



INFORMATION TECHNOLOGY STRATEGIC PLAN

2018 UPDATE



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Executive Summary

The Information Technology Strategic Plan was adopted in September 2016. As part of the ongoing process to maintain the plan, IS staff, along with key stakeholders, met in January of 2018 to assess current and future business needs, budget, and the overall strategic fit to the City’s overarching mission to: **“To protect and enhance Wilsonville’s livability by providing quality service to ensure a safe, attractive, economically vital community while preserving our natural environment and heritage.”**

The Information Technology Strategic Plan Update 2018 focuses on the short, medium, and long term recommendations, as well as those ongoing and completed prior to this update. It should be noted that the recommendations have been adjusted to better reflect a timeline of the stakeholder findings. Each recommendation is outlined according to the table below, with an addition of a “2018 Update” section, noting any updates or changes.

Item	Description
Strategic Recommendation	Mindboard’s recommendation associated with the corresponding strategic theme
Gaps Addressed	Gaps associated with the strategic area.
Action Steps	A sequence of steps that must be taken, or activities that must be performed well, for the strategic recommendation to succeed.
Prerequisite(s)	The action step or the activity that should have been completed prior to implementing the strategic recommendation.
Stakeholders	All parties that are involved in implementing the strategic recommendation.
Resources	Employees responsible for undertaking the action steps/activities defined in the plan.
Estimated Cost	Estimated costs for implementing the recommendation based on industry research and experience. Please note that cost estimates from Vendors were not directly obtained.
Impact/Comments	Additional comments associated with the corresponding strategic recommendation. If applicable, any Council Goals this project supports will be noted here.
2017 Update	Updates or changes made in 2017.
2018 Update	Updates or changes made in 2018.

Project Recommendations Timeline (updated 2018)

Project #	Short Term	Project #	Medium Term	Project #	Long Term
1.	Streamline IT Procurement Process				
2.	Streamline IT Funding				
5.	Implement Event, Facility Booking and Volunteer Management System				
6.	Combine City Web Sites and Social Media Accounts				
9.	Develop Disaster Recovery Plan				
12.	Implement New Financial ERP System (Including Utility Billing and HRIS)				
14.	Implement Integrated Land Management System (permitting, Inspections, Code Enforcement)				
15.	Promote Use of GIS as an Organizational Priority				
18.	Implement Email Archiving and E-Discovery Solution				
25.	Replace VoIP Telephone System				
33.	Telemetry Upgrade				
36.	Implement IT Auditing and Security Solutions				
37.	Contacts Database				
		8.	Implement Run Cutting System at SMART		
		11.	Use Cartegraph as an Enterprise Asset Management System		
		16.	Combine Payment Processing Systems and Merchant Accounts-Citizen Portal		
		21.	Implement a Collaboration System (Cloud Based?)		
		22.	Implement Integrated Security Access System		
		35.	Fuel Management Software		
				17.	Implement Enhanced Interactive Voice Response (IVR) Solution
				19.	Implement Project Management System
				20.	Implement Integrated Time Tracking and Payroll System-Electronic Timesheets
				23.	Implement centralized, Integrated Customer Database and Portal
				24.	Implement a Business Intelligence (BI) Tool
				26.	Implement Virtual Desktops and Enhanced VPN Solution
				27.	Modernize Fare Collection System at SMART
				28.	Consider Implementing Automated Meter Reading (AMR) Infrastructure
Ongoing					
10.	Develop IT Policies and Procedures				
13.	Implement Laserfiche as City Wide Electronic Document Management System				
29.	Continue Standardizing IT Environment				
30.	Establish Periodic IT Skill Gap Review Process				
31.	Continue Enhancing Audio/Video and WilsonvilleTV Infrastructure				
32.	Implement Municipal Fiber Program				
Completed					
4.	Hire IT Assistant				
3.	Develop Fiber Business Plan				
7.	Upgrade Exchange - Evaluate Cloud Based Email Alternative				
34.	Office/OS Upgrade				

Project Recommendations List by Project Number (updated 2018)

Project #	Project Recommendation Name	Identification Date	Completion Date
1	Streamline IT Procurement Process	2016	
2	Streamline IT Funding	2016	
3	Develop Fiber Business Plan	2016	2017
4	Hire IT Assistant	2016	2016
5	Implement Event, Facility Booking and Volunteer Management System	2016	
6	Combine City Web Sites and Social Media Accounts	2016	
7	Upgrade Exchange - Evaluate Cloud Based Email Alternative	2016	2017
8	Implement Run Cutting System at SMART	2016	
9	Develop Disaster Recovery Plan	2016	
10	Develop IT Policies and Procedures	2016	Ongoing
11	Use Cartegraph as an Enterprise Asset Management System	2016	
12	Implement New Financial ERP System (Including Utility Billing and HRIS)	2016	
13	Implement Laserfiche as City Wide Electronic Document Management System	2016	Ongoing
14	Implement Integrated Land Management System (permitting, Inspections, Code Enforcement)	2016	
15	Promote Use of GIS as an Organizational Priority	2016	
16	Combine Payment Processing Systems and Merchant Accounts-Citizen Portal	2016	
17	Implement Enhanced Interactive Voice Response (IVR) Solution	2016	
18	Implement Email Archiving and E-Discovery Solution	2016	
19	Implement Project Management System	2016	
20	Implement Integrated Time Tracking and Payroll System-Electronic Timesheets	2016	
21	Implement a Collaboration System (Cloud Based?)	2016	
22	Implement Integrated Security Access System	2016	
23	Implement centralized, Integrated Customer Database and Portal	2016	
24	Implement a Business Intelligence (BI) Tool	2016	
25	Replace VoIP Telephone System	2016	
26	Implement Virtual Desktops and Enhanced VPN Solution	2016	
27	Modernize Fare Collection System at SMART	2016	
28	Consider Implementing Automated Meter Reading (AMR) Infrastructure	2016	
29	Continue Standardizing IT Environment	2016	Ongoing
30	Establish Periodic IT Skill Gap Review Process	2016	Ongoing
31	Continue Enhancing Audio/Video and WilsonvilleTV Infrastructure	2016	Ongoing
32	Implement Municipal Fiber Program	2016	Ongoing
33	Telemetry Upgrade	2017	Retired 2018
34	Office/OS Upgrade	2017	2018
35	Fuel Management Software	2017	
36	Implement IT Auditing and Security Solutions	2017	
37	Contacts Database	2018	

Short Term Project Recommendations

1. Streamline IT Procurement Process

A rolling 5 year IT Strategic Plan would incorporate an annual update with reprioritization of the IT Projects based on input from the City Manager and Executive Team. Technology projects seeking to be implemented outside the strategic planning process would come to the IS Department for vetting and procurement assistance.

2017 Update

IS staff will work in conjunction with Legal department staff to formalize the purchasing process for IT related purchasing.

2018 Update

IT related purchasing will be incorporated into the new procurement manual being developed by Legal department. Training on the procurement process is anticipated in May 2018.

2. Streamline IT Funding

Continue current IT specific infrastructure funding and charge-back process for support. Enterprise applications replacement should have a centralized reserve fund overseen by IT but funded proportionately by the various stakeholder departments.

2017 Update

IS Manager will oversee funding for IT specific projects through CIP project budgeting.

2018 Update

CIP budgeting is identifying IT related projects as they seek funding. The IS Manager is also working with the Legal department to make sure that IT related projects are identified early in the procurement process to make sure that there is appropriate oversight.

5. Implement an Enterprise wide Integrated Event, Facility Booking and Volunteer Management Systems

Implementation of this recommendation will ensure that the City has user-friendly enterprise event registration, facility booking and volunteer management systems, which are integrated with the financial ERP system and Citizen database and portal. The new integrated solution automates all event management processes and manages payment with minimal manual intervention and integrates with a single sign-on customer portal and backend single payment/merchant account processor.

5. Implement an Enterprise wide Integrated Event, Facility Booking and Volunteer Management Systems

2017 Update

This recommendation was pushed to the medium term from the short to allow the recently hired Parks & Recreation Director time to familiarize with the software program. Interviews with current staff show that they would like a solution that is a one-stop shop that is user friendly and takes payments for citizens, but also provides internal staff tools to more easily plan and accommodate for City wide events.

2018 Update

This project was moved back into the short term. In the Fall of 2018, IS will lead a team of staff to seek out the needs of an Enterprise wide Integrated Event, Facility Booking and Volunteer Management System, in order to assess the current and research other systems. The goal is to provide FY 19-20 budgetary information and if approved, implementation would start in the Fall of 2019.

6. Combine City Web Sites and Social Media Accounts

The City consolidates all individual websites under its parent domain and enforces a thematic framework to improve branding. The websites provide a common self-service framework to automate most common services to citizens and integrate with the ERP, Land management and CRM systems to provide real time automated workflow to users.

The City investigates a social media consolidation tool to manage accounts and publish content to multiple channels in an efficient manner. The City allows two-way communication with citizens on its social media accounts and allows for comment on council meetings online. The City tracks, analyzes, reports and makes communication decisions (web site, social media, etc.) based on web traffic analytics for its web site.

Formal policies are developed for content management and posting.

2017 Update

IS staff is currently seeking out web design vendors in order to get costs for consolidating the sites and updating the design to match the new logo. Administration department staff have developed a Social Media Policy and are actively participating in two way communications with citizens.

2018 Update

Through a RFP process, the City selected *Aha! Consulting* in the Fall of 2017 to design, consolidate, and host the websites. A steering committee, consisting of key staff members from each department that is represented by the websites, was formed to help guide the project along. The City anticipates completion in Spring of 2018.

9. Develop Disaster Recovery Plan

The City uses a geographically dispersed location to house its mirror site. The City continues to use current practice of regular data backup and application/database redundancy to provide business continuity. A formal disaster recovery plan is completed and annual testing implemented. The City implements fault tolerant, duplicate internet connections for enhanced business continuity.

2017 Update

Due to low staffing levels planning for this recommendation has only begun. Research into cloud backup solutions has been performed and a solution may be implemented upon budget committee approval.

2018 Update

Cloud backup solutions have been tested and the results show that the current infrastructure does not support this. Future projects are needed to enhance the infrastructure.

Currently IS is evaluating different backup providers.

12. Implement New Financial ERP System (Including Utility Billing and HRIS)

An Enterprise Resource Planning (ERP) system is used as a single repository for all information regarding the city's business operations. The ERP system provides seamless access to all relevant users based on roles and responsibilities to track preset operational metrics real-time.

The ERP system automates common business processes such as accounts receivable, accounts payable, budgeting etc. to improve efficiency and is integrated with other enterprise systems to have relevant data across departments (HR, Payroll, Inventory control, Asset Management, Utility Billing, etc.) The ERP system is accessible remotely (desktop and mobile) for appropriate users.

2017 Update

IS Manager will serve as the project manager. Select staff have participated in demonstrations of potential new systems.

2018 Update

Started the needs assessment in November of 2017 with an anticipated completion in April of 2018. This assessment will provide direction in selecting a new ERP system. If an integrated system is selected, projects #12 and #14 will be combined.

14. Implement Integrated Land Management System

The City uses a Comprehensive Land Management system that streamlines all actions based on parcels including permits, inspections, investigations, reviews, zoning, project plans, code enforcement, etc. The land management system is built on a GIS platform so that any changes to the property information in the City's GIS system are automatically up to date in the land management system. This system is also integrated with the Financial ERP and Customer Database to provide a single view of the customer and track code conformance over a period of time.

The land management system is mobile enabled to allow field workers to compile inspection reports remotely, including a template based document generation system to speed completion of inspection reports in the field.

The land management system utilizes an automated workflow to route items between staff both within and across departments for assignment, review, notification and approval. It also includes timers and ticklers to keep projects flowing and ensure that all appropriate items are tracked, notified on, and completed – including long term land use actions, agreements, and conditions.

Finally, the land management system includes a modern web interface that provides customers with a fast and easy way to schedule inspections and pay for permits online. The web interface integrates with the City's customer portal and single merchant account for payment processing and customer service.

2017 Update

The IS Manager along with the Building Official will lead this project. Select staff have participated in demonstrations of potential new systems. Depending on the outcome of the needs assessment this may be a part of the ERP System.

2018 Update

Started the needs assessment in November of 2017 with an anticipated completion in April of 2018. This assessment will provide direction in selecting a new ERP system. If an integrated system is selected, projects #12 and #14 will be combined.

15. Promote Use of GIS as an Organizational Priority

The city has developed a robust database of GIS data for major assets, land use and accompanying attributes and provides three interfaces (internal and external version of Wilsonville Maps and internal use of Arc view) to access the GIS data. The city also separately maintains a different database with similar information for use with AutoCAD.

A single, authoritative, GIS database replaces the existing multiple databases and new enterprise permitting and utility billing applications fully integrate with GIS for parcel and addressing information – without manual processing. New web based self-service GIS tools built on current technology offer faster performance, greater flexibility, and enhanced visual appeal, which leads to GIS staff spending more time on GIS infrastructure, data updates, and training and less time making maps.

15. Promote Use of GIS as an Organizational Priority

2017 Update

IS and GIS are working in conjunction with Engineering staff to upgrade software and hardware to make more efficient use of data.

Upon approval of the budget committee, the self-service tools will be updated in fiscal year 2017-2018 (FY17-18).

2018 Update

Development of new self service tools was approved by the budget committee in FY17-18. These tools and the associated GIS website refresh has been put on hold until a new ERP software package has been selected. The new software may include enhanced GIS tools that could be incorporated into the existing site and the IS department does not want to create similar tools. Once the ERP software has been selected, the redesign will begin.

18. Implement Email Archiving and E-Discovery Solution

The installation of an archiving system will provide a means for migrating email and PST files. In addition, email archiving will reduce the server requirements of the current system. Once policies are established for mailboxes, emails and other Microsoft Outlook (or cloud based email) data will automatically be archived on a separate server.

An additional consideration of archiving is the ability to provide legal discovery (eDiscovery module), which will enable faster search and retrieval of emails, calendar items, contact list, etc. across the organization for legal discovery purposes. Some advanced systems can archive and simultaneously search across multiple social media accounts as well.

2017 Update

IS staff have participated in demonstrations from vendors who provide this service. A solution has been identified that is considerably cheaper than the initial estimate. Upon budget committee approval this project will occur in the FY17-18.

2018 Update

After assessing the organizational needs, IS has decided to implement a cloud based solution called Mimecast to facilitate centralized archiving and provided more efficient tools for e-discovery. Implementation began in early 2018, with an anticipated completion in Spring of 2018.

25. Replace VoIP Telephone System

The City uses a user -friendly Voice over Internet Protocol (VoIP) based unified communication system with detailed reporting capability. The City also provides a user-friendly, robust IVR system that is integrated with different enterprise systems (such as financial ERP, CRM, Asset Management, Utility Billing, Permitting, etc.).

2017 Update

The City has been setting aside funds over the past few years for a new phone system. The current plan is to evaluate, select, and implement a phone system in FY18-19.

2018 Update

A budget add package for FY18-19 was submitted to the budget committee for approval. If approved, IS will seek input from phone users from around the City to develop a list of needs for the new phone system. Using that criteria, a Request for Proposal will be created and the City will select a system. It is anticipated that it would be implemented by the end of FY18-19.

33. Telemetry Upgrade

Updating and standardizing the Telemetry software will modernize the system and make it much easier and cost effective to maintain in the future.

2017 Update

The Engineering Department has started working with a vendor to create the specifications required for the Telemetry system.

2018 Update

This project will be retired from this list since Engineering has taken the lead on the project. IS will continue to assist in this project and help integrate it into the City's network as necessary.

36. Implement IT Auditing and Security Solutions

Adding new software to increase Auditing and Security capabilities will help keep the City protected against emerging threats. It will also allow a collaborative environment for the departments to work in.

2017 Update

Several add packages have been submitted that will address areas identified such as new email antivirus protection and auditing software. If approved by the budget committee, they will be implemented in FY 17-18.

36. Implement IT Auditing and Security Solutions

2018 Update

The IS department will be evaluating several tools that will assist with auditing and security. A software package is currently being implemented that will filter, allow better auditing and provide an extra layer of security for email. The IS department will also be evaluating software that will provide the same functionality for the City's network structure.

37. Contacts Database

The need for a centralized contact database that contains Wilsonville area contact information to be used by many departments for outreach and mailings. Currently there are many separate lists with potentially out-of-date contact information. This database will need to have a point staff person to maintain and keep current.

2018 Update

This recommendation was added in 2018.

Medium Term Project Recommendations

8. Implement Run Cutting System at SMART

The City uses an automated run-cutting process to improve efficiency and accuracy of its fixed route transit operations. In conjunction with the newly implemented routing and Computer Aided Dispatch (CAD) and Automated Vehicle Location (AVL) systems, a run cutting software will greatly reduce manual processes.

This application is critical due to the upcoming retirement of the Transit Operations Manager, the only staff person trained in run cutting. Staff currently perform this process manually, which involves a skillset that is no longer trained and rarely found.

Supports Council Goal 9 – Multi-Modal Transportation Network

2017 Update

The Transit department decided to extend this recommendation another year to look for either a run cutting program or, more beneficial, a route and planning software application.

2018 Update

The Transit department is currently researching potential route and planning software solutions. IS will assist with the technical components of the project.

11. Use Cartegraph as an Enterprise Asset Management System

An Enterprise Asset Management (EAM) system is used as a single repository for all asset related data (purchase date, useful life, depreciation, work performed, etc.). This system, in coordination with the GIS database provides extensive asset management information.

Relevant departments that maintain assets record all activities on assets through work orders generated in this system.

ERP system is seamlessly integrated with the Enterprise Asset Management System to track process efficiency and asset related reporting.

The EAM is mobile enabled to allow field workers to receive, complete and track work orders seamlessly. Work order information submitted in the field is updated in real time with the EAM.

The EAM is used in an inventory management capacity (parts attached to relevant work orders, reorder points, etc.) and real time information is maintained on inventory utilized for each work order and for the maintenance of each asset.

11. Use Cartegraph as an Enterprise Asset Management System

2017 Update

Some major backend infrastructure upgrades occurred in 2017 to allow for the most up-to-date software to be utilized. Currently working to get Work Director and Parks modules online. Possibly look at future projects with pavement and fleet asset management.

2018 Update

Parks has been fully implemented. The Fleet Services Manager is currently investigating it for fleet asset management. The formation of a group of department champions is needed to help facilitate further use and provide additional support.

16. Combine Payment Processing Systems and Merchant Accounts

The payment process for different websites are streamlined and consolidated to achieve cost efficiency, better user interface and better integration with other enterprise systems (such as financial ERP, Land Management, CRM, etc.).

2017 Update

Finance is currently doing an audit of the City's merchant accounts. The goal would be to set standards for future contracts involving payment processing.

2018 Update

IS has been working with Finance to help shape the standards for payment processing. The current website redesign project that is underway will utilize these standards.

21. Implement a Collaboration System (Cloud Based?)

A cloud based collaboration system, working in conjunction with a project management tool will allow City users to cut back on or eliminate sending emails back and forth with attachments, thus saving valuable on premise individual mailbox and email server space.

2017 Update

Community Development is interested in utilizing a cloud based collaboration system but cautious of the City owning the data that is in this system. Further research is needed.

2018 Update

IS will work with the Legal department to develop contract language that allows the City to obtain data from a consultant or contractors cloud based collaboration system for long term retention.

22. Implement Integrated Security Access System

The IS department streamlines the key-card access management process to allow centralized administration and oversight of physical access to all facilities and secured areas. Security systems are managed as part of remote access and control systems, building on the City's Internet of Things (IoT) infrastructure.

2017 Update

The current system is almost at maximum capacity. IS Manager and Facilities Manager will discuss how to move forward and will be looking to consolidate into one database.

2018 Update

A budget add package will be presented to the budget committee for FY 18-19 that will perform a City wide audit of security considerations. Card access will be one of the many items evaluated. The report that is created by that audit will provide a direction for card access, security cameras and many other items.

35. Fuel Management Software

A new Fuel Management system will significantly help the Fleet Manager and Finance department to get accurate consumption and costs associated with fueling the City vehicles and busses.

2017 Update

Fleet Manager is interested in finding a new solution to the current ineffective fuel management system.

2018 Update

The Fleet Manager is considering an add package for the FY 19-20 budget but this project may depend on the workload created by the newly funded electric buses for SMART.

Long Term Project Recommendations

17. Implement Enhanced Interactive Voice Response (IVR) Solution

An enhanced and integrated IVR solution allows the City to provide an option to the Citizens to communicate with the City via an automated system, obtain status information, make payments over the phone, etc. The City provides a user-friendly, robust IVR system that is integrated with different enterprise systems (such as financial ERP, CRM, Asset Management, Utility Billing, Permitting, etc.).

2017 Update

Potential IVR replacements will be evaluated in the new ERP implementation projects (12 and 14). IS will work in conjunction with the Building Official to find something that meets the City's requirements.

2018 Update

Potential IVR replacements will be evaluated in the new ERP system. The Building department has decided to focus on web based alternatives for scheduling of permits and move away from an IVR system. Utility Billing will be the primary user of a new IVR system moving forward.

19. Implement Project Management System

The City uses a standard process of documenting and managing projects across all departments of the city. Relevant departments use standard project management software to proactively track and manage the budget and schedule of projects.

The data in project management software is in sync with time tracking system to accurately measure variances. Data in project management software is kept updated and historical data is used to improve project planning continuously.

2017 Update

Moved the timeline for this recommendation from the medium to the long term to allocate resources for more urgent projects.

2018 Update

The upcoming ERP system allow better management of projects, and future changes to the network file structure will help facilitate sharing of project files among all departments.

20. Implement Integrated Time Tracking and Payroll System

Time tracking software is used by all employees of the City to report time spent on defined and undefined activities at regular intervals. Time tracking software keeps track of the time worked by individual employees. The ERP system automatically reconciles and balances benefits accounts.

The time tracking system is integrated with the Human Resource Management Information System (HRIS) and ERP system to automate the payroll process.

2017 Update

With the possibility that the new ERP system will have a solution to this recommendation, it has shifted from the medium to the long term.

2018 Update

Ideally this will be integrated with the new ERP system. If it does not have a viable option, the City will look at a third party software that will integrate with the selected ERP system.

23. Implement Integrated Customer Database and Portal

The city should use a comprehensive customer database to serve as the single repository for all customer information. The database should be integrated with Land Management system, and the City should capture information about customers at different points of interaction, such as registration for classes or events, to build a robust database.

The city should use the information in the database to direct multi-channel communications to increase access to information and services, improve opportunities for engagement and offer members of the community a choice in how they receive information from the City.

Additionally, a single Customer Portal, integrated with the City's web site should allow the customer to log in and access various City services and make payments and conduct transactions seamlessly.

2017 Update

This recommendation will likely be incorporated into the new ERP system.

2018 Update

As the City is evaluating potential ERP Systems, the Integrated Customer Database and Portal will be considered.

24. Implement a Business Intelligence (BI) Tool

The City uses a robust Business Intelligence (BI) tool to provide historical, current, and predictive views of business operations enabling users to analyze data from different perspectives to make better business decisions. The BI solution provides common functions such as reporting, analytics, data mining, business performance management and benchmarking. The BI solution also provides role-based access to staff members to visualize operational data in real time and enables decision-making based on multi-dimensional data. It should enable the city to optimize resource usage by effective use of predictive analytics.

2017 Update

With the current evaluation of a new ERP system, this recommendation may be incorporated into that system.

2018 Update

The new ERP system selected for the City will help define what data is or is not available to view. That will allow the City to select the correct tool for the information available.

26. Implement Virtual Desktops and Enhanced VPN Solution

The City expands its virtual desktop infrastructure to all standard desktop configurations for its staff while providing sufficient computing power as required by staff members.

Virtual desktop infrastructure enables more robust remote access functionality, allowing the City to expand its remote access functionality and policies.

2017 Update

IS will consider this recommendation as improvements in the City network infrastructure occur and make this improvement more cost effective. To accomplish this the City will also need to move towards SaaS oriented applications as well.

2018 Update

Once the ERP solution has been selected, IS can determine if the virtual desktop approach is appropriate for the City.

27. Modernize Fare Collection System at SMART

The City's Finance Department receives online pass payment notifications via e-mail and physically mail the paper passes to customers. They also receive the fare boxes from SMART daily, and two Finance staff members manually empty, count, and track the money from the boxes. The percentage of transit revenue from fares is low and the processing and accounting time for the fare collection process is high.

The City features automated kiosks at the transit center and major bus stops to sell monthly passes. The City also provides a cashless magnetic card based ticketing and/or mobile app based system for riders.

2017 Update

With the knowledge of the Transit Directors retirement this recommendation was moved to the long term to allow for the new director to evaluate the current systems.

2018 Update

The Transit department is looking at feasible options for eFares or eTicketing. IS will assist with the technical components of the project.

28. Consider Implementing Automated Meter Infrastructure (AMI) Infrastructure

An Automated Meter Infrastructure (AMI) may allow the City to collect meter readings for its 5,000 utility billing accounts automatically, thereby eliminating the current manual, contracted process.

It can provide utility billing staff with real time water usage and meter reads to eliminate dispatching crews to perform emergency and one-time, customer requested reads. It can also provide real time usage trends to assist in rapid leak detection. Detecting leaks conserves water and can save both the City and the customer money and frustration.

2017 Update

The Utilities Supervisor is investigating implementing an AMI solution. Overall costs of that project will keep this recommendation in the long term category at this time.

2018 Update

Public Works is investigating creating an Automated Meter Infrastructure (AMI), previously referred to as Automated Meter Reading (AMR), that could work with water meters and streetlights. IS is investigating to see if there is an AMI solution that will integrate with the potential ERP solution.

Ongoing Project Recommendations

10. Develop IT Policies and Procedures

Approaches to computer usage, remote access, internet access, IT equipment procurement, and many other activities should be standardized and communicated throughout the City. Policies should be defined to establish Standard Operating Procedures (SOP) that are uniform and to establish the foundation for enforcement of these policies. Failure to maintain relevant policies and procedures places the City in a position of vulnerability as it relates to enforcement and expenditures on inappropriate use of IT infrastructure.

IS develops formal policies in place of informal policies now utilized in the areas of mobile device management, IT equipment standards, remote access, physical access (key cards), etc.

The City continues to use Mass360 to manage policy on mobile devices but augments Active Directory with a more comprehensive auditing and permissioning tool.

2017 Update

IS Manager will work with Human Resources Manager to develop formal IT policies.

2018 Update

Moving this to the ongoing timeline, as the IS Manager will continue to work with the Human Resources Manager to develop policies in this changing environment.

13. Implement Laserfiche as City Wide Electronic Document Management System

The City uses Laserfiche for its document management needs along with facility for electronic review, update and approval of documents through workflows. The document management tool stores metadata about documents as well as audit trail of activities on the documents to enable easy search and retrieval operation.

City uses web based tools for accessing documents and picture files that are appropriately tagged for easy retrieval.

2017 Update

Moved this recommendation from the medium term on the timeline to ongoing. Completed implementation of the Leave Request form and Municipal Court records in 2017.

2018 Update

IS staff and the City Recorder are working together to form a Laserfiche Action Plan to provide a road map for future records storage of both digital files and those that need to be scanned and made digital to free up physical space. This plan will outline the phases and resources needed to move forward with the implementation.

29. Continue Standardizing IT Environment

Continue current level of standardization of IT Environment and focus future efforts on standardization of business enterprise software systems. Wherever possible, data duplication should be eliminated across the organization through consolidation and integration of overlapping systems and system functions.

2017 Update

IS is investigating opportunities to standardize client databases and other processes in the replacement of the ERP system. Greater efficiencies between departments should be achieved.

2018 Update

IS is continuing to investigate opportunities to standardize client databases with the ERP system. Network equipment is being replaced and standardized this year as well.

30. Establish Periodic IT Skill Gap Review Process

IT skill gap management process is developed. Cross-functional training is provided among IT personnel either through formal or through informal channels to improve the capacity of the team.

Effective documented plan is created to hire and retain IT support personnel. Additionally, effective succession plan should be developed along with creation of a standard operating procedure for each role.

2017 Update

FY16-17 has brought a lot of change to the IS department. An IS Assistant was hired at the end of 2016 and a replacement Network Administrator will be hired in the first part of FY17-18. The new hires will be trained and brought up to speed during 2017. The IS Manager will work with HR to hire and retain personnel and start the creation of the succession planning and standard operating procedures for each role.

2018 Update

The Network Administrator position was filled in 2017. Currently, IS is fully staffed with an IS Manager, GIS Manager, Systems Analyst, Network Administrator, and an Information Systems Assistant I. Cross-functional training has been necessary for the new staff to learn their roles and procedures. The IS Manager is working with the Human Resources Manager to create a succession plan.

31. Continue Enhancing Audio/Video and WilsonvilleTV Infrastructure

Clarified roles surrounding the AV control room support removes staff confusion and a rolling 5-year replacement/enhancement plan for AV resources is completed, vetted with stakeholders and put in place.

All major City facilities have video conferencing capabilities in their main conference room areas, as well as AppleTV functionality for interfacing with staff iPads and iPhones.

2017 Update

The Library's Oak Room and the Public Works conference room AV capabilities were upgraded in FY16-17. HD cameras and new LED lighting for the Council Chambers are planned for FY17-18. The City also entered into a partnership with Wilsonville High School to create content for the Wilsonville Government channel in exchange for camera and video editing equipment.

2018 Update

HD cameras and LED lighting upgrades are planned to be completed by June 2018. Improvements in camera switching hardware are scheduled in 2019.

32. Implement Municipal Fiber Program

Depending on the recommendations set forth in the adopted Fiber Business Plan, the fiber program has the potential to provide significant positive economic development benefits to the City, enhance the competition, reduce costs, improve telecommunications and internet services for the Wilsonville business community, and potentially even offer high-speed internet access at reduced rates to Wilsonville residents.

At the least, continued development of the fiber asset for City purposes will reduce long term telecommunications costs for the organization, enable enhanced connectivity and functionality in intelligent transportation systems throughout town, provide fast, reliable connectivity for telemetry monitoring of critical City utility infrastructure, and offer interconnection for data and service sharing between the City and other local government agencies.

2017 Update

The City will complete its Fiber Business plan in 2017 which will help inform the City Council on decisions regarding fiber investment.

2018 Update

IS is working with Engineering to install conduit in projects that are currently under construction. Several telecommunication companies have contacted the City interested in possibly partnering opportunities on fiber construction. Projects to cross I5 at Boeckman and crossing the Willamette River to reach Charbonneau are under consideration.

Completed Recommendations

4. Hire one (1) full-time Helpdesk Support Staff (IT Assistant)

Hiring an IT Assistant will provide the City with staff dedicated to supporting users with services such as desktop, email and printer related troubleshooting and basic training. This position would also maintain an inventory of IT hardware and software across the city and rollout new computers/devices.

A full-time IT Assistant will allow experienced IS resources to perform higher level, strategic tasks. Currently, entry-level helpdesk tasks are addressed ad-hoc by existing staff, negatively impacting higher value enterprise project and support efforts.

2017 Update

Hired an Information Systems Assistant I in December 2016.

3. Develop Fiber Business Plan

City fiber asset use based on results of the fiber business plan currently underway.

2017 Update

IS Manager is currently working with a consultant and has completed the process of information gathering through interviews with local businesses and staff, and online through surveys to obtain feedback from the public.

2018 Update

Project completed in 2017. Refer to Project #32 – Implement Municipal Fiber Program for ongoing fiber plans.

7. Upgrade Exchange - Evaluate Cloud Based Email Alternative

A self-hosted Microsoft Exchange application is currently used for the City's email system. The current Exchange version is reaching end of life and will need to be upgraded to continue to provide a functional and secure e-mail system.

The City does not have an archiving tool, other than the limited built-in Exchange tool, which leads to user mailbox sizes growing rapidly and frustration with mailbox size limits that have been implemented to help staff better comply with State mandated records management regulations.

Additionally, email attachment size restrictions (15 MB) create issues when sending large files. These physical limitations can be addressed by moving to a cloud-based exchange system, but a cloud-based system will not address the policy and compliance issues.

7. Upgrade Exchange - Evaluate Cloud Based Email Alternative

2017 Update

The determination was made to keep the self-hosted Exchange solution in place, however it will be upgraded to the latest version in the Summer of 2017.

Upon approval from the budget committee, an email archiving solution will be implemented in the future.

2018 Update

Exchange Server 2016 was implemented in the summer of 2017.

34. Office/Operating System Upgrade

Microsoft Office and the Windows Operating System are the most used software applications by all staff, therefore this project will impact everyone's day to day work. IS staff will train and educate staff on the new software thus minimizing the interruption this will cause.

2017 Update

IS staff have tentatively planned this project to occur in the Summer of 2017.

2018 Update

Just over 150 computers were upgraded from Windows 7 to Windows 10 and Office 2010 to Office 2016. The project was completed in early 2018.