

# 2012

## Saugeen Shores Asset Management Plan



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## Executive Summary

Our modern societies base their health & economic prosperity on a standard of living which includes a complex network of infrastructure, both above and below ground. The preventative maintenance and timely renewal of these assets are critical to our public health and economic well-being.

An Asset Management Plan (AMP) can be defined as an *“An open, transparent, structured, long term approach to planning optimal maintenance and eventual renewal of infrastructure”*. Ultimately, Asset Management is providing the **right information to make the right infrastructure investment in the right place at the right time**.

This draft Asset Management Plan initially covers the Core Public Infrastructure (roads, bridges, storm, water and sanitary systems), but in time will include all municipal assets.

The presented asset management plan identifies a systematic and proactive approach with planned actions that will be formalized with the utilization of an asset management program. The plan will enable the assets to provide the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

This is a first draft edition of a “living” document that will continue to evolve and be refined and be subject to change and review by stakeholders in the pursuit of continuous improvement.

It is important to note that this document currently only addresses the maintenance and renewal of **existing** assets as a snap shot of the current inventory. It does not project where enhanced assets are required such as adding a sidewalk or curb & gutter to a road segment, a wider sidewalk, drainage works, wider roads, etc. Further, with the additions of local development, additional assets are being assumed that will continue to increase funding gaps and responsibilities.

The Asset Management Plan introduces some rationale on the concepts of decisions based on a number of new concepts such as increased preventative maintenance, Risk Management and the desired Level of Service. These concepts that have always been informally in the background of decisions will be highlighted in the future as we balance and prioritize the demands within the fiscal constraints.

It is acknowledged that not all the answers or solutions will be apparent as a result of this first document, but by following the approach within the plan, the document will address many outstanding issues and provide a clearer picture of the state of our infrastructure.

## 1.0 Preamble

In order to make informed decisions about the allocation of resources, infrastructure asset managers, financial managers, politicians and ultimately, the customer, all need useful information. Asset management is a resource allocation tool that provides the information municipalities need to make decisions on how they will build, operate, maintain, renew and replace an asset over the asset's useful life. Asset management plans identify the technical and financial needs of municipal infrastructure and provide information well in advance of a major asset renewal or replacement. This enables a municipality to plan for major projects, should other factors (financial, political etc.) align.

The need for such a management plan can be evidenced by the critical role that infrastructure plays in a municipality. A municipality's health can be measured by the quality of its infrastructure, which in turn promotes economic development, ensures citizen's safety and provides a higher quality of life for its society.

**“Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.” (National Guide to Sustainable Municipal Infrastructure)**

## 2.0 Implementation

The asset management program described in this document is based on the unique requirements and service delivery principles of the Town of Saugeen Shores. With existing time restraints, it appeared that implementing a “just do it” philosophy was the most prudent way to construct an asset management plan. As a result, this plan is rooted in the current expertise of the municipal engineering and public works departments, and presents a more systematic method for operating infrastructure projects within the municipality. This asset management plan is firmly rooted in common sense, industry best methods, good business practices and most importantly, what “works” in this municipality. This draft asset management plan currently meets the minimum requirements for engineered services and that it is expected that the AMP will be expanded in the future to consider all municipal assets.

## 3.0 Acknowledgements

The fundamentals of the Asset Management Plan are based upon best management practices and references obtained from:

ROMA/OGRA Conference  
AWWA/OWWA Conference  
AMCTO Conference  
Ontario Good Roads Association (OGRA)  
Ontario Public Works Association  
InfraGuide – National Guide to Infrastructure Management

NRC-CNRC – Municipal Infrastructure Investment Planning (MIIP)  
Infrastructure Canada (IC)  
Municipal Performance Measurement Program (MPMP)  
Ministry of Infrastructure  
Ministry of Transportation (MTO)  
Municipal World  
Public Works and Government Services Canada  
Other municipalities

#### 4.0 Asset Management Mandate

To preserve municipal assets for use by present and future generations, and to demonstrate to the public, in a clear and transparent manner, the rationale for selecting projects to be replaced with the most efficient use of investment dollars through the life cycle of an asset that is in the best interests of the community.

#### 5.0 The Characteristics of an Asset Management Plan

##### 5.1 What is Asset Management?

- A comprehensive framework that includes the planning, design, construction, operation and maintenance of infrastructure used to provide cost-effective service
- It is not a project- it is a never-ending process that will continually be refined and expanded
- A strategy to help allocate available funds and resources amongst the competing needs of assets
- Supports justification for funding new and existing infrastructure assets
- Enables trade-off analysis and decisions, using a full life cycle approach

*Ultimately, Asset Management is providing the **right information to make the right infrastructure investment in the right place at the right time.***

##### 5.2 What are the key principles?

- To effectively manage and optimize infrastructure assets today and into the future across the entire municipality.
- Maximize capital investment decision making process to assist the Town in maximizing the life cycle of our infrastructure networks to ensure a high quality of life for all users.
- Will enable the Town to provide stakeholders who are increasingly demanding with increased transparency, a consistent, qualitative and a quantitative approach of how assets are being managed through their life cycle in an integrated manner.
- A business case involving investment choices that are policy driven with tradeoffs among competing priorities.

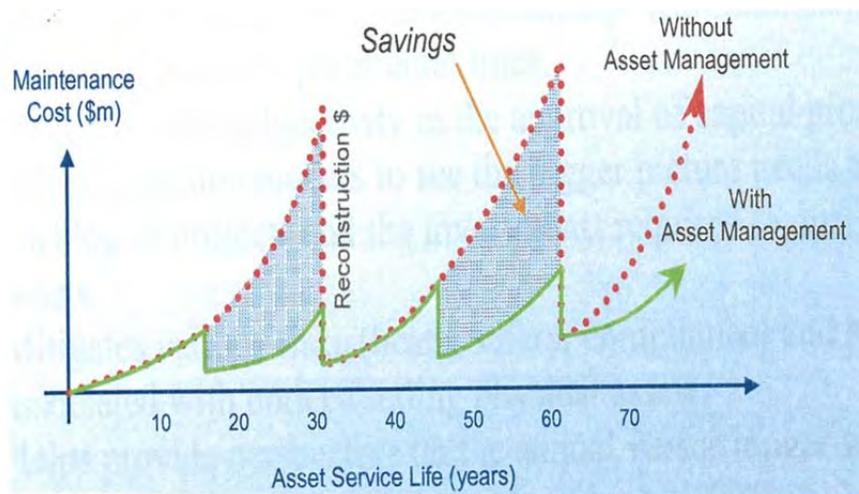
- A comprehensive long-term view of infrastructure performance and cost;
- A strategic and proactive integrated approach that places a premium on data, information, collaboration and interdisciplinary management
- If an asset is not affordable (properly funded), it is not sustainable. If it is not sustainable, the service that the asset provides eventually will be lost or fall to an unacceptable level.

### 5.3 Why is Asset Management important?

- Engineered services – roads, bridges, water & sewer are the largest and most valuable assets in the municipality and they are aging
- Increasingly stringent compliance factors such as health & safety and environmental standards are challenging the level of service at current funding levels.
- Increased government focus on assets management and funding opportunities.
- Decreasing funding from the senior levels of government
- Citizens expect their municipality to responsibly manage their public assets in a transparent process
- Provide imperial data to balance public expectations against budget realities
- The Town can be proactive rather than reactive in maintaining the assets

### 6.0 Reasons for Asset Management

1. Identifies all municipal assets in one dataset, at an appropriate level.
2. Enables the measurement of condition, function and financial performance, year to year and over the lifecycle of all assets.
3. Permits the municipality to prioritize capital requirements based on rational parameters and from a number of perspectives.
4. Strengthens and develops the partnership with financial, operational and technical personnel across departmental lines.
5. Minimizes the subjectivity in the approval of capital project selection and approval.
6. Allows decision makers to see the bigger picture needs beyond the current understood backlog of projects and the investments required to operate, maintain, renew and acquire assets.
7. Mitigates various risks (health, safety, compliance) and helps to qualify the risks associated with under-funding physical assets.



8. Helps provide perspective on the annual versus longer-term Financial Planning.
9. Helps municipalities understand their responsibility to long term assets.
10. The Ministry of Infrastructure has notified all municipalities' that disclosure of an Asset Management Plan will be a pre-requisite for municipalities to be eligible to receive provincial/federal funding in the future.

## 7.0 Elements of Asset Management

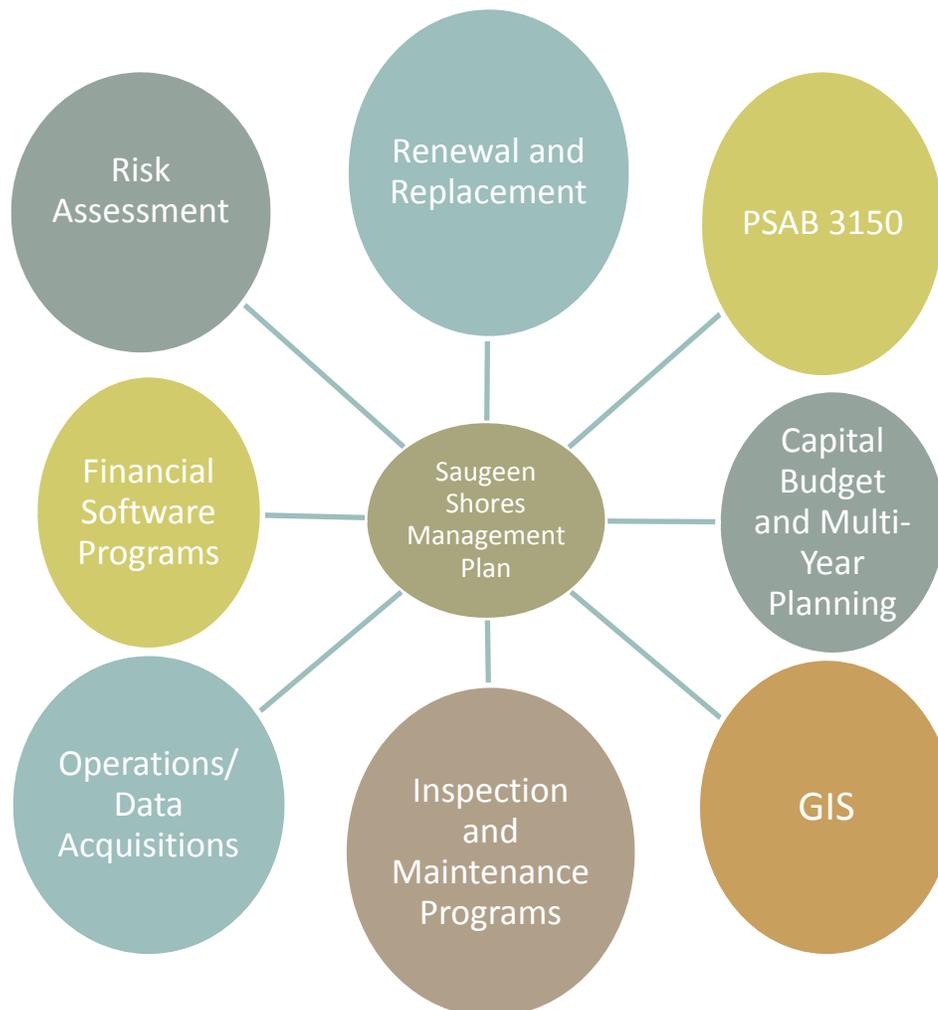
The elements of Asset Management are the factors that create and sustain a successful and useful strategy. The following elements have been identified as being crucial to the strategy Saugeen Shores has and will continue to develop.

1. Inventory - What assets do we own?
2. Condition – What condition are they in?
3. Deficiencies – What corrective Actions are required and when?
4. Performance – Are they performing to standard?
5. Prioritization – What actions are most important?
6. Value – What are our assets really worth?
7. Level of Service – What are the desired Levels of Service for the various assets?
8. Financial Impact – What will it costs?
9. Asset Management Strategy – A strategy of planned actions that will provide the following:
  - 9.1 Provide the desired level of service in a environmentally sound and sustainable manner
  - 9.2 Maximize the asset life and minimize the total cost of ownership of all assets over their respective lifecycles
  - 9.3 Manage and understand the municipalities risk exposure
10. Financial Strategy – To demonstrate the Town has made a continuous concerted effort to integrate asset management planning with financial planning and budgeting for all Town expenditures.

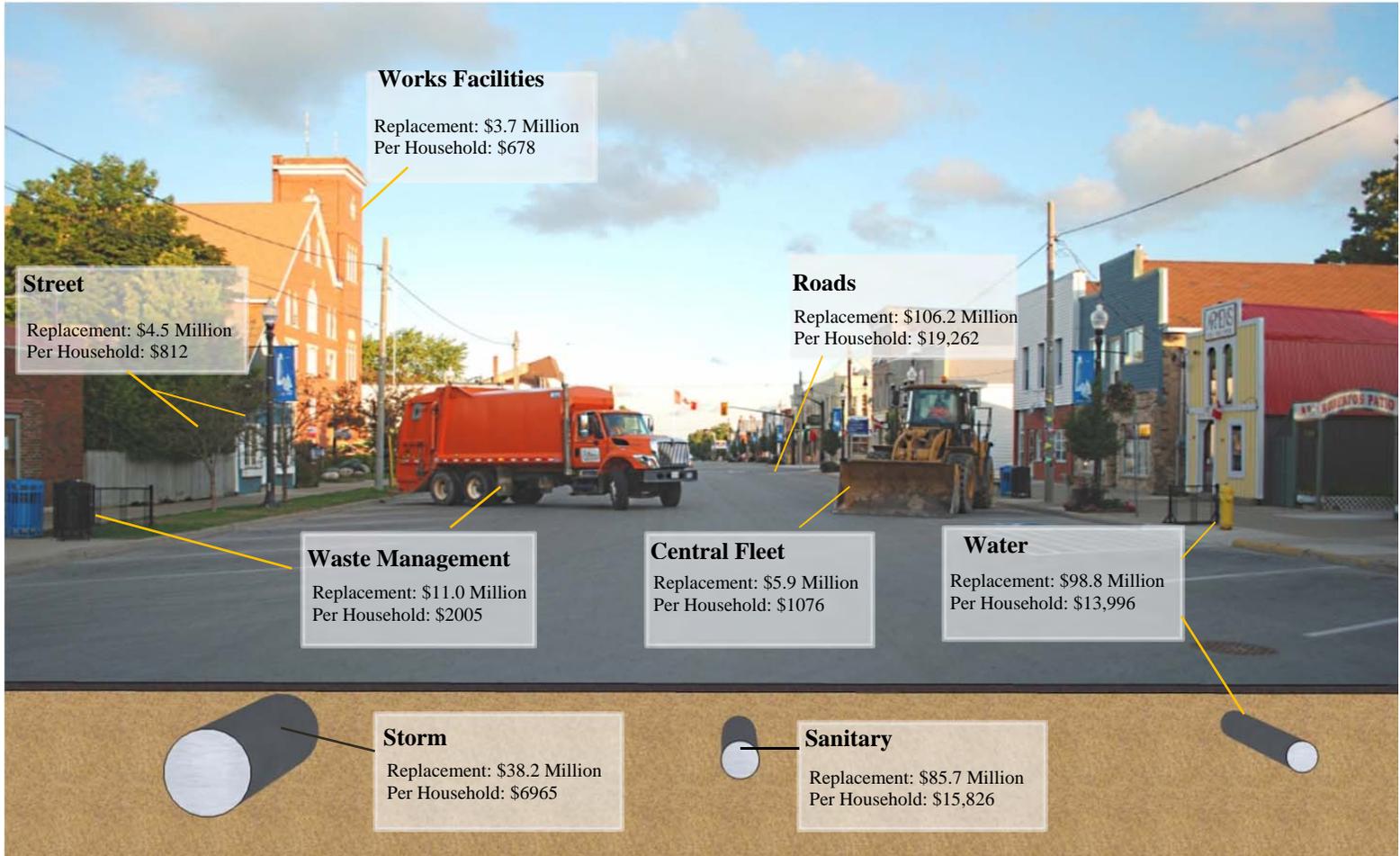
### 8.0 The Benefits of Asset Management

- Provide the analytical tools and data to meet current and future infrastructure-related funding
- Better operational decisions by understanding of service level options and costs
- Improved emergency response
- Greater ability to plan and pay for future repairs and replacements
- Increased knowledge of the location of the assets
- Increased knowledge of what assets are critical to the utility and which ones aren't
- More efficient operation by identifying and implementing continuous improvements
- Better communication with customers
- Rates/levy based on sound operational information
- Increased acceptance of rates/levy levels
- Capital improvement projects that meet the true needs of the system
- Renew the most infrastructure with limited resources (Financial and Human)
- Reduce reactive maintenance
- Formulate a plan for a sustainable future

**Figure 2.0 Asset Management Heuristics: How Information is gathered**



### CORE PUBLIC ASSET REPLACEMENT VALUE PER PROPERTY



**Figure 3.0 Saugeen Shores Asset Statistics**

Asset Category	Quantity	Historical Costs	Replacement Value	Typical Life (years)	Average Remaining Service Life
<b>Water System</b>	<b>1</b>	<b>\$47,974,659</b>	<b>\$98,830,304</b>	<b>40-70</b>	<b>33</b>
<b>Sanitary System</b>	<b>104.6km</b>	<b>\$32,402,278</b>	<b>\$85,650,842</b>	<b>30-70</b>	<b>35</b>
<b>Roads</b>	<b>256.8km</b>	<b>\$43,586,978</b>	<b>\$71,045,842</b>	<b>10-20</b>	<b>-10</b>
<b>Sidewalks/Trails</b>	<b>58.3km</b>	<b>\$3,215,991</b>	<b>\$5,098,015</b>	<b>40</b>	<b>18</b>
<b>Storm Sewer</b>	<b>72.3km</b>	<b>\$35,113,567</b>	<b>\$38,184,798</b>	<b>30-70</b>	<b>29</b>
<b>Storm Ponds</b>	<b>10</b>	<b>In-progress</b>	<b>\$599,571</b>	<b>80</b>	<b>68</b>
<b>Landfill</b>	<b>2</b>	<b>\$2,406,459</b>	<b>\$11,000,000</b>	<b>Varies</b>	<b>16</b>
<b>Cemetery</b>	<b>2</b>	<b>\$454,655</b>	<b>In-progress</b>	<b>Varies</b>	<b>100</b>
<b>Bridges</b>	<b>16</b>	<b>\$3,917,802</b>	<b>\$25,995,641</b>	<b>60-80</b>	<b>15</b>
<b>Bridges</b>	<b>13</b>	<b>\$3,917,802</b>	<b>\$24,916,136</b>	<b>60-80</b>	<b>24</b>

\*Two bridge sections exist to illustrate the impact the Kolb, Moore and McEwing Bridges have on the average remaining service life.

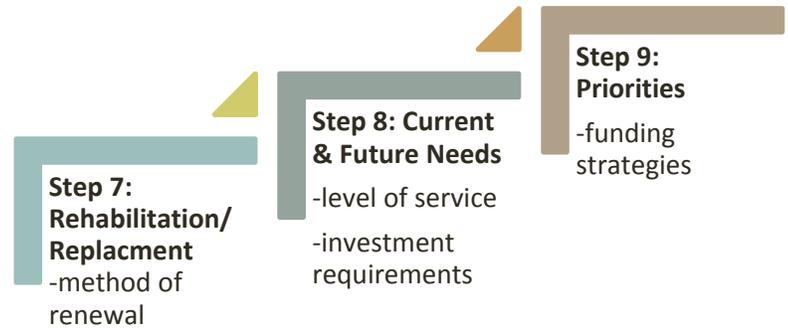
## 9.0 An Integrated Approach to Asset Management and Evaluation

A systematic and proactive method should be used to plan the renewal of municipal roads, sewers, watermains and other related infrastructure in an integrated manner. The inventory, investigation, condition assessment and performance evaluation was completed independently for the various assets. Considering the proximity of all other assets in the municipal environment, significant efficiencies can be achieved taking into consideration coordination of other works over the life cycle of all assets.

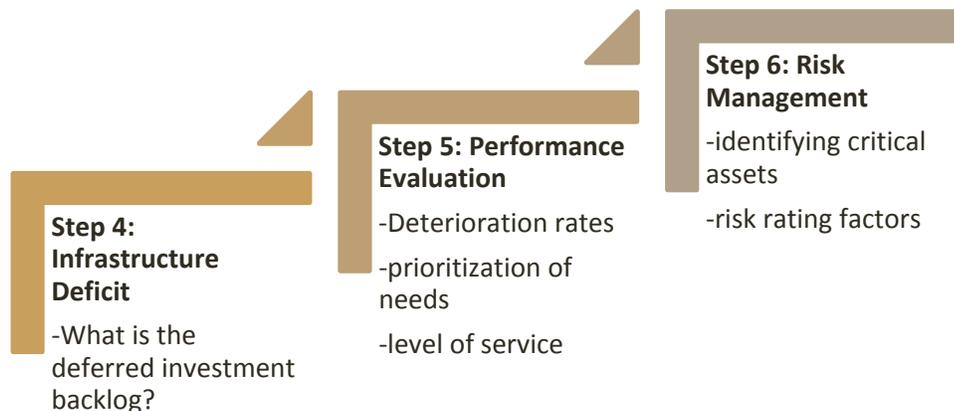
The integration refers to the infrastructure that shares a common location within the utility corridor such as roads, curbs, gutters, streetlights and sewer and water systems. These different asset types all deteriorate at different rates and all have different priorities and timing for maintenance, renewal and replacement.

### Steps 7-8: Decision Time

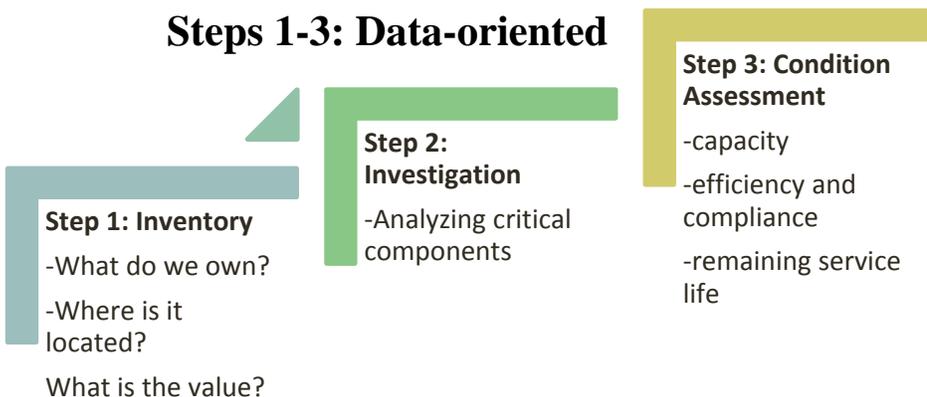
**Figure 4.0: The Steps of an Integrated Approach to Asset Management**



### Steps 4-6: Methodology



### Steps 1-3: Data-oriented



## 10.1 Description of the Steps in an Integrated Approach to Asset Management

### 9.1.1 Step 1: Inventory

Current State: 95% complete

The infrastructure assessment used the information compiled for PSAB 3150 as a starting point to maximize the Town's data and tapped in to staff's knowledge, expertise and experience. The spatial database includes physical attributes of each component, as well as service life, financial data, and any other significant features. This inventory is located in the Geographic Information System (GIS), which provides a powerful spatial component for collection, storage, processing, analyzing and display of all data in one expandable format.

### 9.1.2 Step 2: Investigation

Current State: 95% complete

The importance of each asset is indicated in the inventory (ie. an arterial road is more critical than a minor local road or the water plant and transmission lines are more critical than water distribution lines).

All the various components are assessed using available information, inspections, service records, efficiencies, performance, life service, etc. and placed in databases within the GIS.

### 9.1.3 Step 3: Condition Assessment

Current State: 80% complete

Systematic condition ratings were placed on all assets across all asset groups, using weighted performance indicators to generate a total score for each component. The total scores for each system are ranked so that the assets in the poorest condition are easily identified.

Each type of asset has unique maintenance, rehabilitation and replacement requirements. Staff have utilized an industry standard rating system to evaluate the state and condition of existing infrastructure assets. The system evaluates infrastructure according to key criteria:

- Physical condition
- Demand/Capacity
- Functionality

Every infrastructure class and its individual assets are rated according to the below criteria. For the higher level overall ratings used in the Infrastructure Report Card the rankings are:

- A - Excellent
- B - Very good
- C - Good
- D - Fair
- E - Poor
- F - Critical

For the detailed ratings of the individual assets a scoring system of 0 to 100 is utilized based on the industry standard rating system for that particular asset. A rating of 100 indicates an asset in new or perfect condition where as a 0 rating indicates an asset that is in critical condition and is not useable for the intended purpose.

The overall scores of all associated assets that comprise a street as a whole can be easily ranked for comparison purposes. It is possible for an asset to have a very high condition rating yet must be replaced due to other factors like capacity constraints or compliance issues.

Although the quality of available data varies and requires some assumptions in this assessment, this rating system provides a useful perspective of the state and condition of the infrastructure. Over the course of time, and with the replacement of assets and continual improvements to data collection and analysis, more consistent and accurate data will be generated. This data will provide staff and Council with a defensible approach to the selection of priorities, and with increased transparency for the public on how assets are being managed through their life cycle. The rating system will also allow for quantitative comparisons between the different classes of infrastructure, which has been difficult to do in the past. The rating system within the GIS will be a valuable tool to support improved decision making, especially with comparable year to year data of the infrastructure that is in the most need of repair or replacement.

#### **9.1.4 Step 4: Infrastructure Deficit**

Current State: 80% complete

##### **i. What is the deferred investment backlog?**

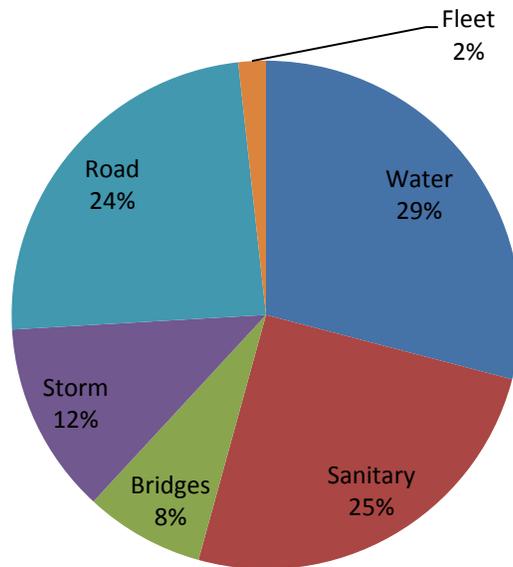
The deferred investment backlog continues to grow and compound as assets reach the end of their service life, replacement capital investment is underfunded and delayed maintenance activities accelerates the deterioration of the assets which results in a considerable reduction in the service life of that asset.

To ignore all available evidence and continue on the current funding model will have dire consequences as the accumulated backlog will simply overwhelm the Council and staff of the day.

The goal of this report/plan is not to shock stakeholders with a massive dollar figure; the goal is to provide information on this negative trend and to facilitate a discussion on solutions to deal with our municipal infrastructure funding challenges.

##### **ii. Maintaining Existing Infrastructure**

Municipal infrastructure experts advise that annual investment for existing infrastructure should be between two and four percent of the total replacement value of infrastructure assets. Using this guideline, the Town of Saugeen Shores annual amortization cost is calculated individually based on the asset categories estimated useful life. For the core public infrastructure assets the amortization rate range from 1.45% for bridges to 4.96% for paved roads. Based on 2% of the replacement value of \$333,979,336 for the core public infrastructure, the Town of Saugeen Shores should invest no less than \$6,679,587 every year in rehabilitation and replacement programs.

**Figure 5.0 Core Asset Distribution****iii. Infrastructure Deficit - Taken from the 2008 Capital Budget Presentation**

*The municipal infrastructure deficit refers to:*

- the unfunded investments required to maintain and upgrade existing, municipally owned infrastructure assets*
- the funding needed over and above current and projected levels to bring existing facilities to a minimum acceptable level for operation over their service life, through maintenance, rehabilitation, repairs and replacement*

*As a result of the massive shift in financial responsibilities during the past 20 years, municipalities have had to increase taxes year after year, reduce services in the community, and defer infrastructure rehabilitation to later in its life-cycle.*

*Saugeen Shores Council has taken positive steps to reduce the upward trend of the municipal infrastructure deficit by allocating appropriate finances. However, this deficit continues to grow and compound as maintenance is delayed, assets reach the end of*

*their service life, and the magnitude of the repairs and replacement costs will skyrocket.*

*The main concern with this aging infrastructure is that deterioration accelerates with age. The longer investments in municipal infrastructure are put off, the higher the eventual costs. As staff investigates and analyzes the Town's existing infrastructure, it becomes apparent that the primarily buried, somewhat forgotten underground infrastructure which the public takes for granted, is under-funded.*

*Town staff is in the process of compiling a comprehensive inventory of all municipal infrastructure assets in conjunction with the work for PSAB compliance. When completed, the magnitude of the under-funding of the infrastructure in Saugeen Shores will be better understood.*

*By completing PSAB and implementing an asset management system, staff and Council will have the tools to make the most effective and efficient use of our available resources.*

**iv. Existing Infrastructure Deficit**

Due to Council's proactive measures, the Town of Saugeen Shores is not in a crisis situation; however, given the growing body of evidence that the municipal infrastructure is under-funded, if the problem is ignored it will simply overtake us.

Council has been trying to limit property tax increases, which will challenge future Council and staff to deal with the aging infrastructure and the resulting drop in level of service.

**• Figure 6.0: Funding Gap**

	Historical Cost	Replacement costs	Annual Depreciation*	2012 Capital Budget	Annual Shortfall
Water System	\$47,974,659	\$98,830,304	\$1,468,827	\$472,300	<b>\$996,527</b>
Sanitary	\$32,402,278	\$85,650,842	\$1,275,590	\$543,000	<b>\$732,590</b>
Roads	\$43,586,978	\$77,080,735	\$3,082,229	\$737,000	<b>\$2,345,229</b>
Sidewalks	\$3,215,991	\$5,098,015	\$123,305	\$21,000	<b>\$102,305</b>
Storm System	\$35,113,567	\$41,493,399	\$617,837	\$41,000	<b>\$576,837</b>
Bridges	\$3,917,802	\$25,826,041	\$374,994	\$148,500	<b>\$226,494</b>
<b>Total**</b>	<b>\$166,211,275</b>	<b>\$333,979,336</b>	<b>\$6,942,782</b>	<b>\$1,962,800</b>	<b>\$4,979,982</b>

Note: \* The depreciation calculation is based on the replacement cost  
 \*\* Fleet not included  
 \*\* Waste management is not include until further direction from Council

It is noted that based on the 2012 Capital Budget, only one third of the annual depreciation value is being funded. This will lead to increased/disproportional funding requirements form the tax levy once the assets reach their end of their useful life.



**v. A Summary of Key Discussions for the Infrastructure Deficit**

- Current inventory of municipal infrastructure is deteriorating slowly since, without doubt, nothing is immortal
- Deterioration will accelerate with age and will become increasingly noticeable
- Deterioration will impact the health and level of service, quality of life and, in some cases, the environment
- Deterioration of the assets will increase the operational budgets by the frequent maintenance activities required to maintain the current level of service
- The right investment at the right time, based on sustainability, can reduce the life cycle cost significantly for the municipality
- Deterioration of the assets will increase the municipalities exposure to risk
- Deferral of essential investment will head to disaster

**9.1.5 Step 5: Performance Evaluation**

Current State: 60% complete

Infrastructure assets have variable service life and deterioration rates are based on a wide variety of parameters. With the capture and analysis of additional data, staff will be able to enhance our estimates to project the investment required over 10 to 20 years to sustain these assets. This will allow the Town to evaluate how to balance the level of service, risk, and the time frame for renewal or replacement of assets that are in poor shape (based on available funding). This evaluation will enable the Town to analyze the underlying reasons why some assets may be underperforming and/or not reaching their optimal service life.

**9.1.6 Step 6: Risk Management**

Current State: 80% complete

Risk can be defined as the possibility that an event may adversely affect the day to day operations in a municipality. Risk management is a term used to describe the process of analyzing, organizing, planning, directing, and controlling the resources of an organization in order to minimize the potential effects of risk.

Risk assessment has been added to identify the cumulative risk associated with the current rate of funding for the Town's assets. As stated, the continual increasing of the infrastructure gap will increase the risk to the municipality.

In figure 6, it is illustrated how risk is evaluated. It is not only based on if the asset fails but what is the severity if a failure occurs. Is the road a collector or a local road? Is the sewer for local collection or is it a truck main that conveys significant flow? These types of priorities must be reviewed when assessing and judging risk management.

## The Risk Management Process



One of the purposes for identifying critical assets is to allow staff and Council to make more informed decisions regarding the use of its operation and maintenance dollars. As discussed previously, the most critical assets are those assets that are likely to fail and have a significant consequence if they do fail. Therefore, it is most advantageous to the municipality to spend the greatest portion of its operation and maintenance budget on assets that are critical to the overall operation of the utility.

Risk management is, by nature, proactive, and encompasses all management-directed activities aimed at accomplishing optimum results in a professional manner. Understanding the consequences of an asset failing is critical to determining its replacement priority.

To meet these goals, the asset management planning effort focused on performance and condition assessment of all assets. Each asset was assessed individually to develop an overall risk-based rating for the renewal/replacement which considers the likelihood and consequence of failure. This provides staff and Council with a holistic long-term look at the health and sustainability of the assets.

**Not all assets are equally important to the municipalities operation; some assets are highly critical to operations and others are not critical at all. Furthermore, critical assets are completely system-specific. Certain assets or types of assets may be critical in one location but not critical in another.**

i. **Benefits of Risk Management**

- Protection of public funds
- Reduced costs
- Increased productivity
- Reduced uncertainty
- More effective management
- Improves strategic decisions that minimizes negative consequences
- Dialogue/communications of the degree and type of risk that the municipality is willing to accept

ii. **Risk Rating Factors**

- Event likelihood
- Time to Impact
- Financial Severity
- Injury Severity
- Reputational Impact Severity

**Figure 8.0: Risk Chart**

<b>Probability of Failure</b>	P5	<b>Almost Certain</b> (80-100%)					
	P4	<b>Likely</b> (60-79%)					
	P3	<b>Possible</b> (40-59%)					
	P2	<b>Unlikely</b> (20-39%)					
	P1	<b>Rare</b> (0-19%)					
			<b>Insignificant</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Catastrophic</b>
			C1	C2	C3	C4	C5
<b>Consequence of Failure</b>							

<b>Risk Levels</b>
Extreme: not acceptable, immediate action required, response by Council and Senior Management
High: generally not acceptable, response by senior management and advise Council
Moderate: considered acceptable, manage by monitoring and performing response procedures
Low: acceptable, manage by routine practices

### **9.1.7 Step 7 Rehabilitation/Replacement Plan**

Current State: 80% complete

Once it has been established that a system component should be rehabilitated or replaced, an analysis is completed to select the most cost effective method available for renewal based on, but not limited to, the following:

1. Technical limitations and emerging technologies
2. Financial factors
3. Intended and unintended socio-economic impacts
4. Growth needs
5. Risk, environmental impacts and compliance

### **9.1.8 Step 8: Current & Future Needs**

Current State: 80% complete

#### **i. Level of Service (LOS)**

Level of Service is a qualitative or quantitative evaluation of how well a service is provided. To decide a service level, one must consider the health, safety, reliability, responsiveness, performance, quantity, quality, quality of life and environmental issues related to the asset in question. In consultation with the public and stakeholders Council will approve the appropriate Level of Service for the each of the various assets based on tradeoffs between service levels, cost and risk. When the Level of Service is approved by Council, staff will concentrate and focus efforts and resources to meet or exceed the agreed on Levels of Service.

Town staff routinely make decisions on the LOS based on the service, standards, compliance/liability and the intended target level of service for multiple assets. Deferring infrastructure investments results in a corresponding lower Level of Service.

#### **ii. Investment requirements**

Asset Management will provide the background information to enable staff and Council to plan well thought out investments and ensure that future generations will inherit sustainable infrastructure that has been well maintained, and operates efficiently and effectively.

#### **iii. Funding Strategies:**

- Tax levy
- Gas tax funding
- Reserves
- Provincial Surpluses
- Municipal Debentures
- Local improvements
- Federal/Provincial/Municipal Funding Partnerships
- Water/Sewer Rates
- Development Charges

### ***9.1.9 Step 9: Priorities***

This phase of the plan will be by far the most onerous as the decisions will be difficult. The community will need to address and balance the funding of high priority assets that are critical to the municipalities' performance against softer assets.

## **10.0 Next Steps**

Asset management documents will always be living documents as the municipality builds this aggregate knowledge and refines the necessary tools and techniques to strategically, tactically or operationally manage the infrastructure system.

The focus in the next 5 years will be on the following:

- Expand the inventory to include all municipal assets
- Improve data collection
- Improve preventative maintenance programs
- Implement Asset Management and related software
- Continued and increased use of technology
- Cost optimization, standardization and documentation
- Refine service life of data
- Further define Level of service standards for the future

## 11.0 Message to the Public

The public needs to know and understand:

- That Council and staff have a sound, defensible and rational plan for the prioritization of expenditures for the financial, environmental and social health of the community
- To help the public gain a better understanding of the demands of the services and assets within a defined budget
- To help the public gain an appreciation of the numerous factors that are considered when expending public funds
- Develop a public communication program to engage the community in discussing the true cost of services, and the assets required to provide those services
- That one asset cannot be discussed in isolation, as expending limited municipal resources in one area will impact another area
- Since each asset starts to depreciate from the day it is placed into service, a certain level of continuing investment is required to ensure sustainability.
- In respect to life cycle costs, the largest expenditure for that asset is in the years after installation, during the operating and maintenance (O&M) phase.
- The invisibility of the underground infrastructure is often an impediment of the public's willingness to pay to maintain the expected level of service.
- Adequate intervention (maintenance, rehabilitation, refurbishment) at the appropriate time to extend the life of the asset without impacting quality and reliability of the service.
- Infrastructure is forgotten, or at the very least, in the background of everyone's mind, until there is a problem or complaint; then it is front and centre in the minds of the residents who expect immediate action with minimal or no increase in municipal taxes.
- The practise of deferring infrastructure renewal dollars is adding to the magnitude of the daunting challenge that faces the municipality in the years to come.

## 12.0 “Lessons Learned” for the Application of the Asset Management Plan

The investigations and analysis associated with building an asset management program have widened the gap in funding as staff start to view all municipal assets as a single entity. In this way, Asset Management provides a new perspective on our capital and operational planning. With a clear view of Saugeen Shores’ infrastructure condition, capital and recurring costs, likelihood of failure, consequence of failure, historical incidents and maintenance, staff can revamp capital and operational plans. *The plan is to move from reactive to proactive management of the assets.*

One of the most important aspects of asset management is that it cannot be something the municipality does on the side as one of its many activities; rather, it must be the way the corporation does business. Asset management thinking must underlie every activity, every action, and every decision that the Town undertakes.

Having asset management underlie all of the municipalities’ activities means that there must be a “buy in” to the asset management concepts at all levels of the Town from the least senior employee to the highest elected official. Every level of employee must be convinced that asset management is important to the overall function of the Town. If there is insufficient acceptance of asset management, the plan will be much less successful and may not succeed at all.

## 13.0 Conclusions

- Asset Management influences decisions rather than waiting to be influenced by arbitrary influences (Proactive versus reactive).
- Asset Management uses resources more efficiently and effectively.
- Asset Management will mediate changing economic conditions, increasing demands, insufficient resources, competing priorities and the public call for greater accountability to ensure the sound stewardship of public resources in the short term and the long term.
- Asset Management is a continuous improvement process that facilitates knowledge transfer from one generation of stewards to the next
- Asset Management is a decision making tool that identifies trends and issues, not policies.
- The municipality must take steps to close the infrastructure funding gap. As the stewards of our infrastructure, we can no longer do nothing.