

City of Union City Technology Roadmap

FY 2022-23 through FY 2026-27
Adopted September 2022



Prepared for the City of Union City by Management Partners



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Message from the Director of Information Technology

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This Technology Roadmap sets the path for the City of Union City for a five-year period. As a roadmap, it is intended to provide guidance while being flexible.

Preparing this Roadmap has been an important undertaking for our department and for the City organization as a whole. Technology is fundamental to our ability to provide City services efficiently and in a way that our customers and community members expect. Having the right software, hardware, security, training, and personnel enables all City employees to focus on doing their best work each day.

This Roadmap lays out goals, strategies, and specific projects we plan to accomplish over the next five years. We know we will experience challenges and opportunities that cannot be predicted today. We will be flexible in addressing those as they occur. But our primary orientation will be to have a plan that is transparent to our City departments, budget for it, and proceed with it.

Our partnership with City departments will be key to implementing the Roadmap. A new IT Governance Team will be created to provide ongoing feedback and assistance in recommending priorities for resource allocations as we proceed.

We look forward to the continued teamwork that will enable this Roadmap to be successful.

Respectfully,
Mario Vallejo
Information Technology Director

Roadmap Approach

This Technology Roadmap was developed through a collaborative process involving City departments and IT staff. It involved the following steps.

Goals and Strategies

Identified goals and strategies in the City's current Strategic Plan that depend on or align with information technology objectives.



Information from City Staff

Department directors and IT staff completed a needs assessment and strengths, weaknesses, opportunities and threats (SWOT) analysis.

Interviews were held with department directors and key staff.



IT Capital Project Needs

The City's IT capital project needs were document using information from IT staff and City departments.



Peer Cities

Gathered data from seven cities to compare staffing, budgets, and other relevant information. See Attachment X for details.

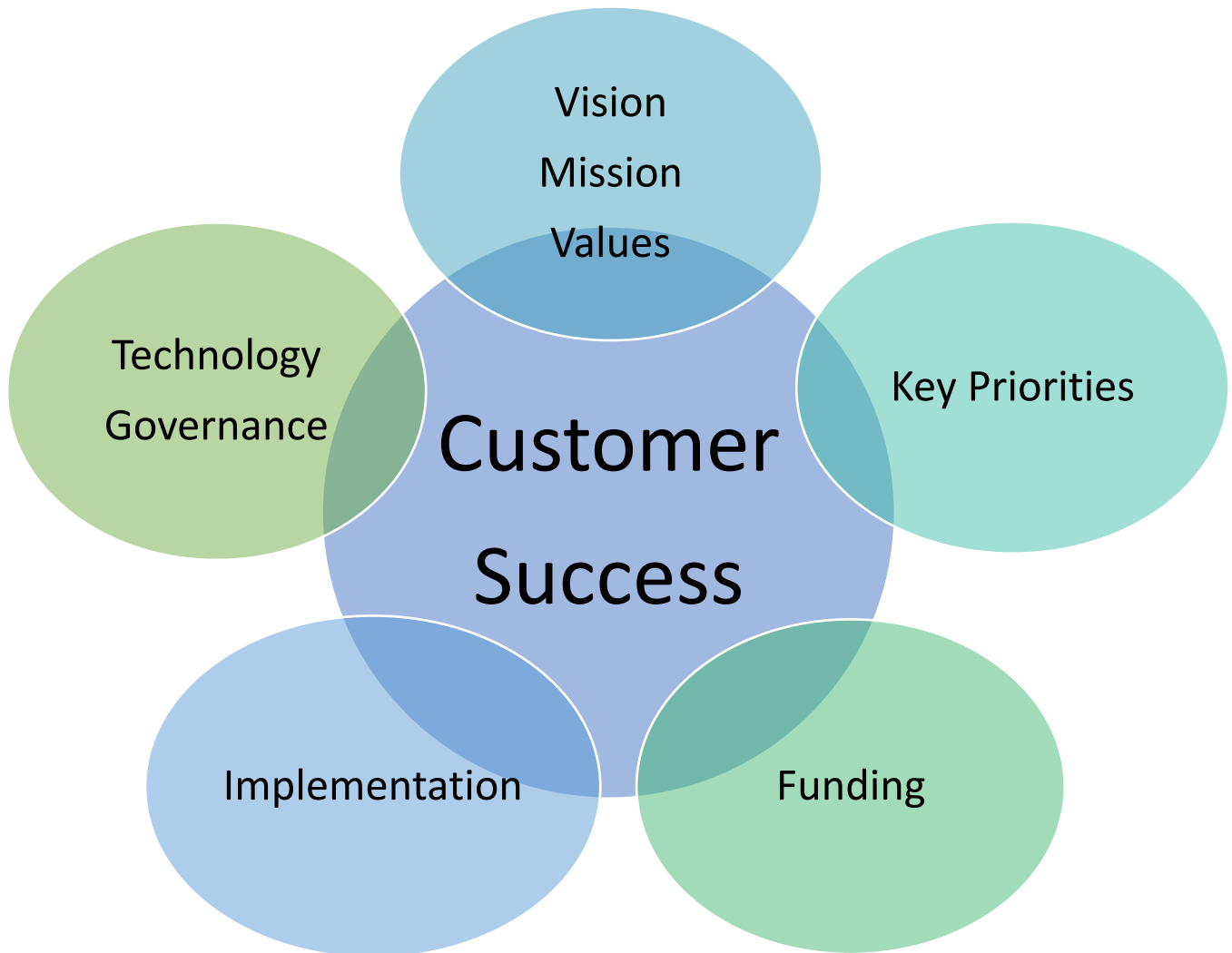


Staff Workshop

Conducted a workshop with IT staff to review data gathered and discuss mission, vision, values, goals, strategies, capital needs and establishing an IT Governance Team.



Roadmap Structure

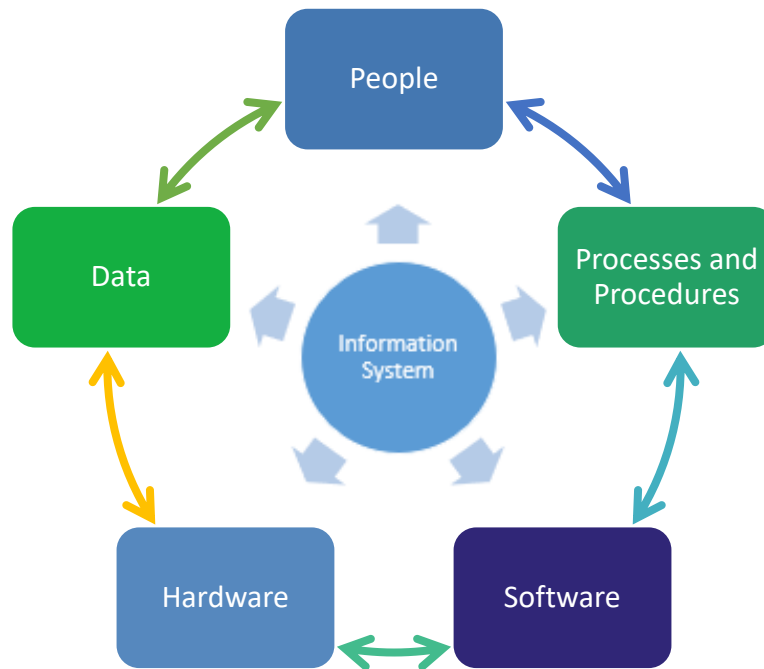


Principles of Technology Governance

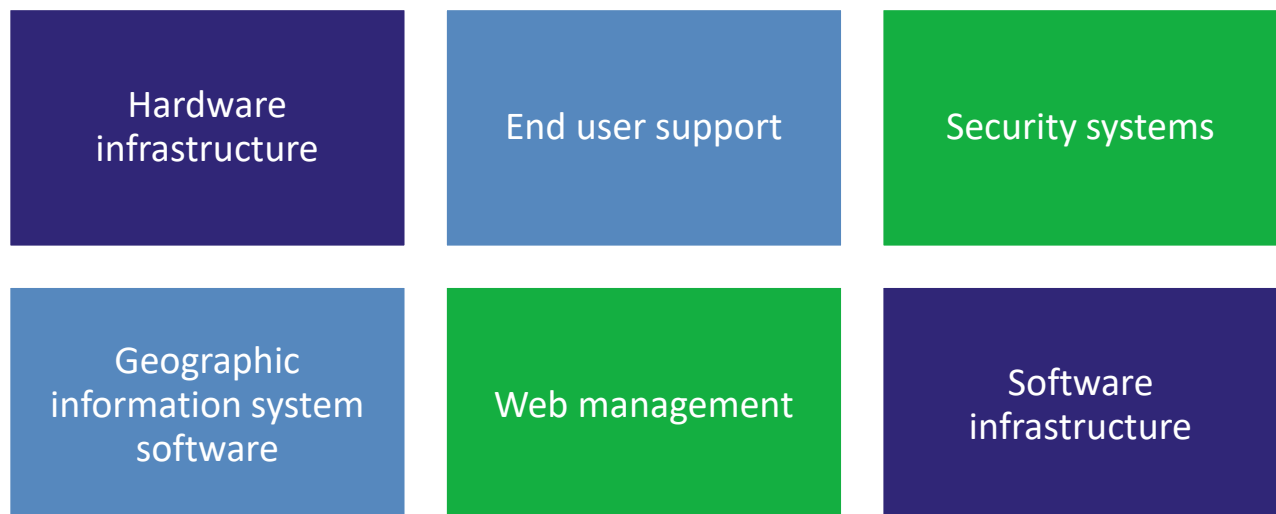
- City executives and IT staff are partners in managing IT priorities
- Project recommendations and scheduling are collaborative decisions
- Policy development and implementation are done through consultation
- Staff skills are developed and enhanced to make effective use of technology

Elements of the Information System

The **information system** involves people interacting with processes and procedures, useful data for decision making, reliable hardware, and easy-to-use software.



The Information Technology Department provides **six major types of support** to City departments and staff.



Vision, Mission and Values



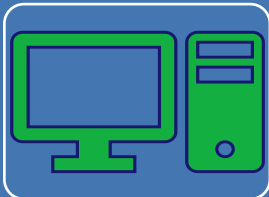
Our IT Strategic Roadmap builds on our earlier mission statement by adding an aspirational vision and a set of values to guide our work.

Vision	Drive innovative services that enable and empower city staff.
Mission	Provide secure, reliable and integrated technology solutions in alignment with Union City goals.
Values	<p>Collaboration: <i>Willing to partner with others to find solutions.</i></p> <p>Customer commitment: <i>Keeping the needs of the end-user in mind.</i></p> <p>Security: <i>Ensuring the safety of our systems.</i></p> <p>Service excellence: <i>Striving to be the best at what we do.</i></p> <p>Teamwork: <i>Achieving our goals together.</i></p>

Multi-Year Goals

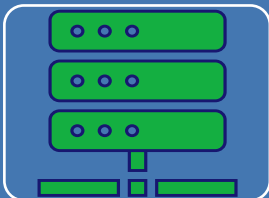
This Roadmap has three multi-year goals. Each has several strategies to achieve their goals. The following pages contain the list of strategies, along with the expected year each will start, which the IT team determined collectively. Implementing the strategies will require an allocation of resources. The new IT Governance Committee will help advise about prioritization of the strategies, confirm the year to start, and resource allocation to enable effective implementation. Additionally, implementing any technology solution may require other changes such as changes to physical facilities (larger computer room, electrical service) or skill improvements by staff.

The strategies outlined in the three goal categories will enable the City to move forward with an array of technology advancements. The “Citywide Strategic Plan Related Strategies” are those items which are included in the City’s adopted Strategic Plan. The “Staff Recommended Strategies” identified by staff from various City departments during the information gathering process.



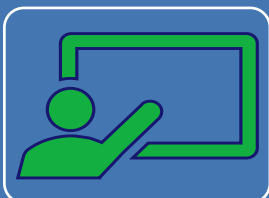
Goal A: Technology

To ensure the City has sufficient software, hardware and security to deliver efficient services and safeguard data.



Goal B: Infrastructure Support

To provide adequate infrastructure to house, maintain, and connect the City’s IT services. This includes adequate and reliable power, environmental controls that are energy efficient and effective, and security appropriate to the preservation of public records.



Goal C: IT Governance, Training and Staffing

To enable City staff to be proficient in the use of technology and to ensure there are sufficient skills held both by line and expert technology staff to carry out the City’s IT mission.

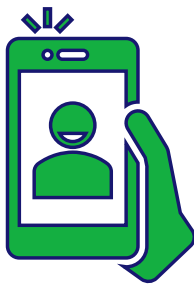
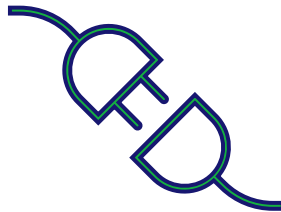
Goal A: Technology

Goal A: Technology

To ensure the City has sufficient software, hardware and security to deliver efficient services, safeguard data, and provide uninterrupted communications.

Strategy	Fiscal Year to Start Strategy				
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Citywide Strategic Plan Related Strategies					
A1. Collaborate with Police department and Fremont IT to deploy a new computer aided dispatch (CAD) and records management system (RMS) service.	✓				
A2. Conduct a robust cybersecurity assessment and create a roadmap.	✓				
A3. Improve the structure and navigation of the City's website to allow ease of access, quality and type of information, and ensure the content is regularly updated.	✓				
A4. Collaborate with departments to digitize and index all City records, historic documents, and technical studies.	✓				
A5. Ensure the City has a disaster recovery system.		✓			
A6. Develop a business continuity plan.		✓			
A7. Identify technology needs as part of a feasibility study of bringing police dispatch services in house.				✓	
Staff Recommended Strategies					
A8. Evaluate and deploy a new geographic information system (GIS).	✓				
A9. Initiate the human resources, payroll, financial and permitting modules through Tyler Munis.	✓				
A10. Collaborate with the Finance Department to upgrade the finance system and explore online services to minimize trips to City Hall.		✓			
A11. Clarify the City's policies and procedures for requesting and receiving upgrades to software licenses, including chargebacks.		✓			
A12. Develop a comprehensive replacement plan for all citywide IT assets, including the aging data center servers, data storage and other IT items.		✓			
A13. Regularly conduct cost allocation analyses to confirm the technology fee applied to all building, fire, encroachment, and grading permits is sufficient to meet technology needs.		✓			
A14. Increase the level of online services provided, such as end-to-end online service requests and tracking.			✓		
A15. Evaluate the efficiency and effectiveness of the Novus program and consider replacement to make staff reports easier to create and edit.			✓		

Strategy	Fiscal Year to Start Strategy				
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A16. Review System Control and Data Acquisition (SCADA) services currently managed by a vendor to understand access and protections in place.			✓		
A17. Collaborate with Economic and Community Development staff to identify a software option to enable and track digital service request by the public and electronically review plans.			✓		
A18. Implement a workload management system for Public Works that will track service requests, preventative maintenance tasks, and other work orders.			✓		
A19. Implement free WiFi in public places at City facilities.				✓	
A20. Evaluate the City's future financial system with CivicRec to provide Community and Recreation Services staff with the ability to directly update financial information in the City's budget system.				✓	
A21. Acquire technologies for centralized tracking and control of water and utility consumption at each City park and facility to advance the goal of reducing water and improving energy consumption.					✓



Goal B: Infrastructure Support

Goal B: Infrastructure Support

To provide adequate infrastructure to house and maintain the City's IT services.

Strategy	Fiscal Year to Start Strategy				
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Citywide Strategic Plan Related Strategies					
B1. Evaluate the use of public kiosks and digital signage to improve access to City services.				✓	
Staff Recommended Strategies					
B2. Establish video camera connectivity citywide with smart analytics and ensure the ability to store and view footage.	✓				
B3. Upgrade data connections between City facilities as necessary.	✓				
B4. Team with Public Works to evaluate the cities available conduit and deploy citywide fiber to City intersections and facilities.	✓				
B5. Upgrade and standardize all door and gate access devices throughout City facilities.		✓			
B6. Standardize information technology services at all City facilities.			✓		
B7. Reevaluate information technology space citywide to ensure it is properly designed and utilized and meets IT requirements.					✓



Goal C: IT Governance, Training and Staffing

Goal C: IT Governance, Training and Staffing

To enable City staff to assist in the efficient prioritization and delivery of essential IT services, be proficient in the use of technology and to ensure there are sufficient expert technology staff available to carry out the City's IT mission.

Strategy	Fiscal Year to Start Strategy				
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Citywide Strategic Plan Related Strategies					
C1. Establish an IT Governance Committee with a clear mission and communicate IT's purpose and activities to senior management.	✓				
C2. Collaborate with Human Resources to deliver IT - related training based on end user needs.	✓				
C3. Provide yearly cybersecurity and equipment safety training for all employees and clearly communicate security requirements to all staff using City technology.	✓				
C4. Communicate budget and resource needs to address information technology issues.	✓				
C5. Identify appropriate IT staff for timely implementation of priority capital projects as determined by the IT Governance Committee and approved in the budget.		✓			
C6. Streamline the onboarding process and expectations so staff have the equipment, access, and software they need when they begin work, whether newly hired, promoted, or given a new assignment.		✓			
C7. Establish professional development plans for each IT employee to support their growth and demonstrate commitment to employees' careers.		✓			
C8. Develop techniques and tools that allow departments to document processes and procedures in anticipation of staff turnover.					✓
Staff Recommended Strategies					
C9. Establish a process to document offboarding, including suspension of access and return of any equipment.			✓		
C10. Develop a communications plan to engage departments about initiatives and challenges pertaining to information technology so they can be effective partners.				✓	



IT Projects Underway in FY 2022-23

Major IT projects and/or new initiatives that are related to IT that are underway are shown in the table below. These items were identified through the needs assessment conducted as part of the Roadmap process, the City's budget process, and regular contact between the Information Technology Department and customer departments. The table includes the planned year for completion for each of the items, a brief description, the status of the project as of July 2022, and the funding status. This list constitutes IT's priority projects, but as always, is subject to adjustment as emergencies or other factors arise. The intent is for this list to be used in allocating both financial and staffing resources for implementing important technology improvements.

Planned Year for Completion	IT Item	Description	Status of IT's Work	Funding Status
FY 2022-23	Active Directory User Data Clean Up	Ensure network security files only contain authorities and data for currently active employees	Underway	Funded
FY 2022-24	Administrative software	Replace payroll system with Tyler Munis	Not started	Funded
FY 2022-23	Audio-visual upgrade	Police department briefing room audio-visual system upgrade	Underway	Funded
FY 2022-23	Axon	Police body-worn cameras, fleet cameras, interview room cameras	Underway	Funded
FY 2022-23	Cell phone migration	Migrate Police Department cell phones to AT&T FirstNet and add to InTune mobile device management	Underway	Funded
FY 2022-23	Cisco Call Manager	Upgrade City telephone system, Cisco Call Manager	Underway	Funded
FY 2022-23	Cubicle design	Collaborate with Public Works on City Hall cubicle design for Public Works, Economic and Community Development, Human Resources, Information Technology and City Manager's Office	Underway	Funded

FY 2022-23	Cyber security framework	Asses the City's network security and implement corrections identified in the assessment	Underway	Funded
FY 2022-23	Data protection implementation	Implement new data backup and protection products, processes, and procedures to ensure the City's data are well protected	On hold	To be determined
FY 2022-23	Fireworks financial reporting	Create an online form for organizations selling fireworks to report gross sales, payment of sales taxes, payment of City fees, other expenses, and net profit	Not started	Funded
FY 2022-23	Fueling system upgrades	Upgrade the fuel management system to integrate with current software and operating systems	Underway	Funded
FY 2022-23	Long-Term Evolution (LTE) connectivity	Enable cellular connectivity (LTE) to City intersections for managing traffic controller and smart city devices	Project led by Public Works	Funded
FY 2022-23	Mobile command vehicle connectivity	Set up connectivity and technology equipment for Police Department mobile command vehicle	Underway	Funded
FY 2022-23	Mobile Data Terminals (MDTs)	Deploy new mobile data terminals in the Police vehicles	Underway	Funded
FY 2022-23	Musco lighting	Team with Public Works to install Musco lighting at the fields and courts where an application can be used to turn lights on and off remotely	Underway	Funded

FY 2022-23	National Incident-Based Reporting System (NIBRS)	Implement Police Department National Incident-Based Reporting System (NIBRS)	Underway	Funded
FY 2022-23	NetMotion software upgrade	Upgrade existing virtual private network software to ensure employees can work remotely and securely.	Underway	Funded
FY 2022-23	Network upgrade	Upgrade City WAN, DMZ, and LAN network equipment to Fortinet	Underway	Funded
FY 2022-23	Online timesheets	Set up online employee timesheet service	Underway	Funded
FY 2022-23	Racial Identity Profiling Act implementation	Collaborate with the Police Department to implement racial and identity profiling protocols and reporting requirements under the state mandate	Underway	Funded
FY 2022-23	Redundant Internet Service Provider (ISP)	Select and set up redundant internet service provider link for city internet	Underway	Funded
FY 2022-23	Replacement of outdated cell phones	Replace staff cell phones that are more than four or five years old	Underway	To be determined
FY 2022-23	Security assessment	Undertake a security assessment and lock down Office 365 service	On hold	To be determined
FY 2022-23	Security training	Deploy security training citywide	Underway	Funded
FY 2022-23	Small cell master license agreement	Create a new agreement with cell service providers for installing small cell equipment on City facilities in the neighborhoods to improve cellular and data services for residents	Underway	Funded
FY 2022-23	Install System Center	Deploy the system configuration manager to	Underway	Funded

	Configuration Manager	improve deployment of new software		
FY 2022-23	SQLServer back-up	Formalize processes for SQLServer back-up and restore standards	Underway	Funded
FY 2022-23	Surveillance upgrade	Upgrade and replace City Hall and Police surveillance systems.	Underway	Funded
FY 2022-23	Tyler Cashiering upgrade	Upgrade Tyler Cashiering software upgrade	Underway	Funded
FY 2022-23	Youth and Family Services ticketing system	Develop a service request system for the Youth and Family Services unit.	Underway	Funded
FY 2023-24	Administrative software	Replace financial system with Tyler Munis	Not started	To be determined
FY 2023-24	Computer Aided Dispatch (CAD) Replacement	Collaborate with the City of Fremont to replace Tiburon, Computer Aided Dispatch and record management system with ProPhoenix	Underway	Funded
FY 2023-24	Solid waste and recycling reporting	Install tracking system for City recycling to interface with Republic's solid waste collection management system (InfoPro)	Not started	To be determined
FY 2024-25	Administrative software	Replace the development permitting system, potentially with Tyler EnerGov	Not started	To be determined
FY 2024-25	Union City Transit fleet electrification	Access technology needs for acquisition of electric transit vehicles and related fleet charging infrastructure	Project led by Public Works	Partially
Ongoing	Replacement of computers	Replace staff computers (rolling replacement program)	Underway	Funded

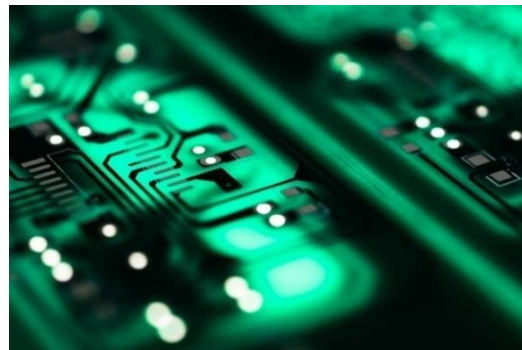
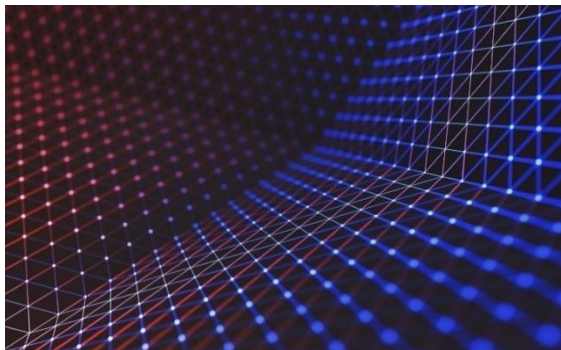
Technology Needs Identified by Departments

The needs assessment conducted as part of the Roadmap process identified significant technology needs in addition to those included in the prior table. These are all items suggested by City departments. In some cases costs are known, but in many cases costs will need to be identified as part of a scoping effort.

- The intent is for this list, and likely other projects, to be reviewed by the IT Governance Committee each year and make recommendations for funding and prioritization. Additional information will be needed (such as complete descriptions and cost estimates) on many of these in order for decisions to be made on funding them.
- The last column of this table notes which of the items are included within the goals and strategies developed as part of this Strategic Roadmap. All those items are listed first, in order of the goal letter and strategy number.

Technology Item	Department	Operating Department Priority Level	Funded (Yes/No)	Estimated Cost	Associated Goal and Strategy
City website (update to be more navigable and relevant)	City Manager's Office, Police Department	1	Yes	\$20,000	A3
Digitize permanent Planning records	Economic and Community Development	1	Yes	\$110,000	A4
Technical document library (centralized and searchable)	City Manager's Office	1	No	To be determined	A4
Ticketing system for Public Works and Economic and Community Development	Information Technology	3	No	To be determined	A7
New geographic information systems (GIS) software	Economic and Community Development	2	Yes	\$46,000	A8
Online services expansion (to include service requests and payment options following the Tyler Munis system implementation)	Finance, Community and Recreation Services	2	Yes	Included in upgrade to Munis	A10
Electronic plan review	Economic and Community Development	1	No	To be determined	A17
Community Wi-Fi in Public Facilities	Community and Recreation Services	2	Yes	\$5,000	A19
Tyler integration with CivicRec (following implementation of Tyler Munis financials)	Community and Recreation Services	1	To be determined	To be determined	A20
Water and utility use database (central tracking of water and utility consumption at each City park and facility)	City Manager's Office	1	No	To be determined	A21
Citywide cameras	Police Department	1	No	To be determined	B2

Technology Item	Department	Operating Department Priority Level	Funded (Yes/No)	Estimated Cost	Associated Goal and Strategy
Enterprise camera system	Information Technology, Public Works	1	No	No	B2
Citywide fiber optic infrastructure	City Manager's Office, Public Works	1	No	To be determined	B4
Door and gate access upgrade	Public Works	1	No	To be determined	B5
Cyber security assessment	Information Technology	1	To be determined	To be determined	C9
Data center servers and data storage	Information Technology	1	To be determined	To be determined	Not applicable
Data policies	Community and Recreation Services	2	To be determined	To be determined	Not applicable
High speed data connections to City facilities	Public Works	1	Yes	\$25,000	Not applicable
Insurance tracking database (central library of City buildings, vehicles, and contractual services City provides public agencies requiring insurance)	City Manager's Office	1	No	To be determined	Not applicable
Outside fueling party integration	Public Works	3	Yes	Public Works funded	Not applicable
Remote sites redundant connection	Information Technology	1	Yes	\$24,000	Not applicable
SharePoint implementation and training	Police Department	1	Not applicable	No additional cost	Not applicable
Server and client test environment	Information Technology	1	No	To be determined	Not applicable
Third-party reimbursement	Community and Recreation Services	3	No	To be determined	Not applicable
Migration to VMware hypervisor	Information Technology	Not indicated	No	To be determined	Not applicable



IT Funding Sources

General Fund

Most of the City's technology investments (including staffing and facilities) are and will be funded through the General Fund. The FY 2021-22 General Fund budget for technology was just over \$3.1 million, and \$4.3 has been budgeted in FY 2022-23 for technology investments.

Development permit technology fees

Fees from development permits can be collected for technology investments directly related to development processing. The City Council adopted its FY 2021-22 Master Fee Schedule on May 11, 2021 including a new 2% fee for all building, fire, encroachment and grading permits. The percentage of the fee was calculated based on cost recovery for the City's technology investment over the past 10 years and to maintain ongoing IT services and digital storage of plans and permits.

Grants

Grants are sometimes made available to local governments that can be used for technology purchases. Currently, there are no grants awarded to the City for technology, but City staff will continually look for such opportunities. Any grant applications and awarded grants would be administered in collaboration between Information Technology and the line department(s) specific to the services related to the grant.



Technology Training

To make efficient use of technology, staff in all departments as well as IT staff, must understand the capabilities of particular types of technology and how to use the software and hardware that apply to their work.

Goal C, Strategy 2, specifically addresses this: “*Collaborate with Human Resources to deliver IT-related training based on end user needs*”. Effective ongoing training will require a commitment of resources by the City and a partnership with Human Resources staff to coordinate the training (i.e., materials and instruction, staff to organize and track the training, and tools such as a learning management system). Some of the training and training coordination may be best provided by IT and some may be best provided by other departments as well as outside vendors.

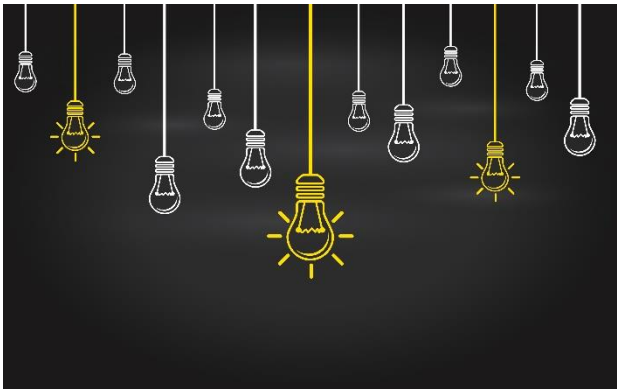
When new staff are hired, they must receive training in the City’s systems they will be required to use. When software updates are made, or new technology is introduced, a part of the implementation must be training for the users. Additionally, when it is apparent that specific technology is not being fully utilized, it may be because the users simply do not know how to use the software or hardware and must be trained. An investment in technology is only as good as its use and application.

The IT Department will work with the IT Governance Committee and Human Resources to prioritize training and budgetary resources to be allocated each year.

As part of the gap analysis, departments indicated the type of technology-related training they thought would be useful, as shown below in Table 1. Three of the training topics are currently provided and need to be continued in the future, both to train new employees and to reinforce the skills of existing employees.

Table 1. Training Topics Suggested by Departments for City Staff

Training Topic	Description	Whether Currently Provided
Basic computer training	Basic computer functions	No
Crystal Reports	Training to design and generate reports	No
Cyber security	Making the city aware of the threats that exist keep them from making mistakes that threaten the safety of the system	Yes
Docusign, Novus	Online video tutorials or a detailed manual specific to Union City processes for new employees	No
Graphic Design - basic rules	Expanded training in utilizing the graphic tools available including the basics of good design such as proper spacing, uniformity in type face, and placement of illustrations	Yes
Integrated Data Collection, Management, and Reporting	Programs to merge multiple data sources that create output files that can be published with the synthesized data	No
Office 365 Suite training to include Excel, PowerPoint, Word, and SharePoint	Maximize resources and increase standardization of systems including basic, intermediate and advanced classes	Yes



IT staff also suggested additional technical training desired for their team, as shown in Table 2. Training on these topics will be provided in the future.

Table 2. Suggested Training for IT Staff

Technology Training Needs	Benefit
Business or non-technical areas such as project management certification	General business skills can help with organization and planning as well as facilitating a more conducive approach to communicating needs and planning for non-IT staff
Docuware advanced functions	There are more advanced functions that we can use within Docuware and workflow
Police Department software	Advanced knowledge of Police Department systems (including computer aided dispatch, records management systems, and mobile data terminals) will allow IT staff to better support the Police Department
Sandbox training environment	Duplicate application environment for training and testing
Tyler Eden and Tyler Cashiering	Learn how to manage Eden and Tyler cashier systems



IT Governance Committee

Information technology is fundamental to the success of all City departments and operations. Our community relies on our ability to process information, conduct transactions, and more. Technology is critical for tracking all types of data, from inventories to maintenance schedules, from calls dispatched to records created. All City departments have essential technology needs. An IT Governance Committee will be formed with this IT Strategic Roadmap to assist with efficient prioritization and delivery of essential IT services.

Role of IT Governance Committee

The core responsibilities of the committee are listed below.

- Review progress in implementing the IT Strategic Roadmap
- Review and advise about priorities for resource allocation for IT needs and requests
- Provide feedback to the IT team about services provided and impediments encountered
- Advise on issues as posed by the Director of Information Technology or City Manager

Who Serves on IT Governance Committee

The committee will be small enough to be nimble, yet large enough to be representative of the Citywide organization. It will be comprised of:

- Information Technology Director,
- Deputy City Manager, and
- Four department directors.

Meeting Frequency

The IT Governance Committee will meet at least quarterly and at other times as needed to carry out its responsibilities.



Successful Implementation

Successful implementation of the Technology Roadmap will require a ***partnership between Information Technology staff and staff from the operating departments*** to make collaborative decisions about projects and scheduling.

- Each department will need sufficient staff to achieve their technology goals.
- For operating departments where technology improvements are desired, an assigned project manager and dedicated staff will be required to work with IT staff on the project.
- In addition, other resources may be required for successful implementation, including potential modifications to physical facilities or additional staff training to improve skills.
- Input from the IT Governance Committee will provide necessary assistance in the prioritization, timing, and resource allocation to enable effective implementation.

An important part of implementation will be ongoing, regular communication about progress to City Council, City staff, and the community through updates and progress reports.



Conclusion

This Technology Roadmap is designed to guide the work of the Information Technology Department and the City of Union City in expanding its use of technology. The department is committed to achieving our vision, mission, values, goals, and strategies. Additionally, we are dedicated to continuing collaboration with our many partners and being a part of implementing the technology goals in the citywide Strategic Plan.

***Thank you to everyone who contributed
to this important planning effort and who will be part of its implementation.***

Attachment A - Strengths, Weaknesses, Opportunities, Threats

As part of the strategic planning process, City department heads and IT staff were asked to describe major strengths, weaknesses, opportunities, and threats related to technology. Highlights are provided below.

Strengths	Limitations/Weaknesses
<ul style="list-style-type: none"> Ability to maintain services to community with limited staff and modified counter hours Availability of tools to streamline operations Excellent customer service Faster backup/recovery system Help desk and IT tickets are effective and efficient High systems availability Improved search functions on City webpage Infrastructure: up-to-date hardware and software Mobile and remote support Rebuilt IT network Response times Solutions oriented staff Teamwork and collaboration Understanding of IT security needs among departments Website management and security 	<ul style="list-style-type: none"> Capacity of IT staff Costs associated with building and maintaining IT infrastructure Contracted help desk staff turnover Limited IT work/storage space Lack of fiber to support city operations, businesses, and residents Lack of standardized electronic filing system Legacy applications and services extended beyond a reasonable life cycle Need for more all-staff training and software support Novus for City Council agendas Outdated equipment, software, and hardware Physical security locks Police Department CAD/RMS software Unclear policy for requesting and receiving upgrades to software licenses Slow user adoption Use of paper in HR/Payroll Website – update to be user friendly, virtually attractive and provide relevant information
Opportunities	Threats
<ul style="list-style-type: none"> Comprehensively update the finance, human resources and permitting systems Cyber security awareness and training Emergency service/back up support Implementation of a new fixed assets system Office 365 – moving files to OneDrive Online services for permitting, bill pay, etc. Project tracking for CIP projects Increase elf Service Tools Software training for all staff Translation program/services Universal camera system Universal upgrade of all door and gate access points Upgrade – connection to remote sites 	<ul style="list-style-type: none"> Budget constraints Cyber attack Data breach Disparate camera systems throughout the city Hardware redundancy Increased electronic services creates need for more support and staffing Inefficient/inconsistent use of OneDrive and SharePoint Loss of data stored on local servers versus the cloud Monitor backup systems Police network is exposed to city traffic Power loss SCADA services Viruses

Attachment B - Technology Trends in Municipal Government

The world is awash with amazing technologies dedicated to assisting our business and personal lives in even trivial challenges. Municipal governments have been actively pursuing technological solutions to unique business challenges for over 40 years. The promise of technology is no less bright for the residents of any municipality and their local government staffs than any other industry once obstacles have been successfully overcome.

The municipal governmental business challenges that can most effectively be improved with the use of technological solutions include:

- Improved efficiency and effectiveness in providing public services and managing public assets;
- Easy access to public records by staff, elected officials, and constituents;
- Efficient handling of service requests; and
- Accurate management information for identifying and managing public needs.

A common goal of local governments is to provide direct access to information and services through public websites. Union City's City Council has included that goal in its current Strategic Plan and City staff has been working toward that goal through a variety of projects. This IT Strategic Roadmap enhances the City's ability to meet that goal by focusing resources on effective technologies in the "back room" to store information and manage business processes. This added attention will allow web applications and online services that residents appreciate to be realized.

The number of business systems that are available to public agencies has been growing for small and medium sized governments. The table below lists some of the types of technologies that are available to support city operations. These systems are common in many California cities, but they obviously depend on the resources and particular needs of each city and are often the basis for online access to the information by the public.

Municipal Operation	
Financial Management	
•	General Ledgers
•	Payroll
•	Purchasing
•	Utility Billing (including online bill payment)
•	Treasury Management
Human Resources Management	
•	Learning Management Systems
•	Onboarding and Offboarding
•	Performance
•	Recruitment
Public Safety Dispatch and Record Management	
•	Computer Assisted Dispatch
•	Police and Fire Records Management
•	Response management information

Municipal Operation**Development Services**

- Building Permits (sometimes include limited online permits)
- Planning
- Electronic submittal of plans and applications

Public Asset Management

- System Control and Data Acquisition (SCADA) – monitoring and management of electrical equipment, pumps, valves, water and waste water treatment and other utility equipment
- Maintenance management tracking and planning for roads, buildings, and other public real assets
- Service request tracking
- Asset inventory

Geographic Information Systems

- Support the analysis of public issues relative to geography

Solid Waste Management**Recreation Program Management****Law Office Support****General Records Management****Project Tracking and Management****Team Collaboration Support****Remote Meeting Support****Website Development and Content Management****Legislative Agenda Development and Management**

Attachment C - Replacement Plan and Capital Project Inventory

Replacement Plan

The equipment and software that supports the City's automated processes require periodic refreshing to continue to operate reliably and address changing needs. Like any other fungible asset, the need for refreshment and replacement should be anticipated to provide long-term budget planning. The most effective way of ensuring the availability of funds is to budget a pro-rated portion of the total replacement costs for each asset over its expected lifetime.

The City's IT Department will identify the replacement costs of the current technology inventory. Once those costs have been estimated, a ten-year replacement forecast can be developed. It will be divided into three sections:

- Hardware,
- Business application software, and
- Personal computers.

Goal A, Strategy 12, specifically addresses this, as follows: *Develop a comprehensive replacement plan for all citywide IT assets, including the aging data center servers, data storage and other IT items.*

One of the roles of the IT Governance Committee will be to discuss the City's methodology for IT equipment replacement and recommend a five-year funding plan based on priorities.

Capital Project Inventory

Capital projects are those items involving the acquisition and implementation of major business systems. IT staff maintain a current capital project inventory which identifies costs and schedules. It is kept current to ensure that the investments meet the City's needs, and that IT staff can be assigned as needed to these projects.

It will be important that sufficient staff capacity be available to implement these capital projects, and that routine IT responsibilities do not interfere with the pressing need for technology implementation. **Goal C, Strategy 5**, specifically addresses this: *Identify appropriate IT staff for timely implementation of priority capital projects as determined by the IT Governance Committee and approved in the budget.*

The capital project inventory is maintained as a separate document and is not included in this Roadmap.

Attachment D - Comparative Data

As part of the Strategic Plan, data about IT staff and workload was collected from peer agencies using publicly available information and a survey. Information was collected from the following seven peer agencies shown in Table 3.

Table 3. Peer Comparison Agencies

Cities	County	Population	Square Miles	Total Full-Time Equivalent (FTE) Positions FY 2021-22	Police	Fire	Parks and Recreation
Alameda	Alameda	80,884	10.61	469.75	✓	✓	✓
Folsom	Sacramento	84,592	21.95	461.30	✓	✓	✓
Redwood City	San Mateo	85,182	19.42	551.40	✓	✓	✓
San Leandro	Alameda	87,289	13.34	428.30		✓	✓
San Rafael	Marin	59,016	16.47	411.73	✓	✓	✓
Tracy	San Joaquin	98,601	22.00	542.00	✓		✓
Walnut Creek	Contra Costa	71,317	19.76	366.50	✓		✓
Union City	Alameda	72,779	19.47	318.02	✓		✓

Fiscal Year 2021-22 general fund expenditures are provided in Table 4.

Table 4. Peer Comparison Agencies' General Fund Budgets

Cities	Citywide General Fund Expenditures	IT Department Expenditures	IT Expenditures Compared to Citywide Expenditures
Alameda	\$114,366,869	\$3,433,014	3.00%
Folsom	\$92,521,841	\$2,025,163	2.19%
Redwood City	\$155,109,409	\$4,364,384	2.81%
San Leandro	\$129,956,400	\$4,630,900	3.56%
San Rafael	\$89,562,734	No detail provided	No detail provided
Tracy	\$78,021,000	\$2,995,286	3.84%
Walnut Creek	\$86,993,398	No detail provided	No detail provided
Union City	\$76,182,466	\$3,144,173	4.13%*
Peer Average	\$106,647,379	\$3,489,749	3.08%

*At the time of this review (FY2022/23) the Union City ITS budget included an additional one-time increase of \$583,197 for the migration of Human Resources, Payroll, and Finance to a new Enterprise Software.

Authorized positions are provided in Table 5 below.

Table 5. *Authorized Positions*

Cities	FY 2021-22 Total FTE	IT Authorized Positions	Percentage of IT Staff to Citywide Staff
Alameda	469.8	6.75	1.44%
Folsom	461.3	6.00	1.30%
Redwood City	551.4	14.00	2.54%
San Leandro	429.7	9.00	2.09%
San Rafael	411.7	No detail provided	0.00%
Tracy	542.0	11.00	2.03%
Walnut Creek	366.5	9.00	2.46%
Union City	319.0	6.00	1.88%
Peer Average	461.8	9.29	1.72%

Those responding agencies also provided information on how they carry out and/or maintain IT services from five options, which are shown below in Table 6. Some respondents employ more than one and are indicated as such.

In-house IT staff



Contract with a vendor



Contract with a cloud service



Shared services with another agency



































































































Not applicable

N/A

Table 6. *How Services are Maintained and Carried Out*

Service	Redwood City	Tracy	Walnut Creek	Union City
Agenda Management				
Application Development		N/A	N/A	N/A
Business Systems Analysis/Support		N/A		
Computer-Aided Design (CAD)			N/A	
Contract Management			N/A	
Customer Relationship Management (CRM)			N/A	

Service	Redwood City	Tracy	Walnut Creek	Union City
Database Development Administration			N/A	
Financials or Enterprise Resource Planning (ERP)			 	
Fire Record Management Software (RMS)		N/A	N/A	N/A
Fleet Management Software			 	
Geographic Information Systems (GIS)				
Help Desk Support				
Library Management Systems (LMS)		N/A	N/A	
Maintenance Management			N/A	N/A
Management Information Systems (MIS)	N/A		 	N/A
Network/Firewall Security				
Online Payments			 	
Online Police and Other Incident Reporting			 	
Payroll			 	
Permits			 	
Police Records Management System (RMS)			 	
Project Management			N/A	
Property Management	N/A		N/A	
Public Works Software			 	
Purchasing			 	
Recreation Classes and Room Rentals			 	
Recruitment				
Rent Control	N/A	N/A	N/A	N/A

Service	Redwood City	Tracy	Walnut Creek	Union City
Supervisory Control and Data Acquisition (SCADA)			N/A	N/A
Server Administration				
Telecommunications/Network Infrastructure Support				
Utility Billing			N/A	N/A
Waste Management			N/A	N/A
Workgroup Collaboration/Workflow	