



Municipal Systems Review Report

for the Municipal Modernization Intake 2 Program

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1 Executive Summary

This financial systems review was facilitated by GM BluePlan Engineering, Ltd. (“GMBP”) for the Corporation of the Town of Fort Erie (“the Town”) as part of the Ontario Municipal Modernization Intake 2 Program to improve service delivery by identifying potential opportunities for cost savings and efficiencies. GMBP conducted this review by assessing the Town’s needs through an online questionnaire, workshops with staff, and a post-workshop feedback opportunity. Based on the findings of this review, functional requirements and resourcing requirements were identified and an implementation plan and roadmap were developed for the modernization of the Town’s existing Financial systems and processes.

1.1 Summary of Key Findings

Major challenges in each business area reviewed were identified and four (4) key issues were determined to be the primary contributors to these challenges:

1. Lack of System Integration

The current systems being utilized by the Town have limited system integration. Staff need to manually reconcile data and perform their analysis in external programs such as Microsoft Excel, which is time consuming and error prone. Information such as asset data and customer data must be entered into different systems multiple times and may be lost across systems since the systems are not integrated. Staff do not have access to real-time accurate data as they may not have access to all systems or data from different systems need to be manipulated in an external program (e.g., Excel) to achieve the desired result.

2. Manual and Paper-based Processes, Lack of Advanced System Features and Automation

Some of the Town’s processes are still manual and paper-based, some are caused by the lack of capability to implement more advanced system features and automations. These issues would be resolved by having a system that is capable of providing capabilities, including, but not limited to: electronic fund transfer (EFT) and billing capability, electronic attachment capability, and web-based self-serve portals for customers.

3. Accounting Principles

Information on committed funds is not readily available to Town staff; the determination of these funds requires manual reconciliation of information from different sources. Most expenditures are recorded when they are paid, not when they are incurred. These issues affect downstream processes such as expenditure tracking, budgeting, financial reporting, and project management in general.

4. Business Process Challenges

Opportunities for improvement in the Town’s business processes have also been identified through this review, including, but are not limited to: record keeping, budgeting, and project management practices.

1.2 Summary of Key Recommendations

Based on the findings from this review, two (2) major areas of improvement were identified:

1. Financial Systems Modernization

As the Town continues to grow in size, the need to efficiently analyze data and complete transactions is beyond current capacity. The implementation of a system capable of meeting the Town's needs would drive efficiencies and resolve issues that the Town is currently experiencing. Functional and resourcing requirements for this system together with the implementation plan and roadmap have been developed to guide the Town in this modernization.

2. Business Process Improvements

In conjunction with the financial system upgrades, it is acknowledged that the success of the overall modernization will also be heavily influenced by the improvement of some business process areas including adoption of commitment accounting.

In addition to the selection and implementation of a software system that meets the Town's needs, it is also recommended that the Town develop an IT Strategic Plan aligned with its specific operational needs. This will serve as a tool for the Town to ensure full organization awareness to IT-related long-term objectives and initiatives, and help the Town manage its resources to implement these initiatives successfully.

A roadmap to achieve the Town's future ideal state was developed and is shown below. It should be noted that actual timing may vary based on the Town's existing workload, priorities, staffing capacities, and coordination to meet the resources required to implement this project.

Task	Estimated Duration (weeks)	Estimated Support Projections	2022												2023										
IT Strategic Plan Development	8	ERP Champion, IT																							
Software Procurement and Selection	12	ERP Champion, Purchasing Committee, IT, Finance SMEs																							
Software Implementation	24	ERP Champion, IT, Finance Department Working Group																							
Configuration	24	ERP Champion, IT, Finance SMEs, Data Analysts																							
Acceptance Testing & Reporting	16	ERP Champion, IT, Finance SMEs, Data Analysts																							
Training	8	ERP Champion, Finance Department, Finance SMEs																							
Cutover, Go Live, Post Go Live	8	ERP Champion, IT, Finance SMEs																							
Decommissioning of Legacy Systems	4	ERP Champion, IT																							
Continuous Improvement	Ongoing	All																							

2 Introduction

The Corporation of the Town of Fort Erie (“the Town”) is the fourth largest municipality in Niagara Region, 168 square kilometers in size and servicing approximately 31,000 permanent and 10,000 seasonal residents. The Town manages, operates, and maintains infrastructure assets with a total replacement value of more than \$1 billion. To improve customer service delivery and realize potential savings and efficiencies, the Town has requested GM BluePlan to:

- Complete a detailed process review and determine opportunities for optimization
- Develop functional requirements specifications for a future request for proposal (RFP)
- Identify cost savings and efficiencies
- Identify resourcing requirements
- Develop an implementation plan and roadmap

For this preliminary report, processes were reviewed to identify issues and formulate recommendations. This was achieved by reviewing the Town’s current financial processes and evaluating the Town’s needs through a staff questionnaire as well as workshops to identify the current state of its financial system and identify key challenges and opportunities. The workshops involved a cross section of staff from Corporate Services, Infrastructure Services, Office of the CAO, Planning and Development Services, and Digital Services. With the information collected and through the expertise provided by GM BluePlan’s subject matter experts, opportunities for improvement and cost savings were identified, functional and resourcing requirements were developed, and an implementation plan and roadmap were created to define the Town’s ideal future state. The following business areas were reviewed in this process:

- | | |
|-----------------------|--------------|
| • Accounts Payable | • Taxation |
| • Accounts Receivable | • Accounting |
| • Asset Management | • Payroll |
| • Billing | • Budgeting |

3 Current State of the Town's Enterprise Resource Planning System

To evaluate the Town staff's needs and current business processes, an assessment survey was circulated to relevant staff. After this survey, workshops were held to verify and collect further information, and a final opportunity for review and feedback was provided to the Town through a workshop handout.

There was a total of 27 survey respondents, 14 of whom attended the workshops. The respondents had on average 10+ years of experience working in Fort Erie and in municipal finance. In addition to the data collected from the respondents, existing business process maps were reviewed.

3.1 Background Information

To get a deeper understanding of the Town's current financial processes and systems, a thorough review of the background information provided by the Town was performed. Outlined below are the current systems that the Town primarily uses for its financial workflows.

System	Use by Fort Erie
System A	Budget management and financial reporting
System B	Billing and collection system used for water/wastewater and tax (setting up new accounts, maintain meter inventory, set up PAP, monthly billing calculations, collections). Collection system for Miscellaneous Cash Payments (majority of all other receipts). System B and System C do not communicate automatically, so that staff must import data from System B into C each week and at month and year ends. Data is imported in aggregate.
System C	General accounting functions (AR, AP, Capital Assets, GL, etc.). It takes data from other applications.
System D	Custom applications that track POs and payment vouchers, various other tasks (payroll – processing time and attendance, water meter inventory, identity management, asset management, etc.)
System E	Payroll

The Town is also currently using Excel files for some tasks such as capital budgeting, user fees calculations, reserve balance tracking, and investment maintenance.

3.2 Key Findings

The financial systems review identified the challenges that the Town is currently experiencing, and based on the data collected from the survey and the workshops, the following key issues have been identified:

- Lack of System Integration
- Manual and Paper-Based Processes, Lack of Advanced System Features and Automation
- Accounting Principles
- Business Process Challenges

The challenges identified in each business area are discussed in detail below, grouped into the relevant major key issues that were found to primarily cause them.

3.2.1 Lack of System Integration

One of the major challenges is primarily associated with the lack of system integration between financial systems. There is currently no integration between all the systems outlined in Section 3.1. Town staff utilize Excel files for some major tasks such as capital budgeting. The Town's financial information is also not integrated with the asset

and work order information. This creates manual and time-consuming work processes (e.g., manual data reconciliation from different systems) for the Town staff. Some information is not readily available or accessible to staff, causing delays or errors in some business processes and activities. Detailed below are some of the identified themes and impacts from the lack of system integration.

General	
Expenditure and Commitment Tracking	Datasets from different systems (actuals from System A, commitments from System D) need to be exported to Excel where the commitments are calculated which makes budget tracking and control more difficult.
Purchase Order (PO) System	The PO System is not fully integrated with System A. This makes expenditure and commitment tracking, invoice processing, capital budgeting, and other AP processes more difficult as manual reconciliation of information is required.
Accounts Payable	
Invoice Processing	Necessary information for invoice processing is stored in three different systems. These systems are not fully integrated; manual data collection is required to process invoices.
Accounts Receivable and Billing	
General	Since there is no integration between billing system (System B) and the general accounting system (System C), manual imports must be facilitated weekly, at the end of each month, and at the end of the year. Data is imported in aggregate, so users may need to navigate from System A, to B, to C to ultimately access detailed transaction-based data. Users cannot update reports until the import is completed. Manual review and reconciliation of information is also required due to lack of system integration.
Customer Information Management	Since the systems are not fully integrated, customer information must be manually entered multiple times into different systems (for example with new tax and water accounts, first in a Word document by Customer Service Unit staff, then into the billing system (System B) by tax and water revenue clerks).
Budgeting	
	Transaction data is stored in Systems B and C and when exported out becomes challenging to use for budgeting and forecasting because data is not normalized and standardized resulting in lost details.
Payroll	
General	Time off requests are done using System E while System D is used for processing time and attendance. These two systems are not integrated for the purpose of attendance tracking; reconciliation from System E to System D must be done manually.
Asset Management	
General	Due to lack of system integration, information flows from Engineering to Corporate Services using manual forms. Data entry tasks are duplicated by accounting and engineering staff.
Capital Program	There is limited integration between the capital budget and System A. Updates to the capital program are performed manually.
Asset Information	Asset acquisitions, betterments and disposals need to be manually recorded three (3) times: in a Word or Excel document, in GIS or other departmental asset system, and in System C which may lead to errors in asset information.
Financial Reporting	
General	Due to the lack of PO system integration, there is delay in updating expenditures against budgets. Departments manually create and update Excel spreadsheets for budget tracking to support decision-making. Capital planning involves a lot of manual analysis using spreadsheets. Once finalized, the budget is entered into the budget management and financial reporting system (System A) for accuracy and balance checks.

Due to the lack of system integration, data flows between systems in aggregate, making it difficult to analyze financial results to support data-driven budget decisions. There is limited ability to disaggregate data from budget management and financial reporting system (System A) reports and analyze budget variances. Queries are required to access data in the System B. Information from the budget and billing systems (Systems A and B) need to be manually reconciled.

There is a module in System C used for Capital Asset PSAB reporting but it is not integrated with the work order system.

Financial Information Return (FIR)	FIR Ministry spreadsheet uses mapping from System C accounts, while System A is used in conjunction with the Ministry's file. However, data needs to be manually exported from System C, reformatted, and entered manually for some forms such as development charges, reserve balances, capital assets, payroll, and work-in-progress information.
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3.2.2 Manual and Paper-Based Processes, Lack of System Features and Automation

The Town is experiencing high property turn-over and rapid growth in land development and population and as a result is causing an increase in most process volumes (accounting, procurement, billing). The current systems that the Town uses have not kept up with this increasing demand and have not been updated with now standard features that will help minimize the amount of inefficient, time consuming, manual tasks that the staff must perform to accomplish basic processes. The Town heavily relies on Excel files to do manual reconciliations of data. Payments and billings are mostly paper based. The systems either have no capability to perform the required features and automation, or the implementation of available modules is found to be challenging.

In addition, tasks including those detailed below are more time consuming because they are paper-based or manual due to outdated systems, which cannot support automation.

Accounts Payable

PO System	POs cannot always be located using Vendor Numbers in System D. This makes expenditures and commitments checking difficult.
Payment Processing	There is currently no Electronic Funds Transfer (EFT) payment capability.
	Most payments are done by paper cheques. Signing, stamping, stuffing of envelopes, and reporting are all manual, time-consuming tasks required to process payments. Costs and risks of delays and possible lost/stolen cheques and cheque frauds are associated with mailing. Errors require timely investigations, voiding and issuing of new cheques, and additional bank charges.
	Pre-authorized payments (PAP) are used for expense account on VISA invoices. Manual processing of VISA invoices leads to data entry errors and invoices being posted in separate batches. Duplicate payments are sometimes made on VISA receipts if they are run separately through payables. Original receipts are sometimes missing, and fraudulent charges may occur.

Account Receivable and Billings

Billing	The Town is experiencing rapid growth and the current billing system (System B) is at functional capacity due to weak system support. The current software provider cannot meet future demands caused by this growth.
	The tax and water/wastewater billing system (System B) has limited capacity for electronic billing. Most bills are printed and mailed. Epost is used for e-billing but it is being decommissioned. Customers can access online payment by credit card or their bank account for some Town services but there are certain services that customers cannot pay for online (e.g., burn permits, inspections).
	There is no up-to-date user guide for the billing software, so staff must rely on corporate knowledge and inhouse procedures to cover basic functions.

	Data from taxation and water/wastewater billing software like tax adjustments and write-offs are reported in a PDF document that cannot be downloaded into Excel. Manual entry of billing software data in Excel is needed for quarterly and annual reporting to the Province.
Taxation Billing	The system has no capability to print a dated statement of account to provide to a current owner who needs this for tax purposes. The system brings up the previous owner information, which must be manually changed in a time-consuming process that risks the release of confidential information. The billing system (System B) cannot produce letters regarding matters such as notification of NSF cheques/PAP payments, POA fines and property standards added to taxes for customers. Staff must prepare the letters manually. Such letters cannot be attached to the tax account electronically. Tax certificates for property transactions produced by the system are difficult to understand. Lawyers often call for explanations and at times make errors when calculating payments.
User Fee Billing	Excel is used for reporting and updating user fees. This requires information on HST, authorizing and amending by-laws, by-law fee implementation schedules, the type of annual fee adjustment index (rate or amount), cash codes, and GL accounts. Excel formulas must be updated yearly. There is no master file of approved fees automatically linked to billing or invoices. Customer service staff enter amounts for fees and charges into System B at the time of collection.
Customer Information Management	Electronic documents cannot be attached to customer accounts in the system. Documents are manually filed or scanned and saved as PDF documents. Accessing these documents to verify information requires staff to conduct time consuming searches.
Customer Service	There is no web-based customer self-serve portal for basic functions of taxation and water billing. Customers call in to request basic account information, change mailing addresses, apply for preauthorized payment, finalize water accounts, or set up new accounts, which are tasks that could be more efficiently provided through a portal. Account disputes are also managed by phone. There is no capability for email notifications and the Town currently does not actively collect email addresses.
Asset Management	
	To ensure that tasks are being completed within the guidelines, data are exported from the Customer Relationship Management system to report on tasks completed by staff and by category. Extra manipulation is required due to duplicate categories and inconsistencies in the exported data before analysis. Manual calculations are required so graphs can be created.
Budgeting	
Budget Overruns	The current system does not flag budget overruns. The overruns are regularly reviewed but this process is not easy with the current system. Overruns may also be a timing issue (i.e., budget adjustments may be approved and entered into the system after cost overruns) or an information issue (e.g., the project manager doesn't have access to current expenditure and funding data).
Reserve and Reserve Funds	Excel is currently used to keep track of all available reserve balances. Reserve balances are not available in the budgeting software. The information is obtained by Corporate Services and is manually entered into an Excel file. Approved amendments are entered in the Excel file but there is a timing delay from approved to when the information is entered in Excel and System A. Spreadsheet calculations include annual forecasts, but user assumptions may differ for these calculations (e.g., reserve interest rate revenue). Financing availability must regularly be confirmed or adjusted. An annual audit and reconciliation is performed manually using Excel to assure that proper development charge (DC) fees have been charged and DC revenues allocated to the proper categories. General ledger (GL) data from System C is exported to Excel to perform the audit. In the event of error, staff must investigate manually. DC fees are adjusted by the appropriate index every year using excel.

The amount of deferred revenue for Development Charges and Canada Community Building Fund available in a year is manually calculated with Excel using data exported from the budget management and financial reporting system (System A). Once calculated, the committed and uncommitted funds in the master Excel reserve file must be updated.

An Excel spreadsheet is used to manually record annual contributions for equipment replacement over a 10- to 15-year life (Fleet Replacement Funding Schedule). These individual allocations must balance to the Total Fleet Reserve contribution for the year, so allocations are often modified to balance to the Fleet Reserve Contribution. All data are manually entered. There is no way to tell if the funding allocation for each vehicle has reached the replacement cost, or to estimate cost savings for vehicles that have completed the replacement funding schedule.

Payroll

General System E doesn't have an Application Programming Interface (API) to allow queries for data that employees require for the purpose of attendance tracking, so System D is used for this purpose. The reports produced by Systems D and E can confuse staff trying to determine things like vacation time remaining if records are not kept up-to-date and reconciled by users

Financial Reporting

Systems cannot produce internal PSAB compliant financial reports using available data. Reports are prepared manually for both capital and operating quarterly budget variance reports.

When systems such as the billing software (System B) cannot generate a report, requests must go to Digital Services (DS) to produce the required reports.

General Report users often deal with limited data (e.g., payroll data not accessible for authorized users, billing/collections information is not available for tax and water in higher level systems, and vendor transaction detail and related support not easily accessible.) Data detail is lost at various system stages due to system fragmentation and data imports which summarize data in various ways. Some data is currently reviewed through hard copy journals and commentary must be added manually requiring unnecessary effort (e.g., System B Pay journals).

Other Financial Processes

Inventory There is currently no procurement system that can be used to track inventory. Tracking, counting, and ordering of items are all done manually.

Journal Entries There is currently no workflow process for journal entries which makes verification of entries difficult. There is no way of tracking which journal entries have been approved other than by reviewing documents external to the system because there is no way to attach documents to a journal entry, even though these documents are stored electronically. In some cases, this means that journal entries need to be reversed when errors are identified upon approval, creating additional work.

Maintaining Investments Investments are maintained in Excel. Investments require detailed calculations and are error prone as information (e.g., interest accrual formulas) may vary from one investment to another.

Bank Reconciliations Ten bank accounts must be reconciled manually each month because there is no capacity to automate bank reconciliations due to poor system integrations.

3.2.3 Accounting Principles

Some of the issues that the Town is experiencing may be resolved by closer adherence to accrual-based accounting principles throughout the year, especially when coupled with facilitating integration of systems and making information readily available and accessible. This may help reduce the need for manual reconciliations required to determine incurred costs. More significantly, commitments are not documented in a systematic manner to facilitate evidence-based and data-driven decisions in processes such as budgeting and capital planning. Further information on the challenges that the Town faces related to cash-based accounting is detailed below.

General	
Expenditure and Commitment Tracking	Most expenses are recorded on a cash basis.¹ Most invoices are reported when they are paid, not when costs are incurred (accrual accounting) or when a PO is issued (commitment accounting). Some exceptions such as Q2, Q3, and Q4 quarter-end expenditures are accrued; invoices received subsequent to year-end close (February of the following year) that relate to the prior year are manually accrued. If there are payments outstanding at the time of capitalization, estimated amounts are accrued so that they can be capitalized based on the service date when some costs have not yet been paid. Cash-based reporting of expenses creates a risk of overspending against budgets and a delay in data. Determination of encumbered funds requires determination of outstanding committed costs, but expenditures are only reported in the system when paid, not when commitments are made at the time of PO approval or when invoices against POs are approved. There is no electronic method of determining committed costs.
Capital Expenditure Tracking	When POs are issued, these become the new budget, but that information may not be available to the project managers. Once a project is completed and no more invoices come in against a PO, the account is closed. If holdbacks are insufficient for expenditures that still occur during a warranty or maintenance period, problems may arise which then require manual intervention. After a year, the capital job costs can be reviewed to ensure proper costing and funding allocations.

3.2.4 Business Process Challenges

The current systems have limited capability to meet the increasing needs of the Town and are unable to adapt to the changes required to address the current issues faced by the staff. However, it is also evident that some challenges are rooted from some business process challenges. These process challenges are discussed below in more detail.

Accounts Payable	
PO Systems	Processing POs is time consuming due to slow approvals, at times resulting in approval after processing of payment vouchers. The purchase order system does not have the capability to track spend reports for different commodities. For example, staff cannot track a spend summary for particular items (goods or services) without data mining invoices. Internal control can be an issue with PO transactions. Legal Services has set up a requisition process which works, but the policy of POs being created prior to purchases is not enforced uniformly. This is a problem with smaller purchases (<\$10,000) where requisitions are generated off the invoice. This is not an issue for larger purchases involving multiple quotes. Creating purchase orders after the receipt of goods eliminates intention and benefits of the system.
Invoice Processing	POs are sent to managers for approval; however, POs may require other approvals. Delays occur because POs can't be processed until all approval levels are obtained. For invoices, each person stamps an invoice in Adobe for approval and then it is entered into System D where it is reviewed and approved again for payment. Manual data entry is time consuming and error prone. Errors in turn lead to later problems such as time-consuming reconciliations, delays in processing, missed invoices, and overspending on accounts.
Vendor Numbers	There can be several entries for a single vendor due to the history of inconsistent entry of vendor information by various staff (e.g., Acme Inc. vs Acme). Staff can do a check of addresses in System C, but it is not reliable. Consequentially, reporting on how much has been paid to a vendor cannot be completed with confidence.

¹ On a quarterly or an annual basis, journal entries are converted to accrual.

Budgeting	
Operating Budget	Operating implications of new capital are identified during capital budgeting, but these changes may not be accurately integrated into the Operating budget.
	There is no integration of user fees in revenue budgets, and no drivers determining fee revenues in Operating budgets.
Capital Budget	Capitalization of an asset causes closing of the accounts of active projects. This usually happens when construction is complete or substantially complete despite there being a pending one year maintenance period and additional consulting and staff time to be charged to the project during this period to deal with deficiencies. If the project manager knows that holdbacks will not be sufficient, at the time of closing the capital job for PSAB, additional accruals can be set up. After the one-year period, the capital job costs can be reviewed to ensure proper costing and funding allocations.
	Cost splitting can be an issue with respect to capital expenditures since POs may cover works for several accounts (e.g., stormwater, wastewater, roads). Engineering estimates the cost split in excel based on the tender award category amounts. This allocation captures any Admin or earthworks (normally section A and B of tender quantities). Excel is used again to calculate the cost allocation at the time of payment. Once payment is made and recorded in System C, it is imported to System A. Costs incurred on a cash basis are used for reporting purposes until quarterly and year adjustments are done for PSAB.
Asset Management	
Capital Projects	Capitalization of assets is a manual process across two departments. Capital project accounts close when PO expenditures are complete but before project tasks like monitoring and maintenance under contract are completed. These costs are accrued at the time of closing of capital jobs.

3.3 Gap Analysis

A gap analysis was completed to compare current performance with target performance of the Town's financial management system. This type of analysis is undertaken to help assure that the Town is making the best use of resources and technology in Finance. As previously mentioned, major contributors to the Town's issues were identified namely: lack of system integration, manual and paper-based processes, lack of advanced system features and automation, accounting principles, and business process challenges. Resulting deficiencies include:

- Extensive use of workaround files and programs by all departments to overcome system deficiencies (e.g., Excel spreadsheets to track budgets)
- Manual data entry, often performed multiple times, throughout the system
- No capacity for web-based customer service
- Limited access to real time and accurate information

Consequences resulting from these deficiencies were identified:

- Data entry errors that can cascade through systems resulting in issues such as budgeting errors and overruns, asset capitalization errors, and time off approval errors
- Time consuming processes of entering data, finding documents and information, reconciliations across systems
- Misguided decisions and missed objectives due to inaccurate and/or incomplete information
- Delays in processing invoices, billing, reporting
- Risk of release of confidential customer information
- Customer and staff frustration

4 Future State

Throughout the process of conducting the investigation for this report, the issues of lack of integration and manual processes were a common theme. It is apparent that these problems are related to the technologies being utilized. To minimize and possibly eliminate these issues in the future state, there must be a strategy choosing the information technology (IT) to be utilized. Aside from satisfying target business requirements, each choice must also fit well within the Town's technology ecosystem.

Currently, the Town's cornerstone IT systems (Budget and Financial Reporting, Billing and Collection Systems, Accounting, Asset Management and Payroll) are distinctly different in age, architecture, and platform technology. The diminished support and concern of long-term support for the existing systems is a credible risk to the Town. The Town has done a great job extracting the most value out of each individual system, but the issues mentioned earlier are to be expected for such distinctly different systems.

In the future state, information systems should be either natively integrated (out-of-the-box/OOB) or be based on the same architecture and technology components. A good example for such consistency is a common database choice (SQL compliant database engine). The database engine can hold many databases for different solutions.

A roadmap and implementation plan to achieve the Town's future ideal state are detailed in the following sections.

5 Improvement Plan

5.1 Overview

The financial systems review gave Town staff an opportunity to identify the features of the desired financial performance, as follows:

- A fully integrated software system with applications that are connected to each other
- Line of sight organization of systems, data, and processes so that employees understanding strategic objectives and have the knowledge and ability to contribute to those objectives.
- A data governance policy in place reducing security risks related to data.
- Minimized work on tedious tasks such as manual data entry and data checking.
- More time to work on value added tasks such as scenario analysis for budget control and user fee calculations.
- Easy, rapid access to data without loss of detail across all applications.
- Improved services for customers and contractors including web-based services.

These findings serve as the foundation for the identified opportunities for improvement and recommendations that will help the Town in the betterment and modernization of its financial systems. Based on these key findings, two major areas have been identified where the Town should focus to facilitate the improvement of its financial systems in the foreseeable future.

5.1.1 Financial System Modernization

The findings of this review show that the Town's current systems have limited capability to help resolve long-standing issues and meet the Town's growing needs. Evaluation by GM BluePlan's subject matter experts deem that trying to resolve the issues with the current systems may provide some aid in the short term but does not address the major issues in the long term. Staff resources will be better allocated to the implementation of a long-term solution that resolves these issues while addressing the need for increased capacity due to the Town's rapid population growth.

Based on the Town's identified needs, a detailed functional requirements specification was developed to specify the required features of the system. These specifications are detailed in **Section 5.5**. In summary, the Town should choose a modern, integrated user-friendly computerized accounting system with the following features:

- Automatic linking and transfer of detailed data between modules
- Readily searchable data repositories for POs, invoices, vendor and customer numbers and documents, project account numbers, etc.
- Easily accessible and searchable real time and historical data
- Single point data entry for transactions, records, documents, etc.
- Automation, where possible, of reconciliation tasks
- Automatic preparation of key documents such as tax certificates, payment vouchers and account payment reminders
- Automatic preparation of all routine financial reports such as customer statements of account, variance reports and reserve balance reports
- Ability to attach electronic documents to any record
- Track investments with system-driven interest accrual calculations
- Track all fees and charges and make these available to billing modules.
- Minimal use of paper for documents and other outputs

- Links to project and maintenance management systems to enable real time tracking of work progress and assure that key financial information is uploaded to Corporate Services and then made available to project managers in a timely manner
- Linked to capital and operating budget preparation and submission systems.
- Linked to systems for management accounting such as budget forecasting and scenario analysis

In addition to the implementation of a modernized accounting system, the following financial system improvements should also be implemented:

- A self-serve web portal for constituents enabling them to access taxation and water account information, submit basic applications, enroll in Town programs, etc.
- EFT-capability for contractor and supplier payments
- Enable full email communications with the public and assure that public documents such as tax certificates and letters are clear and easily understood
- Upgrade the inventory system by including scanners for all items.
- Replacement of old and outdated equipment

5.1.2 Business Process Improvements

As previously discussed, there are business process-related challenges that should be addressed concurrent to the implementation of a modernized accounting system for the Town. These are both related to the use of accrual-based accounting principles and other business process improvements detailed below:

- Establish full accrual accounting for large procurement transactions, especially those involving invoicing against POs.
- Use commitment accounting to improve budget management and financial reporting especially for capital projects.
- Establish an efficient process for journal entry authorization.

5.2 Potential Efficiencies Gains

From the user questionnaire completed by staff, it is estimated that 5 hours per 37.5-hour week are spent by the 60 staff involved in financial activities completing various redundant, repetitive, and avoidable tasks. These inefficiencies amount to 15,600 hours per year of staff time, or approximately \$543,000 per year in wages, that could be reallocated to value added activities such as budget preparation and tracking, control of procurement activities and financial analyses if the deficiencies identified in this report were addressed and resolved. Apart from these time savings, other benefits that can be expected from measures to develop an efficient financial management system include cost reductions from improvements in budget tracking and procurement, simplified and improved interactions with constituents, contractors and suppliers, improved staff morale, and fewer delays in accomplishing policy and project objectives.

A summary of the distribution in process functions is below:

Task/Process	Distribution
Accounts Payable	26%
Budgeting	24%
Accounts Receivable	18%
Reporting	17%
Asset Management	6%
Payroll	4%
Other	3%
Billing	1%
Reconciliations	1%
Total	100%

This finding is consistent with the results of a 2017 work force survey of 1,000 information workers that found that “[n]early 60 percent of workers surveyed estimate they could save six or more hours a week —almost a full workday — if the repetitive aspects of their jobs were automated”.²

5.3 IT Strategic Guideline

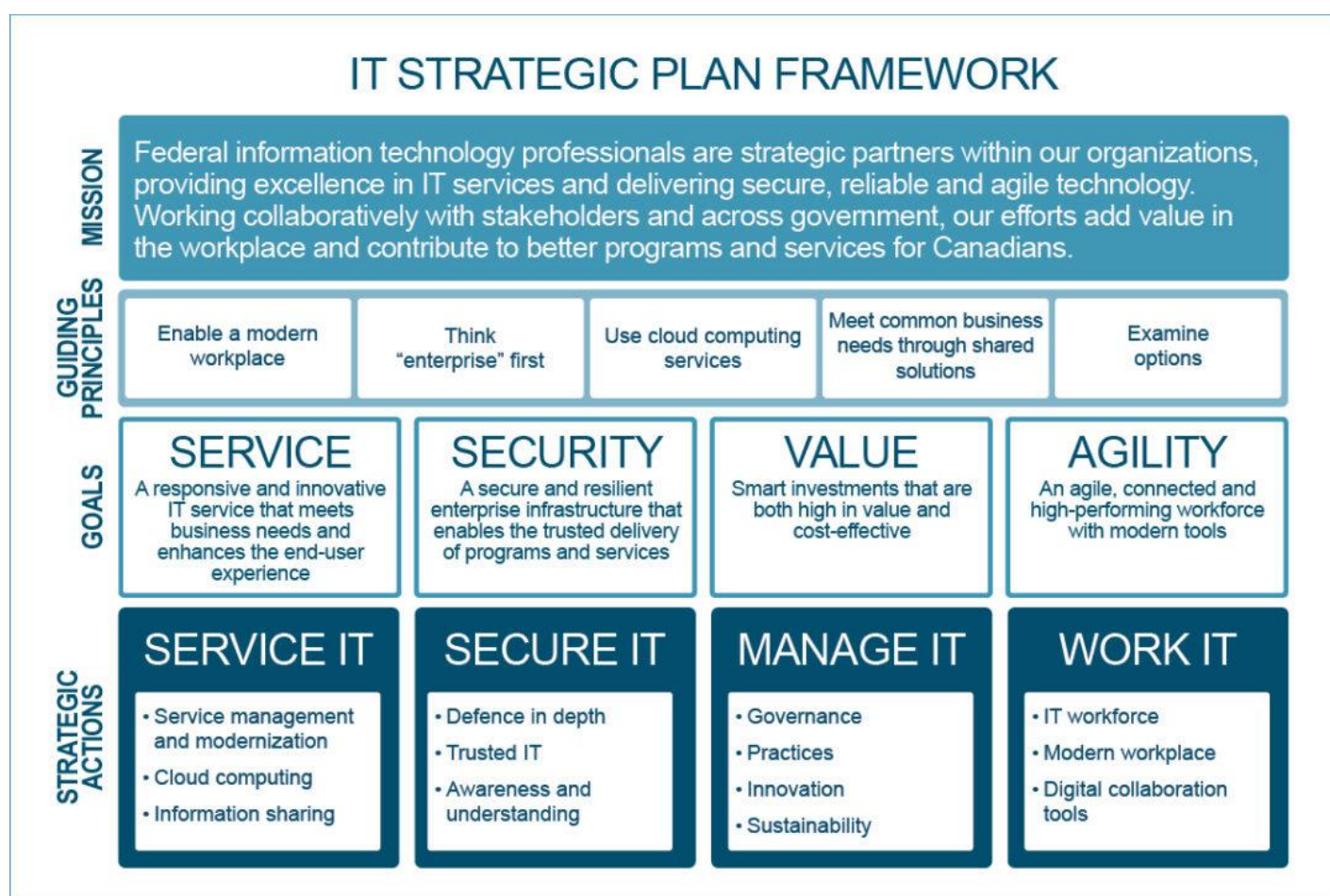
While it is beyond the scope of this report, it is important to discuss an IT Strategy, of which the ERP System will be a part. It is strongly recommended that the Town **establishes an Information Technology Strategy** ensuring the organization is fully aware of the objectives. The strategy should include components such as:

- **Align specific operational needs with objectives of the Strategy.** For example, if the Corporate Services department needs a new accounting system and the strategy calls for utilizing the internet, the new accounting system must be based on internet technologies.
- The strategy should include **long term objectives**; otherwise, technology choices will be based on “today’s special”. For example: a “better digital experience for the citizen” is an excellent long-term objective where the achievement requires to consider a set of technologies which when fused together achieves several key organizational objectives: citizen satisfaction, staff efficiency, and overall cost of ownership reduction.
- The strategy should also have a **well-defined Technology Roadmap**. Adopting a technology due to the purchase of a software solution is an unfortunate example of how one can deviate from the Roadmap. Having a technology roadmap will establish key parameters for qualifying solutions to be utilized by the Town.
- The Strategy should include a reasonable set of **best practices** to be consistent with the Strategy and stay on the Roadmap.
- It is now well understood that the IT department/division/business unit is not a secondary task. **IT Governance** requires IT-related expertise, time to manage the complexities of the Strategy and the roadmap, and time to keep up with the IT progress which changes at an ever-increasing rate. The focus of the Town has always been to provide physical services such as land management and infrastructure management and operation. However, one can easily argue that managing the community’s information and providing the appropriate information package to the citizen is as important as the physical services being provided.
- Being transparent while implementing the Strategy and Roadmap is essential. To accomplish this, the Strategy must include a good **Communication Plan** with easy-to-understand messages. This can be especially challenging as the IT-related publications can be very esoteric.

² Smartsheet Report: Smartsheet Report: Automation in the Workplace 2017. <https://www.smartsheet.com/content-center/executive-center/2017-automation-report>.

- Like any other business unit in the organization, IT should have its own **principles, key performance indicators and financials**. While the business unit is initially supporting the other departments/business units, the higher the degree of automation, the more citizen-facing IT will become. Consider this example: Before ATMs, the IT department helped the bank tellers to use their computers assisting customers with their daily transactions. Once ATMs were adopted, the bank's IT department is directly responsible for the customer satisfaction related to the ATM transactions.
- Finally, the Strategy should consider all aspects of the organization: **people, data, processes, and technology** and include its own quality control where the organization does not backslide into underperforming but known habits.

Shown below is an example of an IT Strategic Plan Framework³. It is from the Canadian Federal Government and is relevant as it covers the areas a plan needs to include regardless of the size of the government organization. Many other examples are available as most municipal plans are published.



³ Source: <https://www.canada.ca/en/treasury-board-secretariat/services/information-technology/information-technology-strategy/strategic-plan-2016-2020.html>

5.4 Resourcing Requirements

It is strongly recommended that the resource requirements be considered when planning for and during the implementation of the ERP system. This is an essential step prior to making major procurement decisions of cornerstone systems of the Town's IT infrastructure.

The resourcing requirements for the implementation of an ERP System typically includes the following resources:

Resource	Role(s)
Executive(s)	The group of executives which have ultimate responsibility of the organizations' performance.
Steering Committee	A small group of executives and senior staff dedicated to the ERP implementation and able to make decisions affecting the entire organization.
IT Manager	Responsible for the IT Strategy and Plan
Department Head	Senior leader within the department responsible
Working Group	A group of staff with cross-functional expertise and responsibilities to bring forward and work through implementation and operational details
Subject Matter Experts (SME)	Subject Matter expertise, staff or consults experts in the subject at hand business or IT
Teams	Staff dedicated to the implementation of the ERP for their specific operations
ERP Champion	A selected individual from each of the Town's dept/business unit who will be trained, assist with the implementation, understand, and promote the new system and best practices
Manager / Supervisor	Responsible for overseeing the functions of a division
Data Analyst	An individual (or group of individuals) assigned with the responsibility of understanding the Town's data bank, the tools to mine the data bank and understands the business requirements to present the accumulated data in a useful and understandable manner

The above listed resources are organized in the following matrix in a way where the complete set of responsibilities and actions by all members comprise the ERP governing model.

ERP Aspects	Subjects	Responsibility / Action		
		Corporate (Decide)	Department (Develop)	Division (Implement)
ERP Strategy & People	Enterprise Standards Key Performance Metrics Reports	- Steering Committee - Executive Leaders	- Department Head - Working Group	- Teams - Working Group - ERP Champion
Business Processes			- Department Head - Working Group	- Manager/Supervisor - Teams
Software	Requirements Configuration	- Steering Committee - IT Manager	- Department Head - SMEs - Working Group	- Teams - Working Group - ERP Champion
Data	Data Standards Integration Ownership	- Steering Committee - Analysts		

5.5 Functional Requirements

5.5.1 Required Modules / Functionality

The Town is seeking highly integrated system that can serve multiple departments with the Town. Below is a list of modules/functionality being sought. Other similar or related modules/functionality will be considered:

- **Information Technology**
 - Internet
 - N-Tier Architecture
 - Relational Database Management System
 - Workflow engine
 - Integration capabilities / exposed API
 - Licensing model
 - Hosted vs On-Prem
 - Customization vs Configuration
 - Reporting options
 - Security model
 - Data Integrity and Validation subsystem
- **Finance**
 - General Ledger
 - Accounts Payable
 - Cash Management / Receipting / Bank Reconciliation
 - Payroll
 - Budgeting
 - Treasury
 - Fund Management
 - Procurement/Purchasing
 - Vendor Management
 - Contract Management
 - Accounts Receivable
 - Capital Project Management
- **Employment Services Resources**
 - Employee
 - Position / Pay Control
 - Benefit Management
 - Time / Attendance / Availability
 - Personnel Actions
 - Employee Self-Service
- **User Fee Billing**
 - General
 - Customer Account Management
 - Fees and Charges Management
 - Billing Management
 - Financial Management
 - Delinquency Management
 - Service Order Management
 - Customer Self Service
- **Utility Billing**
 - General
 - Custom Account and Location Management
 - Meter Reading and Inventory
 - Rates and Fee Management
 - Billing Management
 - Financial Management
 - Delinquency Management
 - Service Order Management
 - Customer Self Service
- **Tax Billing (Ontario-aware)**
 - Property
 - Tax Rates
 - Multi-Year Receivable Management
 - Billing (interim, final, supplemental, CVA)
 - Penalties, discounts, write-offs, rebates etc.
 - Payments In Lieu of Taxes
 - Taxpayer – Self Service options
 - Form generation (Tax Certificates, Property Info)
 - MPAC Interoperability
 - GL Interoperability
 - Cash Management Interoperability
- **Additional Systems**
 - Asset Management
 - Customer Relationship Management
 - Planning, Permitting & Licensing System
 - Document Management System

5.6 Implementation Plan and Roadmap

The implementation plan for the Town's ERP system is and includes the following main tasks:

- Initiate a task to **establish the Town's IT Strategy** (see Section 5.3). Even if not complete, the early stages will reveal key parameters for the ERP System as it relates to the internet, security, database engine and analytics.
- **Explore the market** and understand the available choices at a high level (vendors, solutions, modules, hosted vs on-premise, approximate costs)
- **Procure the system** which presents as many of the key characteristics as possible:
 - Functionality relieving the identified current deficiencies
 - Internet-based technology (assumed to be a key component of the IT Strategy)
 - High degree of interoperability (usually available via a specific module designed to integrate with other systems)
 - Industry standard database engine
- **Staff for the transition** with appropriate expertise (see Section 5.4)
 - Project management
 - Subject matter experts from each of the affected business processes
 - IT governance aware of the new emerging Strategy
- **Implement the new system** utilizing team leads/champions and a "train-the-trainer" approach so staff are not only trained to use the system as-is but have a deeper understanding of its workings and its ability to expand.
- Establish a healthy **post-implementation continuous improvement** practice empowering the team leads/champions with the authority to change the implemented configuration but according to guidelines.
- Gently but decisively **cease activities proliferating the use of legacy systems** and/or processes.

A roadmap is presented in in the following page. It should be noted that actual timing may vary based on the Town's existing workload, priorities, staffing capacities, and coordination to meet the resources required to implement this project.

Task	Estimated Duration (weeks)	Estimated Support Projections	2022												2023					
			Q1			Q2			Q3			Q4			Q1			Q2		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
IT Strategic Plan Development	8	ERP Champion, IT																		
Software Procurement and Selection	12	ERP Champion, Purchasing Committee, IT, Finance SMEs																		
Software Implementation	24	ERP Champion, IT, Finance Department Working Group																		
<i>Configuration</i>	24	ERP Champion, IT, Finance SMEs, Data Analysts																		
<i>Acceptance Testing & Reporting</i>	16	ERP Champion, IT, Finance SMEs, Data Analysts																		
<i>Training</i>	8	ERP Champion, Finance Department, Finance SMEs																		
<i>Cutover, Go Live, Post Go Live</i>	8	ERP Champion, IT, Finance SMEs																		
Decommissioning of Legacy Systems	4	ERP Champion, IT																		
Continuous Improvement	Ongoing	All																		