City of Mequon

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Office of the City Clerk

COMMITTEE OF THE WHOLE
Tuesday, September 14, 2021
6:15 PM
Christine Nuernberg Hall

Agenda

1. **Call to Order, Roll Call**

2. **Presentation of the Information Technology Strategic Plan**

3. **Potential Closed Session:**

   a. Information Technology Strategic Plan: The Common Council may convene into closed session pursuant to Wis. Stat. §19.85(1)(c), considering employment, promotion, compensation or performance evaluation date of any public employee over which the governmental body has jurisdiction or exercises responsibility, and §19.85(1)(d) considering specific applications of probation, extended supervision or parole, or considering strategy for crime detection or prevention and then may reconvene into open session to take such action as deemed appropriate.

4. **Adjourn**

Dated: September 9, 2021 */s/ John Wirth, Chair*

Notice is hereby given that a quorum of other governmental bodies may be present at this meeting to present, discuss and/or gather information about a subject over which they have decision-making responsibility, although they will not take formal action thereto at this meeting. Persons with disabilities requiring accommodations for attendance at this meeting should contact the City Clerk's Office at 262-236-2914, twenty-four (24) hours in advance of the meeting.

Any questions regarding this agenda may be directed to the City Administrator's Office at 262-236-2941, Monday through Friday, 8:00 AM – 4:30 PM.

City of Mequon
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Office of Administration

TO: Committee of the Whole
FROM: Justin Schoenemann, Assistant City Administrator
DATE: September 3, 2021
SUBJECT: Presentation of Information Technology Strategic Plan

Background

In May, the Common Council adopted a resolution approving a professional services agreement with Avèro Advisors (Avèro) of Maryville, Tennessee, to do a full review of the City's information technology resources that would ultimately culminate in a strategic plan to help guide the City's technology investments going forward. Avèro was selected to perform this analysis from a group of eleven (11) firms that originally submitted proposals to the City. The agreement was awarded to Avèro at a not-to-exceed cost of $54,720.

Since the award of the contract in May, Avèro has been working with members of the City's project team as well as various members of each Department to complete the analysis. The City's primary contacts during this review have included Andrew Hayes, Senior Manager, who is a certified Project Management Professional with master's degrees in Business Administration and Organizational Development and 15 years of leading change management and IT modernization projects in the public, private, and nonprofit market sectors. Tyler Gallant, Project Manager, specializes in providing IT Strategic Planning services with a Bachelor of Science in Business Management, and several years of experience working with public sector organizations. The consulting team also included Jared White, Business Analyst, who is an IT Modernization specialist with a Bachelor of Science degree in Business Management and several years of experience providing data analysis and process redesign services within both the public and private sectors.

Analysis

In accordance with the timeline included in the approved agreement, the analysis was to be completed and presented to the Common Council in September. As such, the final report is now submitted herein for review and consideration by the Common Council. A comprehensive review of the analysis process is available in the introductory section of the report.

As previously indicated, a Special Committee of the Whole Workshop Meeting has been scheduled for 6:15 p.m. on Tuesday, September 14 to provide the Common Council with an opportunity to review findings and to ask questions of the consultants. Both Mr. Hayes and Mr. Gallant will attend the workshop meeting next Tuesday, with the following format proposed to guide the Council's review and discussion:

6:15 - 6:40 p.m.	Presentation of Police Department Analysis
6:40 - 7:00 p.m.	Questions/Discussion
7:00 - 7:30 p.m.	Closed Session - Security & Staffing

Recommendation

The entirety of the Special Committee of the Whole Workshop Meeting on September 14 will be devoted to the IT Strategic Plan that was recently completed by Avèro. Time has also been allotted during the meeting to allow for questions from members of the Committee. Thereafter, additional time has been allotted for members of the Common Council to convene a closed session conversation related to security recommendations and staffing.

Subsequently, the Common Council, in its role as the City's Appropriations Committee, may decide to continue discussion of the analysis' findings at a Budget Workshop meeting scheduled for 6:00 p.m. on Tuesday, September 21.

Attachments:
IT Strategic Plan Report (PDF)

INFORMATION TECHNOLOGY STRATEGIC PLAN REPORT

Draft Report

September 1, 2021

AVÈRO ADVISORS

Head Office
512 West Broadway Avenue
Maryville, TN 37801

West Coast Office
10396 East Caribbean Lane
Scottsdale, AZ 85255

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A. Executive Summary

In May of 2021, the City of Mequon (City) and Avèro Advisors (Avèro) formally kicked off the Information Technology Strategic Plan Project. Our teams became acquainted virtually, meeting to discuss the details that would allow us to define a clear scope and plan of action. Upon validating the Project Work Plan, Avèro and the City's Project Sponsor began collecting data related to the City's Information Technology (IT) environment to develop a comprehensive understanding of the City's current state of IT. Avèro was then given the opportunity to spend a week onsite at Mequon's City Hall, where our team had the pleasure of meeting with the City's staff members face-to-face in hour-long Discovery Sessions. During those sessions, Avèro began to recognize themes and opportunities related to the City's IT infrastructure and resources that would later comprise the City's IT Current-State Assessment Report. Upon returning to our firm's headquarters in Tennessee, we scheduled the final stakeholder group sessions virtually via Zoom to validate our Discovery findings. In these sessions, we discussed each department's vision for their respective functional area in greater detail. Once all information was gathered related to the current state and the desired future state, our team submitted the IT Current-State Assessment Report. Following the validation of the report, Avèro began developing the strategies that would address the gaps previously identified between the City's current state and optimized future state of IT. Through our combined efforts to prioritize the proposed strategies, Avèro was able to develop a clear IT Strategic Plan and Roadmap that will guide the City's IT-decision making for the next several years, enabling the City to become an industry leader in some of the various modernization efforts occurring in similar government organizations around the country.

The City of Mequon's City Administrator and Senior Executive Management team have envisioned the development of a straightforward strategic plan that can be easily understood and implemented. The purpose of this plan is to provide the City with a thorough analysis of strengths and weaknesses and provide a comprehensive overview of its strategic direction for IT. The City desires a strategic roadmap that serves as a cornerstone guiding its IT efforts to connect, protect, and enhance the lives of citizens, business owners, and staff in the City of Mequon.

The role of government in our society has traditionally been one of facilitation, collective expenditure, law and order, and generally looking after the well-being of its residents, businesses, and employees. These stakeholder groups have traditionally not expected much from their respective governments. However, times have changed, and these stakeholder groups now demand and expect excellence from their elected officials and the managers they appoint. In some jurisdictions, demand for government services outpaces the available supply of such services. Doing more with less has always been the government's aspirational goal, but only now do the stakeholder groups expect real action.

This report details an Information Technology Strategic Plan and Roadmap for the City of Mequon to achieve security, resiliency, and efficiency, based on the leadership's vision and proven best practices.

This Executive Summary highlights the essential framework for a resilient, secure, efficient, and transparent technology infrastructure within City of Mequon government. At the end of this roadmap, the City can look forward to the following:

1. ***Security First***

   Cybersecurity and its importance cannot be overstated in today's climate. Multiple times this year alone, we have seen the havoc a cyber-attack can have on City governments across the world. While we have to be prepared to respond to cyber threats and security events, the best course of action here is perhaps the oldest – "*prevention is better than the cure*." Once the City of Mequon implements the strategic recommendations within the IT Strategic Plan, it will have put security first and will be better prepared to weather any cyber event that may come Mequon's way. Ransomware, phishing, crypto-scams, and many other threats will not be reduced in the near future. If anything, data shows that our adversaries and their "armies of robots" are only getting more robust, more intelligent, and more persistent with launching attacks and enhancing threats to public infrastructure.

   In the optimized future state, the City of Mequon will be equipped with the hardware, software, and management sophistication to prevent threats and recover from any cyber-event. Using a layered cyber-security framework, the City will develop a hard to breach "moat" around itself and its employees.

2. ***Digital City Experience***

   Traditionally, and sometimes on purpose, government agencies have been slower to adopt newer technologies due to complacency. We are just now, in 2021, beginning to discuss the use of electronic document management and e-signatures. Historically, the citizens of Mequon have accepted the hard-copy-driven processes to conduct business in-person with the City government, such as the permit application process. However, the City of Mequon is now poised to deliver a "*Digital City Experience*" that modernizes the citizen experience in many ways. Paying bills, connecting utilities, applying for permits, and other opportunities will now be at their fingertips. The digital conveniences that Mequon citizens enjoy in their personal lives will now be present in how they interact and conduct business with the City.

3. ***Infrastructure Resiliency***

   Much like roads, schools, and administrative buildings, the City's IT infrastructure requires modernization and resiliency over time. Today, we do not have the option to be non-resilient, which will be even more true in the future. Just as roads need a capital improvement plan, so do fiber-optic networks, servers, storage, computers, firewalls, etc. Waiting for a dire need for repair delays critical progress. Instead, we should take a proactive approach to plan for our infrastructure improvements. Fortunately for the City of Mequon, we will bypass certain technologies that have proven deficient or needlessly expensive. Our IT Strategic Plan calls for the City's infrastructure to be resilient through disaster recovery and data loss prevention strategies, effective asset management, and a service-oriented delivery of technology tools. Strategies for infrastructure resiliency include:

- IT Services Management – we will deliver and manage IT Services in line with industry best practices and standards.
- IT Asset Management – we will know what IT Assets we have, when it needs to be replaced, and how to perform such work.
- IT Software Deployment and Redeployment will happen seamlessly without disruption to end-users, citizens, and businesses.
- IT Policies and Procedures – will be documented, agreed upon, adopted, publicized, and enforced.
- Standardization – we will not buy something because it is cheap or because we like the sales pitch. Instead, we will buy according to our standards and pay for value and service.

4. Data-driven Decisions

Any organization that uses enterprise software systems for its daily operations collects data. As an example, whenever an electronic permitting system issues a permit, a data set is created. When a resident pays their utility bill, a data point is created. Once the City modernizes its enterprise applications, including Tyler MUNIS, a critical element of the strategy will be using data to advise and drive critical decisions. Based on historical data and predictive analytics tools embedded in modern financial and land management systems, the City can make decisions on hard data, not heuristics or feelings. After implementing the IT Strategic Plan and Roadmap, the City will maximize the functional capacity of existing technologies and further utilize enterprise software solutions that will make data-driven decision-making possible at every level of the organization.

5. Software as a Service (SaaS) Migration

The days of organizations having large-scaled IT operations to maintain application infrastructure for enterprise applications that are deployed locally (On-Premise) are going by the wayside as many are migrating to a "Software as a Service" (SaaS) environment for their enterprise software systems. SaaS removes the need for an organization to install and run enterprise applications on their own infrastructure, including application servers, database servers and computers, or in their own data centers. By pushing their infrastructure to the vendor, this eliminates the expense of hardware acquisition, provisioning and maintenance, as well as outdated software licensing, installation and support for an organization. Many of the City's enterprise software systems, including Tyler MUNIS, are currently deployed locally, which limits the City's ability to benefit from the most current version available, as upgrades are very costly. In addition to requiring on-going maintenance to the application infrastructure, these on-premise solutions are not always accessible outside of City Hall. By planning for a migration to a SaaS environment, the City can easily scale up/down based upon the needs of the organization, without incurring the infrastructure costs associated with an "on-premise" solution. In addition, Mequon will benefit from the tele-working mobility offered by users being able to access the SaaS version of the software anywhere with an internet connection.

Current State

Avèro Advisors recognizes that the City is currently using older technologies and manual processes to conduct business. Further, the City is not truly harnessing the functional capacity of other existing technologies to help streamline operations. To help the City improve efficiency, Avèro has identified and outlined the steps necessary to shift from in-person, hard-copy paper, manually driven processes to a smart, digital environment. The purpose of this assessment is to identify gaps in both internal and external service delivery, based on industry best practices, and develop a comprehensive plan to overcome human, hardware, and software shortcomings to promote business process optimization. Implementing these strategies will substantially reduce the inefficiencies present in the City of Mequon's current technological landscape and promote a business savvy, citizen-friendly, and technologically mature community.

Approach and Methodology

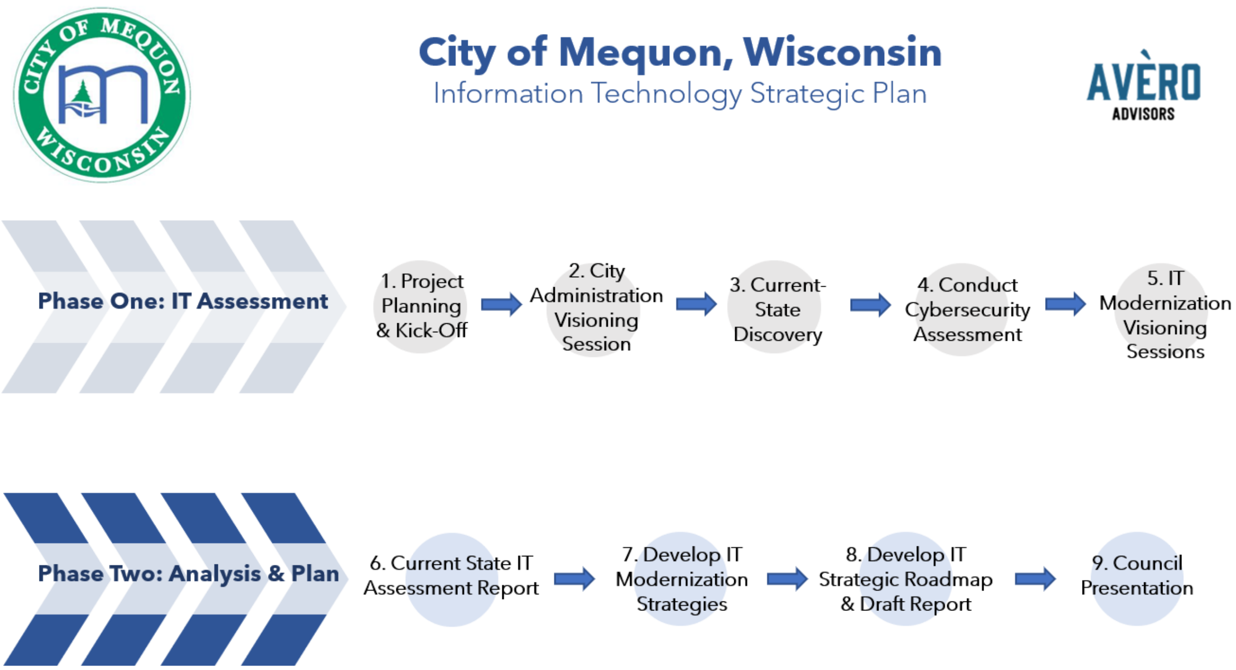
For this initiative, Avèro Advisors was tasked with the development of an Information Technology Strategic Plan, through the execution of the following objectives as set forth by the City:

- Review the existing infrastructure, staffing, funding, applications, business systems, projects, processes, and resources currently used by the City;
- Interview representatives from each Department's leadership, two (2) current information technology staff, and three (3) key contracted service providers;
- Identify issues, gaps, and risks associated with the current technology and service delivery covering all applications/systems at the City;
- Identify, prioritize and analyze costs of projects that the City should undertake over the next five years; and
- Provide actionable recommendations and an implementation plan to realize cost and service improvements aligned with the City's vision and mission.

As part of this engagement, Avèro Advisors utilized a three-dimensional approach, ***People, Process, and Technology (PPT),*** to develop an understanding of the current state of technology within the City. Applying this approach enabled Avèro to understand the execution of different tasks across the organization using available technology, technology-enabled decision-making processes, and the overall efficiency and effectiveness of the organization's operations.

As shown in ***Figure 1*** (***Project Methodology***), the following project activities were executed across multiple phases to develop the City's IT Strategic Plan.

Figure 1: Project Methodology



Phase 1 – Discovery

During Phase 1, Avèro Advisors conducted “Discovery” sessions with the City Administrator, Senior Executive Management team, IT Division members, and department Directors from across the organization. These interactive data-gathering sessions provided Avèro insights into the current state (“As-Is”) of IT service delivery in the City. Discovery focused on the People, Process, and Technology used to execute critical business processes within and across all City departments. Avèro Advisors also facilitated “IT Modernization Visioning” Sessions to capture “wish list” items related to technology optimization in the future-state (“To-Be”) at the City.

Phase 2 – Analysis & Plan

During Phase 2, Avèro Advisors conducted a Current State Assessment, including a Gap Analysis, based upon data gathered during Phase 1’s Discovery. The Gap Analysis focused on analyzing current state data (Phase 1) related to People, Process and Technology, and reporting on the inherent gaps between the current state and the desired future state of Information Technology across the City concerning industry best practices.

Strategic Roadmap – A Summary

As shown in ***Figure 2***, the ***IT Strategic Roadmap*** will guide the City of Mequon in planning, procuring, implementing, and managing current and future technology investments and resources over the next three (3) to five (5) years. The corresponding Action Items which appear support the implementation of each IT Modernization Strategy for the City.

Figure 2$_1$: IT Strategic Roadmap (Action Items)

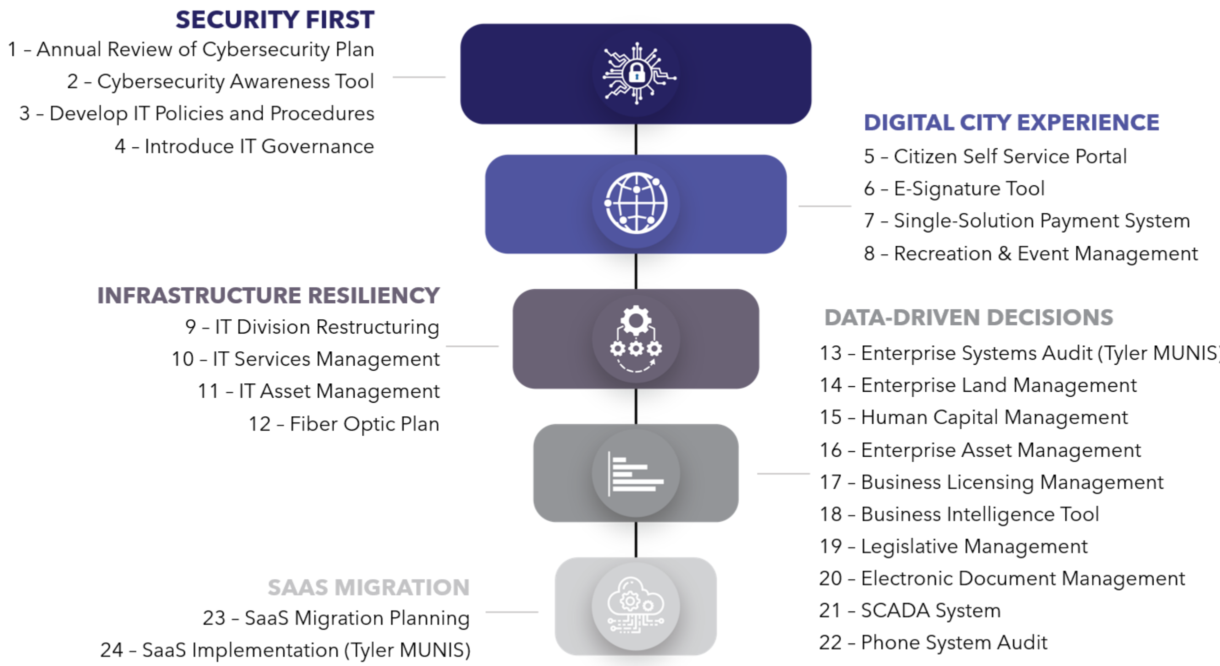
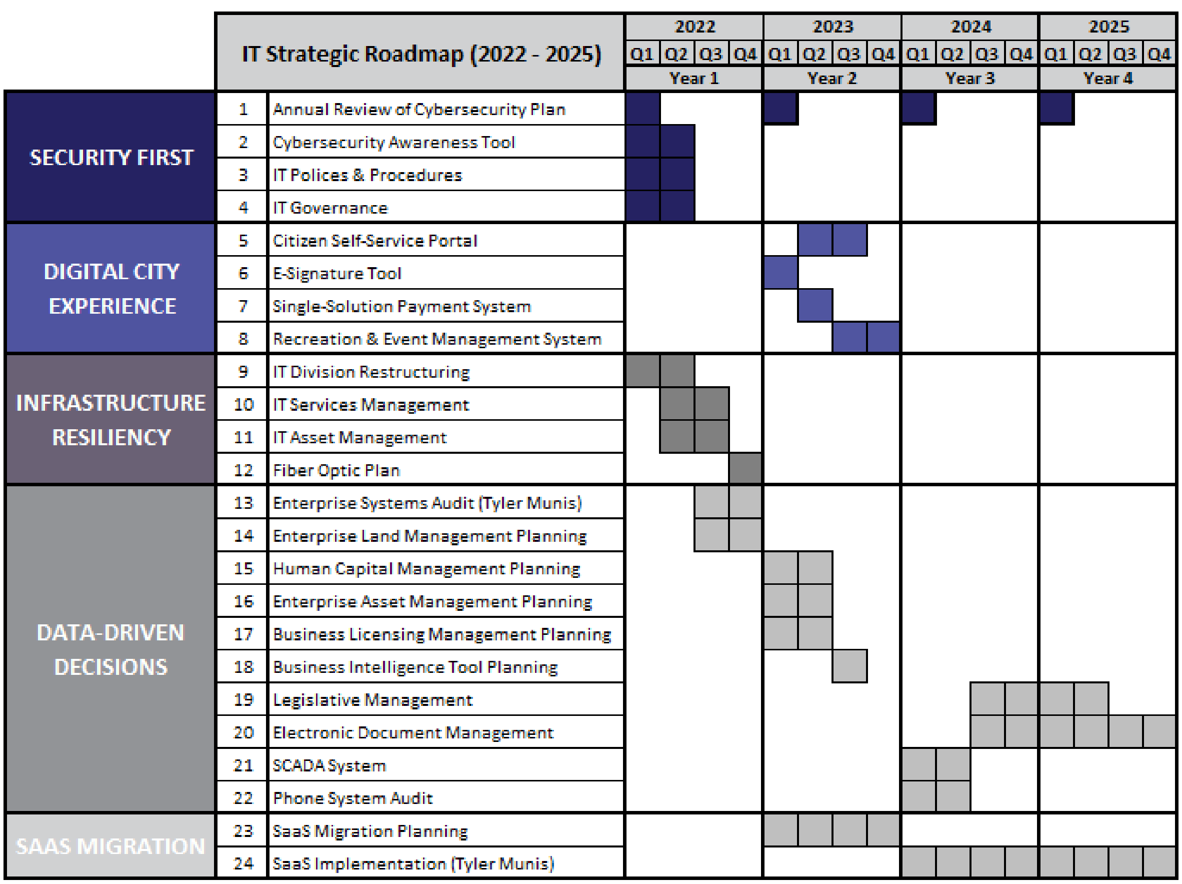


Figure 2$_2$: IT Strategic Roadmap (Implementation Timelines)



Avèro Advisors strongly recommends that the City of Mequon adopt this IT Strategic Plan and Roadmap as the City's definitive guide for future Information Technology strategy over the next three (3) to five (5) years. It is also recommended that the City conduct an annual review to "refresh" this plan to ensure that the strategies remain in line with the City's mission, vision, innovations, and industry best practices.

B. IT Current State Assessment

1. Summary

The Information Technology (IT) Current State Assessment Report summarizes the Key Findings gleaned from the Discovery and Analyses activities of the IT Strategic Planning Project for the City of Mequon. Specifically, the IT Current State Assessment Report considers each respective department's function, the primary business technologies used for operations, and the departmental vision.

The City of Mequon is primarily comprised of eight (8) departments, which are responsible for delivering public services to the City of Mequon community under the executive direction of the Mayor, City Administrator, and Common Council. As an overview, the City strives to provide an exceptional level of public service to the City of Mequon's constituents. Building on industry best practices, the City seeks to strategically use resources in a way that enhances public service offerings through technology modernization.

The following City departments and divisions were included in the assessment of the City's current IT infrastructure and resources:

1. Administration
2. City Clerk
3. Community Development
4. Finance
5. Fire and Emergency Medical Services
6. Information Technology (IT) Division
7. Police
8. Public Works
9. Utilities

Citywide Business Technologies:

The following frequently used technologies, including hardware, software applications, and tools, were identified by Avèro during Phase 1's Discovery:

- Accela, Adobe Acrobat Pro, Black Bear, ExecuTime, Hikvision, IamResponding, Microsoft Office 365, Mitel, Plan-It, Pro Phoenix, Tyler MUNIS, and Webroot

Comprehensive Software Inventory:

Avèro assisted the City's IT Division in utilizing a systems management tool (PDQ) to run scans across all IT assets to determine the current software inventory at the City. The analysis of the inventory report is shown in ***Section 3 – Comprehensive Software Inventory,*** detailing findings from scans conducted both within City Hall and Public Safety's environments.

2. Gap Analysis

A. Key Findings/Universal Gaps

Following the completion of Phase 1's Discovery, Avèro aggregated and analyzed the Current State and Future State vision gathered from City stakeholders to identify Key Findings, including gaps. A Gap is a measure of comparison between the Current State of information technology at the City and the optimized Future State based upon industry best practices as discussed during the Visioning Sessions. The following Key Findings, including Universal Gaps, were identified during the Current State Assessment. Please note that the Gaps below, though related to the IT Division, have been categorized as Universal due to their impact on all the City's various departments.

- There is an absence of IT strategy within the IT Division's approach to serving the organization's future technology needs. The result is departments spending time researching systems, hardware, and applications to resolve their technical issues instead of relying on subject matter experts to keep them apprised of new market offerings. This exacerbates the challenge of departments inadvertently expanding the existing silos of data and resources.
- The City's IT Division does not have standardized policies and procedures in place regarding the systems and hardware utilized by the City's various personnel. This results in ambiguity related to technology replacement schedules, IT procurement, IT service management, and security protocols. Additionally, there is no password change policy, minimum security requirements, or two-factor authentication being enforced by the City's IT Division for City personnel and their City-owned devices and accounts. This increases the risk of compromised passwords and an attacker's chances of gaining unauthorized access to sensitive information.
- City Hall, the Public Works Facility, and the Fire Stations currently are not utilizing a formal IT service ticketing system to manage service requests made by the City's technology users. This results in confusion and inefficiency related to tracking, prioritization, and overall management of ticket statuses and understanding the IT Division's workload as the current process is performed through email communications.
- The City lacks documentation, including both quick reference guides and frequently asked questions (FAQs), for commonly occurring IT issues. This results in the City's IT resources spending the same amount of time addressing the same issues that could be solved by providing one-page writeups detailing a problem's solution.
- The absence of an inventory management system within the City's IT Division leads to an inefficiency in maintaining updated records of the City's IT equipment. This makes it difficult to track and manage the useful lifecycle of IT equipment resulting in reactive hardware replacement due to malfunctions from prolonged use instead of planned replacement through managed IT procurement.

- The City is currently unable to process credit card payments at City Hall. Having a point-of-sale system for credit/debit card transactions could enhance the customer service experience of residents interacting with City Hall.
- There is no standardized process in place to onboard employees and grant them access to the systems needed to perform their duties. Not having a formal process in place has resulted in instances where new hires did not have their equipment set up or lacked access to their respective systems at the time of their initial start date.
- There is no Emergency Notification system in place to quickly notify employees in the event of an emergency. This has the potential to result in confusion in the case of an emergency as there is no expedient way to alert all City staff members simultaneously.
- The City is issuing payments to Tyler Technologies for modules that the City's departments are not currently utilizing. This results in unnecessary spending and payments for unused modules. Additionally, there are modules that were previously under implementation that were not successfully completed.
- There are resources within Public Works and the Fire Department that do not have City email addresses. This poses a security risk as sensitive information occasionally is shared through personal email accounts. Communications sent to employees of the Fire Department are sent to personal email addresses as opposed to an email address that the City of Mequon issues. Allowing employees to utilize personal email poses risks to IP theft and disrupting network operations.
- The City does not have a formal Electronic Document Management System to act as a centralized repository for document management. As a result, many documents are currently stored in hard copy format, and City staff cannot search for archived files independently. In some instances, files are stored electronically on workstation hard drives, outside of the central access that an EDMS would provide. This is inefficient for the City as an archival process would prevent the City from losing data, ensure that only the correct employees can access certain documents, and easily organize documents for access.
- The City does not have a standardized process for signing documents electronically. This results in wasted time and resources as staff must print, sign, and scan documents that require signatures. For example, when a new policy is introduced and dispersed to City staff, they are required to print the policy, sign the document in ink, and return to Administration.
- The City's end users did not receive adequate training during the implementation of the City's Mitel phone system. This results in the product being underutilized and dissatisfaction from the City's users. In addition, minimal documentation exists for existing enterprise software systems, and training needs are not currently being assessed regularly by the IT Division.

- The City does not possess a centralized database for departments to house their data. This creates a lack of transparency between departments, specifically the Community Development Department, Fire Department, Police Department, City Clerk's Office, and Finance, as information is not standardized, or easily accessible, across multiple databases.

B. Departments

During Phases 1 – 2 of the IT Strategic Planning Project, Avèro met with key stakeholders from across the City for the purpose of gathering their experiences on the current state of technology. Discovery sessions also focused on visioning for an optimized future state in the City. This section includes the aggregated findings from all City departments included in the project.

The following City departments and agencies were included for assessment and planning purposes on this IT Strategic Planning project:

1. Administration

The City Administrator serves as the City's Chief Administrative Officer and manages the City's daily operations. The City Administrator's Office also oversees the City Attorney's Office, the Human Resources Division, and the Information Technology Division. The City Administrator's responsibility is to carry out all policy directives of the Common Council requiring administrative action, coordinate and provide leadership across all departments, provide communications to all City departments, and develop and recommend efficient ways of conducting City business. The City Administrator serves as the City's Budget and Chief Personnel Officer and is responsible for keeping the Council aware of county, state, and federal government activities as they may affect Mequon.

Primary Business Technologies:

- Microsoft Office 365, Tyler MUNIS, Adobe Acrobat Pro, and ExecuTime

Gaps:

- Due to the absence of a formal Human Capital Management system, employee records are currently being stored as hard-copy documents within filing cabinets. This makes accessing, updating, and adequately maintaining records difficult and time-consuming for Human Resources staff. Additionally, the management of employee records in hard copy format poses a risk of loss in the event of a disaster. However, in certain cases, compliance with state law may mandate the retention of hard copy for a specified period of time.

- The City currently lacks a formal self-service portal for staff to manage and update their personal employee and benefits-related information. The absence of a Human Capital Management system, including a self-service portal, creates a challenge for the Administration Department as they must update employee information on the employee's behalf.

Vision:

- The Administration Department envisions acquiring all of the right tools to enhance its various processes and provide an improved experience for staff within the City and the citizens it serves.
    - The Department envisions an organization where its enterprise business systems are properly integrated.
    - Administration envisions the initiation and completion of IT strategies to mitigate current state technological gaps and aid in developing IT governance policies and procedures to ensure the City is operating effectively and efficiently.
    - The Administration Department would benefit both from the introduction of a formal Human Capital Management system and an employee self-service portal.
    - The Administration Department would like to see an enhanced level of communication between the IT Division and the City's various departments.
    - The Department envisions gaining the many benefits of introducing digitization to the employee application process.
    - The Administration Department envisions the universal reduction of hard-copy paper through improved enterprise systems and electronic document management.
    - Administration envisions reaching their goal of providing more online services to residents and improving the service and experience the City's residents receive.

2. City Clerk

The City Clerk provides an essential link between citizens and their local governing body. The City Clerk issues licenses and permits, conducts City of Mequon elections, maintains papers and records of the City, attends all Common Council meetings, and keeps records of the proceedings.

Primary Business Technologies:

- Microsoft Office 365, WisVote, Accela, and Tyler MUNIS

Gaps:

- The City currently administers a version of the Legislative Management solution, Granicus (Accela), within their office. Based on feedback provided by the City Clerk's Office, staff was not adequately trained by the vendor or the IT Division upon implementation and as a result are unable to harness the full functionality of Granicus.

- The City currently receives, reviews, and grants business licenses without the use of a system. This results in the process being largely paper based and requires staff to house all information related to business licenses within an Excel spreadsheet.

Vision:

- The City Clerk's Office envisions providing an increasingly positive experience for citizens and City staff through the introduction of more sophisticated systems that would drastically impact the Office's processes.
  - The City Clerk's Office envisions utilizing a system that would allow them to retain records electronically instead of using paper and utilizing a digital tracking system for licensing.
  - The City Clerk's Office wants to see an enhanced partnership with the IT Division through more precise inventory management processes.
  - The City Clerk's Office recognizes the need to scan and digitize the City's abundant hard-copy documents.
  - The Department also envisions the process for obtaining liquor, tobacco, and other various licenses by citizens and business owners to be completed online.
  - The City Clerk's Office envisions the implementation of an electronic document signature system.

3. Community Development

The Community Development Department has two divisions, Inspections and Planning. The Inspections Division provides inspection services for all construction and alteration projects within the City to ensure compliance with Federal, State, and local codes, ordinances, and requirements. The Planning Division is responsible for policy analysis, long-range planning, current development review, zoning code administration, economic development, landmarks administration, zoning code enforcement, the City's geographic information system (GIS), census/demographic coordination, and general information processing relative to development and redevelopment within the community.

Primary Business Technologies:

- Microsoft Office 365, Black Bear, Esri GIS, and Accela

Gaps:

- The Community Development Department is using the land management system (Black Bear) for inspections. This solution, which the vendor is no longer supporting, is not optimal for Community Development as the inspectors must create their notes manually in the field then subsequently enter their notes into "Black Bear," creating the potential for critical data loss.

- The Community Development Department currently has data being housed within multiple databases (Assessor of Personal Property, Assessor Real Property, Black Bear, and MUNIS Utility Billing) that are not integrated. The absence of an integrated interface or data warehouse creates a cumbersome and time-consuming process for departments such as Community Development.

For example, Community Development creates a Parcel ID in "Black Bear," then Utility Billing must enter that address into their system, and shortly after, the property must also be entered into the Assessor's database.

- The current workflow for issuing building permits within the Community Development Department is challenging to manage and requires an abundance of printing and scanning efforts from different stakeholder resources throughout the process. The resulting bottleneck creates a significant inefficiency in managing the permitting lifecycle due to a lack of automation within an optimized enterprise land management system. The current process also causes frequent delays for customers attempting to obtain permits.

- The Community Development Department's current process for backing up their permitting information consists of documenting permit numbers and summaries on index cards and filing them within an index card cabinet. The storing of critical Community Development data in hard copy format is at risk of data loss in the event of a disaster.

Vision:

- The Community Development Department envisions improving the tools used within the Department to empower staff performing inspections and processing permits, ultimately optimizing the customer experience with the citizens of Mequon.
    - Community Development envisions a department where their enterprise business systems are integrated and the data, currently housed in Black Bear, is accurate.
    - Community Development would also like for their inspectors to be utilizing a system where they can scribe and input their notes into the system through mobile devices while in the field.
    - The Department would like to see their future Enterprise Land Management system work in conjunction with their geospatial mapping system to maximize efficiency during the scheduling process.
    - The Department recognizes the value of tracking their progress within a Land Management system to easily track the various stages of the inspection process.
    - The Department would also like to see the implementation of a Citizen Access Portal where the development community can apply for permits electronically, including paying fees, sharing plans, and managing projects electronically online.
    - The Department also envisions a substantial reduction of the need for hard-copy paper by implementing enterprise systems that will eliminate the need to store hard-copy documents.

- The Community Development Department envisions an improved system within the IT Division for hardware replacement through a formal inventory system.

4. Finance

The Finance Department processes all account transactions and is responsible for all year-end account procedures. Finance also oversees the Assessor's Office and assists the Human Resources Division with the administration of the payroll system. Additionally, Finance collects and processes City revenues.

Primary Business Technologies:

- Microsoft Office 365, Tyler MUNIS, Adobe, ExecuTime, Point & Pay, and Govolution

Gaps:

- The City's process for billing customers is a manual, paper-based effort. Various departments furnish the hard-copy bill, along with supporting documentation, and deliver it to Finance, who then enters the information into Tyler MUNIS and mails the bill to its appropriate recipient.

Vision:

- The Finance Department envisions specific processes improved by introducing more sophisticated technology to promote improved collaboration between Finance and other City departments.
  - The Finance Department envisions a solution for processing credit card payments at City Hall to provide greater ease and flexibility to citizens/customers coming into City Hall.
  - The Finance Department also envisions providing Mequon utility customers with the ability to access their billing information through a self-service portal that offers digital enrollment.
  - The Department would benefit from increased collaboration with the City's IT Division regarding system and hardware needs.
  - The Finance Department also envisions the introduction of automation within the Accounts Payable function through secure electronic signatures.
  - The Department envisions the City utilizing a formal IT hardware replacement schedule to upgrade their point-of-sale (POS) stations and other hardware that has become outdated and no longer provides optimal functionality.
  - The Department would benefit from receiving additional training on the Tyler MUNIS system to allow Finance staff to fully utilize the product's service offerings, as well as be an additional resource for other departments and divisions that require training.

5. Fire and Emergency Medical Services

The Fire Department provides fire prevention, fire suppression, and paramedic level emergency medical services to the community. The Fire Department also reviews new construction plans and inspects all commercial, industrial, and multi-family residences each year. They utilize a tiered response system for emergency medical calls to immediately respond to medical emergencies.

Primary Business Technologies:

- Microsoft Office 365, Image Trend, Tyler MUNIS, Aladtec, IamResponding, ProPhoenix, Planit, and Esri GIS

Gaps:

- The Fire Department's current manual process for tracking time and running payroll is executed outside of ExecuTime and is inundated with hard-copy paper. The result is a misallocation of staff time dedicated to manual time entry via hard-copy paper.
- The Fire Department does not possess an optimal tool to capture performance data related to response times to calls and resource utilization. This makes it difficult for the Fire Department to make projections for necessary resource utilization should they reach a complication regarding volunteer availability versus calls received from dispatch.
- The current workflow for the Fire Inspection Process is completely paper-based and lacks electronic automation. The Fire Department does not possess a tool to track violations, backup data, or verify that inspections have been completed.
- There is currently no automated or digital process for notifying the Fire Department of new buildings, additions, or remodels. This creates delays and confusion for applicants as they await inspections. This also creates confusion for the Fire Department as they receive calls for inspections that they were never made aware of.

Vision:

- The Fire and Emergency Medical Services Department envisions utilizing IT tools to improve both the level of service and transparency for Fire operations.
  - The Department envisions an environment where they can access data within ProPhoenix as needed and create reports regarding resource utilization and response times.
  - The Fire and Emergency Medical Services Department would like for their firefighters to have email addresses with the City of Mequon to communicate with them more effectively and not have to be concerned with sharing information through non-City-owned accounts.

6. Information Technology

The Information Technology Division is responsible for maintaining all electronic data systems to ensure that all information processing is performed efficiently, accurately, and timely. Under the current structure, the IT Division is comprised of a contracted IS Coordinator, along with a part-time intern. The IT Division also contracts with an outside services provider "The Office Technology Group" to provide networking and infrastructure services, along with ISCorp to provide data backup and redundancy services. Although not housed under the IT Division, Public Safety also has a full-time IT employee, who reports directly under Police.

Primary Business Technologies:

- Microsoft Office 365, KeePass, Tyler MUNIS, Webroot (please see full inventory within the Appendix)

Gaps:

- The City's current approach to IT program management functions is more of a reactive than proactive model. This is an issue for the City because there is no IT visionary partnering with department leaders to move the organization forward strategically.

- The City does not have any formal project management occurring within its IT program related to planning, performing, and executing IT-related projects. This results in projects not meeting their desired deadlines, and in some cases, projects being abandoned altogether.

Vision:

- The Information Technology Division envisions increasing its effectiveness related to help desk tickets and IT projects and strengthening its strategic partnership with each of the City's departments.
    - The IT Division envisions utilizing a formal help desk ticketing system to track new, ongoing, and completed help desk inquiries. This will provide the Division with the ability to better communicate with the end user community throughout the life cycle of each IT service ticket. In addition, a help desk system will provide the IT Division with IT service management performance data, along with other data needed to substantiate the need for more resources in the future, if necessary.
    - The IT Division would benefit from receiving Capital Funding to fund necessary IT-related improvements, upgrades, and replacements.
    - The Division envisions a more precise delineation of responsibility amongst its resources. This would make the division more efficient in resolving tickets promptly and allow them the opportunity to strategize for the City's future initiatives.

7. Police

The Police Department is composed of 40 officers and 13 civilians that provide law enforcement services to meet the safety and emerging needs of residents and visitors to the City of Mequon. The officers are proactive in patrolling the City to prevent criminal activity, while still responding to calls for service. The Police Department has a designated IT resource on-site to manage their IT infrastructure.

Primary Business Technologies:

- Microsoft Office 365, Badger Tracks, ProQA, Aqua, WatchGuard, Dictation, Hikvision, and ProPhoenix

Gaps:

- The City is not leveraging the data backup services provided by their vendor, ISCorp, which could provide backup services for the Police Department. The data that is housed at City Hall is backed up by ISCorp and is redundant, however, the Police Department's on-premise data is not redundant.

Vision:

- The Police Department envisions the City and Public Safety having a one-team approach where Public Safety's IT resource and the City's IT resources work together collaboratively.
    - The Police Department envisions having an IT Division with increased resources to enhance its level of support and take a more proactive approach to IT service delivery.
    - The Police Department would benefit from more mobile functionality in the field for their officers.
    - The Police Department would also benefit from the backup services that are being provided for the City, also being provided to the Department, such as the Department's video data.
    - The Police Department envisions an upgrade to their network connectivity and switches.

8. Public Works

The Public Works Department is divided into multiple divisions including Fleet Services, Engineering, Highway, Public Utilities (Sewer & Water), Buildings, Parks, and Forestry. The primary responsibility of the department is to maintain the City's infrastructure throughout these 5 divisions.

Primary Business Technologies:

- Microsoft Office 365, Tyler MUNIS, Dossier Systems, Adobe Acrobat Pro, Setmore, ADP, Itron (Water Meter), TruePortal, Esri GIS, and SCADA

Gaps:

- The City's Public Works Department's current SCADA system is outdated, cannot be accessed adequately in the field, and does not offer the department the ability to perform basic functions such as being able to turn off water pumps as needed remotely. This also has the potential to result in a more significant cost to the City in the event of an emergency.
- The City's customers cannot access their water utility billing history. This creates issues for the City staff as they must take time to address payment concerns of residents as opposed to directing them to a self-service customer portal to see their billing/payment history.
- There is no enterprise system to manage work orders and inventory electronically, including workflow automation and handheld access. Divisions, such as Fleet and Buildings, spend excessive time filling out work orders manually, minimizing the time for value-added activities.
- The City does not have a Recreation and Event Management System for citizens to reserve parks and buildings. Reservations are currently being made via phone, email, and paper, and are tracked within an excel spreadsheet. This cumbersome process negatively impacts the customer service experience of Mequon's residents.
- The Sewer Division experiences connectivity issues within the station because the connection to their towers is disrupted by trees due to their height. This results in the Sewer Division experiencing downtime due to lack of connectivity.

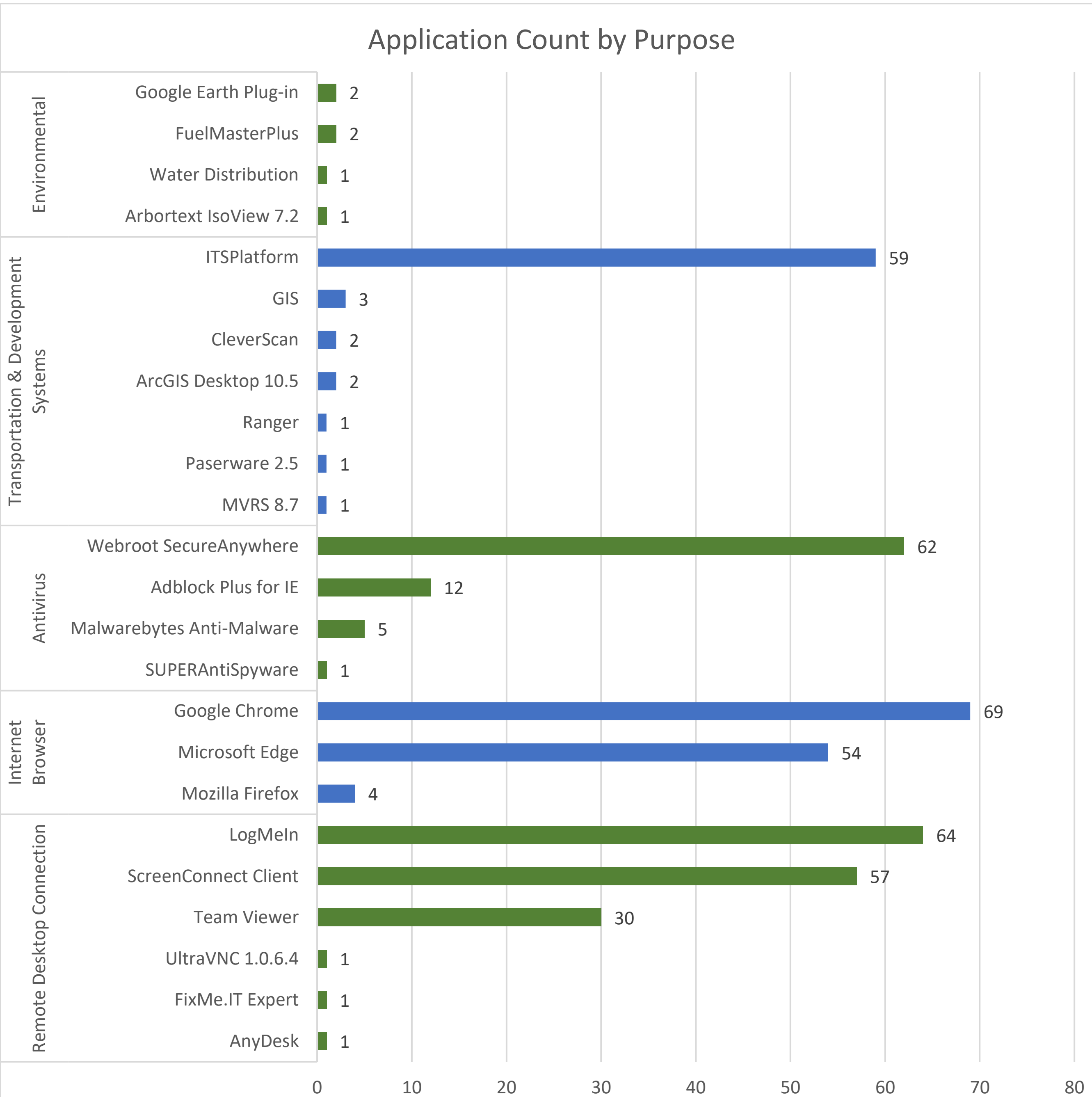
Vision:

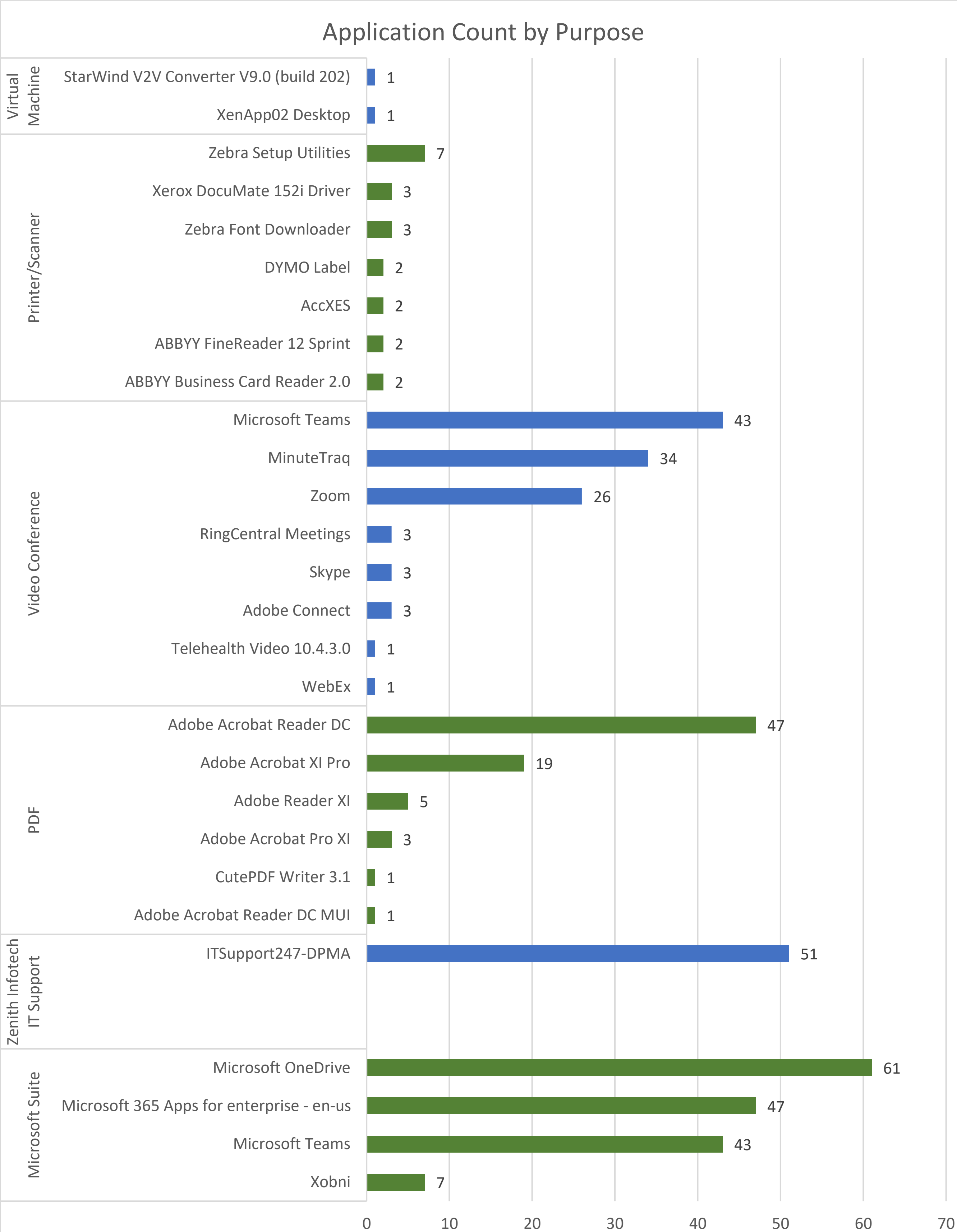
- Public Works envisions introducing more sophisticated technology to its various divisions in order to improve the efficiency of its staff's various processes and service levels to Mequon residents.
    - Public Works envisions an environment where programs are integrated so users can create reports without the need to duplicate efforts by entering the same data points into different programs.
    - Public Works would like the opportunity to provide customers/residents with their billing history through a self-service portal.
    - Public Works would benefit from having a work order management system to keep track of and manage their work orders.
    - The Department would also benefit from managing service requests that were submitted to the City's IT Division.
    - Public Works envisions an increased partnership with the City's IT Division consisting of enhanced levels of communication and strategy.

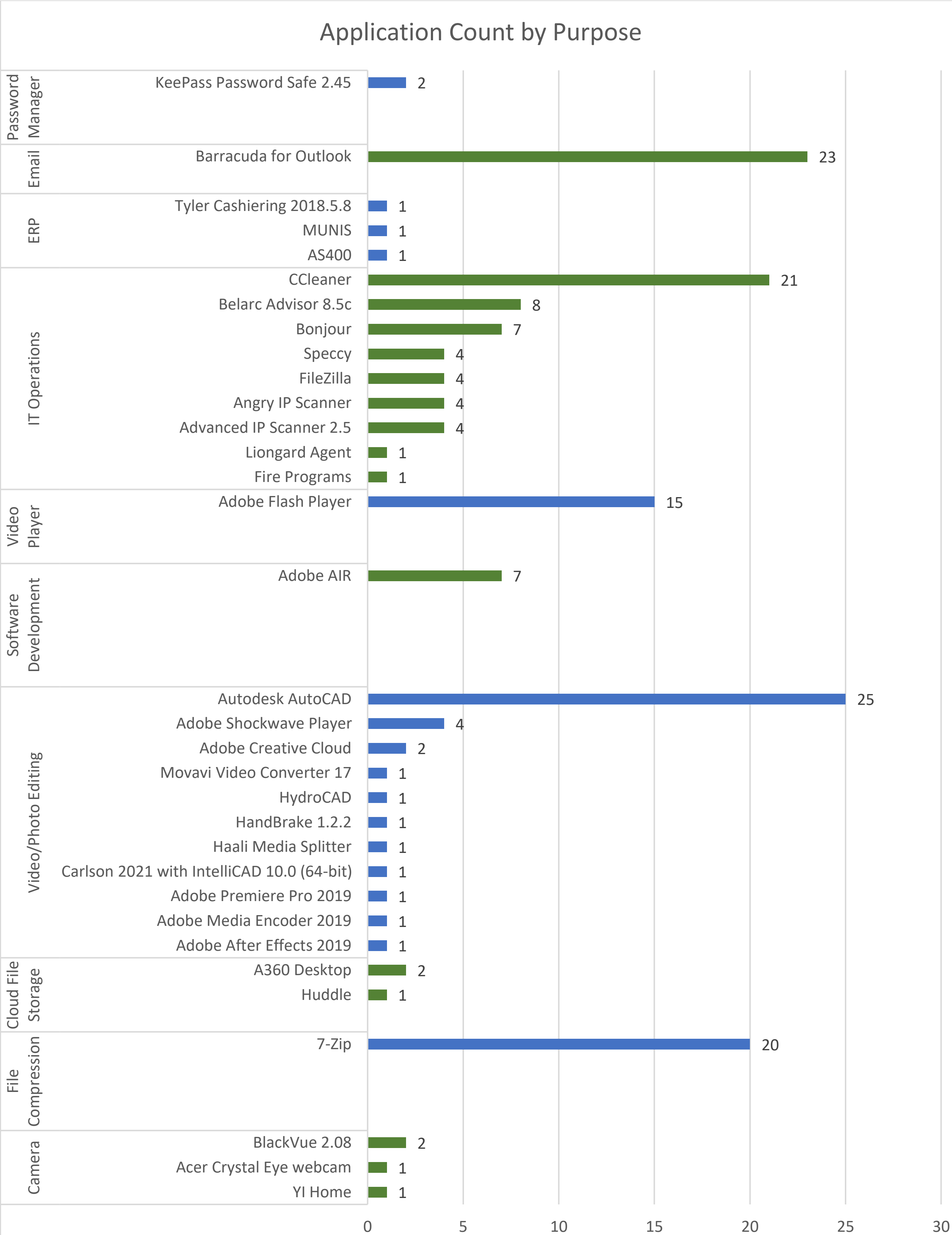
3. Comprehensive Software Inventory

Of the computers that were successfully scanned within City Hall, the following applications were discovered, which were grouped by general purpose. *Please note, this Comprehensive Software Inventory does not include web-based applications.*

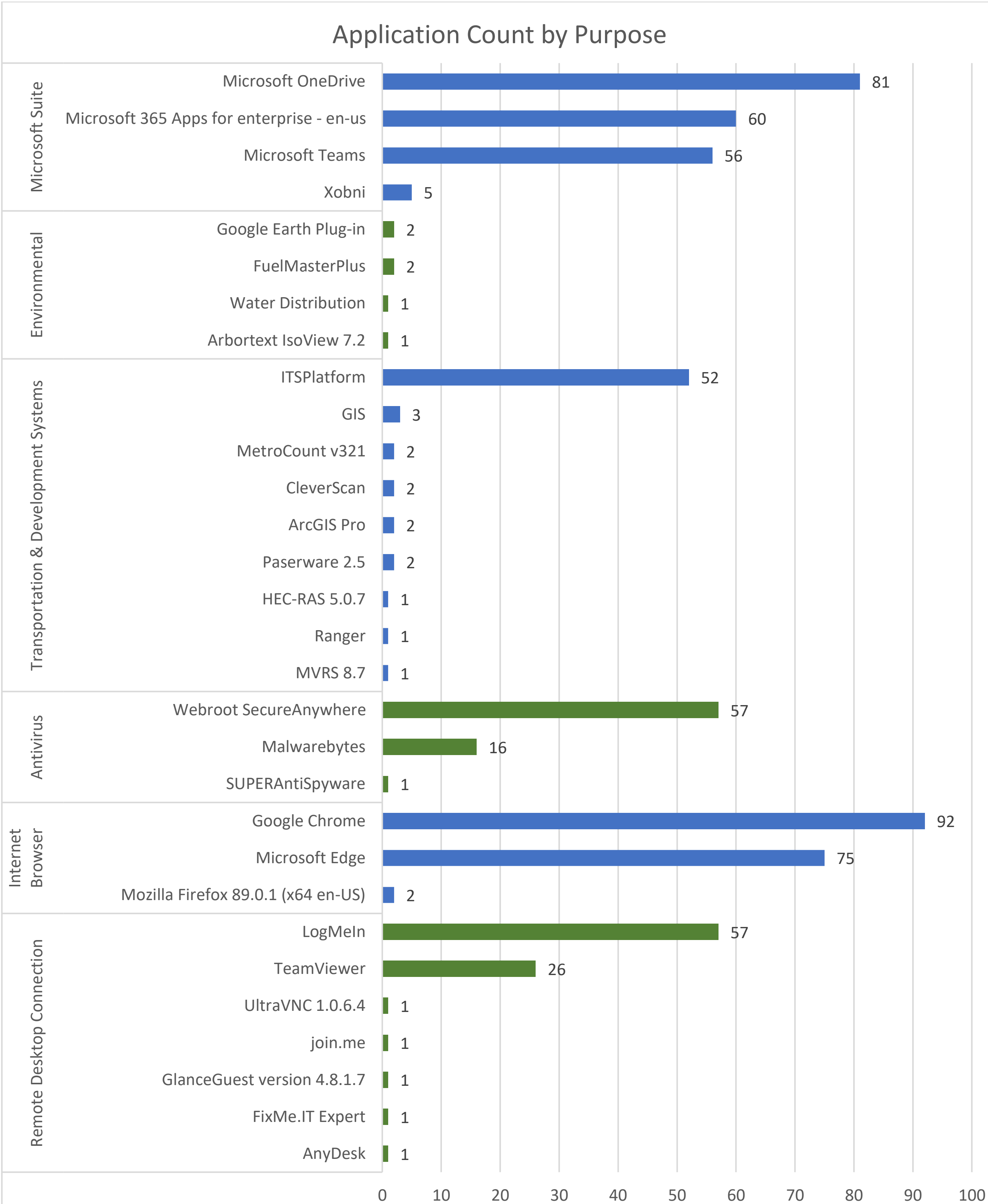
A. City Hall & Non-Public Safety Departments

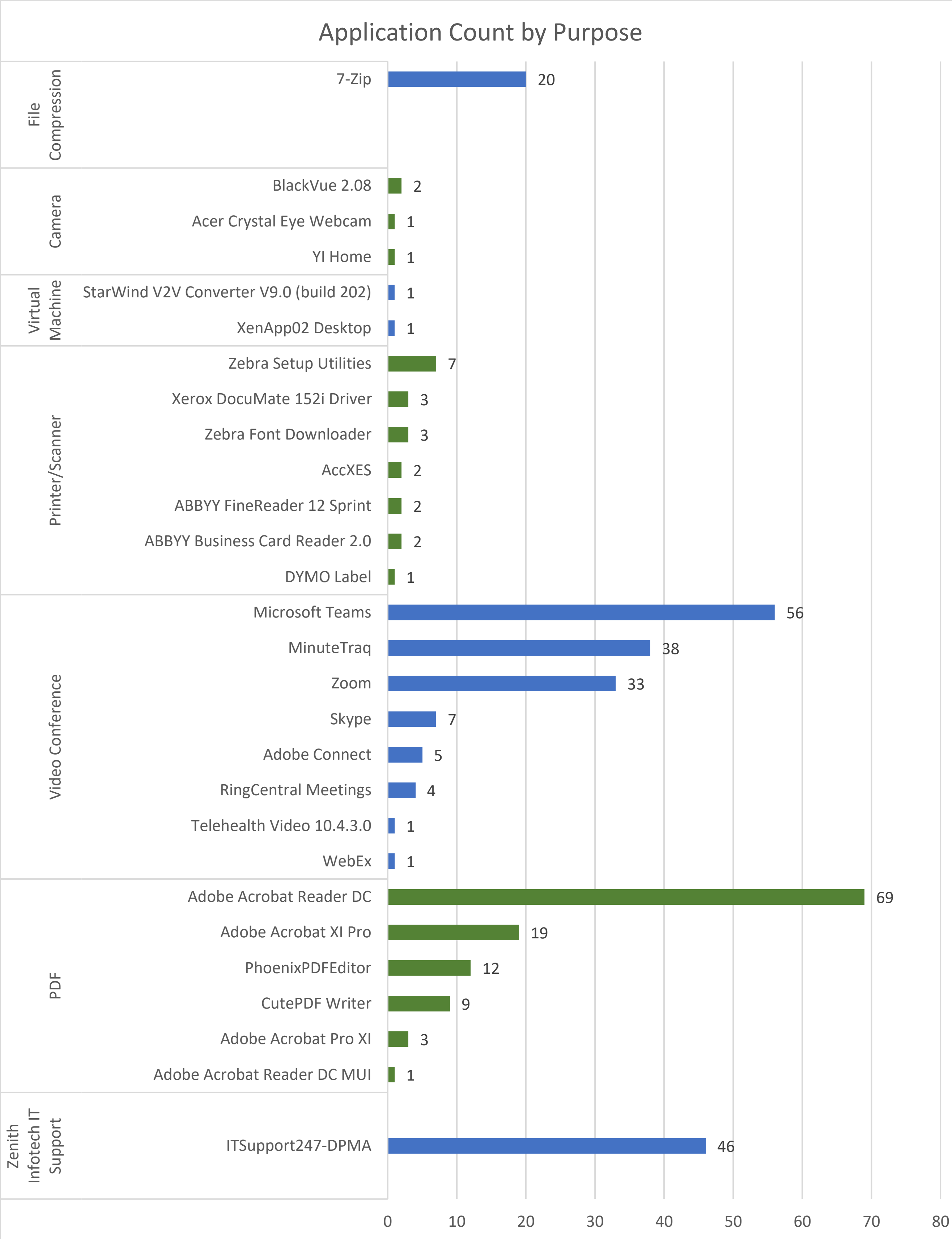


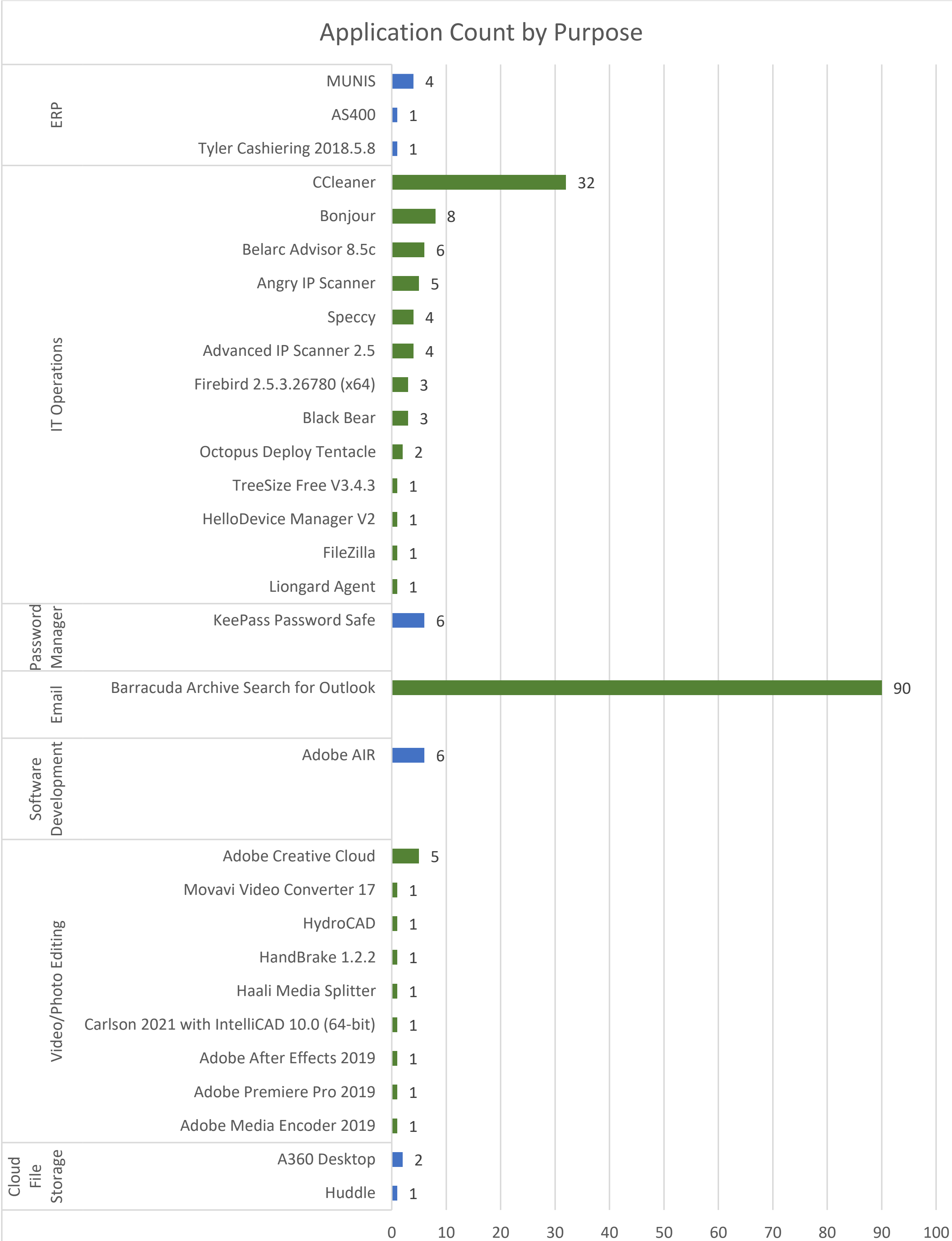

Application Count by Purpose
Virtual Machine
StarWind V2V Converter V9.0 (build 202) 1
XenApp02 Desktop 1
Printer/Scanner
Zebra Setup Utilities 7
Xerox DocuMate 152i Driver 3
Zebra Font Downloader 3
DYMO Label 2
AccXES 2
ABBYY FineReader 12 Sprint 2
ABBYY Business Card Reader 2.0 2
Video Conference
Microsoft Teams 43
MinuteTraq 34
Zoom 26
RingCentral Meetings 3
Skype 3
Adobe Connect 3
Telehealth Video 10.4.3.0 1
WebEx 1
PDF
Adobe Acrobat Reader DC 47
Adobe Acrobat XI Pro 19
Adobe Reader XI 5
Adobe Acrobat Pro XI 3
CutePDF Writer 3.1 1
Adobe Acrobat Reader DC MUI 1
Zenith Infotech IT Support
ITSupport247-DPMA 51
Microsoft Suite
Microsoft OneDrive 61
Microsoft 365 Apps for enterprise - en-us 47
Microsoft Teams 43
Xobni 7
0 10 20 30 40 50 60 70


Application Count by Purpose
Password Manager
KeePass Password Safe 2.45
2
Email
Barracuda for Outlook
23
ERP
Tyler Cashiering 2018.5.8
1
MUNIS
1
AS400
1
IT Operations
CCleaner
21
Belarc Advisor 8.5c
8
Bonjour
7
Speccy
4
FileZilla
4
Angry IP Scanner
4
Advanced IP Scanner 2.5
4
Liongard Agent
1
Fire Programs
1
Video Player
Adobe Flash Player
15
Software Development
Adobe AIR
7
Video/Photo Editing
Autodesk AutoCAD
25
Adobe Shockwave Player
4
Adobe Creative Cloud
2
Movavi Video Converter 17
1
HydroCAD
1
HandBrake 1.2.2
1
Haali Media Splitter
1
Carlson 2021 with IntelliCAD 10.0 (64-bit)
1
Adobe Premiere Pro 2019
1
Adobe Media Encoder 2019
1
Adobe After Effects 2019
1
Cloud File Storage
A360 Desktop
2
Huddle
1
File Compression
7-Zip
20
Camera
BlackVue 2.08
2
Acer Crystal Eye webcam
1
YI Home
1
0
5
10
15
20
25
30

B. Public Safety




Application Count by Purpose
File Compression
7-Zip 20
Camera
BlackVue 2.08 2
Acer Crystal Eye Webcam 1
YI Home 1
Virtual Machine
StarWind V2V Converter V9.0 (build 202) 1
XenApp02 Desktop 1
Printer/Scanner
Zebra Setup Utilities 7
Xerox DocuMate 152i Driver 3
Zebra Font Downloader 3
AccXES 2
ABBYY FineReader 12 Sprint 2
ABBYY Business Card Reader 2.0 2
DYMO Label 1
Video Conference
Microsoft Teams 56
MinuteTraq 38
Zoom 33
Skype 7
Adobe Connect 5
RingCentral Meetings 4
Telehealth Video 10.4.3.0 1
WebEx 1
PDF
Adobe Acrobat Reader DC 69
Adobe Acrobat XI Pro 19
PhoenixPDFEditor 12
CutePDF Writer 9
Adobe Acrobat Pro XI 3
Adobe Acrobat Reader DC MUI 1
Zenith Infotech IT Support
ITSupport247-DPMA 46
0
10
20
30
40
50
60
70
80

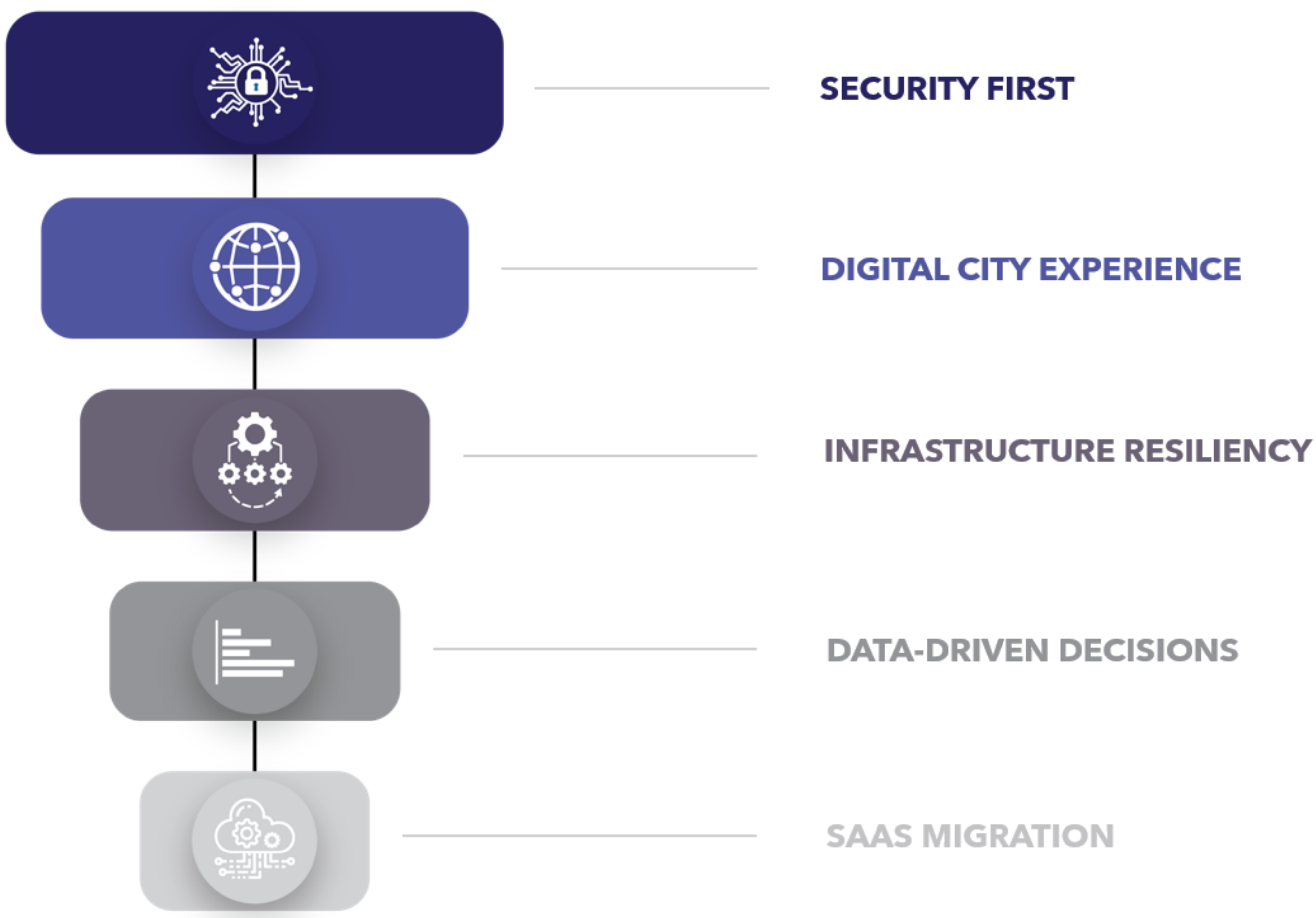

Application Count by Purpose
ERP
MUNIS 4
AS400 1
Tyler Cashiering 2018.5.8 1
IT Operations
CCleaner 32
Bonjour 8
Belarc Advisor 8.5c 6
Angry IP Scanner 5
Speccy 4
Advanced IP Scanner 2.5 4
Firebird 2.5.3.26780 (x64) 3
Black Bear 3
Octopus Deploy Tentacle 2
TreeSize Free V3.4.3 1
HelloDevice Manager V2 1
FileZilla 1
Liongard Agent 1
Password Manager
KeePass Password Safe 6
Email
Barracuda Archive Search for Outlook 90
Software Development
Adobe AIR 6
Video/Photo Editing
Adobe Creative Cloud 5
Movavi Video Converter 17 1
HydroCAD 1
HandBrake 1.2.2 1
Haali Media Splitter 1
Carlson 2021 with IntelliCAD 10.0 (64-bit) 1
Adobe After Effects 2019 1
Adobe Premiere Pro 2019 1
Adobe Media Encoder 2019 1
Cloud File Storage
A360 Desktop 2
Huddle 1
0 10 20 30 40 50 60 70 80 90 100

C. IT Strategic Roadmap

1. IT Modernization Strategies & Action Items

The IT Strategic Roadmap is comprised of five (5) overarching IT Modernization Strategies based upon industry best practices, as shown in ***Figure 3***. The proposed strategies resolve the gaps identified in Phase 2's IT Current State Assessment Draft Report. They are based on the City's priorities, business needs, and goals and consider the interests of City stakeholder groups. Further, the IT Modernization Strategies strategically identify opportunities to build operational efficiencies through integrated enterprise technology, improve access to data in real-time for informed decision-making, enhance cyber-security, and expand citizen access to City services through a digital experience.

Figure 3 – IT Modernization Strategies



2. IT Strategic Roadmap

As shown in ***Figure 4***, the ***IT Strategic Roadmap*** will guide the City of Mequon in its investments of technology resources for the next three (3) years, including strategies that address staffing and infrastructure concerns identified in the Current-State Assessment. The corresponding Action Items support the implementation of each IT Modernization Strategy for the City. Avèro Advisors has developed an IT Strategic Plan Draft Report based upon the prioritized IT Strategic Roadmap of IT Modernization Strategies, which subsequently appears in ***Section D – IT Strategic Plan***.

Figure 4[1]: IT Strategic Roadmap (Action Items)

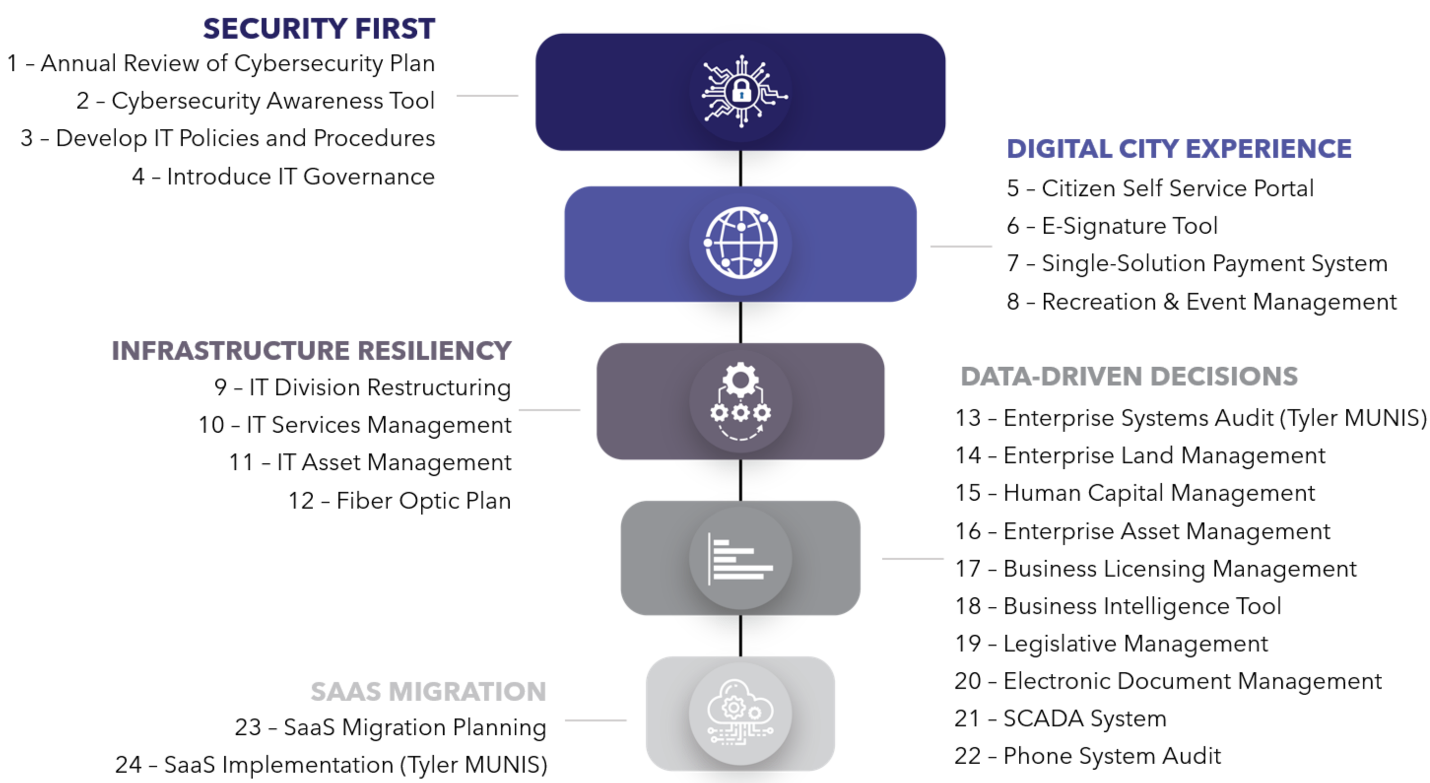
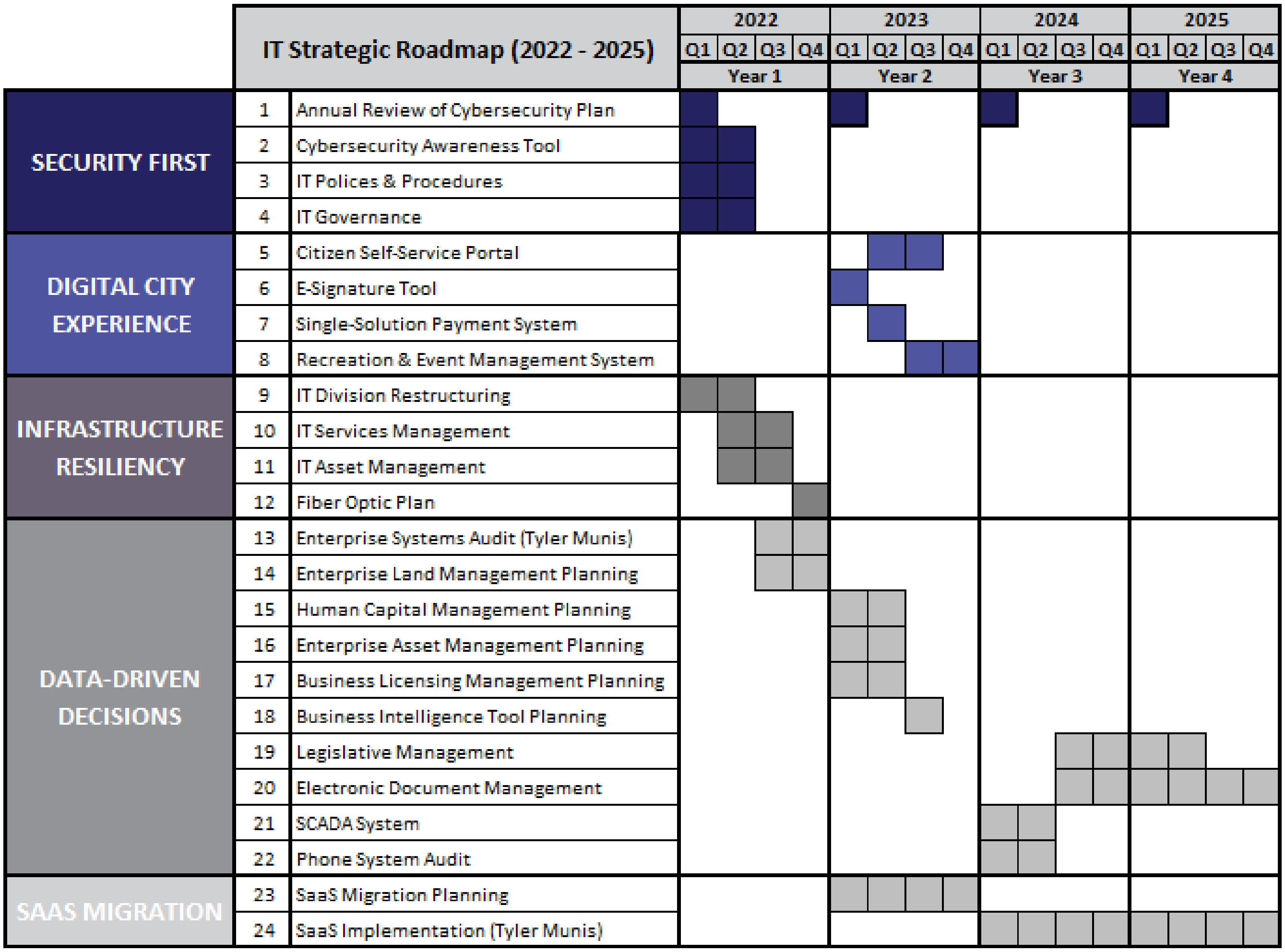


Figure 4₂: IT Strategic Roadmap (Implementation Timelines)



D. IT Strategic Plan

The IT Strategic Plan presents Avèro Advisors' proposed IT Modernization Strategies as optimally prioritized, based upon industry best practices, institutional knowledge, and the City of Mequon's input. The IT Strategic Plan will function as the City's strategic blueprint for IT Modernization over the next several years. The IT Modernization Strategies include improvements to the City's cybersecurity strategy, IT organization, and enterprise software systems.

This document includes a strategic action plan for each prioritized IT Modernization Strategy showcased in the Roadmap, as shown in ***Figure 4***. The detailed template showcases each IT Strategy, a strategic action plan for implementation, the gaps being addressed, the resources required, any prerequisites, the estimated costs for implementation, the stakeholder groups impacted, and an impact statement. ***Figure 5*** provides a legend for the IT Strategic Plan, which includes a detailed description of each line item included in the template.

Figure 5 – Legend

(#) – Name of Action Item (color indicates urgency)

Immediate (Year 1)	Short-Term (Year 2)	Long-Term (Year 3)

- **Gaps Addressed –**
  - Gaps addressed (and alleviated) by the implementation of the IT Strategy
- **Action Steps –**
  - Sequence of activities that must be executed for successful implementation of the IT Strategy.
- **Prerequisites –**
  - Action Item that requires completion prior to the implementation of the IT Strategy.
- **Stakeholders –**
  - All parties that are impacted by the implementation of the IT Strategy.
- **Resources –**
  - Personnel, materials, or other assets required for undertaking the action steps/activities defined in the Action Plan for the implementation of each IT Strategy.
- **Estimated Costs –**
  - Estimated costs associated with the implementation of the recommended IT Strategy based on industry research and institutional knowledge.
    - Please note that any costs provided are general estimates and should be clarified with vendors as the procurement process commences.
- **Estimated Timeline –**
  - Estimated timeframe associated with the implementation of the recommended IT Strategy based on industry research and institutional knowledge.
- **Impact Statement –**
  - The impact on the City of Mequon, and its staff, for following through with the implementation of the recommended IT Strategy.

1. Security First

This section aims to identify areas that need improvement and give the City of Mequon a set of recommendations and processes to resolve cybersecurity issues through short-term incremental strategies that build upon each other to achieve a sustainable, high-level cybersecurity plan. Inadequate security across City technologies could lead to costly results for the organization, its employees, and its citizens.

Recognizing the City's immediate security needs, Avèro has identified "Security First" as the initial IT Modernization Strategy to guide the City's IT planning efforts. Following the NIST's (National Institute of Standards and Technology) guidelines, this layered cybersecurity approach focuses on developing policies & processes in leadership and coordination to better prepare for a significant cyber disruption while building a robust, internal cybersecurity workforce to ensure resilience and continuity.

To help the City place "Security First," Avèro has identified the corresponding action items in terms of security aspects and best practices. These recommended action items focus on establishing an annual review process to evaluate potential vulnerabilities within the City's infrastructure, develop IT policies and procedures, introduce IT governance, and enhance internal awareness regarding cybersecurity. Implementing the proposed strategies is especially significant because failure to take adequate cybersecurity measures for prevention and protection from cyber-attacks can easily result in legal liability and public trust loss in the City. Furthermore, building a well-educated internal culture of cybersecurity best practices across the City will set clear expectations for all employees and help mold the organization into the first cyber defense line while ensuring sensitive business data confidentiality.

#1 – Annual Review of Cybersecurity Plan

- **Gaps Addressed –**
  - Maintaining an up-to-date Cybersecurity Plan, as well as refreshing items that may have naturally become outdated, is pivotal to ensuring the City's infrastructure is secure.

- **Action Steps –**
  - Review risks identified in the Cybersecurity Risk Assessment
  - Prioritize risks based on the identified vulnerabilities
  - Develop formal plan to address each of the identified risks
  - Work internally and/or with external consultant to execute recommended enhancements

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fees: **<u>$9,600</u>**

- **Estimated Timeline –**
  - Immediate – Annual – Years 1, 2, 3 (1 - 3 months)

- **Impact Statement –**
  - The absence of an annual review of an organization's cybersecurity plan can lead to antiquated policies and procedures that leave the organization vulnerable in a multitude of ways. The Cybersecurity Plan review will help to guide the City's IT Division to a proactive approach to addressing its cybersecurity concerns. The plan will also ensure the enhancement of security resiliency for the City's remote workforce infrastructure. The review will also serve to increase the City's network safety to ensure business continuity and compliance with best practices while fortifying the City network to combat opportunistic cybercrime. Essential pieces of the cybersecurity plan include the maintenance of an incident response plan, documented policies and procedures, the inclusion and application of ITIL (Information Technology Infrastructure Library) principles, and data governance policies including data accessible by staff and the protection of PII (Personal Identification Information).

#2 – Implement Awareness Tool for Enterprise Cybersecurity Training

- **Gaps Addressed –**
  - City employees do not receive formal cybersecurity training from the City's IT Division. This creates a vulnerability for the City as its users are not trained in identifying and protecting themselves from cyber threats.

- **Action Steps –**
  - Procure & Implement "KnowBe4" (https://www.knowbe4.com/)
  - Work with City staff to ensure successful utilization of the software

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultants

- **Estimated Costs –**
  - Product Cost (SaaS fees): **$2,175** (annually)
  - External Consulting Fee: **$1,280**

- **Estimated Timeline –**
  - Immediate – Year 1 (1 month)

- **Impact Statement –**
  - A Cybersecurity Awareness Training Tool contains a curriculum for City staff. Within the application, staff members are assigned to various training modules to complete. Further, the optimal Tool allows the City to assess Risk Scores based on each staff member through computer usage, history, and phishing simulation testing, resulting in a more prepared City user base over time. Many recent security breaches in the industry occurred as a direct result of employee negligence. Phishing attempts, malware, and ransomware can be costly attacks that can be avoided with proper training on a recurring basis. These attacks are enormous concerns that every organization faces and can be mitigated by developing training criteria offered by a vendor like KnowBe4.

#3 – Develop IT Policies and Procedures

- **Gaps Addressed –**
  - The City's IT Division does not have standardized policies and procedures in place regarding the systems and hardware utilized by the City's various personnel. This results in ambiguity related to technology replacement schedules, IT procurement, IT service management, and security protocols. Additionally, there is no password change policy, minimum security requirements, or two-factor authentication being enforced by the City's IT Division for City personnel and their City-owned devices and accounts. This increases the risk of compromised passwords and an attacker's chances of gaining unauthorized access to sensitive information.
  - There is no standardized process in place to onboard employees and grant them access to the systems needed to perform their duties. Not having a formal process in place has resulted in instances where new hires did not have their equipment set up or lacked access to their respective systems at the time of their initial start date.
  - The City lacks documentation, including both quick reference guides and frequently asked questions (FAQs), for commonly occurring IT issues. This results in the City's IT resources spending the same amount of time addressing the same issues that could be solved by providing one-page writeups detailing the problem's solution.

- **Action Steps –**
  - Specify IT equipment and software standards
  - Specify staff and hardware authorized for remote access
  - Establish ramifications of non-adherence to policies
  - Publicize policies across City
  - Obtain end-user signatures on new policies as a form of acceptance
  - Continue to maintain and update artifacts as the City implements new enterprise systems

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - Senior Executive Management team
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **$12,000**

- **Estimated Timeline –**
  - Immediate – Year 1 (3 – 6 months)

- **Impact Statement –**
  - Approaches to computer usage, remote access, internet access, IT equipment procurement, IT service management (including service cataloging), 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 related to enforcement and expenditures on inappropriate use of IT infrastructure.

#4 – Introduce IT Governance

- **Gaps Addressed –**
  - There is an absence of IT strategy within the City's IT Division's approach to serving the organization's future technology needs. The result is departments spending time researching systems, hardware, and applications to resolve their technical issues instead of relying on subject matter experts to keep them apprised of new market offerings. This exacerbates the challenge of departments inadvertently expanding the existing silos of data and resources.

- **Action Steps –**
  - Develop an IT Governance framework as a process for making IT investments and decisions
  - Establish an IT Steering Committee for prioritizing investments and decisions
  - Establish selection criteria for becoming an IT Steering Committee Member
  - Determine meeting schedule for reviewing IT Program
  - Train primary stakeholders on the IT Governance process

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultant
  - Senior Executive Management team

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **$4,950**

- **Estimated Timeline –**
  - Immediate – Year 1 (2 months)

- **Impact Statement –**
  - Introducing IT Governance will ensure that the City of Mequon has a formal framework in place for evaluating and prioritizing IT investments. IT Governance will consider each IT investment as a business case, including feasibility, how the investment creates value (and Return on Investment) to the Department, and to the City as an organization, including stakeholder impact. Creating an IT Steering Committee will provide stakeholder groups with the representation needed to ensure that IT decisions are made in the strategic interest of the City's IT, on a macro scale, and not just on a departmental level.

2. Digital City Experience

Traditionally, government services at the City of Mequon have been delivered by individual departments utilizing manual-driven, paper-based processes. In general, the approach to providing City services to the Mequon community is not broken but has ample opportunity for improvement. Often, these inefficiencies spill over to create bottlenecks and affect service delivery to citizens and other key external stakeholders. The City of Mequon's current delivery model for citizens to access many City services requires an "in-person" visit to City Hall. The City wishes to leverage technology to provide City citizens with an enhanced "Digital City Experience." Going forward, the City Administration envisions providing Mequon citizens with a full-service, digital environment, allowing citizens to conduct business with the City from the comfort of their residences, with the same consumer conveniences they experience in their personal lives. This modernization effort would include the ability for citizens to access their water usage history through a customer self-service portal. The City also desires to provide a portal that will allow citizens to submit permitting information and payments online without delivering them to the City physically. Part of the City's effort to create a Digital City Experience also includes using electronic signature tools to efficiently sign and approve documents without the inconvenience of having to print documents, scan them back to their environment, and then share them with the appropriate recipient. Additionally, the City of Mequon will enhance the citizen experience by implementing a Recreation & Event Management System that will enable citizens to schedule reservations for parks or facilities with the press of a button. The overall goal of the Digital City Experience effort is to create more visibility and customer satisfaction.

DIGITAL CITY EXPERIENCE

5 – Citizen Self Service Portal
6 – E-Signature Tool
7 – Single-Solution Payment System
8 – Recreation & Event Management System

#5 – Conduct Needs Assessment for Citizen/City Engagement through Self-Service Portal

- **Gaps Addressed –**
  - The City's customers cannot access their water utility billing history. This creates issues for the City staff as they must take time to address payment concerns of residents as opposed to directing them to a self-service customer portal to see their billing/payment history.
  - The City's development community is unable to apply for permits online and submit plans electronically. In addition, with the City's current hard-copy driven process, the Community Development Department is unable to communicate with applicants electronically through a portal during the lifecycle of the permit application process.

- **Action Steps –**
  - Conduct needs assessment for Citizen/City engagement
    - Community Development (Permit Submission)
    - Public Works (Water Usage & Issue Reporting)
  - Evaluate Customer Relationship Management functionality within Tyler MUNIS
  - If the functionality provided by ERP is insufficient, scan the market for available solutions
  - Ensure that the chosen solution integrates with the ERP system and other enterprise IT systems
  - Develop a plan and timeline to implement the solution
  - Communicate the plan to all relevant department directors
  - Procure and implement selected solution
  - Integrate customer database and portal with City Web site

- **Prerequisites –**
  - IT Governance
  - Complete Audit of Tyler MUNIS Modules

- **Stakeholders –**
  - All City Staff
  - Citizens

- **Resources –**
  - IT Division
  - Administration Department
  - External Consultant

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **TBD**
  - Software: **$1,622** annually

- **Estimated Timeline**
  - Short-term – Year 1 (6 months)

Attachment: IT Strategic Plan Report (6583 : ITSP Presentation)

- **Impact Statement –**
  - A single Customer Portal, integrated with the City's website, and enterprise software systems, will create a "Digital City Experience" by allowing City customers to login and access various City services, including making payments, customer billing history and conducting transactions seamlessly. In addition, and with the implementation of an Enterprise Land Management system, customers will be able to apply for permits and submit plan electronically through the Citizen Access Portal remotely

#6 – Implement an E-Signature tool

- **Gaps Addressed –**
  - The City's process for billing customers is a manual, paper-based effort. Various departments furnish the hard-copy bill, along with supporting documentation, and deliver it to Finance, who then enters the information into Tyler MUNIS and mails the bill to its appropriate recipient.
  - The City does not have a standardized process for signing documents electronically. This results in wasted time and resources as staff must print, sign, and scan documents that require signatures. For example, when a new policy is introduced and distributed to City staff, they are required to print the policy, sign the document in ink, and return to Administration.
- **Action Steps –**
  - Assess current needs regarding Electronic Signatures across the Mequon organization
  - Identify processes to be evaluated for integration with an Electronic Signature tool
  - Develop Requirements Traceability Matrix of the City's business, technical, and functional requirements as well as needs related to legal compliance
  - Procure & Implement "DocuSign – Electronic Signature"
    - (https://www.docusign.com/products/electronic-signature)
  - Select the appropriate option and implement optimal eSignature solutions
  - Work with City staff to ensure successful utilization of the software
- **Prerequisites –**
  - None
- **Stakeholders –**
  - All City Staff
- **Resources –**
  - IT Division
  - External Consultant
- **Estimated Costs –**
  - Software: **<u>$500</u>** annually (per blocks of 5 users)
  - External Consulting Fee: **<u>TBD</u>**
  - Implementation: **TBD**
- **Estimated Timeline –**
  - Short-term – Year 1 (3 months)
- **Impact Statement –**
  - The introduction of a secure Electronic Signature tool will provide great value to the City in regards to cost-saving and time-saving. The E-Signature tool will relieve staff from having to print documents, sign in ink, and scan when a document requires a signature. This will drastically reduce the amount of hard-copy paper files stored at the City and will assist the City in refining their processes to become paperless.

#7 – Establish a Centralized Single-Solution Payment Processing System

- **Gaps Addressed –**
  - The City is currently unable to process credit card payments at City Hall. Having a point-of-sale system for credit/debit card transactions could enhance the customer service experience of residents interacting with City Hall.

- **Action Steps –**
  - Discuss deployment of Tyler Cashiering with Tyler Technology account representative
  - Initiate evaluation of the product
  - Conduct contract negotiations
  - Begin implementation of new module

- **Prerequisites –**
  - Complete Audit of Tyler MUNIS Modules

- **Stakeholders –**
  - Administration
  - Finance
  - City Clerk's Office
  - All City citizens/customers
  - Community Development

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Product Cost (SaaS fees): **<u>$2,333</u>** (annually)
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Short-term – Year 1 (3 months)

- **Impact Statement –**
  - The implementation of a single solution payment processing system (Tyler Cashiering) will provide the City with a fully integrated online payment process and eliminate double entry and ensure PCI compliance. Additionally, the online payment gateway will allow for the security of housing all payment data in a single repository across all City departments. The new ancillary payment processing system to Tyler MUNIS will also offer Mequon citizens the convenience of online payment services in a secure manner, while integrating seamlessly with the City's financial management system.

#8 – Implement a Recreation and Event Management System

- **Gaps Addressed –**
  - The City does not have a Recreation and Event Management System for citizens to reserve parks and buildings. Reservations are currently being made via phone, email, and paper, and are tracked within an excel spreadsheet. This cumbersome process negatively impacts the customer service experience of Mequon's residents.

- **Action Steps –**

Business Process Analysis / Requirement Definition

- Develop Business Process Inventory
- Review Current State ("As-Is") Documentation
- Develop "As-Is" Business Process Model & Notation Process Maps
- Conduct Future State ("To-Be") Visioning
- Develop "To-Be" Business Process Model & Notation Process Maps
- Develop Requirements Traceability Matrix

Vendor Evaluation

- Develop Request For Proposal (RFP) Document
- Analyze Vendor Proposals
- Develop Vendor Short-List
- Facilitate System Demonstrations
- Conduct Reference Calls
- Recommend Optimal Vendor

System Implementation

- Pre-Implementation Planning
- System Configuration, Integration, Testing
- User Acceptance Testing
- End User Training
- Go-Live / Post-Go-Live Support

- **Prerequisites –**
  - None

- **Stakeholders –**
  - Parks & Recreation
  - Citizens

- **Resources –**
  - IT Division
  - External Consultants

- **Estimated Costs –**
  - Product Cost: **<u>$4,000 – $6,000</u>** annual
  - Staff Time
  - External Consulting Fees: **TBD**

- **Estimated Timeline –**
  - Immediate – Year 1 (6 months)

- **Impact Statement –**
  - An optimized Recreation and Events Management solution for Parks will enhance customer satisfaction for the process of citizens making reservations for various events and allow Parks staff to better manage the reservation process. The optimized solution will allow citizens to easily access their desired event through their mobile device. The system will also provide City staff with greater visibility and organization as it relates to staying current on what events are scheduled and at what time and date.

3. Infrastructure Resiliency

The City of Mequon's mission moving forward is to strive for "Infrastructure Resiliency" in the ability to reduce the magnitude and duration of disruptive IT-related events. The effectiveness of a resilient infrastructure or enterprise depends upon its ability to anticipate, absorb, adapt to, and rapidly recover from a potentially disruptive event. The City of Mequon currently lacks an IT Asset Management tracking solution, a formal IT Services Management solution, and an actionable Fiber-Optic network plan. Additionally, the City's IT Division's current structure and the lack of clear delineation of responsibility amongst its resources have resulted in spotty execution of IT projects and delays in infrastructure enhancements.

Through the implementation of the proposed Action Items, including the restructuring of the City's IT Division, the development of an IT Asset Management solution, a fiber-optic network evaluation, and the addition of a formal help desk ticketing system, the City will improve its level of Infrastructure Resiliency over time. Additionally, these projects will positively impact the City's network, which will aid the City in providing services to the broader Mequon community.

#9 – Restructure IT Division, Including Staffing and Reporting Structure

- **Gaps Addressed –**
  - The City's current approach to IT program management is more of a reactive than proactive model. This is an issue for the City because there is no IT visionary partnering with department leaders to move the organization forward strategically.
  - The City does not have any formal project management occurring within its IT program related to planning, performing, and executing IT-related projects. This results in projects not meeting their desired deadlines, and in some cases, projects being abandoned altogether.
- **Action Steps –**
  - Establish an IT Leadership position and hire an IT Manager (F/T)
  - Determine appropriate support positions (including Cybersecurity Officer or designee)
    - City Government
    - Public Safety
    - IT Service Management/Help Desk
  - Develop an organizational chart, job descriptions (scope, skills, etc.), and determine reporting structure
- **Prerequisites –**
  - None
- **Stakeholders –**
  - All City Staff
- **Resources –**
  - IT Division
  - Senior Executive Management team
  - External Consultants
- **Estimated Costs –**
  - Staff Time
  - External Consulting Fees: **TBD**
- **Estimated Timeline –**
  - Immediate – Year 1 (6 months)
- **Impact Statement –**
  - It is imperative that the City positions the IT Division for success by making necessary changes to the existing reporting structure to properly prepare for the recruitment of a new or internal hiring of an IT Leader. Having a formal IT Leader will allow the IT Division to operate more strategically and will allow the division to take a proactive approach to IT service delivery. The restructuring effort will enable the City to refine the IT Division's positions and job descriptions to ensure that the scope of each role accurately reflects what is realistically required. Roles across both the City Government and Public Safety organizations will be developed based upon business needs and industry best practices.

#10 – Implement an Optimized Solution for IT Services Management

- **Gaps Addressed –**
  - City Hall, the Public Works Facility, and the City's two (2) Public Safety facilities currently are not utilizing a formal IT service ticketing system to manage service requests made by various technology users. This results in confusion and inefficiency related to tracking, prioritization, and overall management of ticket statuses and understanding the IT Division's workload as the current process is performed through email communications.
- **Action Steps –**
  - Assess current needs regarding IT Services (HelpDesk) Management
  - Select the appropriate option ("Fresh Desk") and implement optimal module(s)
  - Set up, test, and launch
  - Work with City staff to ensure successful utilization of the software
- **Prerequisites –**
  - None
- **Stakeholders –**
  - All City Staff
- **Resources –**
  - IT Division
  - External Consultants
- **Estimated Costs –**
  - Product cost:
    - Software: **$2,500** annually
  - External Consulting Fee: **TBD**
  - Implementation: **$5,000** (may qualify for waiver/discount by vendor for full implementation)
- **Estimated Timeline –**
  - Immediate – Year 1 (6 months)
- **Impact Statement –**
  - An optimized solution for IT Services Management will enhance the IT HelpDesk Management process and allow the IT Division to enhance overall service delivery to the City of Mequon's staff. The optimized ITSM system will also allow the IT Division to appropriately identify points of flexibility and adaptability within the services they provide and ensure IT resources are aligned with business requirements. This also ensures that IT service requests are handled efficiently and effectively to keep the organization running optimally. Additionally, data analysis and trend analysis of completed tickets will result in proactive helpdesk management over time.

#11 – Implement a Systems Management Tool for Asset Management

- **Gaps Addressed –**
  - The absence of an inventory management system within the City's IT Division leads to inefficiency in maintaining updated records of the City's IT equipment. This makes it difficult to track and manage the useful lifecycle of IT equipment resulting in reactive hardware replacement due to malfunctions from prolonged use instead of planned replacement through managed IT procurement.

- **Action Steps –**
  - Obtain quotes from software vendors for an asset management tool
  - Select the appropriate option and install the software
  - Setup integrations, test, and launch

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Product Cost: **$500** annually
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Immediate – Year 1 (6 months)

- **Impact Statement –**
  - Implementing an IT Asset Management (ITAM) Tool will allow the IT Division to efficiently track, control, and maintain the City's IT assets (e.g., hardware & software). The ITAM Tool will track assets in real-time, including but not limited to, the asset's useful lifecycle, software installed on the asset, and the management of unused assets like hardware or licenses. Ultimately, the ITAM tool will provide the IT Division with an efficient process to track current assets, asset costs, and provide the necessary data to make well-informed technology purchases in the future.

#12 – Assess Current Fiber Optic Network Plan

- **Gaps Addressed –**
  - The Sewer Division experiences connectivity issues within their location of operations because the connection to their towers is disrupted by trees due to their height. This results in the Sewer Division experiencing downtime due to lack of connectivity.

- **Action Steps –**
  - Identify existing fiber optic assets
  - Determine connectivity requirements between City locations
  - Develop short and long term fiber optic network deployment goals

- **Prerequisites –**
  - None

- **Stakeholders –**
  - Public Works – Sewer Division
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Immediate – Year 2 (3 months)

- **Impact Statement –**
  - Performing an assessment of the City's current fiber program has the potential to provide significant positive economic development benefits to the City, enhance competition, reduce costs, improve telecommunications and internet services for the business community, and potentially offer high-speed internet access at reduced rates to residents. The assessment of the Fiber Optic Network Plan will commence the planning efforts around the establishment of a fiber optic network as a City asset and will enable increased internet speeds at locations within Mequon that currently have deficient internet connectivity (i.e., Sewer Division).

4. Data-Driven Decisions

As the digital world is in a constant state of flux, organizations like the City of Mequon need to leverage data for more informed, real-time decision-making across the organization. Modernized enterprise software systems offer workflow automation for process optimization and access to data in real-time. Advancements in business intelligence technologies provide executives with dashboarding tools for data visualization of key performance indicators tracked by businesses to assess various aspects of performance while generating actionable insights through scenario planning. The City currently struggles to leverage its unstructured information and documents using available technological resources and processes. Inadequate technological tools and lack of integration between enterprise systems leads to cumbersome paper-based processes and prevents City employees from communicating, storing, analyzing, and managing data across the organization effectively to better serve the community.

Avèro Advisors has developed the corresponding Action Items to help the City of Mequon mitigate current gaps and achieve its business objectives to enhance data-driven decision-making by harnessing the functional capacity of modern enterprise technologies. These proposed activities offer guidance on driving and improving enterprise content and business process management to help reduce operational costs, streamline processes, and further enhance service delivery through a technology modernization approach. The ability to make “Data-Driven Decisions” can substantially impact the City creating greater clarity and transparency through the utilization of sophisticated data analysis tools.

DATA-DRIVEN DECISIONS

13 – Enterprise Systems Audit (Tyler MUNIS)
14 – Enterprise Land Management
15 – Human Capital Management
16 – Enterprise Asset Management
17 – Business Licensing Management
18 – Business Intelligence Tool
19 – Legislative Management
20 – Electronic Document Management
21 – SCADA System
22 – Phone System Audit

#13 – Perform Enterprise Systems Audit of Tyler MUNIS Modules and Functionality

- **Gaps Addressed –**
  - The City is issuing payments to Tyler Technologies for modules that the City's departments are not currently utilizing. This results in unnecessary spending and payments for unused modules. Additionally, there are modules that were previously under implementation that were not successfully completed.
  - The Fire Department's current manual process for tracking time and running payroll is executed outside of ExecuTime and is inundated with hard-copy paper. The result is a misallocation of staff time dedicated to manual time entry via hard-copy paper.

- **Action Steps –**
  - Perform Systems Audit
    - Document System Functionality
    - Develop Systems Audit Matrix
    - Develop Systems Audit Report

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - City Staff
  - External Consultants

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Immediate – Year 1 (6 months)

- **Impact Statement –**
  - Completing a Systems Audit of the functionality of the existing modules of Tyler MUNIS will enable the City to understand which modules are currently being used, and which workflows are not automated, and require optimization. This will be a first step in determining the need for Tyler MUNIS' various modules as it relates to all departments within the organization.

#14 – Enterprise Land Management System Planning

- **Gaps Addressed –**
  - The Community Development Department is using an obsolete land management system (Black Bear) for inspections. This solution, which the vendor is no longer supporting, is not optimal for Community Development as the inspectors must create their notes manually in the field and then subsequently enter their notes into "Black Bear," creating the potential for critical data loss.
  - The Community Development Department currently has data being housed within multiple databases (Assessor of Personal Property, Assessor Real Property, Black Bear, and MUNIS Utility Billing) that are not integrated. The absence of an integrated interface or data warehouse creates a cumbersome and time-consuming process for departments such as Community Development. For example, Community Development staff creates a Parcel ID in "Black Bear," then Utility Billing must enter that address into the system, and shortly after, the property must also be entered into the Assessor's database.
  - The current workflow for issuing building permits within the Community Development Department is challenging to manage and requires an abundance of printing and scanning efforts from different stakeholder resources throughout the process. The resulting bottleneck creates a significant inefficiency in managing the permitting lifecycle due to a lack of automation within an optimized enterprise land management system. The current process also causes frequent delays for customers attempting to obtain permits.
  - The Community Development Department's current process for backing up their permitting information consists of documenting permit numbers and summaries on index cards and filing them within an index card cabinet. The storing of critical Community Development data in hard copy format is at risk of data loss in the event of a disaster.
  - The current workflow for the Fire Department's Inspection Process is completely paper-based and lacks electronic automation. The Fire Department does not possess a tool to track violations, backup data, or verify that inspections have been completed.
  - There is currently no automated or digital process for notifying the Fire Department of new buildings, additions, or remodels. This creates delays and confusion for applicants as they await inspections. This also creates confusion for the Fire Department as they receive calls for inspections that they were never made aware of.

- **Action Steps –**

  1) **Business Process Analysis / Requirement Definition (Year 1)**
     - Develop Business Process Inventory
     - Review Current State ("As-Is") Documentation
     - Develop "As-Is" Business Process Model & Notation Process Maps
     - Conduct Future State ("To-Be") Visioning
     - Develop "To-Be" Business Process Model & Notation Process Maps
     - Develop Requirements Traceability Matrix

2) **System Implementation (Year 3)**
   - Pre-Implementation Planning

- **Prerequisites –**
  - IT Governance
  - Complete Audit of Tyler MUNIS Modules
- **Stakeholders –**
  - All City Staff
  - Citizens
- **Resources –**
  - IT Division
  - Senior Executive Management team
  - External Consultants
  - Community Development
- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **TBD**
- **Estimated Timeline –**
  - Short-term – Year 1 (6 Months)
- **Impact Statement –**
  - Enterprise Land Management system planning will include an analysis of Community Development's various processes (Planning, Zoning, Permitting, Code Enforcement, Engineering, Inspections) to capture any existing bottlenecks (e.g., paper-based workflows, lack of functionality & data transparency). The analysis will also focus on developing optimized future state workflows based on IT modernization best practices and identifying system requirements and functionality to mitigate gaps and meet current & future Community Development-related needs.
  - Enterprise Land Management (ELM) System (Tyler EnerGov) will provide the City's Community Development division with the ability to use information technology as a strategic tool to provide improved levels of customer service related to:
    - Streamline business processes through automation across the lifecycle of a building, including permits, inspections, new construction, occupancy, renovations, and demolition
    - Integrate with GIS data layers for lifecycle management of a building
    - Provide a central location for critical data related to the Community Development Department
    - Creation of project dashboards (assignments, due dates, activity)
    - Provide mobile system access for field staff to complete inspections
    - Provide land management performance reporting and query tools
    - Expand customer engagement capabilities with residents and the local development community

#15 – Human Capital Management Planning

- **Gaps Addressed –**

  - The City currently lacks a formal self-service portal for City staff to manage and update personal employee and benefits-related information. The absence of a Human Capital Management system, including a self-service portal, creates a challenge for the Administration Department as they must update employee information on the employee's behalf.
  - Due to the absence of a formal Human Capital Management system, employee records are currently being stored as hard-copy documents within filing cabinets. This makes accessing, updating, and adequately maintaining records difficult and time-consuming for Human Resources staff. Additionally, the management of employee records in hard copy format poses a risk of loss in the event of a disaster. However, in certain cases, compliance with state law may mandate the retention of hard copy for a specified period of time.

- **Action Steps –**

  1) **Business Process Analysis / Requirement Definition (Year 2)**
     - Develop Business Process Inventory
     - Review Current State ("As-Is") Documentation
     - Develop "As-Is" Business Process Model & Notation Process Maps
     - Conduct Future State ("To-Be") Visioning
     - Develop "To-Be" Business Process Model & Notation Process Maps
     - Develop Requirements Traceability Matrix

  2) **System Implementation (Year 3)**
     - Pre-Implementation Planning

- **Prerequisites –**

  - IT Governance
  - Complete Audit of Tyler MUNIS Modules

- **Stakeholders –**

  - All City Staff

- **Resources –**

  - IT Division
  - Administration Department
  - External Consultant

- **Estimated Costs –**

  - Staff Time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Short-term – Year 2 (6 months)

- **Impact Statement –**
  - Human Capital Management system planning will include an analysis of Human Resources' various processes (from recruitment through retirement) to capture any existing bottlenecks (e.g., paper-based workflows, lack of functionality & data transparency). The analysis will also focus on developing optimized future state workflows based on IT modernization best practices and identifying system requirements and functionality to mitigate gaps and meet current & future HR-related needs.
  - A comprehensive Human Capital Management System will enable the City of Mequon's HR division to manage Skill Development, Labor Relations, Planning & Recruitment, Safety & Health, and Employee Benefits. Time tracking software (ExecuTime) will be used by all employees of the City to report time spent on defined and undefined activities at regular intervals. Additionally, this Human Capital Management system will include modules for performance management, talent management, succession planning, and self-service.

#16 – Enterprise Asset Management System Planning

- **Gaps Addressed –**
  - There is no enterprise system to manage work orders and inventory electronically, including workflow automation and handheld field access. Divisions, such as Fleet and Buildings, spend an excessive amount of time filling out work orders and reporting, minimizing the time for value-added activities.

- **Action Steps –**

  1) **Business Process Analysis / Requirement Definition (Year 2)**
     - Develop Business Process Inventory
     - Review Current State ("As-Is") Documentation
     - Develop "As-Is" Business Process Model & Notation Process Maps
     - Conduct Future State ("To-Be") Visioning
     - Develop "To-Be" Business Process Model & Notation Process Maps
     - Develop Requirements Traceability Matrix

  2) **System Implementation (Year 3)**
     - Pre-Implementation Planning

- **Prerequisites –**
  - Complete Audit of Tyler MUNIS Modules
  - IT Governance

- **Stakeholders –**
  - Citizens
  - Public Works
  - Senior Executive Management Team
  - IT Division

- **Resources –**
  - External Consultant
  - Senior Executive Management team
  - IT Division
  - Public Works

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **TBD**

- **Estimated Timeline**
  - Short-term – Year 2 (6 months)

- **Impact Statement –**
  - Enterprise Asset Management system planning will include an analysis of various Asset Management processes (from City Fleet Asset Management to Public Works Work Order Management) to capture any existing bottlenecks (e.g., paper-based workflows, lack of functionality & data transparency). The analysis

will also focus on developing optimized future state workflows based on IT modernization best practices and identifying system requirements and functionality to mitigate gaps and meet current & future Enterprise Asset Management-related needs.

- The Implementation of an Enterprise Asset Management (EAM) System will provide the City's Public Works Department with the ability to use information technology as a strategic tool and will help to achieve the following:
  - Streamline business processes across the lifecycle of an asset
  - Establish automated workflows (i.e. electronic plan review, approvals, notifications, etc.)
  - Integrate with GIS data layers for asset management
  - Create dashboards (assignments, due dates, activity)
  - Provide a more accurate understanding of the City's inventory
  - Provide asset management performance reporting and query tools
  - Provide mobile system access for field staff

- Expand citizen engagement capabilities through the usage of Service Request Management / Citizen Relationship Management web portal

#17 – Business Licensing Planning

- **Gaps Addressed –**
  - The City currently receives, reviews, and grants business licenses without the use of a system. This results in the process being largely paper based and requires staff to house all information related to business licenses within an Excel spreadsheet.

- **Action Steps –**
  1) **Business Process Analysis / Requirement Definition (Year 2)**
     - Develop Business Process Inventory
     - Review Current State ("As-Is") Documentation
     - Develop "As-Is" Business Process Model & Notation Process Maps
     - Conduct Future State ("To-Be") Visioning
     - Develop "To-Be" Business Process Model & Notation Process Maps
     - Develop Requirements Traceability Matrix
  2) **System Implementation (Year 3)**
     - Pre-Implementation Planning

- **Prerequisites –**
  - Complete Audit of Tyler MUNIS Modules
  - IT Governance

- **Stakeholders –**
  - Citizens
  - City Clerk's Office
  - Senior Executive Management Team
  - IT Division

- **Resources –**
  - External Consultant
  - Senior Executive Management team
  - IT Division
  - City Clerk's Office

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **TBD**

- **Estimated Timeline**
  - Short-term – Year 2 (6 months)

- **Impact Statement –**
  - The Implementation of a Business Licensing tool will provide the City Clerk's Office with the ability to use IT as a strategic tool and will help to achieve the following:
    - Streamline business processes across the lifecycle of a Business License
    - Establish automated workflows (i.e. applications, approvals, notifications, etc.)
    - Create dashboards (assignments, due dates, activity)

#18 – Implement a Business Intelligence (BI) Tool

- **Gaps Addressed –**
  - The Fire Department does not possess an optimal tool to capture performance data related to response times to calls and resource utilization. This makes it difficult for the Fire Department to make projections for necessary resource utilization should they reach a complication regarding volunteer availability versus calls received from dispatch.
  - The City does not possess a centralized database for departments to house their data. This creates a lack of transparency between departments, specifically the Community Development Department, Fire Department, Police Department, City Clerk's Office, and Finance, as information is not standardized, or easily accessible, across multiple databases.

- **Action Steps –**
  - Perform detailed needs assessment for reporting needs of all stakeholders of the City
  - Evaluate reporting features within Tyler MUNIS
    - If the reports provided by Tyler MUNIS are insufficient, evaluate data needs for required reporting and dashboards
  - Determine system requirements
  - Determine Key Performance Indicators of interest
  - Create a plan to consolidate relevant data from different systems
  - Scan the market for available solutions
  - Compare the available features of the solutions with the needs of the City
  - Ensure that the chosen solution integrates with consolidated data

Vendor Evaluation
- Develop Request For Proposal (RFP) Document
- Analyze Vendor Proposals
- Develop Vendor Short-List
- Facilitate System Demonstrations
- Conduct Reference Calls
- Recommend Optimal Vendor

- Develop a plan and timeline to implement the solution
- Procure and Implement the selected solution

- **Prerequisites –**
  - Introduce IT Governance
  - Complete Tyler MUNIS Systems Audit

- **Stakeholders –**
  - Senior Executive Management team
  - IT Division
  - All City Staff

- **Resources –**
  - IT Division

- **Estimated Costs –**
  - Product Cost: **TBD**
  - Staff Time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Short-term – Year 2 (3 months)

- **Impact Statement –**
  - Once major enterprise systems are implemented and optimized, the City should invest in 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. BI solutions provide common functions such as reporting, analytics, data mining, business performance management, and benchmarking. BI solutions also provide role-based access to staff members to visualize operational data in real time and enable decision-making based on multi-dimensional data, which often ties back to Key Performance Indicators (KPIs) established by the Senior Executive Management team.

#19 – Perform Audit of Legislative Management System

- **Gaps Addressed –**
  - The City currently utilizes a version of the Legislative Management solution, Granicus (Accela), within the City Clerk's Office. The staff was not properly trained upon implementation and as a result are unable to harness the full functionality of Granicus.

- **Action Steps –**
  - Assign Project Sponsor and Project Manager
  - Develop an inventory of business processes executed as part of the Legislative Management Process
  - Perform Legislative workflow analysis to determine functional requirements
  - Provide recommendations on next steps

- **Prerequisites –**
  - None

- **Stakeholders –**
  - City Clerk's Office
  - Citizens

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Staff Time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Long-term – Year 3 (3 months)

- **Impact Statement –**
  - The audit of the City's Legislative Management system will identify if there is a need for a new system due to the system itself being antiquated, or if there is simply a need for additional training to better equip staff within the City Clerk's Office. The current system is nearing the end of its support. Implementation of a modern legislative management system will automate agenda creation, meeting management, vote recording, minutes compilation, etc. A modern legislative management system can also integrate a future video recording system that integrates meeting agendas with time-stamped video content for easy retrieval of relevant information through the City's website.

#20 – Implement a City-Wide Electronic Document Management System

- **Gaps Addressed –**
  - The City does not have a formal Electronic Document Management System to act as a centralized repository for document management. As a result, many documents are currently stored in hard copy format, and City staff cannot search for archived files independently. In some instances, files are stored electronically on workstation hard drives, outside of the central access that an EDMS would provide. This is inefficient for the City as an archival process would prevent the City from losing data, ensure that only the correct employees can access certain documents, and easily organize documents for access.

- **Action Steps –**

  1) **Business Process Analysis / Requirement Definition**
     - Develop Business Process Inventory
     - Review Current State ("As-Is") Documentation
     - Develop "As-Is" Business Process Model & Notation Process Maps
     - Conduct Future State ("To-Be") Visioning
     - Develop "To-Be" Business Process Model & Notation Process Maps
     - Develop Requirements Traceability Matrix
  2) **Vendor Evaluation**
     - Analyze Vendor Proposals
     - Develop Vendor Short-List
     - Facilitate System Demonstrations
     - Conduct Reference Calls
     - Recommend Optimal Vendor
  3) **System Implementation**
     - Pre-Implementation Planning
     - System Configuration, Integration, Testing
     - User Acceptance Testing
     - End User Training
     - Go-Live / Post-Go-Live Support

- **Prerequisites –**
  - IT Governance
  - Complete Infrastructure Upgrades

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultants

- **Estimated Costs –**
  - Product Cost: ~**<u>$250,000</u>** (3-year)
  - Staff Time
  - External Consulting Fee: **TBD** (Full Project Lifecycle)

- **Estimated Timeline –**
  - Long-term – Year 2 – 3 (18 months)

- **Impact Statement –**
  - The City's current state of operations demands that the organization maintains an abundance of hard copy documents as part of its existing document management program. The Electronic Document Management System (EDMS) will store metadata about documents as well as an audit trail of activities on the documents to enable easy search and retrieval operation. This should enable the City to reduce paper for critical business processes such as plan review, permitting, work orders, etc.

#21 – Implement New SCADA System

- **Gaps Addressed –**
  - The City's Public Works Department's current SCADA system is outdated, cannot be accessed adequately in the field, and does not offer the Department the ability to perform basic functions such as being able to turn off pumps as needed remotely. This also has the potential to result in a more significant cost to the City in the event of an emergency.
- **Action Steps –**
  - Perform detailed needs assessment on current SCADA system
  - Determine system requirements for a new SCADA system
  - Scan the market for available solutions
  - Compare the available features of the solutions with the needs of the City
  - Ensure that the chosen solution integrates with consolidated data
  - Perform cost/benefit analysis of each solution
  - Develop a plan and timeline to implement the solution
  - Procure and implement the selected SCADA solution
- **Prerequisites –**
  - None
- **Stakeholders –**
  - Public Works Staff
  - Citizens
- **Resources –**
  - IT Division
  - External Consultants
- **Estimated Costs –**
  - Product Cost: **TBD**
  - Staff Time
  - External Consulting Fee: **TBD**
- **Estimated Timeline –**
  - Long-term – Year 3 (12 months)
- **Impact Statement –**
  - The transition to an optimized SCADA system will allow staff within the Water & Sewer Utilities to remotely access information within the system. The new system will increase reliability, reduce cost, and will provide greater customer satisfaction, as staff will be able to provide critical information to citizens with greater speed and accuracy. Additionally, implementing a more modern SCADA system will ensure that the data held within the system is more secure.

#22 – Conduct Phone System Audit

- **Gaps Addressed –**
  - The City's end users did not receive adequate training during the implementation of the City's Mitel phone system in 2014. This results in the product being underutilized and dissatisfaction from the City's users. In addition, minimal documentation exists for existing enterprise software systems, and training needs are not currently being assessed regularly by the IT Division.
  - There is no Emergency Notification system in place to quickly notify employees in the event of an emergency. This has the potential to result in confusion in the case of an emergency as there is no expedient way to alert all City staff members simultaneously.

- **Action Steps –**
  - Perform Systems Audit
    - Document System Functionality
    - Develop Systems Audit Matrix
    - Develop Systems Audit Report

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - External Consultant

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Short-term – Year 2 (3 months)

- **Impact Statement –**
  - Performing an audit of the current Phone System utilized by the City will, first and foremost, identify all of the features the City is currently utilizing, across all departments, and which it is not. It is important to identify what the system is capable of doing and identify how the City is currently utilizing the system. The next step will be to implement or deploy an Emergency Notification system that will enhance safety and security at City Hall and its other various locations. When a threat is identified, the system will allow the user to send one-way messages in a mass-message or to a targeted group of people to quickly notify them of the threat. The various groups can be customized to reach certain devices in different departments at City Hall, and different buildings within the City (e.g., Public Safety Building, Public Works Facility, East Side Fire Station).

5. Software as a Service (SaaS) Migration

The days of organizations having large-scaled IT operations to maintain application infrastructure for enterprise applications that are deployed locally (On-Premise) are going by the wayside as many are migrating to a “Software as a Service” (SaaS) environment for their enterprise software systems. SaaS removes the need for an organization to install and run enterprise applications on their own infrastructure, including application servers, database servers and computers, or in their own data centers. By pushing their infrastructure to the vendor, this eliminates the expense of hardware acquisition, provisioning and maintenance, as well as software licensing, installation and support for an organization. Many of the City’s enterprise software systems, including Tyler MUNIS, are currently deployed locally, which limits the City’s ability to benefit from the most current version available, as upgrades are very costly. In addition to requiring on-going maintenance to the application infrastructure, these on-premise solutions are not always accessible outside of City Hall. By planning for a migration to a SaaS environment, the City can easily scale up/down based upon the needs of the organization, without incurring the infrastructure costs associated with an “on-premise” solution. In addition, Mequon will benefit from the tele-working mobility offered by users being able to access the SaaS version of the software anywhere with an internet connection.

Avèro Advisors has developed the corresponding Action Items to help the City of Mequon plan for the migration from an “on-premise” environment where enterprise applications, such as Tyler MUNIS, are deployed locally on application infrastructure, to a cloud-based “Software as a Service” environment where enterprise applications are hosted.

SAAS MIGRATION

23 – SaaS Migration Planning

24 – SaaS Implementation (Tyler MUNIS)

#23 – Software as a Service (SaaS) Migration Planning

- **Gaps Addressed –**
  - The City's current Tyler MUNIS environment is stored on-premise requiring maintenance from the City's IT staff as opposed to allowing the vendor to be responsible for the software. This results in the misuse of staff time as well as the product not being updated regularly and routinely.

- **Action Steps –**
  - Determine Enterprise Applications (Tyler MUNIS) for SaaS Migration
    - Financials, Human Capital Management, Enterprise Asset Management, EnerGov
  - Develop SaaS Migration Plan
  - Develop SaaS Migration Timeline
  - Develop SaaS Migration Budget

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - Tyler Technologies
  - External Consultant

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **TBD**

- **Estimated Timeline –**
  - Immediate – Year 2 (6 months)

- **Impact Statement –**
  - Planning for the migration of the City's Enterprise software systems that are currently deployed in an "on-premise" environment to a cloud-based, "Software as a Service" environment will ensure that the City is prepared for the migration. Developing a SaaS Migration Plan will identify the various modules, technical requirements, data conversion planning, implementation timeline and budget associated with the migration.

#24 – Software as a Service (SaaS) Implementation (Tyler MUNIS)

- **Gaps Addressed –**

  - The City's current Tyler MUNIS environment is stored on-premise requiring maintenance from the City's IT staff as opposed to allowing the vendor to be responsible for the software. This results in the misuse of staff time as well as the product not being updated regularly and routinely.

- **Action Steps –**

  System Implementation
  - Pre-Implementation Planning
  - Determine Tyler MUNIS Modules
    - Financials, Human Capital Management, Enterprise Asset Management, EnerGov
  - System Configuration, Integration, Data Conversion, Testing
  - User Acceptance Testing
  - End User Training
  - Go-Live / Post-Go-Live Support

- **Prerequisites –**
  - None

- **Stakeholders –**
  - All City Staff

- **Resources –**
  - IT Division
  - Tyler Technologies
  - External Consultant

- **Estimated Costs –**
  - Staff time
  - External Consulting Fee: **TBD**
  - Product Cost (SaaS fees):
    - **~$250,000** 1st year cost (SaaS/Implementation)
    - **~$80,000** annual SaaS fees

- **Estimated Timeline –**
  - Immediate – Year 2 – 3 (18 months)

- **Impact Statement –**
  - Migrating the City's "on-premise" version of the Tyler MUNIS suite to a Software as a Service will provide immense value to the City of Mequon over time. Previously, the responsibility of maintaining the

solution has lived within the City's IT Division. Pushing responsibility on to the vendor ensures that both application and infrastructure updates are made in a timely manner and that there is significantly less overhead and maintenance for the City's internal resources. This will ensure that the City is always on the latest version of each module, and benefiting from the latest functionality and security offered. Additionally, the data associated with Tyler MUNIS is stored redundantly in secure data centers that meet the highest security standards, reducing the City's risk of data corruption and data loss through local storage. In addition, through the SaaS subscription model, the City can always scale up or down based upon the business needs of the organization and its end user community.

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Office of City Attorney

TO: Committee of the Whole
FROM: Brian Sajdak, City Attorney
DATE: September 8, 2021
SUBJECT: Closed Session Information Technology Strategic Plan

Background

The Common Council may enter closed session pursuant to Wis. Stat. § 19.85(1)(c) for the purpose of considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility and § 19.85(1)(d) for the purpose of considering strategy for crime prevention. In this case, these sections would allow the Council to enter into closed session to discuss both the aspects of the IT Study related to the performance of the City's current IT personnel and also to discuss elements of the IT Study which detail existing security concerns within the City's IT infrastructure and also information which, if made public, could allow criminals to more easily access sensitive or critical data and/or systems. There are obviously portions of the IT Study which do not fall into these categories, and these should be discussed in public pursuant to the Open Meetings Law.

Recommendation

A motion to enter closed session pursuant to Wis. Stat. §§ 19.85(1)(c) and (1)(d) for the purpose of considering performance evaluation data of the City's IT personnel and also considering strategy for crime prevention.

Or

Such other action as the Council deems necessary and appropriate.