



REPORT

To: Mayor and Council
From: Chief Administrative Officer
Subject: For Your Decision: Service Delivery Review - Information Technology
Date: March 25, 2024

Issue

Service Delivery Review - Information Technology

Facts

- According to the 2020 Asset Management Plan, the Municipality currently has an annual funding gap of \$5.6 million between what should be spent to maintain assets and what is spent. This is the equivalent of \$2,156 per household, or more than double the current annual average levy on each house. The number is considered on the lower end of reality as it does not include all asset classes. Furthermore, inflation has increased significantly since the plan was developed, especially for Municipal infrastructure.
- By July 2025, Asset Management Planning legislation requires municipalities to determine current and future levels of service, the costs associated with that level of service and a plan to fund it. The legislation will, in essence, require municipalities to "live within their own means" by setting levels that are affordable and attainable long term. Not being compliant with this requirement will affect Municipal transfer funding.
- Grant funding programs have been shifting to take into account a Municipality's strategy in closing the asset gap and current state of funding their assets (i.e. the more the Municipality is addressing the deficit, the more likely a funding is to be approved. The less a Municipality is working to close the gap, the less likely they are to be approved for funding)
- Council directed staff to undertake Service Delivery Reviews (SDR) on all Municipal services. This is an evaluation process in which a specific municipal service is systematically reviewed to determine the most appropriate way to

provide it. The SDR process focuses on setting priorities and, where possible, reducing the cost of delivery (to the Municipality) while maintaining or improving services and service levels. At times, service levels may have to be cut.

- A part of SDR process is to consider how to enhance services through greater efficiency or process changes without added costs to the Municipality. In many cases however, Council will either need to reduce costs or increase revenues (fees & charges or levy) significantly to address the infrastructure gap and plan for the future. While doing so, the increased complexity of operating services needs to be taken into account. Therefore, it is only possible to reduce costs to the level required by reducing services and/or assets that Greenstone maintains.

Analysis

Please see the attached Information Technology Service Delivery Review Report.

How does this tie to the Strategic Plan?

1.0 Build Financial Capacity

To create the financial capacity to invest in capital infrastructure and equipment to meet service level expectations and statutory requirements, and to allow flexibility to enhance existing and future service delivery options.

1.1 Service Delivery Review (SDR): Council has approved the commencement of a service delivery review. The SDR will look at current and future levels of service for program delivery and asset maintenance. With the completion of each SDR, develop business plans to ensure that the services meet the strategic service level objectives of Council in a fiscally prudent manner.

Recommendation

1. THAT Council direct staff to hire a permanent full-time Information Technology staff member, funding all 2024 related costs from the Human Resources Contingency Reserve and include the necessary enhanced funds in the 2025 budget.
2. THAT Council direct staff to issue a Request for Proposal by April 30, 2024 for a new Managed Services Provider IT support services contract.
3. THAT Council direct staff to proceed with cancelling the current IT Support Contracts upon successfully contracting a new MSP through the procurement process.
4. THAT Council direct the CAO to form an internal Technology Governance Group that will assist the IT Coordinator and MSP in developing and implementing recommendations from the 3-year Technology Roadmap.
5. THAT Council award a contract to the Perry Group to complete a Connectivity Services Facility Assessment and Telephony Review at a cost of \$29,733 plus applicable taxes, to be funded from the 2024 Phone System capital project.

DATE	MONDAY, MARCH 25, 2024
SUBJECT	SERVICE DELIVERY REVIEW – INFORMATION TECHNOLOGY
REPORT NO.	SDR-18

RECOMMENDATION

That Council of the Municipality of Greenstone approve the following:

1. Proceed to hire a permanent full-time Information Technology staff member, funding all 2024 related costs from the Human Resources Contingency Reserve and include the necessary enhanced funds in the 2025 budget.
2. Issue a Request for Proposal by April 30, 2024 for a new Managed Services Provider IT support services contract.
3. Direct staff to proceed with cancelling the current IT Support Contracts upon successfully contracting a new MSP through the procurement process.
4. Direct the CAO to form an internal Technology Governance Group that will assist the IT Coordinator and MSP in developing and implementing recommendations from the 3-year Technology Roadmap.
5. Contract the Perry Group to complete a Connectivity Services Facility Assessment and Telephony Review at a cost of \$29,733 plus the Municipality’s portion of non-refundable HST, to be funded from the 2024 Phone System capital project.

SERVICE SUMMARY

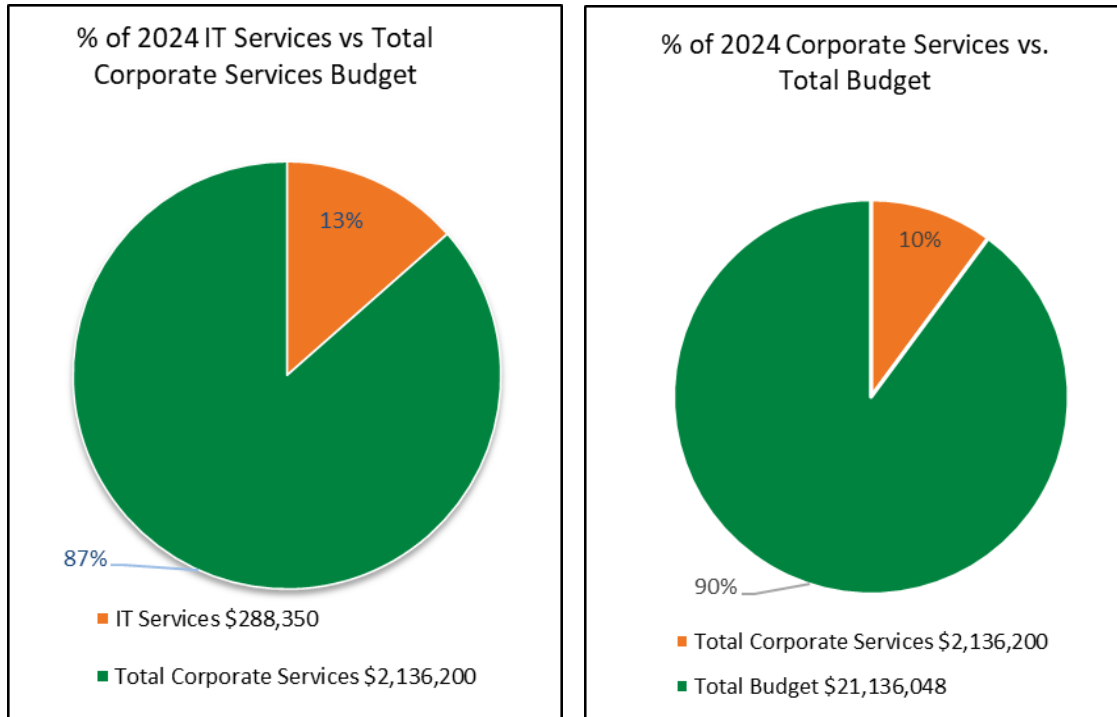
SERVICE	INFORMATION TECHNOLOGY
DEPARTMENT	Corporate Services
SUMMARY	Provision of corporate wide information technology services including computer hardware, software, phones, printers/copiers, Geographic Information Systems (GIS) and various software applications at all administrative and remote work sites.
MANDATORY	Although Information Technology Services is not mandated, it is vital to the ability for all other services to perform.
LEGISLATION	Municipal Freedom of Information and Protection of Privacy Act, 1990 Accessibility for Ontarians with Disabilities Act, 2005
BY-LAWS	By-law 22-83 Council Information Technology Usage Policy By-law 23-16 Information Technology Acceptable Use Policy
FEES/CHARGES	N/A

2024 BUDGET SUMMARY

2024 Expenditures: \$288,350

2024 Revenues: -\$00

Net Budget: \$288,350



The IT budget includes core costs associated with maintaining computer hardware, software, phones, printers/copiers, etc. and includes licencing costs and annual maintenance agreements for such things as the daily support contract, corporate financial software package, GIS, website and the cyber insurance premiums. Costs for administrative phone and internet services are also included.

The budget above does not contain the monthly costs of telephony, mobile devices, internet, etc. at most remote locations or for non-administrative staff. There are also costs associated with specialized software for areas within fire services, building services, airports, etc. These cost are included within the respective departmental budgets and are not part of the centralized IT budget.

STAFFING

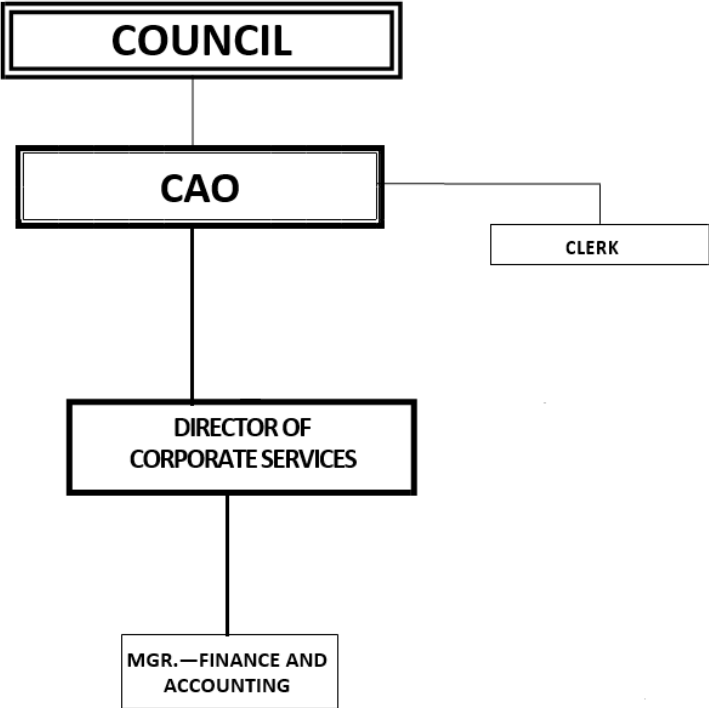
	Positions	Hours Worked per Year
Full Time Positions	2	140
Contract Positions	0	0
Student	0	0
Full Time Equivalent		0.08

The Director of Corporate Services is responsible for developing and monitoring the budget, administering the current service contracts and procuring new/replacement equipment (105 hours) with the assistance of outside contractors as needed. The Manager of Finance & Accounting is responsible for administering and updating the main corporate / financial / payroll software package on behalf of the Director (35 hours).

This allocation of time does not include any of the required GIS/Asset Management functions which will be contained in a future report for the Corporate Service area.

This allocation of time does not include any of the required Corporate Records Management functions which was contained in the Clerks Office SDR presented in January 2024.

ORGANIZATIONAL CHART



Contracted Services

Currently, there are two contracted organizations that help support IT functions on behalf of the Municipality. One, being fully remote and the other, being local to Longlac. The current contracts in place with external IT service providers have provided a good basic foundation for the Municipality, focusing on support for infrastructure, networks, data (and some GIS), security, devices and ITSM. That said, there are no service level agreements (SLAs) in place with either of the MSPs which makes it very difficult to fully quantify overall performance and value for money for these contracts.

SERVICE BACKGROUND

The Director of Corporate Services has historically been tasked with managing the overall IT services and expectations.

Prior to 2015, the Municipality employed an IT intern staff member that worked on providing IT support and maintaining/updating the GIS system. With the departure of that staff member in 2015, the Municipality has been reliant on two service providers who provide ongoing IT support to the Municipality.

Although there are no service level details expressed as part of these contracts, one contractor resides in Longlac and focuses primarily on technology device deployment, onsite break fix (typically hardware) and overall tier 1-2 support issues.

The second contractor provides services and support remotely and is rarely onsite at any Greenstone facility. Again, there are no service levels defined. However, this contractor is largely responsible for infrastructure and network support/maintenance, data backups, database management, application licensing, user account management, device management, some procurement, GIS, file and print management and information security.

IT Services Master Plan

In August 2023, the Municipality issued an RFP seeking an independent third-party review of its information technology infrastructure and services. The objectives of this review were as follows:

- To determine if a third-party IT provider is the appropriate service delivery model;
- To determine if the existing third-party IT partnership is suitable;
- To assess and evaluate the third-party services being provided to the Municipality;
- To identify information technology gaps with existing IT governance framework, IT policies, various enterprise solutions, asset lifecycle replacement, and disaster recovery/business continuity with costed resolution options;
- To perform an IT network and security health check and network diagram/mapping exercise;
- To provide best-practice recommendations and an executable action plan for infrastructure and application to support the Municipality's IT environment for both the short and long term;
- To ensure the Municipality is positioned for future modernization projects.

Perry Group Consulting was awarded the contract and has been working with municipal staff and vendors since September 2023. A final "3-year Technology Roadmap" report was provided to the Municipality in mid March 2024 with a Council presentation taking place on March 25.

Perry Group reviewed Greenstone's technology against the Municipal Technology Model

(MTM). The MTM – developed by Perry Group over the last decade of working with municipalities in Canada – identifies all the technologies that a municipality such as Greenstone should have in place and is expressed through four layers – Infrastructure, Business Solutions, Integrations and Data and Customer-Facing.

It is important that technology is built from the bottom up – on a solid foundation – similar to a house, as shown in the illustration below. If this foundation is not adequate, other components built on top of it will not work well and will require continual support and maintenance to function, even at the most basic level.

If there is no architect managing the build, it will not be completed wholistically or in accordance with a design that best supports the organization as a whole.

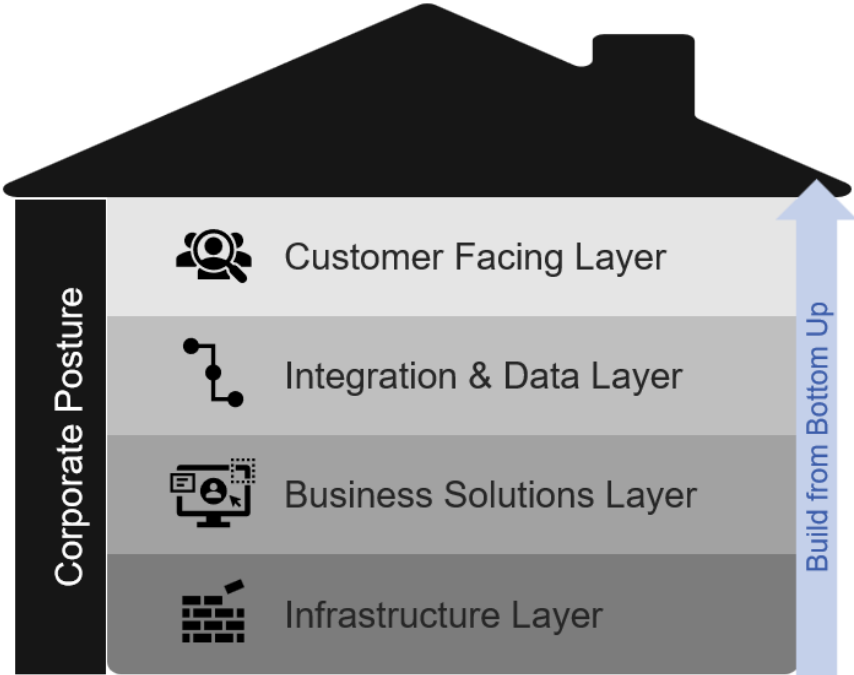


Figure 1: Municipal Technology Model (MTM)

Given the need to maintain confidentiality of the system architecture, potential areas of needs, required changes, etc. to limit the ability of a cyber threat, the final document will remain internal only and will not be provided in a public format. The overarching themes and findings were used in the development of this SDR.

KEY PERFORMANCE INDICATORS

Satisfaction with Municipal Website: Satisfaction with the municipal website, as measured in a survey, reflects the overall quality and user-friendliness of this particularly important means of communication with residents.

Percent of Repair Calls Resolved Within 24 Hours: This measures the efficiency of IT

services in supporting vital communication networks and solving problems as they arise.

Average Number of Hours to Complete Service Desk Request: The average number of hours it takes to complete a service desk request is a metric that tracks the improvements (or lack thereof) in service desk efficiency over time.

IT Customer Satisfaction Rate: IT customer satisfaction rate measures the percentage of customers happy with their interaction with the IT service desk.

ASSET USE

Given the desire for the overall IT systems architecture/setup to remain confidential, this information will not be provided in a public format. That said, the Municipality currently has more than \$1,000,000 invested in IT infrastructure including servers, hardware, connectivity, computers, laptops, telephony, software, etc.

ANALYSIS

Greenstone is a geographically vast and remote local government organization. There are four ward offices along with a multitude of facilities to manage with a uniquely varied number of services to operate. Approximately half the organization is spread across different municipal facilities (some 100 kms away from each other), work from home arrangements and field deployments. In short, the Municipality of Greenstone is complex and multifaceted.

The strategic management of technology can be similarly complex, but it has changed the way municipalities do business. Today, it plays a major role in efficiently connecting customers, councillors, staff, and partners across and beyond the organization. In summary, good technology connects people and makes work easier.

Using common, integrated systems ensures that inquiries flow from front counters to departments and to appropriate field staff for resolution in the quickest and most effective manner possible. Good technology enables the cost-effective delivery of these services, automating workflows and freeing up staff to instead focus on higher value initiatives such as strategic planning, customer service, or vendor performance management.

Unfortunately, technology adoption and utilization has not evolved to a necessary degree in Greenstone, leaving the organization mired in too many manual, paper-based processes that create operational friction and waste valuable staff time on supporting administrative tasks. The Municipality must ensure that technology solutions are developed and continually managed to a degree where they can feasibly automate work and improve conditions for both staff and customers.

Currently, there is also a lack of overall vision for technology as well as dedicated leadership, governance and the technical capabilities to really drive optimal utilization and get the most value from technology investments that are made. Although the Senior

Team has made valiant efforts to continually pursue the “right path”, there simply is not enough capacity within the organization to help orchestrate and coordinate the various IT functions needed to support Greenstone to an adequate degree.

Technology cannot be managed off the side of a desk – there needs to be a dedicated FTE within the organization who has a technology background and is able to understand how it can be applied to solve business problems. This not only requires strong partnerships with and between departments, but also with external service providers, vendors and contractors outside the organization that are vital to success.

Management of external resources in support of technology advancement and growth requires clear lines of accountability to be drawn and an oversight mechanism (e.g., governance, SLAs, performance metrics, etc.) to ensure service levels and operational targets are being met. Technology skill and experience makes it far easier to effectively manage these relationships.

The opportunity for Greenstone lies in modernizing services through digitization and process improvement. Cloud services, mobility and the digitization of information are key pursuits that will drastically impact the way staff are able to collaborate and work in sync. Overcoming current network infrastructure barriers at various facilities will also help stabilize operations and improve communications. In general, Greenstone needs to purposefully embrace technology as a driver to save time and money and generate more value for the community.

Improving In-House Process and Performance:

Development of Technology Governance Group (TGG)

A key to success for Greenstone with respect to technology is ensuring centralized and sound decision-making that spans across the organization to ensure that value for money is being delivered on all fronts.

This includes the prioritization of IT projects, resourcing and funding approvals, contract and vendor management, standards and policies development, training and education, as well as the many other facets of strategic technology planning.

Technology governance is a mainstay of successful organizations that understand that the strategic alignment of, and coordination between, business leaders and IT professionals will undoubtedly lead to better outcomes for everyone.

Collaboration beyond departmental silos is always a challenge, however, it is now critical to ensure that the best possible decisions are made with respect to investments and planning. Further maturity brought forward by instituting governance will help to formalize and mature processes to better support the orchestration of IT across the organization and improve the delivery of leadership, decision making, support and training for all staff.

Recommendation: Constitute TGG to approve the annual work plan, advise the Senior Team on technology-related funding and investment decisions as well as in relation to staffing and allocation of corporate resources to technology projects. This group is also responsible for communication and engagement with staff with respect to technology decisions made.

Cost Avoidance: Operating Costs and Capital Investments:

Connectivity Service Facility Assessment and Telephony Review.

Currently, the Municipality is plagued with connectivity and communications challenges at various facilities. Poor communications between amalgamated offices and satellite facilities is creating operational friction and massive barriers to communications. Telecom resources are inconsistently implemented, and costs vary from site to site for the same service.

To better visualize Greenstone's technology infrastructure environment, Perry Group developed a high-level overview providing details regarding telephony, core services and key activities that will help migrate the Cloud further.

The key related this activity is to improve communications between facilities, empowering staff to better collaborate and share information digitally as well as improve operations that are currently hampered by inadequate services.

This work may also lead to future cost avoidance, as decisions made with respect to the future of telephony and convergence may not necessitate the corporate telephone replacement currently slated for 2024/2025 (\$55,000) and the Ethernet Internetworking project scheduled for 2024 (\$100,000). Although more detail is required through this assessment, the use of soft phones, Teams, CTS and Voice Over Internet Protocol (VOIP) should all be viable options for Greenstone to consider in lieu of purchasing more telephony hardware.

Recommendation: Complete facility connectivity and telephony review project to better articulate current communications capabilities at each facility and an understanding of how to improve on them (e.g., moving from DSL to mobility to support internet connectivity).

Enhancing and Expanding Service Levels:

Next to automation, Greenstone must make a decisive effort to continue to move more workflows into the Cloud. By embracing the Cloud and Cloud services, the Municipality will decrease the need to spend time and money on managing the associated infrastructure components associated with on premise applications (i.e., the data centre). Vendors continue to discontinue "on premise" solutions in favour of Cloud, so in Greenstone's case, this is simply preparing for the inevitable shift that is already underway.

Adopting a Cloud Framework provides a structured approach to designing, building, and managing Cloud environments. Its purpose is to help the organization effectively utilize Cloud computing technologies to achieve its goals.

Moreover, migrating to the cloud will assist in reducing overall cyber risks as the third party provider will have redundancies and failsafe's in place that make it much more difficult for a threat actor to successfully attack the organization.

It should be noted that this can only be accomplished if a favourable outcome is determined through the facility connectivity and telephony review. Cloud migration will only be successful if strong internet connectivity can be built upon at most locations.

Alternative Service Delivery Including Shared Services or Contracting Out:

Engage a Third-Party Managed Service Provider (MSP)

The relationships with existing external service providers are good overall, however, a higher level of service is required, not only to support solid state operations on a day-to-day basis but also to help provide insights at the departmental level with respect to how technology and data could be used to advance their business, to work with vendors on behalf of Greenstone to implement across the organization, to modernize and integrate the solutions available to staff, to ensure critical policies and procedures are in place, to help identify and mitigate risk, and so on.

The current relationship with the Municipality's contractors is also challenged as there is not a strong counterpoint within the Municipal organization with whom the contractor can work directly in partnership (ideally, an IT staff member).

Technology management in a municipality like Greenstone requires a dedicated focus – one that cannot be accomplished off the side of a desk. Experience and a technical background are also certainly ideal characteristics to possess as this, along with strong internal relationships, will allow Greenstone to track, monitor and adjust service levels with external partners to ensure they are delivering on the most critical areas first and overall performance is aligned to contractual requirements.



Figure 2: IT Managed Service Provider Functions (High Level)

Despite current relationships with the contractors (which are quite positive), Greenstone must undertake some necessary due diligence to ensure that it is receiving the capabilities, guidance, support and overall value from its external technology service providers.

An MSP is a key strategic partner for Greenstone – essentially, the IT engine that supports infrastructure and operations – but also provides ongoing guidance and assistance with respect to evolving the digital capabilities of the Municipality.

Although onsite support is always preferred, it is challenging for Greenstone (and rural northern Ontario municipalities, in general) to find MSPs in the area that are able to come onsite. That said, remote IT MSPs are now able to deliver high quality support and can provide the majority of services without ever stepping foot in a facility. Many will also subcontract to ensure there is onsite support a portion of the time.

To be successful with a remote MSP model, however, Greenstone must develop a strong partnership with the external service provider and continually monitor their overall performance to ensure it meets expectations expressed through contractual agreements and SLAs.

Recommendation: Develop and release an RFP as soon as practical for a full service MSP incorporating the required contractual agreements and SLA's. By contracting with a full-service MSP, Greenstone will gain access to a level of IT expertise and experience they could never sustain or support in-house. External MSPs can scale their services to best suit the requirements of the Municipality and provide sufficient reporting back to the organization in order to validate that they are effectively providing services based on contractual obligations.

It should be noted that the current service providers are invited to submit a bid through the process. The Municipality is not unhappy with the existing service provision but requires a contractual agreement and SLA to be in place to ensure that those external contractors are aware of the longer needs and expectations of the organization.

Service Structure and Staffing Realignment:

Recruitment of IT Service staff member

The IT Service staff member is responsible for providing input to the overall technology vision for Greenstone, but also leads the execution of a work plan to deliver on it. This new role will work alongside third-party technology vendors and service providers as a single point of contact to support the technology needs of the organization.

They will help bridge the gap between departmental needs and the provision of platforms and tools. The IT Service staff member will work closely with departments to understand their requirements and help broker solutions that are then prioritized organizationally through the TGG.

Although this internal role does not need to be an expert in all technical areas, a background and experience with current technology management skills and a strong ability to manage partnerships and vendors would unlock the full potential of technology partnerships.

Recommendation: Develop job description as soon as practical, evaluate position salary range, recruit, and onboard.

FINANCIAL IMPACT

The provision of stable IT services is critical to the majority of all other services undertaken by the Municipality. Various critical IT projects have not been undertaken due to constraints under the current contract/budget and available staffing. Appropriate IT staffing and maintenance helps prevent staff downtime due to technology failure.

There is also a growing concern in obtaining cyber insurance to the point that the 2024 renewal now includes a 50% co-insurance on any claim. Although the current cyber insurance is approximately \$20,000 annually, the cost of an attack would be significant. Using CFC Underwriting's online cyber risk tool, the Municipality could reasonably incur an average loss of \$327,500 from a ransomware attack. This includes the ransom payment, loss of profits, forensics, business resumption and other costs like legal and crisis communication. It does not include the organizational costs, reputational costs and down time incurred if there was an attack. Without a focused effort to implement many of the recommendations in the 3-year IT Roadmap it will become increasingly likely that cyber insurance, irrespective of the short term potential premium increases, will not be obtained within the near future.

The 3-year IT Roadmap includes the estimated need of approximately \$387,000 in new

funding to accommodate operational and capital needs

Cost Avoidance

Completing a telephone and facility service review may reduce the need to complete telephone and ethernet internetworking projects currently estimated at \$155,000. Moreover, reviewing all phone and connectivity systems could potentially result in annual savings of up to \$20,000 in phone/internet/mobility charges. Having the Perry Group complete the review will cost \$29,733 plus tax.

Contracting Out

It is expected that the cost for an MSP will generally fall in line with the current spend on existing external contract providers.

Additional FTE

It is expected that the cost of an IT staff member will range between \$75,000 and \$100,000 depending on final job description and salary range.

Overall IT Budget

It is noted that the Perry Group has compared the average cost to provide IT services at a number of similar municipalities, not-for-profits and governmental agencies, determining that the Public Sector average is between 2.5% and 4.5% of the total budget.

Greenstone currently sits at 1.97%. With an increase in funding for an IT FTE, that spend will increase to 2.35%. Further software enhancements contained within the roadmap will push that slightly past the 2.5% mark within the three-year planning period.