

2022 ANNUAL REPORT

INFORMATION TECHNOLOGY:

Department Head: David Petto:

Assistant Manager: Todd Consentino:

Purpose and Duties:

The Information Technology Department has five primary responsibilities:

- *Desktop Services.* The Department provides Computer Help Desk, Printer, PC replacement and Mobile (laptop, tablet and smartphone) services for all Town Departments. The department currently services 258 desktop computers, 68 laptops, 30 Tablets and 45 Smartphones. These are distributed throughout 22 departments and divisions in ten buildings. Also serviced are 88 printers. Servicing involves software installations and updates, virus scans, repairs and replacements. The department maintains and administers approximately 40 departmental specific software applications in addition to Town-wide applications such as Microsoft Office, Adobe Acrobat, LastPass, MUNIS, Zoom, LogMeIn, etc. Industry standard for computer replacement is three years. Our replacement schedule is five years. Printers are replaced on an as needed basis, typically six to eight years. Maintenance of software licensing is also a component of this function.
- *ERP System Administration.* The Department provides Enterprise Resource Planning (ERP) System administration for the Town's MUNIS system. The ERP (Enterprise Resource Planning) system is provided by Tyler Technologies and is called MUNIS. It provides a common repository for the entire Town's financial assets and personnel data. The MUNIS system is used by all departments and is a vital and critical component of the technology infrastructure. The ERP system is a 'Cloud' based system, meaning the server/network infrastructure is located in Tyler Technologies datacenters. Administration is performed by the Systems Administrator and involves version upgrades, weekly updates, database backups, user account maintenance, support help desk service call resolution, monthly file maintenance, system integration, and security.
- *GIS and Database Administration.* This Department is responsible for maintaining the Town's Geographical Information System (GIS) including the Master Address Table (MAT) and also maintains the several Databases developed by all Town Departments. A GIS (Graphical Information System) has become a critical component in municipal planning. The ability to spatially display information provides a substantial increase in efficiency for Planning, Utility work, Property analysis, Pavement management and Public Safety. Our GIS utilizes open-source software and hosting provided by PeopleGIS. We also use software provided by Environmental Systems Research Institute (ESRI). The main challenge in maintaining the GIS is keeping data updated. Parcel information is derived from the Assessors appraisal system and manipulated to update a Master Address Table (MAT) which is utilized by other systems. This is accomplished through the efforts of the Assistant Director using custom written, as well as 'off the shelf,' utility programs. We are constantly finding new uses to address data gathering needs in various departments. Included in this function is the maintenance of all databases in the Town. Although the main platform for the Town is Microsoft SQL Server, we do have several other databases to maintain. Maintenance involves monthly updates, performance analysis, table modifications, and system integration.
- *File Server and Communications Administration.* This Department maintains the Town's Email System (MSOffice 365), systems security (anti-virus, anti-malware and encryption), Intrusion Detection System (IDS), Identity Management System, Enterprise Network Immune System, User Behavioral Analytics, Security Information and Event Management (SIEM), Browser services, File storage, Fire Dispatch System, Fire Staff Management System, Backup Systems, Cloud Based Systems, and Virtual Machines. New Remote Access Management and Security Systems have recently been added. The Town server infrastructure currently contains 45 servers (40-Virtual, 5 Physical). Maintenance involves monthly updates, configuration modifications, virus scans, log file analysis, and performance monitoring. Also included in this function is the Storage Network which allows critical data replication of Town



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data in two locations for redundancy purposes. Data backup to Cloud storage is performed four times a day to ensure no loss of data for any reason. The Town utilizes Microsoft Office 365 in the 'Cloud' for email. There are currently over 185 mailboxes which are constantly scanned for viruses and SPAM. We have an on-premise email archiving system (Barracuda) which provides eDiscovery capability. In addition, there are several layers of security that are constantly monitored. These include, a Security Information and Event Management (SIEM) system, Account Behavioral Analytics System, Email Filtering System, Enterprise Network Immune System which utilizes Artificial Intelligence (AI), Anti-Virus System, and Intrusion Detection. These systems are maintained by the Senior Systems Administrator.

- *Technical Training.* The Department is responsible for providing training in the use of a number of the Town's systems such as Email, GIS, File Storage and Remote Access (Zoom, LogMeIn VPN). Also, to provide training in proper security measures for protection of personal information for residents and staff. The IT Department conducts training classes, when possible, to assist other Town departments to properly utilize technology to reduce costs. These classes include GIS, ERP, Email, Security, and Policy training. As systems are changed or added, 'one on one' training is performed as much as possible. We also have online training available on a request basis with 10 licensed seats through LinkedIn Learning. In addition, we are using Computer Based Training (CBT) for security awareness through KnowB4.

Summary of Activities and Accomplishments:

- Provided Zoom administration for Town Committees.
- Replaced 20 Desktop Computers, 8 Laptops, and 5 Printers.
- Maintained Computer Imaging System to latest version of Windows 10.
- Expanded Security Information and Event Management (SIEM) and Intrusion Detection System.
- Expanded Data Auditing & Protection, Identity Management, and User Behavioral Analytics System for increased Cyber-attacks.
- Increased Ransomware detection and mitigation for Security Systems.
- Completed implementation of Multi Factor Authentication (MFA).
- Upgraded server operation systems (OS).
- Upgraded on premises SQL servers.
- Updated Belmont GIS parcel data to MassGIS standard and submit to state.
- Implemented new Patch management system to handle increase in vulnerability software updates.
- Added Managed Threat Response (MTR) to security systems.
- Added Artificial Intelligence (AI) to email scanning and threat mitigation.
- Added a managed Security Operations Center (SOC).

Goals for 2023:

- Complete Cybersecurity policies and procedures.
- Complete implementation of Multi Factor Authentication (MFA) for additional Town Departments.
- Maintain membership in the Multi-State Information Sharing and Analysis Center (MS-ISAC), Center for Internet Security (CIS), Department of Homeland Security (DHS), the Cybersecurity and Infrastructure Security Agency (CISA) and several other organizations. Through information sharing with these various organizations, we are constantly adjusting our Data Auditing & Protection, Identity Management, User Behavioral Analytics and Intrusion Detection Systems.
- Maintain network and system security despite the continuing rise in Cyberattacks.
- Enhance our cybersecurity posture by fine tuning security systems and implementing 'best practices'.
- Increase Security Awareness training.
- Increase technology training for the staff.

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Respectfully Submitted,

David Petto

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Town IT Manager