Town of Milton Information Technology Committee Report and Recommendations - 2022-23

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Executive Summary

The Information Technology (IT) Committee was appointed by the Town Moderator, Bob Hiss, in 2021 to develop a strategic IT plan for the Town of Milton. Over the past 9 months, the IT Committee has met monthly to understand and assess the current lay of the land and to make recommendations both at a tactical and a strategic level for the town's future IT needs. During this process we managed to interview the various IT stakeholders in the Town of Milton including: the interim IT Director, Rob Mallett, Town Administrator, Mike Dennehy, Milton Public Schools (MPS) Superintendent James Jette, MPS IT Director, Bob Pattison, and Library Director, Will Adamczyk.

During these interviews, we assessed the IT vendor relationships currently in place as well as the budgets allocated to the IT spend for each department. We found that there were several instances where the various IT stakeholders did not go through a central procurement process and negotiated directly with vendors to purchase software and other IT equipment. Despite these unilateral purchasing decisions being made, the expectation was that the IT support would come from interim IT Director Rob Mallett.

We also evaluated the IT strategic plans of several similar sized towns in Massachusetts including Dartmouth and Plymouth to get a benchmark of their strategic plans. Based on the assessment of the current conditions and contracts and employee feedback regarding technology issues, the IT Committee is recommending the following:

- **Staffing**
  The hiring of an IT Director to provide strategic planning with all the other IT staff reporting into a centralized IT Operations organization structure.

Additional IT staff need to be hired for business continuity and support. Interdepartmental staffing needs to be balanced based on need.

- **Procurement**

A centralized procurement process to ensure economies of scale, hardware and software standardization and IT's input into IT purchasing decisions.

- **Cybersecurity**

The town's current cybersecurity maturity is below industry standards and more budget will be needed to harden the IT infrastructure to protect against ransomware attacks.

- **Citizen Services**

Citizens of the town will need improved IT touchpoints to interface with the town's services including improved online bill pay, information access on the website, communication with Town Meeting Members, insight, accountability, and transparency in voting systems.

The State of IT in the Town Today

a. Currently IT operations and decision making is decentralized. Interim IT Director, Rob Mallett is the only full-time employee (FTE) managing the town's IT Infrastructure including Town Hall, Milton Police Department (MPD), Milton Fire Department (MFD), Department of Public Works (DPW), Council on Aging, Library, Cemetery, Milton Access (partial firewall only) and the Milton Retirement Board. Some funds that come out of an IT central budget. This includes payment for services provided by GDS (a managed services provider) that provides TotalCare Co-Managed services which covers monitoring systems, tracking the health and performance of all devices on the network and alerts when needed, remote-control which allows for secure management and support for all devices and users from a single console. They also provide a patch manager which assures that all Windows based devices are getting the required updates and are monitored for patch compliance. Remedial services are provided as requested by the town's IT staff at prevailing GDS rates. Local departmental support is provided by Allan Bishop who is the GIS expert in DPW, Library IT support is Diane Dunn and Shane Brandenburg provides IT Support at Milton Access. The local IT support

people are FTEs but only spend about 20% of their time on IT related work.

IT Committee Understanding of Town IT Organizations
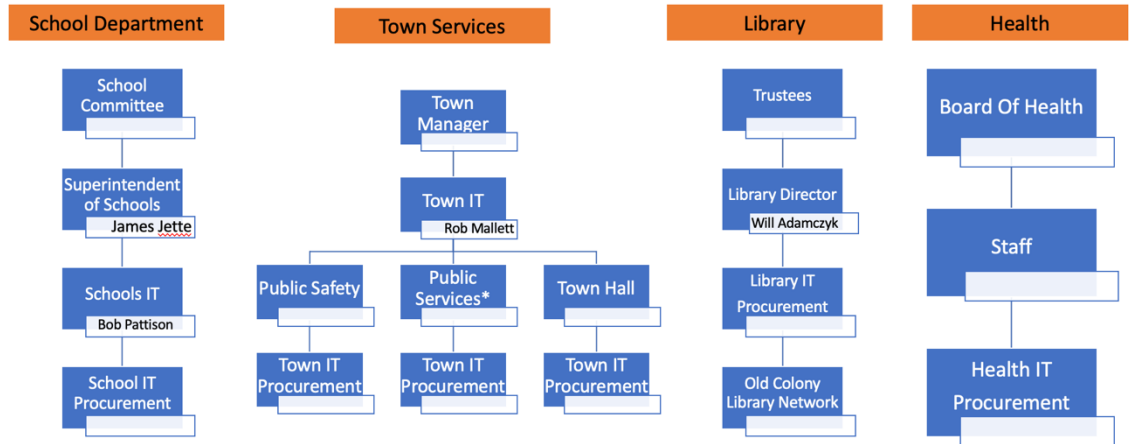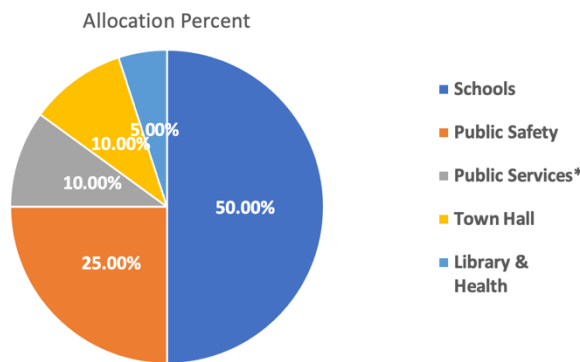

* Includes DPW, Parks & Rec, COA

b. MPS has their own IT Budget and gets educational discounts on software and hardware but is not significant. Most of their software is in the cloud and the hardware includes Chromebooks, Whiteboards and Camera Systems. Additional software includes Softrite Accounts Payable. There are some iPads and desktops that are covered in this budget. MPS IT is currently led by Bob Pattison, who is their IT Director, and has 3 FTE technicians who support all the schools. There is some support provided by MPS students mostly around Chromebook hardware repairs. The FTE technicians are assigned to the 4 elementary schools but travel to the Middle School and High School on an as-needed basis for support. They mostly use Google Admin console and Gopher to troubleshoot. Their firewall is bundled with their high-speed internet service provided by Whalley Computer Associates. They have separate support contracts with Xtreme, VMWare and HP. Bob Pattison is responsible for keeping the servers up to date with patches. There is no automated ticketing system, and they rely on emails to a generic helpdesk email account that is monitored by Bob and the 3 FTE technicians. Much of the help requested is for simple questions by the teachers. Cybersecurity is supported by a year-long grant provided by the state. Cybersecurity at the schools is controlled through policies. Website access is restricted by a domain controller at each school. There are regular phishing tests done to ensure compliance with policies. The VMWare environments are backed up every

night and once per week on the cloud. Documents are stored in MyDocs on the cloud which is backed up daily as part of an Active Directory policy

c. All Town of Milton departments have autonomy on their purchases and their IT spend is rolled into these budgets. They do not require Rob's consent to make IT purchases. But Rob must support whatever they purchase. The MPD is looking to fund an FTE to support the rollout of body cameras. This FTE would be a Public Records Officer under the Town Clerk and support IT and MPD and would be required to review body camera footage as needed for cases.

d. Diane Dunn supports the library IT issues with help from Rob Mallett. The Library's IT spend consists of 6 Windows Desktops and Chromebooks with docking stations. The library has its own separate contract with GDS, and this is primarily supporting the Chromebooks, firewalls, WIFI access points and the Konica printing system. The integrated library system is completely managed by the Old Colony Library Network. This includes the automated book handlers, self-checkout machines, Smart Child Software, Shared Catalog, Plymouth Rocket to manage events and bookings of conference rooms, Google Suite emails, Comcast lines 100MB at an annual cost of $42,000.

Estimated IT Budgets Across the Town

Allocation Percent

- Schools — 50.00%
- Public Safety — 25.00%
- Public Services* — 10.00%
- Town Hall — 10.00%
- Library & Health — 5.00%

* Includes DPW, Parks & Rec, COA

IT Strategy Recommendations Short Term 1 year

The IT Committee recommends consolidating the various IT Departments across the Town of Milton including: (a) Town Hall IT Dept.; (b) MPS IT; (c) Public Safety; (d) all other departments with independent purchasing power and holding maintenance agreements with IT vendors. The towns of Andover, Plymouth and Hull have all done this and are now the model for other MA towns.

As such, all IT employee resources would be governed by centralized IT Leadership consisting of a CIO, Director FTE, and a Tech Assistant FTE. Individual departments would continue to operate autonomously day to day, however, all purchasing activity and maintenance contracts will be centralized to enable: (a) visibility to spending; (b) standardization on best-of-breed products; (c) improved purchasing power; and (d) load balancing of tech support across all departments.

Proposed Org Chart for Milton IT Department
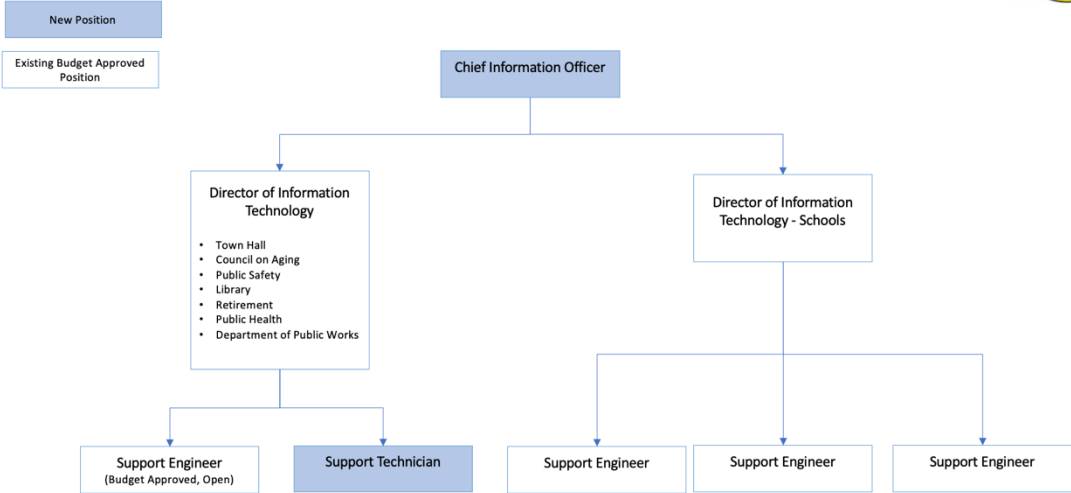
IT Strategy Recommendations Long Term 2-5 years

Centralization of IT Operations Benefits include:

1. Scaling workload coverage and built-in redundancy
2. Standardization of hardware and software
3. Consolidation of IT spend
4. Reduction of overlapping technology
5. Holistic system upgrades
6. Leveraging existing infrastructure backbone
7. Ability for IT Director to plan strategically across the town
8. Predicting IT needs for new headcount in an expansion role.
9. Increasing usage of existing technology by employees. e.g., Microsoft Teams is underutilized. Recommend hands-on training, lunch & learns, coffee and donuts. Incentivizing users to use the tools. e.g work from home or flextime. HR/Personnel Board needs to revisit policies to rethink how people work.

Centralization of IT Procurement Benefits include:

1. Procurement Governance

   Negative Examples: (a) Geronimo Building Health Engineering modules management software was procured separately and was upgraded without consulting Rob Mallett, which led to numerous issues. (b) Police and DPW have bought sign boards separately when they could have consolidated. Recommend IT sign-off on procurement plans.

   Positive Example: MPD and Fire added Rob Mallett to vendor calls and made a collaborative decision on the right vendor for incident tracking software.

2. Avail the town of multiple funding sources

   1. [Government Finance Officers Association (gfoa.org)](gfoa.org)

   2. [Department of Labor Relations | Mass.gov](Mass.gov)

   3. [American Rescue Plan Act]()

3. Centralized IT for the Future

a. Set the tone for more citizen friendly services – automation of payments – RE, Excise Taxes and Water Bills

b. Improved overall self-service with One Front Door to the town.

c. Environmental goal achievement – reduced waste through paper elimination across the town.

Cybersecurity Plan

Bottom Line Up Front: The current cybersecurity maturity is below industry standards and more budget will be needed to harden the town's defenses. The different divisions of the Town of Milton need to collaborate better together on this topic. The managed services GDS is a strong partner but can do more for us. Biggest risk is the library and its current reliance on The Old Colony Library Network (OCLN).

a. Municipal Cybersecurity Awareness Grant Schools only ($)
b. Security training part of ethics compliance every 2 yrs.
c. Ad hoc awareness training was provided by Chris Crummey targeting Town of Milton employees 3 sessions 75 people in February 2022. A recording is available for all staff. Recommendations have been met for 2022.
d. Met with GDS on 3/2/22 and confirmed backup and business continuity strategy. GDS recommends XDR SentinelOne for threat detection and response and Duo for Multi Factor Authentication. These are becoming default standards in the industry.
e. There is an existing $1M insurance policy against breaches. (See MCL 011 Cyber Coverage Form.pdf)
f. MPS has its own IT team, network, and budget for cybersecurity.
g. The biggest concern is the library and the old equipment and OCLN. Password length, resets and email address are all dependent on OCLN and do not match the requirements of the Town of Milton. Concerns of the Library to have access to the Town of Milton network.

Cybersecurity Recommendations:

● Security Culture starts with leadership. Culture is how the employees feel.

- Continue to move to the Cloud for key mission critical applications and have procurement make this a necessary requirement to lower risk for the long term.
- Cybersecurity awareness training should be done once a month vs once a year. (Ex. Each month you cover lunch and learn on different topics like social engineering, Thumb drives, etc.)
- Move towards password management and 2-Factor-Authentication for all employees
- Share best practices across the different divisions like Fire, Police, Library, MHS, etc.
- Work with OCLN to increase their cybersecurity standards

IT Communications with the Town Citizens Recommendations

Currently, the only method that constituents have for finding their Town Meeting representatives would be the mailing address listed on the town website. This provides an inefficient form of communication for our members. What is worse is that there also is not an easy way for the Town Meeting Members (TMM) to initiate communication with their constituents. There is an increasing demand to establish better communication between town residents and elected government officials and TMMs are the next level of direct representation of the residents.

A few concerns must be addressed when considering a solution for improved communication between town residents and TMMs
- Initialization of the contacts – There is an initial labor cost of someone inputting/updating the contact information for each TMM when the selected service is initiated. We currently have one IT employee, and the job would likely fall on their shoulders.
    - This may be a place where utilizing Student resources for assistance as a training task may be helpful
- Keep contacts in synch with current TMMs – As TMMs come in and out of office, the contacts for each of these need to be kept up to date to ensure that residents:
    - Can reach their TMMs
    - Are contacting valid TMMs

How this is implemented is still to be considered. Some potential solutions include:

- Providing town email addresses for all TMMs (xxx@townofmilton.org)
    - The cost for this can be calculated based on the known costs of town email maintenance
    - The Town of Milton currently has a Microsoft Office 365 contract for town employees that includes MS Team Spaces. It is recommended that the TMM for each precinct have access to Team Spaces so that they can communicate with their precinct captains and members on issues that need their vote
- Utilizing Microsoft Teams accounts as a makeshift account provider
    - Teams is already a part of the Milton IT infrastructure which affords us the ability to utilize this as an option
- Building a "provide your own email address" model
    - Building a mechanism to collect and display email addresses of TMMs is another potential solution. The same concerns of maintenance and initialization apply.