                                                                                |
| ArcGIS (Desktop/Online)                | Mapping and analysis software                                                                                                                                                                                                                                                                                                                                                  |
| Bluebeam Revu                          | Digital blueprint/plan review software                                                                                                                                                                                                                                                                                                                                         |
| Central Square TRAKiT <i>[Current]</i> | Building, Planning, Code Enforcement, Public Works and Finance permit tracking and issuance                                                                                                                                                                                                                                                                                    |

|                                                                                                                                                                           |                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Central Square Community Development Suite (Mobiles, GIS, Licensing, Code Enforcement, Permitting, Citizen Portal) <i>[Planned, shared with Public Works and Finance]</i> |                                                                           |
| GreenHalo <i>[Planned]</i>                                                                                                                                                | Construction waste diversion reporting                                    |
| RealQuest                                                                                                                                                                 | Property ownership information                                            |
| RSMeans Data                                                                                                                                                              | Construction estimating cost data                                         |
| SolarApp+ <i>[Planned]</i>                                                                                                                                                | Automated residential solar permitting                                    |
| Stripe                                                                                                                                                                    | Online payment collection platform                                        |
| Yiftee                                                                                                                                                                    | Economic development tool                                                 |
| <b>Community Services</b>                                                                                                                                                 |                                                                           |
| Adobe Creative Suite                                                                                                                                                      | Editing software for PCTV                                                 |
| Allan and Heath                                                                                                                                                           | Audio mixing software for Council Meetings                                |
| Apple Final Cut Pro                                                                                                                                                       | Video editing software                                                    |
| Audacity                                                                                                                                                                  | Audio editor and recorder                                                 |
| AV Snap                                                                                                                                                                   | Audio/visual system design software                                       |
| Compix Broadcast Graphics                                                                                                                                                 | Characters and graphics software for video streaming                      |
| Leightronix Winlgx                                                                                                                                                        | Broadcasting systems for long format video recording and playback on PCTV |
| Leightronix Total Import                                                                                                                                                  | File management software                                                  |
| RecDesk                                                                                                                                                                   | Program management and reservation scheduling for Recreation              |
| Scala                                                                                                                                                                     | Scroll or bulletin board messaging systems for PCTV on air use            |
| Zoner Photo Studio 16                                                                                                                                                     | Photograph editing, tagging, and organizing software                      |
| VLC Media Player                                                                                                                                                          | Cross-platform multimedia player and framework                            |
| <b>Finance</b>                                                                                                                                                            |                                                                           |
| Balancing Act                                                                                                                                                             | Interactive survey platform                                               |
| GovInvest                                                                                                                                                                 | Labor costing                                                             |
| MuniCast                                                                                                                                                                  | Financial forecasting                                                     |
| Tyler Technologies ERP Pro                                                                                                                                                | Cloud-based financial software                                            |
| <b>Fire</b>                                                                                                                                                               |                                                                           |
| California Environmental Reporting System (CERS)                                                                                                                          |                                                                           |
| Cordico                                                                                                                                                                   | Employee wellness                                                         |
| Knox MedVault                                                                                                                                                             | Digital coded access to vaults for controlled substances                  |
| Operative IQ                                                                                                                                                              | Controlled substances tracking                                            |

|                                                              |                                                                                                                                                   |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Physio Control                                               | For LIFEPAK-15 cardiac defibrillator monitors                                                                                                     |
| Tablet Command                                               | Dispatch and incident management program installed on iPad tablet MDCs in all apparatus and command vehicles                                      |
| TRAKiT (fire inspection module)                              | Fire inspection software                                                                                                                          |
| Vector Solutions – Target Solutions and Vector Scheduling    | Training, scheduling, and personnel accountability                                                                                                |
| Zoll e-PCR                                                   | Patient care reports program                                                                                                                      |
| Zoll Fire RMS                                                | Fire Department records management system                                                                                                         |
| Zonehaven                                                    | Evacuation software                                                                                                                               |
| <b>Human Resources</b>                                       |                                                                                                                                                   |
| LinkedIn                                                     | Human resources social media                                                                                                                      |
| NeoGov                                                       | A web-based recruitment tool used by Human Resources for their recruitment process.                                                               |
| Tyler Technologies Human Resources Management Pro            | Personnel management                                                                                                                              |
| <b>Police</b>                                                |                                                                                                                                                   |
| 3SI                                                          | GPS tracker application                                                                                                                           |
| APBNet                                                       | Law enforcement alert and information sharing system                                                                                              |
| Automated Regional Information Exchange System (ARIES)       | Criminal justice and law enforcement information sharing platform for criminal case scheduling                                                    |
| Axon/Evidence.com                                            | Body-worn cameras network docks, Taser network docks, vehicle cradle points                                                                       |
| California Law Enforcement Telecommunications System (CLETS) | Data sharing and messaging network among State and national law enforcement agencies                                                              |
| Cordico                                                      | Employee wellness application                                                                                                                     |
| Crossroads                                                   | Electronic citation system, including WiFi network for uploading data                                                                             |
| FileonQ                                                      | Police Department evidence management                                                                                                             |
| ManageEngine MDM                                             | Mobile Device Management software for Police Department mobile phones                                                                             |
| Milestone XProtect                                           | Video Management software for citywide surveillance cameras (Public Safety Building, Fernandez Park, Senior Center, Fitzgerald Drive, Skate Park) |
| ShotSpotter                                                  | Gunshot detection through San Pablo                                                                                                               |
| Stancil                                                      | 911 Call Recording                                                                                                                                |
| Sun Ridge RIMS                                               | Computer Aided Dispatch and Records Management System                                                                                             |
| Tyler Technologies Enterprise Public Safety Software         | Legacy Computer Aided Dispatch and Records System                                                                                                 |

|                                                         |                                                                                                                                                                                                                                               |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vigilant Solutions                                      | ALPR (Automatic License Plate Recognition)                                                                                                                                                                                                    |
| <b>Public Works</b>                                     |                                                                                                                                                                                                                                               |
| ArcGIS (Desktop/Online)                                 | Mapping and analysis solution to make maps, analyze data, share, and collaborate                                                                                                                                                              |
| Aveva Citect SCADA                                      | Industrial process management for Water Pollution Control Plant                                                                                                                                                                               |
| Beehive                                                 | Asset management, maintenance management, fleet management                                                                                                                                                                                    |
| CAD                                                     | 3D rendering and design                                                                                                                                                                                                                       |
| CivicPlus SeeClickFix ( <i>Planned for FY 2021/22</i> ) | Non-emergency resident request management                                                                                                                                                                                                     |
| eNPDES                                                  | Water quality compliance monitoring and reporting to State and federal agencies                                                                                                                                                               |
| Microsoft Project                                       | Project development and management                                                                                                                                                                                                            |
| Public Purchase                                         | Procurement platform                                                                                                                                                                                                                          |
| Streetsaver                                             | Pavement management system, provided to the City by the Metropolitan Transportation Commission (MTC), which provides analysis tools, including Budget Needs, Budget Scenarios, Target Driven Scenarios, and Project Selection for City Roads. |
| Versatile                                               | Physical document tracking                                                                                                                                                                                                                    |

## Electronic Devices Managed By City Departments

As noted above, under the City's current IT service delivery model, the IT Division and Precision are not responsible for procuring, maintaining, and/or administering all City electronic devices. Below is a list of City electronic devices that are procured and maintained by individual departments.

### Citywide (IT Division)

- Multi-functional devices (copiers)

### Community Development

- Large format printer (plotter)

### Community Services (PCTV)

- Amplifiers and microphones
- Apple computers
- Assistive listening systems
- Audio mixing boards
- Backup projector
- Drone
- DVD recorders
- Encoder
- Field video cameras
- Intercom systems
- Microwave AV transport systems
- Replay systems
- Signal converters
- Signal distribution systems both audio and video
- Specialized monitors and recorders
- Studio lighting control
- Studio lights
- Wireless microphones

## Fire

- Base station radios
- Fire Station Alerting System
- LIFEPAK-15 cardiac defibrillator monitors
- Mobile Digital Computers (MDCs) – iPad tablets in all apparatus and command vehicles
- Two-way portable radios
- Vehicular mobile radios

## Human Resources

- Identification card printer

## Police

- Automated license plate readers
- Body-worn cameras
- Fingerprint sensors
- Radar guns
- ThinBlueOnline training simulator
- Two-way portable radios
- Veriton

## Public Works

- Electronic building security equipment
- Facility climate controls
- Global positioning system (GPS) tracking systems for City vehicles
- Traffic control devices

## Recent Technology Accomplishments

The City has implemented several IT improvements over the past few years. Below is a list of some recent accomplishments.

| Project                                   | Description                                                                                                                                                                                                                                                               |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Office 365 Migration                      | Migration from on-premises Exchange 2003 to Cloud-based Office 365 to increase accessibility and reliability of electronic communication.                                                                                                                                 |
| Workstation Replacement                   | Replaced approximately 75 end-user workstations with new Windows 10 machines from Dell. Old machines were 5+ years old and out of warranty.                                                                                                                               |
| Network Switch Replacement                | Upgraded the switches in the Public Safety building and City Hall from 100Mbps "Fast Ethernet" switches to 1Gbps switches with 10Gb uplinks. Gives us the ability to move to a full 10Gb network backbone in the future.                                                  |
| Data Center Power Upgrade                 | Replaced Uninterruptible Power Supplies (UPS) for all critical network infrastructure and servers.                                                                                                                                                                        |
| City Hall Firewall Replacement            | A firewall is a security device used to stop or mitigate unauthorized access to private networks that are connected to the internet. Upgrade the firewall in City Hall to a more secure solution.                                                                         |
| Business Continuity and Disaster Recovery | Migrated from legacy LTO Tape backups to an automated off-site backup and disaster recovery solution. Dramatically increased backup reliability and information assurance.<br>Decreased the time needed to recover from possible hardware failure and disaster scenarios. |
| Public Safety Building Fiber Replacement  | Replaced the fiber link between City Hall and the Public Safety building. Increased available network bandwidth between sites.                                                                                                                                            |
| Corp Yard Network Upgrade                 | Replaced the leased T1 line with 10Mbps Sonic internet. Improves network speed until the city can install a Fiber connection. Fiber was installed under the railroad tracks separating the Corp Yard/WPCP from the downtown area but was not continued to City Hall.      |

## Proposed Major IT Projects and Annual Budget FY 2021-22 Through FY 2025-26

One of the most significant components of the IT Plan is the identification of potential IT projects and budgets for the five-year planning period. Below find a list of the major IT projects proposed over the next five years as well as the planning-level estimated City IT budget for those years.

### Fiscal Year 2021-22 Projects and Budget

| Expenditure                          | Amount      |
|--------------------------------------|-------------|
| Professional Services                | \$210,000   |
| Network Maintenance                  | \$79,757    |
| Software Maintenance                 | \$189,899   |
| Equipment Maintenance and Leases     | \$49,700    |
| Software Purchases and Subscriptions | \$61,230    |
| Communications - Voice Service       | \$174,786   |
| Computer Equipment                   | \$76,500    |
| Measure S-2014 (Direct Charge)       | \$42,600    |
| Projects (Details below)             | \$391,000   |
| Total                                | \$1,275,472 |

### Potential Projects

| Project                             | Department | Cost     | Description                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Implement Two-Factor Authentication | All        | \$4,000  | Implementing two-factor authentication (2FA) on City employee Office 365 email accounts and services will add an additional layer of protection that can help prevent unauthorized access to staff's email and files. Completing 2FA will simply be an additional step taken by employees when accessing Office 365 through their internet browsers, programs, or mobile applications. |
| Police Mobile                       | Police     | \$92,000 | Fleet-wide replacement of the Police Department                                                                                                                                                                                                                                                                                                                                        |

|                                                                        |                    |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------|--------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Digital Computers (MDCs)                                               |                    |           | in-car MDCs. The current Getac units are well over 5 years old and have been suffering hardware failures for the past year. The replacement of the existing units will increase reliability and stability. The Police Department is implementing a replacement dispatch and records system. Replacing the MDCs would line up with the new system being implemented.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Phone System Replacement                                               | All                | \$65,000  | The existing AT&T CENTREX phone system lacks modern functionality, hinders efficient workflow, limits off-site usability, and is becoming more and more unreliable and expensive. One of the primary goals will be to replace the existing system with a yet to be determined voice over internet protocol (VOIP) solution that will increase reliability, functionality, and ease of use.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Fiber Data Network Evaluation                                          | Community Services | \$10,000  | The City-owned underground fiber connection that supplies the Youth Center/PCTV and Senior Center with network/internet access was initially installed in the late 1990s and has suffered multiple instances where it has been dug up by construction crews. With a generally acceptable lifespan of 20-25 years, the underground fiber needs to be evaluated for its current condition and future replacement. A fiber conduit was installed under the railroad tracks separating the Corp Yard/WPCP from the downtown area. The condition of that conduit needs to be inspected so it can be used for a future expansion of the fiber system from City Hall. Installing a City-owned fiber connection to the Corp Yard would negate the need for the existing expensive private internet connection service. |
| Upgrade to New Version of Geographic Information System (GIS) Software | Multiple           | \$10,000  | Re-establish GIS software.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Upgrade to New Version of TRAKiT                                       | Multiple           | \$200,000 | Upgrade to current version of TRAKiT (eTRAKiT) community development and business license software.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Upgrade MedVaults to                                                   | Fire               | \$2,500   | Upgrade management software for Fire Department's narcotics vaults (at Fire Station and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|                                                                         |      |         |                                                                                             |
|-------------------------------------------------------------------------|------|---------|---------------------------------------------------------------------------------------------|
| KnoxConnect 2.5 Cloud System                                            |      |         | on vehicles).                                                                               |
| Implement Operative IQ (or obtain PSTrax in Lieu of Operative IQ)       | Fire | \$2,500 | Upgrade software for narcotics tracking and reporting to County Emergency Medical Services. |
| Expand Use of Target Solutions (Vector Solutions and Vector Scheduling) | Fire | \$5,000 | Implement new scheduling software that integrates with payroll.                             |

## Fiscal Year 2022-23 Budget and Projects

| Expenditure                          | Amount      |
|--------------------------------------|-------------|
| Professional Services*               | \$396,550   |
| Network Maintenance                  | \$82,149    |
| Software Maintenance                 | \$195,595   |
| Equipment Maintenance and Leases     | \$51,191    |
| Software Purchases and Subscriptions | \$63,066    |
| Communications - Voice Service       | \$182,748   |
| Computer Equipment                   | \$28,000    |
| Measure S-2014 (Direct Charge)       | \$43,878    |
| Projects (Details below)             | \$253,592   |
| Total                                | \$1,296,769 |

\*Note that the professional services budget amount includes two full-time staff from Precision onsite at City Hall beginning in FY 2022-23.

### Potential Projects

| Project                                                                       | Department                           | Cost     | Description                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------|--------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Document Storage                                                              | Clerk's Office and Other Departments | TBD      | Digitize City paper records. The Clerk's Office is already using LaserFiche. Other City departments will also begin digitizing their paper records.                                                                                                                                                                                                                                                 |
| Citywide Employee ID/Access Card System                                       | Public Works and Human Resources     | TBD      | Implement cardkey access systems for all City facilities.                                                                                                                                                                                                                                                                                                                                           |
| Replace Youth/Senior Center Fiber Run and Install Fiber Run to Corp Yard/WPCP | Community Services                   | \$50,000 | It is recommended that the city replace fiber runs that were evaluated in the previous year. Replacing the fiber run to the Youth Center/PCTV and Senior Center will ensure the network's stability and availability, and installing a fiber run to the Corp Yard/WPCP will negate the need for the current expensive internet service (\$500/month) and increase internet speeds at that location. |

|                                                                          |                    |          |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------|--------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Replace Youth Center Building Alarm and Call Box System (Access Control) | Community Services | TBD      | An access control system is a type of security system that manages and controls who or what is allowed entrance to a facility. Replace the outdated alarm and call box system at the Youth Center. A new system will ensure that the building is secure and report any emergencies. The callbox will allow staff to communicate with the public and allow them to enter the building through the buzzer system. |
| Replace Senior Center Building Alarm System                              | Community Services | TBD      | Replace the outdated alarm system at the Senior Center. The system has been out of service for many years. A new system will ensure that the building is secure and report any emergencies.                                                                                                                                                                                                                     |
| Public Safety Network Re-Addressing                                      | Police             | \$6,000  | Re-address the Public Safety network per guidance from the Contra Costa County Department of Information Technology (DoIT). The current Public Safety All County Criminal Justice Information Network (ACJIN) network uses a county-assigned network address space that was planned in the late 1990s. This project will not require any hardware purchases.                                                    |
| Mobile Device Management (MDM)                                           | All                | \$2,500  | MDM provides a single interface for inventory, tracking, and management of City mobile devices (mobile phones and tablets). The City currently has an MDM solution for Police. This existing solution should be deployed to all City phones/tablets.                                                                                                                                                            |
| City Website Update                                                      | City Manager       | \$40,000 | For FY 2022-23, it is recommended that the city update its website, to improve the architecture, user experience, tools, and accessibility. This is a recommendation of the Communication and Engagement Plan. A significant component of the project will be ensuring the accessibility of the site, including adding closed captioning to appropriate videos.                                                 |
| Expand Zoll Fire Records Management System (RMS)                         | Fire               | TBD      | Expand the functionality of the Fire Department's records management system.                                                                                                                                                                                                                                                                                                                                    |

|                                                                                                                   |                       |                                              |                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Station 74 Re-Opening Electronics                                                                                 | Fire                  | \$15,000                                     | Refresh non-IT electronics at Station 74 if the City agrees to a partnership with Confire to reopen the station.  |
| Online Payment Platform for Finance                                                                               | All                   | \$5,000                                      | Implement software to enable online payment of various City fees and charges.                                     |
| Install Updated Computers, AV, and Communication Devices in Room Serving as the Emergency Operations Center (EOC) | All                   | \$50,000                                     | Refresh EOC IT and electronic systems.                                                                            |
| Emergency Power to City Hall                                                                                      | City Hall             | TBD                                          | Implement emergency power supply to City Hall.                                                                    |
| Implement Remote Desktop Server for ArcGIS                                                                        | Public Works          | \$5,000                                      | Addition of a remote desktop server for use with ArcGIS and the addition of three more ArcGIS licenses.           |
| Agenda Management Software                                                                                        | City Clerk            | \$8,000                                      | Implement agenda packet management software for public meetings.                                                  |
| LiveScan Machine Replacement                                                                                      | Public Safety         | \$6,000                                      | Replace the LiveScan machine.                                                                                     |
| New Body-Worn Cameras                                                                                             | Public Safety         | Annual: \$40,392<br>\$201,963 (over 5 years) | Body-worn Axon Cameras and docking stations.<br>all equipment planned to be replaced by end of '22                |
| Senior Center Check-In Station                                                                                    | Community Services    | \$2,500                                      | Install a self-serve check-in station (kiosk) for the public to use for program check in and online registration. |
|                                                                                                                   |                       |                                              |                                                                                                                   |
| Plan Review Desk                                                                                                  | Community Development | \$3,200                                      | A dedicated desk for construction plan reviews including a 36" or larger monitor.                                 |
| "Front Counter" Online Application                                                                                | Community Development | \$5,000                                      | A new printer and two computers to serve as kiosks for submitting online applications.                            |

|                        |                       |          |                                                                                                                                                                                                                                                                                                          |
|------------------------|-----------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Submittal Kiosks       |                       |          |                                                                                                                                                                                                                                                                                                          |
| Conference Room Update | Community Development | \$10,000 | New screen, computer, and telecommunications hardware to facilitate remote conferences and meetings in the “fishbowl” conference room                                                                                                                                                                    |
| Desktop Scanners       | Human Resources       | \$2,500  | New scanners to be used with the new online document management system.                                                                                                                                                                                                                                  |
| Desktop Scanners       | Community Development | \$2,500  | Five desktop scanners.                                                                                                                                                                                                                                                                                   |
| PC Refresh             | All                   | \$28,000 | Estimated 14 computers will be up for replacement in FY 22-23. The City should continue the process of deploying approximately 20 per year so all PCs are replaced approximately every 5 years. This provides consistent budgeting and avoids a much larger project of replacing all PC’s every 5 years. |

## Fiscal Year 2023-24 Budget and Projects

| Expenditure                          | Amount      |
|--------------------------------------|-------------|
| Professional Services                | \$408,446   |
| Network Maintenance                  | \$84,614    |
| Software Maintenance                 | \$201,463   |
| Equipment Maintenance and Leases     | \$52,726    |
| Software Purchases and Subscriptions | \$64,958    |
| Communications - Voice Service       | \$188,231   |
| Computer Equipment                   | \$54,000    |
| Measure S-214 (Direct Charge)        | \$45,194    |
| Projects (Details below)             | \$81,000    |
| Total                                | \$1,180,632 |

### Potential Projects

| Project                                      | Department      | Cost     | Description                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------|-----------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Replace Public Safety Building Access Points | Police and Fire | \$6,000  | Update the Public Safety Building's access points for better WiFi connectivity.                                                                                                                                                                                                                                                         |
| Public Safety Building Rewiring              | Police and Fire | TBD      | Rewire the Public Safety Building for computers and other network devices.                                                                                                                                                                                                                                                              |
| City Hall Rewiring                           | City Hall       | TBD      | City Hall's data cabling was installed shortly after City Hall was built in 1997. Some of the structured data cabling has stopped working due to age and is the older CAT5 specification. City Hall's data cabling should be replaced to ensure future reliability and to provide increased network speed with the newer CAT6 standard. |
| Upgrade all Fire Radios                      | Fire            | \$25,000 | Current inventory of mobile and two-way portable radios is becoming obsolete and will be without support.                                                                                                                                                                                                                               |
| Continue to                                  | Fire            | TBD      | Improve fire station alerting systems.                                                                                                                                                                                                                                                                                                  |

|                                                                     |                    |          |                                                                                                                            |
|---------------------------------------------------------------------|--------------------|----------|----------------------------------------------------------------------------------------------------------------------------|
| Improve Station Alerting System (Timers, Information Displays etc.) |                    |          |                                                                                                                            |
| Establish an Open Data Portal                                       | Citywide           | TBD      | Establish a City webpage that will serve as a library and access point of key City data.                                   |
| New Equipment and Software for PCTV                                 | Community Services | \$50,000 | Expand network storage, on-air systems automation, live closed captioning, and computer graphics workstations and software |
| Implement NeoGov Onboarding Module                                  | Human Resources    | TBD      | Implement a web-based recruitment tool.                                                                                    |
| Tyler ESS - Expansion                                               | Human Resources    | TBD      | Expand the functions of Tyler for use of the employee self-service features.                                               |
| PC Refresh                                                          | All                | \$54,000 | Estimated 27 computers will be up for replacement in FY 23-24.                                                             |

## Fiscal Year 2024-25 Budget and Projects

| Expenditure                          | Amount      |
|--------------------------------------|-------------|
| Professional Services                | \$420,699   |
| Network Maintenance                  | \$87,152    |
| Software Maintenance                 | \$207,507   |
| Equipment Maintenance and Leases     | \$54,308    |
| Software Purchases and Subscriptions | \$66,907    |
| Communications - Voice Service       | \$193,878   |
| Computer Equipment                   | \$102,000   |
| Measure S-214 (Direct Charge)        | \$46,550    |
| Projects (Details below)             | \$43,900    |
| Total                                | \$1,222,901 |

### Potential Projects

| Project                           | Department | Cost      | Description                                                                                                                                                                                                                                                                                                            |
|-----------------------------------|------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Replace City Hall Server          | All        | \$28,500  | The existing City Hall server that functions as the VMWare host will be 6 years old in October 2024. This age is typically the end of life for a physical server.                                                                                                                                                      |
| City Hall Server Room UPS Refresh | All        | \$7,400   | The 7 UPSs in the City Hall server room will be 6 years old in October 2024. These units provide battery backup power for the critical servers and networking equipment in City Hall and should be replaced at this time.                                                                                              |
| Replace City Hall Firewall        | All        | \$8,000   | The current Sophos XG 310 firewall protects the entire City network from outside attacks and controls internet traffic. It is reaching the end of its useful life and should be replaced with the newest model. This will futureproof the City for 5 years as new larger/faster internet connections become available. |
| PC Refresh                        | All        | \$102,000 | Estimated 51 computers will be up for replacement in FY 24-25. It is recommended                                                                                                                                                                                                                                       |

|  |  |  |                                                                                                                                                                                                                                                                                                                               |
|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | <p>that these PCs be replaced after 5 years as reliability and speed decreases. The City should continue the process of deploying approximately 20 per year so all PCs are replaced approximately every 5 years. This provides consistent budgeting and avoids a much larger project of replacing all PC's every 5 years.</p> |
|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Fiscal Year 2025-26 Budget and Projects

| Expenditure                          | Amount      |
|--------------------------------------|-------------|
| Professional Services                | \$433,320   |
| Network Maintenance                  | \$89,767    |
| Software Maintenance                 | \$213,733   |
| Equipment Maintenance and Leases     | \$55,937    |
| Software Purchases and Subscriptions | \$68,914    |
| Communications - Voice Service       | \$199,694   |
| Computer Equipment                   | \$28,000    |
| Measure S-214 (Direct Charge)        | \$47,946    |
| Projects (Details below)             | \$34,000    |
| Total                                | \$1,171,311 |

### Potential Projects

| Project                          | Department | Cost     | Description                                                                                                                                                                      |
|----------------------------------|------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Replace Police Department Server | Police     | \$17,000 | The existing server at the Police Department was purchased in January 2021 and will be 5 years old in January 2026. This age is typically the end of life for a physical server. |
| Replace Fire Department Server   | Fire       | \$17,000 | The existing server at the Fire Department was purchased in March 2020 and will be 6 years old in March 2026. Replacement is recommended for similar reasons as stated above.    |
| PC Refresh                       | All        | \$28,000 | Estimated 14 Computers will be up for replacement in FY 25-26.                                                                                                                   |

## Benchmarks

The City will track data on the following workload and productivity measures (“benchmarks”) to monitor the performance of the City’s IT systems.

| Measure                                                                                     | Current Data                                                  |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Number of Active End Users Supported                                                        | 137                                                           |
| Average Time for Initial Response from Precision for Help Desk Requests (Most Recent Month) | 9.46 Minutes                                                  |
| Precision Help Desk Tickets Opened / Closed (Most Recent Month)                             | 121/133 Respectively                                          |
| Precision Priority 1 Tickets Resolution 24hrs                                               | Goal = 100%   Actual = 100%                                   |
| Backup Success Rate (Calendar Year to Date)                                                 | 99.25% Backup Success Rate                                    |
| Patch Compliance (Calendar Year to Date)                                                    | 98% of Important patches have successfully been applied.      |
| Cyber Security (Most Recent Month)                                                          | 41,198 Total threats blocked; 909 Websites blocked and warned |