

Strategic Asset Management Plan



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The Corporation of the Town of Grimsby GMBP Project Number: 618043

May 14, 2019





May 14, 2019

Our File: 618043

The Corporation of the Town of Grimsby 160 Livingston Avenue Grimsby ON L3M 4G3

Attention: Jenn Gross, C.Tech. GIS & Asset Management Coordinator

Re: Strategic Asset Management Plan

Dear Jenn:

We are pleased to submit this Final Report for the Strategic Asset Management Plan project.

If you have any questions, or require any additional information, please contact the undersigned.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

James Burn

James Burn, LET, C.E.T., CGS, GISP, EP GIS Lead, Partner



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1 BACKGROUND

1.1 The Town of Grimsby's Asset Management Program

The Town of Grimsby is actively working on the implementation of an Asset Management (AM) program. In December of 2016, the Town established an Asset Management Team (AMT). The AMT's role is to ensure that the Town's AM practices support strategic planning objectives; are consistent with international AM best practices; and, comply with legislative requirements. Further activities completed as part of the Town's AM program include a maturity assessment of AM practices completed by Town staff in 2016, and the adoption of a council-endorsed AM policy in 2017.

As part of the next step of its AM program, in 2018 the Town engaged **GM BluePlan Engineering Ltd**. (GMBP) to provide consulting services related to the development of this Strategic Asset Management Plan (SAMP) – also referred to as an AM Strategy.

1.2 Asset Management as a Corporate Management System

AM is an integrated set of strategies to support decisions regarding building, operating, maintaining, renewing, replacing and disposing of infrastructure assets. The aim of AM is to sustain municipal infrastructure systems in a manner that meets desired service levels while balancing risks and lifecycle costs.

In recent years, AM has evolved from a focus on the day-to-day activities related to managing assets to include all activities and practices an organization applies to its physical assets to achieve strategic objectives. This approach establishes AM as a corporate management system (i.e. AM System). An AM System provides decision makers with a formal structure that links organizational objectives to the levels of service provided by infrastructure systems, the asset lifecycle activities required to achieve the desired levels of service, and the costs of completed lifecycle activities.

The following figure illustrates the Town's AM System.



Figure 1: Asset Management System Hierarchy



This graphic illustrates the hierarchy of the Town's AM System. It illustrates the link between high level corporate vision and strategy, to the tactical level of AM. This link is referred to as a "Line of Sight" within the ISO 55000 AM Standard.

The Town's AM System is comprised of the following business practices and documents:

- **Corporate Strategic Objectives:** The Town's corporate objectives, typically detailed in the form of a corporate strategic plan. A strategic plan articulates the Town's overall vision and goals. It is a document that guides the ideals of all Town policy and business activities. At present, the Town has not yet created a formal Corporate Strategic Plan document.
- **AM Policy:** The Towns' AM Policy articulates the Town's commitments and principles that will be considered across the organization in a systematic and coordinated way. The Policy is included in Appendix A of this report.
- Strategic Asset Management Plan (SAMP): The Town's SAMP (commonly referred to as an AM Strategy) defines how the objectives of the AM Policy will be realized in the tactical Asset Management Plan (AMP). It describes the set of inter-related business processes necessary to realize a mature AM System. In addition, the SAMP will identify the roles, responsibilities, authorities and accountabilities of individuals and departments regarding the processes related to implementing and delivering AM across the Town. Note that a SAMP differs from an AMP, which is the tactical outcome of the AM System defining levels of service, lifecycle activities and financial strategy of an organization.
- Asset Management Plan (AMP): The AMP establishes the current/proposed levels of service provided by each infrastructure systems, the asset lifecycle activities practiced at the Town, and financial strategy to fund the required expenditures.
- **Operational Strategies and Plans** are products of the Town's AMP. They include capital plans, which indicate capital needs and expenditures related to the Town's assets; operational and maintenance programs for assets; and, long-term financial plans. These documents are produced as a result of the AM analyses which formulate the Town's AMP.

2 **PURPOSE AND SCOPE**

2.1 **Purpose of the Strategic Asset Management Plan**

This SAMP is a foundational element of the Town of Grimsby's AM System. It clearly defines the Town's AM objectives and specifically details the method in which they will be achieved. The SAMP plays a key role in explaining the method in which the commitments and principles described in the Town's AM Policy will be implemented; and to ensure that they are connected to the Town's AMP. To do this, this SAMP will:

- Define the scope of the Town's AM System;
- Document AM objectives and explain how the AM system will meet these objectives;
- Detail the alignment of the AM System with strategic initiatives;
- Detail business drivers for the implementation of the AM System;
- Define a framework to describe the AM System and AM practices throughout the Town, which will be enacted to achieve the Town's AM goals;
- Define a governance structure, including roles and responsibilities, for the implementation and management of the AM System;
- Detail the methods for ongoing evaluation and continual improvement of the AM System; and,
- Provide a plan for the implementation of the AM System.



2.2 **Scope**

The scope of this SAMP pertains to the Town's services that are dependent on physical assets for delivery. The Town departments that provide these services, and are therefore within the scope of the SAMP are:

- Information Technology and Service Innovation
- Public Works
 - Road network
 - Water/wastewater systems
- Planning and Development
- Finance
- Fire
- Recreation, Facilities and Culture
 - Parks and Trails
 - o Library

It is noted that the Planning and Finance departments have been included in the scope since these groups provide key services for the long-term planning and sustainability of service delivered by the Town.

3 STRATEGIC ALIGNMENT

3.1 Alignment to Strategic Initiatives

This SAMP is aligned to the Town's strategic objectives through the Town's AM Policy. The AM Policy and SAMP are interrelated documents that work in conjunction with one another. The Policy outlines principles and commitments to guide infrastructure decisions that will direct the requirements for the AM System. This SAMP provides details on how the processes of the AM System will be developed. It impacts both internal and external stakeholders and aligns with overall strategic objectives. The documents are typically drafted and maintained separately as they have different levels of detail and provide different functions in the overall AM System.

In many municipal organizations, the principles and commitments in the AM Policy (and the subsequent SAMP) have been developed to align with the strategic objectives contained in Strategic Plans or Term of Council Priorities. In the absence of these strategic processes, this SAMP has been developed to align with the AM Policy. The AM Policy and SAMP can be refined if/when the Town has developed a Strategic Plan to ensure the AM System continues to connect strategic objectives to day-to-day decisions related to the management of infrastructure assets.

3.2 How Asset Management Achieves Organizational Objectives

This SAMP was developed to detail the method in which the Town will achieve its organizational and AM objectives. It will guide the enhancement of existing processes and the development of new processes to increase the maturity of the Town's AM System. The goal of increasing the maturity of the Town's AM System is to enable an evidence-based and data-driven alignment between the Town's strategic goals and the day-to-day decisions that are made related to when, why and how money is spent on infrastructure systems.

The AM System impacts both internal and external stakeholders and aligns with the Town's overall strategic objectives. Furthermore, it provides the necessary processes that the Town will undertake to achieve those objectives.

This SAMP describes the means through which the AM Policy objectives will be achieved in future AMPs. The alignment between Policy-SAMP/Strategy-AMP is maintained through an iterative process. Outputs of the AM System will serve as inputs to the Town's strategic planning process, ensuring not only alignment, but continuous improvement over time.



4 BUSINESS CONTEXT AND ANALYSIS

This SAMP was developed to achieve organizational and AM objectives, as well as to respond to the needs and priorities of individual stakeholders (front line staff and residents). As a result, it was developed using both a top-down and bottom-up approach.

Top-down considerations reflect organizational objectives of the Town and were informed by legislative requirements and the Town's AM Policy.

Bottom-up considerations reflect the needs and goals of stakeholders and were informed by industry best practices and a maturity assessment of the Town's current AM practices completed through workshops with over 20 staff.

The following figure illustrates the approach to developing this SAMP.



Figure 2. Process for Developing the SAMP.

4.1 **Top-down Considerations**

4.1.1 Legislative Requirements

In Ontario, the development of AM Policies and Strategies for municipalities has stemmed from two primary pieces of legislation. The first piece of legislation was the *Infrastructure for Jobs and Prosperity Act*, which was enacted in 2015. The second piece of legislation was *Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure*, which was created in 2017, under the Act. This regulation detailed requirements for municipalities to develop an AM Policy and AMP, which necessitates the development of a SAMP.

This SAMP has been developed as a key component of the Town's AM System, which will put the Town on the pathway for full compliance with the requirements of O.Reg. 588/17.

4.1.2 Asset Management Policy

The Town's AM Policy outlines the commitments and principles of the Town, related to the implementation of the AM System. In particular, the objectives of the Town's AM Program are based on the principles outlined in the policy. These objectives are provided in detail, in Subsection 5.1 below.

4.2 **Bottom-up Considerations**

4.2.1 Best Practices

The development of this SAMP was informed by industry best practices. The AM Framework, which details the processes of AM at the Town was founded on internationally recognized AM best practices. This framework is the foundation of AM



processes at the Town, and it is thorough this framework that other initiatives are based, such as the Town's maturity assessment, performance targets, and implementation plan for AM.

4.2.2 Needs Assessment

As part of the development of this SAMP, a needs assessment of the Town's current AM practices was completed in October of 2018. AM needs (or maturity) assessments are a best management practice in the municipal infrastructure industry. Completing a needs assessment provides a comprehensive and unbiased view of an organization's AM processes. The results of the needs assessment provided a lens with which to view the development of current and future AM processes throughout the Town, including this SAMP, and an implementation plan to operationalize the Town's AM System.

The needs assessment was conducted through a desktop review of the Town's AM-related information and documentation, and information gathered through a series of workshops with Town staff members from the following departments: Fire, Public Works, Finance, Parks, Recreation and Culture, Library and Museum, and IT.

The needs assessment was completed against the Town's AM Framework, the details of which are provided in Section 5, below. For each of the categories of the framework, the assessment reviewed the Town's existing maturity and provided a gap analysis that summarized areas of required improvement. Details of the needs assessment were summarized in a Technical Memorandum, which is provided herein in Appendix B.

5 **ASSET MANAGEMENT OBJECTIVES AND PERFORMANCE TARGETS**

5.1 Asset Management Objectives

Through the development of its AM Policy, the Town of Grimsby has identified a series of principles that will be used to guide informed decisions around assets. These principles define the objectives and goals of the AM program. The Town's AM program strives to achieve the following goals:

- Make informed decisions;
- Integrate corporate, financial, business, technical and budgetary planning;
- Develop and enhance AM knowledge and competencies;
- Establish organizational accountability and responsibility;
- Consult with stakeholders;
- Define and document service, maintenance and replacement levels and outcomes;
- Use available resources effectively;
- Manage assets to be sustainable;
- Minimize total lifecycle costs of assets;
- Consider environmental goals;
- Consider social and sustainability goals;
- Minimize risk;
- Achieve/pursue best practices;
- Continually improve practices; and,
- Monitor and report on the AM program.

The Town's AM Policy (refer to Appendix A) provides additional details on the principles which make up the Town's AM objectives and goals.



5.2 Asset Management Performance Targets

Two types of performance targets are defined as part of the Town's AM System:

- 1. Targets related to the performance of the AM System as a whole.
- 2. Targets related to the performance of the Town's asset network.

Both types of performance targets were developed to align with the objectives of the AM Program.

5.2.1 Asset Management System Performance Targets

As noted in Subsection 4.1.2, a needs assessment of the Town's current AM practices was completed in October of 2018, also commonly referred to as a maturity assessment. The needs assessment was completed against the Town's AM Framework. The results of the assessment are provided in Appendix B.

As per the request of the Town, GMBP has completed an assessment of the Town's AM Policy with respect to the requirements of O.Reg. 588/17. This assessment is included in **Appendix A** with the Town's AM Policy document.

Performance targets to measure progress of the Town's AM System are defined as achieving "No Gap" in all areas of the needs assessment. Achieving these targets represent a fully mature AM System. Note that AM maturity is related to understanding the impacts that decisions in one business area will cause in another business area, as opposed to an assessment of the approach to making decisions in each individual business area. AM maturity generally is not intended to be a measure of specific business processes at the Town, but rather a reflection of the sophistication of the integration of business processes that are employed to achieve objectives.

The following table summarizes the performance targets for the Town, against the categories of the AM Framework. The AM Framework is discussed in detail in Section 6 below.



AM Framework Category	Component	Current Maturity	Performance Target
	Community LOS Expectations	LOS tables defining service attributes and community performance measures	Maintain and refine the LOS tables on an annual basis.
Connecting to Strategic Priorities	Customer/Community Performance Measures	were developed in Q1 2019.	
	Enterprise Risk Management	No formal enterprise risk management process in in place.	Apply a common enterprise risk perspective to budget prioritization.
	Technical Levels of Service	LOS tables defining service attributes and technical	Maintain and refine the LOS tables on an annual basis.
	Technical Performance Measures	performance measures were developed in Q1 2019.	
Asset Lifecycle Management	Asset Lifecycle & Risk Management Strategies	Processes are generally in place for each service area through professional judgment of staff.	Develop data-driven lifecycle strategies that link to LOS and risk. Connect across all service categories to inform cross-asset optimization.
	Growth & Service Enhancements	Master Plans are a regular practice.	Connect master plans to LOS, future asset lifecycle expenditure needs, and financial planning activities.
Asset Management	Optimized Capital and Operating Budgets	Budgets developed based on professional judgment of senior staff.	Data-driven prioritization/optimization of budgets that connect to LOS and risk.
Analysis	Financial Analysis	Typical financial planning processes in place, no long term financial planning that connects to LOS or risk.	Understand of the cost to achieve higher/lower LOS and the required expenditures and revenues.

Table 1: Asset Management System Performance Targets



AM Framework Category	Component	Current Maturity	Performance Target
	Reporting on Current State of Infrastructure	Reported in current AMP.	Some additional reporting requirements to achieve regulatory compliance.
	Reporting on LOS & Performance Measures	Not in current AMP.	AMP includes the populated LOS tables.
Asset Management Plan	Asset Management Plan to Maintain Current LOS and Achieve Desired LOS	Discussed in current AMP but not connected to current or proposed LOS.	AMP includes the asset lifecycle activities required to maintain current LOS vs achieve proposed LOS.
	Financial Plan	Discuss in current AMP but Not connected to current or proposed LOS.	AMP includes the financial plan to fund the asset lifecycle activities required to maintain current LOS vs achieve proposed LOS.

5.2.2 Asset Network Performance Targets

In 2018/2019, the Town developed its first set of LOS for all service areas. These included a series of customer and technical performance measures that are aligned with the Key Service Attributes for all the Town's service areas.

The LOS are displayed in a series of tables for each major service area. The LOS tables were developed in conjunction with the Town's subject matter experts (SME) during a series of workshops held on November 28th, 2018.

The structure of these LOS tables was developed by leveraging GMBP's experience and knowledge of international best practices. The tables were also developed in accordance with O.Reg. 588/17. Each LOS table is comprised of four major components: Service Statements; Key Service Attributes; LOS Statements; and, Performance Measures. The LOS tables provide the performance targets for the Town's asset network.

The full suite of LOS tables is provided in Appendix C.

6 ASSET MANAGEMENT FRAMEWORK

The AM System Framework illustrates the key processes that make up the Town's AM System. The Framework is used to provide context to illustrate the method in which these individual processes work together to connect the Town's strategic objectives to the day-to-day decisions related to managing infrastructure assets. It was founded based on internationally recognized AM best practices.

The framework is comprised of the following four (4) major categories. Each category defines a critical component of AM best practice:

- 1. Connecting to Strategic Priorities: This category defines the Town's corporate vision, priorities and key indicators of services to be provided to the customers (public). It consists of the following components:
 - Community Levels of Service Expectations;



- Customer/Community Performance Measures; and,
- Enterprise Risk Management.
- **2. Asset Lifecycle Management:** This category identifies asset-focused strategies for maintaining and enhancing current services. It consists of the following components:
 - Technical Levels of Service;
 - Technical Performance Indicators;
 - Asset Lifecycle & Risk Management Strategies; and,
 - Growth & Service Enhancements.
- **3.** Asset Management Analysis: This category defines the metrics used to support decisions regarding assetrelated activities. It consists of the following components:
 - Optimized Capital and Operating Budgets; and,
 - Financial Analysis.
- **4. Asset Management Plan:** This category identifies all the necessary data to comply with the requirements of AM reporting. It consists of the following components:
 - Reporting on Current State of Infrastructure;
 - Reporting on LOS & Performance Measures;
 - Asset Management Plan to Maintain Current LOS and Achieve Desired LOS; and,
 - Financial Plan.

The following figure provides a graphical representation of the Town's AM Framework. It illustrates the framework's four (4) categories and their components. The diagram also includes a continuous improvement function, which is considered a key component of the Town's AM Framework.





7 **GOVERNANCE FRAMEWORK**

The Town's AM Governance Framework describes the corporate structure that is responsible for implementing and managing the Town's AM System; and, provides clarity regarding the roles, responsibilities, authorities and accountabilities of individuals and departments that make up that structure.

7.1 **Governance Structure**

Defining and implementing a governance structure for the Town's AM System is critical to ensuring that the Town's SAMP can be executed in a manner that adds value across the organization. The governance structure will guide staff in the implementation and general function of the AM System. It will ensure that collaboration is occurring between stakeholders to make processes effective and increase the degree to which it can be implemented into business as usual activities.

The following figure illustrates the Governance Structure of the Town's AM System:



Figure 4: Governance Structure of the Town's AM System

This governance structure is represented by three major groups: Council, the AMT and Town Departments. Council represents the connection between the AM governance structure and the community. Town Departments are employees of the Town, who enact AM business practices. The Town's AMT provides a link between these two groups.

Lines of communication between each group are also defined under this governance structure. Council is responsible for communicating to stakeholders (such as the Town's residents) as well as communicating back to Town Departments, through the AMT. The AMT will report to Council and will communicate the results of AM processes that are managed by Town Departments.

The Town's AMT plays a critical role in the governance of AM at the Town. The relatively small size of Grimsby's staff complement requires distributed responsibilities within the AMT as there is no Manager of Asset Management position. Taking this into account, AM fits into the current governance structure of the Town by leveraging the resources and expertise of existing staff, rather than being in a separate department. As a result, existing staff have adopted AM business practices into their current roles under the guidance and support of the AMT. Moving forward, the Town should review the overall governance of AM and consider establishing a Manager level position that would be responsible for overseeing the AM system.



7.2 Roles and Responsibilities

The following roles and responsibilities of individuals and departments that make up the Town's governance structure are defined below.

7.2.1 Council

Council is made up of the elected representatives of the Town of Grimsby.

Council's role is to:

- Act on behalf of and represent the interests of stakeholders, over short, medium and long-term horizons;
- Establish the vision, service mandates and corporate management policies;
- Adopt, review and update the AM Policy and ensure a SAMP is in place;
- Maintain the necessary corporate capacity to support the elements and practices of an AM System; and,
- Set priorities and articulate community values to Town administration.

Council's Responsibilities are to:

- Implement the AM System, including the AM Policy and SAMP;
- Ensure staff are provided with sufficient resourcing, financial support, training and tools to manage risk and support the elements of sustainable service delivery;
- Commit to the implementation and continual improvement of AM practices, processes and tools to support the achievement of the Town's organizational objectives. This commitment should not only be to short-term foundational works, but to the long-term AM function at the Town;
- Schedule and complete periodic internal audits and management reviews to assess the effectiveness of the AM System in achieving AM objectives and supporting organizational objectives and council priorities.

7.2.2 Asset Management Team

The Town of Grimsby established the AMT to ensure that the Town's AM practices support strategic planning objectives, are consistent with international AM best practices, and are in compliance with legislative requirements.

The membership of the AMT will consist of (or designate of):

- Director of Finance;
- Assistant Director of Finance;
- Director of Public Works;
- Assistant Director of Public Works;
- GIS & Asset Management Coordinator;
- Director of Recreation, Facilities & Parks;
- Manager of Parks and Facilities;
- Operations Manager;
- Fire Chief; and,
- Representative for the Library, Art Gallery and Museum.

The AMT's role is to:

- Act as Liaison between Council and the Town Departments;
- Lead coordinated AM initiatives within the Town;
- Author the Corporate AMP;
- Recommend an optimized Capital Plan for inclusion within the Capital Budget submission;
- Benchmark and monitor the effectiveness of the AM Program and continually improve the AM System; and,





• Produce AM Reporting.

The AMT's responsibilities are to:

- Perform project prioritization activities, and recommend an optimized capital plan;
- Ensure regulatory compliance of the AM Policy and AMP;
- Project manage the delivery of the prioritized AM improvement tasks, including the selection and leading of cross-divisional task-specific teams;
- Provide technical advice related to the AM System to asset managers and departmental staff;
- Collect tactical and operational-level feedback on the AM System performance, needs and improvement priorities; and,
- Coordinate AM training for staff.

One member of the AMT will act as the AM Champion. At present, this role is occupied by the GIS & Asset Management Coordinator. This person will be responsible for Championing the AM program within the organization and coordinating AM business practices across the organization. Furthermore, this person will be responsible for ensuring that AM business processes adequately integrate different parts of the organization. The AM Champion will also be responsible for ensuring compliance with regulatory requirements for AM.

7.2.3 Town Departments

Town Departments liaise with the AMT and provide technical input and support for the implementation of the AM Program. They will participate in key Project Team roles within the AM Program Implementation Plan.

Town Department's roles are to:

- Support operational AM activities at the department level; and
- Liaise with the AMT and participate in project activities.

Town Department's responsibilities are to:

- Sit on technical advisory committees for the AM Program and specific projects;
- Champion AM Program activities within the department, and raise awareness for the AM Program;
- Assign technical resources to participate in project team or provide expertise and asset data (Subject Matter Experts); and,
- Communicate resourcing needs and barriers to the AMT.

8 **RISKS AND OPPORTUNITIES**

As with any business venture, risks to implementation are present. The following details some of the organizational risks and opportunities related to the implementation of the Town's AM System.

Risk: Changes to Legislation

Legislative requirements, such as O.Reg. 588/17, represent business drivers for the implementation of the Town's AM System. As with any piece of legislation, a risk exists that changing governments will overhaul or remove that legislation. The removal of legislative requirements may have an adverse affect on the implementation of the Town's AM System, by either causing the Town to minimize, or abandon the implementation of the AM System.

Risk: Prioritizing Resources

O.Reg. 588/17 has pressing timelines that must be met by municipalities. In order to achieve these timelines, the Town must commit resources to the implementation of its AM System. This pressure is exacerbated in the Town due to other concurrent corporate initiatives that are competing for the same resources across the corporation.



Opportunity: Embracing AM to Address Challenges and Mitigate Risks

The implementation of the Town's AM System presents an opportunity for the Town to adopt holistic and sustainable practices manage infrastructure. It will enable the Town to have a broader connection between their day-to-day decisions and services experienced by the community.

Furthermore, AM is a crucial process that has far-reaching benefits to the Town now and in the future. The implementation of AM at the Town is intended to be more than just a process implemented to satisfy a government requirement, but rather a practice that makes good business sense, and will aid the Town in decision-making now and in the future.

Education, training and the promotion of corporate-wide AM culture are key to the implementation of the AM System, as well as to managing risks and staff expectations.

9 CONTINUOUS IMPROVEMENT

The AM System and the AM Framework include core fundamental elements that create the environment of AM at the Town and detail the path to implementation of the full AM System. Once fully implemented, the Town's AM System will produce an AMP that provides direction for the management of the Town's assets in a manner that connects to the objectives of the AM Policy.

The AMP will inform the continued improvement of the Town's asset network. For that reason, continual improvement is a key component of AM; as all documented processes and practices will need to be revised and/or adjusted for changing circumstances to ensure that the AM System is delivering required outcomes.

As noted in Section 5, performance of the Town's AM System is measured against its AM Framework. Through maturity (needs) assessments the Town can continually assess its AM practices and report on progress of the AM System.

The following monitoring activities should be completed on an annual basis to embody the concept of continual improvement:

- Complete an update on the progress of the AMP, or revise the AMP as necessary;
- Report on the State of Infrastructure; and,
- Adjust performance targets for its asset network as required.

Every five (5) years, the Town should:

- Complete a maturity (needs) assessment against its AM Framework;
- Report on progress in AM maturity; and,
- Update strategic documents (ex. Strategic Plan, AM Policy, AM Strategy) as required.

10 ASSET MANAGEMENT ACTION PLAN

A series of activities will need to be completed by staff to increase the maturity of the Town's AM System. These activities are listed in an implementation plan, which is provided in Appendix D. These activities detail the next steps to the implementation of the Town's AM System. The completion of each activity will increase the maturity of the respective components of the AM Framework, thus striving to achieve performance targets.

All of the activities detailed in the implementation plan have two primary components. First, the activities consist of finite projects, intended to build a core or foundational component of the Town's AM System. Second, the activities will result in the implementation of an ongoing business process, which should be integrated into the Town's AM program to ensure the continual operation of the Town's AM System.



The implementation plan applies to the Town departments for which the scope of this SAMP applies. Within the implementation plan, the following groups are considered:

- CAO Chief Administrative Officer's Office
- IT Information Technology and Service Innovation
- IT (AMT) Asset Management Team a subset of IT
- PW Public Works (includes roads and water/wastewater systems)
- Planning Planning and Development
- Finance Finance
- Fire Fire
- Rec Recreation, Facilities and Culture (includes Parks and Trails, Library)

The implementation plan provides the following information:

Activity – details the recommended activity.

Related Objective – details the category of the Town's AM Framework that relates to the recommended activity.

Rationale – provides a brief description of the project, as well as the project components that will increase the Town's AM maturity.

Priority – Details the priority of the activity. Priorities are also linked to criticality and urgency. High priority activities are also critical; and should be completed sooner, when compared to medium or low priority activities. Priority may also be detailed as "Existing Process", which indicates that major activities have already been completed at the Town, however, ongoing maintenance and business practices associated with these activities will still be required.

Lead Group – indicates the group in the Town that will lead the activity.

Primary Support Group(s) – indicates the group or groups in the Town that will be required to participate in the activity and will have a major stake in its outcome.

Internal Resources – indicates the internal staff resource requirements within the Town that will support the ongoing business processes that result from the activity. These resources are expressed as a percentage of a full time equivalent (FTE) position.

Outsourcing Potential – indicates whether outsourcing can be engaged to advance the existing processes or to implement project activities (i.e. foundational components) of the respective activity.

Outsourcing Cost – indicates the estimated cost associated with the abovementioned outsourcing work.

Timeline – indicates the recommended timeline to complete the activity. Note that timelines are often linked to priority (i.e. criticality).

11 **RESOURCE REQUIREMENTS**

The implementation plan has identified several activities, and provided associated costs associated with outsourcing, as well as recommendations for internal resourcing to maintain or manage the resulting processes.

11.1 Outsourcing

For each of the activities in the implementation plan, the potential for outsourcing is identified. Outsourcing can be necessary to leverage external resources when resource requirements are higher than can be accommodated by internal staff. Furthermore, outsourcing can help to complete activities in a timely manner. Outsourcing can also provide the Town



with access to AM expertise that can bring perspectives from other municipalities and can provide the resources required without the cost of long term staff positions.

The implementation plan has identified a total financial requirement of approximately \$430,000 over five years for potential outsourcing needs. It should be noted that the extent to which any project is outsourced can vary depending on the scope of the project and the Town's internal capacity to support smaller/larger portions of each activity. The Town should review the scope of each project at the time the terms of reference are developed to determine more specific outsourcing requirements.

11.2 Staff Resources

The implementation plan has also identified internal staff resource requirements for each activity, expressed as a percentage of a full time equivalent (FTE) position. These values represent the resource requirements to manage and maintain the processes resulting from the activities in the plan.

The implementation plan has identified an staff resource requirement of 1.0 FTE associated with maintaining the recommended activities. It is important to note that the recommendations do not necessarily represent a need for net new resources. Resource requirements should be considered and reviewed with departmental leads and managers to determine if new resources are needed, or if the work can be accommodated with the existing Town staff resources.

12 SUMMARY AND CONCLUSIONS

This SAMP is a foundational element of the Town of Grimsby's AM System. It clearly defines the Town's AM objectives and specifically details the method in which they will be achieved. The SAMP is aligned to the Town's AM Policy. It plays a key role in explaining how the commitments and principles described in the Town's AM Policy will be implemented; and to ensure that they are connected to the Town's AMP. The scope of this SAMP pertains to the Town's services that are dependent on physical assets for delivery, including all Town departments that provide these services.

This SAMP was developed to achieve organizational and AM objectives. It was informed by the Town's AM Policy; legislative requirements for AM; the needs and goals of stakeholders; industry best practices; and, a needs assessment of the Town's current AM practices.

This SAMP details the Town's AM Framework, which defines the key components of the Town's AM System. The AM Framework is comprised of the following four (4) major categories. Each category defines a critical component of AM best practice:

- 1. Connecting to Strategic Priorities
- 2. Asset Lifecycle Management
- 3. Asset Management Analysis
- 4. Asset Management Plan

In order to implement the Town's AM system, a governance structure has been defined. The governance structure consists of: Council (in the oversight position); the Town's AMT (in the management and implementation position); and, Town Departments (in the collaboration and support position).

Objectives and performance targets have been defined, which the Town will use to monitor its progression to a fully mature AM System. Furthermore, methods for the Town to continually assess its AM practices and report on progress of the AM System are also provided.

An implementation plan has been developed to define key activities for the Town to increase the maturity of its AM system. The plan has defined 14 activities, over a span of five (5) years. The plan has also provided recommendations for potential outsourcing (including funding requirements) as well as internal staff resources required to support the AM processes that make up the AM system. The implementation plan has identified a total financial requirement of approximately \$430,000 over five years for potential outsourcing needs; and, a staff resource requirement of 1 FTE to manage and maintain the processes resulting from the activities in the plan.



Appendix A Town of Grimsby Asset Management Policy





Title:	Town of Grimsby Asset Management Policy		
Document #	CO-GEN-AMP-POL-001-001	Created by:	Jenn Gross
Policy Number:		Authority:	Council
Status of Document:	Approved	Approved by:	Council
Approval Date:	June 19, 2017	Effective date:	June 19, 2017
Issue/		Start of Next	
Revision Date:		Review Period:	
Revision #:	0	No. of Pages	6

BACKGROUND AND PURPOSE

The purpose of this policy is to set out direction and guidance for staff undertaking asset management across the organization in a systematic and coordinated way and in a manner which supports the Town's goals and objectives. Specifically, it addresses the need to:

- 1) Provide consistent and accurate means of tracking and reporting on the Town's assets, while improving decision-making accountability and transparency;
- 2) Provide a framework that will enable the Town to implement plans, define goals, and work towards enterprise asset management to achieve medium and long term sustainability, and to demonstrate fiscal stewardship;
- 3) Meet legislative reporting and organization financial planning requirements;
- 4) Improve customer service.

DEFINITIONS

asset	Has a physical nature, is a significant economic resource, and provides the delivery of programs and/or services.	
asset management	The application of sound technical, social and economic principles that considers present and future needs of users, and the service from the asset.	
corporate asset management	The application of asset management practices on a corporate level to maximize consistency among diverse business units. Corporate asset management creates efficiency by harmonizing service levels and business processes wherever possible.	
asset management plans	Department specific plans, renewed every 5 years, which tell how departments can implement strategies and achieve asset objectives and targets.	
life cycle	The time interval that commences with the identification of the need for an asset and terminates with the disposal of the asset.	

life cycle cost

The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation, and disposal costs.

public The public shall refer to Grimsby tax payers, residents, businesses.

VISION AND GOALS FOR INFRASTRUCTURE ASSETS

Council's goal for the community is a safe, livable, sustainable and economically vibrant community fortified by well-managed and maintained municipal assets. These assets, which are essential to the delivery of services, include but are not limited to:

- Efficient transportation networks
- Safe and reliable water distribution networks
- Economical and reliable sewage collection systems
- Reliable information technology systems
- Productive fleets
- Accessible parks
- Recreation and civic facilities.

The purpose of this policy is to articulate Council's commitment to asset management and guides staff using the policy statements. This policy outlines how it is to be integrated within the organization in such a way that it is coordinated, cost effective and organizationally sustainable. This policy also demonstrates to the community that Council is exercising good stewardship and is delivering affordable services while considering its legacy to future residents. This policy will support the development and improvement of decision-making tools that promote doing the right thing, to the right asset, at the right time.

Staff will implement the policy through the development and use of asset management guidelines and practices. The policy intends to allow business units the latitude to develop, implement, operate and continually improve asset management practices for their particular asset types and businesses within a common framework, effectively making use of staff's knowledge of processes, technologies, and available tools. Staff will continually work to optimize processes for the creation, operation, maintenance and disposal of assets as well as promote service levels that balance customer expectations with cost and business risk.

COUNCIL ASSET MANAGEMENT POLICY STATEMENTS

Asset management is a broad strategic framework that encompasses many disciplines and involves the entire organization. To guide the organization, the following policy statements have been developed.

The Town of Grimsby will make reasonable efforts to:



- Maintain and manage municipal assets at defined levels to support public safety, community well-being and community goals. The Town does not accept liability for any damages incurred by the public that are the result of not maintaining higher levels of service.
- b) Monitor standards and service levels to ensure that they meet and support the community, as well as Council's goals and objectives.
- c) Develop and maintain inventories of its municipal assets.
- d) Establish asset replacement strategies using full life cycle costing principles.
- e) Plan financially for the appropriate level of maintenance of assets to deliver service levels and extend the useful life of assets.
- f) Make the commitment to maintain, within reason, the necessary corporate capacity (including, but not limited to, resourcing, financial support, staff competencies, business processes, data and integrated information systems) to support the elements and practices of the asset management system.
- g) Plan for and provide stable long term funding to replace and/or renew and/or decommission assets.
- h) Where appropriate, Town of Grimsby will consider and incorporate asset management in its other corporate plans.
- i) Report to citizens on the status and performance of work related to the implementation of this asset management policy.

POLICY PRINCIPLES

The principles that shall guide staff decisions, actions and recommendations to achieve the purposes of this policy are described below.

- Make informed decisions based on all available information on that asset class, identifying all revenues and costs (including operation, maintenance, replacement and decommission) associated with asset decisions, including additions and deletions. The basis for the decisions made should be recorded.
- Integrate corporate, financial, business, technical and budgetary planning for municipal assets.
- Develop and enhance asset management knowledge and competencies to ensure the availability of skill sets required for the implementation of asset management programs.
- Establish organization accountability and responsibility for asset inventory, condition, use and performance.
- Consult with stakeholders where appropriate.
- Define and document service, maintenance and replacement levels and outcomes.
- Use available resources effectively.
- Manage assets to be sustainable.
- Minimize total life cycle costs of assets.
- Consider environmental goals.
- Consider social and sustainability goals.
- Minimize risks to users and risks associated with failure.
- Achieve/pursue best practices where applicable.
- Report on the performance of its asset management program as required.



Where insufficient resources exist to adequately follow these principles staff shall attempt, as much as is reasonably possible, to follow the overall spirit of these principles.

GUIDELINES AND PRACTICES

Using accepted industry guidelines and practices, staff shall implement this policy. Staff is to consider the creation of an asset management strategy and will continue to create, and use, asset management plans.

The Town will continue to follow all relevant regulations and requirements for capital asset reporting and asset management.

The Town shall work towards integrating an asset management program into operational plans and data management throughout the organization. Corporate standards will continually be created and improved upon, where applicable, to promote consistency in how assets are managed. The Town will review current business processes where justified to improve operational effectiveness and efficiency. Through improvements to data quality, there will be continuous improvements to asset management processes which will help achieve increased forecast reliability.

Asset Management Plans (AMP) shall be developed for required asset classes and will outline longterm goals, processes and steps toward how they will be achieved. The AMPs shall be based on recent inventories and condition data (acquired or derived), projected performance, and remaining service life and consequence of losses. They should also consider future growth. Financial plans should consider alternative scenarios and risks, and include public consultation where applicable.

CONTEXT AND INTEGRATION

With increasing regulation and focus on informed decision-making, asset management has become a necessity that needs to be implemented throughout the organization. Asset management and data management are intrinsically linked, and need to be developed together as the Town increases their reliance on digital information.

Where possible and appropriate, Council and staff will consider this policy and integrate it in the development of corporate documents such as:

- Official community plan
- Business plans
- Corporate strategic plan
- Corporate financial plan
- Capital budget plan
- Data or information management plan
- Operational plans and budgets (including vehicle and fleet plans and budgets)
- Neighbourhood plans/annual reports
- Design criteria and specifications



- Infrastructure servicing, management and replacement plans
- Community social plans
- Parks and recreation plans
- Facility plans
- Transit plans

KEY ROLES

Council approves Town policies while staff, the public and other agencies may provide input on the nature of text of the policy. Council retains the authority to approve, update, amend or rescind Council policies. The roles and responsibilities are outlined below. Council delegates the authority to operationalize this policy to the Town Manager.

Role	Responsibility
Identification of issues, and development of policy	Council, staff
updates	
Establish levels of service	Council
Exercise stewardship of assets, adopt policy and	Council
budgets	
Implementation of policy	Town Manager and staff
Development of guidelines and practices	Town Manager, AMT, and staff
On-going review of policies	Council, AMT, and staff

IMPLEMENTATION, REVIEW AND REPORTING RESPONSIBILITIES

The implementation, review and reporting regarding this policy shall be integrated within the organization. Due to the importance of this policy, the organization's asset management program shall be reported on annually to the community, and implementation of this policy reviewed by Council at the mid-point of its term.

Actions	Responsibility
Adopt Asset Management Policy	Town Manager and Council
Monitor and review infrastructure standards and service levels at established intervals	Town Manager and Council, AMT
Develop and maintain infrastructure strategies including development and service plans	Planning, Public Works and other asset operation and maintenance departments, Finance
Develop and maintain asset inventories	Public Works, other asset operation and maintenance departments, Finance
Assess infrastructure condition and service levels	Public Works, other asset operation and maintenance departments, Finance
Establish and monitor infrastructure replacement levels through the use of full life cycle costing principles	Public Works, other asset operation and maintenance departments, Finance
Develop and maintain financial plans for the appropriate level of maintenance, rehabilitation, extension and decommission of assets	Public Works, other asset operation and maintenance departments, Finance
Report to citizens on status of the community's infrastructure assets and asset management program. The channels may include annual citizen	Council, Town Manager, Staff



reports, business plans, etc.	
Act as asset management stewards – responsible for the implementation of improvements to processes identified through the asset management program	Department Managers

ASSOCIATED DOCUMENTS

- Infrastructure Asset Management Plan (2014)
- Asset Management Maturity Assessment (2016)
- Asset Management Team Terms of Reference (2016)
- Facilities Asset Management Plan (2017)

REVISION HISTORY

Revision No.:

Date of Last Revision:

Last Approval Date:

Reason for Change(s):

Summary of Change(s):



Gap analysis is a process of determining the difference between the current status of a system or document, and legislated or standard requirements, usually for the purpose of formulating an action plan to ensure a new system is in conformance with requirements. This gap analysis presents the GMBP review of the Town of Grimsby's Asset Management Policy (CO-GEN-AMP-POL-001-001 Jun 2017) and the policy requirements from Ontario Regulation 588/17: Asset Management Planning For Municipal Infrastructure, under the Infrastructure for Jobs and Prosperity Act, 2015.

Red Italic = Current policy does not appear to have required content

Nature of Requirement	Requirement from O. Reg. 588/17 – The Policy Shall Include	Town of Grimsby Policy CO-GEN-AMP-POL-001-001 Jun 2017	
Link to other Docs	Any of the municipality's goals, policies or plans that are supported by its asset management plan.	Context & Integration section	None
Process	The process by which the asset management plan is to be considered in the development of the municipality's budget or of any long-term financial plans of the municipality that take into account municipal infrastructure assets.	Implementation section	None
Approach	The municipality's approach to continuous improvement and adoption of appropriate practices regarding asset management planning.	Vision section contains some notes about "continually work to optimize processes for creationand disposal of assets" and "promote service levels".	None
		Principles section: Develop and enhance asset management knowledge and competencies to ensure the availability of skill sets required for the implementation of asset management programs.	
		Guidelines section: corporate standards will continually be improved upon	
Commitment	 The municipality's commitment to consider, as part of its asset management planning, the actions that may be required to address the vulnerabilities that may be caused by climate change to the municipality's infrastructure assets, in respect of such matters as, operations, such as increased maintenance schedules, levels of service, and lifecycle management. 	Principles section includes "consider environmental goals" and "be sustainable", however no Commitment is made to consider the issues listed related to climate change.	Consider a fir section that i considered in change, respo operations, le throughout t effect of clim matters is no
Commitment	The municipality's commitment to consider the anticipated costs that could arise from the vulnerabilities described above.	See above	See above

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	Gap
	ment under the Policy Statements imate change issues listed to be
	ze impact, resilience to climate
-	tain diversity). Although
	ce and lifecycle is mentioned
	nmitting to being aware of the
	ulnerabilities on these core AM

Nature of Requirement	Requirement from O. Reg. 588/17 – The Policy Shall Include	Town of Grimsby Policy CO-GEN-AMP-POL-001-001 Jun 2017	
Commitment	The municipality's commitment to consider adaptation opportunities that may be undertaken to manage the vulnerabilities described above.	See above	See above
Commitment	The municipality's commitment to consider mitigation approaches to climate change, such as greenhouse gas emission reduction goals and targets.	See above	See above
Commitment	The municipality's commitment to consider disaster planning and contingency funding.	Policy Statements section: "Maintain assets to support public safety"	See above
Process, link to other docs	A process to ensure that the municipality's asset management planning is aligned with any of the following financial plans: Financial plans related to the municipality's water assets including any financial plans prepared under the <i>Safe Drinking Water</i> <i>Act, 2002,</i> Financial plans related to the municipality's wastewater assets.	Implementation section, but does not explicitly list Water Financial Plan	Consider enhar Financial Plan (
Process	A process to ensure that the municipality's asset management planning is aligned with Ontario's land-use planning framework, including any relevant policy statements issued under subsection 3 (1) of the <i>Planning Act</i> , any provincial plans as defined in the <i>Planning Act</i> and the municipality's official plan.	Implementation section, but does not explicitly list development-related plans	Consider enhar Charge Studies,
Explanation or Definition	An explanation of the capitalization thresholds used to determine which assets are to be included in the municipality's asset management plan and how the thresholds compare to those in the municipality's tangible capital asset policy, if it has one.	No explanation related to the content found	Consider addin definition relat definition for ti
Commitment	The municipality's commitment to coordinate planning for asset management, where municipal infrastructure assets connect or are interrelated with those of its upper-tier municipality, neighbouring municipalities or jointly-owned municipal bodies.	Principles section includes: "Consult with stakeholders where appropriate" Policy Statements includes "Report to citizens on performance of work related to the implementation of the policy"	Re-consider the requires a com
Responsibility	The persons responsible for the municipality's asset management planning, including the executive lead.	Key Roles section – who is responsible overall for AM planning? Council appears to be by the description. Implementation section	Consider a clea management p
Responsibility	An explanation of the municipal council's involvement in the municipality's asset management planning.	Key Roles section	None
Commitment	The municipality's commitment to provide opportunities for municipal residents and other interested parties to provide input into the municipality's asset management planning.	Implementation section: Report TO citizens. The public may provide input on the POLICY.	Consider a mor interested part than just receiv
		Policy Statements section: Report TO citizens	

Gap
nhancing the integration list to include the Water an (O Reg 453).
nhancing the integration list to any Development dies, if relevant.
dding an explanation on how the policy asset relates to the Tangible Capital Asset policy for the Town.
r the use of "where appropriate", as the legislation commitment to coordinate planning.
clearer definition of person(s) responsible for asset nt planning overall
more explicit commitment for residents and parties to provide INPUT into AM planning, rather eceiving output only.

Nature of Requirement	Requirement from O. Reg. 588/17 – The Policy Shall Include	Town of Grimsby Policy CO-GEN-AMP-POL-001-001 Jun 2017	
Date / Revision	Every municipality shall prepare its first strategic asset management policy by July 1, 2019 and shall review and, if necessary, update it at least every five years.	Implementation section requires annual reporting to the community, bi-annual policy implementation review by Council.	If the Council r include a revie
	The principles to be followed by the municipality in its asset management planning, which must include the principles set out in section 3 of the Infrastructure for Jobs and Prosperity Act:		
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure planning and investment should take a long- term view, and decision-makers should take into account the needs of Ontarians by being mindful of, among other things, demographic and economic trends in Ontario.	 Policy Statements g) notes long term funding Guidelines section notes long-term goals from AMPs Principles section only refers to "minimize total life cycle costs" Principle includes "consider social and sustainability goals" Guidelines section: consider future growth 	Consider a spe a long-term vie As the definitio 'Council goals' economic vibra about the cons in asset manag is definitely rel
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should take into account any applicable budgets or fiscal plans, such as fiscal plans released under the Fiscal Transparency and Accountability Act, 2004 and budgets adopted under Part VII of the Municipal Act, 2001 or Part VII of the City of Toronto Act, 2006.	Principles section, Policy Statements section	None
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure priorities should be clearly identified in order to better inform investment decisions respecting infrastructure.	Policy Statements section: manage assets at defined levels Principles section: Document service, maintenance and replacement levels and outcomes.	None
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should ensure the continued provision of core public services.	Policy Statements section a)	None
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should promote economic competitiveness, productivity, job creation and training opportunities.	Principles section: Consider social goals Policy Statements section a)	None
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure planning and investment should ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.	No principle related to the content found	Consider addin and safety of w maintenance of

Gap I review of implementation of the policy would view of the policy itself, no gap. --pecific principle to encourage AM planning to take view as a whole. ition of 'asset management' and the defined ls' within the document both refer to livability and prance, consider including a specific principle nsideration of demographics and economic trends agement planning. Social and sustainability goals elated.

ding a AM principle related to ensuring the health workers involved in the construction and of infrastructure assets is protected.

Nature of Requirement	Requirement from O. Reg. 588/17 – The Policy Shall Include	Town of Grimsby Policy CO-GEN-AMP-POL-001-001 Jun 2017	
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure planning and investment should foster innovation by creating opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques and practices developed in Ontario.	No principle related to the content found	Consider addin by creating oppo services and pra
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should be evidence- based and transparent	Principles section includes "The basis for the decisions made should be recorded", but not described how it is then publicly available. Purpose section also notes transparency, but not a principle. Evidence based decisions is described.	Consider a firm and the inform
Principle	(From Sec. 3 of the Act) Investment decisions respecting infrastructure should be made on the basis of information that is either publicly available or is made available to the public, and	Principles section includes "The basis for the decisions made should be recorded", but not described how it is then publicly available. Purpose section also notes transparency, but not a principle.	Consider a firm and the inform
Principle	(From Sec. 3 of the Act) Information with implications for infrastructure planning should be shared between the Government and broader public sector entities, and should factor into investment decisions respecting infrastructure.	Principles section includes: "Consult with stakeholders where appropriate"	Re-consider the the intent of the information.
Principle, link to other docs	 (From Sec. 3 of the Act) Where provincial or municipal plans or strategies have been established in Ontario, under an Act or otherwise, but do not bind or apply to the Government or the broader public sector entity, as the case may be, the Government or broader public sector entity should nevertheless be mindful of those plans and strategies and make investment decisions respecting infrastructure that support them, to the extent that they are relevant. Examples of plans and strategies to which this paragraph may apply include, i. policy statements issued under section 3 of the <i>Planning Act</i>, and provincial plans as defined by that Act, ii. municipal water sustainability plans submitted under the <i>Water Opportunities Act</i>, 2010, iii. the Lake Simcoe Protection Plan established under the <i>Lake Simcoe Protection Act</i>, 2008, and iv. transportation plans adopted under the <i>Metrolinx Act</i>, 2006. 	Context section	None
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should promote accessibility for persons with disabilities	Vision section includes "accessible parks", but principles on the consideration of accessibility promotion not found	Consider addin accessibility.

Gap

ding a AM principle related to fostering innovation pportunities to make use of innovative technologies, oractices.

rmer principle about the transparency of decision rmation used to make decisions.

rmer principle about the transparency of decision rmation used to make decisions.

the use of "where appropriate", as this may soften the legislation to encourage the sharing of

Iding an AM principle related to promoting

Nature of Requirement	Requirement from O. Reg. 588/17 – The Policy Shall Include	Town of Grimsby Policy CO-GEN-AMP-POL-001-001 Jun 2017	
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure planning and investment should minimize the impact of infrastructure on the environment and respect and help maintain ecological and biological diversity, and infrastructure should be designed to be resilient to the effects of climate change	Principles section includes "consider environmental goals" and "be sustainable"	Consider a fir elements liste resilience to e
Principle	<i>(From Sec. 3 of the Act)</i> Infrastructure planning and investment should endeavour to make use of acceptable recycled aggregates	Principles: "Use available resources effectively".	None
Principle	(From Sec. 3 of the Act) Infrastructure planning and investment should promote community benefits, being the supplementary social and economic benefits arising from an infrastructure project that are intended to improve the well-being of a community affected by the project, such as local job creation and training opportunities (including for apprentices, within the meaning of section 9), improvement of public space within the community, and any specific benefits identified by the community	Policy Statements: "support community well-beingand goals" Community social plans also listed in Context section.	None
Process	Every municipality shall post its current strategic asset management policy on a website that is available to the public, and shall provide a copy of the policy to any person who requests. It.	Not explicitly noted	Consider a no communicatio

Gap

firmer principle that includes all environmental isted to be considered in AM (minimize impact, to climate change, respect and maintain diversity)

note to ensure policy availability and ation.



Appendix B Technical Memorandum – Needs Assessment





GM BluePlan Engineering Ltd. (GMBP) was retained by the Town of Grimsby to review the state of its Asset Management (AM) processes against GMBP's AM Framework, which is founded on internationally recognized AM best practice. The assessment identifies gaps within the Town's current practice and is based on information gathered through a desktop review of Grimsby asset management related information and documentation, and information gathered at the Needs Assessment Workshops held the first week of October with staff from: Fire; Public Works; Planning; Finance; Parks, Recreation and Culture; Library and Museum; and, IT. These workshops provided GMBP with the opportunity to confirm the gaps found during the desktop review and ask probing questions to better understand the current state of Asset Management.

AM needs (or maturity) assessments are a best management practice in the municipal infrastructure industry. Completing a needs assessment provides a comprehensive and unbiased view of an organization's AM processes. The needs assessment provides a benchmark that can assist in measuring progress of the Towns' AM System as it matures in the coming years. AM maturity generally is not intended to be a measure of specific business processes at the Town, but rather a reflection of the sophistication of the integration of business processes that are employed to achieve objectives. In that light, maturity is also related to understanding the impacts that decisions in one business area will cause in another business area, as opposed to an assessment of the approach to making decisions in each individual business area.

It should be noted that the areas related to Customer and Technical LOS and Performance Measures reflect the current state at the outset of the project. A key task of the project was to develop LOS tables and a suite of performance measures for each service area in the Town. After this Task, the respective boxes in the Framework will be changed to 'No gap'.

The following memo documents the findings of the Needs Assessment Workshop.

1. AM FRAMEWORK

The AM Framework provides GMBP with an organized and systematic method of recognizing gaps. During the October Gap Assessment Workshop, GMBP provided a review of the Framework components.





FIGURE 1 - ASSET MANAGEMENT FRAMEWORK

Each component defines a critical component of asset management best practice. Framework components include:

- Connecting to Strategic Priorities: defines the Town's corporate vision, priorities and key indicators of services to be provided to the customers (public)
 - Community Levels of Service Expectations
 - o Customer/Community Performance Measures
 - Enterprise Risk Management
- Asset Lifecycle Management: identifies asset focused strategies for maintaining and enhancing current services
 - Technical Levels of Service
 - Technical Performance Indicators
 - o Asset Lifecycle & Risk Management Strategies
 - o Growth & Service Enhancements
 - Asset Management Analysis: defines the metrics used to support decision regarding asset related activities
 - o Optimized Capital and Operating Budgets
 - Financial Analysis
 - Asset Management Plan: identifies all the necessary data to comply with the requirements of asset management reporting
 - Reporting on Current State of Infrastructure
 - Reporting on LOS & Performance Measures
 - o Asset Management Plan to Maintain Current LOS and Achieved Desired LOS
 - o Financial Plan



2. GAP ASSESSMENT

The following sections summarize the gap analysis and outline areas of required improvement for each component of the AM Framework. Gaps have been colour coded accordingly:



2.1 CONNECTING TO STRATEGIC PRIORITIES

The needs of the customers (public) and the corporate vision must be clearly defined to drive all functions of the Town. These components of the framework involve formalizing a corporate risk strategy, defining clear customer levels of service and measuring customer related performance indicators that will allow Council and the Town's staff to continuously measure the effectiveness of their investments and tradeoff's in each service area.

It was noted that a Corporate Strategic Plan is not in place; which is typically a key document that provides high level strategic direction that influences how infrastructure is managed. In addition, there is no formally documented process that defines budget priorities. The Town does have a Strategic AM Policy that is used to support infrastructure priorities.

Customer and Technical levels of service, as well as key performance indicators are critical elements in the AM Framework. They are used to drive the program AM strategies and assess the success of service delivery. The Town has completed Mater Plans for several service areas, however the planning activities do not connect to the future O&M or capital replacement needs of new infrastructure.

The following documents specific findings for each process in the AM Framework:

Process	Findings	Gap
	Fire: Department is currently working on defining the scope of their services.	
	Parks and Recreation: Master Plan is in progress with a focus on existing assets and future opportunities.	
Community Levels of Service Expectations	PW Planning: Transit master plan has been completed and defines LOS, Master Plans for various services areas are an existing process that include some community LOS expectations.	
	Library and Museum: Strategic Plan has been completed.	
	IT: Strategy is in place defining LOS expectations.	
	PW Planning: DC and economic development strategy have been done in past. There is one specific to the waterfront.	
	IT: Strategy is in place defining Performance Measures.	
Customer/ Community Performance Measures	Fire: Department is currently working on defining community performance measures.	
	PW: Some technical performance measures existing, but not well connected to community performance measures.	
	Parks and Recreation: Master Plan is in progress and will define community performance measures	



Enterprise Risk Management There is no formal enterprise risk management process. Enterprise risk management is applied through the professional judgement of senior staff to determine budget priorities.

2.2 ASSET LIFECYCLE MANAGEMENT

Technical LOS are the condition and performance measures that each Program will attempt to achieve, over and above regulatory requirements, when establishing capital and operating investment plans for assets. They are established by considering the Customer LOS expectations and defining what expectations should be placed on the individual assets and the overall systems to support the delivery of service. Whereas Customer LOS can be an externally communicated expectation, Technical LOS is utilized as an internal measure. Some LOS measures have been defined for core services in O.Reg. 588/17.

Technical LOS align with the lifecycle decisions made by Grimsby staff in determining the capital renewal and rehabilitation decisions for assets to support the enhancement of asset management systems.

In addition, asset strategies support the growth management processes and define how new assets that accommodate developments will be managed, as well as additional assets in existing areas to improve or enhance levels of service.

In general, it was noted that:

- Existing lifecycle strategies are not explicitly documented and currently consider anecdotal or regulatory levels of service requirements.
- Not all department have defined Levels of Service
- There is no formal process (or triggers) to establish the need for new non-growth assets or to adjust service levels in existing areas.


The following documents specific findings for each process in the AM Framework:

Process	Findings	Gap
	Fire: Department is currently working on defining the scope of their services from an operations perspective.	
Technical Levels of Service and Technical Performance Indicators	Public Works: Water has defined LOS as per compliance with DWQMS regulation, in addition roads also have defined LOS.	
	Parks and Recreation: Department is working on defining their LOS.	
	IT: Department noted they have define and have tracked specific metrics.	
	Library: Department tracks some standard industry metrics.	
	Fire: Current Preventive Maintenance activities are tracked via Public Works. NFPA guidelines on service life of various assets is typically followed.	
Asset Lifecycle & Risk Management Strategies	Public Works: Proactive approach on maintenance/rehabilitation activities for appropriate asset types. Working on ways to optimize their activities.	
management offategies	Parks and Recreation: Department applies typical industry strategies to manage parks, facility management strategies require work order data to optimize rehab/replace timing of some assets.	
	Library and IT: Department applies typical industry strategies to manage respective assets.	
	Fire: Second stations recently constructed, as part of new developments recommendations have been made for a future 3 rd one but is not a formal request	
Growth & Service	Public Works: It was noted they are working on producing water/wastewater masterplan, and they have a stormwater masterplan.	
Enhancements	Parks and Recreation: Master Plan is in development to define growth and service enhancement needs.	
	Library: Recent new library, no other planned. Biggest issue is space planning which is tracked through a booked process.	

2.3 ASSET MANAGEMENT ANALYSIS

Optimized Capital and Operating Budgets refers to the processes to make informed analysis with respect to why, when, and how to invest in infrastructure systems. This process considers the technical LOS, performance measures, lifecycle management strategies, asset risk management and Growth Management to produce a plan for why (investment triggers), when (optimal timing) and how (replace/rehabilitate) to invest in an asset. This will help support the development of an expenditure plan which will be supported by robust data consistency. It was noted that each department has a different system to record data, therefore is important to define a consistent approach for reporting.

The information from the workshops confirmed that the Town does not currently practice data-driven AM analysis across all asset groups. The analysis is completed to some extent within each service area, however this is not connected in an overall analysis that informs cross-asset optimization/prioritization. This process is done through the professional judgment of senior staff to establish budget priorities.



The financial analysis portion of an AM Analysis refers to process of connecting the short, medium and long term expenditures and revenues that are required to fund the optimized capital and operating budgets. A mature financial analysis process enables staff to understand the longer term financial implications of setting higher/lower LOS expectations on the expenditure or revenue needs. This in turn can be connected to community affordability and willingness to pay discussions with residents.

The information from the workshops confirmed that the Town's financial planning staff have strong process in place to develop and execute operating and capital budgets, and well as to monitor the health of the Town's reserve and debt situation. However, the Town does not explicitly complete a financial analysis that is connected to LOS expectations.

2.4 ASSET MANAGEMENT PLAN

The current processes to establish capital, operating and asset maintenance plans for the Town's infrastructure systems are based on making incremental adjustments to previous year allocations based on the professional judgment of senior staff to reflect corporate priorities. The goal of the Town's AM Systems is to leverage improved asset data with higher confidence levels that connect to LOS expectations to substantiate future funding requests. As the Town progresses their Strategic Asset Management Plan there will be more data and information available to develop a data-driven AMP.

Process	Findings	Gap
Reporting on Current State of Infrastructure	The Tows current AMP reports on the current state of the Town's infrastructure. However, the new O.Reg 588/17 has some additional State of Infrastructure reporting requirements.	
Reporting on LOS & Performance Measures	The Town does not report on asset-related LOS Performance Measures. The new O.Reg 588/17 requires AMPs to report on the current performance of a range of LOS metrics, and by 2024 the proposed performance of each metrics.	
Asset Management Plan to Maintain Current LOS and Achieve Desired LOS	The Town does have a current AMP. However, the new O.Reg 588/17 requires AMPs to report on the asset lifecycle activities that are required to maintain current LOS, and by 2024 the asset lifecycle activities achieve proposed LOS.	
Financial Plan	The Town does have a current AMP that contains a financial plan. However, the new O.Reg 588/17 requires AMPs to report on the financial plan to fund the lifecycle activities required to achieve the current versus proposed LOS.	

The following documents specific findings for each process in the AM Framework:



3. TOWN OF GRIMSBY ASSET MANAGEMENT STATE

Based on our analysis the current state of Grimsby's Asset Management processes as it relates to GMBP AM Framework is summarized below as of Q4 2018:



As mentioned in the introduction, a series of LOS tables and performance measures were developed through collaboration with staff across the organization in Q4 2018 and Q1 2019. This process has resulted in an increase in maturity of these process. The revised state of Grimsby's Asset Management processes as it relates to GMBP AM Framework is summarized below as of Q2 2019:





Appendix C Level of Service Tables



Introduction

Asset Levels of Service (LOS) represent a key cornerstone of the Town of Grimsby's Strategic Asset Management Plan (SAMP). Developing a series of structured performance measures that align with community values and corporate priorities will contribute to the Town's objectives to develop a leading asset management program that balances costs, opportunities and risks against desired LOS. The LOS Frameworks were developed for each asset group or service area in conjunction with the Town's subject matter experts through a series of working sessions. The process used to develop the LOS Frameworks is outlined below.

Structure of the LOS Frameworks

1. A *service statement* is developed that briefly describes the kind of service that will be provided to residents. For example, the service statement for Parks and Open Spaces is "Efficiently providing high quality parks, open spaces and trails that are accessible to residents and support a livable community".

2. The content of LOS Framework is populated:

• Key service attribute: a phrase that describes what the service will be/provide, e.g. accessibility, efficiency, quality, quantity, etc. These descriptions should cover all aspects of the service and be easy for the customer/public to understand and recognize.

• LOS statement: a short sentence that describes the outputs of the service category. There may be one or multiple LOS statements written for each key service attribute. The output should clearly state customer standards and be measurable.

• Performance measure: a metric that quantifies the degree to which a LOS is being achieved. Performance measures should be SMART (specific, measurable, achievable, relevant, and time-bound). There are also two types of performance measures (customer and technical) which are described in more detail below.

3. The performance measures, current performance values, and targets are developed for both customer and technical perspectives. It should be noted that customer performance measures can also be referred to as 'community', 'corporate' or 'strategic' performance measures.

Customer performance measures are expressed in non-technical terms that describe the general public's understanding of services being provided by infrastructure systems. Customer performance measures are typically related to the service that is provided by the overall system supporting the service delivery, rather than the specific assets.

Technical performance measures are technical measures applied against assets and overall systems that define the performance requirements to support the Customer performance measure. Technical performance measures are used to determine which criteria will be used to drive business decisions. The following points describe the main categories of Technical performance measures:

- Legislated/regulated performance measures that the municipality is legislated to achieve, such as water quality targets.
- Service delivery best practices performance measures that are based on meeting the Town's service delivery objectives.
- Industry standards performance measures that are based on the industry standards for how infrastructure is designed or managed.

4. The performance measures are categorized as Foundational and Advanced metrics. The Foundational metrics are the fundamental starting point for developing Asset LOS. They typically consist of financial and condition data that the Town is able to begin measuring immediately. Advanced metrics describe areas where little or no data exists, typically because processes or data sets have not yet been implemented to track performance. Advanced metrics can be considered "aspirational metrics," which are useful to consider but will require further effort to operationalize in the Town's AM processes.

Service Category: Libraries

Service Statement: Efficiently providing high quality, safe, accessible, and energy efficient libraries with content that enrich lives, connects the community and inspire discovery

Kau Carries Attribute		Customer/Council F	ocused Performance Measu	res	Technical Focused Perfo	rmance Measures	
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
		Annual cost to provide service	(Tracking Consodebast)	TOD	Annual operating budget for facilities management	(Tracking Spreadsheet)	TBD
		(\$/capita)	(Tracking Spreadsheet)	TBD	Average annual capital expenditure for libraries management	(Tracking Spreadsheet)	TBD
Cost Efficient	Cost Efficient Providing library services in an efficient manner	Average library collection replacement rate (# years)	(Database Query)	TBD	5 Year forecast average library collection replacement budget as a % of replacement value	TBD	TBD
		Average library facility asset replacement rate (# years)	TBD	TBD	5 Year forecast average library facility asset replacement budget as a % of replacement value	TBD	TBD
		Average library IT asset replacement rate (# years)	(Tracking Spreadsheet)	TBD	5 Year forecast average library IT asset replacement budget as a % of replacement value	TBD	TBD
Safe	Providing safe libraries	Annual # of complaints/service requests from unsafe libraries	(Incidents report Tracking Sheet)	TBD	Annual # of health and safety incidents	(Incidents report Tracking Sheet)	TBD
Accessible	Providing libraries that are AODA compliant	% of library assets that are AODA compliant	(Accesibility Audit Report)	TBD	% of applicable assets that are AODA compliant	(Accesibility Audit Report)	TBD
	Providing an appropriate number of libraries and amenities	Service population per library	1 library per 27,314 residents (Tracking Spreadsheet)	TBD	Amount of library space (sqft/capita)	(Tracking Spreadsheet)	TBD
		ndition % of libraries in poor or very poor condition	TBD		% of building envelop assets in poor or very poor condition	TBD	TBD
	Providing libraries in acceptable condition			TBD	% of architectural finishes in poor or very poor condition	TBD	TBD
					% of mechanical assets in poor or very poor condition	TBD	TBD
					% of IT assets in poor or very poor condition	TBD	TBD
Quality		% of spaces meeting program needs	TBD	TBD	% of spaces with adequate furniture, equipment and accessories that meet program needs	TBD	TBD
					Annual # of complaints	(Feedback Forms)	TBD
	Providing libraries that meet program needs,				Collection size (collection size/capita)	TBD	TBD
		% of residents satisfied with libraries	TBD	TBD	% of budget spent on new technologies	TBD	TBD
					Annual # of unfulfilled requests	TBD	TBD
					Monthly IT downtime	TBD	TBD

Service Category: Fire Services

Service Statement: Providing effective and reliable emergency services that keep the community safe.

		Customer/Council F	ocused Performance Measu	res	Technical Focused Performa	nce Measures	
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
					Annual operating budget for Fire Suppression Services (Emergency Response)	TBD	TBD
					Annual operating budget for Fire Suppression Services (Training)	TBD	TBD
		Annual cost to provide service (\$/household)	(Cost per Capital, population densities)		Average annual capital expenditure for Fire Suppression Services (Fleet)	TBD	TBD
				TBD	Average annual capital expenditure for Fire Suppression Services (Equipment)	TBD	TBD
Cost Effective	Providing effective fire rescue services				Average annual capital expenditure for Fire Suppression Services (Facilities)	TBD	TBD
Cost Effective					Annual operating budget for Prevention and Public Education Services (per capital costs)	TBD	TBD
					Average annual capital expenditure for Prevention and Public Education Services	TBD	TBD
			Typical Large Fleet - 20 years life Small Fleet - 10 years Equipment - 10-15 years PPE - 5 years Facilities - 20 years (Source?)	TBD	15 Year average Fire Suppression Services asset renewal budget as a % of replacement value (Fleet)	TBD	TBD
		Average asset renewal rate (# years)			10 Year average Fire Suppression Services asset renewal budget as a % of replacement value (Equipment)	TBD	TBD
					10 Year average Fire Suppression Services asset renewal budget as a % of replacement value (Facilities)	TBD	TBD
	Description and the second	ding responsive fire, medical, hazardous erial and rescue services, appropriately ipped and with fully trained firefighters	(Incident Reports)		% of Fire Suppression incidents response times in the 90th percentile	TBD	TBD
Responsive	material and rescue services, appropriately			TBD	% of Emergency Rescue incidents response times in the 90th percentile	TBD	TBD
					% of Specialty Team incidents response times in the 90th percentile	TBD	TBD
					Annual hours of emergency management plan drills	TBD	TBD
Emergency Prepareness	Emergency Management Program and Plan	Compliance with Emergency Management and C us	Civil Protection Act - staff are considering a e in future updates.	ppropriate Measures to	Annual hours of emergency management plan training	TBD	TBD
					% of staff certified	TBD	TBD
		% of customers that are satisfied with the effectiveness of the prevention and inspection	TBD	TBD	Annual # of prevention activities completed	TBD	TBD
Prevention and Public Education	Providing services that educate the public on how to prevent and effectively respond to	services			Average # of inspections per month	TBD	TBD
	emergencies	% of customers that are satisfied with the effectiveness of the public education services	TBD	TBD	Annual # of public education activities completed	TBD	TBD
					% of apparatus/vehicles in poor or very poor condition	TBD	TBD
		% of Fire Service Assets in poor or very poor		700	% of facility assets in poor or very poor condition	TBD	TBD
Reliability	Providing reliable assets for rescue services	condition	TBD	TBD	% of safety inspections/certifications that are completed on fire services assets within the appropriate timeframe	TBD	TBD
					Ratio of apparatus/vehicles in service versus required	TBD	TBD

Foundational Metrics

Advanced Metrics

Service Category: Roads and Right-of-Ways

Service Statement: Efficiently providing operational and accessible roads and right-of-ways at the appropriate quality that support drivers, cyclists and pedestrians.

		Customer/Council Fo	cused Performance Measures	S	Technical Focused Performa	ance Measures	
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
			TOD	TRD	Annual operating budget for roads	TBD	TBD
Cost Efficient	Providing an efficient transportation network for all modes	Annual cost to provide service (\$/household)	TBD	TBD	Average annual capital expenditure for roads	TBD	TBD
		Average asset renewal rate (# years)	TBD	TBD	Road linear asset 5 year average capital renewal budget as a % of replacement value	TBD	TBD
Reasonable Traffic	Providing a transportation network with	Metrics under development	TBD	ТВД	Metrics under development	TBD	TBD
Flow/Movement	reasonable traffic flow and movement		100	100		TBD	TBD
			TBD			TBD	TBD
Operational	Providing an operational road network that is safe for vehicles, pedestrians and	Metrics under development		TBD	Metrics under development	TBD	TBD
Operational	cyclists					TBD	TBD
						TBD	TBD
				TBD	% of paved roads in poor or very poor condition	(Task Summary)	TBD
					% of unpaved roads in poor or very poor condition	(Task Summary)	TBD
					% of sidewalks in poor or very poor condition	(Task Summary)	TBD
		Annual # of customer service requests relating to asset quality	TBD		% of pathways in poor or very poor condition	(Task Summary)	TBD
Quality	Providing a transportation network at the appropriate material quality with smooth				% of traffic signals in poor or very poor condition	(Task Summary)	TBD
	and safe surfaces				% of street lighting in poor or very poor condition	(Task Summary)	TBD
					% of other roads and ROW assets in poor or very poor condition	(Task Summary)	TBD
					% of facilities in poor or very poor condition	(Task Summary)	TBD
		Include description or images that illustrate the different levels of road class pavement condition.	TBD	TBD	Average surface condition (e.g. excellent, good, fair or poor) for paved roads.	TBD	TBD
					# of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the municipality.	TBD	TBD
Assessible	Providing an accessible transportation	Include description, which may include maps, of the road network in the municipality and its level of connectivity.	TBD	TBD	# of lane-kilometres of collector roads and local roads as a proportion of square kilometres of land area of the municipality.	TBD	TBD
Accessible	network	or connectivity.			# of lane-kilometres of local roads as a proportion of square kilometres of land area of the municipality	TBD	TBD
		% of road assets that are AODA compliant	TBD	TBD	% of sidewalks that are AODA compliant	TBD	TBD
Environmental Stewardship	Providing a transportation network that is environmentally conscious	% of streetlights that are energy efficient	TBD	TBD	% of streetlights with LED or low energy fixtures	100%	TBD



Service Category: Bridges and Culverts Service Statement: Efficiently providing reliable, safe, and easy accessible movement for vehicles and pedestrians.

		Customer/Council F	ocused Performance Measu	res	Technical Focused P	erformance Measures	
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
		Annual cost to provide service (\$/household)	TBD	TBD	Annual operating budget for bridges and culverts	TBD	TBD
Cost Efficient	Cost Efficient Providing bridges, culverts, and tunnels in an	Annual cost to provide service (\$/household)	עסו	עפו	Average annual capital expenditure for bridges and culverts	TBD	TBD
efficient manner	Average bridge, culvert and tunnel asset	TBD	TBD -	Bridges 5 Year average capital renewal budget as a % of replacement value	TBD	TBD	
	renewal rate (# years)	00		Culvert 5 Year average capital renewal budget as a % of replacement value	TBD	TBD	
		Annual # of customer service requests relating	TBD	TBD TBD -	% of bridges in poor or very poor condition	(Task Summary)	TBD
		to asset quality			% of culverts in poor or very poor condition	(Task Summary)	TBD
Quality	Providing bridges, culverts, and tunnels at the appropriate material quality	Include Description or images of the condition of bridges and how this would affect use of the bridges.	TBD	TBD	For bridges in the municipality, average bridge condition index value.	TBD	TBD
		Include Description or images of the condition of culverts and how this would affect use of the culverts.	TBD	TBD	For structural culverts in the municipality, average bridge condition index value.	TBD	TBD
		% of bridge assets that are AODA compliant	TBD	TBD	% of pedestrian bridges that are AODA compliant	TBD	TBD
Accessible	Accessible Providing accessible bridges, culverts, and tunnels	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	TBD	TBD	% of bridges in the municipality with loading or dimensional restrictions	TBD	TBD

Foundational Metrics

Advanced Metrics

O.Reg 588/17 Metrics

Service Category: Stormwater Management Service Statement: Efficiently providing reliable stormwater services that protect the community and natural environment.

		Customer/Council F	ocused Performance Measu	res	Technical Focused Performance	Measures	
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
		Annual cost to provide service (\$/household)	TBD	TBD -	Annual operating budget for stormwater	TBD	TBD
		Annual cost to provide service (ornousehold)	שמו		Average annual capital expenditure for stormwater	TBD	TBD
Cost Efficient	Providing stormwater services in an efficient manner				Stormwater linear 5 Year average capital renewal budget as a % of replacement value	TBD	TBD
		Average stormwater asset renewal rate (# years)	TBD	TBD	Stormwater management pond 5 year average renewal budget as a % of replacement value	TBD	TBD
					Stormwater culvert 5 year average renewal budget as a % of replacement value	TBD	TBD
Poliobility	Reliability Providing stormwater services with minimal impact to the community	% of the Town prone to flooding during wet	TBD	TBD -	% of community with stormwater quantity control	TBD	TBD
Reliability		weather events			Annual # of complaints of flooding during flooding	TBD	TBD
			TBD	TBD	# of SWM ponds that have exceeded their target dredging frequency	TBD	TBD
Environmental Stewardship	Providing stormwater services that protect the environment	% of community with stormwater quality control			% of OGS maintained annually	TBD	TBD
					% of community with stormwater quality treatment control	TBD	TBD
0	Providing stormwater services that protect the	Description, which may include maps, of the user groups or areas of the municipality that are		TOD	% of properties in municipality resilient to a 100-year storm	TBD	TBD
Scope	Scope community	protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	TBD	TBD –	% of the municipal stormwater management system resilient to a 5-year storm	TBD	TBD



Service Category: Parks & Open Spaces

Service Statement: Efficiently providing high quality parks, open spaces and trails that are accessible to residents and support a livable community.

		Customer/Council Focused P	Performance Measures		Technical Focused Performanc	e Measures	
Key Service Attribute	E LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target
					Annual operating budget per acre for communities parks and open spaces	TBD	TBD
					Average annual capital expenditure for communities parks and open spaces	TBD	TBD
				TBD TBD -	Annual operating budget per acre for neighbourhood parks and open spaces	TBD	TBD
		Annual cost to provide parks and open spaces(\$/household)	TBD		Average annual capital expenditure for neighbourhood parks and open spaces	TBD	TBD
					Annual operating budget per kilometer for trails	TBD	TBD
Cost Efficient	Cost Efficient Providing parks and open spaces in an efficient manner				Average annual capital expenditure for trails	TBD	TBD
Cost Enicient					Annual operating budget for sports fields	TBD	TBD
					Average annual capital expenditure for sports fields	TBD	TBD
				TBD	Parks and Open Space 5 Year average renewal budget as a % of replacement value	TBD	TBD
		Average parks and open spaces renewal rate (# years)	TBD		Sport Fields 5 Year average renewal budget as a % of replacement value	TBD	TBD
					Cemetery 5 Year average renewal budget as a % of replacement value	TBD	TBD
					% of capital projects that are completed and fully functional as scheduled	TBD	TBD
		Annual # of succesful claims in parks and open spaces	TBD	TBD TBD	% of safety inspections completed as scheduled	TBD	TBD
Safe	Providing safe parks and open spaces for the				% of preventive maintenance activities completed as scheduled	TBD	TBD
Sare	community				Annual # of insurance claims	TBD	TBD
					% of amenities that meet CSA standards	TBD	TBD
Accessible	Providing parks within a reasonable proximity to every residential household	Metrics Under Deve	elopment		Metrics Under Development		
	Providing parks that are AODA compliant	% of park amenities or open spaces that are AODA compliant	TBD	TBD	% of park amenities or open spaces that are AODA compliant	TBD	TBD
					% of park amenities in poor or very poor condition	TBD	TBD
	Providing parks and open spaces with amenities, and trails in acceptable condition	% of parks and open spaces in poor or very poor condition	TBD	TBD	% of trails in poor or very poor condition	TBD	TBD
Quality					% of trees in poor or very poor condition	TBD	TBD
	Providing parks and open spaces with the right number/type of amenities	Metrics Under Development			Metrics Under Development		
Livable Community	Providing livable parks and open spaces	# of complaints about park maintenance/appearance	TBD	TBD	% of parks cleaned and maintained as scheduled	TBD	TBD

Service Category: Parks, Open Spaces & Cemeteries

Service Statement: Efficiently providing high quality cemeteries that are accessible to residents and support a livable community.

		Customer/Council Focused P	erformance Measures		Technical Focused Performance Measures			
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target	
		Annual cost to provide cemeteries (\$/household)	TBD	TBD —	Annual operating budget for cemeteries	TBD	TBD	
Cost Efficient	Providing cemeteries in an efficient manner				Average annual capital expenditure for cemeteries	TBD	TBD	
		Average cemeteries renewal rate (# years)	TBD	TBD	Cemetery 5 Year average renewal budget as a % of replacement value	TBD	TBD	
Safe	Safe Providing safe cemeteries for the community	Annual # of succesful claims in cemeteries	TBD	TBD	% of preventive maintenance activities completed as scheduled	TBD	TBD	
Jale	r rowuling sale cemetenes for the community				Annual # of insurance claims	TBD	TBD	
Accessible	Providing cementaries that are AODA compliant	% of amenities that are AODA compliant	TBD	TBD	% of amenities that are AODA compliant	TBD	TBD	
Quality	Providing computeries in acceptable condition	% of cemeteries in poor or very poor condition	TBD	TBD -	% of cemetery building envelop assets in poor or very poor condition	TBD	TBD	
Quality	Quality Providing cementeries in acceptable condition	% of cemeteries in poor or very poor condition			% of cemetery architectural assets in poor or very poor condition	TBD	TBD	
Livable Community	Providing respectful cemeteries	% of residents satisfied with the cemeteries	TBD	TBD	% of cemeteries cleaned and maintained as scheduled	TBD	TBD	

Service Category: Facilities Management

Service Statement: Efficiently providing high quality, safe, accessible, and energy efficient facilities for the community.

		Customer/Council Fo	ocused Performance Measur	es	Technical Focused Performance	Measures		
Key Service Attribute	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target	
		Annual cost to provide service (\$/household)	TBD	TBD	Annual operating budget per sqft for facilities management	TBD	TBD	
Cost Efficient	Providing facilities management services in an efficient manner	Annual cost to provide service (\$/nodseriold)	עסו	שמו	Average annual capital expenditure for facilities management	TBD	TBD	
		Average facilities renewal rate (# years)	TBD	TBD	Facility Asset 5 Year average renewal budget as a % of replacement value	TBD	TBD	
					% of facilities that meet security standards	TBD	TBD	
	Sofo Providing facilities management services to				# of outstanding safety improvements required at facilities/100 sqft	TBD	TBD	
Safe		Annual # of incident claims	TBD	TBD	% of facilities annually inspected	TBD	TBD	
ensure that facilities are safe		TDD	100	% of facility assets with identified code violations during inspections	TBD	TBD		
					% of reactive work completed within target timeline	TBD	TBD	
					% of planned maintenance activities completed as per schedule	TBD	TBD	
			TBD	TBD	% of facilities with entrances that are AODA compliant	TBD	TBD	
	Providing facilities management services to ensure that facilities are AODA compliant	% of facilities that are AODA compliant			% of facilities with furniture that are AODA compliant	TBD	TBD	
Accessible					% of facility assets that meet accessibility objectives	TBD	TBD	
	Providing enough space for community and staff to comfortably use facilities	Metric	s Under Development		Metrics Under Development			
					% of facility systems above target SCI	TBD	TBD	
					% of facilities above target FCI	TBD	TBD	
Quality	Providing facilities in good condition for users	% of facilities in poor or very poor condition	TBD	TBD	% of facility assets in poor or very poor condition by value	TBD	TBD	
Quality					Annual # of customer complaints/service requests relating to facility condition	TBD	TBD	
					% of wifi enabled buildings with network complaints	TBD	TBD	
	Providing facilities at the right design standard	Metrics Under Development			Metrics Under Development			
		Annual electricity consumption per square foot	TBD	TBD	Annual electricity consumption per square foot	TBD	TBD	
Environmental Stewardship	Providing facilities that are energy efficient	Annual natural gas consumption per square foot	TBD	TBD	Annual natural gas consumption per square foot	TBD	TBD	
	Providing facilities that are environmentally conscious	Annual water consumption per square foot	TBD	TBD	Annual water consumption per square foot	TBD	TBD	

Foundational Metrics

Advanced Metrics

Service Category: Water Service Statement: Efficiently providing safe, high quality and reliable water services with adequate pressure and flow.

		Customer/Council Focused Performance Measures			Technical Focused Performance Measures			
Key Service Attribute	LOS Statement	Performance Measure	Current Performance	Target	Performance Measure	Current Performance	Target	
			-		Operating budget for water services	TBD	TBD	
Cost Efficient	Providing water services in an efficient manner	Annual cost to provide water service (\$/household)	TBD	TBD	5 Year average water linear asset renewal budget as a % of replacement value	TBD	TBD	
Safe	Water system provides safe potable drinking water	% of community with acceptable risk of experiencing adverse water quality	TBD	TBD	% compliance with all applicable water quality regulations	TBD	TBD	
	difficing water				# of confirmed adverse water quality tests	TBD	TBD	
		# of complaints due to rusty/discoloured water	TBD	TBD	% of system serviced by sources that provide substandard water	TBD	TBD	
Quality Providing high quality water to residents				% of system that is unlined CI/DI	TBD	TBD		
		# of complaints due to low pressure	TBD	TBD	% of system with low pressure	TBD	TBD	
					% of watermains in poor or very poor condition	TBD	TBD	
				% of facility assets in poor or very poor condition	TBD	TBD		
				TBD	% of critical assets below target condition	TBD	TBD	
		% of customers where service is interrupted above target frequency	TBD		% of non-critical assets below target condition	TBD	TBD	
					# of watermain breaks	TBD	TBD	
Dellable	Providing water services with minimal				# of watermains above target break rate	TBD	TBD	
Reliable	interruptions				% of services prone to frozen water services	TBD	TBD	
		 Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system. 	TBD	TBD	# of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system	TBD	TBD	
		Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	TBD	TBD	# of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system	TBD	TBD	
Environmental Stewardship	Providing a water service that is environmentally conscious	Water consumption L/cap/day	TBD	TBD	Unancounted for Water or Infrastructure Leakage Index	TBD	TBD	
		% of residents satisfied with water services						
Scope	Providing adequate water services to the community	 Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system. 	TBD	TBD	% of properties connected to the municipal water system	TBD	TBD	
		 Description, which may include maps, of the user groups or areas of the municipality that have fire flow. 			# of properties where fire flow is available	TBD	TBD	

Foundational Metrics Advanced Metrics O.Reg 588/17 Metrics

Service Category: Wastewater

Service Statement: Efficiently providing reliable wastewater services that are environmentally conscious.

		Customer/Council Focused Perfor	Customer/Council Focused Performance Measures			Technical Focused Performance Measures			
Key Service Attribute	LOS Statement	Performance Measure	Current Performance	Target	Performance Measure	Current Performance	Target		
					Operating budget for wastewater services	TBD	TBD		
Cost Efficient	Providing wastewater services in	Cost to provide service (\$/household)	TBD	TBD	Annual operating and maintenance cost/km of sewer	TBD	TBD		
	an efficient manner				5 Year average wastewater linear asset renewal budget as a % of replacement value	TBD	TBD		
					km of sewers in poor or very poor condition	TBD	TBD		
					% of sewers in poor or very poor condition	TBD	TBD		
			TBD	TBD	% of the system surcharged within 1.8 m of the ground elevation during a 25-year wet weather event	TBD	TBD		
		# of customers that experience a service interruption			% of the system with adequate resiliency to accommodate the impacts of climate change	TBD	TBD		
					# of sewers with operational issues likely to cause service interruptions	TBD	TBD		
					% of preventative maintenance activities completed on schedule	TBD	TBD		
					# of locations with FOG issues or prone to blockages	TBD	TBD		
Reliable	Providing wastewater services with minimal interruptions	 Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes. Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches. 	TBD	TBD	# of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	TBD	TBD		
		 Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. 	TBD	TBD	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	TBD	TBD		
		 Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph 3. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system. 	TBD	TBD	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	TBD	TBD		
	Providing wastewater services that				# of overflow occurrences	TBD	TBD		
Environmentally Conscious			TBD	TBD	Total volume of untreated wastewater discharged into the natural environment via sewer network overflows	TBD	TBD		
Scope	Providing adequate wastewater services to the community	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	TBD	TBD					

Foundational Metrics Advanced Metrics

O.Reg 588/17 Metrics

Service Category: Information Technology Service Statement: Efficiently providing secure information technology at an appropriate quality and quantity to support the delivery of services.

Key Service Attribute		Customer/Council Foo	cused Performance Measu	es	Technical Focused Performance Measures				
	LOS Statement	Performance Measure	Current Performance (Data source)	Target	Performance Measure	Current Performance (Data Source)	Target		
	Providing IT services in a cost efficient manner		TBD	TBD	Annual operating budget for IT	TBD	TBD		
Cost Efficient		Cost to provide service (\$/user)			Average annual capital expenditure for IT	TBD	TBD		
					Cost of monitoring software (\$/year)	TBD	TBD		
		Average IT hardware asset renewal rate (# years)	TBD	TBD	5 Year average IT asset renewal budget as a % of replacement value	TBD	TBD		
	Providing IT assets at the appropriate quality (age, performance expectations)		TBD	TBD	% of server assets past their estimated service life	TBD	TBD		
Quality		% of IT assets that are passed their estimated service life			% of network infrastructure assets past their estimated service life	TBD	TBD		
Quality					% of hardware past their estimated service life	TBD	TBD		
					% of software past estimated service life				
	Providing the right amount of IT services			TBD	# of outstanding IT requests (hardware)	TBD	TBD		
Quantity		% of service request	TBD		% of City with sufficient network infrastructure	TBD	TBD		
					% of City with sufficient internet infrastructure	TBD	TBD		
Security	Minimizing Security Threats	# of threats	TBD	TBD	% of mitigated threats	TBD	100%		
Accessible	Providing an AODA Compliant IT	% of IT assets that are AODA compliant	TBD	TBD	% of IT assets that are AODA compliant	TBD	TBD		



Appendix D Implementation Plan



NUMBER	ACTIVITY	RELATED OBJECTIVE	RATIONALE	PRIORITY	LEAD GROUP	PRIMARY SUPPORT GROUP(S)	INTERNAL RESOURCES	OUTSOURCING POTENTIAL	OUTSOURCING COST	TIMELINE
1	Develop a Corporate Strategic Plan	Connecting to Strategic Priorities	The Town does not have a corporate strategic plan in place. Developing one will provide high-level strategic direction that will influence how infrastructure is managed. It will detail the Town's strategic priorities, which will inform its AM System.	High	CAO	IT (AMT)	5%	Y	\$50,000 - \$150,000	1 year
2	Maintain the Town's Strategic Documents (Policy, SAMP, etc.)	Connecting to Strategic Priorities	The Town's strategic documents will form the foundation of its AM System. They will require periodic review and updating to ensure that strategic priorities are being met by the Town's AMP. Continued improvement of the AM System will necessitate periodic review and updating of these documents.	High	IT (AMT)	CAO	5%	N	N/A	1 year
3	Develop an Enterprise Risk Management Framework	Connecting to Strategic Priorities	Enterprise risk management is an important process to support the prioritization of recourses across service areas.	Medium	IT (AMT)	Finance	5%	Y	\$20,000	2 - 5 years
4	Build an AM Culture and Develop AM Skills	Connecting to Strategic Priorities	Building a culture where AM processes are supported across staff in the Town will be critical to ensuring continual improvement of the AM System.	Medium	IT (AMT)	CAO	5%	N	N/A	Ongoing
5	Integrate Growth Planning	Connecting to Strategic Priorities	The development of documents such as master plans and strategic plans will guide the Town's objectives into the future. By integrating these plans into the AM System, and aligning them with corporate strategic objectives, the Town can ensure that day-to-day asset activities take future considerations into account.	High	IT (AMT)	PW, Planning, Fire	5%	Ν	N/A	Ongoing
6	Continue to enhance Community Levels of Service and Performance Measures	Connecting to Strategic Priorities	Building upon and maintaining the Town's developed Community LOS will be an ongoing process. Updates to performance targets, and periodic review of the Town's LOS will be required in order to track progress and engage in continuous improvement.	Existing Process	IT (AMT)	CAO, Finance	5%	Ν	N/A	Ongoing
7	Continue to enhance Technical Levels of Service and Technical Performance Measures	Asset Lifecycle Management	Building upon and maintaining the Town's developed Technical LOS will be an ongoing process. Updates to performance targets, and periodic review of the Town's LOS will be required in order to track progress and engage in continuous improvement.	Existing Process	IT (AMT)	PW, Fire, Rec	5%	Ν	N/A	Ongoing
8	Develop a Decision Support Model that Integrates Lifecycles, Risks and LOS	Asset Lifecycle Management	This activity will also necessitate the development of lifecycle and asset criticality strategies. A Decision Support model will balance costs, LOS, criticality and lifecycle management strategies in order to optimize capital budgets and prioritize capital projects, to ensure that the Town's AM objectives are met.	High	IT (AMT)	PW, Fire, Rec	50%	Y	\$50,000	2 - 5 years
9	Implement Maintenance Management Plans through the procurement and implementation of a Computerized MM System.	Asset Lifecycle Management	The procurement and implementation of a computerized maintenance management system and the development of maintenance plans will allow the city to efficiently track work orders against assets, and collect the data required in order to efficiently operate those assets in a way that meets AM objectives.	Medium	IT (AMT)	PW, Fire, Rec	30%	Y	\$130,000	2 - 5 years
10	Compile Asset Inventories and Create a Corporate Asset Register	Asset Lifecycle Management	A centralized corporate asset register will enable cross-service (and department) analysis of assets, in order to balance corporate strategies against the diverse asset portfolio at the Town. Initial development of Asset Register should be completed as part of Activity 8 (Decision Support Model).	High	IT (AMT)	PW, Fire, Rec	25%	Ν	N/A	1 - 2 years
11	Develop a Condition Assessment Framework	Asset Lifecycle Management	This activity will ensure that the approach to completing condition assessments against assets is standardized across asset types, so that asset data can be used as part of a corporate asset register, and AM analyses can be activated across all services.	Medium	IT (AMT)	PW, Fire, Rec	10%	Y	\$20,000	2 - 5 years
12	Complete Financial Forecasting Analysis of Existing Infrastructure	AM Analysis	Financial forecasting will determine long-term financial requirements of existing infrastructure, to allow the Town to plan for future needs.	Medium	Finance	IT (AMT)	5%	N	N/A	2 - 5 years
13	Prepare Long-term financial Plans, linked to LOS and Performance Measures	Asset Management Plan	This activity develops a key component of the Town's AM plan. Using forecasting data, links to LOS and asset performances will be established in order to prepare long-term financial plans.	Medium	Finance	IT (AMT)	10%	Y	\$30,000	2 - 5 years
14	Prepare State of Infrastructure Reports	Asset Management Plan	This activity develops a key component of the Town's AM plan, by using asset data and AM analyses to prepare state of infrastructure reports. This project can be completed in conjunction with project 13.	Medium	IT (AMT)	PW, Fire, Rec, Finance	1076	Y	\$30,000	2 - 5 years