Draft
Information Technology Plan
FY 2021-2026

City of Pinole

Background

- City Council adopted Strategic Plan 2020 – 2025

- Strategic Plan identifies vision, mission, and goals of the City

- Strategic Plan requires creation of a City IT Plan

Contents of the IT Plan

The IT Plan addresses the following aspects of City IT:

- IT Management
- IT Planning and Budgeting
- IT Infrastructure
- Software Applications
- Electronic Devices managed by City Departments
- Recent IT Accomplishments
- Future IT Projects

IT Management

- Responsibility for IT at the City is shared between the IT Division of the City Manager department, other City department managers, and Precision IT Consulting.

- Precision IT Consulting is a Managed Service Provider based in the Bay Area who has been serving the City of Pinole since 2017.

IT Management

- Precision performs day to day and proactive IT functions. This includes Systems Administration, Communications, Networking, Project Management and Business Continuity.

- Precision IT currently provides a full time on-site Systems Administrator at City Hall, supported by a remote team consisting of a technical account manager, Engineers and Technicians.

- There is some hardware and software that Precision IT does not administer. Most of these items are used within Public Safety, PCTV and Public Works departments. The IT Plan contains a more comprehensive list of these items.

IT Planning 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.

- Precision IT Consulting, staff from the City Manager department, and representatives of other City departments preform a "Technical Alignment Review" of the City's IT environment and needs against a set of technical/security standards and best practices. Through this process a report is created which helps the team identify needed future IT projects.

- Once the proposed city-wide and department specific IT projects have been identified, the team determines the priority, budget, and timeline of when these projects will be implemented.

IT Budget

- The City budgets for citywide IT expenditures (those that benefit all departments) and department-specific IT expenditures.

- All City departments contribute funds toward the foundational IT services that the IT Division provides.

- The IT Division works with the departments to determine if items should be in the department budget versus the centralized IT budget.

IT Infrastructure

- The City's Data Network is comprised of Six City Facilities, all connecting back to City Hall by dedicated Fiber and Copper circuits as well as VPN tunnels via commercial Internet services.

- There are other services that utilize the City's fiber optic infrastructure that are not supported by the IT division. These services include PCTV and Surveillance systems which are managed by their respective departments.

- City Hall and Public Safety host servers that provide services, applications and data storage to the staff. The servers at these locations are protected by Business Continuity / Disaster Recovery appliances which facilitate a 3-2-1 Backup strategy. This strategy dictates that all data resides in three locations, which provides multiple restore points that can be retrieved either locally or from the cloud.

IT Infrastructure

- There are around 120 endpoints that are being managed for the City. These include servers, workstations, laptops, and mobile communications devices.

- Endpoints and Servers are protected by top-rated Anti-Virus software that provides Anti-Malware, Anti-Ransomware along with detection and response capabilities.

- Each facility possesses an array of networking technologies that include Routers, Switches, Media Converters, etc.

- All vital Server and Network equipment are connected to Uninterruptible Power Supplies (UPS) which will continue to provide power to these systems for a limited duration of time during a power outage.

Software Applications

- City Departments use many software applications to provide services.

- Generally, applications are hosted from City Hall, Public Safety or an application provider's cloud. There are some Public Safety and Fire applications that are hosted by the County and the City of San Pablo.

- Some of these systems are not exclusively administered by the IT Division and are managed either by Public Safety, the County or a neighboring municipality.

Electronic Devices Managed by City

- Along with some software and systems, there are also physical electronic devices that are managed by City Departments.

- The IT Plan lists these devices which are generally managed by the manufacturer, a third party vendor or the department themselves.

- The majority of these devices reside within the Public Safety, Fire and PCTV departments.

Recent Technology Accomplishments

- Email Migration - Migration from on-premises Exchange 2003 to Cloud-based Office 365 to increase accessibility and reliability of electronic communication.

- Workstation Replacements – About 75 workstations were replaced throughout the City which were identified through a Hardware Lifecycle Initiative.

- Network Switch Replacements – Network Switches have been replaced in City Hall and Public Safety to improve reliability, redundancy and future expansion options.

- Power Upgrades – The UPS devices have been replaced which provide backup power to critical network and server infrastructure.

Recent Technology Accomplishments

- Business Continuity & Disaster Recovery - Transitioned from legacy tape backup system to an all-in-one solution that incorporates local backup and recovery with a secure, cloud-based repository and full disaster recovery in the cloud.

- Public Safety Building Fiber Replacement – The Fiber circuit between City Hall and Public Safety has been replaced providing improved bandwidth and reliability.

- Corp Yard Network Upgrade – A leased T1 line has been replaced with a much faster Internet circuit and VPN tunnel connecting the Corp Yard back to City Hall. This has improved internet speed and local network resource access for the facility.

Proposed IT Projects – 5 Year IT Plan

- The implementation of Multi-Factor authentication to further protect email and VPN Access.

- The replacement of Mobile Digital Computers for Public Safety Officer vehicles.

- Replacing the legacy Centrex Telecommunications lines (phone system)used by the City with a modern IP based Voice Solution for increased functionality.

- Upgrade City's aging fiber network infrastructure.

- As hardware ages, replacements and refreshes are budgeted and accounted for as part of the ongoing hardware lifecycle initiative.

Next Steps

- Staff will incorporate input provided by the City Council on the draft IT Plan into a final IT Plan that will be published later this fiscal year.

- Staff will also conduct one more review and refresh of the future projects list to ensure that the list is complete and as well detailed as possible for this planning-level document in the final IT Plan.

Q&A

Questions?