
ASSET MANAGEMENT PLAN

2024-07-01



EXECUTIVE SUMMARY

Saugeen Shores' Corporate Mission is "To provide residents with a safe and healthy community; to guide the Town's future growth and development while providing municipal services and protecting our natural resources and assets in a sustainable manner."

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.

"Asset management planning is the process of making the best possible decisions regarding the building, operating, maintaining, renewing, replacing and disposing of infrastructure assets. The objective is to maximize benefits, manage risk, and provide satisfactory levels of service to the public in a sustainable manner."

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

Strategic asset management planning is critical for extracting the highest value from public assets at the lowest lifecycle costs. It is important to note that this document only addresses the maintenance and renewal of existing assets as a snapshot of the current inventory (as of the 2019 year for Part A assets and 2023 for Part B Assets). This asset management plan (AMP) currently covers the Core Assets and Non-Core assets in two parts.

It is a living document that will continue to evolve not only to meet the municipal regulation guidelines but as changes are made across the municipality. The document will be reviewed yearly with a full re-evaluation every 5 years

AMP Section	Asset Class
Part A	Roads
	Sidewalk and Curbs
	Bridges and Culverts
	Sanitary Network
	Storm Network
	Water Network
Part B	Facilities
	Parks
	Trails
	Fleet
	Community Service Assets
	IT Equipment
	Land
	Transportation Assets
	Business Units
	Equipment

CONTENTS

Executive Summary.....	2
1 Introduction & Background	19
1.1 Elements of the AMP	19
1.2 The Characteristics of an Asset Management Plan	20
1.2.1 What is Asset Management?	20
1.2.2 What are the key principles of asset management?	20
1.2.3 Reasons for Asset Management	21
1.3 Developing the Asset Management Plan.....	22
1.3.1 Asset Management Mandate	22
1.3.2 Implementation	22
1.3.3 Amortization	22
1.3.4 Financial Analysis	22
1.3.5 Limitations.....	22
1.3.6 Methodology.....	23
2 Core Assets – Summary Statistics	25
3 Part A – Core Assets Background.....	26
3.1.1 Dataset	28
3.1.2 Field Inspection Data	28
4 Key Statistics	29
4.1 Asset Valuation – All Core Asset Classes.....	29
4.2 Source of Condition Data	30
4.3 Overall Condition – All Cores Asset Classes	31
4.4 Financial Profile.....	33
5 State of Local Infrastructure	35
5.1 Road Network Infrastructure.....	37
5.1.1 Asset Inventory	37

5.1.2	Replacement Cost Valuation.....	37
5.1.3	Asset Useful Life.....	38
5.1.4	Infrastructure Investment.....	38
5.1.5	Useful Life Consumption.....	39
5.1.6	Current Asset Condition.....	40
5.1.7	Forecasting Replacement Needs	42
5.2	Sidewalk Network	45
5.2.1	Asset Inventory	45
5.2.2	Replacement Cost Valuation.....	45
5.2.3	Asset Useful Life.....	45
5.2.4	Infrastructure Investment.....	46
5.2.5	Useful Life Consumption.....	46
5.2.6	Current Asset Condition.....	47
5.2.7	Forecasting Replacement Needs	48
5.3	Bridge & Culvert Infrastructure	51
5.3.1	Asset Inventory	51
5.3.2	Replacement Cost Valuation.....	51
5.3.3	Asset Useful Life.....	51
5.3.4	Infrastructure Investment.....	52
5.3.5	Useful Life Consumption.....	52
5.3.6	Current Asset Condition.....	53
5.3.7	Forecasting Replacement Needs	54
5.4	Storm Sewer Network.....	57
5.4.1	Asset Inventory	57
5.4.2	Replacement Cost Valuation.....	57
5.4.3	Asset Useful Life.....	58
5.4.4	Infrastructure Investment.....	58

5.4.6	Useful Life Consumption.....	59
5.4.7	Current Asset Condition.....	61
5.4.9	Forecasting Replacement Need.....	62
5.5	OCWA - WATER Distribution and Sanitary Sewer Network.....	65
5.5.1	Asset Inventory.....	65
5.5.2	Replacement Cost Valuation.....	66
5.5.3	Asset Useful Life.....	67
5.5.4	Infrastructure Investment.....	67
5.5.5	Useful Life Consumption.....	70
5.5.6	Current Asset Condition.....	72
5.5.7	Forecasting Replacement Needs.....	74
6	Infrastructure Report Card – Core Assets.....	76
7	Level of Service – Core Assets.....	77
7.1	Transportation Network.....	77
7.2	Storm Water Network.....	80
7.3	Water Network.....	82
7.4	Sanitary Network.....	83
8	Lifecycle Activities – Core Assets.....	85
8.1	Transportation Network.....	86
8.1.1	Road Network – Paved Roads (HCB & LCB).....	86
8.1.2	Road Network – Gravel.....	87
8.1.3	Bridges & Culverts.....	88
8.1.4	Sidewalks & Curbs.....	89
8.2	Storm Network.....	90
8.3	Water Distribution and Sanitary Sewer Network.....	90
9	Asset Management Strategy – Core Assets.....	91
9.1	Condition Assessment Program.....	91

9.2	Stronger Lifecycle Management.....	92
9.3	Project Prioritization	92
10	Financial Strategy – Core Assets	93
10.1	Current Funding Position	93
10.2	Recommendations	94
11	Part B – Non-Core Assets Summary Statistics	97
12	Non-core assets Background	98
13	Key Statistics	99
13.1	Asset Valuation – All Asset Classes.....	99
13.2	Source of Condition Data	99
13.3	Overall Condition – All Asset Classes	101
13.4	Financial Profile.....	102
14	State of Assets.....	103
14.1	Facilities.....	105
14.1.1	Asset Inventory	105
14.1.2	Replacement Cost Valuation.....	105
14.1.3	Asset Useful Life.....	106
14.1.4	Investment Level.....	106
14.1.5	Useful Life Consumption.....	107
14.1.6	Current Asset Condition.....	108
14.1.7	Forecasted Replacment Needs	109
14.2	Parks.....	113
14.2.1	Asset Inventory	113
14.2.2	Replacement Cost Valuation.....	113
14.2.3	Investment Level & Useful Life Consumption.....	114
14.2.4	Current Asset Condition.....	114
14.2.5	Forecasted Replacment Needs	115

14.3	Trails.....	117
14.3.1	Asset Inventory	117
14.3.2	Replacement Cost Valuation.....	117
14.3.3	Asset Useful Life.....	118
14.3.4	Trails Next Steps.....	118
14.4	Community Service Assets.....	120
14.4.1	Asset Inventory	120
14.4.2	Replacement Cost Valuation.....	121
14.4.3	Asset Useful Life.....	122
14.4.4	Investment Level & Useful Life Consumption.....	122
14.4.5	Current Asset Condition.....	122
14.4.6	Forecasted Replacment Needs	123
14.5	Fleet	125
14.5.1	Asset Inventory	125
14.5.2	Replacement Cost Valuation.....	125
14.5.3	Asset Useful Life.....	126
14.5.4	Investment Level.....	126
14.5.5	Useful Life Consumption.....	127
14.5.6	Current Asset Condition.....	129
14.5.7	Forecasted Replacment Needs	130
14.6	IT Equipment.....	133
14.6.1	Asset Inventory	133
14.6.2	Replacement Cost Valuation.....	134
14.6.3	Asset Useful Life.....	135
14.6.4	Investment Level.....	136
14.6.5	Useful Life Consumption.....	137
14.6.6	Current Asset Condition.....	138

14.6.7	Forecasted Replacment Needs	140
14.7	Land.....	142
14.7.1	Category Definitions	142
14.7.2	Tree Canopy	144
14.8	Transportation Assets – Streetlights.....	148
14.8.1	Asset Inventory	148
14.8.2	Replacement Cost Valuation.....	149
14.8.3	Asset Useful Life.....	149
14.8.4	Investment Level.....	150
14.8.5	Useful Life Consumption.....	151
14.8.6	Current Asset Condition.....	152
14.8.7	Forecasted Replacment Needs	153
14.9	Transportation Assets – Street Signs	155
14.9.1	Asset Inventory	155
14.9.2	Replacement Cost Valuation.....	156
14.9.3	Asset Useful Life.....	156
14.9.4	Current Asset Condition.....	156
14.9.5	Forecasted Replacment Needs	157
14.10	Transportation Assets – Parking lots	158
14.10.1	Asset Inventory	158
14.10.2	Replacement Cost Valuation.....	158
14.10.3	Asset Useful Life.....	159
14.10.4	Current Asset Condition.....	159
14.11	Equipment.....	161
14.11.1	Asset Inventory	161
14.11.2	Replacement Cost Valuation.....	161
14.11.3	Asset Useful Life.....	162

14.11.4	Investment Level.....	162
14.11.5	Useful Life Consumption.....	163
14.11.6	Current Asset Condition.....	164
14.11.7	Forecasted Replacment Needs	165
14.12	Business Units - Tourist Camps.....	168
14.13	Business Units - Harbour.....	169
14.13.1	Asset Inventory	169
14.13.2	Replacement Cost Valuation.....	169
14.13.3	Asset Useful Life.....	170
14.13.4	Investment Level.....	170
14.13.5	Useful Life Consumption.....	171
14.13.6	Current Asset Condition.....	172
14.13.7	Forecasted Replacment Needs	173
14.14	Business Units - Landfill	175
14.14.1	Asset Inventory	175
14.14.2	Replacement Cost Valuation.....	175
14.14.3	Asset Useful Life.....	176
14.14.4	Condition and Replacement Schedule.....	176
15	Asset Report Card	177
16	Current Levels of Service	178
17	Lifecycle Activities.....	180
18	Financial Strategy.....	183
19	Appendix.....	185
19.1	The Benefits of Asset Management.....	185
19.2	Asset Report Cards.....	185
19.3	Transportation Network Capital Plan	200
19.4	GM BluePlan 10 Year Capital Bridge and Culvert Program	206

19.5	Recommended Project – Water and Waste Water	208
19.6	OCWA Water & Sanitary Recommendations.....	212
19.7	Asset Maps.....	213
19.8	Community Service Assets & Park Attributes.....	243
19.8.1	Community Service Assets Summary Table.....	243
19.8.2	Park Attribute Summary Table	243
19.9	Tree Canopy Study Area.....	244
19.10	Equipment Type List.....	246
19.11	Trail Count Data	247
20	References	248

List of Tables

Table 4.1	Condition Data Source	30
Table 5.1	Asset Inventory - Road Network.....	37
Table 5.2	Asset Valuation - Road Network.....	37
Table 5.3	Asset Useful Life in Years - Road Network.....	38
Table 5.4	Asset Useful Life Remaining - Road Network.....	39
Table 5.5	Current Asset Condition - Road Network.....	41
Table 5.6	Asset Inventory - Sidewalk & Curb.....	45
Table 5.7	Asset Valuation - Sidewalk & Curb.....	45
Table 5.8	Asset Useful Life in Years - Sidewalk & Curb.....	45
Table 5.9	Current Asset Condition - Sidewalk & Curb	48
Table 5.10	Asset Inventory - Bridges & Culverts.....	51
Table 5.11	Asset Valuation - Bridges & Culverts.....	51
Table 5.12	Asset Useful Life in Years - Bridges & Culverts	51
Table 5.13	Current Asset Condition - Bridges & Culverts.....	54
Table 5.14	Asset Inventory - Storm Sewer.....	57

Table 5.15 Asset Valuation - Storm Sewer.....	57
Table 5.16 Asset Useful Life in Years - Storm Sewer	58
Table 5.17 Historical Infrastructure Investment - Storm Sewer Network.....	59
Table 5.18 Current Asset Condition - Storm Sewer Network.....	61
Table 5.19 Asset Inventory - Water & Sanitary Sewer Network	65
Table 5.20 Asset Valuation - Water Distribution Network.....	66
Table 5.21 Asset Valuation - Sanitary Sewer Network	66
Table 5.22 Historical Infrastructure Investment - Water Network	68
Table 5.23 Historical Infrastructure Investment - Sanitary Network	70
Table 5.24 Asset Performance Rating Descriptions.....	73
Table 5.25 Current Performance by Replacement Value	73
Table 6.1 Infrastructure Report Card.....	76
Table 7.1 Transportation Network Level of Service Performance	78
Table 7.2 Storm Water Network Level of Service Performance.....	81
Table 7.3 Water Network Level of Service Performance.....	82
Table 7.4 Sanitary Network Level of Service Performance.....	83
Table 8.1 Lifecycle Activities	86
Table 8.2 Paved Road Maintenance Activities.....	86
Table 8.3 Paved Road Lifecycle Activities	87
Table 8.4 Gravel Roads Maintenance Activities	88
Table 8.5 Gravel Roads Lifecycle Activities	88
Table 8.6 Bridges and Culverts Maintenance Activities	89
Table 8.7 Bridges and Culverts Lifecycle Activities	89
Table 10.1 Current Funding and Requirements for Existing Assets	93
Table 13.1 Condition Data Source	99
Table 13.2 Condition Rating Definitions	100
Table 14.1 Facility Categories	105

Table 14.2 Asset Inventory - Facilities	105
Table 14.3 Asset Valuation - Facilities	106
Table 14.4 Asset Useful Life in Years - Facilities	106
Table 14.5 Asset Useful Life Consumption – Facilities	107
Table 14.6 Current Asset Condition – Facilities	109
Table 14.7 Asset Inventory – Parks.....	113
Table 14.8 Asset Replacement Cost - Parks.....	114
Table 14.9 Current Asset Condition – Parks	114
Table 14.10 Asset Inventory - Trails.....	117
Table 14.11 Asset Valuation - Trails.....	117
Table 14.12 Asset Useful Life in Years - Trails.....	118
Table 14.13 Asset Inventory - Community Service Assets.....	120
Table 14.14 Asset Valuation - Community Service Assets.....	121
Table 14.15 Asset Useful Life in Years - Community Service Assets.....	122
Table 14.16 Current Asset Condition - Community Service Assets	123
Table 14.17 Fleet Categories	125
Table 14.18 Asset Inventory - Fleet	125
Table 14.19 Asset Valuation - Fleet	126
Table 14.20 Asset Useful Life in Years - Fleet	126
Table 14.21 Useful Life Consumption - Fleet.....	128
Table 14.22 Current Asset Condition - Fleet.....	129
Table 14.23 Asset Inventory - IT Equipment.....	133
Table 14.24 Asset Valuation - IT Equipment.....	134
Table 14.25 Asset Useful Life in Years - IT Equipment.....	135
Table 14.26 Asset Useful Life Consumption - IT Equipment.....	137
Table 14.27 Current Asset Condition - IT Equipment	139
Table 14.28 Town Land Inventory	142

Table 14.29 - Urban Tree Canopy Plan Timeline	146
Table 14.30 Asset Inventory - Streetlights.....	148
Table 14.31 Asset Valuation - Streetlights.....	149
Table 14.32 Asset Useful Life in Years - Streetlights.....	149
Table 14.33 Asset Useful Life Consumption - Streetlights.....	151
Table 14.34 Current Asset Condition - Streetlights	152
Table 14.35 Streetlighting Repair Timeline	153
Table 14.36 Asset Inventory - Signs	155
Table 14.37 Asset Valuation - Signs	156
Table 14.38 Asset Useful Life in Years - Signs.....	156
Table 14.39 Current Asset Condition - Signs.....	156
Table 14.40 Asset Inventory - Parking Lots.....	158
Table 14.41 Asset Valuation - Parking Lots.....	158
Table 14.42 Asset Useful Life in Years - Parking Lots.....	159
Table 14.43 Asset Inventory - Equipment.....	161
Table 14.44 Asset Valuation - Equipment.....	161
Table 14.45 Asset Useful Life in Years - Equipment	162
Table 14.46 Asset Useful Life Consumption – Equipment.....	163
Table 14.47 Current Asset Condition - Equipment.....	164
Table 14.48 Asset Inventory - Tourist Camps	168
Table 14.49 Asset Inventory - Harbour.....	169
Table 14.50 Asset Valuation - Harbour.....	169
Table 14.51 Asset Useful Life in Years - Harbour.....	170
Table 14.52 Asset Useful Life Consumption - Harbour.....	171
Table 14.53 Current Asset Condition - Harbour	172
Table 14.54 Asset Inventory – Landfill.....	175
Table 14.55 Asset Valuation – Landfill.....	175

Table 14.56 Asset Useful Life in Years – Landfill.....	176
Table 15.1 Asset Summary Report Card	177
Table 16.1 Current Levels of Service.....	178
Table 17.1 Operating Expenditure	180
Table 17.2 Facilities Capital Costs	182

List of Figures

Figure 3.1 Projected Population Growth	26
Figure 3.2 Projected Private Household Growth	27
Figure 4.1 Core Infrastructure Asset Valuation (\$ in millions)	29
Figure 4.2 Asset Condition Distribution by Replacement Cost (\$ in millions)	31
Figure 4.3 Historical Investment in Saugeen Shores Infrastructure – All Classes by Installation Year	32
Figure 4.4 Useful Life Remaining – All Asset Classes (\$ in Millions)	33
Figure 4.5 Core Public Asset Replacement Value Per Property.....	34
Figure 5.1 Saugeen Shores Infrastructure Investment in Road Network by Installation Year Based on 2019 Replacement Cost	39
Figure 5.2 Remaining Useful Life - Road Network	40
Figure 5.3 Asset Condition Roads*	41
Figure 5.4 Replacement Schedule - Roads.....	42
Figure 5.5 Provision Schedule - Roads	43
Figure 5.6 Saugeen Shores Infrastructure Investment in Sidewalk Network Infrastructure by Installation Year Based on 2019 Replacement Cost	46
Figure 5.7 Remaining Useful Life - Sidewalk & Curb.....	47
Figure 5.8 Asset Condition - Sidewalk & Curb	48
Figure 5.9 Replacement Schedule - Sidewalks & Curbs.....	49
Figure 5.10 Provision Schedule - Sidewalks & Curbs	49

Figure 5.11 Saugeen Shores Infrastructure Investment in Bridges & Culvert Infrastructure by Installation Year Based on 2019 Replacement Cost	52
Figure 5.12 Remaining Useful Life - Bridges & Culverts	53
Figure 5.13 Asset Condition - Bridges & Culverts	54
Figure 5.14 Replacement Schedule - Bridges & Culverts.....	55
Figure 5.15 Provision Schedule - Bridges & Culverts	55
Figure 5.16 Saugeen Shores Infrastructure Investment in Storm Mains Infrastructure by Installation Year Based on 2019 Replacement Cost	58
Figure 5.17 Remaining Useful Life - Storm Mains.....	60
Figure 5.18 Remaining Useful Life – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)	60
Figure 5.19 Asset Condition - Storm Sewer Network	61
Figure 5.20 Replacement Schedule - Storm Mains.....	62
Figure 5.21 Provision Schedule - Storm Mains	62
Figure 5.22 Replacement Schedule – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)	63
Figure 5.23 Provision Schedule – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)	63
Figure 5.24 Saugeen Shores Infrastructure Investment in the Water Network by Installation Year Based on 2019 Replacement Cost	67
Figure 5.25 Saugeen Shores Infrastructure Investment in the Sanitary Network by Installation Year Based on 2019 Replacement Cost	69
Figure 5.26 Remaining Useful Life - Water Network	71
Figure 5.27 Remaining Useful Life - Sanitary Network	72
Figure 5.28 - Water and Sanitary Network 2021 Asset Performance Summary	74
Figure 5.29 Capital Spending Forecast.....	75
Figure 8.1 Whole Life Cost Template.....	85
Figure 10.1 Annual Capital Provisions	94
Figure 10.2 Financial Strategy Recommendation	95

Figure 13.1 Town Asset Portfolio Condition (\$ millions)	101
Figure 13.2 Replacement Cost Per Household by Asset	102
Figure 14.1 Yearly Investment - Facilities	107
Figure 14.2 Useful Life Consumption – Facilities	108
Figure 14.3 Current Asset Condition - Facilities.....	109
Figure 14.4 Provision Schedule - Facilities.....	110
Figure 14.5 Replacement Schedule - Facilities	110
Figure 14.6 Forecasted Replacement Schedule - Facilities.....	111
Figure 14.7 Current Asset Condition - Parks.....	115
Figure 14.8 Current Asset Condition – Community Service Assets	123
Figure 14.9 Yearly Investment - Fleet	127
Figure 14.10 Useful Life Consumption - Fleet.....	128
Figure 14.11 Current Asset Condition - Fleet.....	129
Figure 14.12 Provisional Schedule - Fleet	130
Figure 14.13 Replacement Schedule - Fleet	130
Figure 14.14 Asset Investment Level - IT Equipment	136
Figure 14.15 Asset Useful Life Consumption - IT Equipment	138
Figure 14.16 Current Asset Condition - IT Equipment	139
Figure 14.17 Provision Schedule - IT Equipment	140
Figure 14.18 Replacement Schedule - IT Equipment.....	140
Figure 14.19 – Urban Settlement Area	144
Figure 14.20 Yearly Investment - Streetlights.....	150
Figure 14.21 Asset Useful Life Consumption - Streetlights	151
Figure 14.22 Current Asset Condition - Streetlights	152
Figure 14.23 Provisional Schedule - Streetlights	153
Figure 14.24 Replacement Schedule - Streetlights.....	154
Figure 14.25 Asset Investment Level - Equipment	162

Figure 14.26 Asset Useful Life Consumption – Equipment	163
Figure 14.27 Current Asset Condition - Equipment.....	164
Figure 14.28 Provisional Schedule – Equipment	165
Figure 14.29 Replacement Schedule - Equipment.....	165
Figure 14.30 Yearly Investment - Harbour.....	171
Figure 14.31 Asset Useful Life Consumption - Harbour	172
Figure 14.32 Current Asset Condition - Harbour	173
Figure 14.33 Provisional Schedule - Harbour	174
Figure 14.34 Replacement Schedule - Harbour	174

1 INTRODUCTION & BACKGROUND

1.1 ELEMENTS OF THE AMP

This AMP has been developed to follow the Province of Ontario’s Building Together: Guide for Municipal Asset Management Plans. The AMP includes the following components:

Table 2.1 Elements of the AMP

Section #	Section Title	Content Description
1	Introduction	Describes the concept of Asset Management and how it will help the Town reach its long term goals. Explains the asset classes and how the AMP was developed.
2	Key Statistics	Provides a high level summary of the current asset status including replacement value and condition.
3	State of Local Infrastructure	Describes the asset inventory, valuation, age distribution and condition.
4	Infrastructure Report Card	High level summary of status of asset classes
5	Level of Service	Outlines levels of service through performance indicators. Looks to review outside factors that could affect expected levels of service.
6	Asset Management Strategy	Explains planned actions that should take place to maintain or improve levels of service in a long term sustainable way.
7	Financial Strategy	Outlines the integration of the asset management plan with financial planning and budgeting

The elements of Asset Management are key components 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:
 - a. Provide the desired level of service in a environmentally sound and sustainable manner
 - b. Maximize the asset life and minimize the total cost of ownership of all assets over their respective lifecycles
 - c. Manage and understand the municipalities risk exposure
 - d. 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.

1.2 THE CHARACTERISTICS OF AN ASSET MANAGEMENT PLAN

1.2.1 WHAT IS ASSET MANAGEMENT?

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.

In the administrative agreement for the federal gas tax fund, asset management is defined as:

“...a strategic document that states how a group of assets are to be managed over a period of time. The plan describes the characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.” (Federation of Canadian Municipalities).

1.2.2 WHAT ARE THE KEY PRINCIPLES OF ASSET MANAGEMENT?

- 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.

1.2.3 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.

1.3 DEVELOPING THE ASSET MANAGEMENT PLAN

1.3.1 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.

1.3.2 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. This plan has been developed using 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.

1.3.3 AMORTIZATION

The Town uses a straight-line amortization schedule approach to depreciate capital assets. Although this method is not representative of the true nature of asset deterioration, it is a useful alternative when standardized decay models are not available.

1.3.4 FINANCIAL ANALYSIS

The financial analysis reported on in this AMP reflect the minimum allocation of funds to maintain the selected assets. Additionally, the replacement costs are calculated based on the CPI (consumer price index) for the given year. These values represent the minimum amount that should be set aside annually by the municipality in order to manage assets that have reached the end of their lifecycle. The annual shortfall that is seen directly relates to infrastructure backlogs and as a result needs to be addressed.

1.3.5 LIMITATIONS

Limitations that were and continue to be experienced while developing the asset management program, include:

- Field condition data is not available for all assets. In the absence of field condition assessments age of the asset is used to estimate physical condition.
- Accuracy of replacement cost may not provide a true representation of market costs. A CPI multiplier is used to calculate inflation and provide replacement costs. As a result, the value of the Town's assets may be over or understated.
- Recommendations and calculation are only reflective of the best available data at the time the AMP was developed.

1.3.6 METHODOLOGY

To determine the condition of Town assets and to determine the needs to maintain level of service moving forward the plan will use a combination of measures regarding the current core infrastructure. Asset condition and useful life need to be understood as two measures that should be considered in connection with one another. Useful life uses the installed date of an asset and the estimated life span or longevity of an asset. Life span of assets has been determined using expert knowledge as well as industry standards. Asset condition has been determined through asset assessments and where not available through age-based calculations. It is often seen that there is a discrepancy between the number of assets beyond useful life and the overall condition of the same assets. What is key is remembering that these assets need to be understood as two pieces of the puzzle. Due to maintenance and minor repairs that are often applied to assets the condition of assets that are at the end of their useful life can be improved. However, the percentage of assets at or beyond useful life will need to be prioritized for replacements in the near future and will only be able to maintained for so long. As a result of continuing to maintain these assets the Town may be spending significant resources on assets that are beyond their useful life. Through the use of the AMP and applying these understandings to decision making the Town will be able to better allocate resources.

ASSET MANAGEMENT PLAN – PART A

Core Assets



2 CORE ASSETS – SUMMARY STATISTICS

Replacement cost of core asset portfolio	\$397 million
Replacement cost of infrastructure per capita	\$28,940
Percentage of assets in good or very good condition	76%
Percentage of assets with over 10 years of useful life remaining	55%
Percentage of annual funding being met	59%
Annual infrastructure deficit per capita	\$399

3 PART A – CORE ASSETS BACKGROUND

The Town of Saugeen Shores is located along the Lake Huron shoreline, just west of Owen Sound and north of Kincardine. Saugeen Shores includes the communities of Port Elgin, Southampton and Saugeen Township, and are part of Bruce County. Saugeen Shores is the fastest growing municipality in Bruce County, and one of only a few municipalities that experienced residential and non-residential growth since 2001. Saugeen Shores is a growing community with a population of over 13,000 as of 2016, and a projection of strong growth over the next 10 years (Figure 3.1). The Town’s population is projected to reach approximately 18,000 residents by 2031. That would be an increase of more than 34% over the 15 years (2016 to 2031).

Figure 3.1 Projected Population Growth

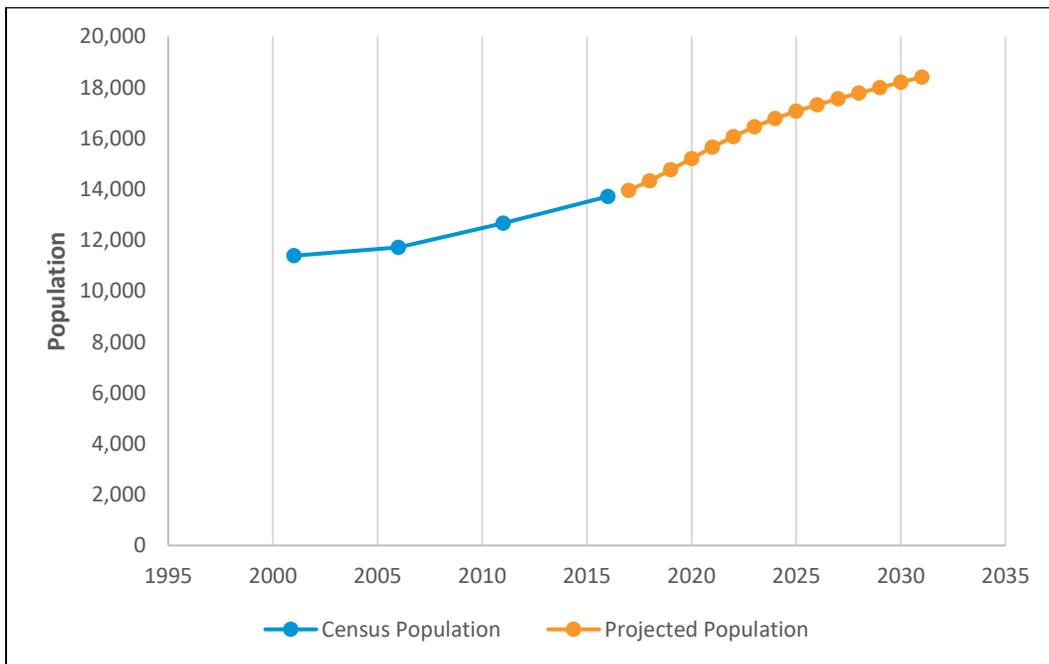
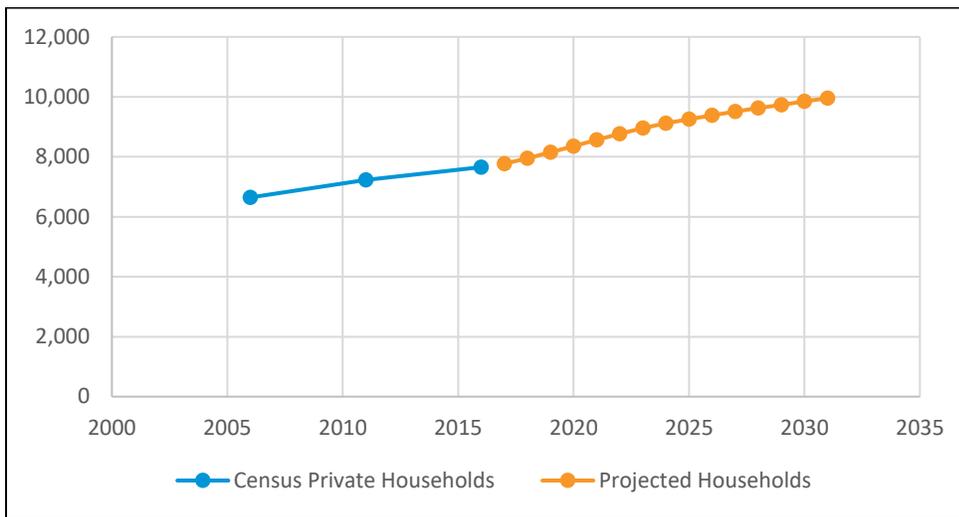


Figure 3.2 Projected Private Household Growth



Similarly, growth in private households is following the same trend as overall population (Figure 3.2). Growth is projected to be around a 50% increase from 2016 to 2031 as we see private households move from 6,645 to an estimated 9,955 in 2031.

As stated in the Official Plan (2014) “the goal of this *Plan* is to provide an appropriate amount of housing and employment lands to accommodate an additional 5,000 permanent and seasonal residents and 1,125 jobs through 2031.” This projected growth may now be underestimated as the Town continues to see rising population, housing and employment growth year over year. As a result of this continued growth in the community it is a priority to provide a high level of service to its residents including drinking water, waste water collection and treatment, storm water drainage, as well as useable bridges and road network. The 2020 Corporate Asset Management Plan outlines the state of these core infrastructure assets.

This asset management plan currently meets the requirements set out by the Government of Ontario (O. Reg 588/17), however it is understood that this is a living document which will continue to evolve. Asset management progress will be reviewed annually and the plan will be reviewed every 5 years to ensure projects are up to date and available for decision makers. The following asset categories are addressed in the report:

- Road Network
- Sidewalk Network
- Bridges & Culverts (greater than 8m)
- Water Distribution Network

- Sanitary Sewer Network
- Storm Sewer Network

These assets have been assessed to determine value, condition and level of service in order to determine a maintenance and rehabilitation strategy and the overall impact to the municipality's financial strategy.

3.1.1 DATASET

The Town's infrastructure dataset for each of the core infrastructure classes that have been analyzed in this document are maintained in the GIS using ESRI software. Each asset dataset contains key attributes including, in-service dates, replacement costs, condition, etc. This data is maintained and the GIS should be considered the primary repository for infrastructure data.

Ontario Clean Water Association (OCWA) has been contracted to complete the study of the water and wastewater assets for the town of Saugeen Shores. The Town of Saugeen Shores and OCWA have worked together to not only provide a high level of service among these assets but also to provide a clear picture of the condition and maintenance needs to continue to provide these services to a growing community.

3.1.2 FIELD INSPECTION DATA

Condition data is a valuable piece of information when determining the true state of infrastructure. Field condition data was available for roads, sidewalks, bridges & culverts which was used to provide more precise recommendations. For all additional categories age-based condition assessments were used.

4 KEY STATISTICS

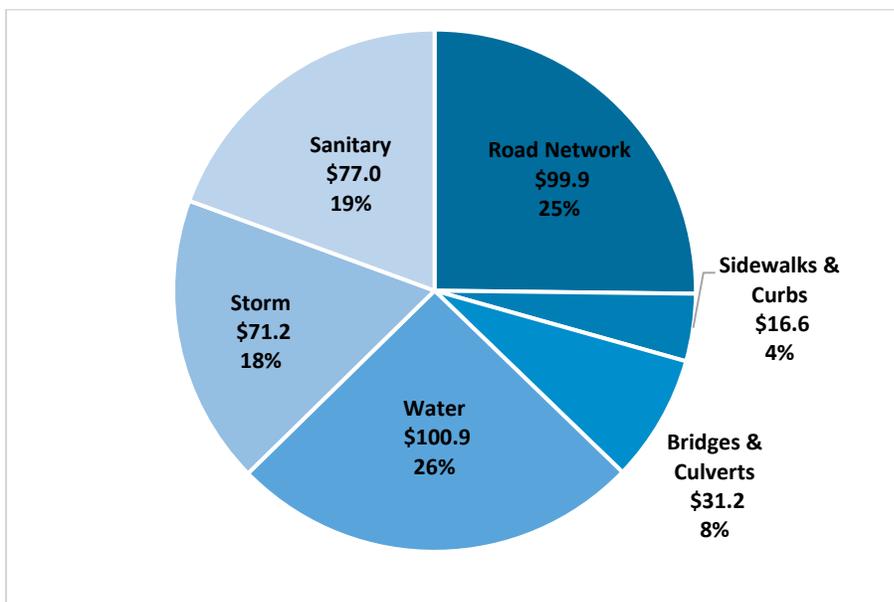
In this sections of the AMP a high level summary of the key indicators is provided for the Town’s core infrastructure. The state of each asset category will be provided in greater detail in Section 3 of the report.

4.1 ASSET VALUATION – ALL CORE ASSET CLASSES

This AMP has relied on two data sources to determine replacement cost for assets. Costing has been determined from either user-defined costs or cost inflation calculations. User-defined cost estimates come from Town staff and are based on recent contracts, engineering reports and assessments. Cost inflation or CPI cost have been calculated using the consumer price index. User-defined replacement cost provide the most accurate way of determining pricing, as it incorporates changes in product and technology of products. When user-based information is not available CPI has been used.

Replacement costs have been determined based on 2019 data valuation, in order to ensure most complete dataset was being evaluated. Core infrastructure classes in the Town of Saugeen Shores had a total valuation of \$397 million (2019), or \$28,940.11 per capita based on 2016 census population of 13,715. Figure 4.1 displays the distribution of these asset classes and their respective value.

Figure 4.1 Core Infrastructure Asset Valuation (\$ in millions)



4.2 SOURCE OF CONDITION DATA

The condition data available for the core infrastructure assets in this AMP are age-based unless observed data is available. Although, age-based data is less accurate, it provides a baseline that will allow for long term capital funding planning. Table 4.1 indicates condition assessment sources for the core infrastructure assets in this AMP.

Table 4.1 Condition Data Source

Asset Class	Condition Data Source
Road Network	Assessed (PCI) – 2020
Sidewalks	Assessed
Bridges & Culverts	Assessed – 2020
Water Distribution Network	Age-based
Sanitary Sewer Network	Age-based/Assessed *
Storm Sewer Network	Age-based

* 2016-2020 inspection dates for sanitary mains only

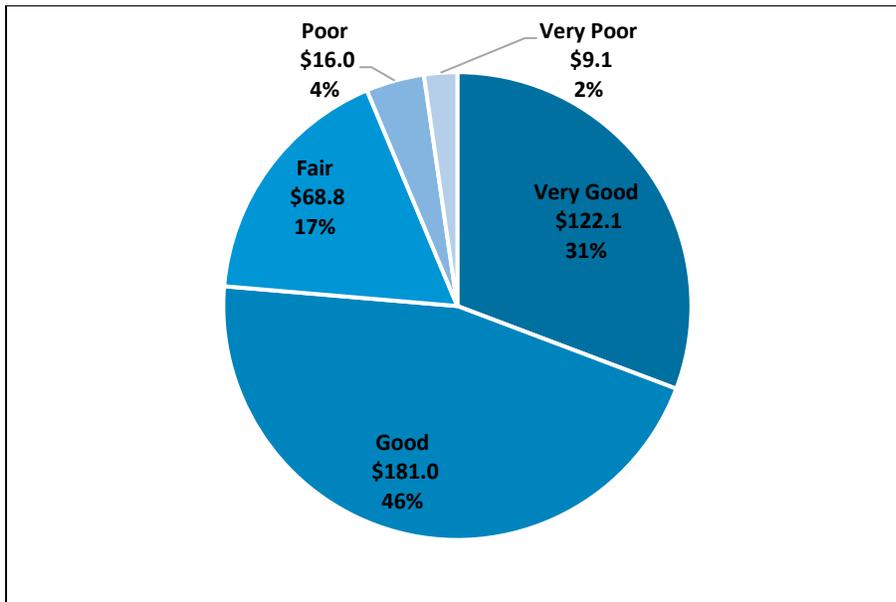
When assessed condition data is not available, age-based condition has been determined using the Canadian Infrastructure Report Card template. Age-based condition assessments are calculated based on deterioration percentage and current age of the asset. This is modelled and applied to the assets in the GIS. Condition ratings for assets can fall into 1 of 5 categories:

1. Very poor: The asset is unfit for sustained service. It is near or beyond its expected service life and shows widespread signs of advanced deterioration. Some assets may be unusable.
2. Poor: There is an increasing potential for its condition to affect the service it provides. The asset is approaching the end of its service life, the condition is below the standard and a large portion of the system exhibits significant deterioration.
3. Fair: The asset requires attention. The asset shows signs of deterioration and some elements exhibit deficiencies.
4. Good: The asset is adequate. It is acceptable and generally within the mid-stage of its expected service life.
5. Very Good: The asset is fit for the future. It is well maintained, in good condition, new or recently rehabilitated.

4.3 OVERALL CONDITION – ALL CORES ASSET CLASSES

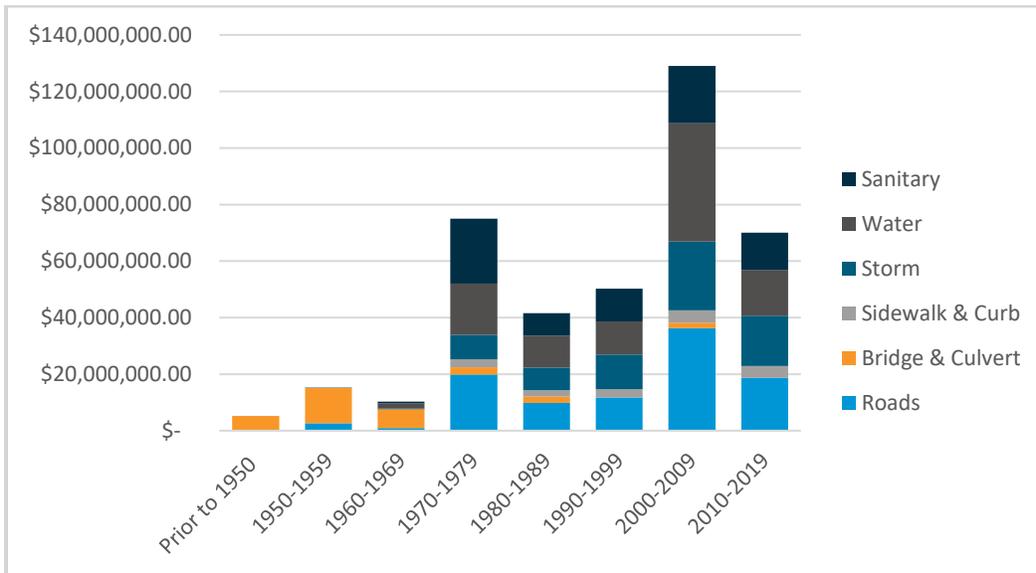
Based on the 2019 replacement cost and available condition data 76% of the assets are in good or very good condition (Figure 4.2). With just over 24% of assets in Fair to Very Poor condition. It should be reminded that condition data for a number of assets is currently only available as age-based assessments and therefore may not provide a complete picture of on the ground condition.

Figure 4.2 Asset Condition Distribution by Replacement Cost (\$ in millions)



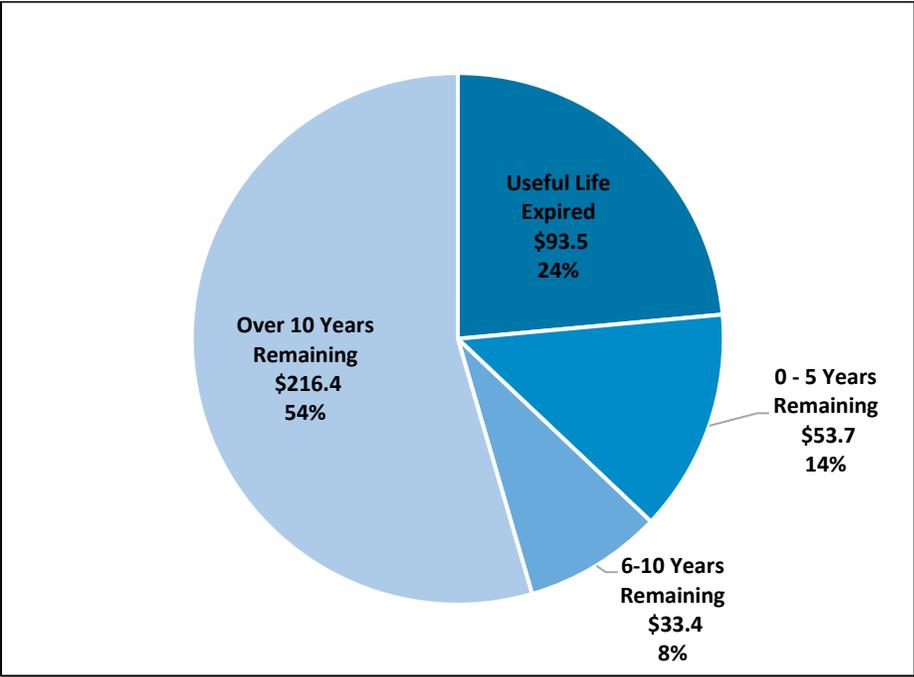
In addition to condition data, installation year and useful life remaining can be used as indicators of the state of the infrastructure. Installation year provides a picture of historical investments across asset classes. This investment often parallels population growth and demographics shifts. This is a result of the need to reach a certain level of service provided by assets to local infrastructure.

Figure 4.3 Historical Investment in Saugeen Shores Infrastructure – All Classes by Installation Year



Saugeen Shores has seen major investment in core infrastructure during the 1970s and again between 2000 and 2009 (Figure 4.3). These investments have often been tied to the population growth and overall development during these time periods. There has been a pretty clear decline in investment in infrastructure since 2009. Investment declined from \$129 million between 2000 and 2009 to \$70 million between 2009 and 2019, an 45% decrease in investment.

Figure 4.4 Useful Life Remaining – All Asset Classes (\$ in Millions)

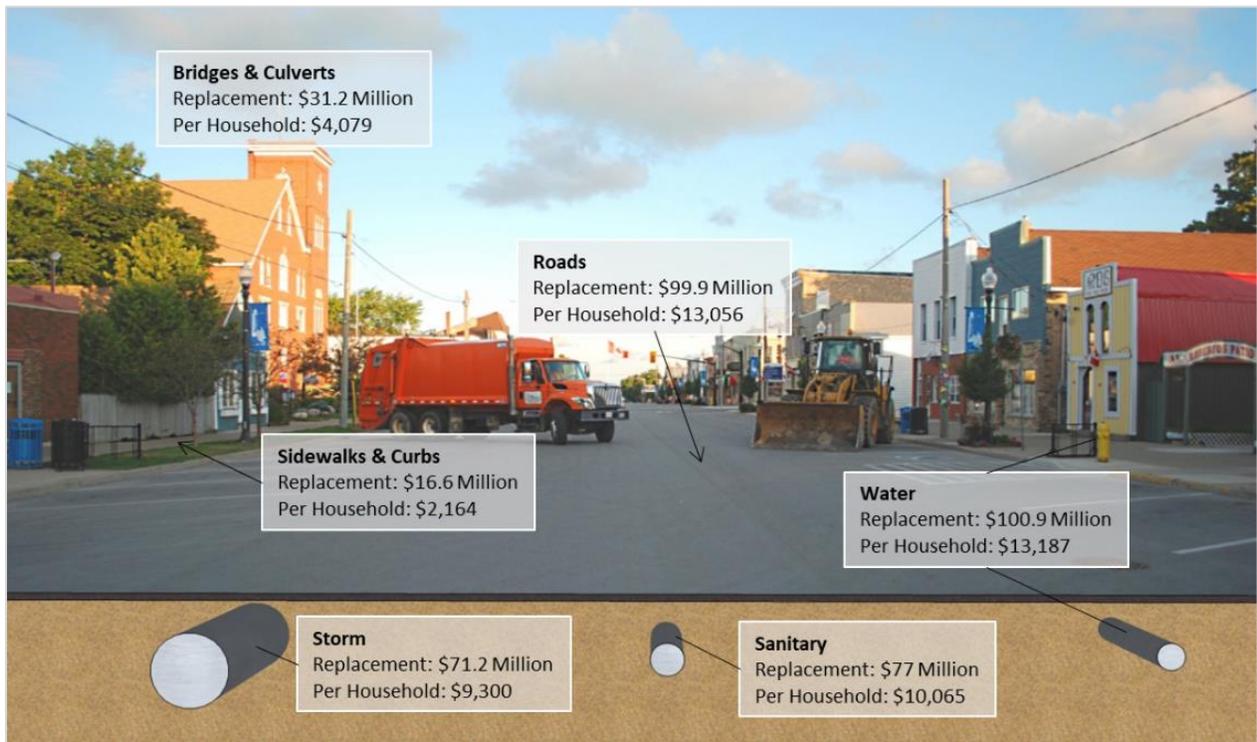


Majority of the assets (54%) profiled in this plan have a useful life of over 10 years (Figure 4.4). However, 38% of assets have 5 years or less useful life remaining, with 24% (or \$92.5 million) being beyond useful life. This indicates that replacements or at very least refurbishments will need to be focused over the next 5 years in order to maintain the current level of service.

4.4 FINANCIAL PROFILE

In Saugeen Shores, based on 2016 Census, there are 7,655 private dwellings. Based on these number core assets are valued at \$51,850 per household. However, it is understood that significant development has taken place in the last few years and these numbers may be under estimated.

Figure 4.5 Core Public Asset Replacement Value Per Property



5 STATE OF LOCAL INFRASTRUCTURE

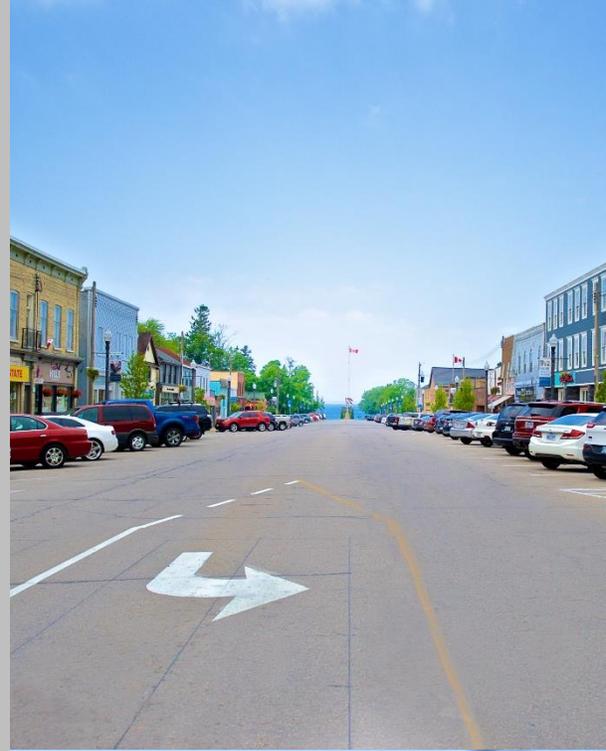
This section of the AMP will outline the key indicators for the core infrastructure classes. The state of local infrastructure includes an inventory, condition rating, useful life data, infrastructure investment and forecasting for each asset class.

Asset classes currently included in the AMP are as follows:

- Road Network
- Sidewalk Network
- Bridge & Culvert Infrastructure
- Water Distribution Network
- Sanitary Sewer Network
- Storm Sewer Network



5.1 | ROAD NETWORK



5.1 ROAD NETWORK INFRASTRUCTURE

The Town's road network is made up of 254.56km of road surface, 79% of which is made up of hard surface roadway (Table 5.1). Hard surface roadway can be categorized as either high class bituminous (HCB – asphalt) or low class bituminous (LCB – surface treated). An additional 52km of road are gravel in the Town.

5.1.1 ASSET INVENTORY

Table 5.1 Asset Inventory - Road Network

Asset Class	Asset Sub-class	Quantity (Length km)
Road Network	HCB	162.00
	LCB	40.68
	Gravel	51.87
		254.56

5.1.2 REPLACEMENT COST VALUATION

The current replacement cost for the entire road network is close to \$1 billion and is broken down in Table 5.2.

Table 5.2 Asset Valuation - Road Network

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Road Network	HCB	\$505,836.38	\$81,944,870.82
	LCB	\$330,905.81	\$13,462,080.46
	Gravel	\$87,440.88	\$4,535,951.53
			\$99,942,902.81

5.1.3 ASSET USEFUL LIFE

Average useful life with minimal maintenance applications is 15 years for hard surface roads and 5 years for gravel roads (Table 5.3). The average lifecycle for roads has been determined based on historical information as well as known impact factors that are unique to the area.

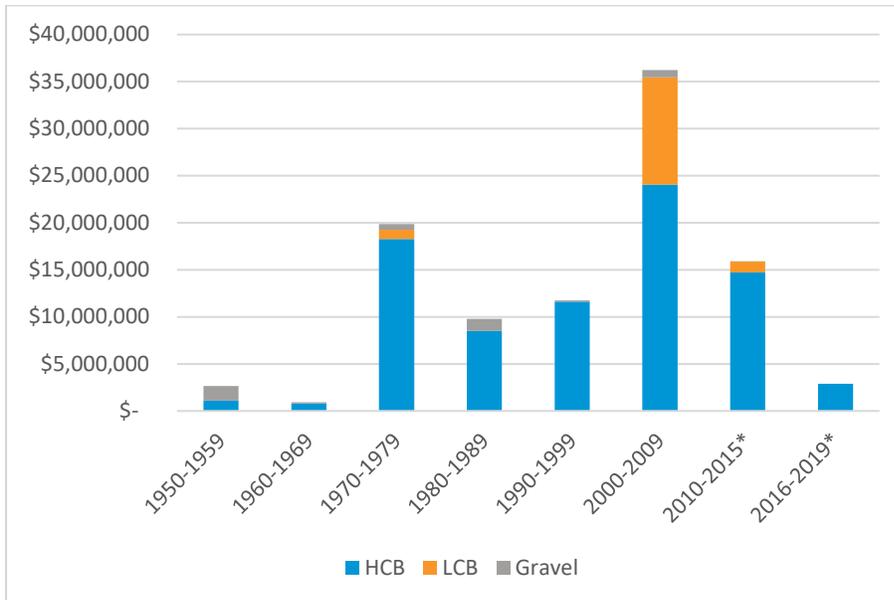
Table 5.3 Asset Useful Life in Years - Road Network

Asset Class	Asset Sub-class	Useful Life
Road Network	HCB	15
	LCB	15
	Gravel	5
	Average Useful Life	12

5.1.4 INFRASTRUCTURE INVESTMENT

The historical investment in the Town's road network has seen two peaks in investment. The first being between 1970 to 1979 and the second from 2000 to 2009 (Figure 5.1). Both of these time periods saw majority of the investment being made in HCB road material with \$18 million in 1970-1979 and \$24 million in 2000-2009. These influxes in investment are correlated to town development.

Figure 5.1 Saugeen Shores Infrastructure Investment in Road Network by Installation Year Based on 2019 Replacement Cost



* 5 year increments instead of 10 year increments. This was done to provide more detail for the most current years.

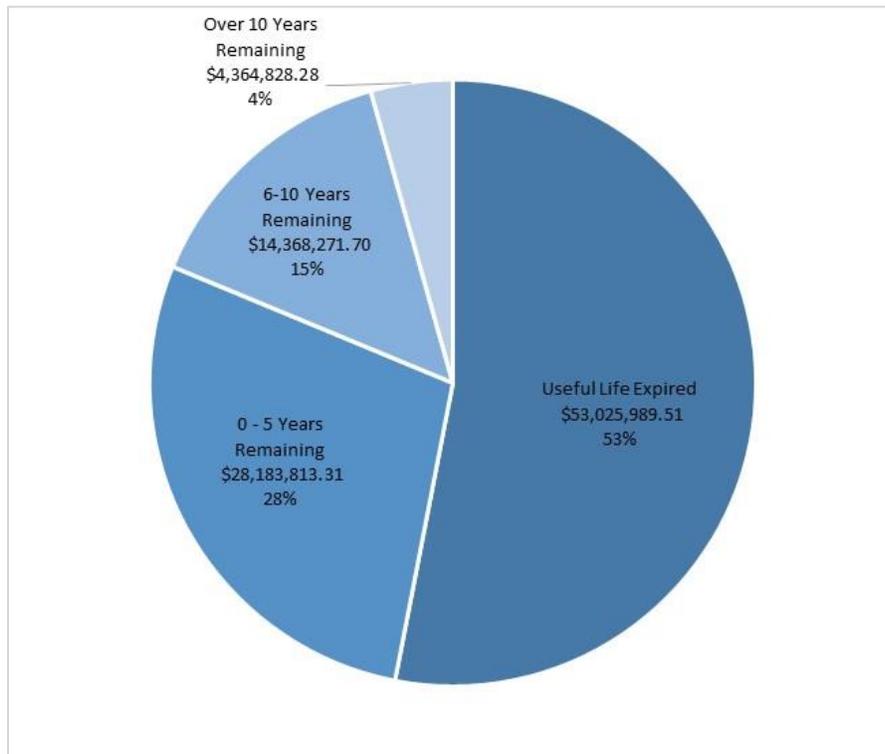
5.1.5 USEFUL LIFE CONSUMPTION

The Town’s road network is a significantly aged group of assets. Currently, 81% of all road assets have 5 years or less useful life remaining, 53% of that have useful life that is expired (Table 5.4 and Figure 5.2). As a result of this we have an aging infrastructure that in the next 5 years will require major refurbishments or complete replacements in order to maintain our current levels of service.

Table 5.4 Asset Useful Life Remaining - Road Network

	HCB	LCB	Gravel	Total Roads
Useful Life Expired	\$46,608,189.65	\$1,881,848.34	\$4,535,951.53	\$53,025,989.51
0 - 5 Years Remaining	\$17,728,350.65	\$10,455,462.66	\$0	\$28,183,813.31
6-10 Years Remaining	\$13,243,502.24	\$1,124,769.46	\$0	\$14,368,271.70
Over 10 Years Remaining	\$4,364,828.28	\$0	\$0	\$4,364,828.28

Figure 5.2 Remaining Useful Life - Road Network



5.1.6 CURRENT ASSET CONDITION

The road network condition was assessed in house in 2020. Road condition assessments in Ontario are often rated on two measures – riding quality and distress manifestations. Riding quality is a subjective measure (unless a mechanical device is used) which depends on personal bias and experience. Additionally, distress manifestations need to be quantified in order to provide meaningful condition ratings. ¹

Majority of our assets were rated in the very good category with 69% of total assets falling within this range (Figure 5.3). Although only 10% of the road assets fall between the fair to very

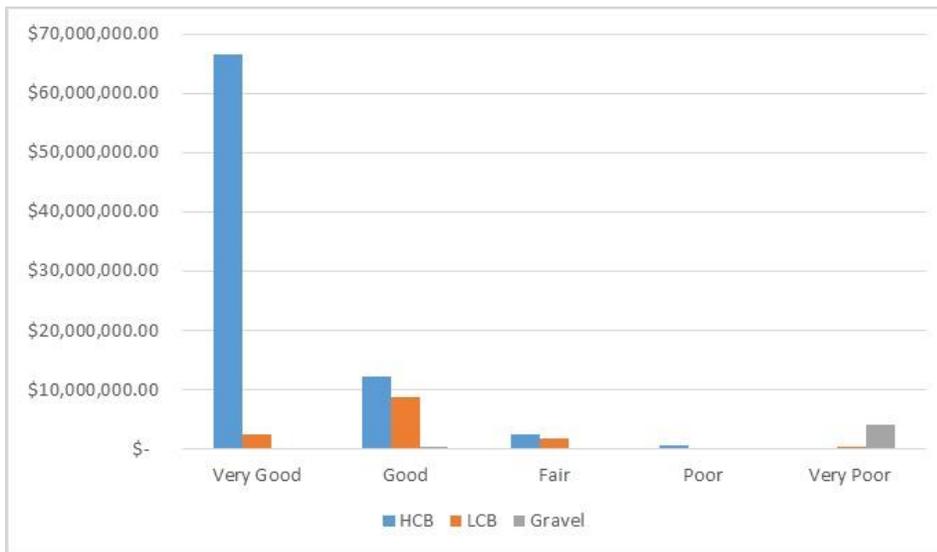
¹ Ministry of Transportation. (1989). *SP-024 Manual for condition rating of flexible pavements*. Toronto: The Research and Development Branch MTO.

poor condition category, condition should be examined along side useful life for a better long term perspective on road condition.

Table 5.5 Current Asset Condition - Road Network

	HCB	LCB	Gravel	Total Roads
Very Good	\$ 66,568,092.36	\$ 2,426,062.22	\$19,582.86	\$ 69,013,737.44
Good	\$ 12,160,373.32	\$ 8,647,790.21	\$410,798.40	\$ 21,218,961.93
Fair	\$2,433,367.71	\$ 1,846,077.94	\$4,362.22	\$4,283,807.87
Poor	\$567,364.51	\$146,989.09	\$0	\$714,353.60
Very Poor	\$215,672.93	\$395,160.99	\$4,101,208.04	\$4,712,041.97

Figure 5.3 Asset Condition Roads*



* Condition data is based on 2020 road assessment, completed in house by our road team.

5.1.7 FORECASTING REPLACEMENT NEEDS

The road network can be described as having a deficit and being in need of repairs and replacements at close to \$80 million worth of assets (Figure 5.4). To continue to provide level of service in our road network almost \$90 million is required to bring assets back to good/very good quality, with a little over \$15 million set aside in reserves every year for the next 4 years (Figure 5.5) and \$10 million for following years.

Figure 5.4 Replacement Schedule - Roads

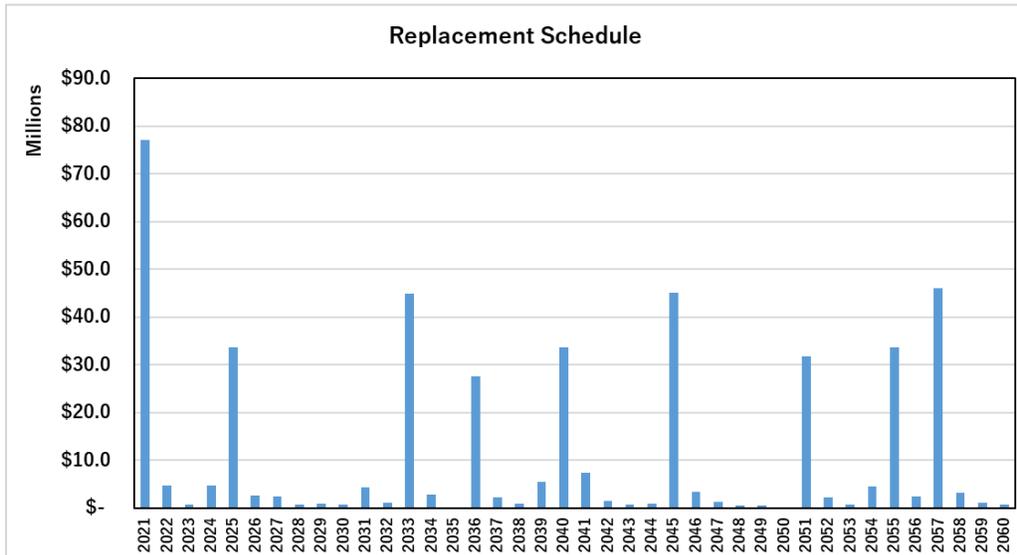
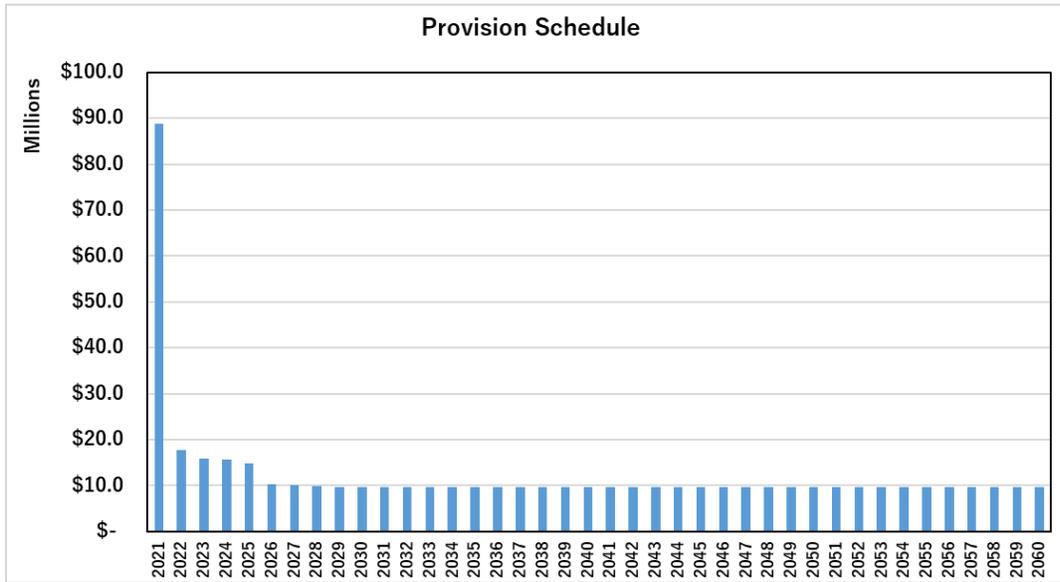
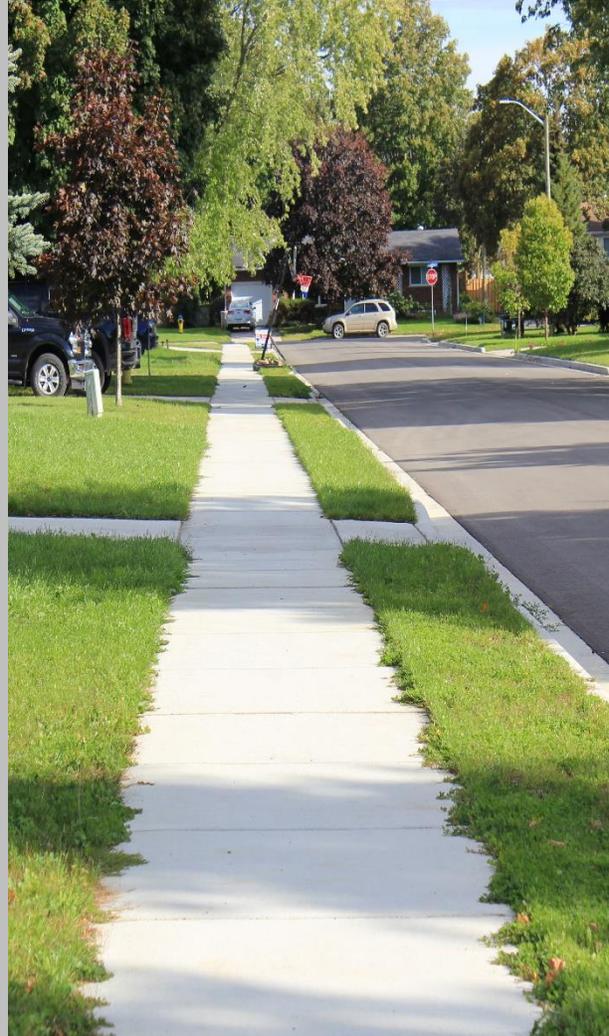


Figure 5.5 Provision Schedule - Roads



5.2 | SIDEWALK NETWORK



5.2 SIDEWALK NETWORK

The Town currently has 72kms of sidewalk and 143kms of curb (Table 5.6) with an overall replacement cost of \$16.5 million (Table 5.7). These assets have an average useful life of 30 years (Table 5.8) before requiring replacement.

5.2.1 ASSET INVENTORY

Table 5.6 Asset Inventory - Sidewalk & Curb

Asset Class	Asset Sub-class	Quantity (Length km)
Sidewalk & Curb	Sidewalk	72.44
	Curb	143.16
		215.60

5.2.2 REPLACEMENT COST VALUATION

Table 5.7 Asset Valuation - Sidewalk & Curb

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Sidewalk & Curb	Sidewalk	\$100,152.44	\$7,254,711.50
	Curb	\$65,037.56	\$9,311,019.63
			\$16,565,731.13

5.2.3 ASSET USEFUL LIFE

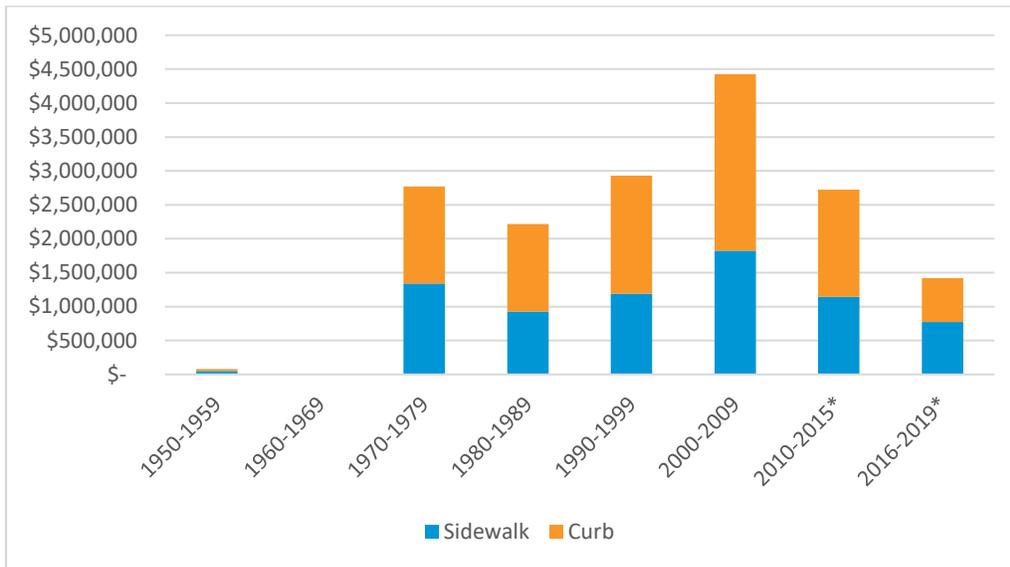
Table 5.8 Asset Useful Life in Years - Sidewalk & Curb

Asset Class	Asset Sub-class	Useful Life
Sidewalk & Curb	Sidewalk	30
	Curb	30
	Average Useful Life	30

5.2.4 INFRASTRUCTURE INVESTMENT

Sidewalks have seen a relatively consistent investment since the 1970s, with approximately \$3 million of investment every 10 years (Figure 5.6). Since 2000 this investment has increased to approximately \$4 million every 10 years.

Figure 5.6 Saugeen Shores Infrastructure Investment in Sidewalk Network Infrastructure by Installation Year Based on 2019 Replacement Cost

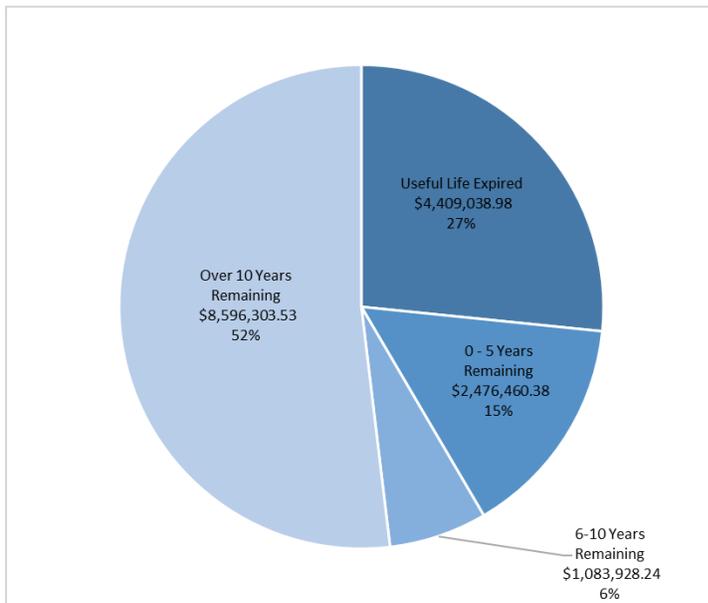


* 5 year increments instead of 10 year increments. This was done to provide more detail for the most current years.

5.2.5 USEFUL LIFE CONSUMPTION

Current useful life remaining for sidewalks and curbs shows 52% of assets having over 10 years of life remaining (Figure 5.7). However, 42% or almost \$7 million of assets have less than 5 years remaining.

Figure 5.7 Remaining Useful Life - Sidewalk & Curb



5.2.6 CURRENT ASSET CONDITION

The current assessed condition for curbs and sidewalks shows 75% of assets fall within good to very good condition (Figure 5.8, Table 5.9). Curbs and sidewalks are assessed for deficiencies including cracking, encroachments, and joint deflection. Sidewalk and curb assessment are completed on a yearly basis in house and therefore should provide an accurate picture of the on the ground condition of the assets. With that there are 25% of assets or \$4 million of assets that will require some investment to improve current condition.

Figure 5.8 Asset Condition - Sidewalk & Curb

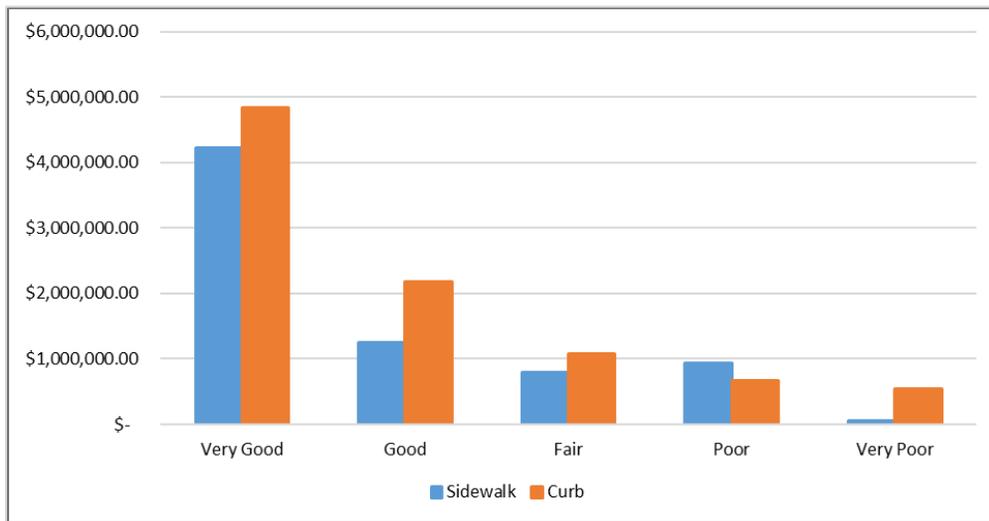


Table 5.9 Current Asset Condition - Sidewalk & Curb

	Sidewalk	Curb	Sidewalk & Curb
Very Good	\$4,223,488.50	\$4,833,285.61	\$9,056,774.11
Good	\$1,251,638.28	\$2,175,484.67	\$3,427,122.96
Fair	\$787,397.19	\$1,079,877.28	\$1,867,274.47
Poor	\$942,744.75	\$671,805.44	\$1,614,550.19
Very Poor	\$49,442.78	\$550,566.63	\$600,009.41

5.2.7 FORECASTING REPLACEMENT NEEDS

Curbs and sidewalks are currently experiencing a \$6 million replacement deficit (Figure 5.9). The remaining replacement schedule for curbs and sidewalks falls below \$1 million year over year for the next 17 years with only two spikes in replacement need after that. As a result, sidewalk and curb priorities should be made in order to spread the \$6 million deficit over multiple years, while working to increase level of service and improve overall condition. Priorities should also be flagged that fall in line with road replacements that are planned to occur over the next few years.

A reserve fund for sidewalks and curbs should receive over \$1 million a year (Figure 5.10) moving forward once the deficit of \$6 million is eradicated.

Figure 5.9 Replacement Schedule - Sidewalks & Curbs

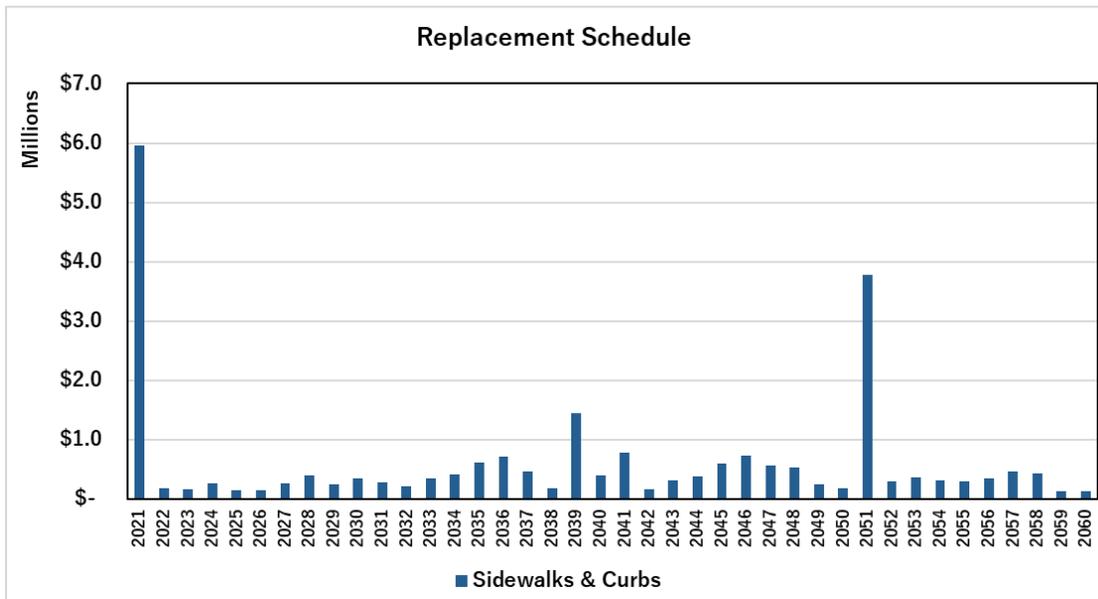
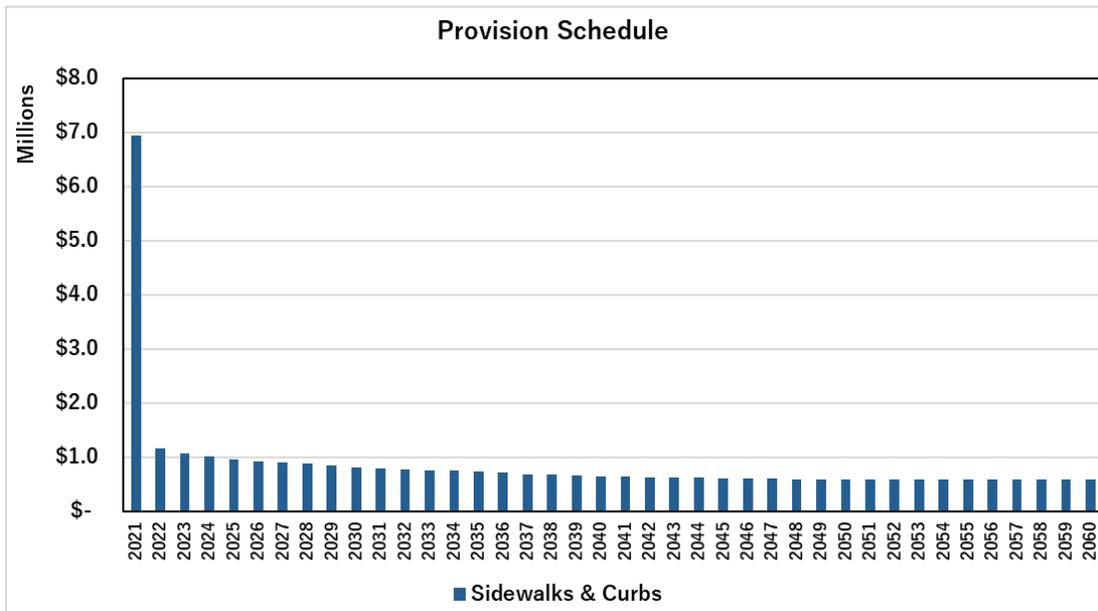


Figure 5.10 Provision Schedule - Sidewalks & Curbs



5.3 | BRIDGES & CULVERTS



5.3 BRIDGE & CULVERT INFRASTRUCTURE

The Town of Saugeen Shores currently has 11 bridges and 5 culvert structures (Table 5.10). Two of the culverts are shared with the Municipality of Kincardine, the cost of these assets are split between the two municipalities 50/50. The estimated replacement cost for bridges and culverts is a little over \$31 million (Table 5.11) with useful life on average to be 67 years for bridges and a slightly shorter lifespan for culverts at 62 years (Table 5.12).

5.3.1 ASSET INVENTORY

Table 5.10 Asset Inventory - Bridges & Culverts

Asset Class	Asset Sub-class	Quantity
Bridges & Culverts	Bridge	11
	Culvert	5
		16

5.3.2 REPLACEMENT COST VALUATION

Table 5.11 Asset Valuation - Bridges & Culverts

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Bridges & Culverts	Bridge	\$2,618,133.70	\$28,799,470.72
	Culvert	\$488,820.00	\$2,429,100.00
			\$31,228,570.72

5.3.3 ASSET USEFUL LIFE

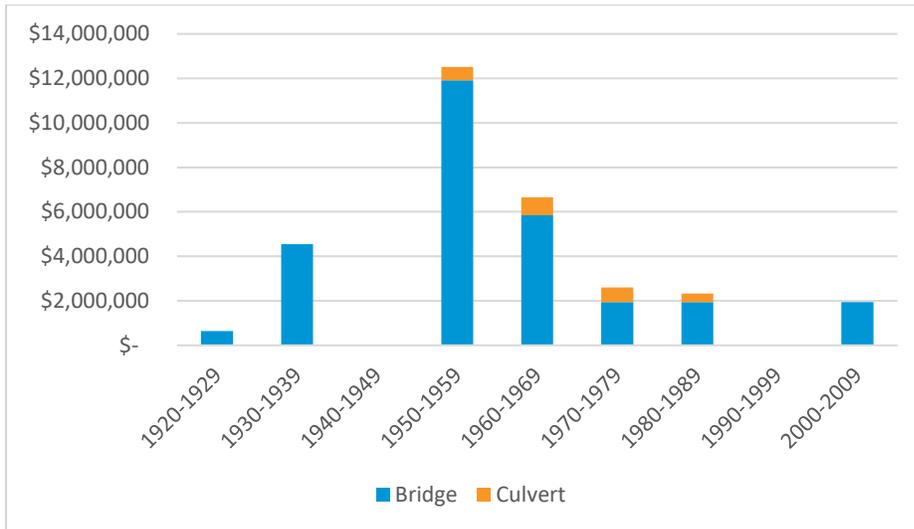
Table 5.12 Asset Useful Life in Years - Bridges & Culverts

Asset Class	Asset Sub-class	Useful Life
Bridges & Culverts	Bridge	67
	Culvert	62
	Average Useful Life	65

5.3.4 INFRASTRUCTURE INVESTMENT

Investment in bridge and major culverts was seen primarily between 1950 to 1969 with a total investment of over \$19 million (Figure 5.11). Of that the majority was invested in the Saugeen River Bridge which has a current estimated replacement value of \$11.5 million and was built in 1958.

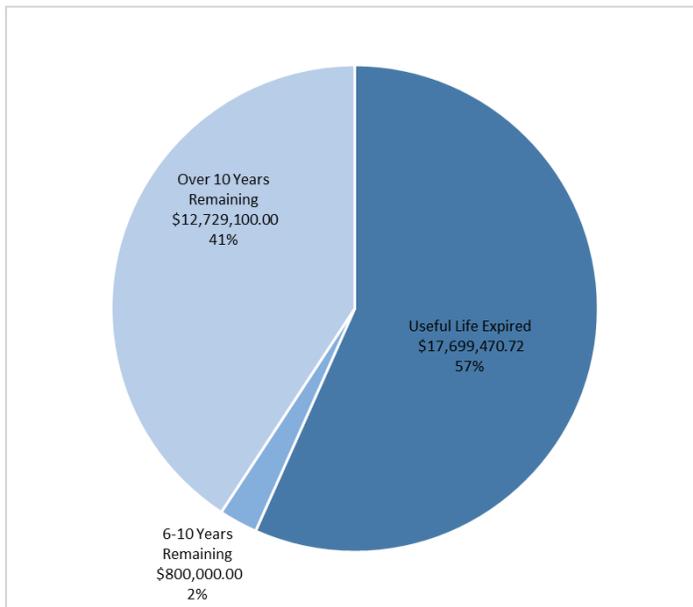
Figure 5.11 Saugeen Shores Infrastructure Investment in Bridges & Culvert Infrastructure by Installation Year Based on 2019 Replacement Cost



5.3.5 USEFUL LIFE CONSUMPTION

As a result of majority of investment being made before 1970 it can be understood that 57% of bridge and culvert assets are beyond their estimated useful life (Figure 5.12). The remaining assets (43%) have a useful life remaining of 6+ years.

Figure 5.12 Remaining Useful Life - Bridges & Culverts



5.3.6 CURRENT ASSET CONDITION

Of the \$31 million of total bridge and culvert assets \$25 million are considered to be in good condition (Figure 5.13). Condition is based on bi-annual assessments completed by a third party. However, two factors should be considered when reviewing this information. The first is that \$11.5 million of assets is attributed to a single bridge (Saugeen River Bridge), while the remaining \$12 million, in good condition, can be attributed to 7 additional bridges. The second factor is that condition is a cumulative assessment of bridge features. The failure or poor condition of a single bridge or culvert component can still result in closure and the need for major repair or replacement. This has been experienced by the municipality as a closure of a bridge due to poor condition of a single feature causing the bridge to no longer be safe. Bridges should be flagged when a major component falls into or below the fair condition category. This would allow for additional maintenance to maintain the bridge level of service, while determining the best plan of action. The inspection report provides a 10-year outlook on work recommended for completion on the bridges and culverts (See Appendix 19.4). This 10-year outlook should be incorporated into the budget for bridges and culverts.

Figure 5.13 Asset Condition - Bridges & Culverts

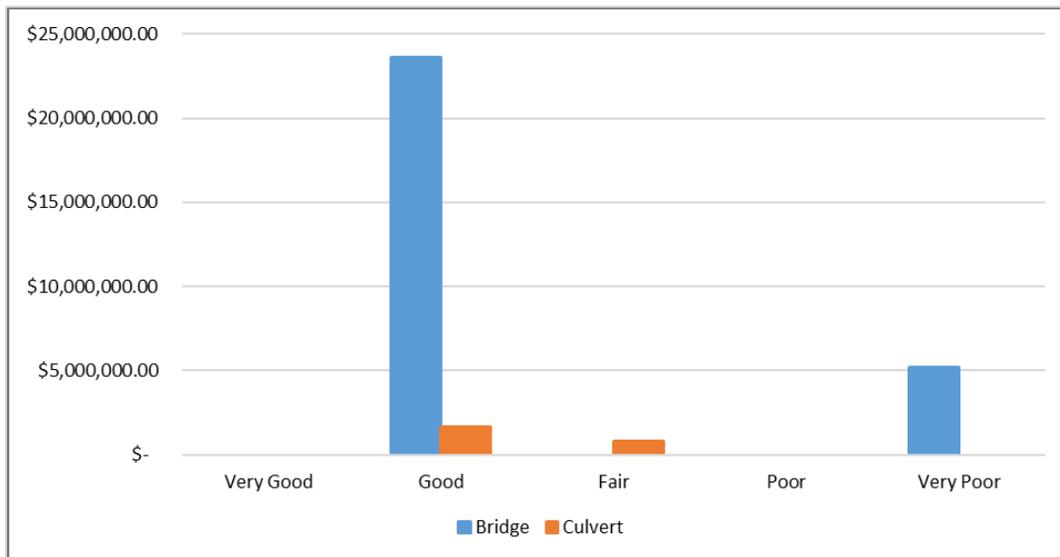


Table 5.13 Current Asset Condition - Bridges & Culverts

	Bridge	Culvert	Bridges & Culverts
Very Good	\$0	\$0	\$0
Good	\$23,609,470.72 *	\$1,629,100.00	\$25,238,570.72
Fair	\$0	\$800,000.00	\$800,000.00
Poor	\$0	\$0	\$0
Very Poor	\$5,190,000.00	\$0	\$5,190,000.00

* Note: \$11,568,897.22 attributed to “Good” condition from a single bridge asset (Saugeen River Bridge) with the remaining \$12,040,573.50 attributed to 7 other bridges

5.3.7 FORECASTING REPLACEMENT NEEDS

Although there are fewer overall assets in this category our Bridge and Culvert assets are still under a large deficit in terms of replacement needs and/or major repairs. The town should be looking at \$18 million worth of potential investment into bridges and culverts (Figure 5.14) in order to maintain level of service. To maintain current level of service the deficit would have to be prioritized and an additional \$1 million a year (Figure 5.15) should be added to reserves for future repairs and replacement moving forward.

Figure 5.14 Replacement Schedule - Bridges & Culverts

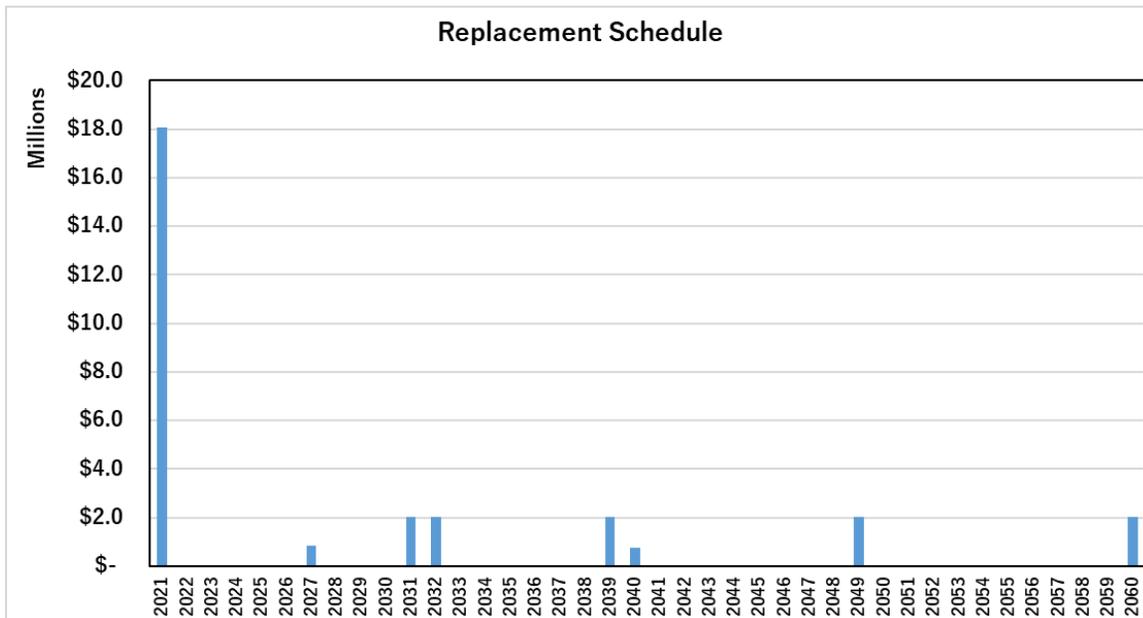
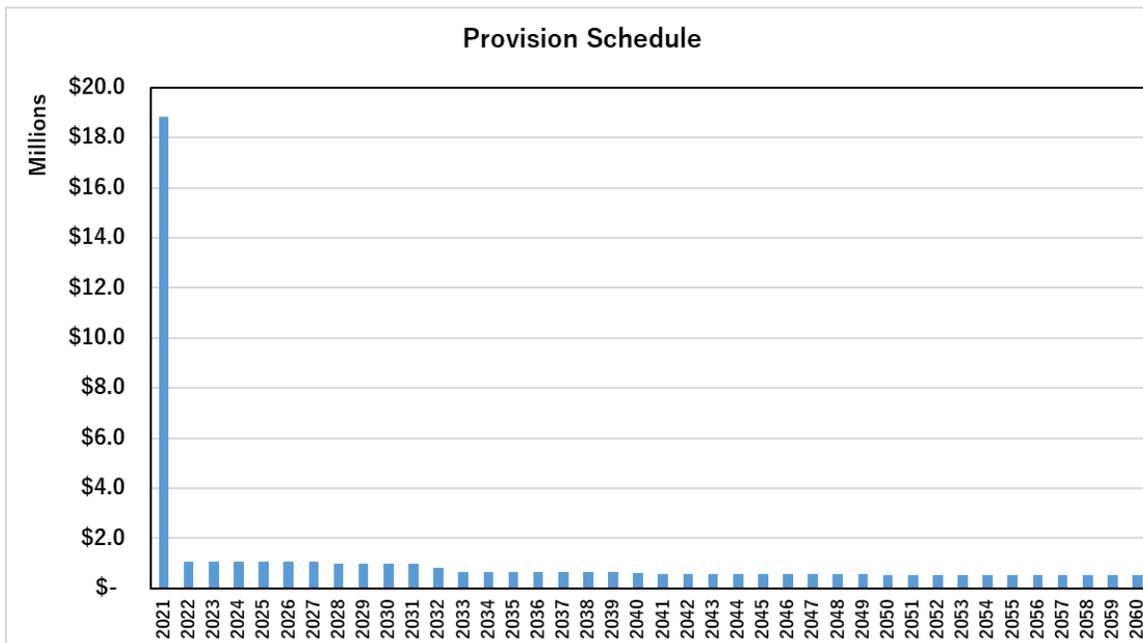


Figure 5.15 Provision Schedule - Bridges & Culverts



5.4 | STORM SEWER



5.4 STORM SEWER NETWORK

The Town of Saugeen Shores currently has 93km of storm main and almost 4,000 storm network components (Table 5.14). Storm network components include drainage pits, management ponds, manholes, catchbasins and stormceptors. These assets make up over \$69 millions in replacement costs, of that storm mains make up 70% of those replacement costs (Table 5.15). The useful life of storm network range from 70 years for management ponds to 31 years for culverts (Table 5.16).

5.4.1 ASSET INVENTORY

Table 5.14 Asset Inventory - Storm Sewer

Asset Class	Asset Sub-class	Quantity
Storm Sewer	Storm Mains	93km
	Storm Structures*	3305
	Drainage Pits	274
	Management Ponds	2
	Culverts	370
		93 km
	3,951 units	

* Storm structures include manholes, catchbasins and stormceptors

5.4.2 REPLACEMENT COST VALUATION

Table 5.15 Asset Valuation - Storm Sewer

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Storm Sewer	Storm Mains	\$530,516.02	\$49,116,343.96
	Storm Structures	\$4,253.69	\$14,058,457.60
	Drainage Pits	\$10,000.00	\$2,740,000.00
	Management Ponds	\$18,333.00	\$36,666.00
	Culverts	\$10,066.14	\$3,734,538.30

5.4.3 ASSET USEFUL LIFE

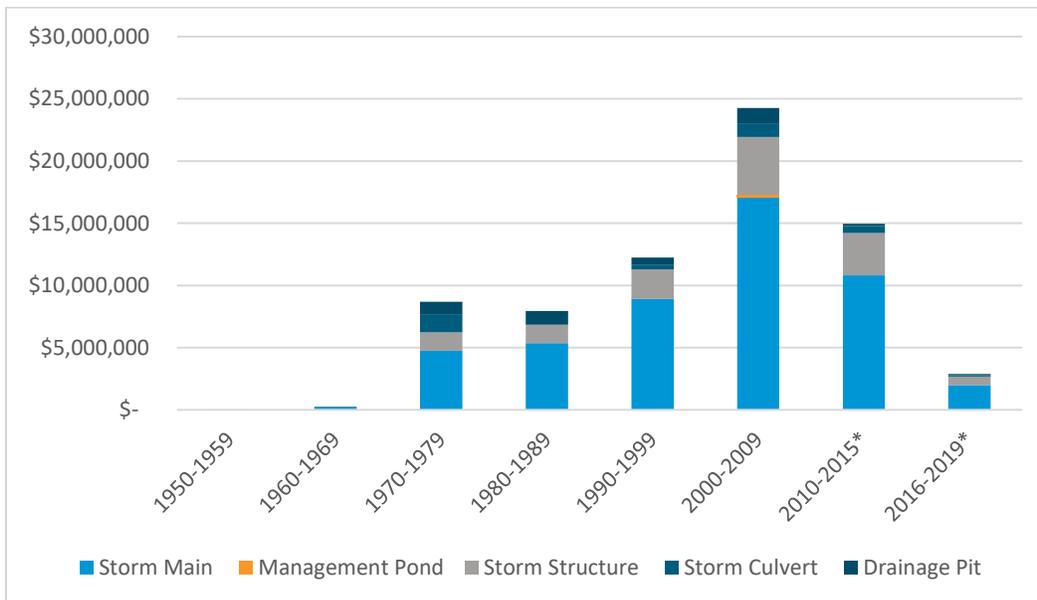
Table 5.16 Asset Useful Life in Years - Storm Sewer

Asset Class	Asset Sub-class	Useful Life
Storm Sewer	Storm Mains	67
	Storm Structures	67
	Drainage Pits	70
	Management Ponds	59
	Culverts	31
	Average Useful Life	59

5.4.4 INFRASTRUCTURE INVESTMENT

In 2000 to 2009 the storm network saw a surge of investment with almost \$25 million of investment during those 10 years. 2010 to 2019 sees less investment at over \$17 million in the 10-year time frame.

Figure 5.16 Saugeen Shores Infrastructure Investment in Storm Mains Infrastructure by Installation Year Based on 2019 Replacement Cost



* 5 year increments instead of 10 year increments. This was done to provide more detail for the most current years.

Table 5.17 Historical Infrastructure Investment - Storm Sewer Network

	Storm Main	Management Pond	Storm Structure	Storm Culvert	Drainage Pit
1950-1959				\$3,663.01	
1960-1969	\$192,643.54	\$0	\$0	\$51,393.72	\$0
1970-1979	\$ 4,745,241.57	\$0	\$1,476,405.60	1,467,512.35	\$990,000.00
1980-1989	\$5,361,813.63	\$0	\$1,445,543.45	\$70,752.66	\$1,065,000.00
1990-1999	\$8,919,031.24	\$0	\$2,376,634.71	\$388,449.52	\$555,000.00
2000-2009	\$ 17,104,233.82	\$165,000.00	\$4,665,287.40	\$ 1,103,853.16	\$ 1,215,000.00
2010-2015	\$ 10,807,028.45	\$0	\$3,401,805.76	\$566,734.63	\$180,000.00
2016-2019	\$1,986,351.71	\$0	\$697,872.64	\$82,179.25	\$105,000.00

5.4.5 USEFUL LIFE CONSUMPTION

Storm network components have a longer useful life overall, as a result majority of components have over 10 years of life remaining. Of the storm mains 94% or over \$46 million of assets (Figure 5.17) and of storm components 83% or over \$18 million (Figure 5.18), have a useful life remaining of over 10 years. Storm network assets that have less than 5 years remaining or an expired useful life make up \$2.8 million of assets. These assets should be reviewed for replacement or rehabilitation.

Figure 5.17 Remaining Useful Life - Storm Mains

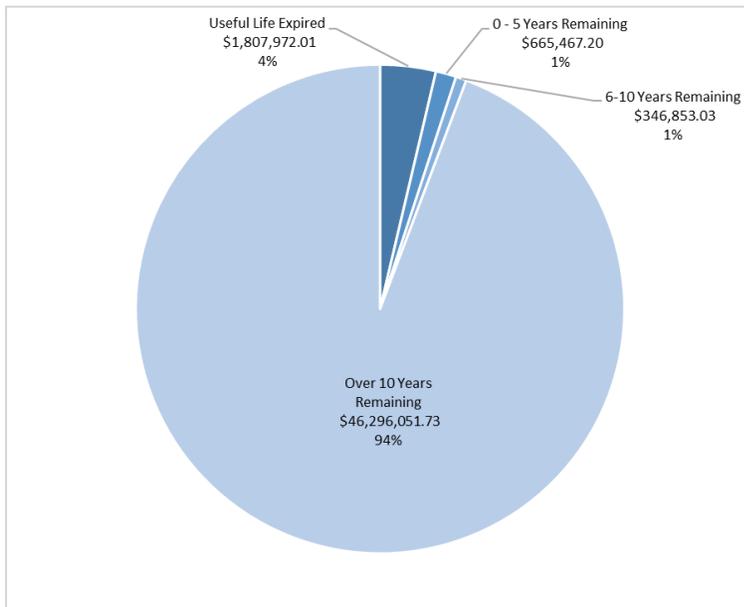
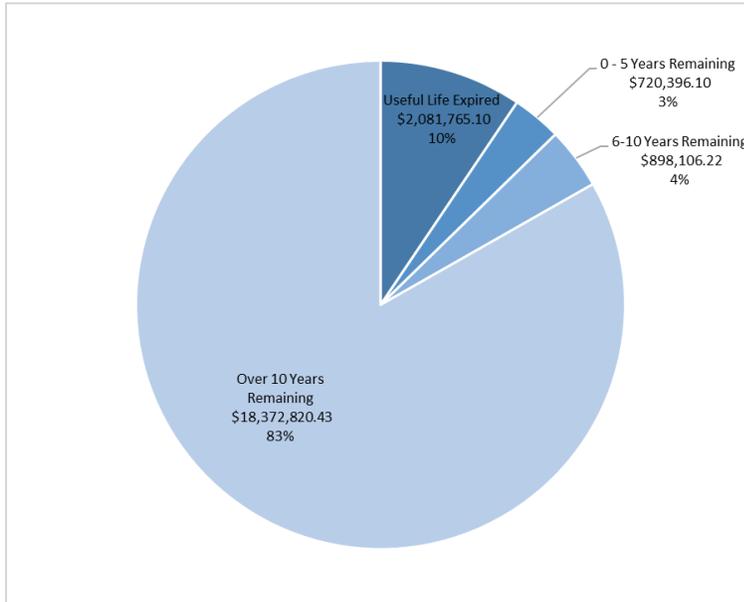


Figure 5.18 Remaining Useful Life – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)



5.4.6 CURRENT ASSET CONDITION

Storm network assets condition has been determined based on age of asset. As a result, 79% of assets fall within the good to very good condition category, while 21% of assets fall in or below a fair condition rating (Figure 5.19 and Table 5.18).

Figure 5.19 Asset Condition - Storm Sewer Network

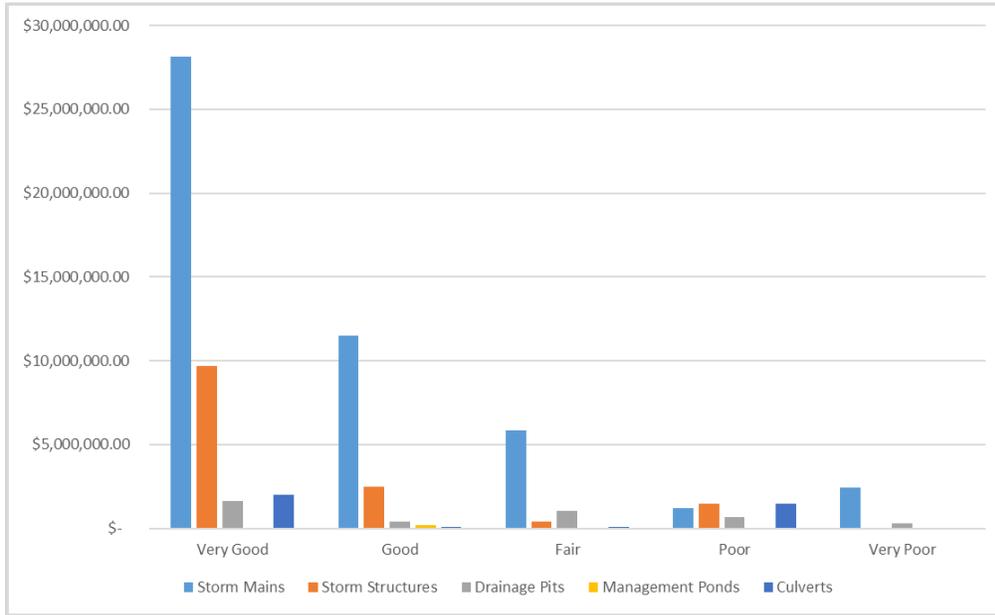


Table 5.18 Current Asset Condition - Storm Sewer Network

	Storm Mains	Storm Structures	Drainage Pits	Management Ponds	Culverts
Very Good	\$28,141,788.91	\$9,703,150.37	\$1,650,000.00	\$ -	\$2,017,239.02
Good	\$11,522,265.13	\$2,478,056.71	\$405,000.00	\$165,000.00	\$108,087.16
Fair	\$5,858,663.08	\$405,936.87	\$1,065,000.00	\$ -	\$70,752.66
Poor	\$1,177,347.50	\$1,476,405.60	\$675,000.00	\$ -	\$1,483,402.72
Very Poor	\$2,416,279.34	\$ -	\$315,000.00	\$ -	\$55,056.74

5.4.8 FORECASTING REPLACEMENT NEED

The storm network requires close to \$2.5 million to replace storm mains that are past their useful life (Figure 5.20), and an additional \$2.5 million to replace additional storm components that are also past useful life (Figure 5.22). To ensure level of service of storm assets is maintained moving forward a yearly reserve of approximately \$2 millions should be developed (Figure 5.21 and 5.23). This would allow for the Town to maintain assets.

Figure 5.20 Replacement Schedule - Storm Mains

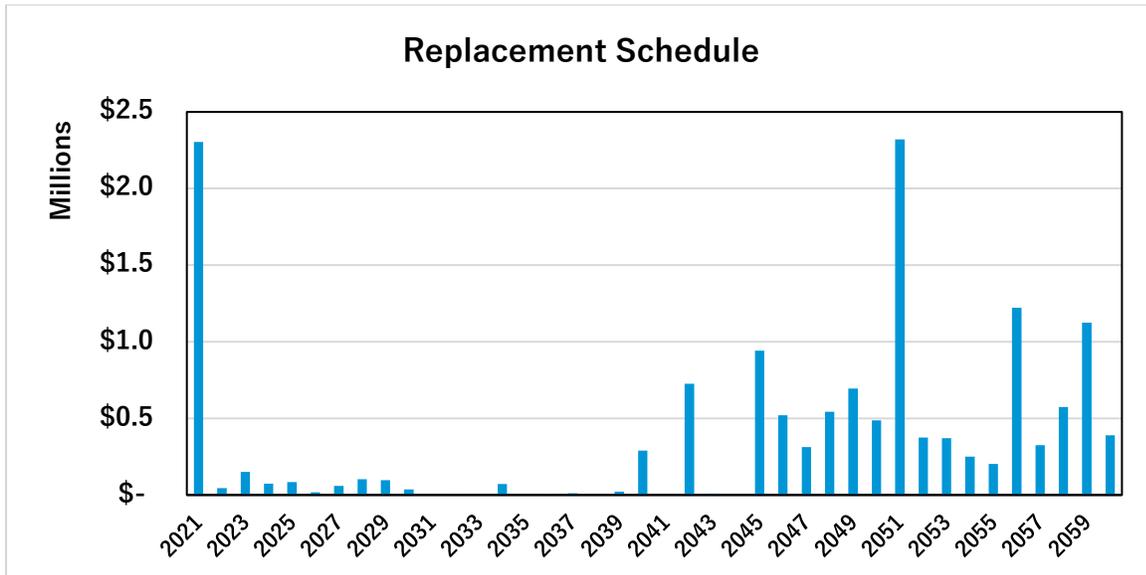


Figure 5.21 Provision Schedule - Storm Mains

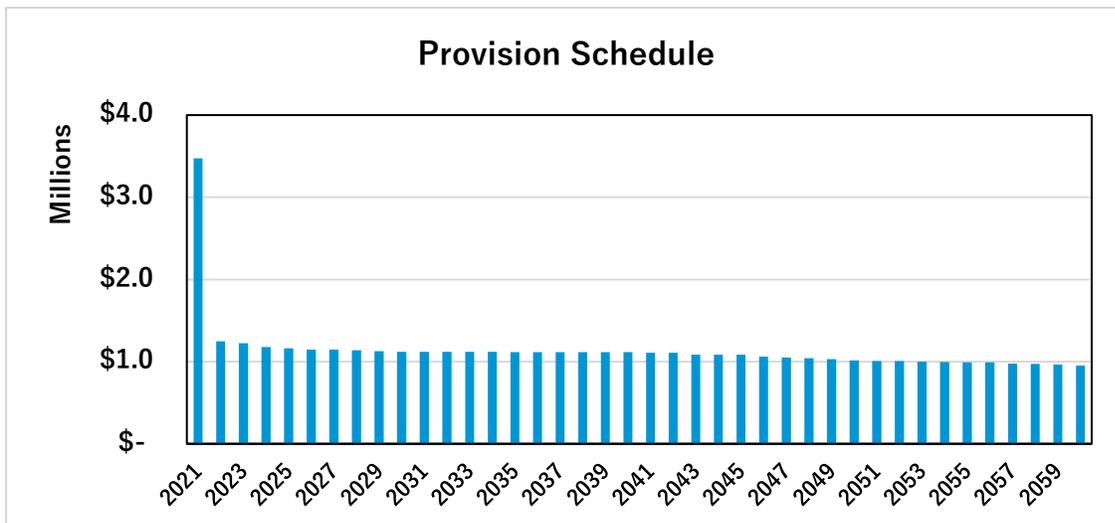


Figure 5.22 Replacement Schedule – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)

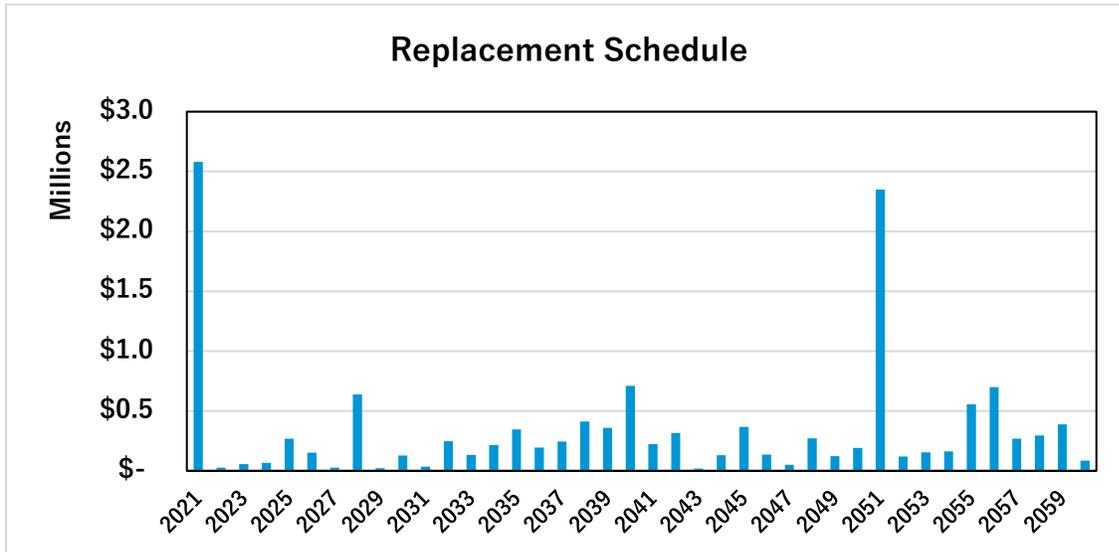
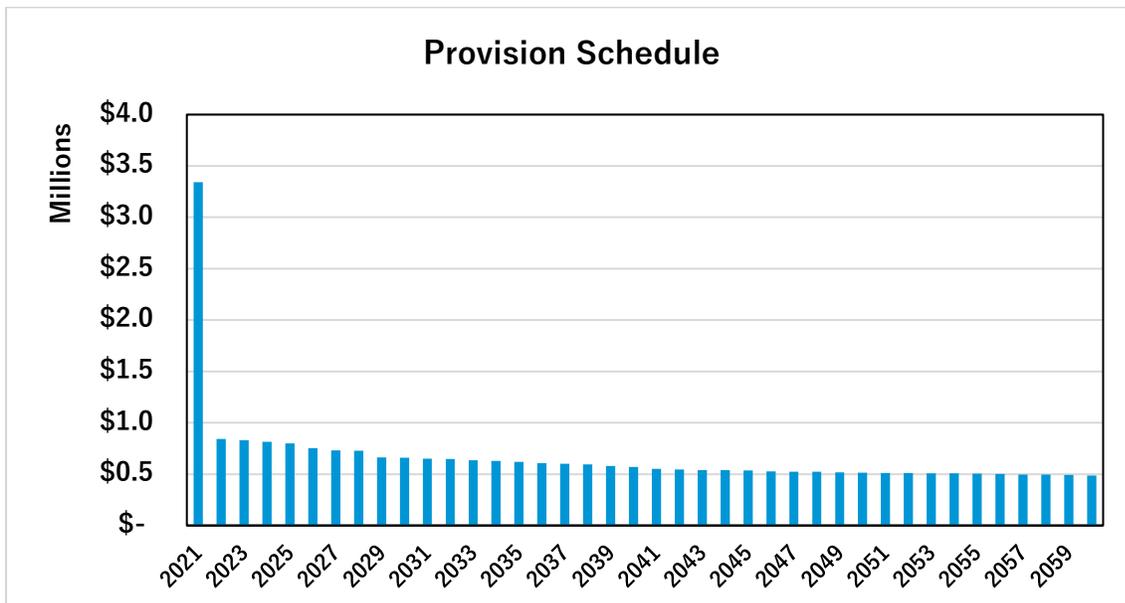


Figure 5.23 Provision Schedule – Storm Components (Includes catch basins, manholes, drainage pits, management ponds, and culverts)



5.5 WATER AND SANITARY NETWORK



5.5 OCWA - WATER DISTRIBUTION AND SANITARY SEWER NETWORK

The details for assets that fall under water and sanitary for the Town are managed by OCWA (Ontario Clean Water Associate). As a result, OCWA has assisted in providing a report outlining the details of these assets for the AMP. Data provided by OCWA is up to date as of May 2021. OCWA aligns with ISO 55000 and defines asset performance as the ability for an asset to fulfill its objectives or requirements. This means that the performance of an asset is directly proportional to the level of service it provides. Levels of service are also at the core of O.Reg. 588/17 which requires municipalities to understand the cost to achieve higher or lower levels of service.

The water distribution network currently includes a water treatment plant, low lift station, water storage and distribution components and 157km of watermains (Table 5.19). The sanitary network includes 2 wastewater treatment plants, 10 pumping stations and 132km of sewers and forcemains (Table 5.19).

5.5.1 ASSET INVENTORY

Table 5.19 Asset Inventory - Water & Sanitary Sewer Network

Asset Class	Asset Sub-class	Quantity
Water Distribution Network	Water Treatment Plant	1
	Low Lift Station	1
	Water Storage and Distribution*	5
	Watermains	157 km
Sanitary Network	Southampton Wastewater Treatment	1
	Southampton Pumping Stations	5
	Port Elgin Wastewater Treatment	1
	Port Elgin Pumping Stations	5
	Sewers and Forcemains	132 km

*Water storage and distribution includes 1 booster pumping station, 3 storage facilities and 1 chlorination facility.

5.5.2 REPLACEMENT COST VALUATION

The water and sanitary infrastructure portfolio has an estimated replacement value of approximately \$178 million (Table 5.20 & Table 5.21). The infrastructure portfolio is represented by approximately 7,000 individual asset records in the inventory.

Table 5.20 Asset Valuation - Water Distribution Network

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Water Distribution Network	Water Treatment Plant	\$14,754,362.40	\$14,754,362.40
	Low Lift Station	\$2,113,339.20	\$2,113,339.20
	Water Storage and Distribution	\$1,068,201.40	\$5,341,007.00
	Watermains	\$501,491.13	\$78,734,107.91
			\$100,942,816.51

Table 5.21 Asset Valuation - Sanitary Sewer Network

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Sanitary Network	Southampton Wastewater Treatment	\$4,383,000.00	\$4,383,000.00
	Southampton Pumping Stations	\$154,800.00	\$774,000.00
	Port Elgin Wastewater Treatment	\$7,674,335.30	\$7,674,335.30
	Port Elgin Pumping Stations	\$459,131.28	\$2,295,656.38
	Sewers and Forcemains	\$470,067.22	\$61,917,141.10
			\$77,044,132.78

5.5.3 ASSET USEFUL LIFE

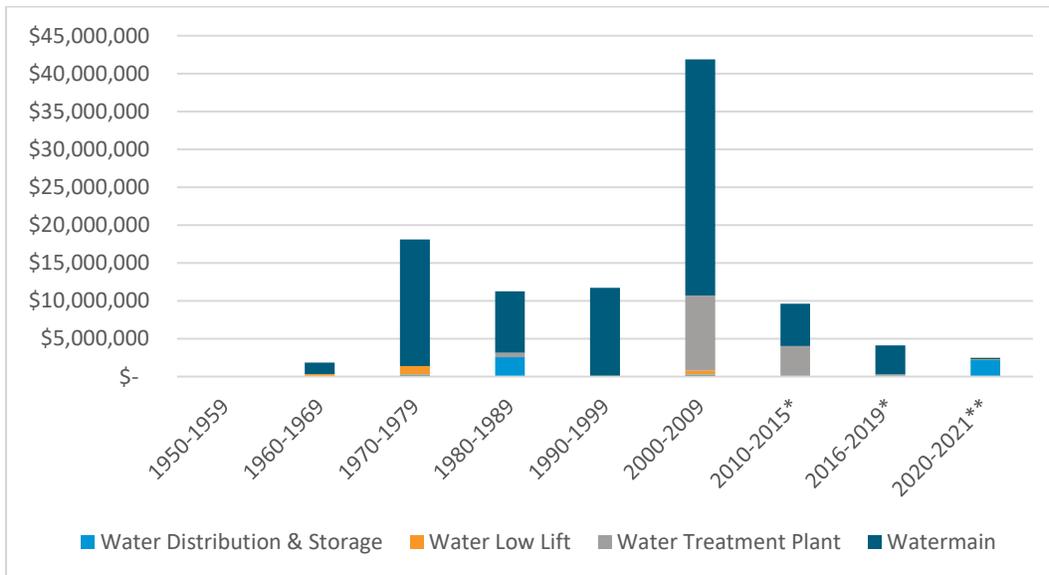
The average useful life for watermains is 68 years, while sanitary sewers and forcemains see an average useful life of 64 years. Useful life has not been broken down for other asset sub-classes as they are made up of multiple components. The useful life of these components range from 9 years to a useful life of 50 years.

5.5.4 INFRASTRUCTURE INVESTMENT

5.5.4.1 WATER NETWORK

The water network like many other asset classes received a surge in investment in 2000 to 2009 of over \$40 million (Figure 5.24). Prior to that the highest investment decade was from 1970 to 1979 with just less than \$20 million. It should also be noted that primary investment is spent on watermains. In 2000 – 2009 \$31 million was spent on the expansion of the water network (Table 5.22). Any additional \$9.9 million was spent on the water treatment plant.

Figure 5.24 Saugeen Shores Infrastructure Investment in the Water Network by Installation Year Based on 2019 Replacement Cost



* 5 year increments instead of 10 year increments. This was done to provide more detail for the most current years

** Includes 2020-2021 data as provided by OCWA

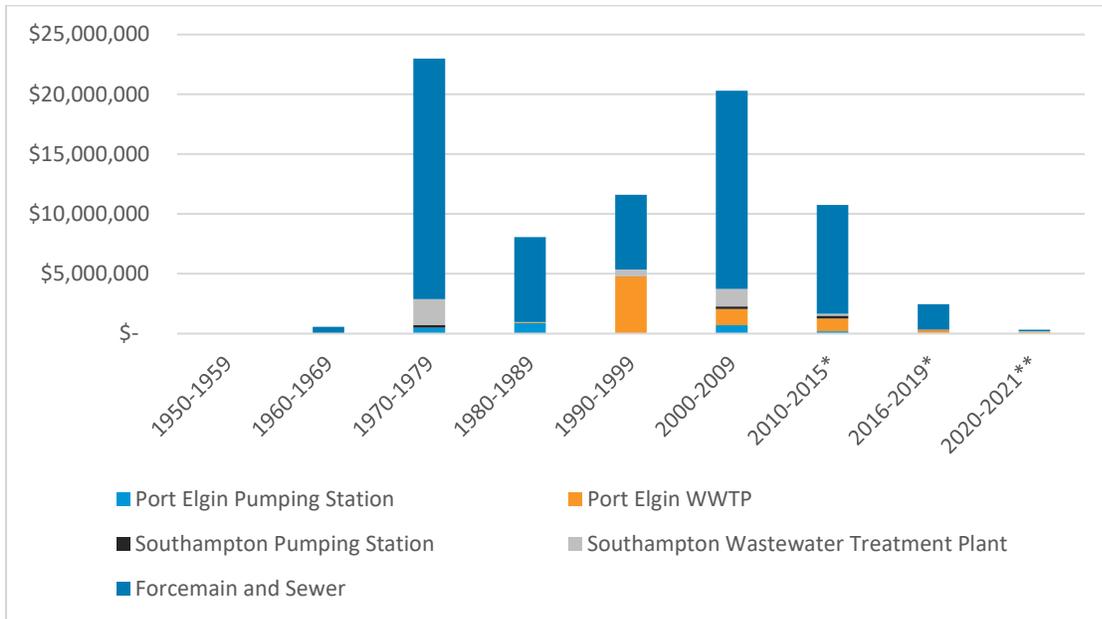
Table 5.22 Historical Infrastructure Investment - Water Network

	Water Distribution & Storage	Water Low Lift	Water Treatment Plant	Watermain
1950-1959	\$0	\$0	\$0	\$0
1960-1969	\$0	\$350,000	\$0	\$1,508,223
1970-1979	\$267,000	\$1,107,387	\$0	\$16,710,416
1980-1989	\$2,576,007	\$0	\$570,240	\$8,109,857
1990-1999	\$2,000	\$0	\$0	\$11,708,014
2000-2009	\$263,000	\$517,712	\$9,941,882	\$31,135,771
2010-2015*	\$40,000	\$0	\$3,971,520	\$5,595,238
2016-2019*	\$0	\$42,240	\$270,720	\$3,793,292
2020-2021**	\$ 2,193,000.00	\$96,000.00	\$0	\$173,296.82

5.5.4.2 SANITARY NETWORK

The sanitary network saw its primary growth or investment between 1970 and 1979 of nearly \$23 million (Figure 5.25). This development surge was seen with the construction of the Southampton sewage system during this time. In the 1990s the original Port Elgin WWTP was replaced. From that point most investment into the system is seen in 2000 to 2009 as a result of continued town growth forcemains and sewer systems received over \$16 million (Table 3-23).

Figure 5.25 Saugeen Shores Infrastructure Investment in the Sanitary Network by Installation Year Based on 2019 Replacement Cost



* 5 year increments instead of 10 year increments. This was done to provide more detail for the most current years

** Includes 2020-2021 data as provided by OCWA

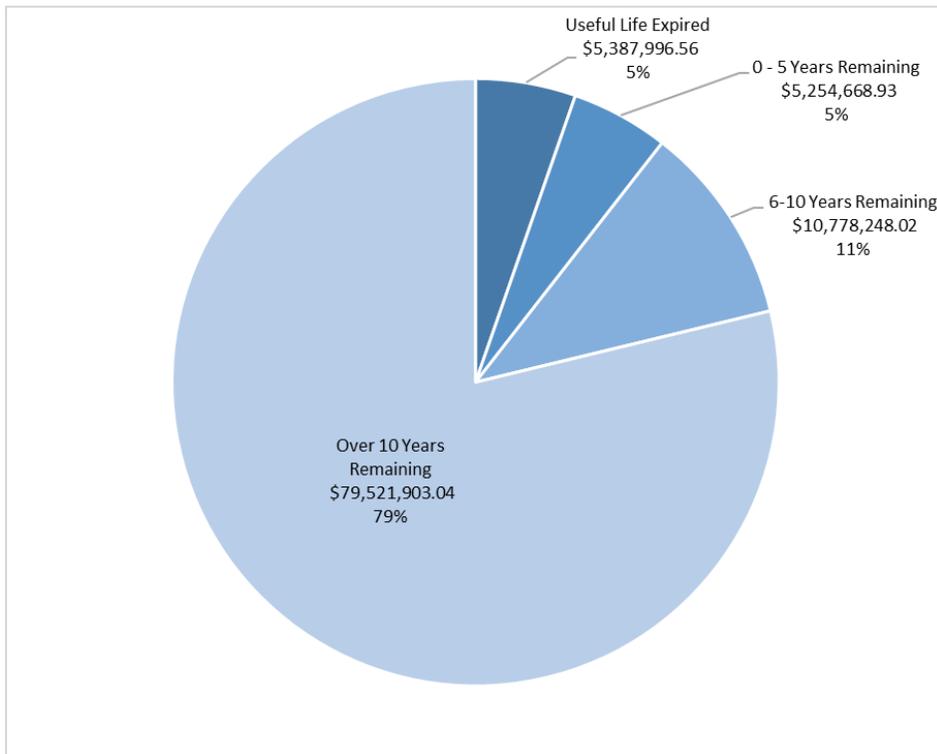
Table 5.23 Historical Infrastructure Investment - Sanitary Network

	Port Elgin Pumping Station	Port Elgin WWTP	Southampton Pumping Station	Southampton Wastewater Treatment Plant	Forcemain and Sewer
1950-1959	\$0	\$0	\$0	\$0	\$0
1960-1969	\$0	\$0	\$0	\$0	\$568,174
1970-1979	\$483,946	\$0	\$239,000	\$2,153,000	\$20,099,887
1980-1989	\$889,712	\$76,044	\$0	\$0	\$7,099,757
1990-1999	\$0	\$4,775,548	\$12,000	\$560,000	\$6,258,404
2000-2009	\$693,867	\$1,358,141	\$210,000	\$1,470,000	\$16,573,196
2010-2015*	\$197,714	\$1,076,780	\$238,000	\$145,000	\$9,095,010
2016-2019*	\$30,418	\$235,736	\$75,000	\$20,000	\$2,091,096
2020-2021**	\$0	\$152,087.50	\$0	\$35,000.00	\$131,618.07

5.5.5 USEFUL LIFE CONSUMPTION

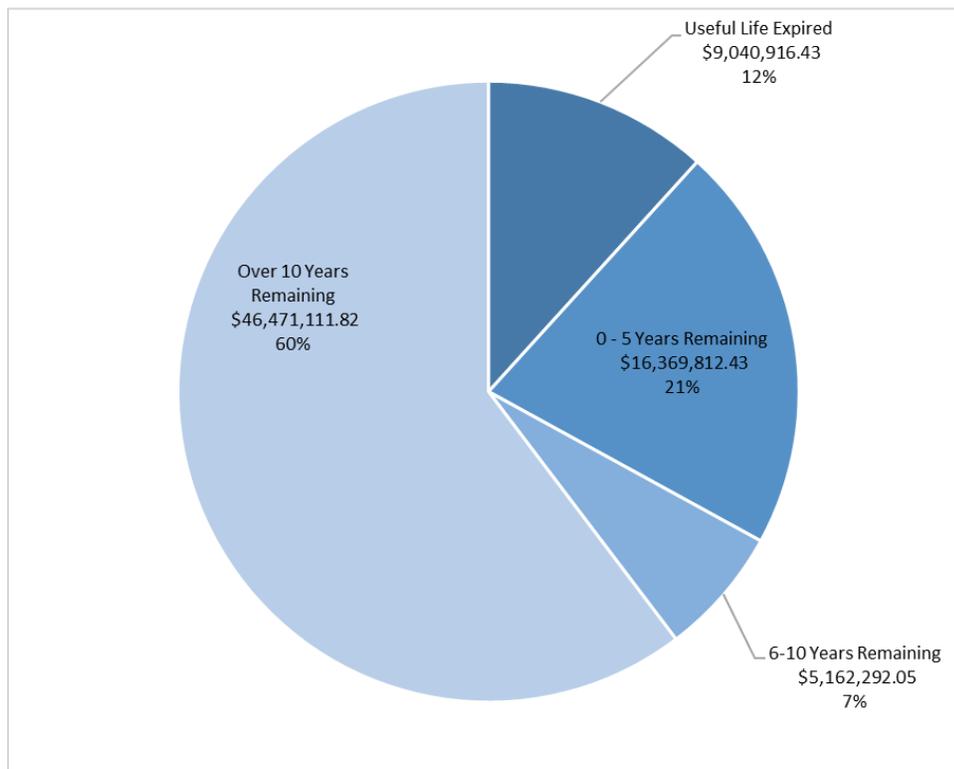
The estimated useful life remaining for water and sanitary networks shows that majority of asset components have over 10 years of useful life remaining. The water network has 79% or \$79.5 million of assets with over 10 years remaining (Figure 5.26). Of the current water network assets 10% of total assets or \$10.6 million have 5 years or less of useful life remaining.

Figure 5.26 Remaining Useful Life - Water Network



The sanitary network has over \$46 million or 60% of assets with an useful life of over 10 years (Figure 5.27). However, the sanitary network also has \$25 million or 33% of assets with a useful life of 5 years or less remaining.

Figure 5.27 Remaining Useful Life - Sanitary Network



5.5.6 CURRENT ASSET CONDITION

Asset performance is defined as “the ability of an asset to fulfill the organization’s objectives or requirements”.

The performance of an asset is directly related to the level of service it provides:

- An asset in the good performance category is one which is meeting the expectations of the community (i.e. providing an appropriate level of service); and
- An asset in the poor performance category is one which is not meeting expectations (i.e. not providing an appropriate level of service), and requires spending to have it meet expectations.
- The community’s asset performance expectations balance costs and affordability and are therefore unique to each community based on its infrastructure inventory, financial status and community/corporate priorities.

The best available asset information is combined with the judgement of subject matter experts to establish the current performance of each of the individual asset records that are

represented in the asset portfolio. The performance of individual assets is aggregated to present the performance distribution of each asset group.

The performance rating scale (Table 5.24) and current asset performance results (Table 5.25) are provided below.

Table 5.24 Asset Performance Rating Descriptions

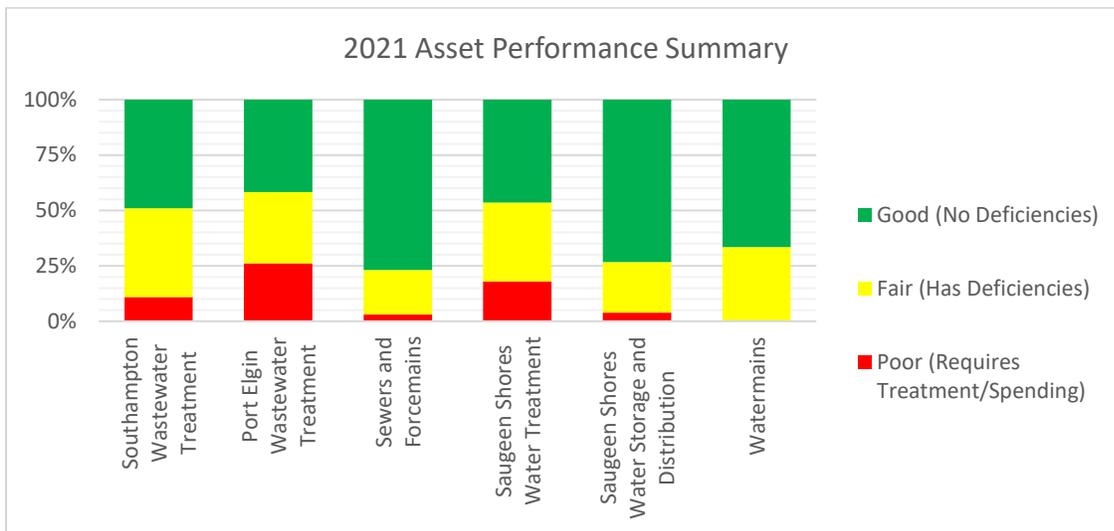
Performance Category	Description	State of Asset
Good	Asset performance meets or exceeds its objectives/requirements.	No Deficiencies
Fair	Asset performance is nearing the point where it will not meet its objectives/requirements.	Has Deficiencies
Poor	Asset performance is not meeting its objectives/requirements.	Requires Treatment (Spending)

An asset in the poor performance category requires spending for it to be restored to the good performance category. An asset in the good performance category has no known deficiencies and is meeting its expectations or objectives. An asset in the fair performance category has deficiencies but has not yet degraded to a point where it requires spending.

Table 5.25 Current Performance by Replacement Value

Performance Category	Southampton Wastewater Treatment	Port Elgin Wastewater Treatment	Sewers and Force mains	Saugeen Shores Water Treatment	Saugeen Shores Water Storage and Distribution	Water mains
Good (No Deficiencies)	\$2,532,000	\$4,158,072	\$47,608,680	\$7,837,525	\$3,915,005	\$52,393,207
Fair (Has Deficiencies)	\$2,059,000	\$3,200,517	\$12,403,157	\$6,003,297	\$1,216,000	\$26,025,765
Poor (Requires Treatment/Spending)	\$566,000	\$2,611,402	\$1,905,304	\$3,026,880	\$210,002	\$315,136

Figure 5.28 - Water and Sanitary Network 2021 Asset Performance Summary

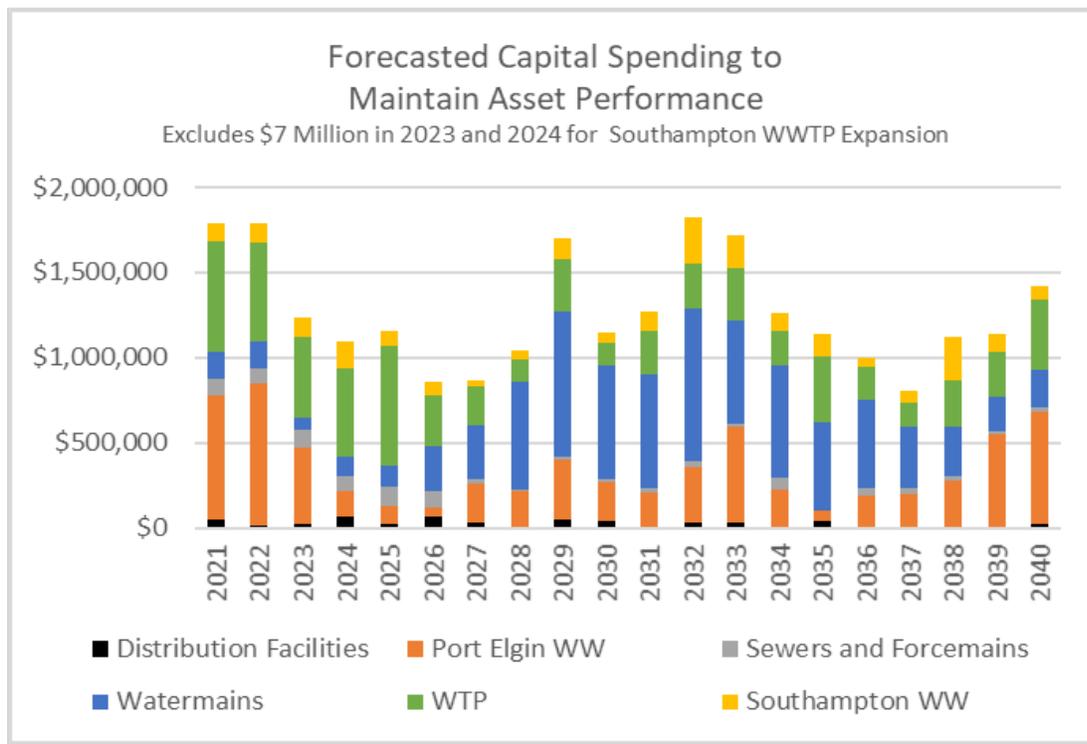


The total replacement cost of the assets in the poor performance category is of approximately \$8.6 million, which represents approximately 5% of the total asset portfolio (Table 5.25 and Figure 5.28). It should be noted that the spending required to restore these assets to the good performance category is not equal to the replacement costs, since some assets only require rehabilitation while others require replacement with a more expensive asset.

5.5.7 FORECASTING REPLACEMENT NEEDS

The analysis demonstrates that average annual capital spending of approximately \$1.3 million is required to maintain asset performance expectations over the long term for both the water and wastewater systems (Figure 5.29).

Figure 5.29 Capital Spending Forecast



Past spending levels have been approximately \$1.35 million. Therefore, no funding gap has been identified to maintain asset performance expectations over the long term for both the water and wastewater systems.

Capital spending needs in the short term exceed the historical average by \$400k per year in both 2021 and 2022. The Town will be developing the financial strategy to fund these short term spending increases.

It is noted that capital expenditures for the expansion of the Southampton wastewater treatment facility, currently estimated at \$7 million and construction in 2023 and 2024, are not currently included in the analysis.

6 INFRASTRUCTURE REPORT CARD – CORE ASSETS

The infrastructure report card summarizes the general state of the asset category and funding capacity. A letter grade has been given to each category based on condition and available funding. Table 6.1 provides a quick glance of grading for the categories. The overall letter grade for the Town of Saugeen Shores is a B-, which was derived by taking the weighted average for both grading categories. What can be determined is that although overall condition of many of our assets remain high, funding of these assets falls below need in most cases. The long term outcome of this will be assets that continue to deteriorate and funding that does not allow for the current level of service expectations to be met. More details on Infrastructure Report cards is included in Appendix 19.2.

Table 6.1 Infrastructure Report Card

Infrastructure Report Card				B-
Town of Saugeen Shores				
Asset Category	Condition vs. Performance	Funding vs. Need	Comments	Overall Rating
Transportation Network	B+	D	Transportation Network includes roads, bridges, culverts and sidewalks.	C+
Storm System	B+		Transportation network and storm system have been combined to remain consistent with financial report procedures	
Water System	B-	A		B+
Sanitary System	B-	C		C+

7 LEVEL OF SERVICE – CORE ASSETS

Level of Service (LOS) provides a framework for measuring customer needs and expectations in conjunction with actual asset condition measures. By identifying LOS, decisions can be made that ensure positive impact to customers, and that the Town continues to strive to meet and exceed minimum LOS.

Bellow outlines the current levels of service for core infrastructure based on the technical metrics/performance measures as well as the community levels of service.

7.1 TRANSPORTATION NETWORK

The goal of the town is to provide a transportation network that is not only safe to use by both residents and transient users, but also one that is efficient. The transportation network is made up of roads, bridges, culverts and sidewalks and the levels of service aligns with the Town's Official Plan as well as the Transportation Master Plan. See Appendix 19.7 for maps of current transportation network assets.

In 2019 there were 13 days of interruption to traffic flow due to unplanned road closures (Table 7.1). These closures were a result of repairs needed to other assets (watermains, culverts, etc). In total there were seven unplanned road closures for the year.

Additionally, the municipality currently has 3 bridges that have been closed due to condition no longer allowing for usage. The bridges that are currently closed include McEwing Bridge, Moore Bridge, and Kolb Bridge (Closed in 2020).

Table 7.1 Transportation Network Level of Service Performance

Service Attribute	Performance Measure	Current Performance
Scope	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the municipality.	0.25
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the municipality.	0.38
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the municipality.	2.36
	Percentage of active bridges in the municipality with loading or dimensional restrictions.	0%
Quality	Percentage of Lane-Km with a PCI <40 (Poor to Very Poor Condition)	2%
	Percentage of Lane-Km with a PCI of 40 to 59 (Fair Condition)	23%
	Number of Lane-Km of paved roads with a PCI <20	4.25 km
	% of lane-km that are gravel	20%
	For paved roads in the municipality, the average pavement condition index value.	85.33
	For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor).	Very Poor
	Percentage of Bridges currently closed	21%
	For bridges in the municipality, the average bridge condition index value.	57

	Number of structures with a BCI <40 (Bridges & Culverts)	13 (87%)
	For structural culverts in the municipality, the average bridge condition index value.	65.6
Safety	% of sidewalks with a condition index < 20	1%
	Patrolling Frequency	100%
Reliability	Number of days unplanned street closures due to road/asset failure (not due to weather)	12.91 days

7.2 STORM WATER NETWORK

“The Town of Saugeen Shores has a complex system for surface water drainage, which includes overland sheet flow, natural water courses, municipal drains, tile drains, ditches, culverts and storm sewers. With recent significant land development pressure, the Town is taking a proactive approach to better understand the existing drainage systems in order to appropriately plan for future drainage needs. The Town has identified some areas where drainage deficiencies are apparent, including capacity issues, aging infrastructure and flooding. Further, in consideration of the Town’s urban development and projected future growth, opportunities exist to improve the level of service provided by existing drainage systems, improve water quality, improve water balance conditions and reduce flooding and erosion. Thereby, maintaining the ecological health of the receiving water bodies and improving public safety” (Master Drainage Plan).

Table 7.2 Storm Water Network Level of Service Performance

Service Attribute	Performance Measure	Current Performance
Scope	Percentage of properties in municipality resilient to a 100-year storm.	98%
	Percentage of the municipal stormwater management system resilient to a 5-year storm.	91%
Safety	# of days roads are closed due to flooding**	62 days
Environmental Protection	% of manhole sumps cleaned/year	100%
	% of catch basins cleaned/year	100%
	% of Storm Water Management Ponds that are inspected/year	100%
	Inspect and clean all critical inlet and outlet structures and systems after major storm events	100%
Customer Service	# of confirmed flooding related customer complaints/year	100%
	Response within 2-5 days for non-emergency response % of the time	100%
	Response within 2 hours for emergency response % of the time	100%

* See Appendix 19.7 for condition maps and for vulnerable flood area

**Road closure of 62 days was caused by flooding and road washout on the River Road from Bruce Road 17 to Bruce Road 3. Road closure lasted from January 29, 2019 to April 1, 2019.

7.3 WATER NETWORK

The Town of Saugeen Shores strives to ensure that drinking water is available to the community with little to no interruption to service. The current asset structure has been able to provide service to 57% of properties and has seen no issues to service reliability in 2019 (Table 7.3).

Table 7.3 Water Network Level of Service Performance

Service Attribute	Performance Measure	Current Performance
Scope	Percentage of properties connected to the municipal water system.	57%
	Percentage of properties where fire flow is available.	57%
Reliability	The number 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.	0
	Number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system	0
	Adverse Water Quality Incident (AWQI)	0

7.4 SANITARY NETWORK

The Town’s current sanitary network has connection provided to 53% of properties (Table 7.4). Once again safety and reliability of the system is priority. A spill event has been experienced in 2017 and 2020 because of forcemain failure on 10th Concession in Port Elgin. As a result, the forcemain should be reviewed for refurbishment or full replacement in coming years to avoid future events. This recommendation has also been noted by OCWA as a project to prioritize.

Table 7.4 Sanitary Network Level of Service Performance

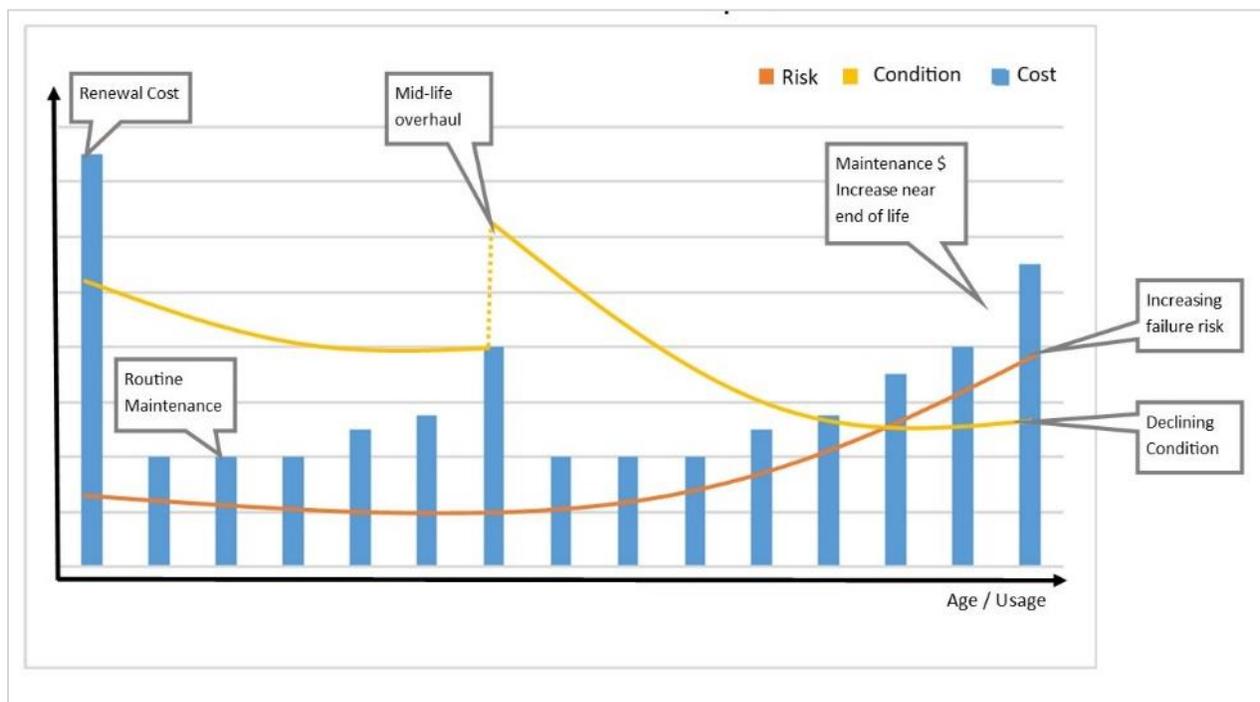
Service Attribute	Performance Measure	Current Performance
Scope	Percentage of properties connected to the municipal wastewater system.	53%
Reliability	The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	0
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0
	The number of spill events per year	1
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0

Protect & Promote Public Health & Safety	# of sanitary sewer service backups that caused waste water to flood into building	0
	# of sanitary sewer trunk forcemain breaks	0

8 LIFECYCLE ACTIVITIES – CORE ASSETS

Intervention throughout the life of an asset ensures that the greatest value from the asset is achieved. Following a routine maintenance schedule as well as larger refurbishments throughout asset life will help improve condition as well as longevity. A lifecycle framework provides the greatest value when it has been developed for each individual asset class

Figure 8.1 Whole Life Cost Template



Typical asset lifecycle activities can fall into a number of different categories depending on age, condition of asset and financial contribution (Table 8.1). Lifecycle activities should be determined using an objective decision making processes while understanding the asset condition, age of the asset and incorporating replacements into large capital project planning.

Table 8.1 Lifecycle Activities

Lifecycle Activity	Description
Operational	Operational activities, routine preventative maintenance, studies on asset performance
Minor Rehabilitation	More significant repairs to maintain asset performance
Major Rehabilitation	Significant project, typically costing between 30% and 70% of asset replacement value.
Replacement	Significant project resulting in an asset that meets top industry and community expectations.
New Asset	Construction or purchase of new assets that results in net growth of the asset inventory and an enhancement in service levels provided to the community.

8.1 TRANSPORTATION NETWORK

8.1.1 ROAD NETWORK – PAVED ROADS (HCB & LCB)

The road network’s useful life of assets is approximately 15 years. With no intervention or yearly operational maintenance roads is estimated to hit a state of failure at or before this point. Operational activities for paved roads, both asphalt (HCB) and surface treated (LCB) include the following:

Table 8.2 Paved Road Maintenance Activities

Activity Description	Cost per Unit (m ²)
Crack sealing	\$0.045
Line painting	\$0.013
Ditching and brushing	\$0.013
Patching potholes	\$0.016
Road sweeping	\$0.032
Grass cutting	\$0.013

These maintenance activities will help to extend the useful life of roads in the community, and therefore a consistent maintenance schedule is key to ensuring the greatest return on investment. These activities are completed to maintain asset condition as best as possible prior to capital activities. Work activities should be decided on based on asset age and condition, as well as operator input. Table 8.3 describes thresholds for intervention on assets at both the operational and capital level.

Table 8.3 Paved Road Lifecycle Activities

Activity Description	Age	Condition/Performance Threshold
Maintenance Activities Only	-	100-56
Shave and Pave. Mill 50mm then 50mm overlay.	20-39	≤55
Pulverize and pave + spot base repairs and minor culvert replacement (100mm)	40-59	≤50
Shave and Pave. Mill 50mm then 50mm overlay.	60-79	≤55
Pulverize and pave + spot base repairs and minor culvert replacement (100mm)	80-99	≤50
Shave and Pave. Mill 50mm then 50mm overlay.	100-124	≤55
Full-depth reconstruction.	125	≤40

8.1.2 ROAD NETWORK – GRAVEL

The useful life of gravel roads is much shorter than any other asset at only 5 years. With consistent maintenance the lifecycle of gravel roads can be extended significantly and ensures that impact to surrounding area is minimal. Maintenance activities (Table 8.4) include calcium chloride application for dust control, as well as an annual grading cycle. Capital intervention for gravel roads should be cycled through a maintenance process which involves yearly grading before receiving additional maintenance gravel every 5 years. Additionally, the excavation of

subbase and/or subgrade may be completed before deciding to complete a full replacement or reconstruction (Table 8.5).

Table 8.4 Gravel Roads Maintenance Activities

Activity Description	Cost per Unit (m ²)
Calcium Chloride Application	\$1.48
Spring Grading	\$0.356
Fall Grading	\$0.356
Grass Cutting	\$0.593
Ditching	\$0.593
Guard Rails	\$0.020
Maintenance Gravel	\$0.593

Table 8.5 Gravel Roads Lifecycle Activities

Activity Description	Age	Condition/Performance Threshold
Operational Maintenance Activity	-	≥31
Excavation of Subbase	0-50	≤30
Excavation of Subgrade	0-50	≤30
Full Replacement or Full Construction	80	≤10

8.1.3 BRIDGES & CULVERTS

Bridges and culverts are inspected on a biennial basis by an outside structural engineer. The resulting report not only provides the current condition of the assets but also provides a 10-year needs list, which includes the recommended actions that are required (Appendix 19.4). Maintenance activities are to be completed as needed are outlined in Table 8.6. Thresholds for capital activities provide a break point to initiate rehabilitation or replacements of bridges and culverts. However, the advised interventions provided by the structural engineer delivers a

clear picture of all bridge components requiring intervention and as a result should be incorporated into planning activities.

Table 8.6 Bridges and Culverts Maintenance Activities

Activity Description	Cost per Unit (m)
Wash/Clean Bridge Deck	\$2.63
Minor guiderail repairs and replacement	\$14.81
Pothole repair - on bridges with asphalt wearing surface	\$2.63
Grading of surface - bridges with gravel wearing surface	\$2.63

Table 8.7 Bridges and Culverts Lifecycle Activities

Asset Sub- Class	Activity Description	Age	Condition/Performance Threshold
Bridge	Minor Rehabilitation	0-40	≤55
	Major Rehabilitation	41-60	≤50
	Full Replacement	61-80	≤45
Culvert	Minor Rehabilitation	0-30	≤55
	Major Rehabilitation	31-50	≤50
	Full Replacement	51-70	≤45

8.1.4 SIDEWALKS & CURBS

Sidewalk maintenance is initiated based on inspections completed on a yearly basis. These inspections are documented and provide work orders for rehabilitation and flag damaged sections. Maintenance will be completed for elevations with a difference of 25mm and above to minimized tripping hazards. When hazards cannot be removed from maintenance activities targeted replacements can be used before deciding to do a full replacement of sidewalks or curbs. Additionally, capital replacements should be incorporated into major capital projects when possible.

8.2 STORM NETWORK

The lifecycle activities undertaken for the storm network are triggered by inspections of the assets or a noted failure. Like many buried structures maintenance of these assets is minimal and therefore lifecycle activities include regular inspections. Regular maintenance within the storm network includes cleaning out of catchbasins, specifically after large storm events. Inspections of drainage pits, storm ponds, as well as storm mains should be completed at a regular interval. With major refurbishments or replacements occurring when condition falls below a fair rating or as part of other planned reconstruction programs.

8.3 WATER DISTRIBUTION AND SANITARY SEWER NETWORK

OCWA subscribes to a similar lifecycle system as most buried asset networks with a cycle of operational activities and inspection prior to major capital rehabilitation or replacement. Maintenance activities include routine preventative maintenance and asset studies, followed by more significant repairs used to maintain asset performance. Once all other measures have been taken assets will undergo significant rehabilitation or complete replacement.

9 ASSET MANAGEMENT STRATEGY – CORE ASSETS

The AMP outlines the conditions and funding gaps for current assets in the network using the best available information for those assets. The goal now is to continue to grow the quality of data available on the assets but also create a process for managing the assets moving forward.

The priority of all asset management plans is to increase asset performance and longevity. This allows for greatest return on investment while providing the highest level of service. As a result, it should become priority to continue to build the dataset in which we are able to determine accurate asset performance and overall condition. This will allow for maintenance and project plans to become more efficient and have the greatest output.

Each year the asset management team will provide an update on progress of the AMP. This will be done by updating the asset inventory using best available asset data and resources. Including newly acquired assets, removed assets, performance indicators, and replacement costs. Spending analysis will also be completed to determine what is being spent on assets. Over time these updates will allow for better understanding of the impact of spending and result in the ability to better forecast and establish proposed levels of service.

The asset management strategy will only be effective if it is integrated with the Town's long term planning goals and when asset management is adopted as the primary resource for decision making. These strategies will evolve and be strengthened using staff knowledge as well as through the utilization of software and data management and outside resources when necessary.

The key areas of focus and development moving forward in asset management for the Town at this time will be the following components:

- Asset condition assessment program
- Lifecycle management development
- Project prioritization system

9.1 CONDITION ASSESSMENT PROGRAM

To continue to strengthen the Town's asset management plan the available data for assets needs to be developed. Good asset management practices rely on having comprehensive and reliable information. The decisions being made regarding future expenditure and actives will be better achieved if performance and condition of assets is fully understood.

A consistent condition assessment methodology is recommended for all assets. These condition assessments can be completed as very detailed assessments or as more cursory approaches; however, they should be completed on a consistent basis using a consistent methodology. The development of a condition assessment approach that goes beyond age based modelling will provide a better understand of infrastructure need. These inspections can act as a facilitator for further more detailed inspections of flagged assets.

The benefits of developing condition assessments programs can include more accurate asset valuation, avoiding unnecessary expenditures, extending service life, and enabling accurate reporting. As a result, decision making based on complete infrastructure data will be more accurate and efficient.

9.2 STRONGER LIFECYCLE MANAGEMENT

Lifecycle management modeling of assets will allow for a clearer understanding of replacement timeline needs and well as maintenance measures that can be made to lengthen the life of an asset. Through the use of modeling systems as well as operator knowledge an asset should be able to be maintained and utilized for beyond its natural useful life. This not only allows for greatest return on investment, as previously stated, but will also allow the town to focus its investment in a way that will maintain if not improve level of service experienced. Lifecycle management will allow for strategic intervention to the assets and therefore better operational and capital budgeting.

9.3 PROJECT PRIORITIZATION

Capital funding needs in many municipalities often exceed what is available, and the Town of Saugeen Shores is no different. As a result, it is key that decisions are made carefully to ensure the most effective and efficient use of funding. Projects and investments should be selected based on community growth needs, the state of the infrastructure and the development goals of the Town. Projects that will make the greatest impact should be prioritized with the goal of also minimizing risk. Risk in terms of asset management considers not only the consequence of failure but also the probability of failure. Moving forward project planning and prioritization should be determined using the asset management strategies and data available for infrastructure.

10 FINANCIAL STRATEGY – CORE ASSETS

The integration of the financial planning and long-term budgeting is key for the success of the Asset Management Plan. Integration will allow for asset management to be sustainable in the long term.

10.1 CURRENT FUNDING POSITION

The current funding position for the core infrastructure has been determined based on annual depreciation of current assets and does not include additional lifecycle activities (Table 10.1). Given the current capital spending and the annual depreciation of existing infrastructure, there is currently a funding gap of \$5.4 million annually.

Table 10.1 Current Funding and Requirements for Existing Assets

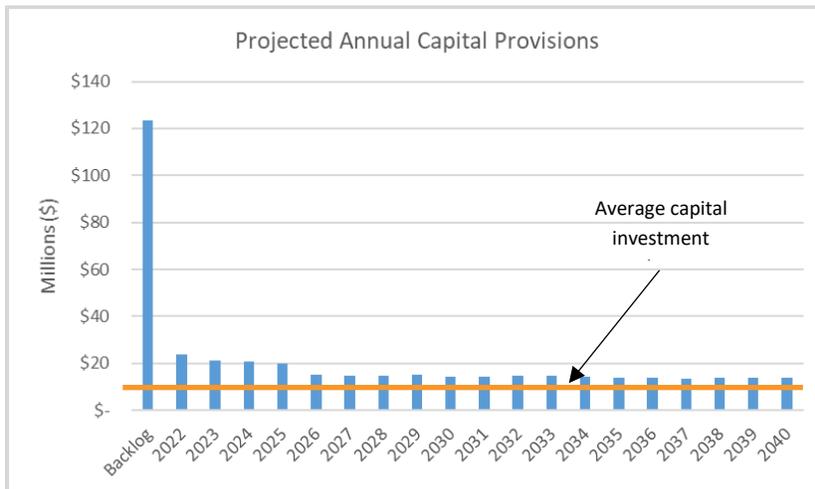
	Historical Cost	Replacement Costs	Annual Depreciation*	2020 Capital Budget	Annual Shortfall
Road Network & Storm Sewer **	\$95,733,086.66	\$116,508,633.93	\$8,241,442.66	\$ 3,833,200.00	-\$4,408,242.66
Bridges & Culverts	\$3,927,190.09	\$31,228,570.72	\$893,948.99	\$654,000.00	-\$239,948.99
Water Distribution Network	\$53,402,306.06	\$100,942,816.51	\$ 2,194,878.50	\$ 1,978,840.00	-\$216,038.50
Sanitary Network	\$34,841,114.83	\$ 77,044,132.78	\$ 1,928,202.08	\$ 1,315,460.00	-\$612,742.08
Total	\$187,903,697.64	\$325,724,153.95	\$13,258,472.23	\$7,781,500.00	-\$5,476,972.23

* Depreciation calculated based on replacement cost

** Road Network and Storm Sewer have been combined to remain consistent with financial reporting procedure within the Town

The current infrastructure deficit represents the difference between current funding to capital and the required contributions needed in order to maintain levels of service. This deficit will continue to grow year over year should the contribution to capital not be increased to meet need. The projected capital provisions show that an average of \$15.8 million dollars a year is required (Figure 10.1), however this does not include expenditures to minimize the backlog experienced by assets past their useful life and is a result of this year over year funding gap.

Figure 10.1 Annual Capital Provisions



10.2 RECOMMENDATIONS

The Town needs to develop a financial strategy that allows for the asset management plan to be successful in providing infrastructure to a growing community. The AMP and financial strategy need to work hand in hand moving forward. As noted above the town had a funding gap resulting in a deficit of \$5.4 million based on the 2020 budget and annual asset depreciation. Additionally, the Town has a noted backlog of approximately \$123.3 million of core assets to date (Table 10.2). This backlog is a result of allowing assets to reach end of useful life without budgeting for repairs or replacement on an ongoing basis. It is unrealistic however, to expect the Town to address the backlog in the short term. As a result, a long term financial strategy is required to address current and future financial requirements for core infrastructure capital needs.

If the Town were to implement a funding strategy with the goal of eliminating the backlog and closing the funding gap an annual increase to capital of 6% would be required (Table 10.2). The accumulated deficit would reach \$119 million before being able to lower this amount by continuing to increase contributions beyond the provision requirement. The infrastructure deficit would be reduced to \$36.3 million by 2040 by following this strategy.

The best strategy for long term success will be improving the asset management process for the Town. In doing so more refined estimates of infrastructure needs will be determined and as a result replacement plans will not be simply based on end of life.

Figure 10.2 Financial Strategy Recommendation

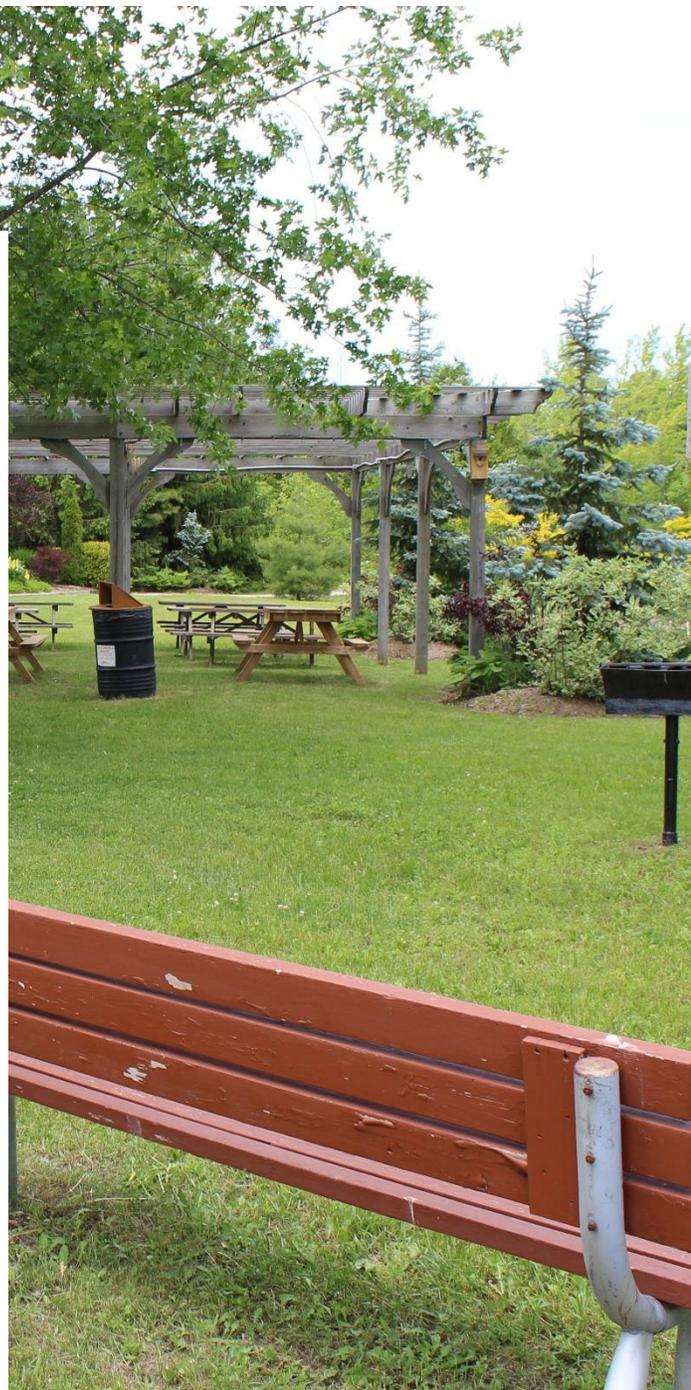
	Projected Annual Capital Provisions	Projected Annual Capital Provisions Including Backlog Recovery Over 10 Years	Annual Capital Contributions	Annual Increase to Capital (%)	Annual Funding Gap	Cumulative Infrastructure Deficit
Backlog	\$123,309,885.15	\$12,330,988.52*				
2022	\$23,924,856.15	\$36,255,844.67	\$11,905,525.68**	6%	\$24,350,318.99	\$26,377,163.22
2023	\$21,239,124.68	\$33,570,113.19	\$12,619,857.22	6%	\$20,950,255.97	\$47,327,419.19
2024	\$20,769,605.25	\$33,100,593.77	\$13,377,048.65	6%	\$19,723,545.12	\$67,050,964.30
2025	\$19,883,773.36	\$32,214,761.87	\$14,179,671.57	6%	\$18,035,090.30	\$85,086,054.60
2026	\$15,001,536.82	\$27,332,525.34	\$15,030,451.87	6%	\$12,302,073.47	\$97,388,128.07
2027	\$14,710,185.04	\$27,041,173.55	\$15,932,278.98	6%	\$11,108,894.57	\$108,497,022.64
2028	\$14,573,297.81	\$26,904,286.33	\$16,888,215.72	6%	\$10,016,070.61	\$118,513,093.25
2029	\$15,071,301.09	\$27,402,289.61	\$17,901,508.66	6%	\$9,500,780.95	\$128,013,874.20
2030	\$14,443,681.36	\$26,774,669.88	\$18,975,599.18	6%	\$7,799,070.70	\$135,812,944.90
2031	\$14,507,537.33	\$26,838,525.85	\$20,114,135.13	6%	\$6,724,390.71	\$142,537,335.61
2032	\$14,863,358.37	\$27,194,346.88	\$21,320,983.24	6%	\$5,873,363.64	\$148,410,699.25
2033	\$14,571,683.71	\$14,571,683.71	\$22,600,242.23	6%	-\$8,028,558.52	\$140,382,140.73
2034	\$14,092,855.04	\$14,092,855.04	\$23,956,256.77	6%	-\$9,863,401.73	\$130,518,739.00
2035	\$13,935,081.35	\$13,935,081.35	\$25,393,632.17	6%	-\$11,458,550.83	\$119,060,188.18
2036	\$13,761,370.11	\$13,761,370.11	\$26,917,250.11	6%	-\$13,155,880.00	\$105,904,308.18
2037	\$13,543,629.78	\$13,543,629.78	\$28,532,285.11	6%	-\$14,988,655.33	\$90,915,652.85
2038	\$13,833,909.09	\$13,833,909.09	\$30,244,222.22	6%	-\$16,410,313.13	\$74,505,339.72
2039	\$13,836,990.10	\$13,836,990.10	\$32,058,875.55	6%	-\$18,221,885.45	\$56,283,454.27
2040	\$13,999,140.66	\$13,999,140.66	\$33,982,408.08	6%	-\$19,983,267.42	\$36,300,186.85
Total Infrastructure Deficit					\$36,300,186.85	

*There is a current backlog of \$123,309,885.15 in assets that have reach or surpassed useful life. By adding \$12,330,988.52 to provisions over the next 10 years this backlog will be incorporated into the long term financial strategy

** 2022 Annual Capital Contribution value has been calculated based on a 6% increase to the approved 2021 capital budget of \$11.231.628

ASSET MANAGEMENT PLAN – PART B

Non- Core Assets



11 Part B – Non-Core Assets Summary Statistics

Replacement cost of asset portfolio	\$337 million
Replacement cost of assets per capita*	\$21,161
Percentage of assets in good or very good condition	73%
Percentage of assets with over 10 years of useful life remaining	32%

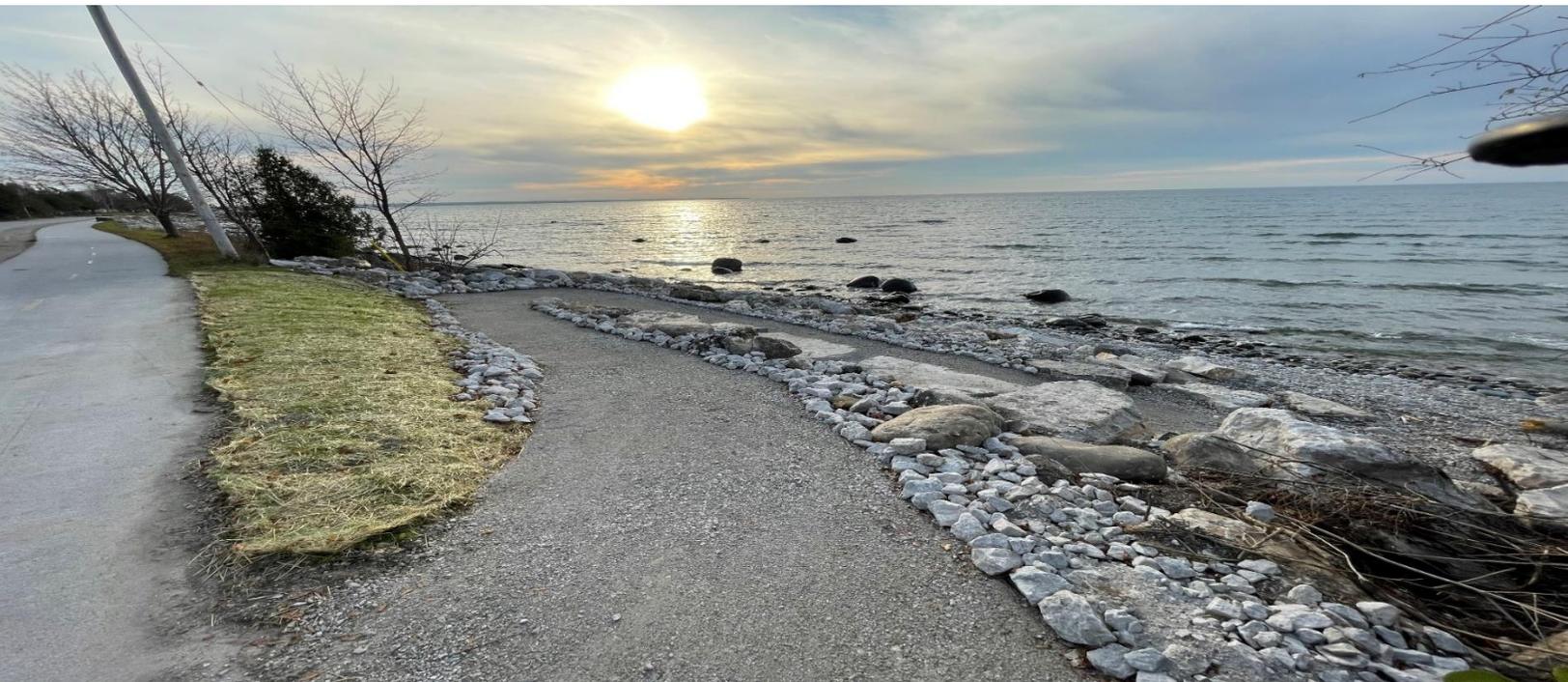
* Per Capita based on 2021 statistics

12 NON-CORE ASSETS BACKGROUND

This asset management plan currently meets the requirements set out by the Government of Ontario (O. Reg 588/17); however it is understood that this is a living document which will continue to evolve. Asset management progress will be reviewed annually, and the plan will be fully reviewed every 5 years to ensure projects are up to date and available for decision makers. The following asset categories are addressed in this section of the report:

- Facilities
- Parks
- Trails
- Fleet
- Community Service Assets
- IT Equipment
- Land
- Transportation Assets
- Business Units
- Equipment

These assets have been assessed to determine value, condition, and current level of service to determine a maintenance and rehabilitation strategy and the overall impact to the municipality's financial strategy.



13 KEY STATISTICS

In this section of the AMP a high-level summary of the key indicators is provided for the Town’s non-core infrastructure. The state of each asset category will be provided in greater detail in Section 5 of the report.

13.1 ASSET VALUATION – ALL ASSET CLASSES

This AMP has relied on two data sources to determine replacement cost for assets. Costing has been determined from either user-defined costs or cost inflation calculations. User-defined cost estimates come from Town staff and are based on recent contracts, engineering reports and assessments. Cost inflation or CPI cost have been calculated using the consumer price index. User-defined replacement cost provides the most accurate way of determining pricing, as it incorporates changes in product and the technology of said products. When user-based information is not available CPI has been used to inflate historical information.

13.2 SOURCE OF CONDITION DATA

The condition data available for the assets in this AMP are age-based unless assessment data is available. Although age-based data is less accurate, it provides a baseline that will allow for long term capital funding planning. Table 13.1 indicates condition assessment sources for the assets in this AMP.

Table 13.1 Condition Data Source

Asset Class	Condition Data Source
Facilities	Building Condition Assessment (2023) / Internal Assessment
Parks	Assessed
Community Service Assets	Age-based/Assessed
Fleet	Age-based/Assessed
IT	Age-based
Land	N/A
Transportation Assets	Age-based/Assessed
Business Units	N/A
Equipment	Age-Based/Assessed

When assessed condition data is not available, age-based condition are used. Age-based condition assessments are calculated based on deterioration percentage and current age of the asset. This is modelled and applied to the assets in the GIS.

Condition ratings for assets can fall into 1 of 5 categories:

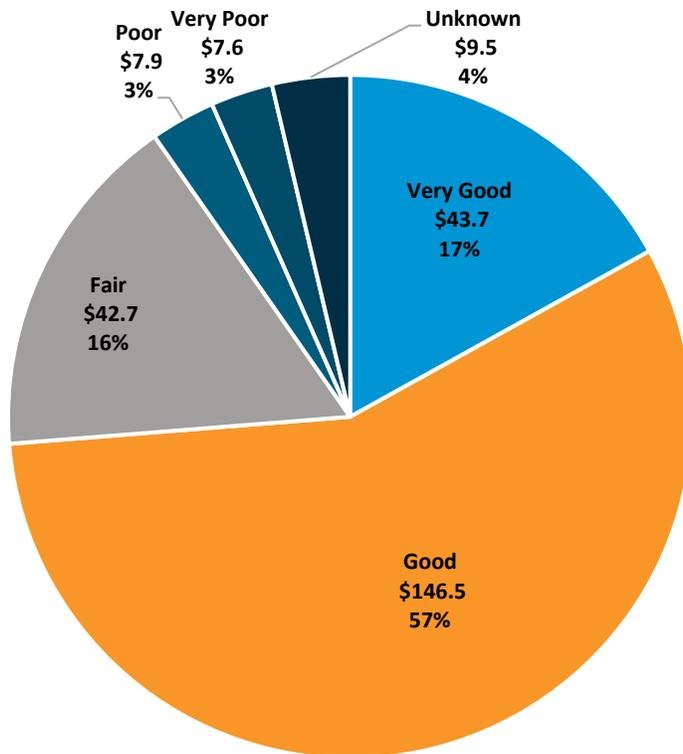
Table 13.2 Condition Rating Definitions

Condition	Definition
Very Good	Well maintained, good condition, new or recently rehabilitated asset.
Good	Good condition, few elements exhibit existing deficiencies.
Fair	Some elements exhibit significant deficiencies. Asset requires attention.
Poor	A large portion of the system exhibits significant deficiencies. Asset mostly below standard and approaching end of service life.
Very Poor	Widespread signs of deterioration, some assets may be unusable. Service is affected.

13.3 OVERALL CONDITION – ALL ASSET CLASSES

The overall condition of non-core assets for the Town are primarily in the Good to Very Good range, with a total of 74% falling into these categories (Figure 13.1). Only 23% of assets fall into the Fair to Very Poor condition range, and 4% of assets have an unknown condition. It should be noted that trails, land, and parking lots do not have available condition data (or condition cannot be calculated) and therefore they are exempt from the total values here.

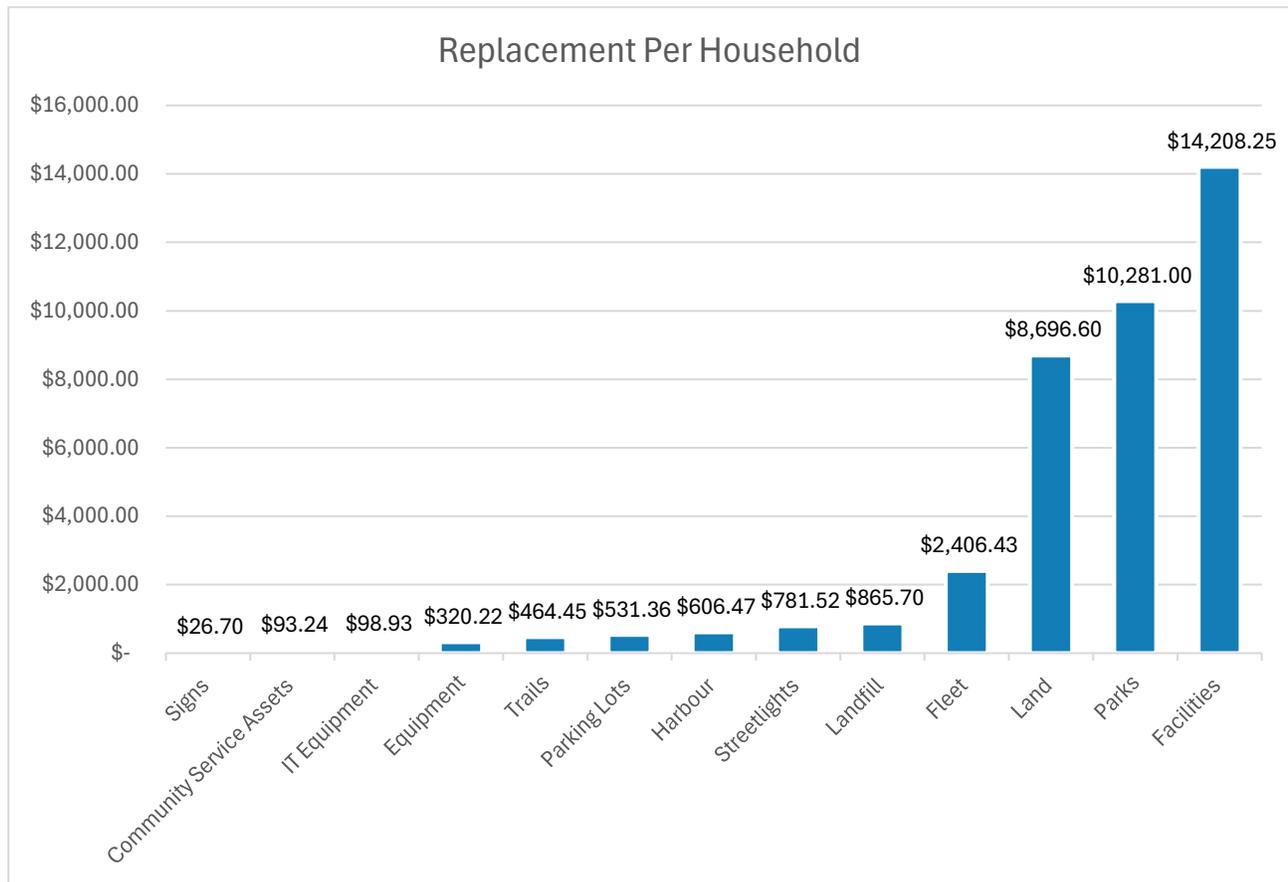
Figure 13.1 Town Asset Portfolio Condition (\$ millions)



13.4 FINANCIAL PROFILE

Total number of private dwellings in 8,548 based on 2021 Census data, an increase of 11.6 % since 2016. The non-core assets have a replacement value of \$337 million or a total of \$39,381 per household. Parks and facilities make up majority of the replacement value (Figure 13.2) followed by land. However, land may never be replaced and in fact may be sold by the Town.

Figure 13.2 Replacement Cost Per Household by Asset





14 STATE OF ASSETS

This section of the AMP will outline the key indicators for the defined asset classes. The state of assets section includes an inventory, condition rating, useful life data, infrastructure investment and forecasting for each asset class.

Asset classes currently included in the AMP are as follows:

- Facilities
- Parks
- Trails
- Fleet
- Community Service Assets
- IT Equipment
- Land
- Transportation Assets
- Business Units
- Equipment

14.1 | FACILITIES



14.1 FACILITIES

Table 14.1 Facility Categories

Categories	Description
A	Complex buildings with multiple components and unique systems or rooms Includes: Fire Hall, Police Station, Municipal Hall & Treatment Plants
B	Medium complexity buildings. Includes: Library, NII, Art School
C	Low complexity buildings, usually one room or space Includes: Stand alone washrooms, Pavilions, etc

Facilities that are not included in the assessment are: Centennial Pool, Municipal Hall, Jubilee Pavillion, BMTS, Cameron and Chesley St Washrooms, Doctor Condos and the Airport.

These facilities were not assessed due to limited access or current plans to demo or complete construction in the near future.

14.1.1 ASSET INVENTORY

The Town currently has 74 facilities under its ownership. These facilities range from complex buildings such as municipal hall and the fire stations to single standalone washrooms. Of the 74 facilities 22 facilities are contained within the Town's defined park areas. For the purposes of this AMP 52 facilities are standalone facilities which will be reviewed in this section (Table 14.2). While the remaining 22 facilities will be contained within the Park asset category.

Table 14.2 Asset Inventory - Facilities

Asset Class	Asset Sub-class	Quantity
Facilities	A	27
	B	10
	C	15
		52

14.1.2 REPLACEMENT COST VALUATION

Table 14.3 shows that \$95 million or 80% of total replacement costs are category A buildings. Once again category A facilities are complex facilities with multiple components which results in the higher replacement needs. Category C buildings often have minimal components and an average replacement cost of approximately \$448,514.73 per facility.

Table 14.3 Asset Valuation - Facilities

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Facilities	A	\$3,532,066.49	\$95,365,795.23
	B	\$1,935,858.20	\$19,358,582.00
	C	\$448,514.73	\$6,727,720.96
			\$121,452,098.19

14.1.3 ASSET USEFUL LIFE

An average useful life of 40 years for facilities has been assigned to the buildings owned by the Town. It is understood however, that many facilities outlast their useful life. The Town’s oldest building to date is the Southampton Art School which was built in 1888 followed by the Boathouse and Town Hall. It is understood that many of these facilities will not be completely replaced, and useful life should be used as an indicator for a major refurbishment.

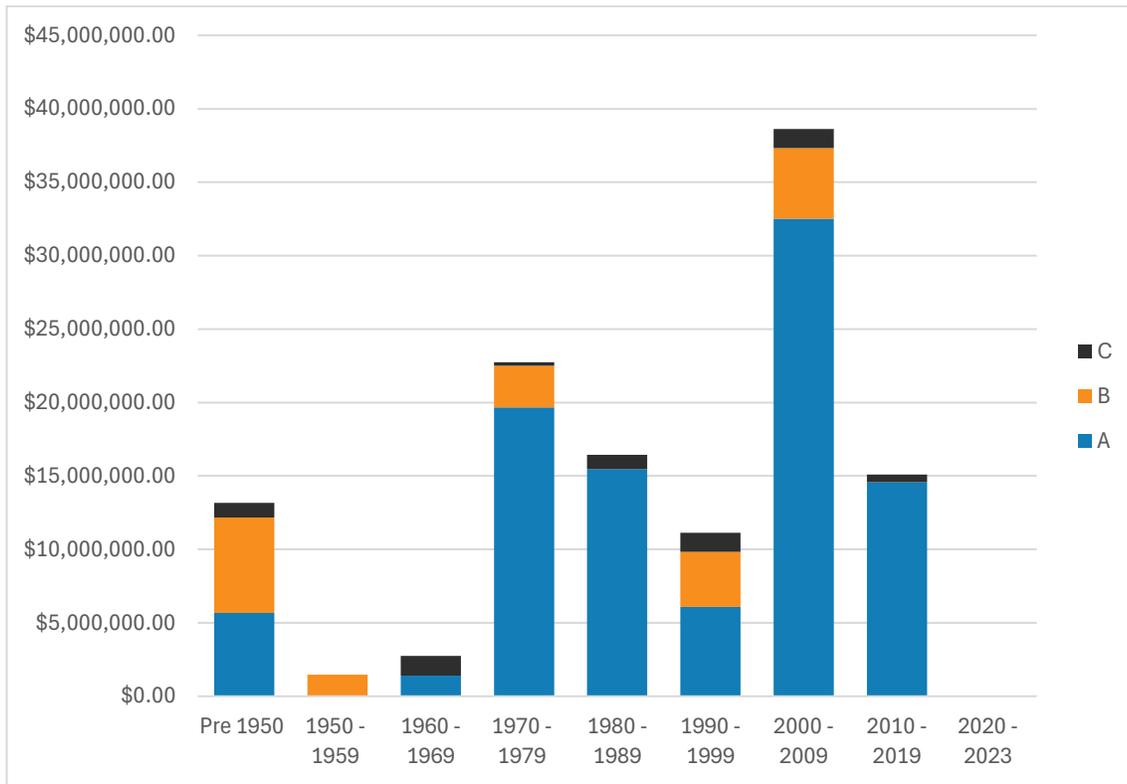
Table 14.4 Asset Useful Life in Years - Facilities

Asset Class	Asset Sub-class	Useful Life
Facilities	A	40
	B	49
	C	33
	Average Useful Life	40

14.1.4 INVESTMENT LEVEL

As the Town has experienced growth and through amalgamation large facilities were added to its portfolio. Just after amalgamation, between 2000 and 2009 (Figure 14.1), the facility portfolio expanded greatly with the addition of Municipal Hall, the Plex, two medical clinics and the old Police Station (now the NII). The Town has not seen a new facility addition since the new Police Station built in 2019, however a few things should be noted. The new landfill office was built in 2023 and was in service in 2024 and is included in the Landfill section of this report (Section 14.14). Additionally, the new AWC is currently under construction with a tentative completion date in 2025 and therefore is currently not included in the AMP. Both facilities will be included in the next rendition of the AMP for non-core assets.

Figure 14.1 Yearly Investment - Facilities



* Based on 2023 replacement costs

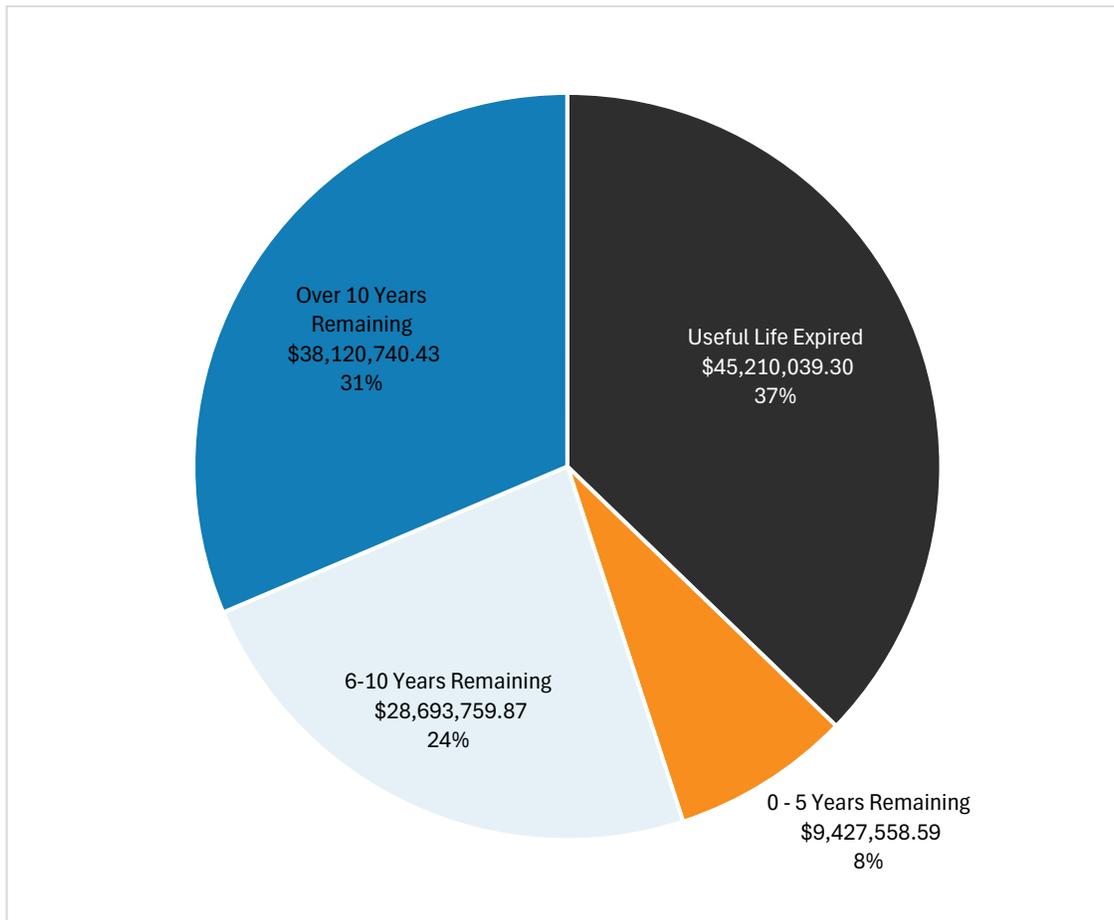
14.1.5 USEFUL LIFE CONSUMPTION

The Town has 52 facilities (not including park facilities) ranging in age from 135 years old to 4 years old, although it is important to understand the age of the facility it is not the only factor to consider when planning long term. A total of 37% or \$45 million, of Town facilities are marked as being beyond the useful life prescribed for the specified category of building (Table 14.5). However, a total of 55% of facilities have 6 or more years of remaining useful life (Figure 14.2).

Table 14.5 Asset Useful Life Consumption – Facilities

	Useful Life Expired	0 - 5 Years Remaining	6-10 Years Remaining	Over 10 Years Remaining
A	\$32,581,427.82	\$7,338,610.00	\$25,485,869.87	\$29,959,887.54
B	\$9,229,590.00	\$1,578,300.00	\$3,207,890.00	\$5,342,802.00
C	\$3,399,021.48	\$510,648.59	\$0.00	\$2,818,050.89
Grand Total	\$45,210,039.30	\$9,427,558.59	\$28,693,759.87	\$38,120,740.43

Figure 14.2 Useful Life Consumption – Facilities



Useful life consumption will be used to help understand the needs of maintenance activities and long-term planning. Older buildings will bring their own unique needs and requirements, including but not limited to equipment that has aged out, below average technologies, and assets that require special disposal (asbestos, etc) for example. Additionally, many older buildings will be historic in nature and therefore complete replacement will not be considered.

14.1.6 CURRENT ASSET CONDITION

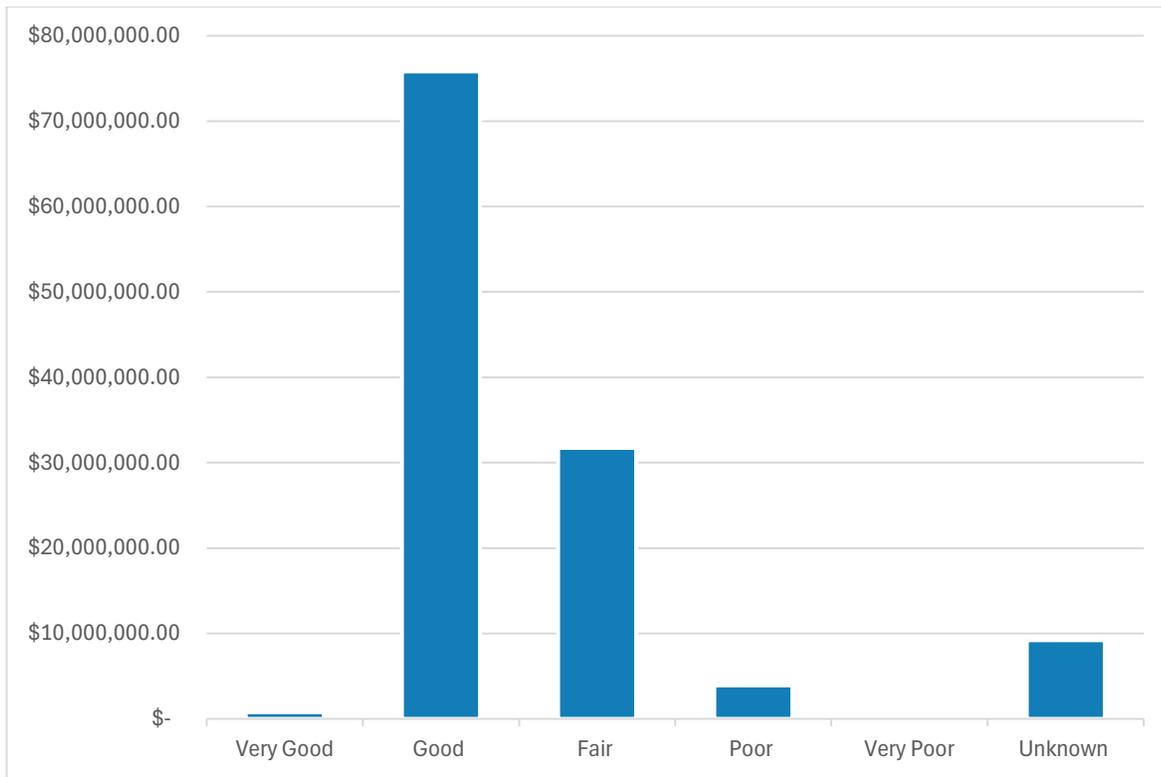
Asset condition was assessed in 2023. Assessments for category A and B facilities were completed by a third-party consultant. Category C facility assessments were completed by Town Staff, following criteria developed by the consultant.

The majority of the facility portfolio, 63%, has a condition rating of good to very good (Table 14.6, Figure 14.3). Therefore, the focus should be on the Fair to Poor ranked facilities for future improvements.

Table 14.6 Current Asset Condition – Facilities

	Very Good	Good	Fair	Poor	Unknown
A	\$446,169.01	\$56,693,369.75	\$28,493,769.00	\$1,921,300.00	\$7,811,187.47
B	\$0.00	\$17,020,494.00	\$1,260,700.00	\$0.00	\$1,077,388.00
C	\$327,913.59	\$2,111,416.19	\$1,979,390.00	\$2,000,000.00	\$309,001.18
Grand Total	\$774,082.60	\$75,825,279.94	\$31,733,859.00	\$3,921,300.00	\$9,197,576.65

Figure 14.3 Current Asset Condition - Facilities



14.1.7 FORECASTED REPLACEMENT NEEDS

Best on data available for construction date and replacement value the provisional average over the next 10 years for facilities is \$21,489,829 with a replacement average of \$8,783,075 over the same period (Figure 14.4 & Figure 14.5). These values represent the total replacement cost of the asset and not the individual components. As previously stated, in many cases a full replacement would not occur and therefore additional component information should be gathered for long term planning.

Figure 14.4 Provision Schedule - Facilities

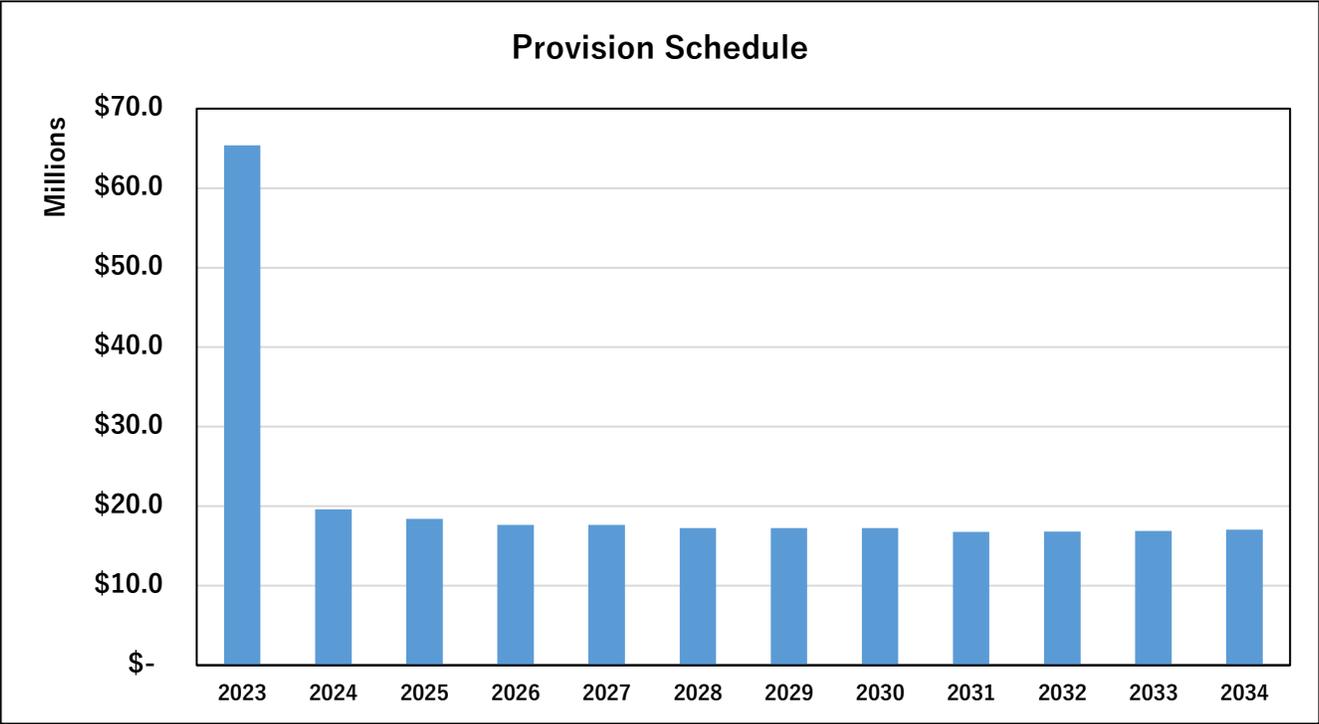
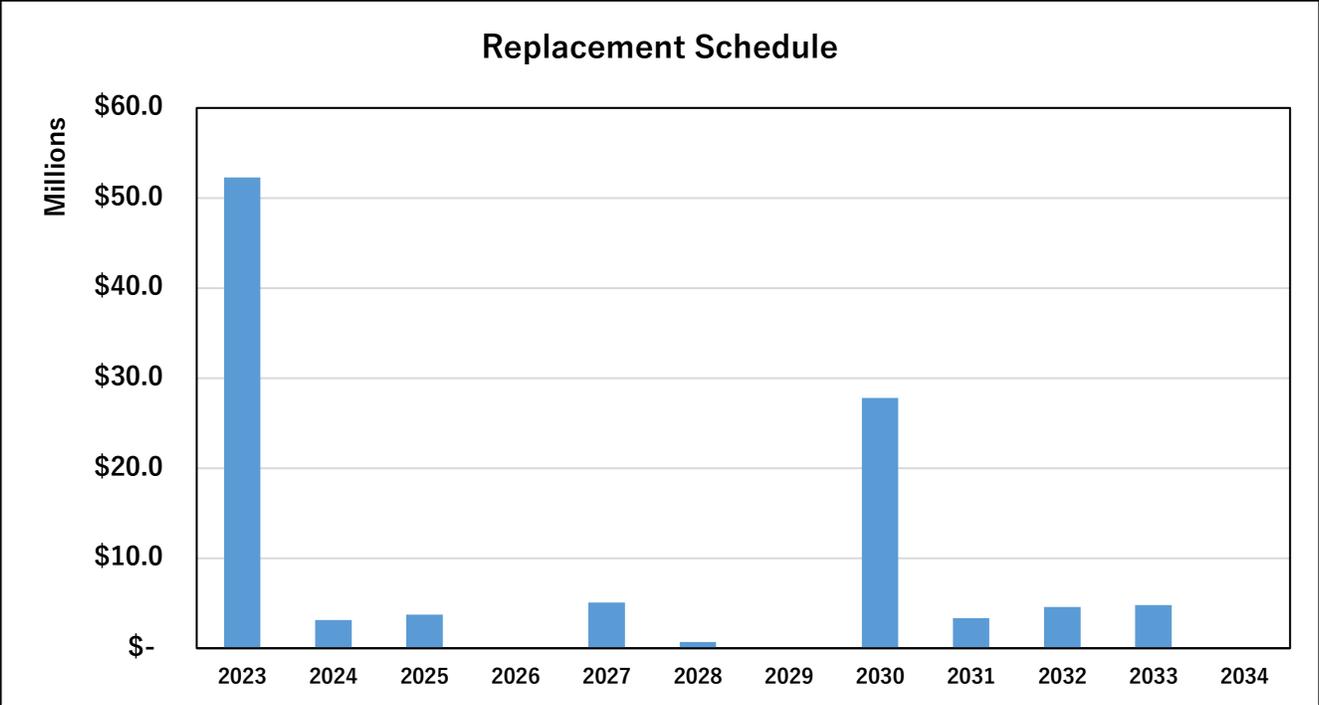
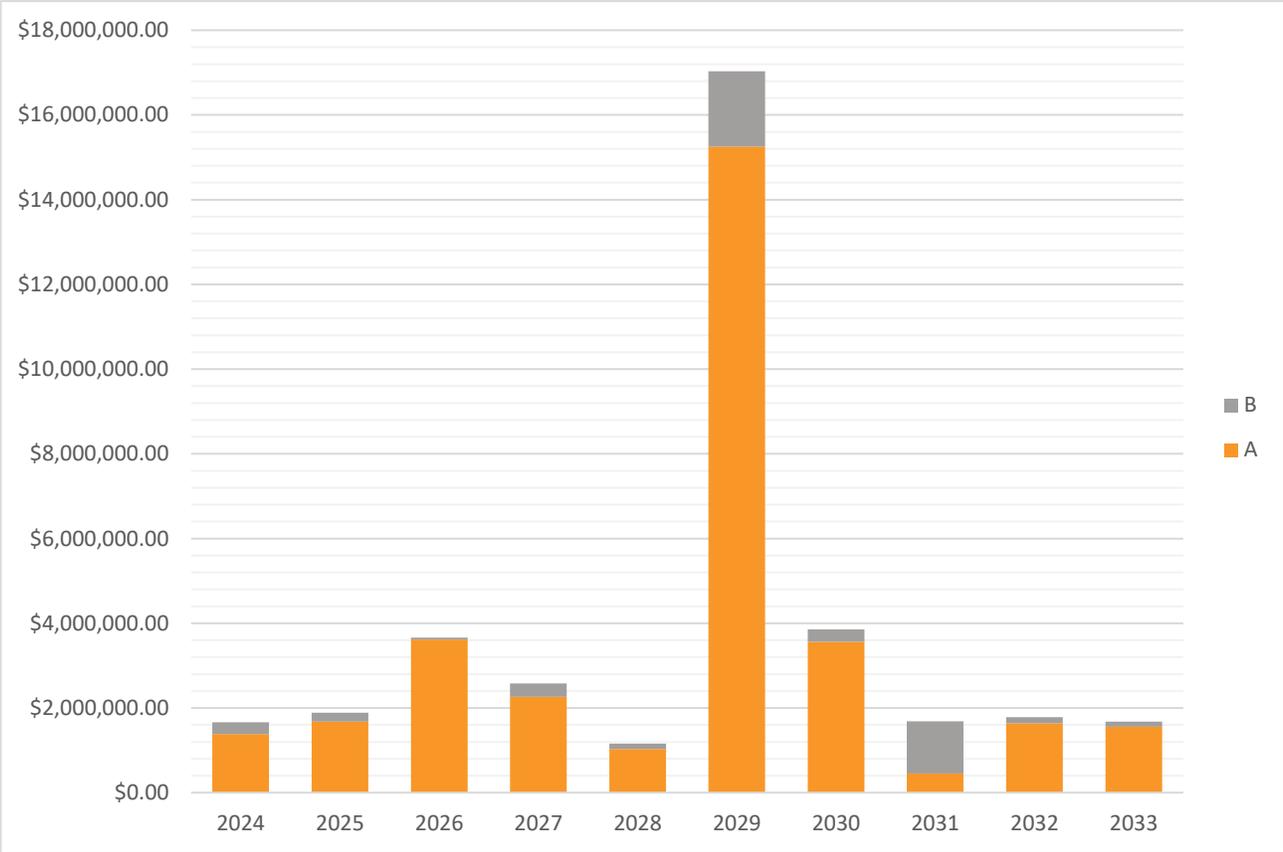


Figure 14.5 Replacement Schedule - Facilities



The building condition assessment completed by the third-party consultant was able to provide the forecasted replacement schedule for the assessed facilities (Category A & B). This replacement looks at component replacement or major repairs and not the replacement of the building in its entirety. Figure 14.6 shows the replacement schedule for assessed facilities (Category A & B) over the next 10 years.

Figure 14.6 Forecasted Replacement Schedule - Facilities



The replacement breaks the assessment down to building components that fall within the Uniformat levels 3 criteria. This includes but is not limited to doors, windows, parking lots, HVAC systems, etc. With an average spend of \$3.7 million dollars over the next 10 years with a peak spend in 2029 at a total of \$17 million dollars for category A and B facilities.

13.2 | PARKS



14.2 PARKS

14.2.1 ASSET INVENTORY

The current park inventory includes 59 sites which range from beach access points to large community parks (Table 14.7). Majority of Town parks can be defined as Community, Neighbourhood and or Parkettes. A map of all park sites can be found in Appendix 19.7.

Table 14.7 Asset Inventory – Parks

Asset Class	Asset Sub-class	Quantity
Parks	Beach Access Point	8
	Beach Front	7
	Community	11
	Conservation Area	1
	Greenspace	3
	Neighbourhood	16
	Parkette	12
	Other	1
		59

14.2.2 REPLACEMENT COST VALUATION

Park replacement cost is a complex number made up of park attributes (swing sets, splash pads, etc), facilities (washrooms, pavilions, etc), and landscaping. The Town's park portfolio has a total replacement cost of nearly \$88 million, \$50 million of which is dominated by community park sites (Table 14.8).

Table 14.8 Asset Replacement Cost - Parks

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Parks	Beach Access Point	\$114,451.56	\$915,612.46
	Beach Front	\$2,051,581.87	\$14,361,073.12
	Community	\$4,576,280.56	\$50,339,086.21
	Conservation A	\$757,718.62	\$757,718.62
	Greenspace	\$1,198,770.67	\$3,596,312.00
	Neighbourhood	\$940,335.76	\$15,045,372.21
	Parkette	\$195,792.90	\$2,349,514.79
	Other	\$517,272.35	\$517,272.35
			\$87,881,961.76

14.2.3 INVESTMENT LEVEL & USEFUL LIFE CONSUMPTION

Investment level and useful life consumption will not be reviewed for this asset class. Install year for majority of these asset classes are not recorded.

14.2.4 CURRENT ASSET CONDITION

Town parks are well maintained and cared for which has resulted in most parks receiving a very good to good condition rating (Table 14.9 & Figure 14.7). Condition was calculated by combining the condition of the individual attributes located at the park to create an overall condition.

Table 14.9 Current Asset Condition – Parks

	Very Good	Good	Fair
Beach Access Point	\$46,117.38	\$869,495.08	\$0.00
Beach Front	\$2,287,327.73	\$10,211,317.92	\$1,862,427.47
Community	\$24,775,140.05	\$23,786,624.70	\$1,777,321.45
Conservation A	\$0.00	\$757,718.62	\$0.00
Greenspace	\$2,069,365.21	\$1,526,946.78	\$0.00
Neighbourhood	\$1,477,904.12	\$13,567,468.09	\$0.00
Parkette	\$104,269.69	\$517,272.35	\$0.00
Other	\$0.00	\$2,245,245.09	\$0.00
Grand Total	\$30,760,124.18	\$53,482,088.65	\$3,639,748.93

Figure 14.7 Current Asset Condition - Parks



14.2.5 FORECASTED REPLACEMENT NEEDS

The Town recently completed master plans for 3 parks (North Shore, Jubilee and Helliwell), this process has been helpful in identifying typical user needs and replacement costs of various park amenities. These estimates can be used to forecast similar amenity costs in other parks. In addition, in 2025 the Town is planning a review and update of the Recreation Master Plan which will include a major update of the Parks and Trail Master Plan. This process will identify future needs and priorities for all Parks and Recreation facilities and will help to inform future decisions to determine replacement needs and long-term budget planning.

13.3 | TRAILS



14.3 TRAILS

14.3.1 ASSET INVENTORY

The Town's current trail network is made up of almost 40km of trail (Table 14.10). Trail track material can be one of the following 5 material types: gravel, hard packed gravel, natural, paved or wood chip. The current trail network is primarily hard packed gravel (13.67 km) or paved path (10.86 km). As the trail system continues to expand and accessibility continues to be a priority the Town can expect that hard packed gravel and paved paths continue to be the primary path type.

Table 14.10 Asset Inventory - Trails

Asset Class	Asset Sub-class	Quantity (km)
Trails	Gravel	2.05
	Hard Packed Gravel (Stone Dust)	13.67
	Natural	4.85
	Paved Path	10.86
	Wood Chip	8.51
		39.95

14.3.2 REPLACEMENT COST VALUATION

The replacement cost of Town trails is \$4 million (Table 14.11) with paved path making up 60% of the replacement cost.

Table 14.11 Asset Valuation - Trails

Asset Class	Asset Sub-class	Unit Replacement Cost ¹	Overall Replacement Cost
Trails	Gravel	\$60,000.00	\$122,889.75
	Hard Packed Gravel (Stone Dust)	\$74,200.53	\$1,014,595.81
	Natural	\$40,734.53	\$197,523.22
	Paved Path	\$234,082.29	\$2,542,800.81
	Wood Chip	\$29,514.52	\$251,259.75
			\$3,970,144.28

¹ Cost per km of trail based on 3m wide trail

14.3.3 ASSET USEFUL LIFE

The useful life of trails is dependent on the material type, as is the case with many assets. The average useful life of our trail network is 14 years with the longest being paved paths with 30 years and the shortest being wood chip at 5 years useful life (Table 14.12). Natural paths do not have a useful life as they do not require replacement.

Table 14.12 Asset Useful Life in Years - Trails

Asset Class	Asset Sub-class	Useful Life
Trails	Gravel	10
	Hard Packed Gravel (Stone Dust)	10
	Natural	N/A
	Paved Path	30
	Wood Chip	5
	Average Useful Life	14

14.3.4 TRAILS NEXT STEPS

Trail data will continue to be developed to provide a better understanding of the maintenance requirements and current condition of the Town's network. Trail data will include the trail surface as well as assets along the trail including signage, physical features (i.e. bridges, stairways), hazards, etc. By expanding the information, the Town has on its trail network better maintenance, more informed replacement, and community need will be highlighted for future planning.

13.4 | COMMUNITY SERVICE ASSETS



14.4 COMMUNITY SERVICE ASSETS

Community service assets for the purpose of this AMP are assets maintained by the Community Services Department that are not within a defined park area. Often these assets are seen in the downtown corridors. For a complete inventory of these assets including those within a defined park please see Appendix 19.8.

14.4.1 ASSET INVENTORY

Community service assets include assets that improve the service provided to the community both visually and functionally. As seen in Table 14.13 below these assets include benches, garbage receptacles, information signs and ground beds that are not within a park area. To date this asset category includes 622 assets, with benches and planters being 56% of total assets.

Table 14.13 Asset Inventory - Community Service Assets

Asset Class	Asset Sub-class	Quantity
Community Service Assets	Bench	181
	Bike Rack	50
	Bleacher	3
	Fire Pit	1
	Garbage Receptacle	53
	Ground Bed No Tree	2
	Ground Bed With Tree	61
	Information Sign	25
	Picnic Table	34
	Planter	168
	White Muskoka Chair	44
		622

14.4.2 REPLACEMENT COST VALUATION

Community services assets make up a portfolio of nearly \$800,000 (Table 14.14). A total of \$558,000 or 70% of assets being made up of benches, information signs, and planters.

Table 14.14 Asset Valuation - Community Service Assets

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Community Service Assets	Bench	\$1,000.00	\$181,000.00
	Bike Rack	\$750.00	\$37,500.00
	Bleacher	\$15,000.00	\$45,000.00
	Fire Pit	\$500.00	\$500.00
	Garbage Receptacle	\$1,000.00	\$53,000.00
	Ground Bed No Tree	\$500.00	\$1,000.00
	Ground Bed with Tree	\$1,000.00	\$61,000.00
	Information Sign	\$5,000.00	\$125,000.00
	Picnic Table	\$558.82	\$19,000.00
	Planter	\$1,500.00	\$252,000.00
	White Muskoka Chair	\$500.00	\$22,000.00

The benches seen in Table 14.14 is a portion of our memorial bench program that provides a revenue stream to the Municipality of an average \$21,692 annually. Total number of benches is 545 as seen in the community service asset summary in Appendix 19.8.

14.4.3 ASSET USEFUL LIFE

The average useful life of a community service asset is 9 years, with the shortest term being 1 year (season) for our ground beds.

Table 14.15 Asset Useful Life in Years - Community Service Assets

Asset Class	Asset Sub-class	Useful Life
Community Service Assets	Bench	10
	Bike Rack	10
	Bleacher	20
	Fire Pit	10
	Garbage Receptacle	7
	Ground Bed No Tree	1
	Ground Bed with Tree	10
	Information Sign	12
	Picnic Table	7
	Planter	10
	White Muskoka Chair	7
	Average Useful Life	9

14.4.4 INVESTMENT LEVEL & USEFUL LIFE CONSUMPTION

Investment level and useful life consumption will not be reviewed for this asset class. Install year for majority of these asset classes are not recorded.

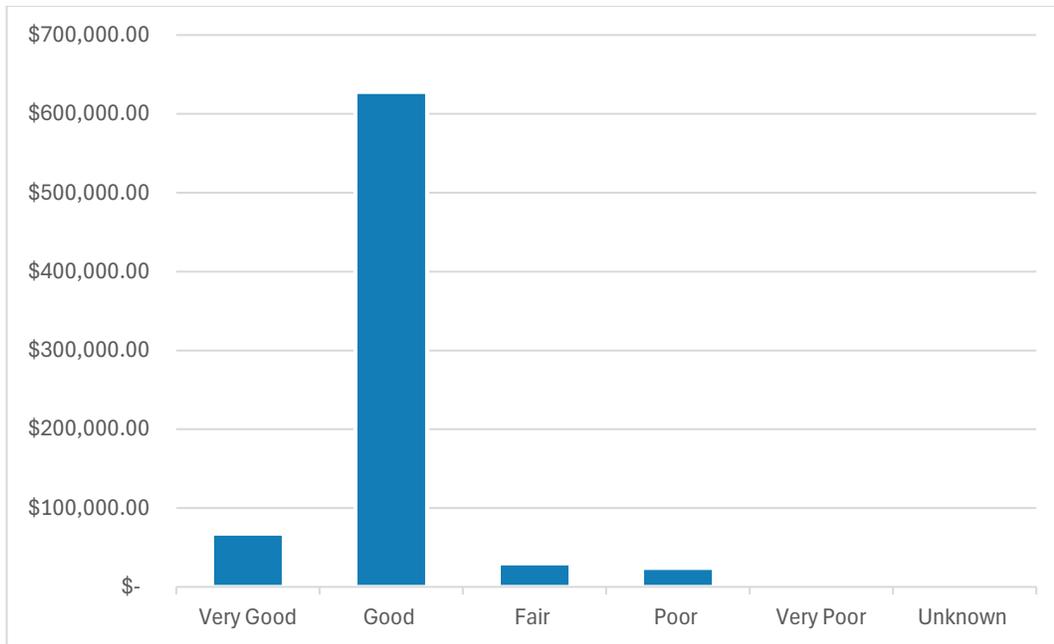
14.4.5 CURRENT ASSET CONDITION

Most assets fall within the very good to good condition rating, with 92% of assets within this category or a total of \$695,250 of the asset class (see Table 14.16 and Figure 14.8). This condition rating is the result of seasonal installation and removal of a number of these assets. For example, planters are removed in the fall and stored over the winter and put back in place in the spring. This process not only ensures condition is being assessed on a regular basis, but the life span of these assets is extended due to being able to avoid the impact of harsh winter weather.

Table 14.16 Current Asset Condition - Community Service Assets

Asset Sub-class	Very Good	Good	Fair	Poor	Very Poor	Unknown
Bench	\$46,000.00	\$117,000.00	\$0.00	\$15,000.00	\$2,000.00	\$1,000.00
Bike Rack	\$3,000.00	\$33,750.00	\$750.00	\$0.00	\$0.00	\$0.00
Fire Pit	\$0.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00
Garbage Receptacle	\$0.00	\$49,000.00	\$4,000.00	\$0.00	\$0.00	\$0.00
Ground Bed No Tree	\$0.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00
Ground Bed with Tree	\$7,000.00	\$47,000.00	\$4,000.00	\$3,000.00	\$0.00	\$0.00
Information Sign	\$0.00	\$105,000.00	\$15,000.00	\$5,000.00	\$0.00	\$0.00
Picnic Table	\$7,500.00	\$7,000.00	\$3,500.00	\$1,000.00	\$0.00	\$0.00
Planter	\$0.00	\$250,500.00	\$1,500.00	\$0.00	\$0.00	\$0.00
White Muskoka Chair	\$4,000.00	\$17,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00
Grand Total	\$67,500.00	\$627,750.00	\$29,750.00	\$24,000.00	\$2,000.00	\$1,000.00

Figure 14.8 Current Asset Condition – Community Service Assets



14.4.6 FORECASTED REPLACEMENT NEEDS

Due to lack of install year for many of these assets forecasted replacement need has not been calculated. However, based on depreciation an estimated \$84,000 should be budgeted annually for repairs or replacements.

13.5 | FLEET



14.5 FLEET

Fleet has been categorized into 5 sub-classes as outlined in Table 14.17 below. These categories allow the Town to understand the diversity of our fleet portfolio and it has been incorporated into our fleet identification process.

Table 14.17 Fleet Categories

Categories	Description
A	½T, ¾ T, van, passenger vehicle
B	1T
C	Heavy equip: plows, water truck sweeper, etc
D	Heavy equip: tractors, trackless, loader, Zamboni, etc
E	Light Equipment: Mowers, trailers, aerators, discer, etc.

14.5.1 ASSET INVENTORY

The Town's fleet is made up of 162 active units. Which is heavily weighted in passenger vehicles and D level heavy equipment. This heavy equipment is primarily made up of our zero turn tractors and sidewalk machines.

Table 14.18 Asset Inventory - Fleet

Asset Class	Asset Sub-class	Quantity
Fleet	A - Passenger Vehicle	62
	B - 1 Ton	12
	C - Heavy Equipment	23
	D - Heavy Equipment	48
	E - Light Equipment	17
		162

14.5.2 REPLACEMENT COST VALUATION

The fleet portfolio consists of \$20.5 million of assets. Understandably, the two heavy equipment categories make up 77% or a total of \$15.8 million of total replacement value (Table 14.19). Replacement value in these categories' ranges from approx. \$13,000 to \$1.6 million for individual assets.

Table 14.19 Asset Valuation - Fleet

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Fleet	A - Passenger Vehicle	\$48,444.76	\$3,003,575.20
	B - 1 Ton	\$119,776.87	\$1,437,322.40
	C - Heavy Equipment	\$372,928.34	\$8,577,351.80
	D - Heavy Equipment	\$150,751.25	\$7,236,059.80
	E - Light Equipment	\$18,578.07	\$315,827.16

14.5.3 ASSET USEFUL LIFE

Optimal useful life for fleet assets can be seen in Table 14.20 below. Passenger vehicles have the shortest useful life of 7 years, while sub-class C-Heavy Equipment has the longest at an average of 16 years. These are optimal useful life for the vehicles meaning that if maintenance schedules are adhered to minimal breakdown should be experienced.

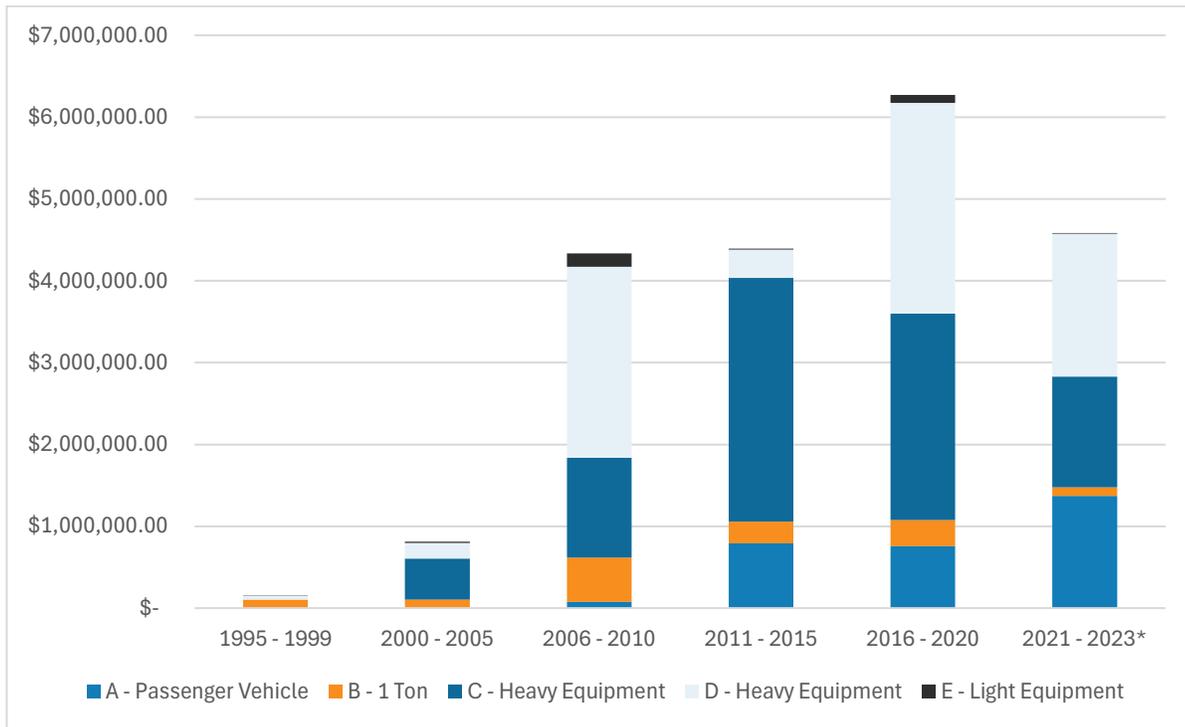
Table 14.20 Asset Useful Life in Years - Fleet

Asset Class	Asset Sub-class	Useful Life
Fleet	A - Passenger Vehicle	7
	B - 1 Ton	8
	C - Heavy Equipment	16
	D - Heavy Equipment	10
	E - Light Equipment	15
	Average Useful Life	11

14.5.4 INVESTMENT LEVEL

Investment levels have been relatively constant from 2006 to 2015 with a spike in the 2016-2020 timeframe. The average spent year over year between 2006 to 2015 was less than \$900,000 per year, totaling \$4.3 million over 5 years. 2016 to 2020 saw an increase to approximately \$1.2 million per year, resulting in a \$6.2 million total for the 5-year span. The trend for 2021 to present is \$1.5 million per year which will result in approximately \$7.4 million over 5 years if the trend continues.

Figure 14.9 Yearly Investment - Fleet



* 2021 to current date and not 5 year increment

** Based on 2023 replacement costs

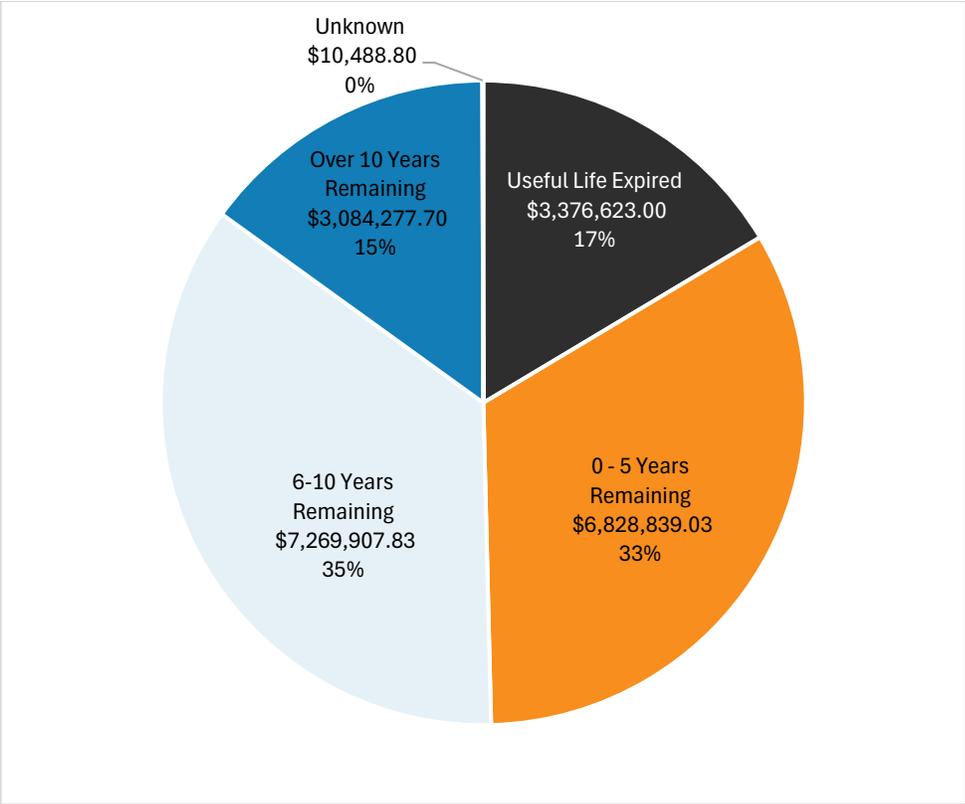
14.5.5 USEFUL LIFE CONSUMPTION

Useful life of fleet assets is dependent on the type of asset, as seen in Table 14.20 above. The current useful life consumption of fleet assets shows 50% of fleet requiring replacement in the next 5 years (Figure 14.10). With a total replacement cost of \$10.2 million dollars for assets needing repair in the next 5 years, \$3.4 million of which are assets currently beyond their optimal replacement date (Table 14.21).

Table 14.21 Useful Life Consumption - Fleet

	Useful Life Expired	0 - 5 Years Remaining	6-10 Years Remaining	Over 10 Years Remaining	Unknown
A - Passenger Vehicle	\$748,356	\$1,060,557	\$1,194,662	\$0	\$0
B - 1 Ton	\$908,743	\$422,864	\$105,716	\$0	\$0
C - Heavy Equipment	\$498,493	\$1,495,086	\$3,534,189	\$3,049,585	\$0
D - Heavy Equipment	\$1,154,218	\$3,723,692	\$2,358,150	\$0	\$0
E - Light Equipment	\$66,813	\$126,641	\$77,192	\$34,693	\$10,489
Grand Total	\$3,376,623	\$6,828,839	\$7,269,908	\$3,084,278	\$10,489

Figure 14.10 Useful Life Consumption - Fleet



14.5.6 CURRENT ASSET CONDITION

Current asset condition is based on useful life consumption as well as asset assessment by our subject experts. The majority of fleet assets fall below the Very Good to Good condition rating meaning that the assets require attention as they are showing signs of deterioration and have deficiencies. At almost \$6 million of fleet falling within the very poor rating (Table 14.22).

Table 14.22 Current Asset Condition - Fleet

	Very Good	Good	Fair	Poor	Very Poor
A - Passenger Vehicle	\$1,255,598	\$117,253	\$477,501	\$186,688	\$966,535
B - 1 Ton	\$105,716	\$0	\$0	\$317,148	\$1,014,459
C - Heavy Equipment	\$1,353,724	\$1,979,155	\$3,250,894	\$1,102,585	\$890,993
D - Heavy Equipment	\$1,113,439	\$978,075	\$1,229,617	\$993,850	\$2,921,079
E - Light Equipment	\$11,250	\$78,189	\$32,934	\$10,094	\$183,360
Grand Total	\$3,839,728	\$3,152,673	\$4,990,947	\$2,610,364	\$5,976,425

When considering fleet assets and the resulting condition of these assets, it is important to understand the cost of maintaining and the possible loss of service of these assets. A total of \$7.6 million of fleet assets (Fair to Poor condition rating) are going to require more than routine maintenance to ensure continued service.

Figure 14.11 Current Asset Condition - Fleet



14.5.7 FORECASTED REPLACEMENT NEEDS

As a result of the large backlog in fleet both the provisional schedule and the optimal replacement schedule see average spend in the millions year over year. Provisional schedule has an average spend of \$5 million per year to ensure replacement requirements are funded (Figure 14.12).

Figure 14.12 Provisional Schedule - Fleet

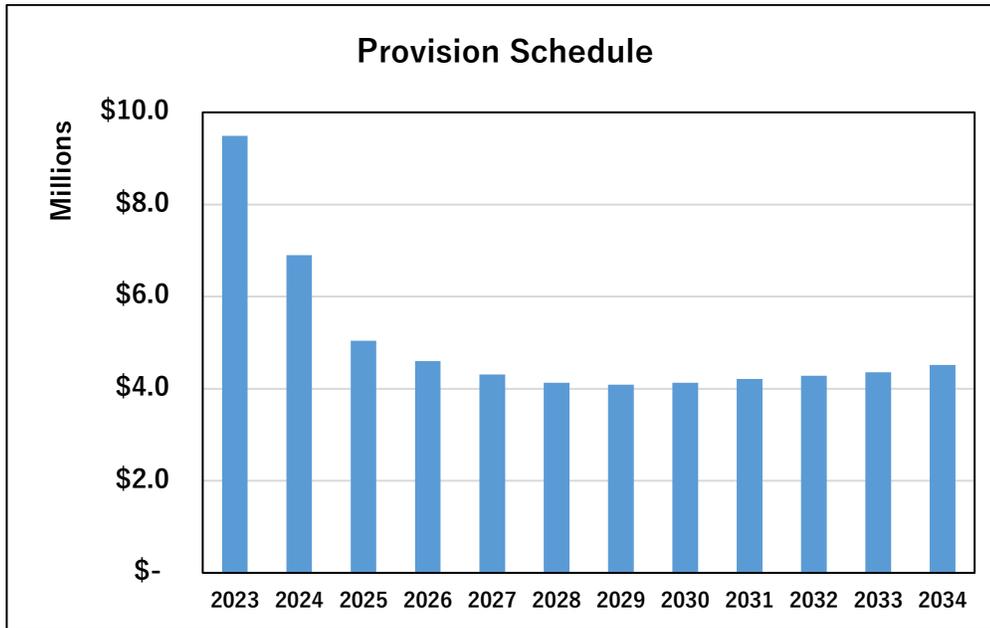
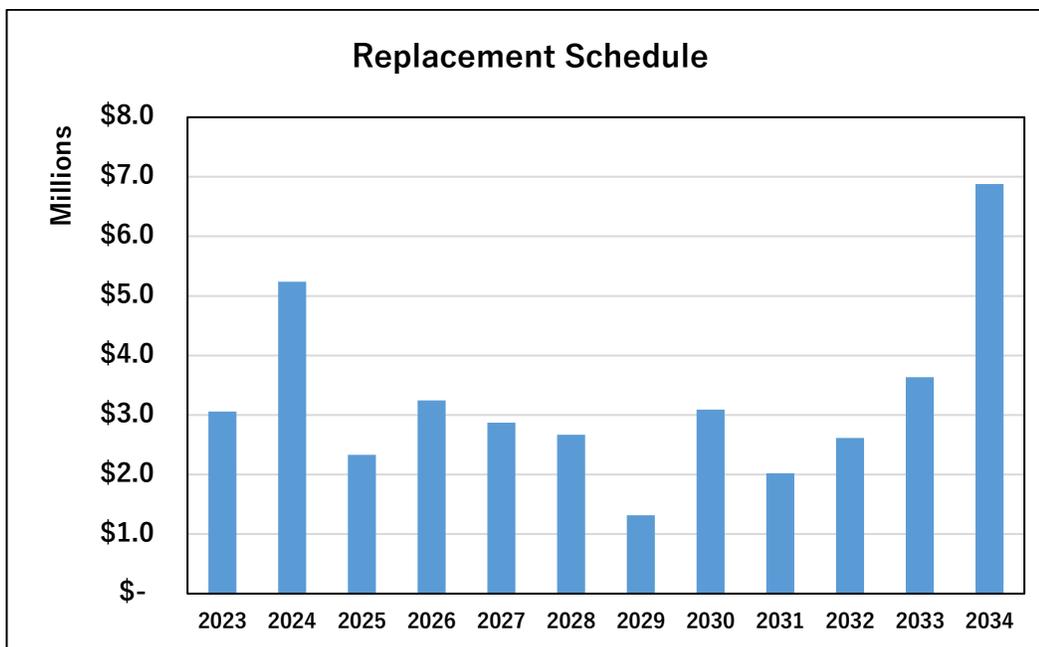
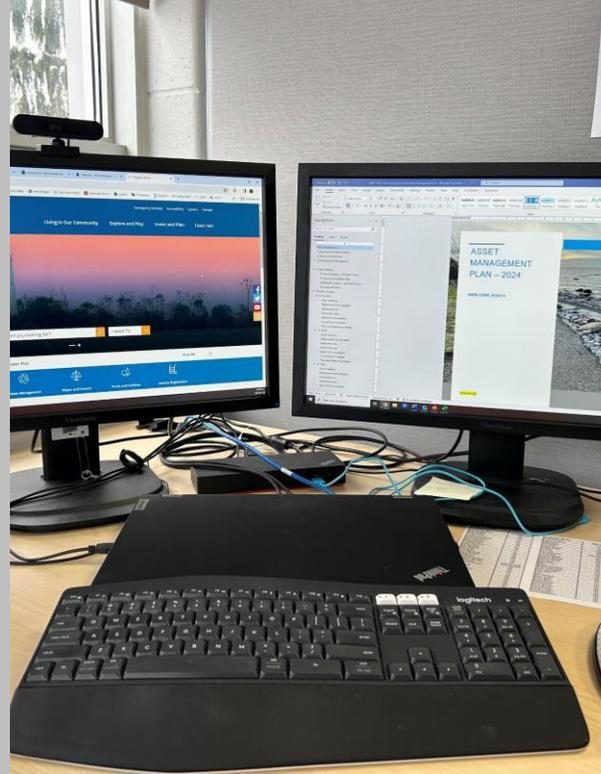


Figure 14.13 Replacement Schedule - Fleet



Similarly, the replacement schedule has an average spend of \$3.2 million over the next 10 years to keep in line with optimal fleet replacement (Figure 14.13).

13.6 | IT EQUIPMENT



14.6 IT EQUIPMENT

It should be noted that the laptop sub-class for the IT equipment inventory includes not only the laptop but also the equipment required for a useable workstation. In this case it includes the cost of monitors and docks. Smaller IT equipment such as mouse and keyboards have not been included in this inventory as they are minor costs.

14.6.1 ASSET INVENTORY

Workstations, particularly laptops and desktop computers take up most of the asset inventory (Table 14.23). Other IT Equipment as defined by this asset management plan includes servers, firewalls, battery backup, etc and can be reviewed below.

Table 14.23 Asset Inventory - IT Equipment

Asset Class	Asset Sub-class	Quantity
IT Equipment	Cameras	2
	Desktop	48
	Firewall	7
	Laptop	115
	NVR	2
	Other	3
	Server	5
	Storage Array	4
	Switch	16
	Tablet	16
	UPS Battery Backup	11
	Wireless	1
		230

14.6.2 REPLACEMENT COST VALUATION

The current replacement cost for all IT equipment is \$845,650 which can be seen broken down into asset sub-classes in Table 14.24. A large part of investment is in desktop and laptop equipment for staff.

Table 14.24 Asset Valuation - IT Equipment

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
IT Equipment	Cameras	\$6,250.00	\$12,500.00
	Desktop	\$1,764.58	\$84,700.00
	Firewall	\$3,071.43	\$21,500.00
	Laptop	\$2,449.57	\$281,700.00
	NVR	\$30,400.00	\$60,800.00
	Other	\$17,500.00	\$52,500.00
	Server	\$21,000.00	\$105,000.00
	Storage Array	\$28,000.00	\$112,000.00
	Switch	\$3,868.75	\$61,900.00
	Tablet	\$1,243.75	\$19,900.00
	UPS Battery Backup	\$1,013.64	\$11,150.00
	Wireless	\$22,000.00	\$22,000.00

14.6.3 ASSET USEFUL LIFE

The average useful life of IT equipment is 6 years with the longest life span being 9 years and the shortest 5 years. With improvements to technology, replacement may occur more often than the currently defined useful life. It is up to the discretion of the IT Department to determine when equipment requires replacement outside of the useful life, initiated by either technology improvement or equipment condition.

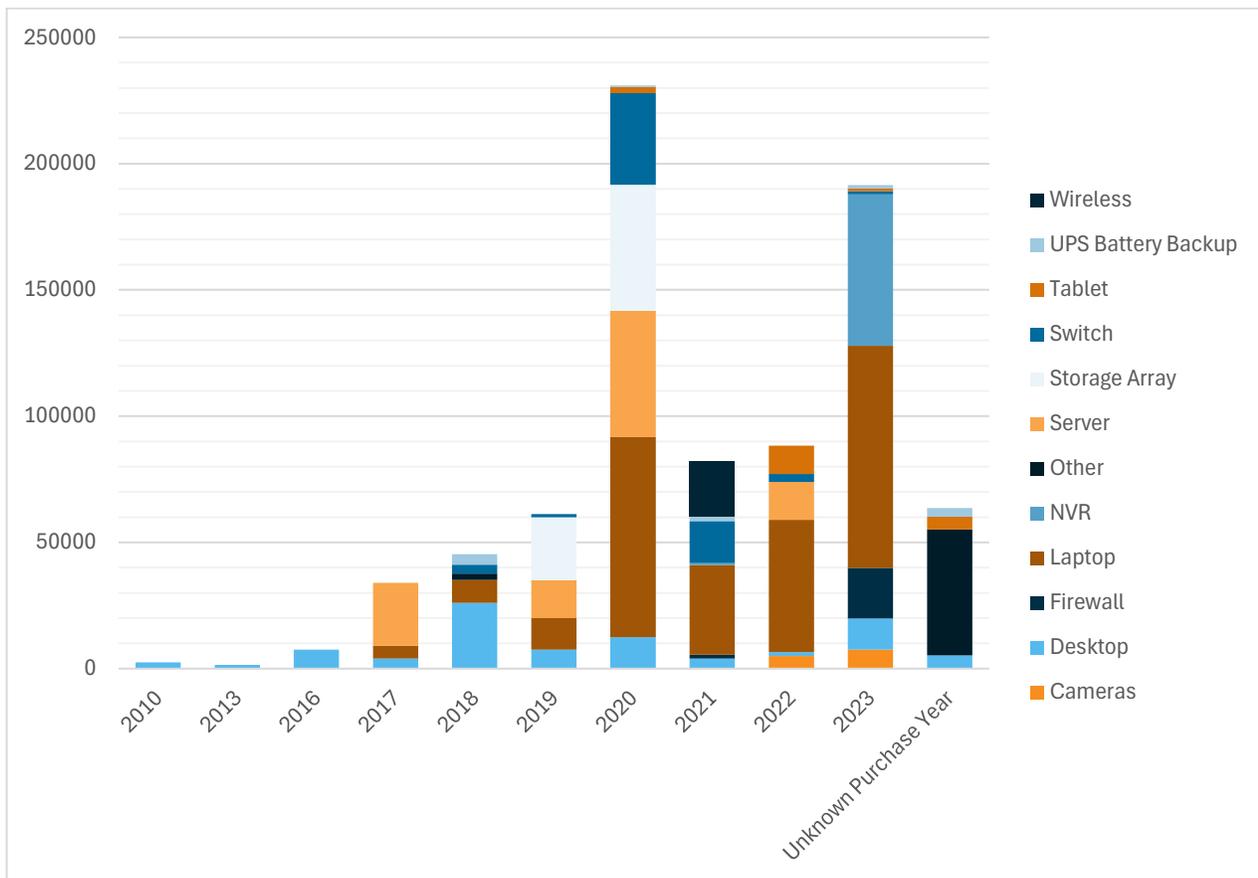
Table 14.25 Asset Useful Life in Years - IT Equipment

Asset Class	Asset Sub-class	Useful Life
IT Equipment	Cameras	9
	Desktop	5
	Firewall	6
	Laptop	5
	NVR	7
	Other	5
	Server	5
	Storage Array	5
	Switch	9
	Tablet	5
	UPS Battery Backup	6
	Wireless	8
	Average Useful Life	6

14.6.4 INVESTMENT LEVEL

IT Equipment has drastically changed over the last 10 years. With advancements in technology and changes to the needs of the Town, IT has had to keep pace. Figure 14.14 clearly shows the changes to assets in this category, and also clearly shows the impact Covid had in IT equipment needs. With the increased need for flexibility in the work environment the Town saw increased laptop purchases, improvement to our servers and the way we store our information.

Figure 14.14 Asset Investment Level - IT Equipment



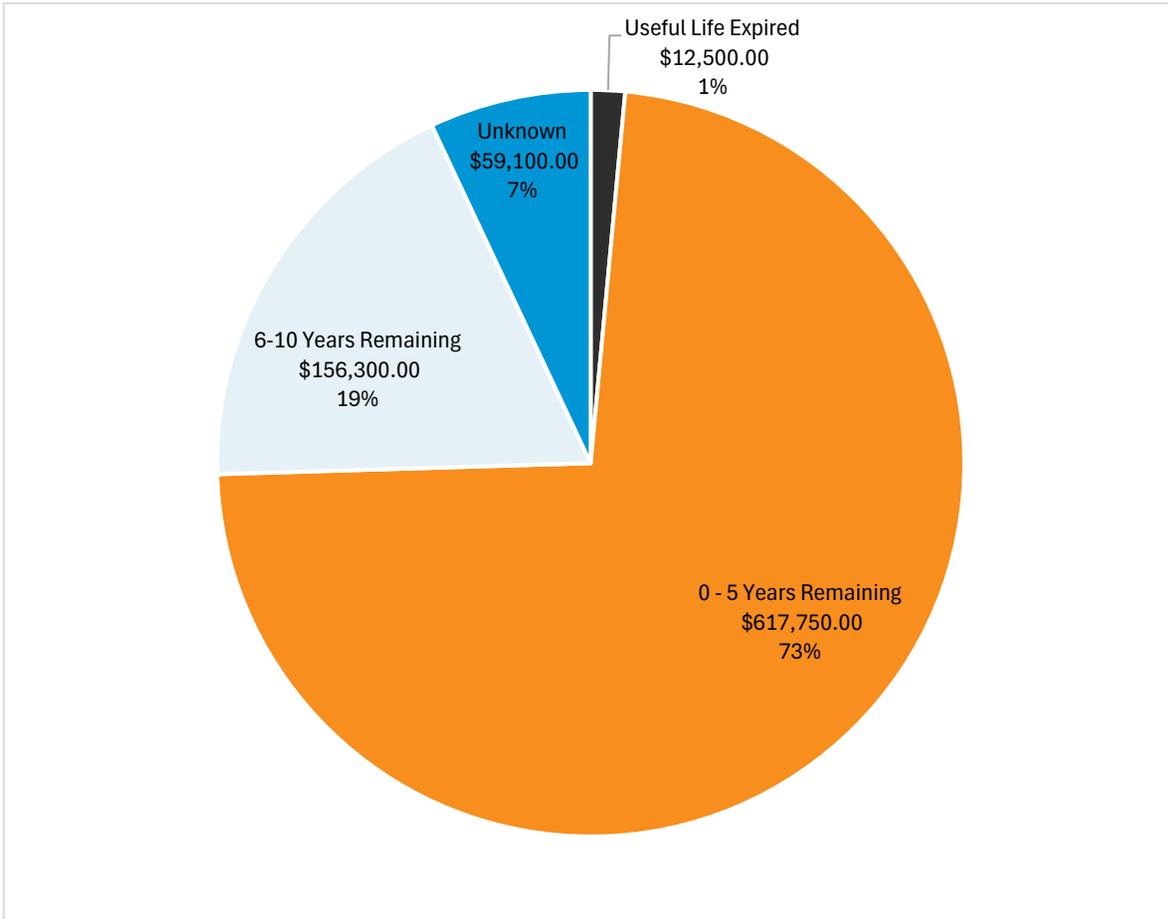
14.6.5 USEFUL LIFE CONSUMPTION

Due to the short lifecycle of most IT equipment, it is presumed that the assets included in the registry would fall within the 0-5 years of remaining useful life. A total 74% (Figure 14.15) of IT equipment will require replacement due to end of life over the next 0-5 years, that is a total of \$6630,250 (Table 14.26).

Table 14.26 Asset Useful Life Consumption - IT Equipment

	Beyond Useful Life	0-5 Yrs Remaining	6-10 Yrs Remaining	Unknown
Cameras	\$0.00	\$0.00	\$12,500.00	\$0.00
Desktop	\$10,000.00	\$66,700.00	\$5,300.00	\$2,700.00
Firewall	\$0.00	\$1,500.00	\$20,000.00	\$0.00
Laptop	\$2,500.00	\$266,200.00	\$13,000.00	\$0.00
NVR	\$0.00	\$0.00	\$60,800.00	\$0.00
Other	\$0.00	\$2,500.00	\$0.00	\$50,000.00
Server	\$0.00	\$105,000.00	\$0.00	\$0.00
Storage Array	\$0.00	\$112,000.00	\$0.00	\$0.00
Switch	\$0.00	\$41,000.00	\$20,900.00	\$0.00
Tablet	\$0.00	\$15,700.00	\$1,200.00	\$3,000.00
UPS Battery Backup	\$0.00	\$7,150.00	\$600.00	\$3,400.00
Wireless	\$0.00	\$0.00	\$22,000.00	\$0.00
Grand Total	\$12,500.00	\$617,750.00	\$156,300.00	\$59,100.00

Figure 14.15 Asset Useful Life Consumption - IT Equipment



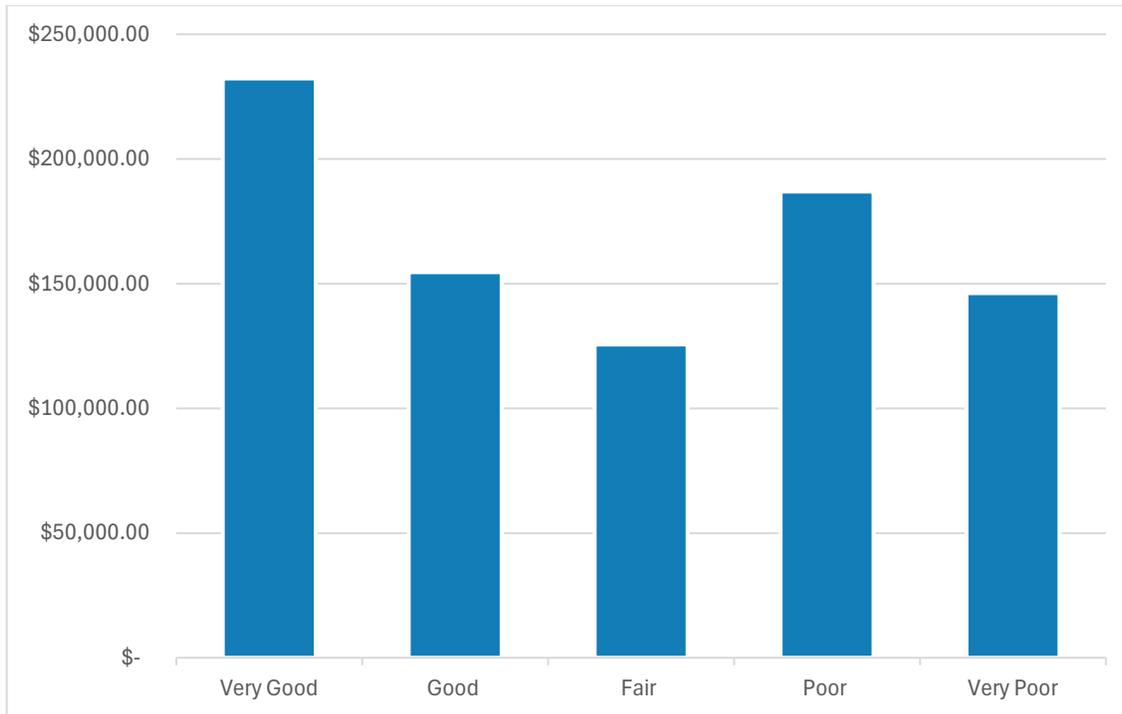
14.6.6 CURRENT ASSET CONDITION

The current condition of IT equipment seems to be evenly distributed among categories with an average of 20% of assets within each condition category. A total of 27% or \$232,300 of all IT equipment assets are found to be in very good condition (Table 14.27). Condition was calculated based on useful life of the equipment and was not assessed at this time. Priority should be given to the 54% of assets or \$458,750 that fall in the range of fair to very poor condition (Figure 14.16).

Table 14.27 Current Asset Condition - IT Equipment

	Very Good	Good	Fair	Poor	Very Poor
Cameras	\$12,500.00	\$0.00	\$0	\$0	\$0
Desktop	\$13,900.00	\$0.00	\$4,500	\$28,400	\$37,900
Firewall	\$20,000.00	\$1,500.00	\$0	\$0	\$0
Laptop	\$93,000.00	\$47,500.00	\$39,500	\$76,000	\$25,700
NVR	\$60,000.00	\$800.00	\$0	\$0	\$0
Other	\$0.00	\$5,000.00	\$0	\$0	\$47,500
Server	\$0.00	\$15,000.00	\$0	\$75,000	\$15,000
Storage Array	\$25,000.00	\$0.00	\$75,000	\$0	\$12,000
Switch	\$4,300.00	\$52,800.00	\$4,800	\$0	\$0
Tablet	\$2,400.00	\$10,000.00	\$0	\$4,500	\$3,000
UPS Battery Backup	\$1,200.00	\$0.00	\$1,800	\$3,050	\$5,100
Wireless	\$0.00	\$22,000.00	\$0	\$0	\$0
Grand Total	\$232,300.00	\$154,600.00	\$125,600.00	\$186,950.00	\$146,200.00

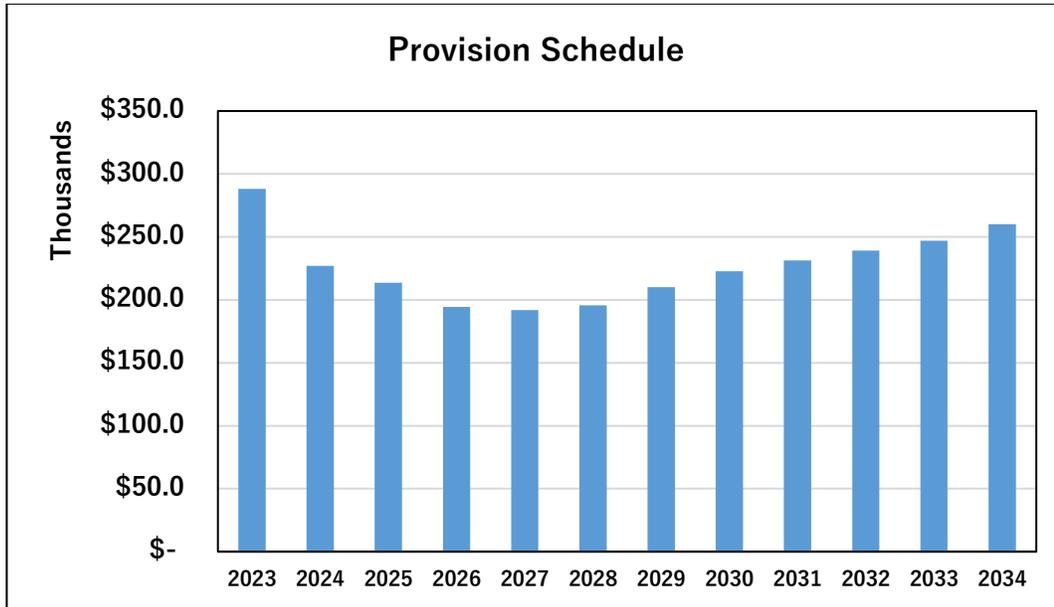
Figure 14.16 Current Asset Condition - IT Equipment



14.6.7 FORECASTED REPLACEMENT NEEDS

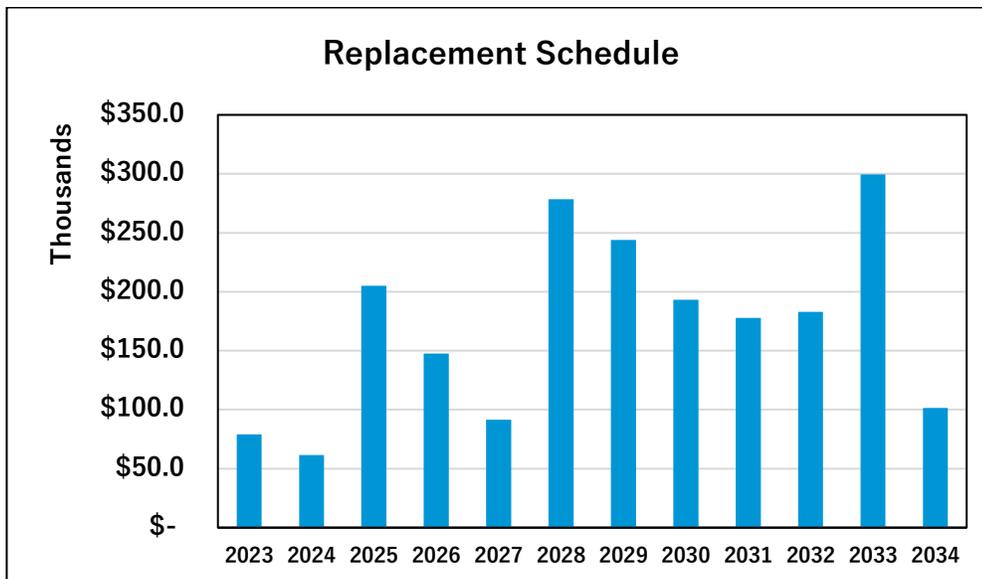
Average annual provision for the next 10 years is approximately \$226,742 (Figure 14.17).

Figure 14.17 Provision Schedule - IT Equipment

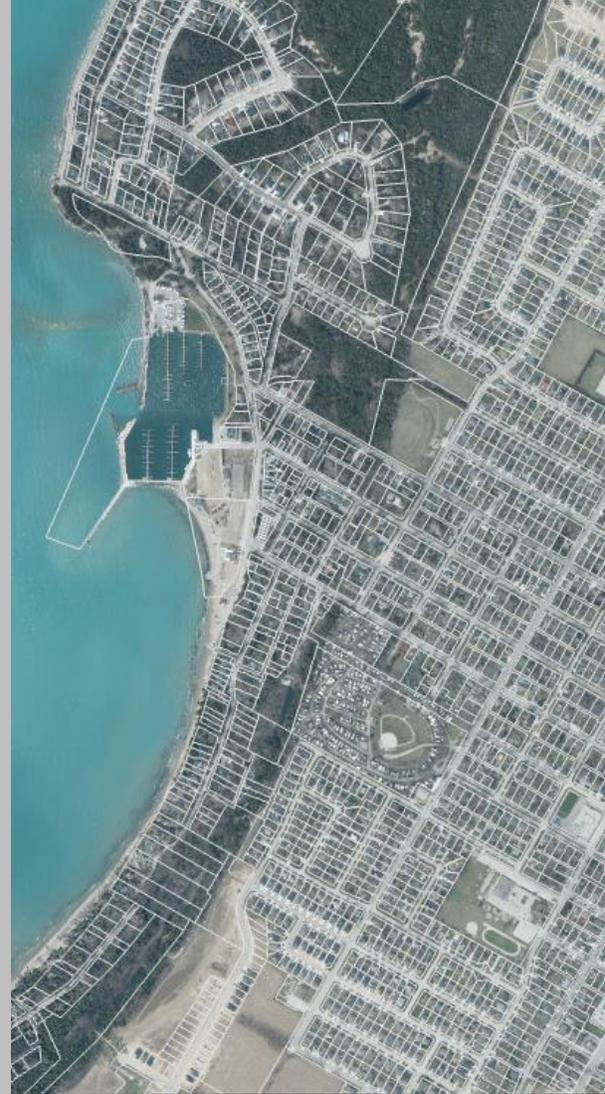


The average annual replacement budget for the next 10 years is approximately \$171,827 (Figure 14.18).

Figure 14.18 Replacement Schedule - IT Equipment



13.7 | LAND



14.7 LAND

The Town currently owns a total of 244 land parcels totaling 1,426 acres with an assessed value of \$74 million (Table 14.28). The assessed value of this land is based on MPAC data which is up to date as of 2016. Parcels have been classified into 6 categories to better understand our land inventory.

Table 14.28 Town Land Inventory

Land Classification	Number of Parcels	Area (acres)	Assessed Value (\$)	Approx Value Per Acre
Trail/Road Allowance	84	59.06	\$3,377,800	\$ 57,194.37
Undeveloped/Other	64	233.59	\$7,203,400	\$ 30,837.47
Outdoor Recreation Area	45	533.09	\$21,935,800	\$ 41,148.39
Contains Town Building	32	565.43	\$39,384,000	\$ 69,653.21
Contains Private Building	15	33.84	\$2,153,500	\$ 63,634.22
Parking	4	1.32	\$284,000	\$ 215,183.53
Grand Total	244	1,426.33	\$74,338,500	\$ 79,608.53

14.7.1 CATEGORY DEFINITIONS

Trail/Road Allowance – 59.06 acres

Trails include the Town’s maintained trail network consisting of both natural and paved paths.

Road allowances refer to allowances originally laid out for roads by a Crown surveyor, including both road allowances shown on an original township survey and road allowances shown along the water in a plan of subdivision. Road allowances are generally 66 feet in width.²

Additionally, many of these parcels contains buried infrastructure.

Undeveloped/Other – 233.59 acres

Undeveloped land is a vacant parcel without any utilities, buildings or other additions. In addition, this classification includes parcels that do not fall into the other categories, such as our gravel pits, storm water ponds, etc.

² (Government of Ontario, 2024)

Outdoor Recreation Area – 533.09 acres

This includes all Town parklands. These areas include parcels designed or designated for recreational areas and include parkettes, parks, dog-parks and multi-use parcels. Outdoor recreation area was prioritized as a classification weighting.

Contains Town Property – 565.43 acres

These parcels contain all Town owned facilities. These parcels include the Municipal Office site, Southampton Town Hall, and the landfill.

Contains Private Property – 33.84 acres

These parcels are owned by the Town, but the property is owned or leased by a second party. For example, the Curling Club and tennis courts.

Parking – 1.32 acres

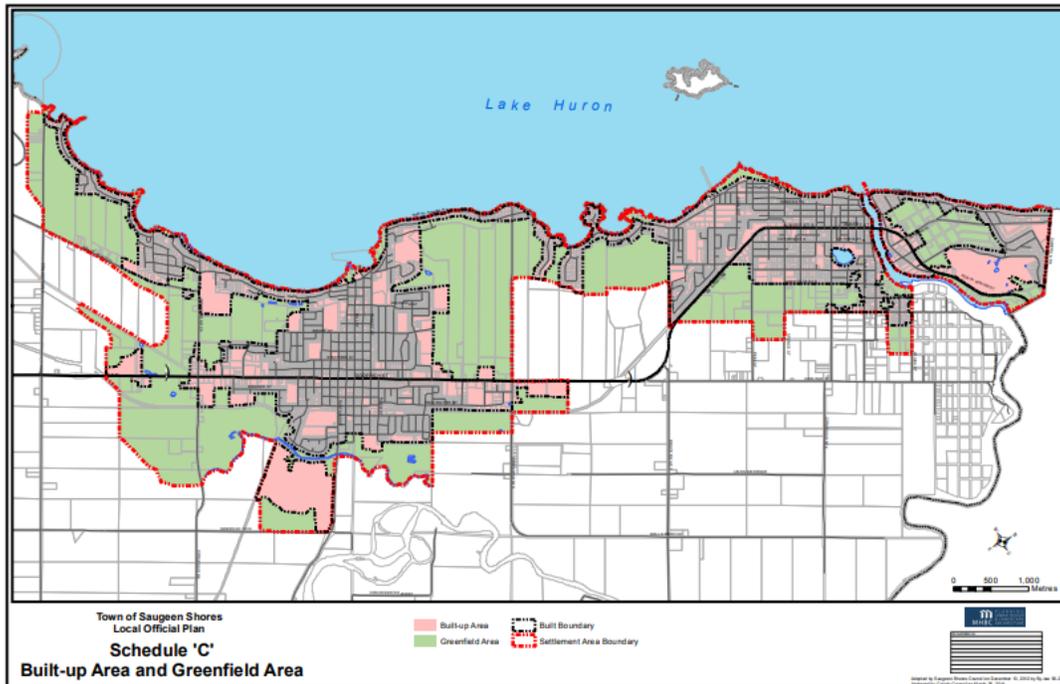
These parcels make up our town-owned municipal parking lots not connected to recreational areas.

See Appendix 19.7 for map of location of land classifications.

14.7.2 TREE CANOPY

The Town is currently developing an Urban Tree Canopy Plan (UTCP) alongside Williams and Associates to assess overall tree health and canopy in the Urban Settlement Area of Saugeen Shores (Figure 14.19).

Figure 14.19 – Urban Settlement Area



The Plan will also look to assess current procedures and processes such as, tree maintenance, tree planting as well as Town policies to provide recommendations on how to improve these processes to better preserve and grow quality tree canopy in Saugeen Shores. In addition, the UTCP will also include the drafting of a Tree By-law in consultation with the community to better protect significant trees and their canopy cover in Saugeen Shores.

Using Google Earth imagery from 2021 the consultant evaluated the canopy cover for the selected boundaries. In this study canopy cover includes tree canopy and shrub canopy, including woodlands and other natural areas.

The study estimated the canopy cover for the Municipal boundary was 36.1% which includes individual trees, shrubs and thicket, and woodlots. The estimated canopy cover for the settlement area was 39.6%, 8.6% of which was on Municipal zoned land (See Appendix 19.9 for area boundaries).

The study has made the following long-term recommendations for the Town:

1. Develop and update the Official Plan including Section 2.6 Environmental Features to strengthen policies that will maintain and improve Urban Tree Canopy Cover in Saugeen Shores.
2. Develop policies with tree-planting requirements to ensure canopy cover is maintained and increased through the development process.
3. Develop a plan to reforest the closed landfill in Port Elgin to substantially increase canopy cover.
4. Develop plans to address the planting of trees on municipal properties, such as road allowances, parks, and facilities.
5. Consider planting small high-density patches (i.e. Miyawaki or micro forests) of trees in municipal parks and facilities to increase canopy cover.
6. Work with residents and businesses to plant trees, where sensible, through stewardship campaigns and partnership and funding opportunities.

The Urban Tree Canopy Plan has a projected completion date of September 2024 (Table 14.29). The Town will be working to implement the recommendations and UTCP as provided by Williams and Associates and as approved by Council to ensure that Canopy Cover is maintained, monitored and continues to grow in Saugeen Shores.

Table 14.29 - Urban Tree Canopy Plan Timeline

Timeline	Deliverable	Description
January 2024	Project Begins	
February	Windshield Survey Report	Assessment of tree within Saugeen Shores are assessed with Town Arborist to determine overall health and quality of trees and canopy
March	Canopy Cover Analysis Report	Consultants utilize i-tree canopy and existing town GIS data to analyze types and amount of canopy in different zones as well as available plantable space in Saugeen Shores.
April	Online Survey launch & Engagement Plan Report	Survey for UTCP is launched on engagement site as well as completion of Engagement Plan Report.
May	Public meeting	Survey for UTCP closes and notification for Public Meeting is circulated for Thursday May 23 rd . Meeting will provide updates on the current findings, developments of the plan with further opportunity for input.
June	20-Year UTCP with 5-Year operating Plan	Draft Plan to be provided to Town staff regarding cost estimates for recommended activities (e.g., tree planting) over time to reach level of desired service.
July	Council for adoption of Tree-By law	Project team to bring Tree By-law to council for approval.
August	Presentation to Senior Management	Presentation to Senior management of overall Complete UTCP Draft for final comment/ revisions of UTCP before going to council.
September, 2024	Council for approval of final UTCP and Delivery of UTCP	Presentation to council to approve the final proposed UTCP and delivery of final project/plan to Town staff.

13.8 |
TRANSPORTATION
ASSETS



14.8 TRANSPORTATION ASSETS – STREETLIGHTS

For the purposes of this report street light sub-classes are defined as the following:

Decorative Light Standard: Decorative street lighting, often seen in the Town’s downtown corridors.

Hydro Pole: a streetlight attached to a hydro pole.

Light Standard: a streetlight, light pole, lamp post, streetlamp, lamp standard, or other raised source of light located inside the right-of-way of a public road or highway, or utility easement.

Traffic Light: a set of automatically operated coloured lights for controlling traffic at road junctions and crosswalks.



14.8.1 ASSET INVENTORY

The Town currently has 2,191 streetlights (Table 14.30) with a large portion of those being hydro poles.

Table 14.30 Asset Inventory - Streetlights

Asset Class	Asset Sub-class	Quantity
Streetlights	Decorative Light Standard	284
	Hydro Pole	1,153
	Light Standard	670
	Traffic Lights	84
		2,191

14.8.2 REPLACEMENT COST VALUATION

The replacement cost of streetlights is \$6.7 million with the largest proportion being spent on light standards (Table 14.31). Hydro poles costing the least to replace at approximately \$1000 per unit, this is because the town only replaces the light fixture and not the pole. The pole is owned and maintained by the hydro company. As the Town continues to expand we will not only see the addition to light standards and hydro poles but can expect that additional signaled intersections will be added requiring more traffic lights.

Table 14.31 Asset Valuation - Streetlights

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Streetlights	Decorative Light Standard	\$ 4,591.20	\$ 1,303,900.00
	Hydro Pole	\$ 992.63	\$ 1,144,500.00
	Light Standard	\$ 3,773.13	\$ 2,528,000.00
	Traffic Lights	\$ 20,285.75	\$ 1,704,003.00
			\$ 6,680,403.00

14.8.3 ASSET USEFUL LIFE

The useful life of streetlighting holds a life cycle of 25 years except for traffic lights which have a 50-year useful life. Useful life has been prolonged with the switch to LED bulb systems which last longer overall.

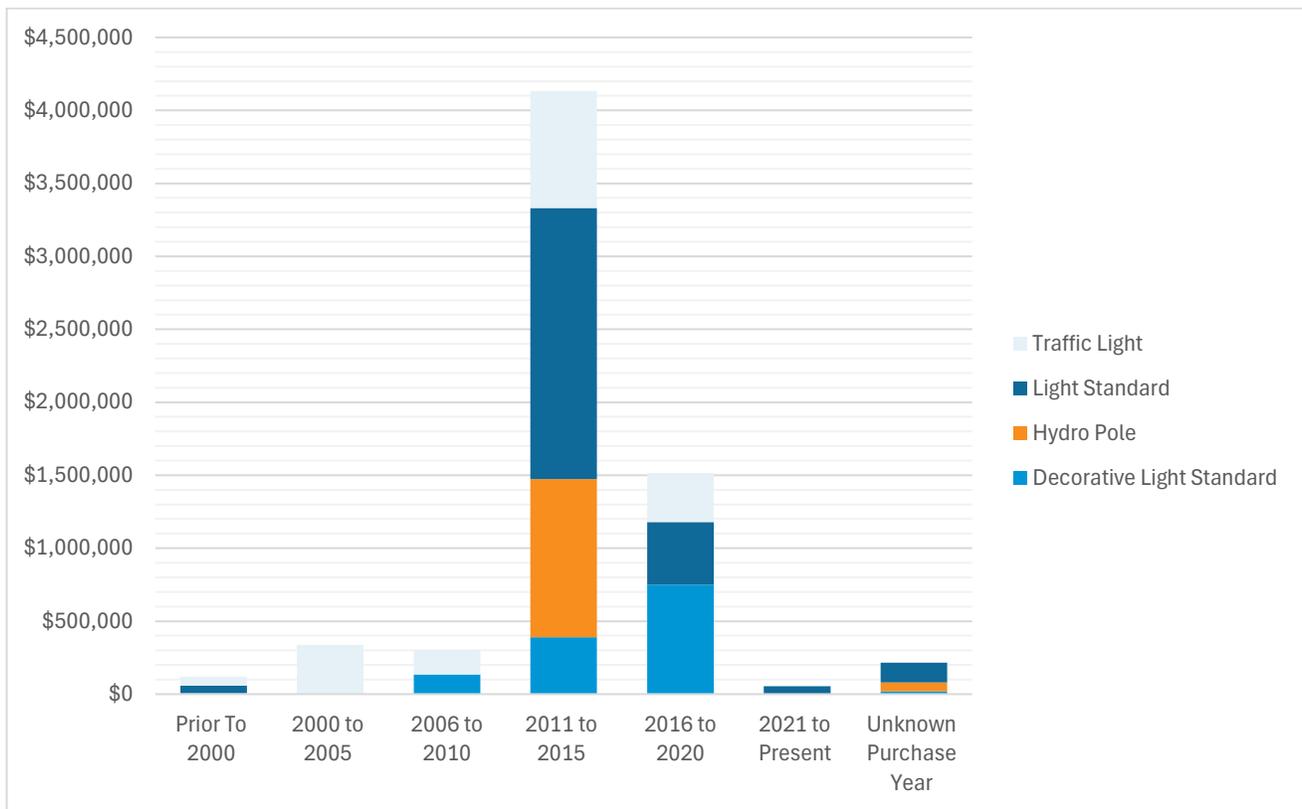
Table 14.32 Asset Useful Life in Years - Streetlights

Asset Class	Asset Sub-class	Useful Life
Streetlights	Decorative Light Standard	25
	Hydro Pole	25
	Light Standard	25
	Traffic Lights	50
	Average Useful Life	31

14.8.4 INVESTMENT LEVEL

With the constant development of the Town, both in terms of private dwellings and commercial development the need for streetlights has expanded. With a large boom in 2011 to 2015 the Town saw a significant increase to its lighting network with the addition of \$3.8 million (Figure 14.20). Most of this was through the addition of light standards and hydro pole lighting which made up \$3 million of the addition during this time frame.

Figure 14.20 Yearly Investment - Streetlights



With the continued community development and sprawl being experienced by the Town it can be expected that street lighting, like many Town assets, will continue to expand as well.

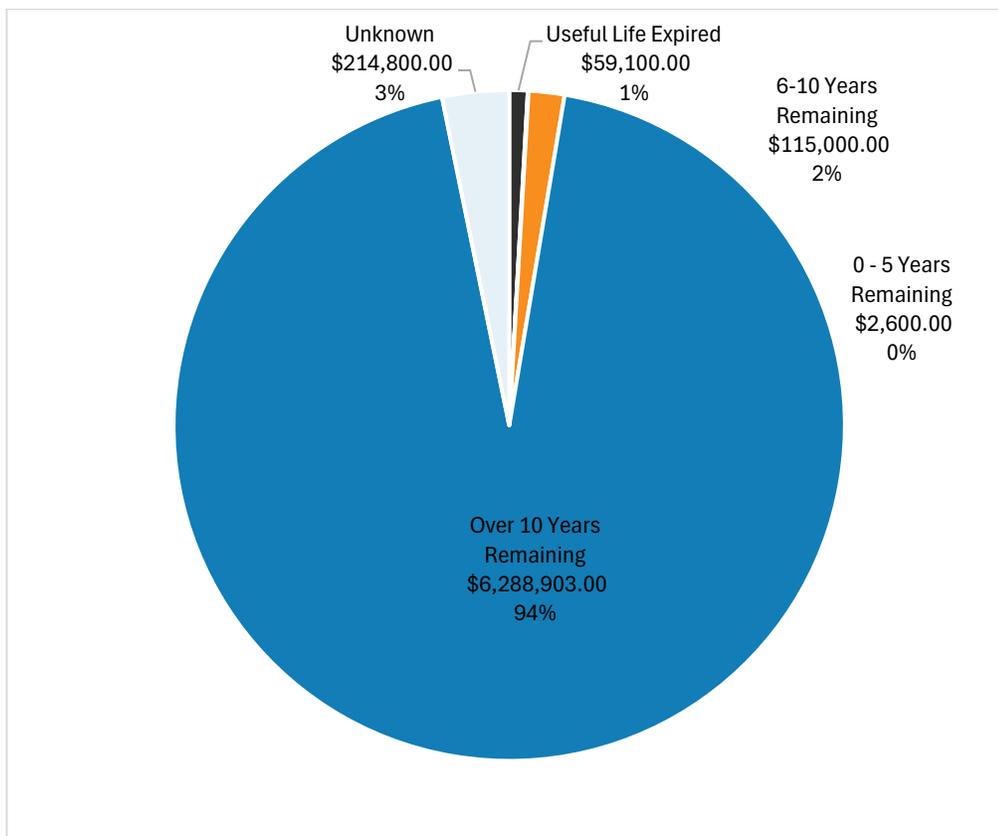
14.8.5 USEFUL LIFE CONSUMPTION

The majority of street light assets, 94%, have over 10 years of useful life remaining (Figure 14.21). To date \$61,700 of assets will require replacement or upgrade in the next 5 years (Table 14.33). Specifically, the Town’s decorative light standards and light standards.

Table 14.33 Asset Useful Life Consumption - Streetlights

	Decorative Light Standard	Hydro Pole	Light Standard	Traffic Lights
Useful Life Expired	\$8,400.00	\$0.00	\$50,700.00	\$0.00
0 - 5 Years Remaining	\$0.00	\$0.00	\$2,600.00	\$0.00
6-10 Years Remaining	\$135,000.00	\$0.00	\$0.00	\$0.00
Over 10 Years Remaining	\$1,140,500.00	\$1,083,500.00	\$2,340,900.00	\$1,704,003.00
Unknown	\$20,000.00	\$61,000.00	\$133,800.00	\$0.00

Figure 14.21 Asset Useful Life Consumption - Streetlights



14.8.6 CURRENT ASSET CONDITION

Current asset condition of the Town’s street light network is in good to very good condition. A total of \$4.2 million of assets fall within this condition rating (Figure 14.22 and Table 14.34).

Figure 14.22 Current Asset Condition - Streetlights

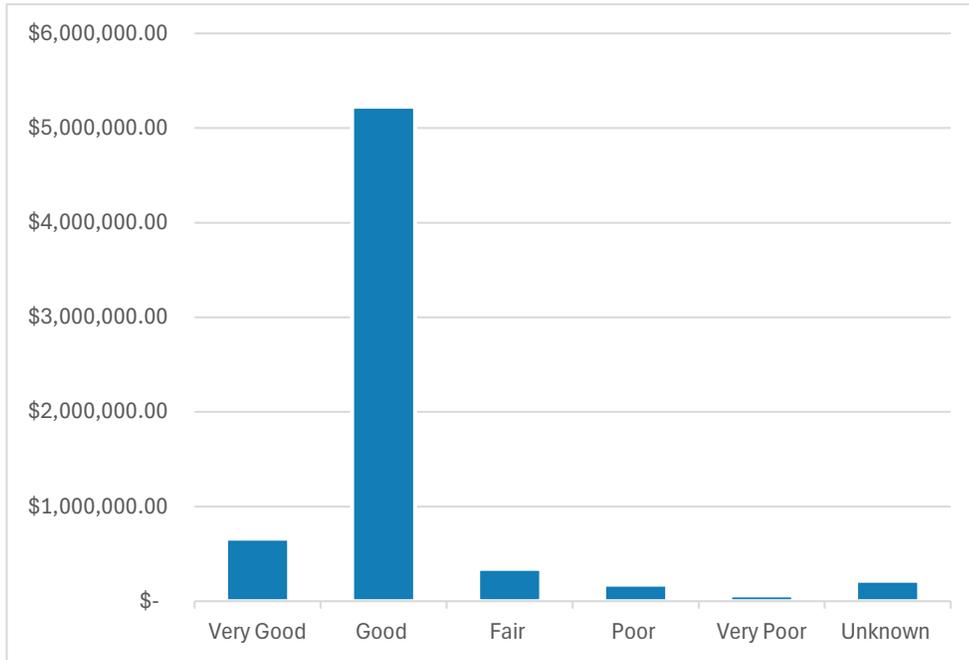


Table 14.34 Current Asset Condition - Streetlights

	Decorative Light Standard	Hydro Pole	Light Standard	Traffic Lights
Very Good	\$0.00	\$0.00	\$100,000.00	\$426,003.00
Good	\$1,028,700.00	\$378,000.00	\$1,381,600.00	\$1,218,000.00
Fair	\$111,800.00	\$705,500.00	\$859,300.00	\$0.00
Poor	\$135,000.00	\$0.00	\$0.00	\$60,000.00
Very Poor	\$8,400.00	\$0.00	\$53,300.00	\$0.00
Unknown	\$20,000.00	\$61,000.00	\$100,000.00	\$0.00

Based on minimum maintenance standards it is important the streetlights receive quick repair or replacement. According to O. Reg 239/02 lighting deemed to be in a state of repair as outlined in the regulations are required to be repaired within the timeline outlined in the table below (Table 14.35).

Table 14.35 Streetlighting Repair Timeline

Class of Highway	Time
1	7 Days
2	7 Days
3	14 Days
4	14 Days
5	14 Days

14.8.7 FORECASTED REPLACEMENT NEEDS

The average provisional value is \$759,800 (Figure 14.23) with an average replacement cost of \$38,741 (Figure 14.24) for the next 10 years. However, with continued Town development it could be expected that these figures will change.

Figure 14.23 Provisional Schedule - Streetlights

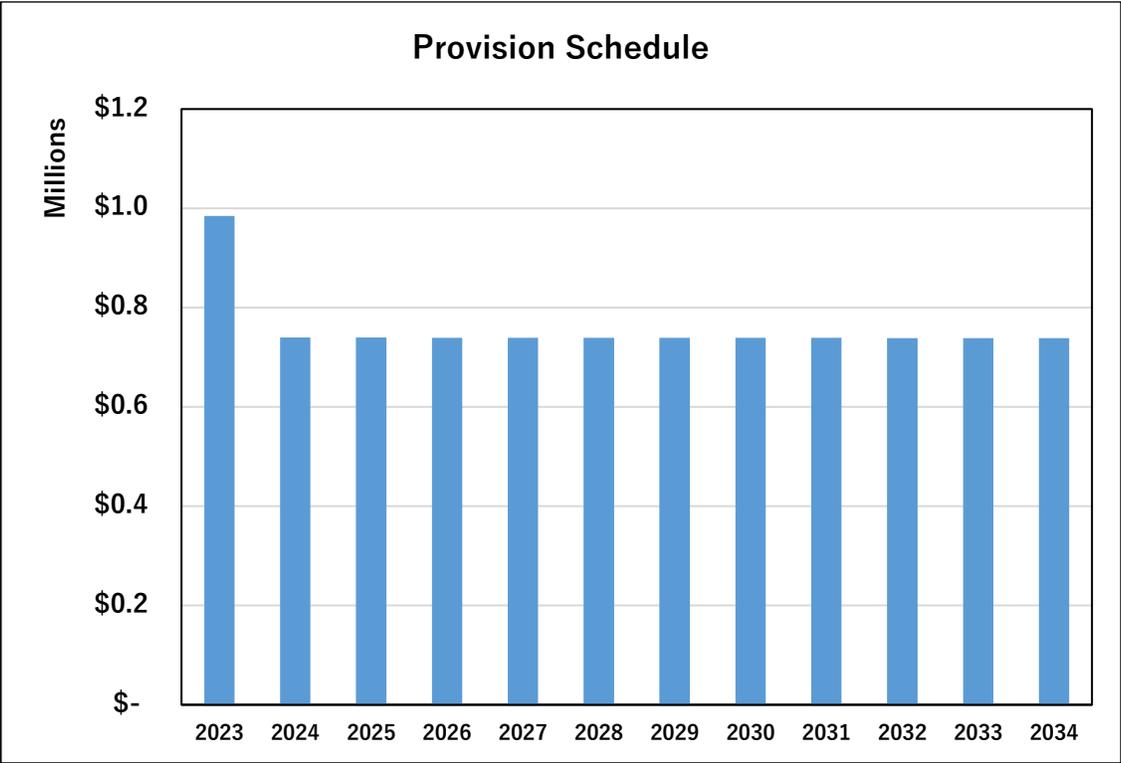
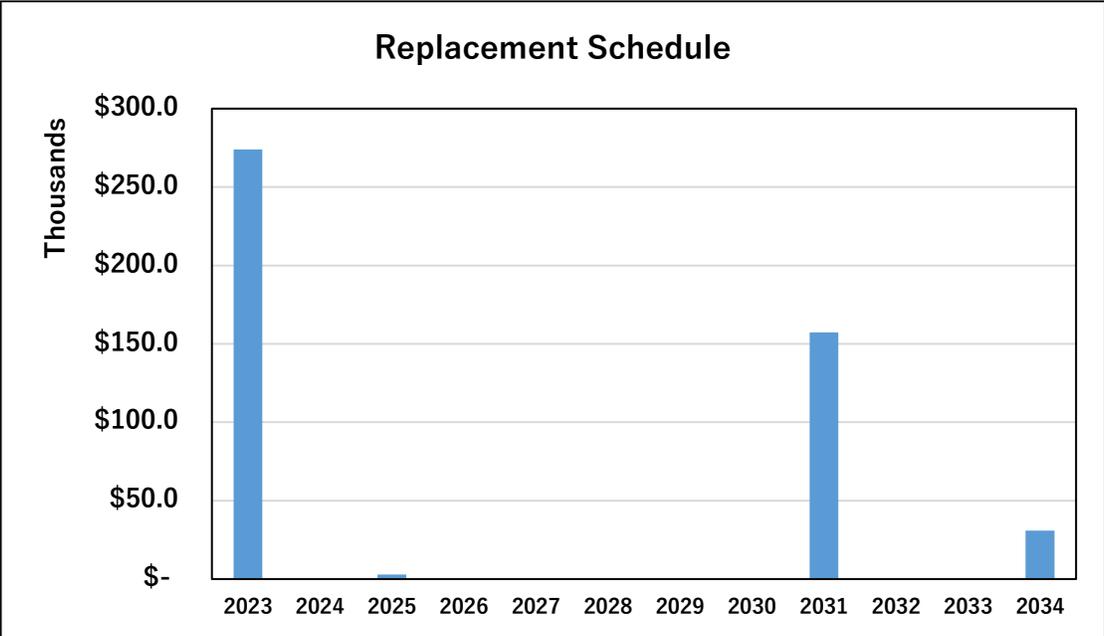


Figure 14.24 Replacement Schedule - Streetlights



14.9 TRANSPORTATION ASSETS – STREET SIGNS

The signs owned by the Town of Saugeen Shores are inspected on an annual basis by a third-party contractor and tested for retroreflectivity. The signage is inspected based on the Transportation Association of Canada (MUTCDC) Minimum Maintained Retroreflectivity Levels and are given a Pass/Warn/Fail rating. In addition, a sign condition visual inspection is completed, and a good/fair/poor rating is assigned to each sign. The Town replaces all signs that have failed retroreflectivity and in addition any signs that have a failing contrast ratio.

14.9.1 ASSET INVENTORY

The Town currently has 2,184 signs that fall on Town owned roads (table 14.36). Signs can be divided into 3 categories priority, regulatory and warning.

Priority signs are high priority signs that require immediate repair or replacement when a deficiency is made aware of. Priority signs according to O.Reg 239/02 include:

- | | |
|--|--|
| 1. Checkerboard. | 7. Stop Ahead. |
| 2. Curve sign with advisory speed tab. | 8. Stop Ahead, New. |
| 3. Do not enter. | 9. Traffic Signal Ahead, New. |
| 3.1 Load Restricted Bridge. | 10. Two-Way Traffic Ahead. |
| 3.2 Low Bridge. | 11. Wrong Way. |
| 3.3 Low Bridge Ahead. | 12. Yield. |
| 4. One Way. | 13. Yield Ahead. |
| 5. School Zone Speed Limit. | 14. Yield Ahead, New. O. Reg. 239/02, s. 11 (2); |
| 6. Stop. | O. Reg. 23/10, s. 7 (3). |

Regulatory signs give directions that must be obeyed. They include do not enter road, speed increase ahead and stop signs.

Warning signs warn of dangerous or unusual conditions ahead such as a curve, turn, dip or sideroad. They are usually diamond-shaped and have a yellow background with black letters or symbols.

Table 14.36 Asset Inventory - Signs

Asset Class	Asset Sub-class	Quantity
Signs	Priority	955
	Regulatory	635
	Warning	594
		2,184

14.9.2 REPLACEMENT COST VALUATION

As of 2023 the Town has \$228,194 worth of street signs. Most of the costs of signs are within the Priority sign classification (Table 14.37). The replacement cost of signs includes the cost of the post, which depending on location can be wood or metal.

Table 14.37 Asset Valuation - Signs

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Signs	Priority	\$ 110.83	\$ 105,843.92
	Regulatory	\$ 91.14	\$ 57,872.53
	Warning	\$ 108.55	\$ 64,478.00
			\$ 228,194.45

14.9.3 ASSET USEFUL LIFE

The estimated useful life for a sign before required replacement is 7 years. However, signs are replaced based on the pass-fail rating from retroreflectivity assessment. Signs undergo yearly retroreflectivity assessments by a third-party contractor. As a result, all signs that fail retroreflectivity and/or have a failing contrast ratio are flagged for replacement.

Table 14.38 Asset Useful Life in Years - Signs

Asset Class	Asset Sub-class	Useful Life
Signs	Priority	7
	Regulatory	7
	Warning	7
	Average Useful Life	7

14.9.4 CURRENT ASSET CONDITION

Third party contractors complete a visual inspection of the sign including the signpost and provide a rating of good, fair, or poor. Although sign condition receives a visual inspection replacement is triggered by the retroreflectivity pass fail criteria.

Table 14.39 Current Asset Condition - Signs

	Priority	Regulatory	Warning	Grand Total
Good	\$103,936.58	\$57,596.05	\$61,053.34	\$222,585.97
Poor	\$1,907.34	\$276.48	\$3,424.66	\$5,608.48

14.9.5 FORECASTED REPLACEMENT NEEDS

Since completing yearly retroreflectivity the Town has seen an improvement to sign condition overall. The average number of signs being replaced over the last 3 years has been 75 signs per year. With an average cost per sign of \$104 per sign (including post) the Town should forecast a yearly replacement cost of \$7,762.95 plus yearly inflation.

14.10 TRANSPORTATION ASSETS – PARKING LOTS

14.10.1 ASSET INVENTORY

Majority of Town parking lots are asphalt lots while only 16 of the total 66 lots are of other material (Table 14.40). Parking lots currently have a total area of 101,560 m².

Table 14.40 Asset Inventory - Parking Lots

Asset Class	Asset Sub-class	Quantity	Area (m ²)
Parking Lots	Asphalt	50	77,904
	Gravel	7	6,403
	Sand/Earth/Other	9	17,254
		66	101,560 m²

14.10.2 REPLACEMENT COST VALUATION

Total replacement cost for parking lots is \$4.5 million dollars. Replacement cost for sand and/or earth lots are not considered. It should be noted that gravel and other material lots may be replaced with asphalt in the future if the need arises. Approximate replacement cost of asphalt lots are \$55 per m². If gravel and sand/earth lots were replaced with gravel the base replacement cost would be approximately \$1.2 million.

Table 14.41 Asset Valuation - Parking Lots

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Parking Lots	Asphalt	\$85,399.47	\$4,269,973.59
	Gravel	\$38,873.83	\$272,116.81
	Sand/Earth/Other	N/A	N/A
			\$4,542,090.40

14.10.3 ASSET USEFUL LIFE

Average useful life for parking lots is 13 years, with asphalt having an approximate 15-year useful life (Table 14.42).

Table 14.42 Asset Useful Life in Years - Parking Lots

Asset Class	Asset Sub-class	Useful Life
Parking Lots	Asphalt	15
	Gravel	12
	Sand/Earth/Other	12
	Average Useful Life	13

14.10.4 CURRENT ASSET CONDITION

To date Town owned parking lots do not undergo a formal inspection process. Maintenance is triggered by service requests and full replacement is triggered when regular maintenance will no longer serve as a long-term fix.

13.9 | EQUIPMENT



14.11 EQUIPMENT

Equipment assets have been categorized by department. Each department has a unique set of needs and requirements when it comes to the equipment, they require in order to maintain the expected level of service for that department. The assets under the equipment classification in this section include equipment not pertaining to fleet or IT.

14.11.1 ASSET INVENTORY

A total of 814 pieces of equipment have been recorded by the Town departments (Table 14.43). These assets range from GPS equipment, fire hoses, firearms, chainsaws, and push mowers. A complete category list can be seen in Appendix 19.10. The threshold for which assets were to be recorded was dependent on the department. If an asset was considered to have a known useful life and costs more than \$500 it was recorded in the inventory.

Table 14.43 Asset Inventory - Equipment

Asset Class	Asset Sub-class	Quantity
Equipment	Community Services	111
	Development Services	7
	Operations	12
	Public Works	136
	Police	83
	Fire	465
		814

14.11.2 REPLACEMENT COST VALUATION

The Town owns \$2.7 million worth of individual equipment among the 6 departments (Table 14.44). The Fire department currently has the largest replacement cost of equipment with a total of \$1.4 million.

Table 14.44 Asset Valuation - Equipment

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Equipment	Community Services	\$ 2,577.38	\$ 286,089.52
	Development Services	\$ 24,026.87	\$ 168,188.10
	Operations	\$ 6,646.95	\$ 79,763.38
	Public Works	\$ 4,323.56	\$ 588,003.55
	Police	\$ 2,385.85	\$ 198,025.88
	Fire	\$ 3,047.63	\$ 1,417,150.00

14.11.3 ASSET USEFUL LIFE

Most equipment has a useful life of 10 years, with the shortest useful life being 5 years for equipment in the Development Services department (Table 14.45).

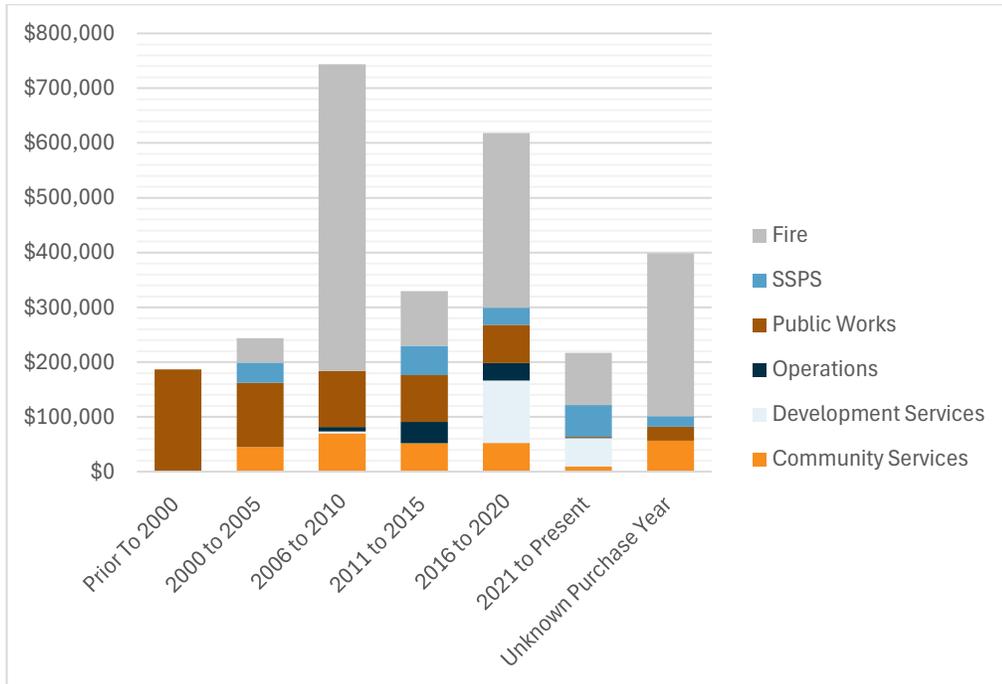
Table 14.45 Asset Useful Life in Years - Equipment

Asset Class	Asset Sub-class	Average Useful Life
Equipment	Community Services	10
	Development Services	5
	Operations	11
	Public Works	11
	Police	8
	Fire	14
	Average Useful Life	10

14.11.4 INVESTMENT LEVEL

The investment the Town has experienced in equipment seems to have an influx every 5 years, this is seen in the spike from 2006 – 2010 as well as in 2016 – 2020 (Figure 14.25). The average yearly spending on equipment from 2021 to 2023 is \$72,288. If this continues the town can expect a budget of approximately \$145,000 spent on equipment between 2024 and 2025.

Figure 14.25 Asset Investment Level - Equipment



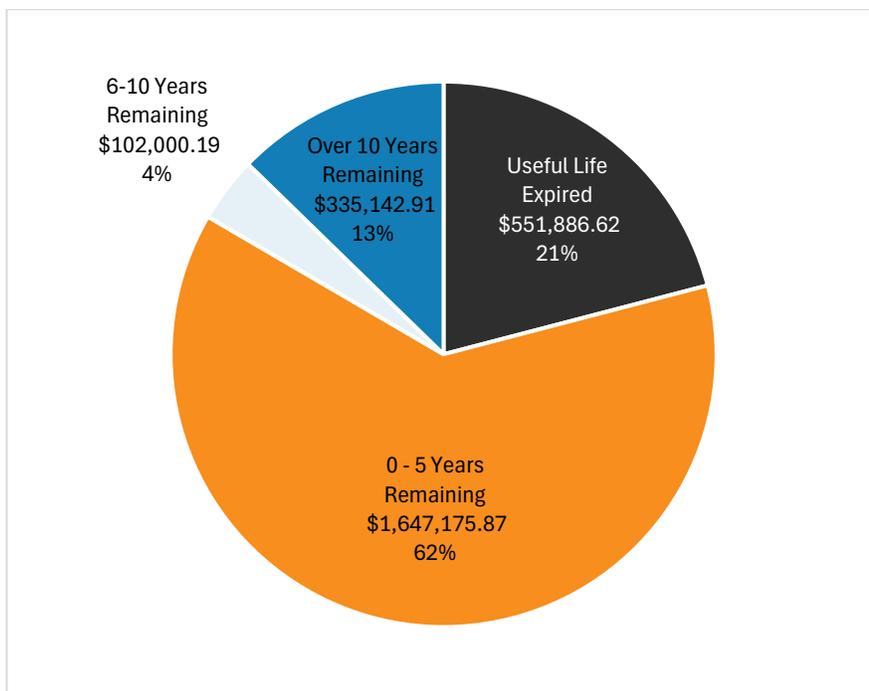
14.11.5 USEFUL LIFE CONSUMPTION

Most of the equipment falls within a replacement need in the next 0 to 5 years, a total of 62% of all recorded equipment while an additional 21% of equipment is beyond its optimal replacement life (Figure 14.26). A grand total of \$2.2 million dollars of equipment will be due for replacement over the next 5 years (Table 14.46). Although priority will be required for Police and Fire equipment to ensure safety regulations are met to ensure maintained levels of service that all equipment requiring replacement before failure.

Table 14.46 Asset Useful Life Consumption – Equipment

	Useful Life Expired	0 - 5 Years Remaining	6-10 Years Remaining	Over 10 Years Remaining	Unknown
Community Service	\$48,600.00	\$118,839.52	\$17,000.00	\$45,100.00	\$56,550.00
Development Service	\$69,175.52	\$99,012.58	\$0.00	\$0.00	\$0.00
Operations	\$9,072.57	\$39,644.87	\$8,632.18	\$22,413.77	\$0.00
Public Works	\$302,910.11	\$179,987.34	\$21,478.01	\$58,229.14	\$25,398.95
Police	\$90,128.42	\$83,941.56	\$4,890.00	\$0.00	\$19,065.90
Fire	\$32,000.00	\$1,125,750.00	\$50,000.00	\$209,400.00	\$0.00
Grand Total	\$551,886.62	\$1,647,175.87	\$102,000.19	\$335,142.91	\$101,014.85

Figure 14.26 Asset Useful Life Consumption – Equipment



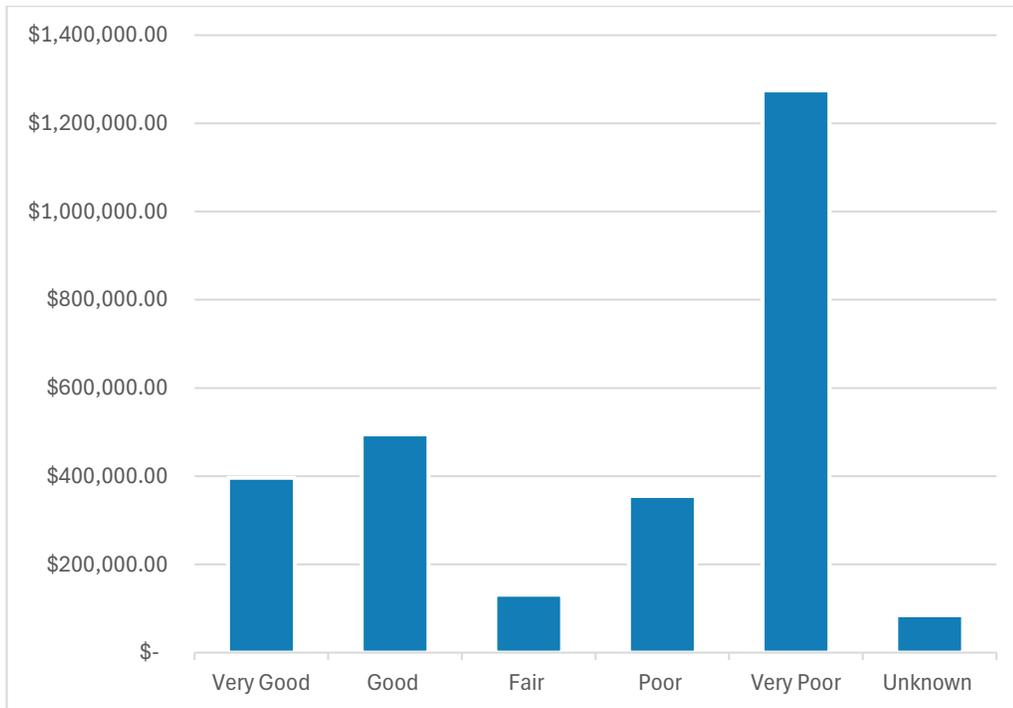
14.11.6 CURRENT ASSET CONDITION

Approximately \$1.2 million of equipment assets fall within the very poor condition range (Figure 14.27). Condition for equipment assets has been defined using both remaining useful life and physical inspection when available. It is to be noted that \$570,000 of assets within the very poor categorization are within the Fire department (Table 14.47). These assets may not physically be in very poor condition, however, do require imminent replacement due to strict regulation guidelines.

Table 14.47 Current Asset Condition - Equipment

	Community Services	Development Services	Operations	Public Works	Police	Fire
Very Good	\$49,296.00	\$0.00	\$0.00	\$0.00	\$57,690.00	\$289,350.00
Good	\$166,750.00	\$51,666.80	\$22,413.77	\$11,604.44	\$0.00	\$242,400.00
Fair	\$23,812.00	\$0.00	\$8,632.18	\$18,884.69	\$0.00	\$80,000.00
Poor	\$31,200.00	\$0.00	\$550.00	\$92,274.90	\$31,141.56	\$200,000.00
Very Poor	\$10,031.52	\$116,521.30	\$48,167.44	\$439,840.57	\$90,128.42	\$570,000.00
Unknown	\$5,000.00	\$0.00	\$0.00	\$25,398.95	\$19,065.90	\$35,400.00
Grand Total	\$286,089.52	\$168,188.10	\$79,763.38	\$588,003.55	\$198,025.88	\$1,417,150.00

Figure 14.27 Current Asset Condition - Equipment



14.11.7 FORECASTED REPLACEMENT NEEDS

The average provisional cost for equipment across all departments is \$299,918 with an average yearly replacement cost of \$ 207,303 (Figure 14.28 and Figure 14.29).

Figure 14.28 Provisional Schedule – Equipment

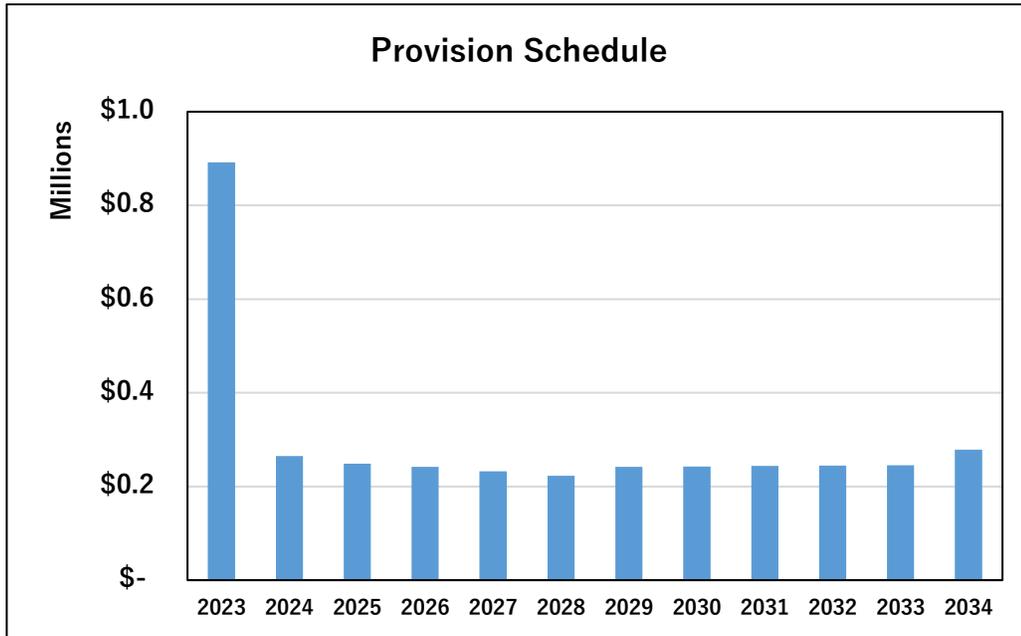
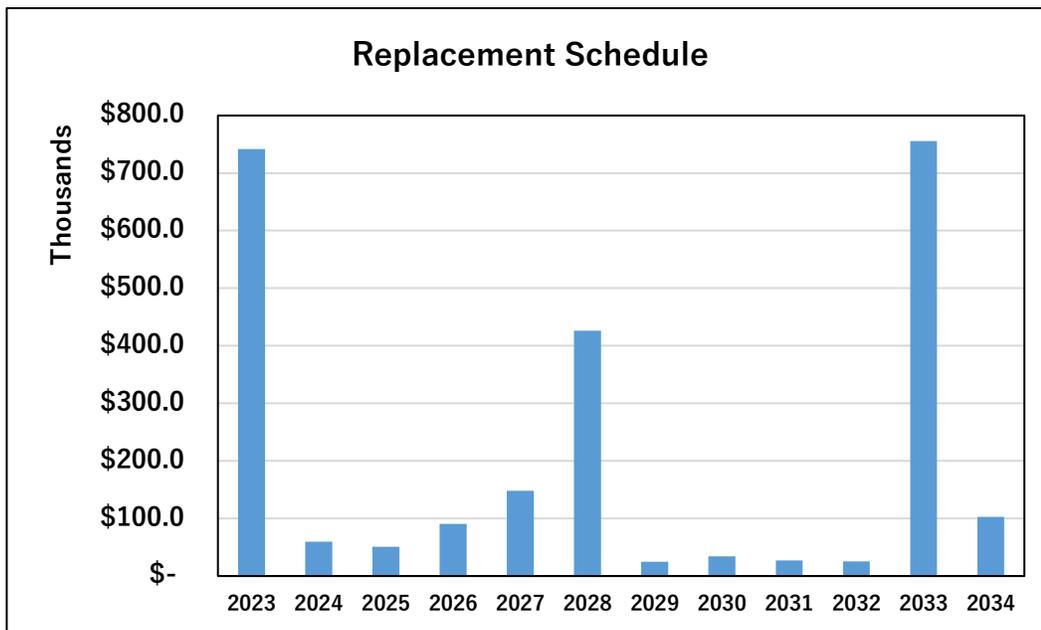
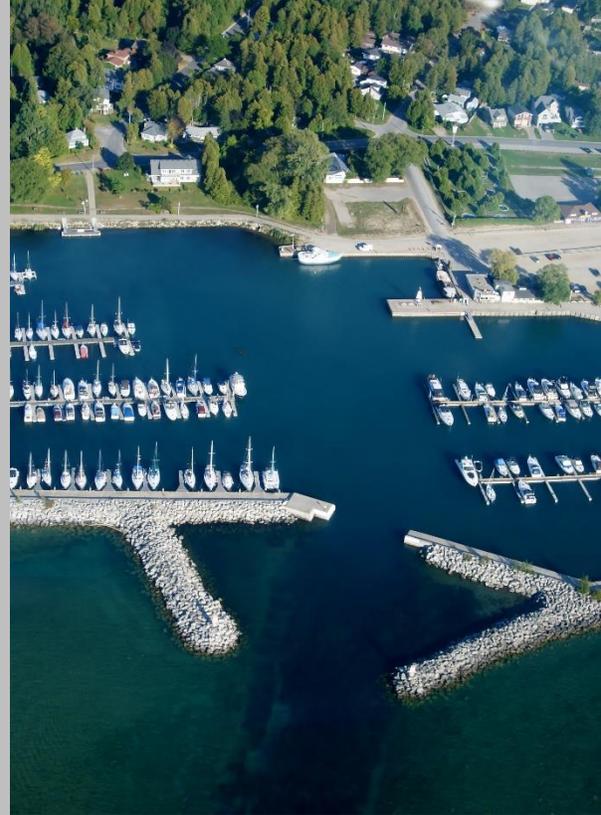


Figure 14.29 Replacement Schedule - Equipment



The yearly replacement need for equipment is expected to be a lower cost than many other assets due to the smaller unit cost for most of the assets in this classification. In addition, based on the replacement schedule of many of these assets being followed closely due to regulation requirements (specifically in Police and Fire) unlike other asset classes there is not a significant backlog.

13.10 | BUSINESS UNITS



14.12 BUSINESS UNITS - TOURIST CAMPS

The Town of Saugeen Shores operates two tourist campgrounds in Southampton and Port Elgin. The Tourist camps both operate six months of the year and offer full-service sites for seasonal and overnight campers. See Appendix 19.7 for site map.

Table 14.48 Asset Inventory - Tourist Camps

Southampton Site	Port Elgin Site
1 office	1 office
4 washrooms (with showers)	4 washrooms (2 with showers)
176 sites (4 transient)	312 sites (13 transient)
3 parks separated by municipal roads	Dumping Station
Electrical	Electrical
Water mains	Playground
Sanitary mains	Baseball Diamond with bleachers
	Water mains
	Sanitary mains
	Boat Parking

In 2024, a budget has been allocated to undertake a strategic assessment of the Tourist Camps. This will review the camp revenues and expenses including capital investments required to upgrade the infrastructure to meet current and future demand. The camps are seen as a business venture for the Town and are expected to provide dividends back to the Town. Further details for the Town of Saugeen Shores Tourist Camps will be provided in the next Non-Core Asset Management Plan update once study has been completed.

14.13 BUSINESS UNITS - HARBOUR

14.13.1 ASSET INVENTORY

The Harbour currently has 13 assets and 35,315 sq feet of dock within its defined business unit (Table 14.49). These assets include fuel services, various ramps and an office building.

Table 14.49 Asset Inventory - Harbour

Asset Class	Asset Sub-class	Quantity
Harbour	Boat Launch	2
	Dock	35,315 Sq ft
	Fishing Dock	1
	Fuel	2
	Gate	2
	Pump-out Station	1
	Ramp	3
	Service Dock	1
	Office	1
	13 Assets Plus 35,315 sq ft of dock	

14.13.2 REPLACEMENT COST VALUATION

The Harbour has an estimated replacement cost of \$5.2 million for all noted assets (Table 14.50). The multiple docks at the Harbour make up 84% of the total replacement cost.

Table 14.50 Asset Valuation - Harbour

Asset Class	Asset Sub-class	Unit Replacement Cost	Overall Replacement Cost
Harbour	Boat Launch	\$29,080.80	\$58,161.60
	Dock	\$123.11	\$4,347,675.08
	Fishing Dock	\$70,000.00	\$70,000.00
	Fuel	\$45,384.18	\$90,768.36
	Gate	\$30,000.00	\$60,000.00
	Pump-out Station	\$8,670.45	\$8,670.45
	Ramp	\$66,666.67	\$200,000.00
	Service Dock	\$75,000.00	\$75,000.00
	Office	\$273,856.78	\$273,856.78

14.13.3 ASSET USEFUL LIFE

Harbour assets have fairly long useful lives at an average of 28 years (Table 14.51). However, extreme weather conditions can affect these assets due to proximity to the waterfront and this should be considered for long term planning and potential replacement needs.

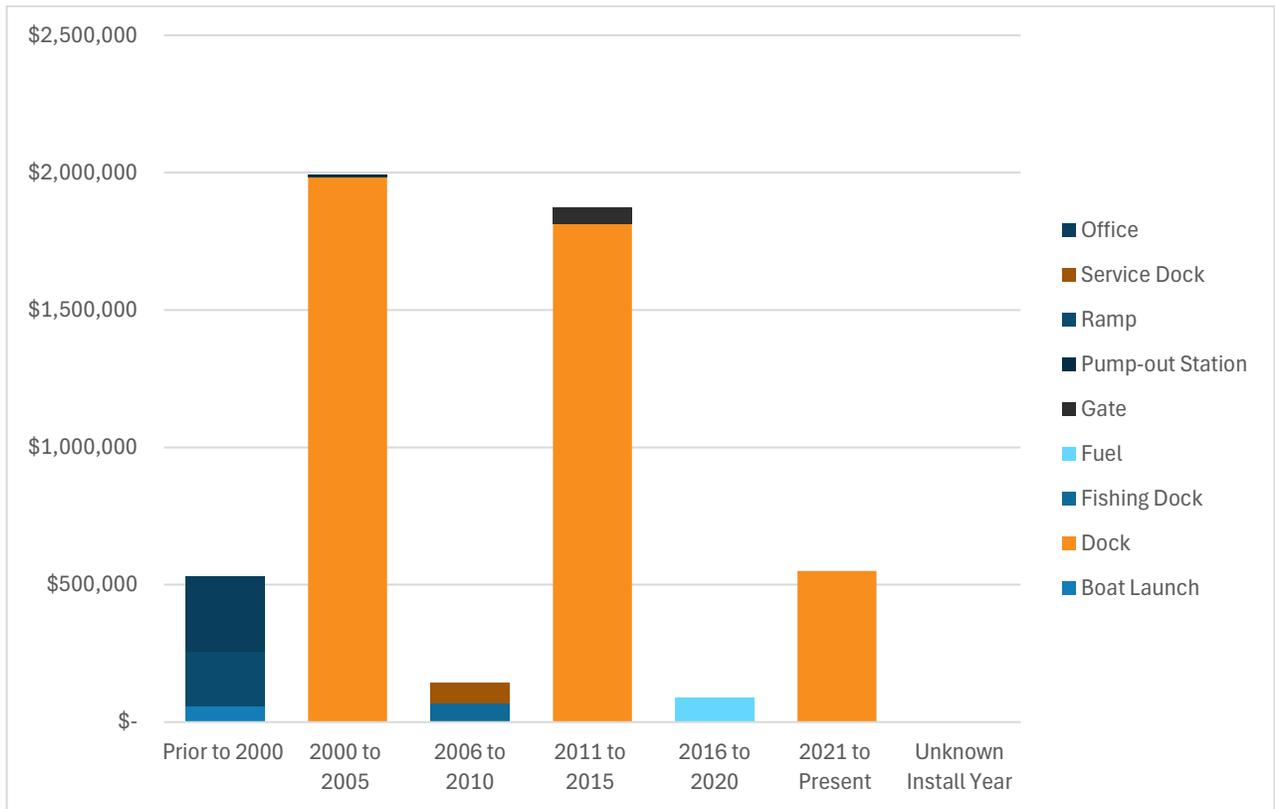
Table 14.51 Asset Useful Life in Years - Harbour

Asset Class	Asset Sub-class	Useful Life
Harbour	Boat Launch	40
	Dock	30
	Fishing Dock	30
	Fuel	20
	Gate	30
	Pump-out Station	20
	Ramp	20
	Service Dock	30
	Office	30
	Average Useful Life	28

14.13.4 INVESTMENT LEVEL

Like many Town assets, the Harbour is no different in experiencing spikes in investment over the years. The Harbour saw its largest investments in 2000 to 2005 at \$2 million and again in 2011 to 2015 at a total of almost \$1.9 million (Figure 14.30). 2021 to present is on track to see a similar although slightly lower 5 year spend due to the need of a major dock replacement.

Figure 14.30 Yearly Investment - Harbour



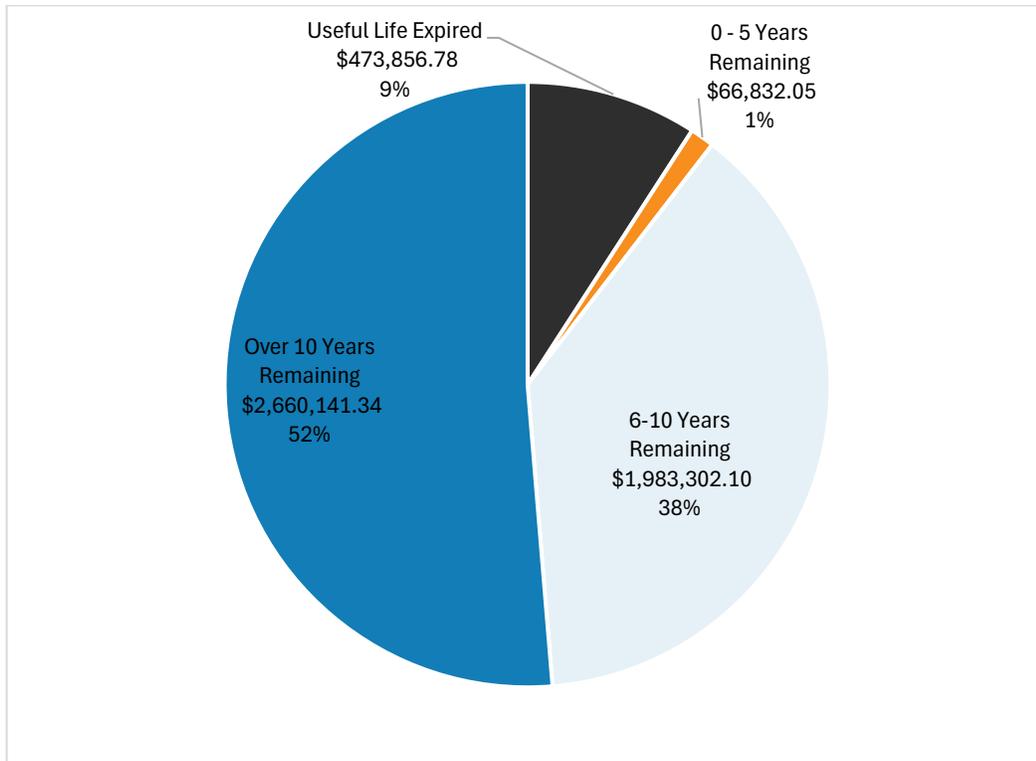
14.13.5 USEFUL LIFE CONSUMPTION

The useful life of the office and ramp assets are beyond the optimal replacement (Table 14.52), however, 90% of assets have 6+ years of useful life remaining (Figure 14.31).

Table 14.52 Asset Useful Life Consumption - Harbour

	Useful Life Expired	0 - 5 Years Remaining	6-10 Years Remaining	Over 10 Years Remaining
Boat Launch	\$0.00	\$58,161.60	\$0.00	\$0.00
Dock	\$0.00	\$0.00	\$1,983,302.10	\$2,364,372.98
Fishing Dock	\$0.00	\$0.00	\$0.00	\$70,000.00
Fuel	\$0.00	\$0.00	\$0.00	\$90,768.36
Gate	\$0.00	\$0.00	\$0.00	\$60,000.00
Office	\$273,856.78	\$0.00	\$0.00	\$0.00
Pump-out Station	\$0.00	\$8,670.45	\$0.00	\$0.00
Ramp	\$200,000.00	\$0.00	\$0.00	\$0.00
Service Dock	\$0.00	\$0.00	\$0.00	\$75,000.00
Grand Total	\$473,856.78	\$66,832.05	\$1,983,302.10	\$2,660,141.34

Figure 14.31 Asset Useful Life Consumption - Harbour



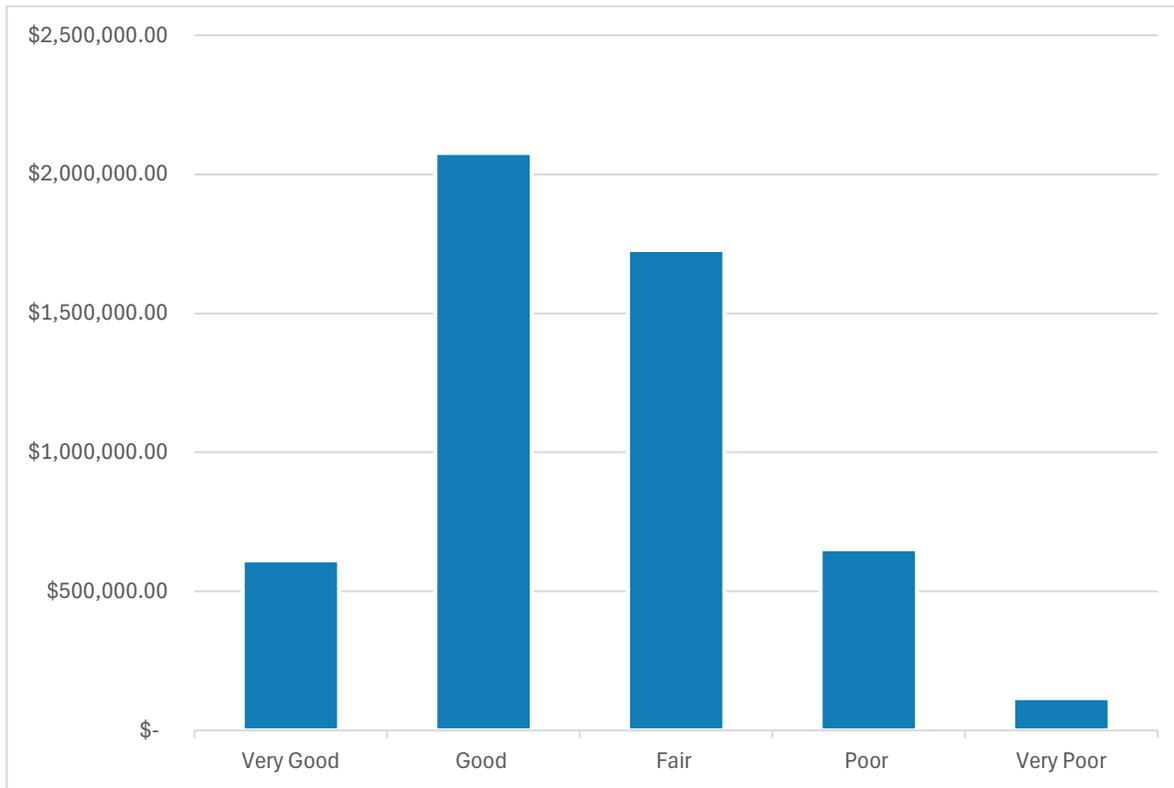
14.13.6 CURRENT ASSET CONDITION

A total of 52% or \$2.7 million of Harbour assets fall within the Very Good to Good condition category (Table 14.53 and Figure 14.32) however this leaves 48% of assets that require some level of repair or replacement.

Table 14.53 Current Asset Condition - Harbour

	Very Good	Good	Fair	Poor	Very Poor
Boat Launch	\$0.00	\$0.00	\$58,161.60	\$0.00	\$0.00
Dock	\$520,755.30	\$1,933,241.76	\$1,125,964.06	\$651,498.12	\$116,215.84
Fishing Dock	\$0.00	\$0.00	\$70,000.00	\$0.00	\$0.00
Fuel	\$90,768.36	\$0.00	\$0.00	\$0.00	\$0.00
Gate	\$0.00	\$60,000.00	\$0.00	\$0.00	\$0.00
Office	\$0.00	\$0.00	\$273,856.78	\$0.00	\$0.00
Pump-out Station	\$0.00	\$8,670.45	\$0.00	\$0.00	\$0.00
Ramp	\$0.00	\$0.00	\$200,000.00	\$0.00	\$0.00
Service Dock	\$0.00	\$75,000.00	\$0.00	\$0.00	\$0.00
Grand Total	\$611,523.66	\$2,076,912.21	\$1,727,982.44	\$651,498.12	\$116,215.84

Figure 14.32 Current Asset Condition - Harbour



14.13.7 FORECASTED REPLACEMENT NEEDS

For the Harbour the average provisional cost is \$668,917 with an average replacement cost of \$302,922 (Figure 14.33 and Figure 14.33). These values consider the need to ensure funding is available for future dock replacements and building updates. It should be noted that the breakwater is owned by the Federal government, however the Town contributes to maintenance and major repair projects. It is a major component of the harbour however, it is not an asset that is owned by the municipality.

Figure 14.33 Provisional Schedule - Harbour

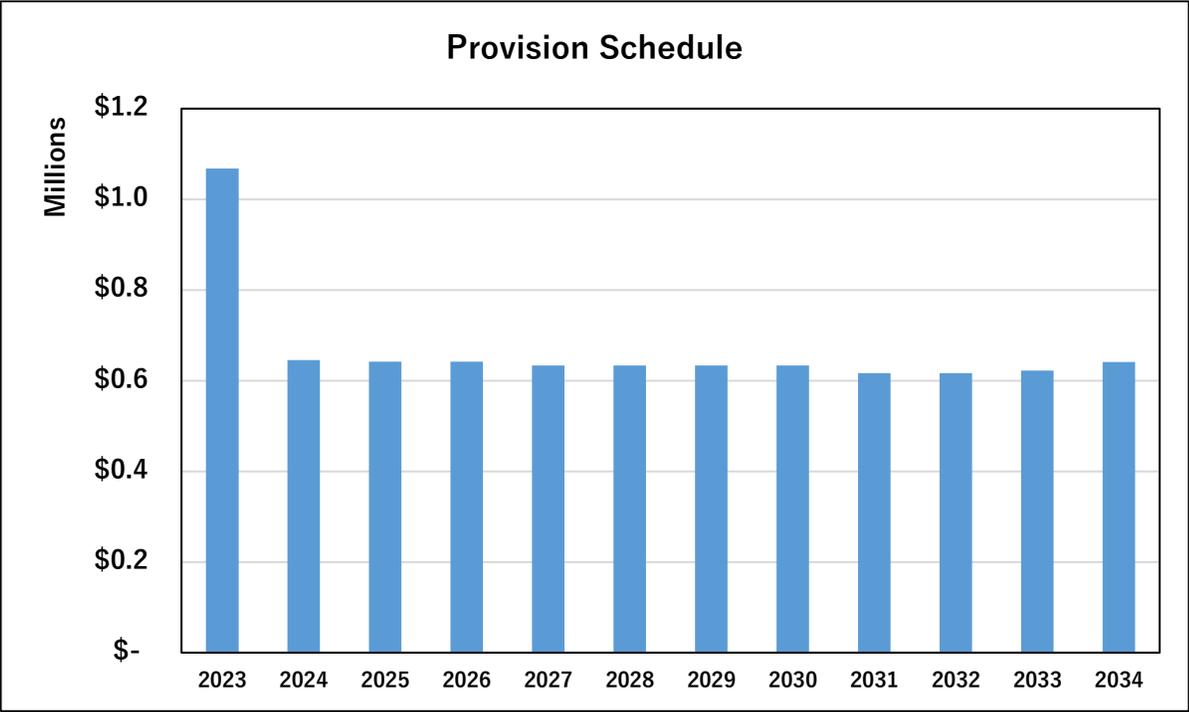
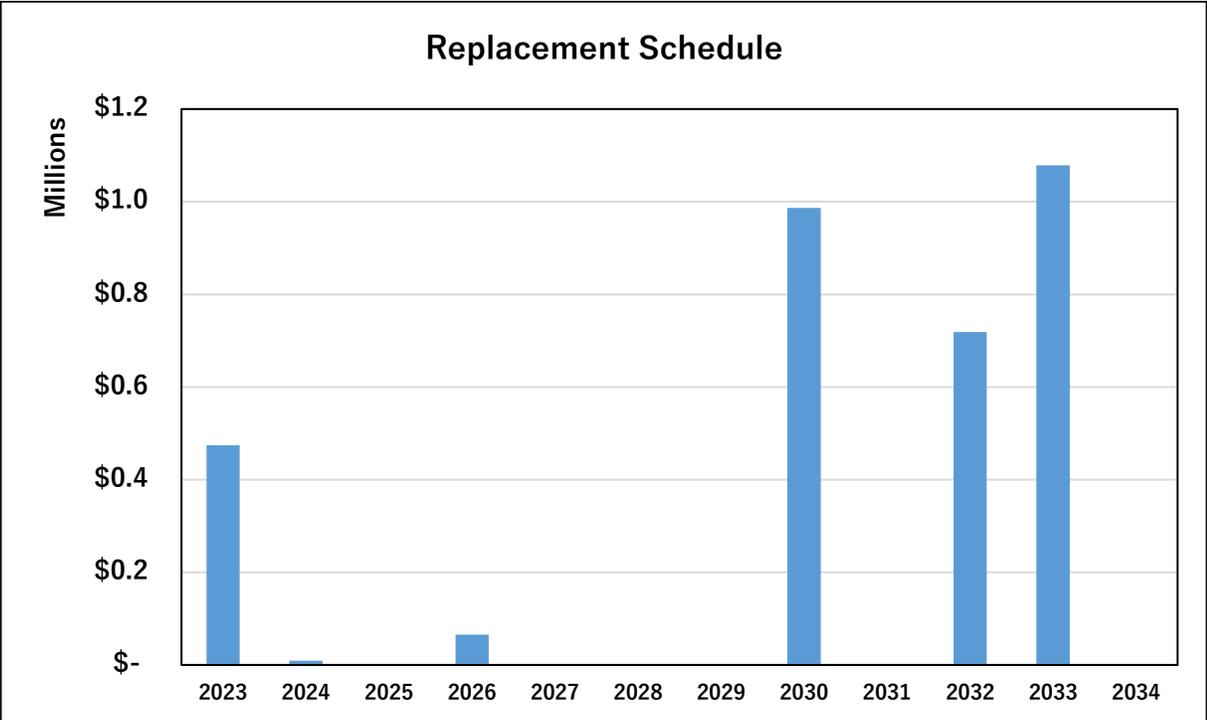


Figure 14.34 Replacement Schedule - Harbour



14.14 BUSINESS UNITS - LANDFILL

14.14.1 ASSET INVENTORY

The current landfill is made up of a scale house, transfer station, composting facility, and the active landfill site.

Table 14.54 Asset Inventory – Landfill

Asset Class	Asset Sub-class	Quantity
Landfill	Active Engineered Landfills	1
	Composting Facilities	1
	Scale House	1
	Transfer Station	1
		4

14.14.2 REPLACEMENT COST VALUATION

The landfill scale house and household waste disposal area underwent upgrades in 2023. Which included a new scale house, new recycling area, and new household waste sorting areas. Total replacement cost of the landfill is \$7.4 million (Table 14.55).

Table 14.55 Asset Valuation – Landfill

Asset Class	Asset Sub-class	Unit Replacement Cost
Landfill	Active Engineered Landfills	\$5,000,000.00
	Composting Facilities	\$200,000.00
	Scale House	\$200,000.00
	Transfer Station	\$2,000,000.00
		\$7,400,000.00

Additionally, an Asset Retirement Obligation value will be determined for this site in the near future. Under PS 3280 the cost of disposal of a tangible capital asset such as a landfill is required to be determined in the event the landfill would be permanently closed.

14.14.3 ASSET USEFUL LIFE

Currently, the scale house and transfer station have a useful life of 35 and 50 years respectively (Table 14.56). To date the useful life of the landfill and composting facilities will be determined once the results of the environmental assessment is complete.

Table 14.56 Asset Useful Life in Years – Landfill

Asset Class	Asset Sub-class	Useful Life
Landfill	Active Engineered Landfills	TBD
	Composting Facilities	TBD
	Scale House	35
	Transfer Station	50
	Average Useful Life	21

As is the active landfill and composting facilities have around 8 years of useful life remaining prior to needing to undergo the expansion.

14.14.4 CONDITION AND REPLACEMENT SCHEDULE

The landfill scale house and transfer stations have both recently undergone replacement or expansion as recently as 2022 and 2023. The landfill and composting facilities are currently undergoing an environmental assessment to determine the current condition as well as a long-term plan for the facilities.

As it stands all assets are considered to be in good or very good condition, however a more detailed report will be provided once the environmental assessment is complete.

15 ASSET REPORT CARD

The asset report card summarizes the overall state of the assets as well as current funding capacity based on the 2023 budget. A letter grade has been given to each asset class based on overall asset condition. The asset grade given to the Town is C+ (Table 15.1).

Table 15.1 Asset Summary Report Card

Asset Report Card Town of Saugeen Shores		C+
Asset Category	Condition vs. Performance	Comments
Facilities	C+	
Community Services	B+	This category includes parks, trails and community service assets as defined above
Fleet	C-	
IT Equipment	C+	
Transportation Assets	B-	This category contains streetlights, signs, and parking lots
Equipment	D+	
Business Units	B	Does not contain tourist camps as they are currently being reviewed

As asset management continues to be incorporated into the long-term financial plan it is expected that these grades will improve overall. Individual asset report cards can be reviewed in Appendix 19.2.

16 CURRENT LEVELS OF SERVICE

The levels of service are the expected standards or quality of service that the assets provide to the customers and stakeholders. They are defined by various performance measures, such as customer service, reliability, and quality of assets. The following chart summarizes the current levels of service for each asset class and service attribute, based on the most recent data available.

Table 16.1 Current Levels of Service

Asset Class	Service Attribute	Performance Measure	Current Performance
Business Units	Customer Service	Average response time of service requests ¹	61 days
Community Service Assets	Quality	Percentage of assets at or above Good or Very Good condition	92%
Equipment	Quality	Percentage of assets at or above Good or Very Good condition	33%
Facilities	Customer Service	Average response time of service requests	29 days
Fleet	Customer Service	Fleet down time for repairs ²	5 days
	Quality	Percentage of assets at or above Good or Very Good condition	34%
	Reliability	General maintenance schedule followed	100%
IT Equipment	Quality	Devices under warranty ³	29%
	Quality	Percentage of assets at or above Good or Very Good condition	45%
	Reliability	IT Uptime	99.99%
Parks	Customer Service	Average response time of service requests ¹	18 days
	Customer Service	Walkability of parks (800m)	90.76%
	Quality	Survey response: How well do you think beautification is being done in Saugeen Shores today (261 responses)	49% - Good
	Quality	Think about how Saugeen Shores looks today compared to a few years ago. Which best describes how you think things have changed? (260 responses)	36.9% "It looks a little better now"
	Quality	Percentage of assets at or above Good or Very Good condition	96%

Signs	Quality	Percentage of assets at or above Good or Very Good condition	98%
	Safety	Improvement to number of signs requiring replacement due to failing reflectivity	2% of signs failed in 2023 (reflectivity & contrast)
Streetlights	Quality	Percentage of assets at or above Good or Very Good condition	88%
	Reliability	Average response time of service requests	6 days
Trails	Customer Service	Average response time of service requests ¹	33 days
	Customer Service	Annual Use of Trails ⁴	499,677 trail users
	Quality	Please rate the overall quality of the trail system in Saugeen Shores today (245 responses)	57.6% - Good
	Quality	Percentage of assets at or above Good or Very Good condition	Unknown ⁵

1. Response time is impacted by seasonality of work
2. Can be impacted on wait times of parts need for repairs
3. Includes only active IT equipment with warranty
4. List of trails with counters can be found in Appendix 19.11
5. Trail data is currently being collected and condition will be updated once completed

The current levels of service are to be used as an indicator of performance moving forward. As the AMP matures proposed levels of service will be integrated. These will act as goals to strive for and indicators of performance moving forward.

17 LIFECYCLE ACTIVITIES

Lifecycle activities are the actions and interventions that are performed on assets to maintain or improve their condition, functionality, and performance. Lifecycle activities can include routine maintenance, repairs, replacements, upgrades, enhancements, or decommissioning. Lifecycle activities vary depending on the type and nature of the asset, as well as its expected lifespan and service level. Lifecycle activities should be planned and prioritized based on the asset management strategy and the available resources.

Some examples of lifecycle activities for different types of assets are:

- Facilities: cleaning, painting, roofing, plumbing, electrical, heating, ventilation, air conditioning, security, fire protection, etc.
- Parks: landscaping, mowing, pruning, fertilizing, pest control, etc.
- Fleet: tire changes, rust proofing, safety inspections, oil changes, etc

Table 6.1 illustrates the operating expenditures required on an annual basis to maintain assets in the Town's non-core asset classes. An estimated spend of \$1.8 million dollars annually is required to provide basic maintenance for these assets.

Table 17.1 Operating Expenditure

Asset Classification	Activity Description	Annual Cost	Notes
Facilities	Lighting	\$5,000.00	
	General maintenance wages	\$878,580.00	
	HVAC	\$5,000.00	
	Painting	\$5,000.00	
	Electrical	\$20,000.00	
	Plumbing	\$10,000.00	
Parks & Trails	Annual maintenance wages	\$649,064.00	
It Equipment	Licence maintenance (Harbour)	\$1,500.00	
	Security Hardware Licences	\$5,000.00	
Equipment	Fire Fleet and Equipment - Maintenance and Inspections	\$24,322.08	
	Police Equipment	\$6,593.00	
Parking Lots	Pothole patching / minor asphalt repair	\$0.05 / m ²	

Fleet - A/B	Rust Proofing	\$14,800.00	Annual
	Oil Changes	\$8,140.00	Every 5,000 – 7,000 km
	Brakes	\$22,500.00	Every 20,000km
	Tires	\$25,650.00	Every 70,000km
	Safety	\$11,470.00	Annual
Fleet - C	Tires	\$3,166.67	Every 3 year vac truck
		\$22,800.00	Every 5 years plow
	Specialized equipment maintenance	\$2,000.00	Vac truck – tubes & repairs
	Oil Change	\$16,100.00	Every 250 hrs
	Specialized equipment inspection/testing	\$17,250.00	20,000 fleet
	Safety	\$17,250.00	Annual
	Pump failure	\$277.78	1/life
Fleet - D	Oil Change	\$33,600.00	Every 250 hrs

In addition to the above annual operating costs, for the selected asset classes, facilities also prescribe to capital improvements that help to ensure the longevity of our buildings. These capital costs along with the timeline when they are to be completed and the risk associated with not completing these improvements is shown in Table 17.2.

Table 17.2 Facilities Capital Costs

Activity Description	Age	Cost per Unit			Risk/Consequence of not undertaking lifecycle activity
HVAC - rooftop unit	20-25 years	\$50-\$80,000			No heating or cooling
Roof - Metal	50 years	\$7.00-\$16.00/sqft.			Roof leaks
Roof - Asphalt	50 year	\$50 per m3			Roof leaks
Hvac-household unit	20-25 years	\$7-\$10,000			No heating or cooling
Flooring		Material	Material cost per square foot	Total installed cost per square foot	Trip and fall hazard
		Hardwood	\$4 – \$15	\$11 – \$25	
		Laminate	\$1 – \$6	\$4 – \$14	
		Linoleum	\$2 – \$7	\$3 – \$11	
		Luxury vinyl plank (LVP)	\$2 – \$10	\$4 – \$16	
Doors	20 years	\$300-\$5000			Failure impact to safety

Capital repairs to assets allows for an extension on the asset’s useful life. By completing lifecycle repairs to an assets it ensures that the Town is receiving the highest ROI for that individual asset.

18 FINANCIAL STRATEGY

The Town has implemented long range capital planning. The 2024 Business Plan not only features the current year's worth of project and improvements but also incorporates a 10-year capital plan. This allows the Town to have better oversight on the anticipated repairs and replacements of Town infrastructure to ensure levels of service are maintained for our residents. Moving forward the Town will continue to strive towards integration of the asset management plan into our long-term financial planning to provide evidence-based forecasting.

For more information on the Town's financial strategy please review the 2024 Business Plan and the 2023-2027 Strategic Plan.

[2024 Business Plan](#)

[Strategic Plan 2023 – 2027](#)

This page has been left blank intentionally.

19 APPENDIX

19.1 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

19.2 ASSET REPORT CARDS

The report card provides an overview of how well the Municipality is performing with regards to asset condition. While the asset condition is assessed based age of the asset or field inspections when available. Report cards were completed for facilities, parks, trails, fleet, IT equipment, transportation assets and equipment.

Transportation & Storm Network			
Overall Rating			
Overall Condition vs Performance star rating	Funding vs Need star rating	Average star rating	Overall letter grade
4.3	2.0	3.1	C+

1. Condition vs. Performance								
Total Category Replacement		\$ 147,737,205	Segment replacement value		\$ 147,737,205	Segment value as a % of total category replacement value	100%	
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating	
Transportation Network	Very Good	A	5	\$80,550,626	55%	2.73	4.3	B+
	Good	B	4	\$47,864,608	32%	1.30		
	Fair	C	3	\$10,493,846	7%	0.21		
	Poor	D	2	\$2,521,498	2%	0.03		
	Very Poor	F	1	\$6,306,627	4%	0.04		
				\$147,737,205	100%	4.31		

Total Category Replacement								
Total Category Replacement		\$ 71,189,432	Segment replacement value		\$71,189,432	Segment value as a % of total category replacement value		100%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating	
Storm	Very Good	A	5	\$41,512,178	58%	2.92	4.2	B+
	Good	B	4	\$14,678,409	21%	0.82		
	Fair	C	3	\$7,400,353	10%	0.31		
	Poor	D	2	\$4,812,156	7%	0.14		
	Very Poor	F	1	\$2,786,336	4%	0.04		
				\$71,189,432	100%	4.23		

2. Funding vs. Need						
Average annual investment required	Funding Available	Funding Percentage	Deficit		Category star rating	Category letter grade
\$8,241,443	\$ 3,883,200	47%	\$4,358,243		2.0	D

Water Distribution Network

Overall Rating

Overall Condition vs Performance star rating	Funding vs Need star rating	Average star rating	Overall letter grade
3.6	5.0	4.3	B+

1. Condition vs. Performance

Total Category Replacement		\$ 100,942,817	Segment replacement value		\$100,942,817	Segment value as a % of total category replacement value	100%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating
Water Network	Very Good	A	5	\$0	0%	0.00	3.6
	Good	B	4	\$64,145,737	64%	2.54	
	Fair	C	3	\$33,245,062	33%	0.99	
	Poor	D	2	\$3,552,018	4%	0.07	
	Very Poor	F	1	\$0	0%	0.00	
				\$100,942,817	100%	3.60	B-

2. Funding vs. Need

Average annual investment required	Funding Available	Funding Percentage	Deficit		Category star rating	Category letter grade
\$2,194,879	\$ 1,978,840	90%	\$216,039		5.0	A

Sanitary Network			
Overall Rating			
Overall Condition vs Performance star rating	Funding vs Need star rating	Average star rating	Overall letter grade
3.6	3.0	3.3	C+

1. Condition vs. Performance							
Total Category Replacement		\$ 77,044,133	Segment replacement value		\$77,044,133	Segment value as a % of total category replacement value	100%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating
Sanitary Network	Very Good	A	5	\$0	0%	0.00	3.6
	Good	B	4	\$54,298,752	70%	2.82	
	Fair	C	3	\$17,662,675	23%	0.69	
	Poor	D	2	\$5,082,706	7%	0.13	
	Very Poor	F	1	\$0	0%	0.00	
				\$77,044,133	100%	3.64	B-

2. Funding vs. Need

Average annual investment required	Funding Available	Funding Percentage	Deficit		Category star rating	Category letter grade
\$1,928,202	\$ 1,315,460	68%	\$612,742		3.0	C

Facilities

Condition vs. Performance

Total Category Replacement		\$ 121,452,098		Segment replacement value		\$ 121,452,098		Segment value as a % of total category replacement value		100%	
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating				
Facilities	Very Good	A	5	\$774,082.60	1%	0.03	3.4	C+			
	Good	B	4	\$75,825,279.94	62%	2.50					
	Fair	C	3	\$31,733,859.00	26%	0.78					
	Poor	D	2	\$3,921,300.00	3%	0.06					
	Very Poor	F	1	\$0.00	0%	0.00					
	Unknown	U	0	\$9,197,576.65	8%	0.00					
				\$121,452,098.19	100%	3.38					

Fleet

Condition vs. Performance

Total Category Replacement		\$20,570,136.36		Segment replacement value		\$20,570,136.36		Segment value as a % of total category replacement value		100%	
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating				
Fleet	Very Good	A	5	\$3,839,727.76	19%	0.93	2.8	C-			
	Good	B	4	\$3,152,672.60	15%	0.61					
	Fair	C	3	\$4,990,946.70	24%	0.73					
	Poor	D	2	\$2,610,363.90	13%	0.25					
	Very Poor	F	1	\$5,976,425.40	29%	0.29					
				\$20,570,136.36	100%	2.82					

Community Service Assets

Overall Rating

	Category Star Rating	Category Letter Grade
	4.34	B+

Condition vs. Performance

Total Category Replacement		\$ 92,793,754	Segment replacement value		\$ 87,881,962	Segment value as a % of total category replacement value	95%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating
Parks	Very Good	A	5	\$30,760,124.18	35%	1.75	4.1
	Good	B	4	\$53,482,088.65	61%	2.43	
	Fair	C	3	\$3,639,748.93	4%	0.12	
	Poor	D	2	\$0.00	0%	0.00	
	Very Poor	F	1	\$0.00	0%	0.00	
				\$87,881,961.76	100%	4.31	

Total Category Replacement		\$ 92,793,754	Segment replacement value		\$ 4,159,792	Segment value as a % of total category replacement value	4%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating
Trails	Very Good	A	5	\$4,159,791.77	100%	5.00	0.2
	Good	B	4	\$0.00	0%	0.00	
	Fair	C	3	\$0.00	0%	0.00	
	Poor	D	2	\$0.00	0%	0.00	
	Very Poor	F	1	\$0.00	0%	0.00	
				\$4,159,791.77	100%	5.00	

Total Category Replacement		\$ 92,793,754	Segment replacement value		\$ 751,000	Segment value as a % of total category replacement value		1%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating	
Community Services Assets	Very Good	A	5	\$67,500.00	9%	0.45	0.03	
	Good	B	4	\$627,750.00	84%	3.34		
	Fair	C	3	\$29,750.00	4%	0.12		
	Poor	D	2	\$24,000.00	3%	0.06		
	Very Poor	F	1	\$2,000.00	0%	0.00		
	Unknown	U	0	\$1,000.00	0%	0.00		
				\$751,000.00	100%	3.98		

IT Equipment

Condition vs. Performance								
Total Category Replacement		\$845,650.00	Segment replacement value		\$845,650.00	Segment value as a % of total category replacement value		100%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating	
IT Equipment	Very Good	A	5	\$232,300.00	27%	1.37	3.2	C+
	Good	B	4	\$154,600.00	18%	0.73		
	Fair	C	3	\$125,600.00	15%	0.45		
	Poor	D	2	\$186,950.00	22%	0.44		
	Very Poor	F	1	\$146,200.00	17%	0.17		
				\$845,650.00	100%	3.17		

Equipment

Condition vs. Performance

Total Category Replacement		\$2,737,220.43		Segment replacement value		\$2,737,220.43		Segment value as a % of total category replacement value		100%	
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating				
Equipment	Very Good	A	5	\$396,336.00	14%	0.72	2.3	D+			
	Good	B	4	\$494,835.01	18%	0.72					
	Fair	C	3	\$131,328.87	5%	0.14					
	Poor	D	2	\$355,166.46	13%	0.26					
	Very Poor	F	1	\$1,274,689.25	47%	0.47					
	Unknown	U	0	\$84,864.85	3%	0.00					
				\$2,737,220.43	100%	2.32					

Business Units

Condition vs. Performance

Total Category Replacement		\$12,584,132.27		Segment replacement value		\$12,584,132.27		Segment value as a % of total category replacement value		100%	
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating				
Business Units	Very Good	A	5	\$2,811,523.66	22%	1.12	4.0	B			
	Good	B	4	\$7,276,912.21	58%	2.31					
	Fair	C	3	\$1,727,982.44	14%	0.41					
	Poor	D	2	\$651,498.12	5%	0.10					
	Very Poor	F	1	\$116,215.84	1%	0.01					
				\$12,584,132.27	100%	3.95					

Transportation Assets

Condition vs. Performance									
Total Category Replacement		\$6,908,597.45		Segment replacement value		\$6,908,597.45		Segment value as a % of total category replacement value	100%
Segment	Condition	Letter Grade	Star Rating	Replacement Value (\$) in given condition	% of Assets in given condition	Weighted, unadjusted star rating	Segment adjusted star rating		
Transportation Assets	Very Good	A	5	\$661,003.00	10%	0.48	3.8	B-	
	Good	B	4	\$5,448,585.97	79%	3.15			
	Fair	C	3	\$341,900.00	5%	0.15			
	Poor	D	2	\$180,608.48	3%	0.05			
	Very Poor	F	1	\$61,700.00	1%	0.01			
	Unknown	U	0	\$214,800.00	3%	0.00			
				\$6,908,597.45	100%	3.84			

19.3 TRANSPORTATION NETWORK CAPITAL PLAN

Capital Budget Year	Project Description	2019 Recommended Budget
2019	Bruce Road 25 - Phase 1 (Bruce County)	\$1,569,000.00
	Emerald Street at Albert (CA 7%)	\$145,000.00
	Albert Street - Emerald to Palmerston (CA 7%)	\$853,430.00
	Palmerston St - Albert to Victoria (CA 7%)	\$213,000.00
	Victoria Street - Palmerston to Water Tower (CA 7%)	\$156,000.00
	Beach Street - Front to Huron	\$675,000.00
	McNabb Street - Peel to Railway	\$136,000.00
	Davey Drive - Bricker to Wellington	\$30,000.00
	Port Elgin Interlock Brick Repairs	\$50,000.00
	Goderich Street Sidewalk - Tomlinson to Dev.	\$86,000.00
2020	Bruce Road 25 - Phase 2 (Bruce County)	\$875,000.00
	Ridge Street - Ivings to Bruce Road 25 (Design & CA 15%)	\$1,840,000.00
	Highland Street - Green to Market (Design & CA)	\$550,900.00
	Louis Street - Goderich to Bricker (Design & CA)	\$315,317.00
	Bricker Street - Mill to Elgin (Design & CA)	\$360,366.00
	Port Elgin Interlock Brick Repairs (Design & CA)	\$25,000.00
	Davey Drive - Bricker to Wellington (Design 8%)	\$51,480.00
	Catherine Street - Goderich to Wellington (Design 8%)	\$105,200.00
	Snyder Street - Jay to George (Design 8%)	\$52,160.00
2021	Bruce Road 25 - Phase 3 (Bruce County)	\$1,160,000.00
	Catherine Street - Goderich to Wellington (CA 7%)	\$1,412,050.00
	Lane Between Elgin/Mill - Ruby to Eastwood (Design & CA)	\$173,000.00
	Davey Drive - Bricker to Wellington (CA Only)	\$643,500.00

Snyder Street - Jay to George (CA Only)	\$655,903.33
Adelaide Street - Lambert to Huron (Design 8%)	\$44,160.00
Victoria Street - Spence to Morpeth (Design 8%)	\$42,880.00
Adelaide Street - Albert to Breadalbane (Design 8%)	\$49,000.00
Knechtel Lane - Victoria to Morpeth (Design 8%)	\$3,520.00
Catherine Street - Kaake to Bruce (Design 8%)	\$48,480.00

Capital Budget Year	Project Description	2019 Recommended Budget
2022	Bruce Road 25 - Phase 4 (Bruce County)	\$670,000.00
	Adelaide Street - Lambert to Huron (CA 7%)	\$590,640.00
	Victoria Street - Spence to Morpeth (CA 7%)	\$573,520.00
	Knechtel Lane - Victoria to Morpeth (CA 7%)	\$47,080.00
	Catherine Street - Kaake to Bruce (CA 7%)	\$653,420.00
	Adelaide Street - Albert to Breadalbane (CA Only)	\$620,000.00
	Alice Street - Grenville to Edward (Design & CA)	\$190,500.00
	Peel Street - Knowles to Lambert (Design & CA)	\$203,000.00
	Arlington Street - Elgin to River (Design & CA)	\$300,200.00
	George Street - Jay to Snyder (Design & CA)	\$321,875.00
	Bricker Street - Barnes to Ivings (Design 8%)	\$38,750.00
	Archibald Place - Bay to Bay (Design 8%)	\$86,850.00
	Bricker Street - Emma to Gustavus (Design 8%)	\$26,850.00
	Lisa Lane - Christopher to Davey (Design 8%)	\$27,250.00
	MacAuley Lane - Peel to Adelaide (Design 8%)	\$38,891.73
	Burns Lane - Peel to Adelaide (Design 8%)	\$31,651.72
2023	Lisa Lane - Christopher to Davey (CA 7%)	\$387,475.00
	MacAuley Lane - Peel to Adelaide (CA 7%)	\$543,310.00
	Burns Lane - Peel to Adelaide (CA 7%)	\$446,075.00
	Bricker Street - Emma to Gustavus (CA 7%)	\$379,540.00
	Archibald Place - Bay to Bay (CA 7%)	\$ 1,186,700.00
	Eastwood Drive - Mill to Elgin (Design & CA)	\$321,580.00
	Palmerston Street - Huron to Laird (Design & CA)	\$159,475.00
	Bricker Street - Barnes to Ivings (CA Only)	\$410,500.00
	Sideroad 28/29 - Concession 2 to BR40 (Design & CA)	\$414,000.00
	Bricker Street - Ashwell to Carsons (Design & CA)	\$110,510.21
	Stafford Street - Green to Mill (Design 8%)	\$27,000.00

Arlington Street - Eastwood to River (Design 8%)	\$53,000.00
River Street - Arlington to Wellington(Design 8%)	\$24,000.00
Falconer Street - Waterloo to Sumpton (Design 8%)	\$31,000.00
Bricker Street - Elgin to Market (Design 8%)	\$23,000.00
Grey Street - Adelaide to Morpeth (Design 8%)	\$33,000.00
Catherine Street - Stafford to Kaake (Design 8%)	\$33,000.00
Stafford Street - Catherine to Eugenie (Design 8%)	\$31,000.00

Capital Budget Year	Project Description	2019 Recommended Budget
2024	Bricker Street - Elgin to Market (CA 7%)	\$269,640.00
	Catherine Street - Stafford to Kaake (CA 7%)	\$398,425.00
	Falconer Street - Waterloo to Sumpton (CA 7%)	\$374,500.00
	Grey Street - Adelaide to Morpeth (CA 7%)	\$390,550.00
	Stafford Street - Catherine to Eugenie (CA 7%)	\$305,520.00
	Arlington Street - Eastwood to River (CA 7%)	\$705,665.00
	River Street - Arlington to Wellington (CA 7%)	\$21,000.00
	Stafford Street - Green to Mill (CA 7%)	\$340,400.00
	Bay Street - Archbald to Archibald (Design & CA)	\$253,000.00
	Mcvicar Street - Stevens to Geddes (Design & CA)	\$546,000.00
	Concession 4 - Saugeen Boundary to BR33 (Design & CA)	\$310,000.00
	High Street - Grosvener to Albert (Design & CA)	\$482,000.00
	Christopher Street - Goderich to Bricker (Design & CA)	\$182,500.00
	Falconer Street - Highland to Bruce (Design 8%)	\$83,000.00
	Ruby Street - Mill to Market (Design 8%)	\$60,500.00
	Richard Crescent - Robin to Wellington (Design 8%)	\$54,000.00
Goderich Street - Biener to Mary (Design 8%)	\$39,000.00	
2025	Ruby Street - Mill to Market (CA 7%)	\$809,455.00
	Falconer Street - Highland to Bruce (CA 7%)	\$ 1,105,845.00
	Richard Crescent - Robin to Wellington (CA 7%)	\$724,390.00
	Goderich Street - Biener to Mary (CA 7%)	\$523,765.00
	Grey Street - Clarendon to Alice	\$179,000.00
	McVicar Street - Stevens to Arthur	\$241,000.00
	Mill Street - Eastwood to Lehnen (CA Only)	\$329,500.00
	Lehnen Street - Mill to Green (CA Only)	\$225,500.00
	Ashwell Crescent - Bricker to Robin	\$312,000.00
	Green Street - Highland to King	\$322,000.00

	Catherine Street - Goderich to Waterloo (Design 8%)	\$37,500.00
	Morpeth Street - Grenville to Breadlbane (Design 8%)	\$82,000.00
	Cristopher Drive - Bricker to Wellington (Design 8%)	\$52,000.00
	Robin Road - Bricker to Wellington (Design 8%)	\$61,000.00
	Albert Street - MacDonald to Clarendon (Design 8%)	\$20,500.00
2026	Morpeth Street - Grenville to Breadalbane (CA 7%)	\$ 1,089,260.00
	Robin Road - Bricker to Wellington (CA 7%)	\$815,340.00
	Catherine Street - Goderich to Waterloo (CA Only)	\$500,760.00
	Cristopher Drive - Bricker to Wellington (CA 7%)	\$693,360.00
	Albert Street - MacDonald to Clarendon (CA 7%)	\$272,850.00
	Park Place - Goderich to Waterloo	\$227,500.00

19.4 GM BLUEPLAN 10 YEAR CAPITAL BRIDGE AND CULVERT PROGRAM

RECOMMENDED 10 YEAR CAPITAL BRIDGE AND CULVERT PROGRAM

Of the thirteen (13) bridges and culverts inspected, twelve (12) structures require some form of repair, rehabilitation and/or replacement. The structures have been placed in a specific order based on the individual bridge components requiring repair, therefore components showing advanced deterioration or severe damage have been given priority.

A recommended 10-Year Capital Bridge and Culvert Program is presented in the table below with a total estimated construction cost range of \$3,193,500 to \$5,156,500 depending on which rehabilitation option is chosen by the Town. All estimates have been provided in current dollar value form, and therefore do not account for inflation over the 10-year period.

Capital Budget Year	<u>Structure No.</u>	<u>Recommended Repairs</u>	<u>Estimated Costs (\$2020)</u>
2021	SS-08	Replace damage guiderail lengths.	\$ 4,500
	SS-13	Rip-rap placement at pier footings.	\$84,300
	SS-16	Install new steel beam guide rail system over structure. Reconstruct headwalls and waterproof bridge deck.	\$ 148,000
	SS-18	Major rehabilitation including culvert extension, installation of retaining walls at each end of the structure and the placement of scour protection inside the structure.	\$ 469,000
2022	SS-06	Full structure replacement or removal.	\$ 2,368,000 (replacement) \$565,000 (removal)
2023	SS-01	Install steel beam guide rail system over structure.	\$63,200
	SS-13	Patch/waterproof and pave deck top. Repave approaches. Repair poor concrete on sidewalks, deck top, abutment walls, ballast walls, wingwalls and soffit. Recoat bearing pads and rollers.	\$ 788,700
2024	SS-07	Repair poor concrete at abutments and pier.	\$ 46,000
	SS-11	Repair spalls at girder ends and coat pre-stressing strands. Recoat ends of deck drains. Stabilize east embankment.	\$ 37,200
	SS-12	Repair poor concrete on abutments, wingwalls and deck top. Locate and seal deck leaks. Replace rotten guide rail posts.	\$ 17,700
2025	SS-03	Replace expansion joint seals.	\$14,400
	SS-09	Replacement or removal of bridge structure.	\$425,000 (removal) \$585,000 (replacement)
	SS-17	Repair concrete at soffit. Seal joint between barrel walls and soffit.	\$ 3,500

Capital Budget Year	<u>Structure No.</u>	<u>Recommended Repairs</u>	<u>Estimated Costs (\$2020)</u>
2026 - 2030	SS-07	Repaint structural steel members.	\$ 72,000
	SS-13	Repair coating on structural steel.	\$ 455,000

19.5 RECOMMENDED PROJECT – WATER AND WASTE WATER

Projects recommended from BMRoss as part of the Water and Wastewater Servicing Master Plan Update 2020 – Draft ³

Table E3.1 – Prioritized Schedule of Recommended Projects

Service and Location		Recommended Solution	Capital Cost	MCEA Schedule	Relative Priority
Item No.	Name				
Water Supply – Major Facilities					
1	Short-term Increase to WTP capacity.	Populate membrane cassettes to 100%.	\$500,000	A	High
2	Long-term Increase to WTP capacity.	Expand filtration capacity including related ancillary works.	\$7,000,000 to \$9,000,000	A if within existing site. B if site expansion required.	Medium
3	Short-term need for increased effective storage	Modify SCADA to allow Port Elgin Reservoir filling after the morning peak.	\$10,000	A	High
4	Need for additional storage in the short and long-term.	Undertake study to determine preferred approach. Implement best alternative.	\$20,000 for study and \$2,715,000 to \$3,050,000 to expand	A+ if no additional property required.	High
Water Supply – Port Elgin Distribution System					
5	Concession 10 watermain expansion to accommodate development.	2,200 m of 250 mm dia. on Concession 10 from Goderich Street to Miramichi Bay Road	\$1,250,000	A	High depending on timing of development.

³ BMRoss. (2020). *Water and Wastewater Servicing Master Plan Update 2020 - DRAFT*. Retrieved from Town of Saugeen Shores: https://www.saugeenshores.ca/en/town-hall/resources/Documents/MasterPlan/2021-05-28-Master-Plan-_DRAFT.pdf

Service and Location		Recommended Solution	Capital Cost	MCEA Schedule	Relative Priority
6	Watermain expansion to accommodate development.	700 m of 250 mm dia. through Summerside development from Conc. 10 to Devonshire Road.	\$400,000	A	Medium to High depending on timing of development.
7	Bruce Road 17 watermain expansion to accommodate development.	1,750 m of 300 mm dia. on Bruce Road 17 and Sideroad 13/14 beginning at Thede Drive.	\$1,030,000	A	Medium to High depending on timing of development.
8	Bruce Road 25 watermain expansion to accommodate development.	450 m of 300 mm dia. on Bruce Road 25 from Goderich St. to Ridge St.	\$265,000	A	High – planned for 2021
Wastewater – Port Elgin Major Facilities					
9	Long-term (by 2033) increase to WWTP capacity.	Preferred approach requires study and Class EA.	\$10,000,000+ to expand	C	Medium depending on rate of development.
10	Expansion of WWTP Headworks	Preferred approach requires study. Probable expansion of building.	To be determined through study. Allow \$35,000 for study.	A	High to medium. Timing may be driven by the need to replace existing equipment.
11	Expansion of biosolids management facilities.	Preferred approach requires study. Requires investigation of alternatives to the existing aerobic digester and holding tank.	To be determined through study. Allow \$50,000 for study.	A	Medium to low. Timing may be driven by issues related to biosolids disposal.

Service and Location		Recommended Solution	Capital Cost	MCEA Schedule	Relative Priority
Wastewater – Port Elgin Collection System					
12	Parkwood Drive sewer replacement to accommodate development.	110 m of sewer on Parkwood Drive.	\$75,000	A	Low. Magnitude of projected capacity exceedance is almost negligible. Complete work in conjunction with road reconstruction.
13	Bruce Road 25 sewer replacement to accommodate development.	610 m of sewer on Bruce Road 25	\$705,000	A	Already planned for 2021.
14	Elgin St. sewer replacement to accommodate development.	150 m of sewer on Elgin St.	\$130,000	A	Medium to high. Magnitude of projected capacity exceedance varies over length.
15	Mill St. sewer replacement to accommodate development.	240 m of sewer on Mill St.	\$185,000	A	Low. Magnitude of projected capacity exceedance is not extreme. Complete work in conjunction with road reconstruction.
16	Ridge St. sewer replacement to accommodate development.	45 m of sewer on Ridge St.	\$70,000	A	Low to medium. Need for upgrade and timing is dependent upon growth.

Service and Location		Recommended Solution	Capital Cost	MCEA Schedule	Relative Priority
17	Stafford St. sewer replacement to accommodate development.	110 m of sewer on Stafford St.	\$80,000	A	Low. Magnitude of projected capacity exceedance is not extreme. Complete work in conjunction with road reconstruction.
19	Mill Creek Rd. sewer replacement to accommodate development.	50 m of sewer on Mill Creek Rd.	\$35,000	A	Low. Magnitude of projected capacity exceedance is almost negligible. Complete work in conjunction with road reconstruction.
Wastewater Southampton Major Facilities					
20	Increase average and peak rating of WWTP	Peak rating increase to be achieved by new headworks and flow equalization. Average Annual capacity to be increase through re-rating and modifications.	\$13,800,000	C	High for peak capacity. Low for Average Annual.
21	SPS 1 - Capacity increase	Replace the existing pumps with larger pumps. Will require rehab or replacement of generator and electrical systems. Add valve to existing SPS overflow.	\$750,000	A+	High. To address current capacity constraints and allow for more development.

Wastewater – Southampton Collection System					
22	Grosvenor St. sewer replacement to accommodate development	50 m of sewer on Grosvenor St.	\$45,000	A	Low. Magnitude of projected capacity exceedance is not extreme. Complete work in conjunction with road reconstruction.
25	Albert St. sewer replacement to accommodate development	30 m of sewer on Albert St.	\$25,000	A	Low. Magnitude of projected capacity exceedance is not extreme. Complete work in conjunction with road reconstruction.
26	Clarendon St. sewer replacement to accommodate development	95 m sewer on Clarendon St.	\$145,000	A	Low. Magnitude of projected capacity exceedance is not extreme. Complete work in conjunction with road reconstruction.

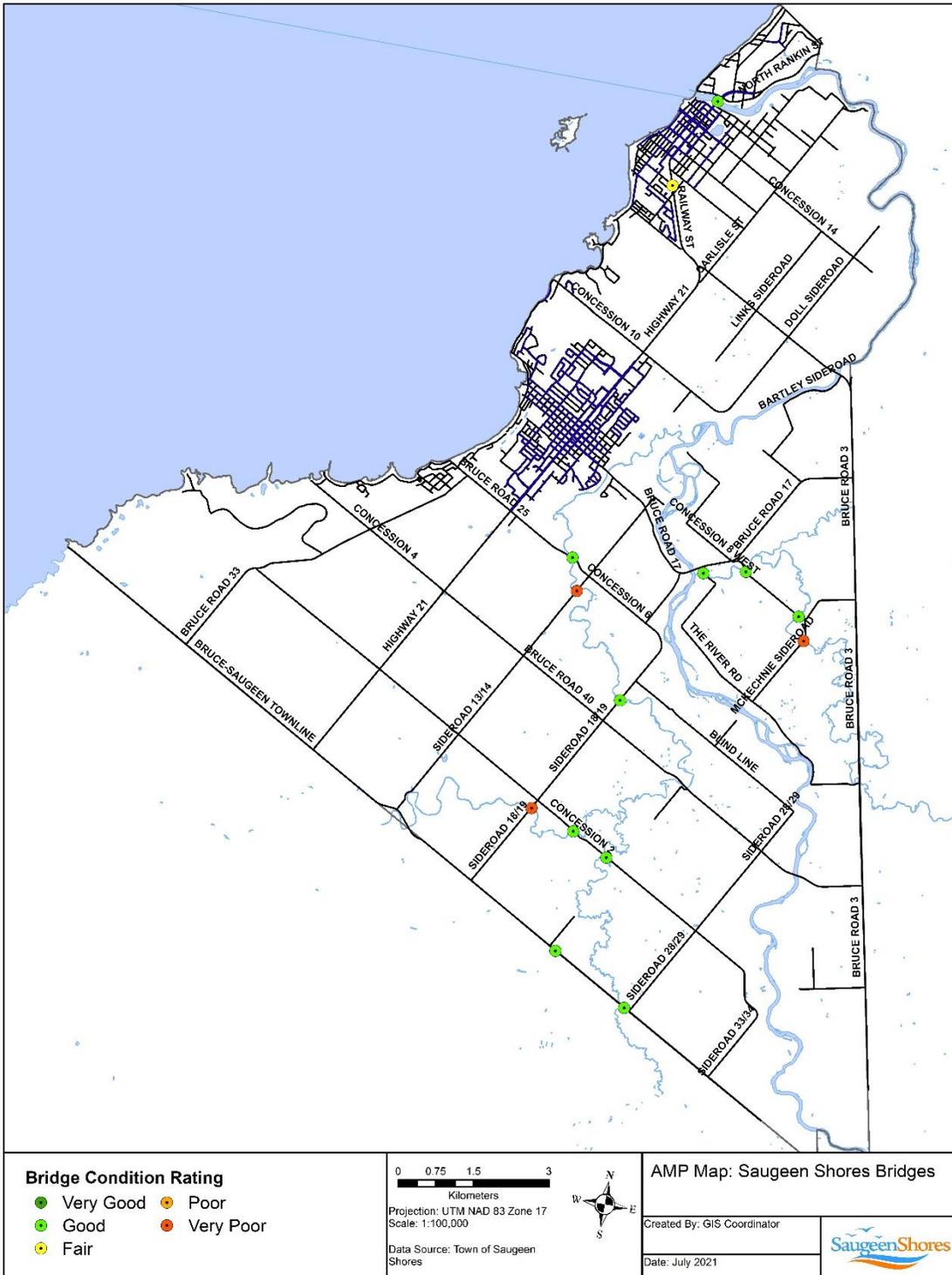
19.6 OCWA WATER & SANITARY RECOMMENDATIONS

The following describe areas of additional spending that is recommended for water and sanitary assets:

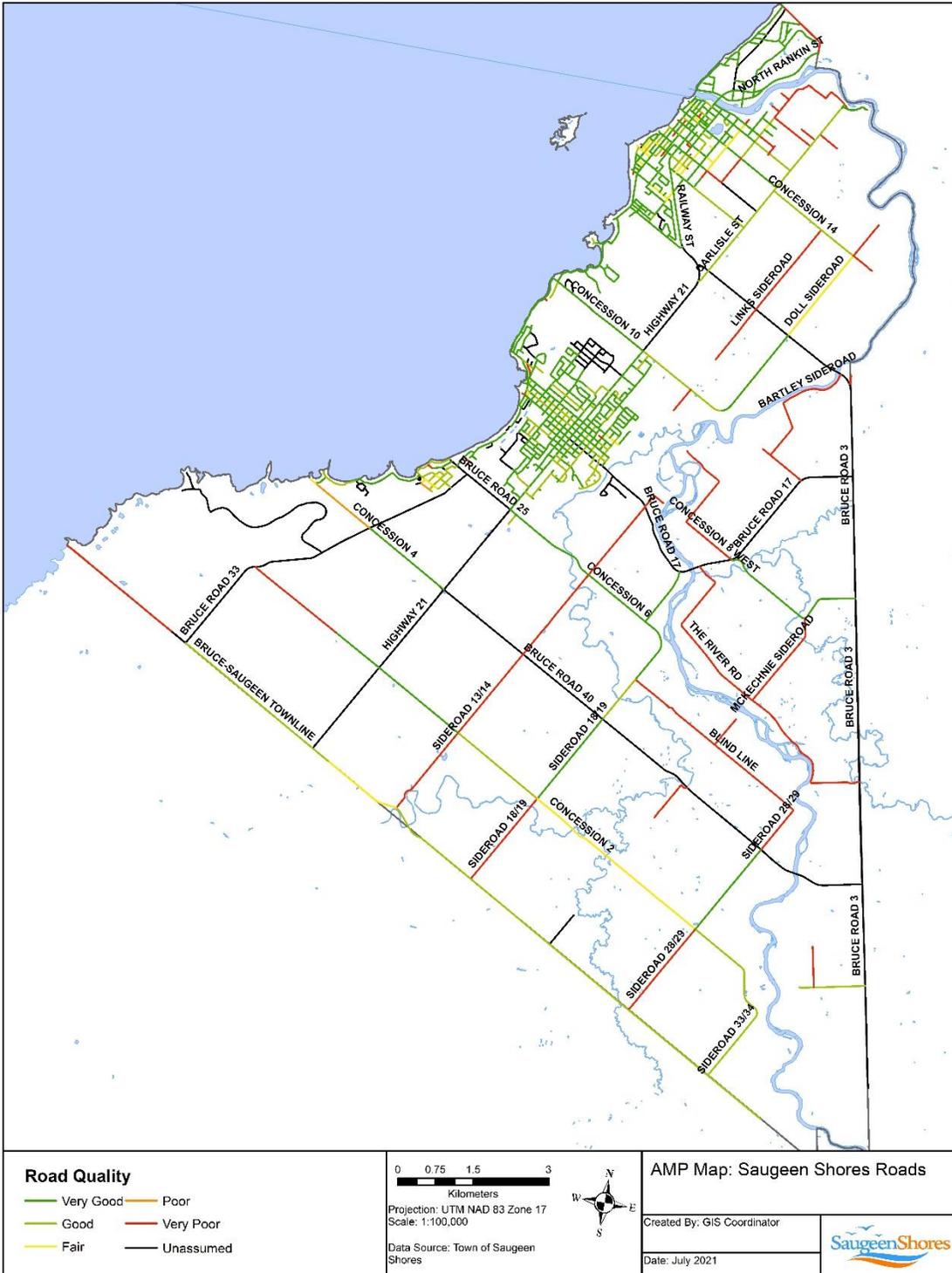
- The Southampton wastewater treatment facility is at the end of a Schedule C Environmental Assessment (EA). The preferred alternative to increase the plant capacity has an estimated cost of \$11.5 million with construction timing of 2023 and 2024.
- The water distribution system has only two connections between the communities of Southampton and Port Elgin – a large watermain on Highway 21 and a small watermain along the waterfront. The small watermain is not likely sufficient to supply Port Elgin with water for an extended period of time should the large watermain experience a service disruption. Consideration should be given to complete a hydraulic analysis of the distribution system to evaluate the need to install a new second large connection between the two communities, and if so, potential routes for the watermain.
- The 10th Concession Forcemain is relatively new (constructed in 2009) and has already experienced two failures. Consideration should be given to completing an engineering design review to determine the cause of the premature failures, and to determine the cost and timing of any spending that may be required to reduce the likelihood of future failures.

19.7 ASSET MAPS

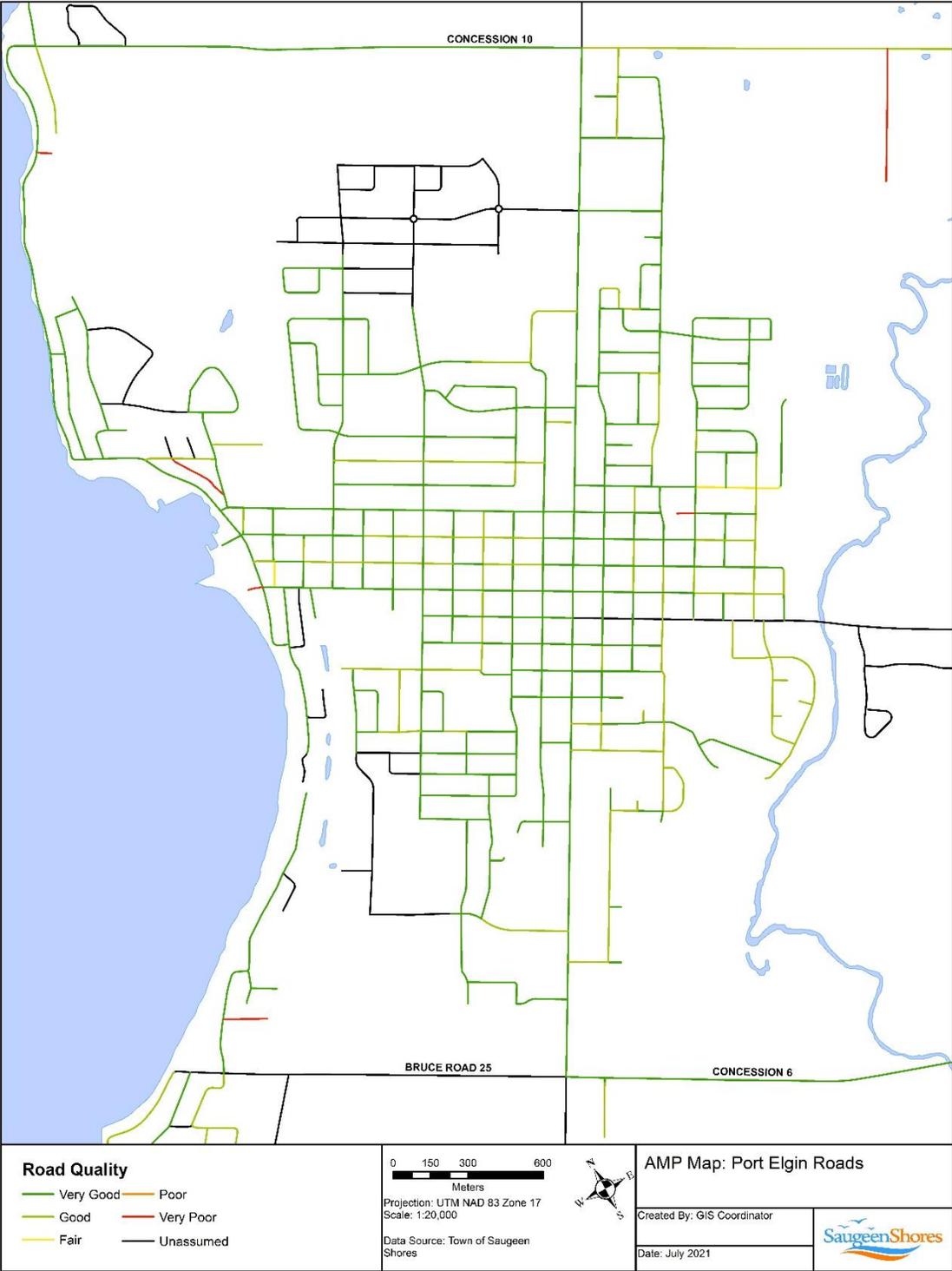
Bridges – Condition



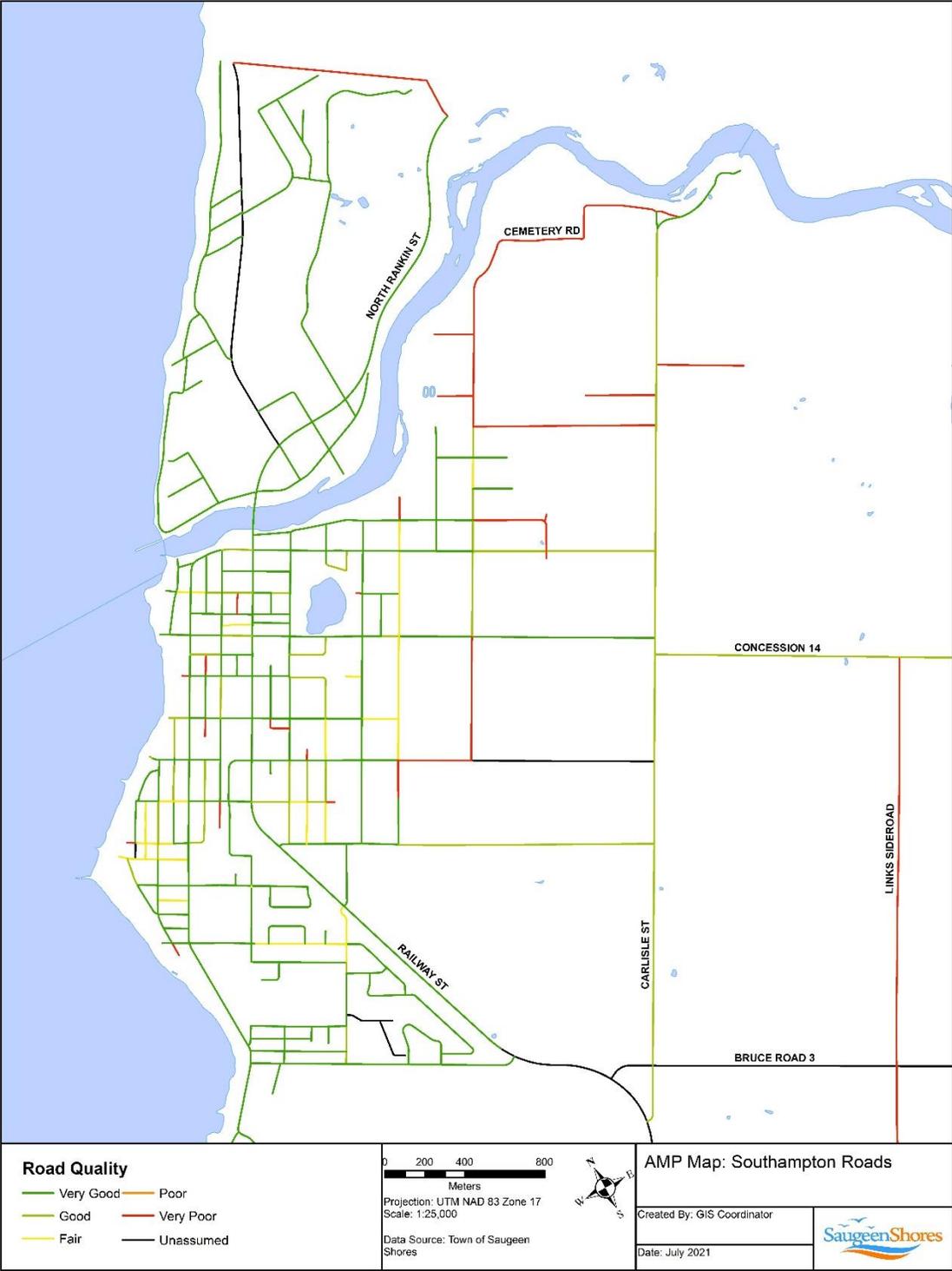
Road Network – Condition (Saugeen Shores)



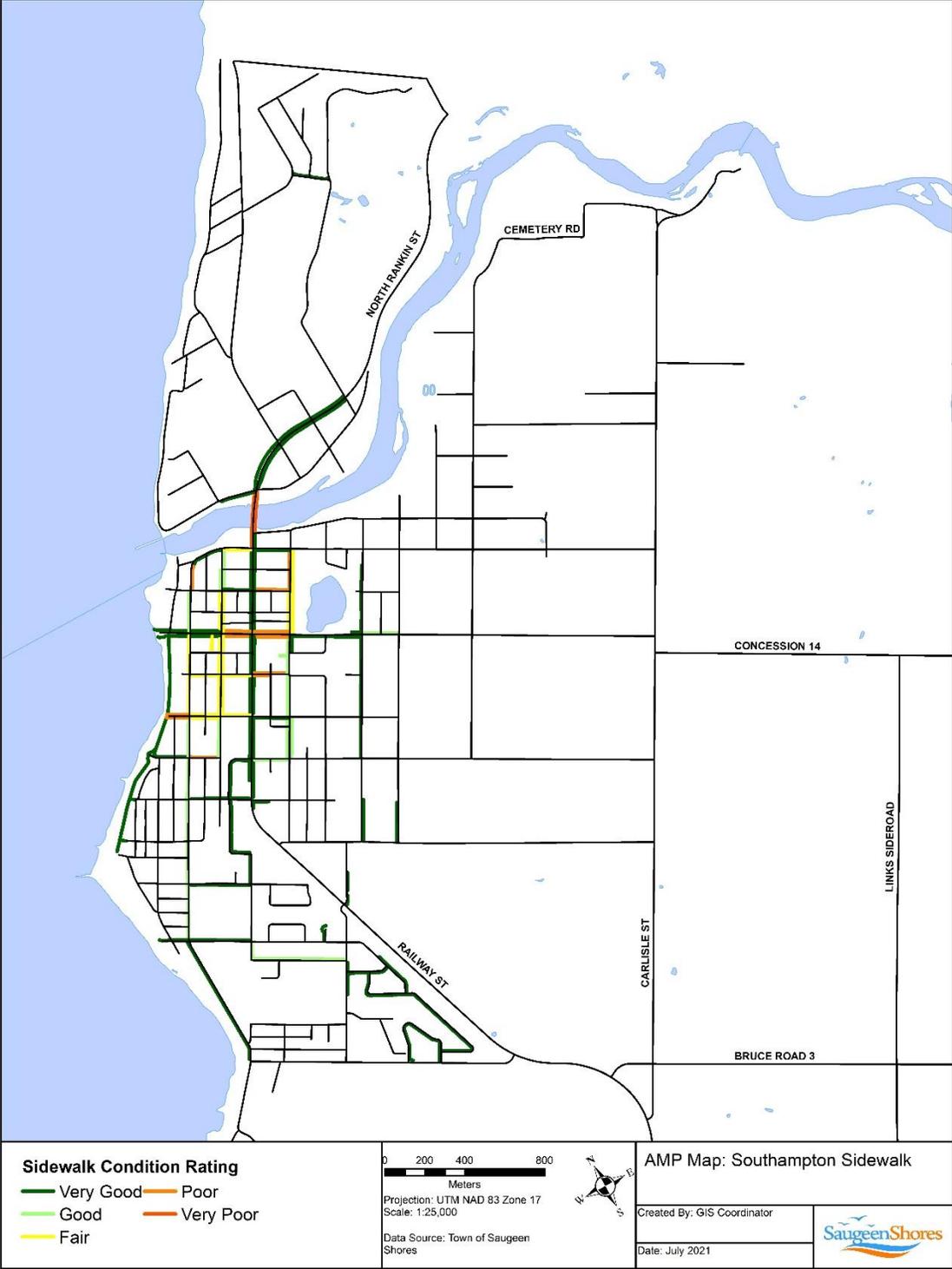
Road Network – Condition (Port Elgin)



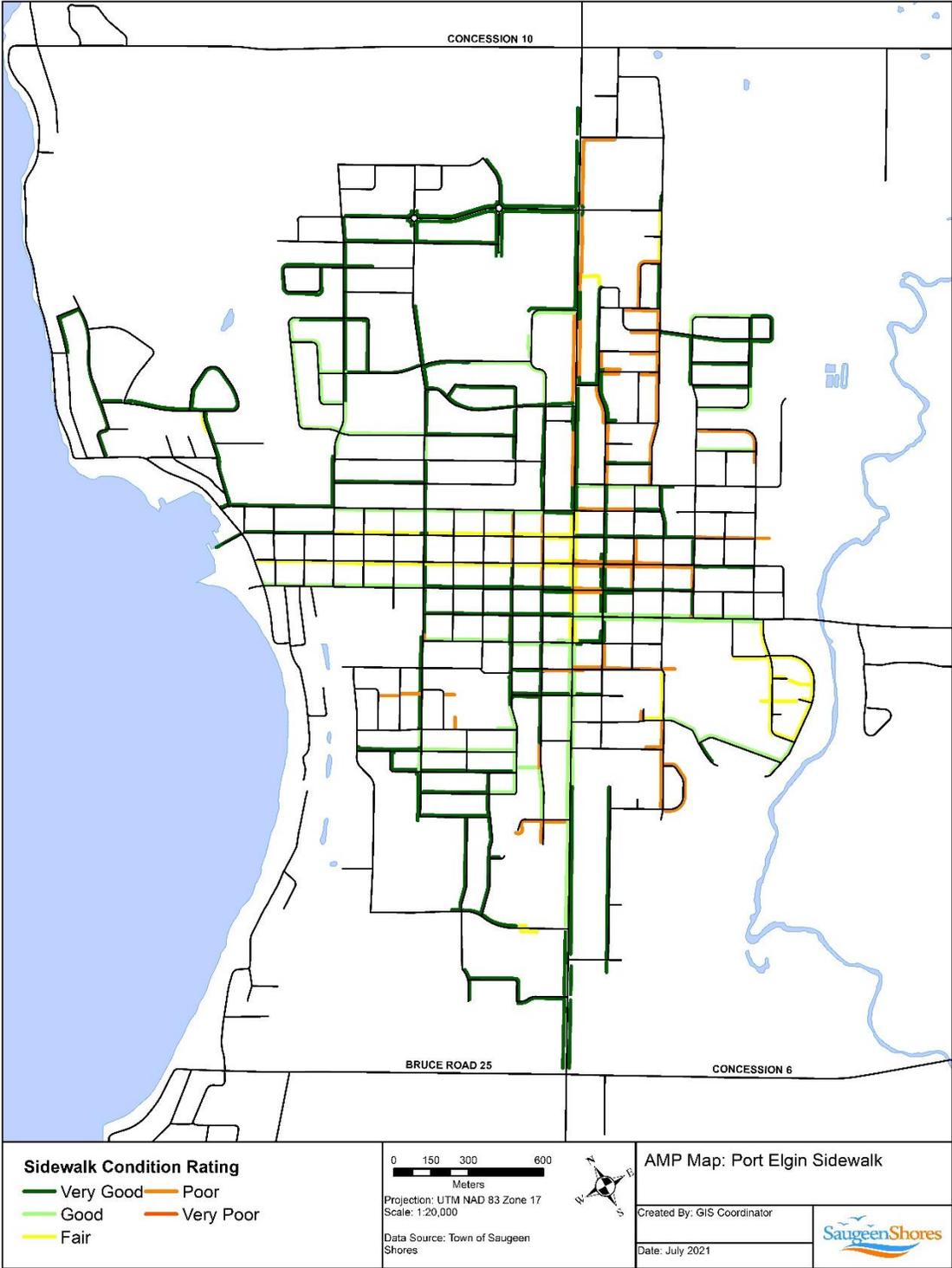
Road Network – Condition (Southampton)



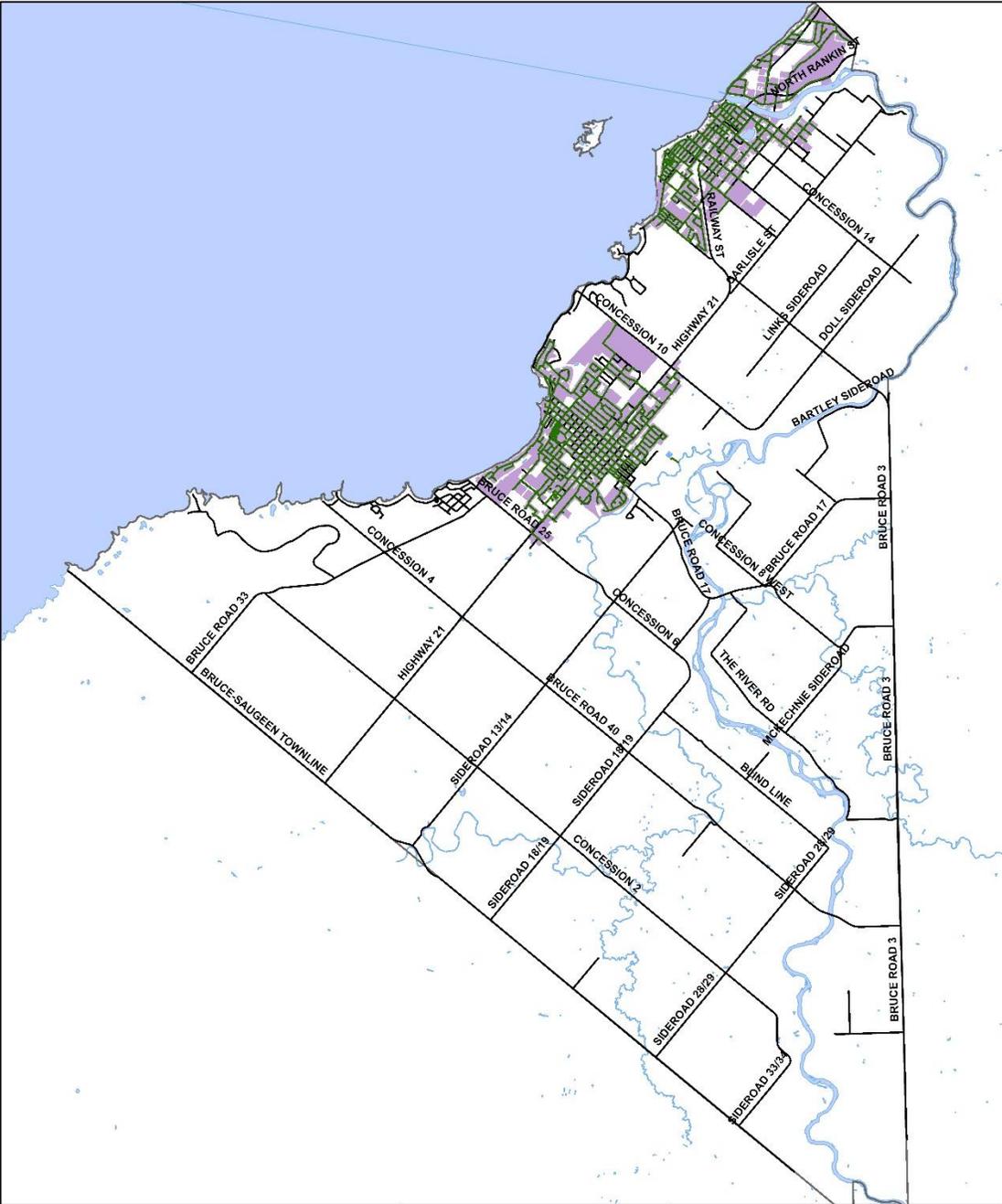
Sidewalk Network – Condition (Southampton)



Sidewalk Network – Condition (Port Elgin)

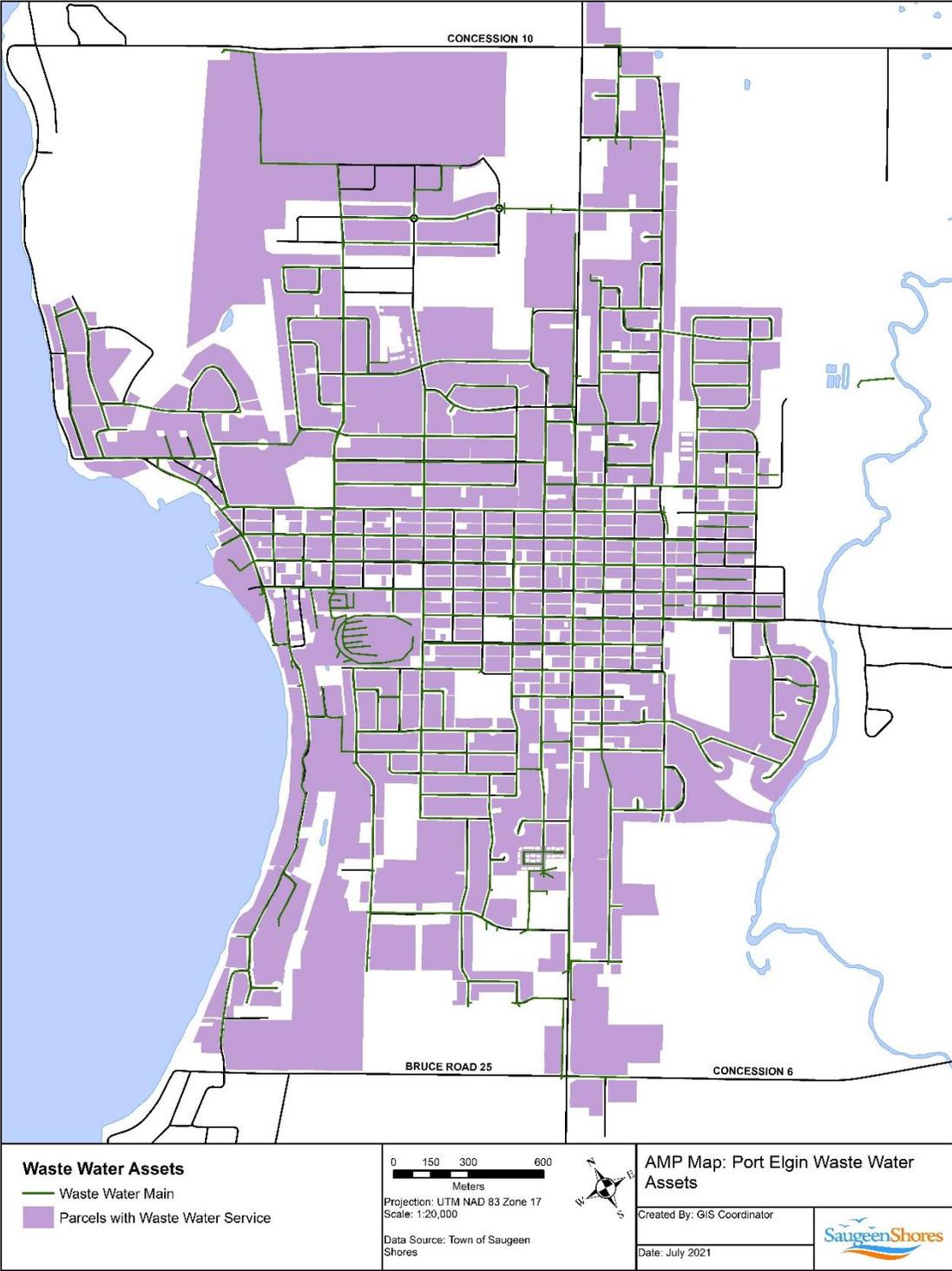


Waste Water Service Area – Saugeen Shores

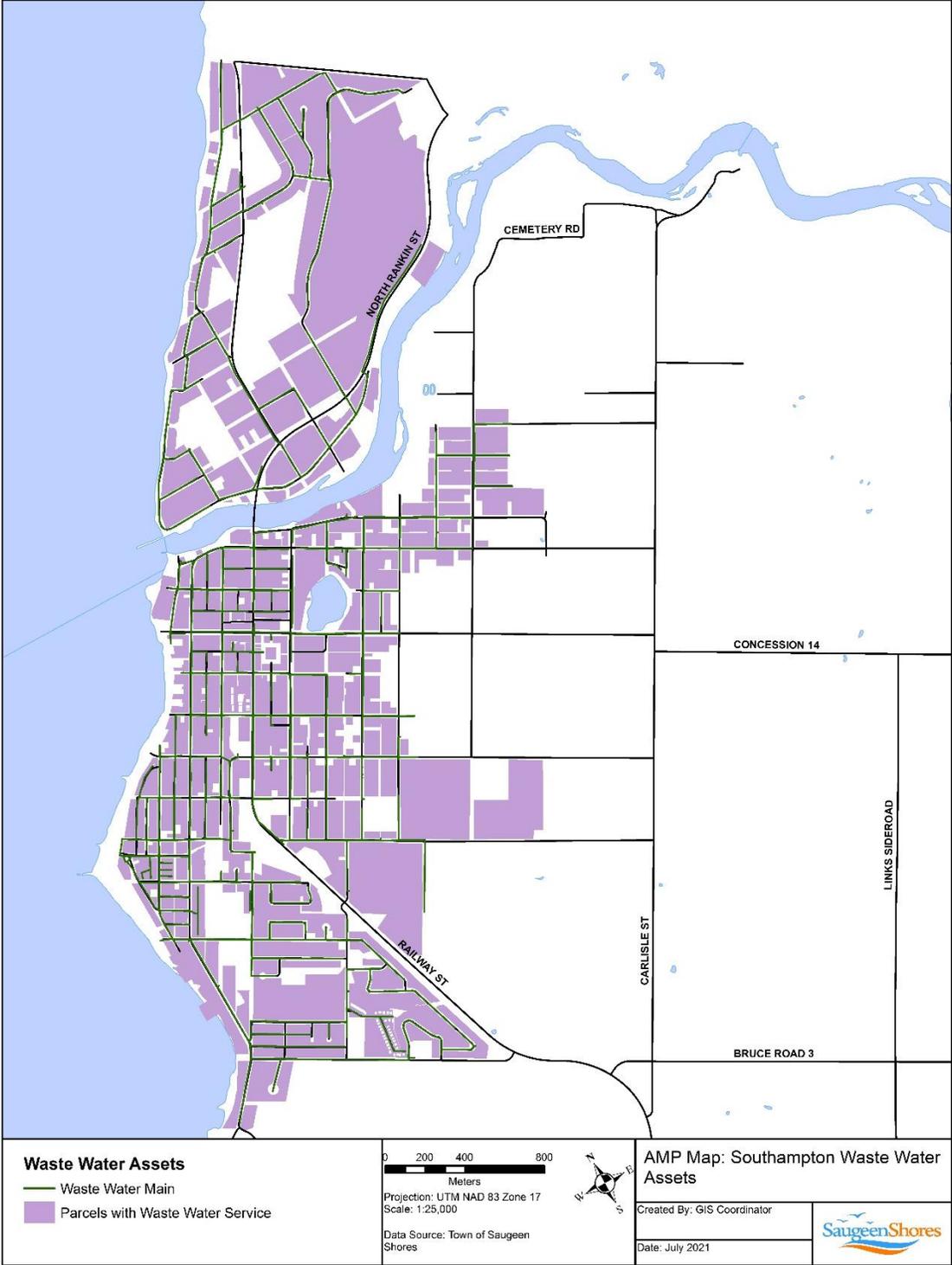


<p>Waste Water Assets</p> <ul style="list-style-type: none"> — Waste Water Main Parcels with Waste Water Service 	<p>0 0.75 1.5 3 Kilometers</p> <p>Projection: UTM NAD 83 Zone 17 Scale: 1:100,000</p> <p>Data Source: Town of Saugeen Shores</p>	<p>AMP Map: Saugeen Shores Waste Water Assets</p> <p>Created By: GIS Coordinator</p> <p>Date: July 2021</p>	
---	--	---	---

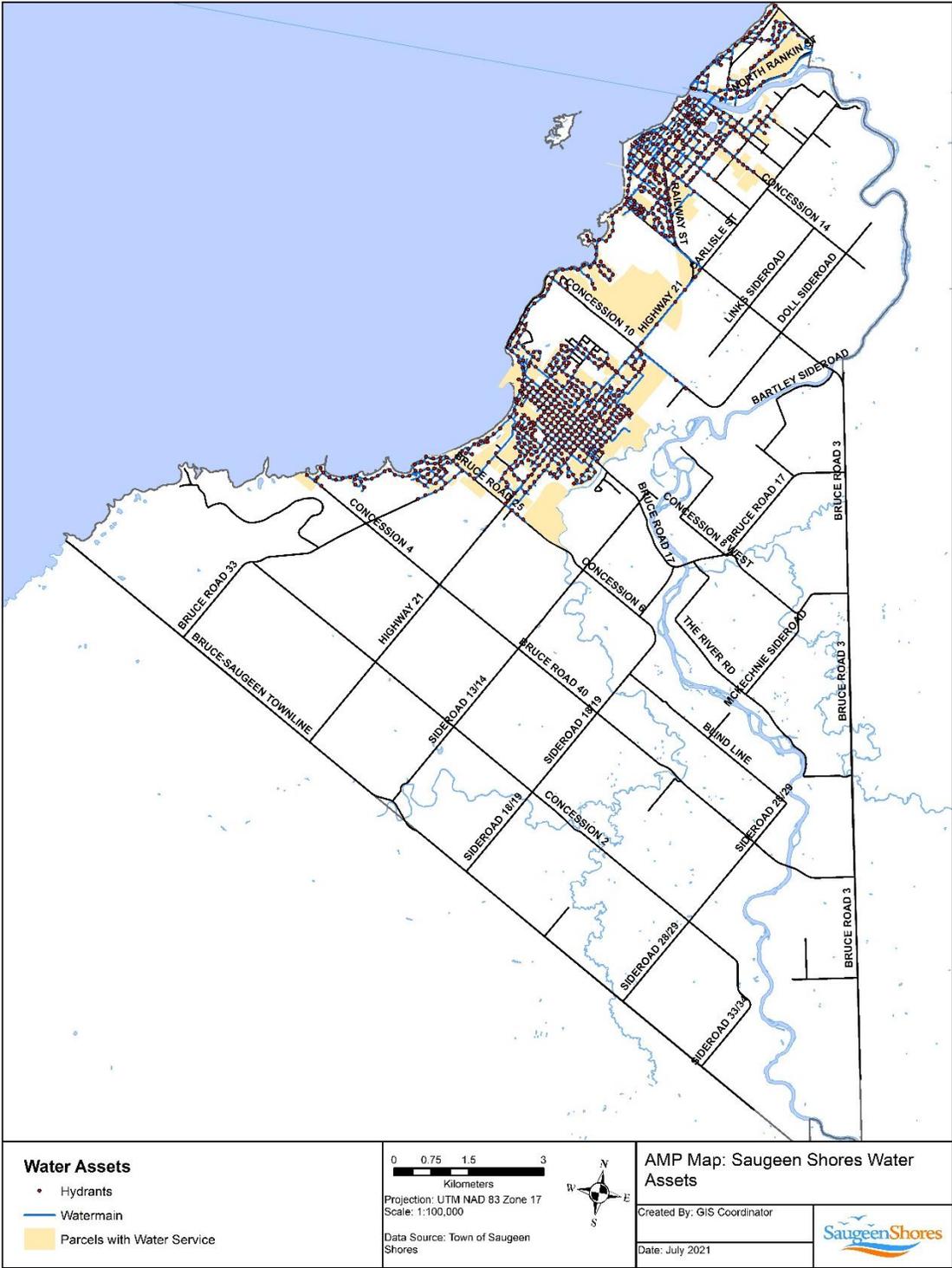
Waste Water Service Area – Port Elgin



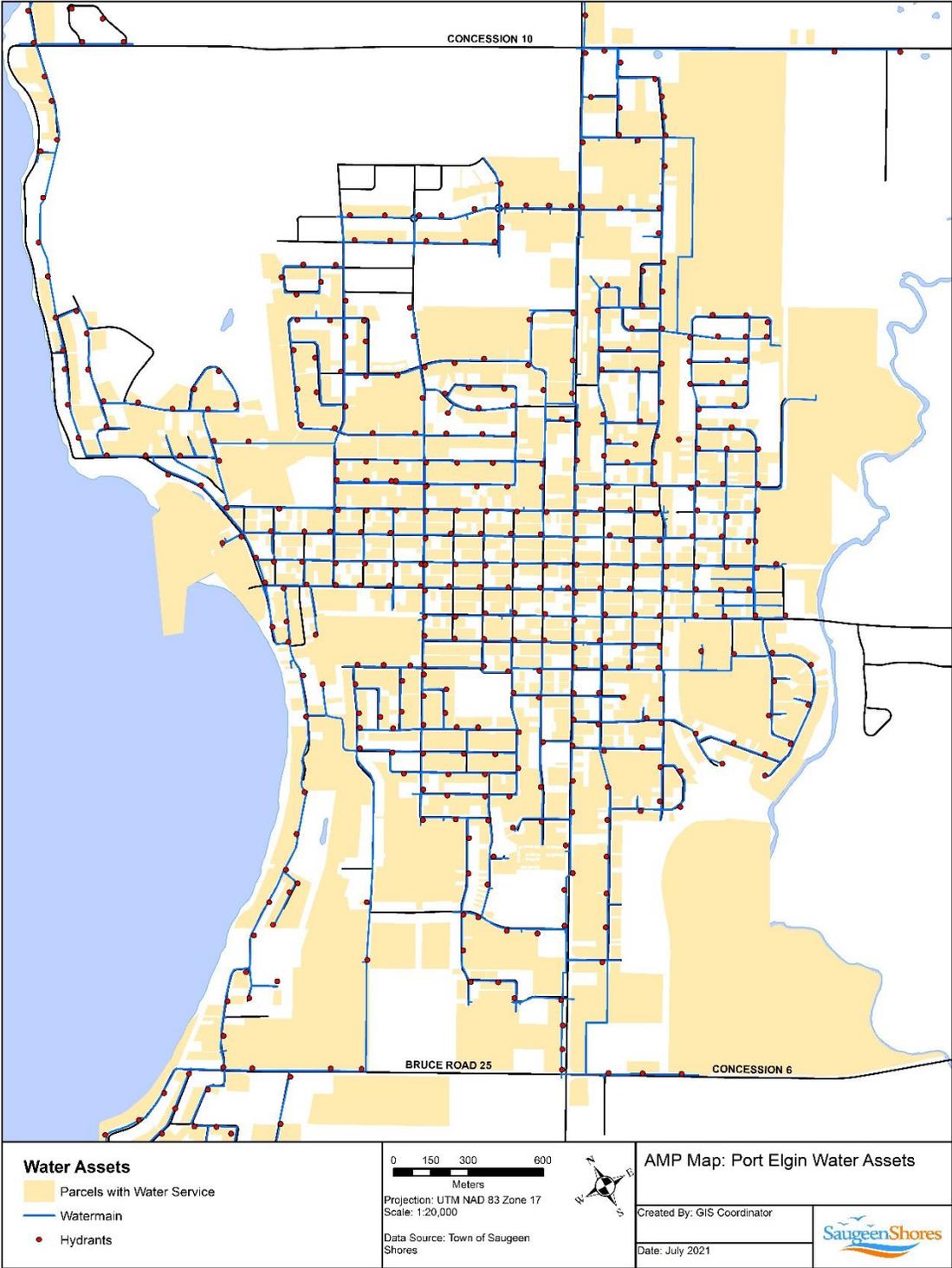
Waste Water Service Area – Southampton



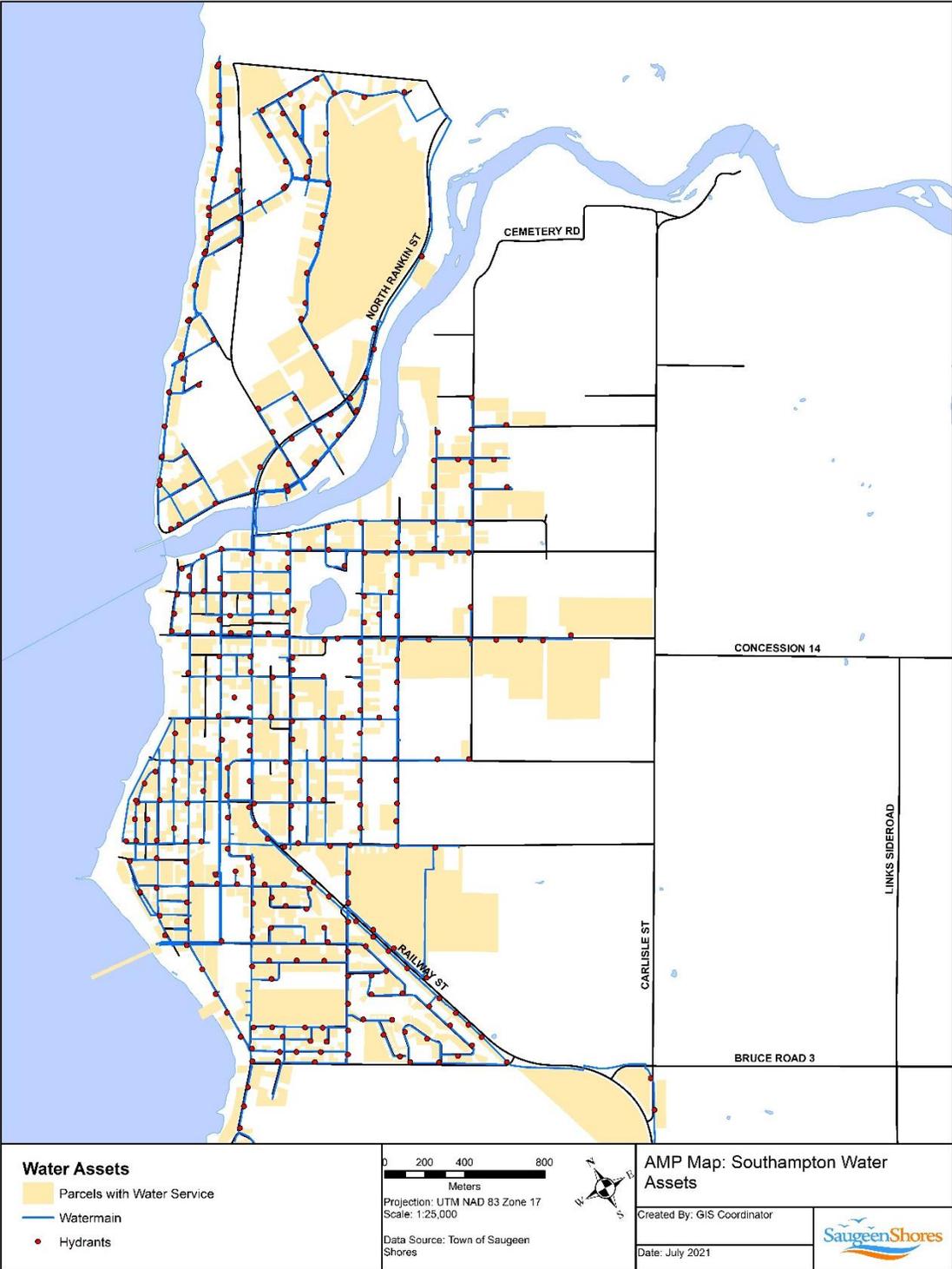
Water Service Area – Saugeen Shores



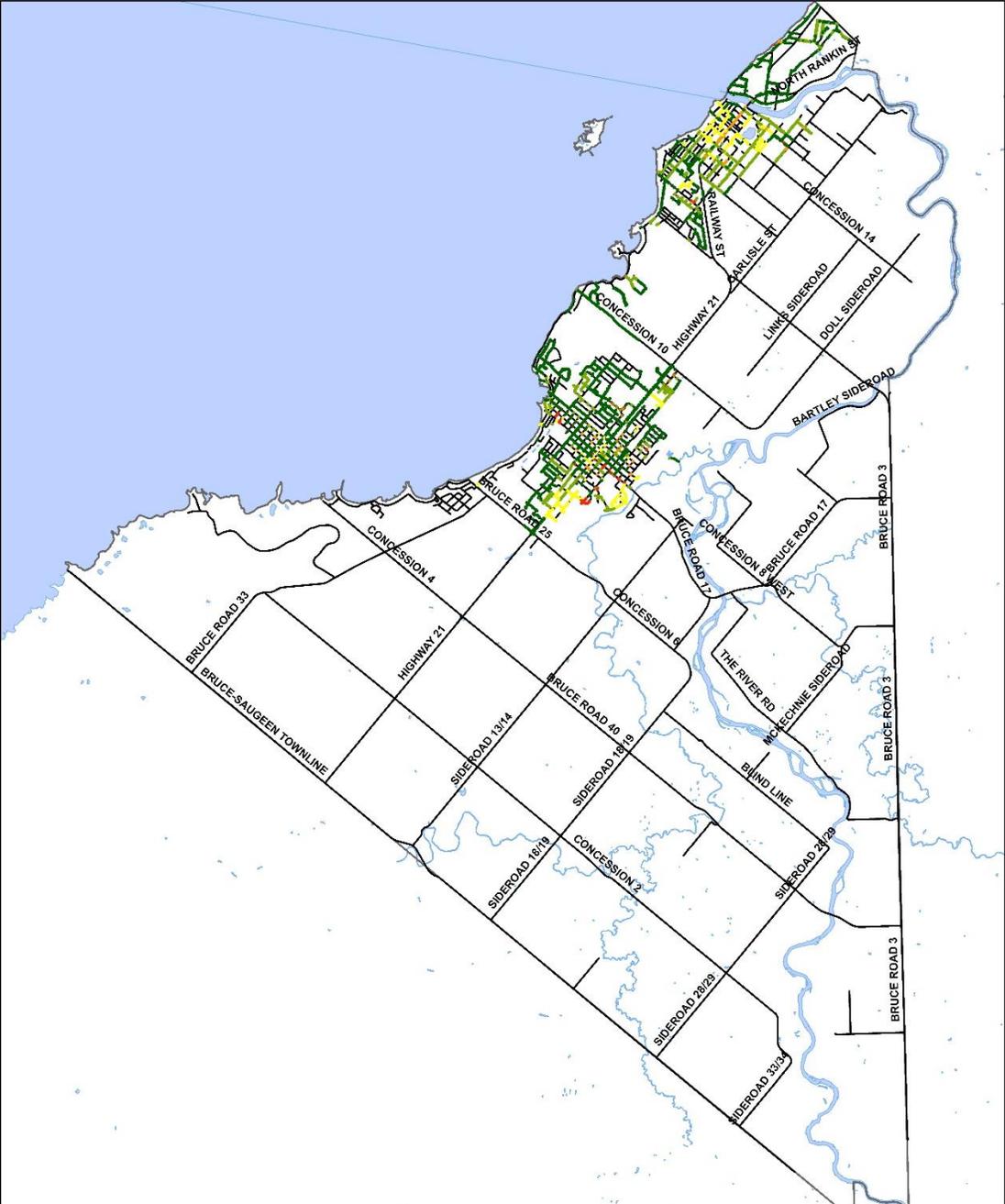
Water Service Area – Port Elgin



Water Service Area – Southampton

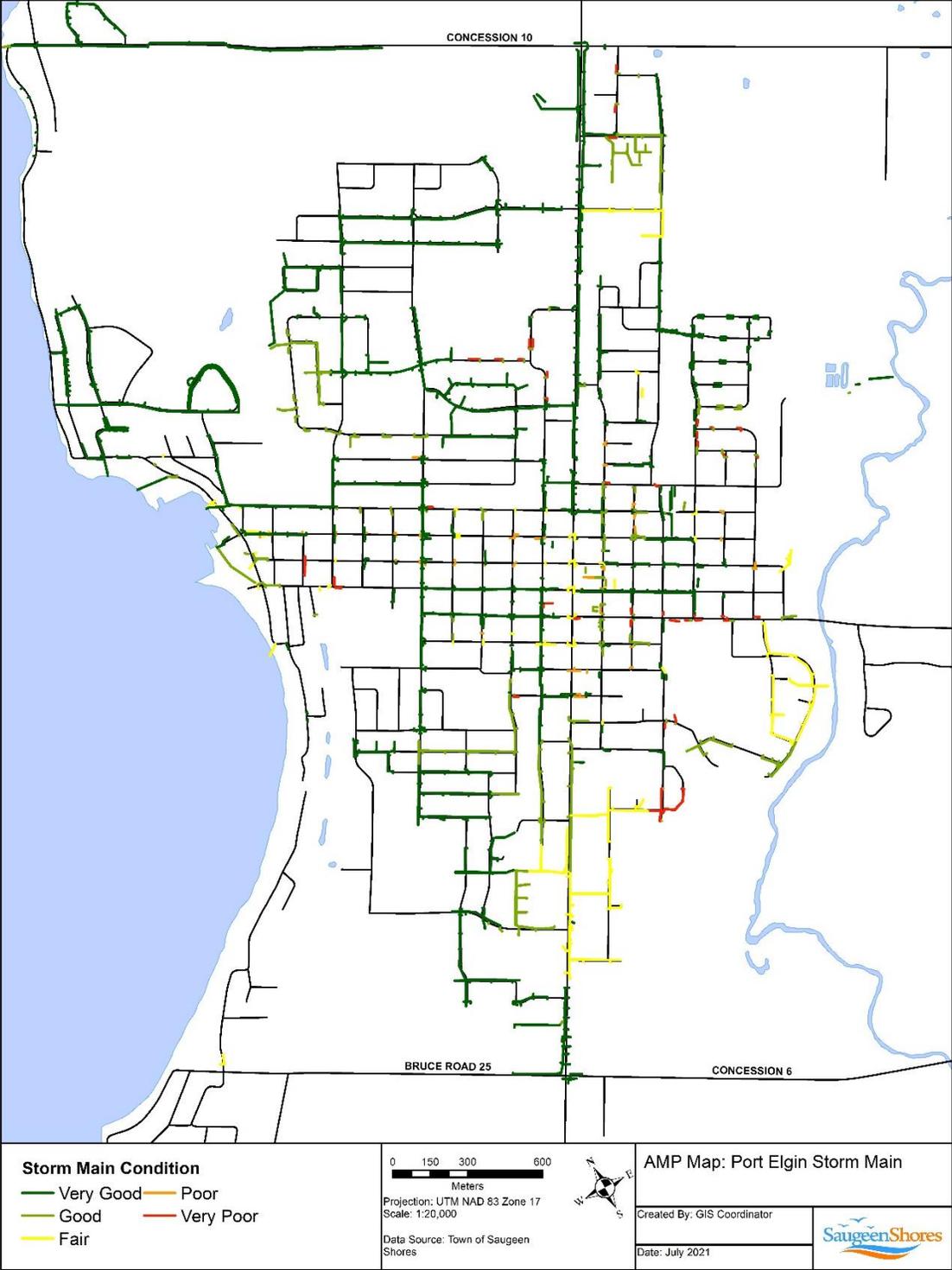


Storm Water Network Condition – Saugeen Shores

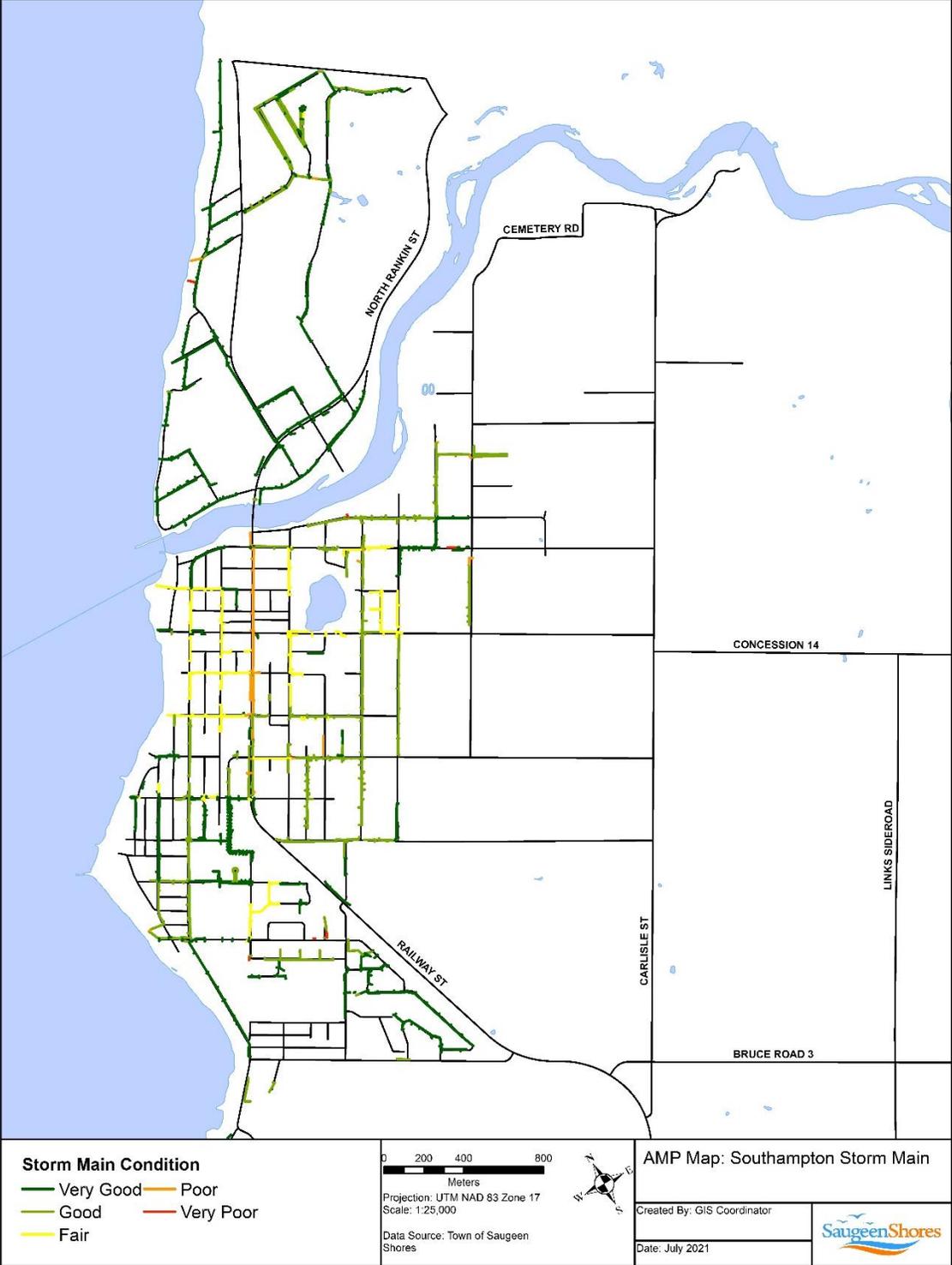


<p>Storm Main Condition</p> <ul style="list-style-type: none"> Very Good Good Fair Poor Very Poor 	<p>0 0.75 1.5 3 Kilometers</p> <p>Projection: UTM NAD 83 Zone 17 Scale: 1:100,000</p> <p>Data Source: Town of Saugeen Shores</p> 	<p>AMP Map: Saugeen Shores Storm Main</p> <p>Created By: GIS Coordinator</p> <p>Date: July 2021</p> 
---	--	--

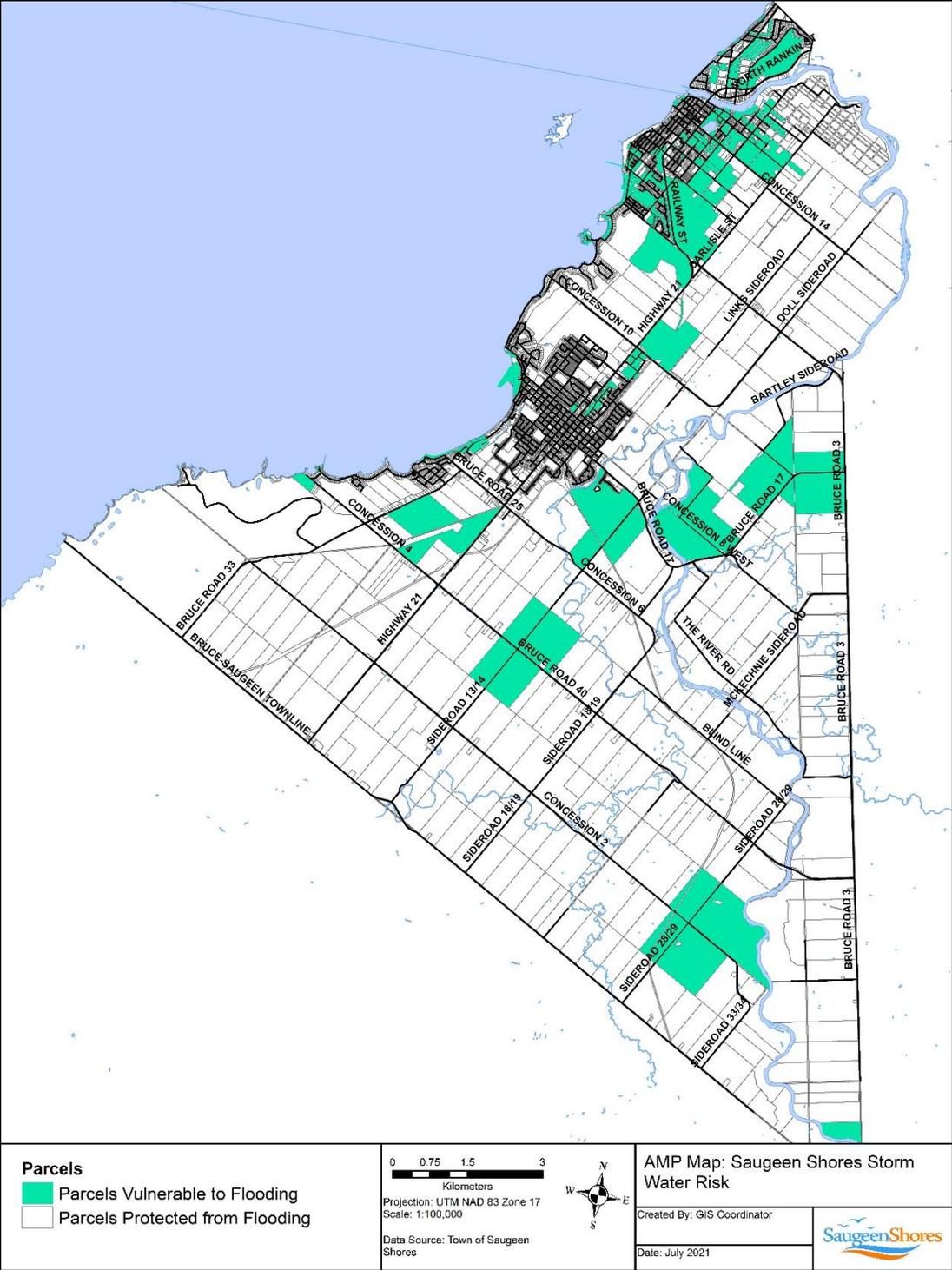
Storm Water Network Condition – Port Elgin



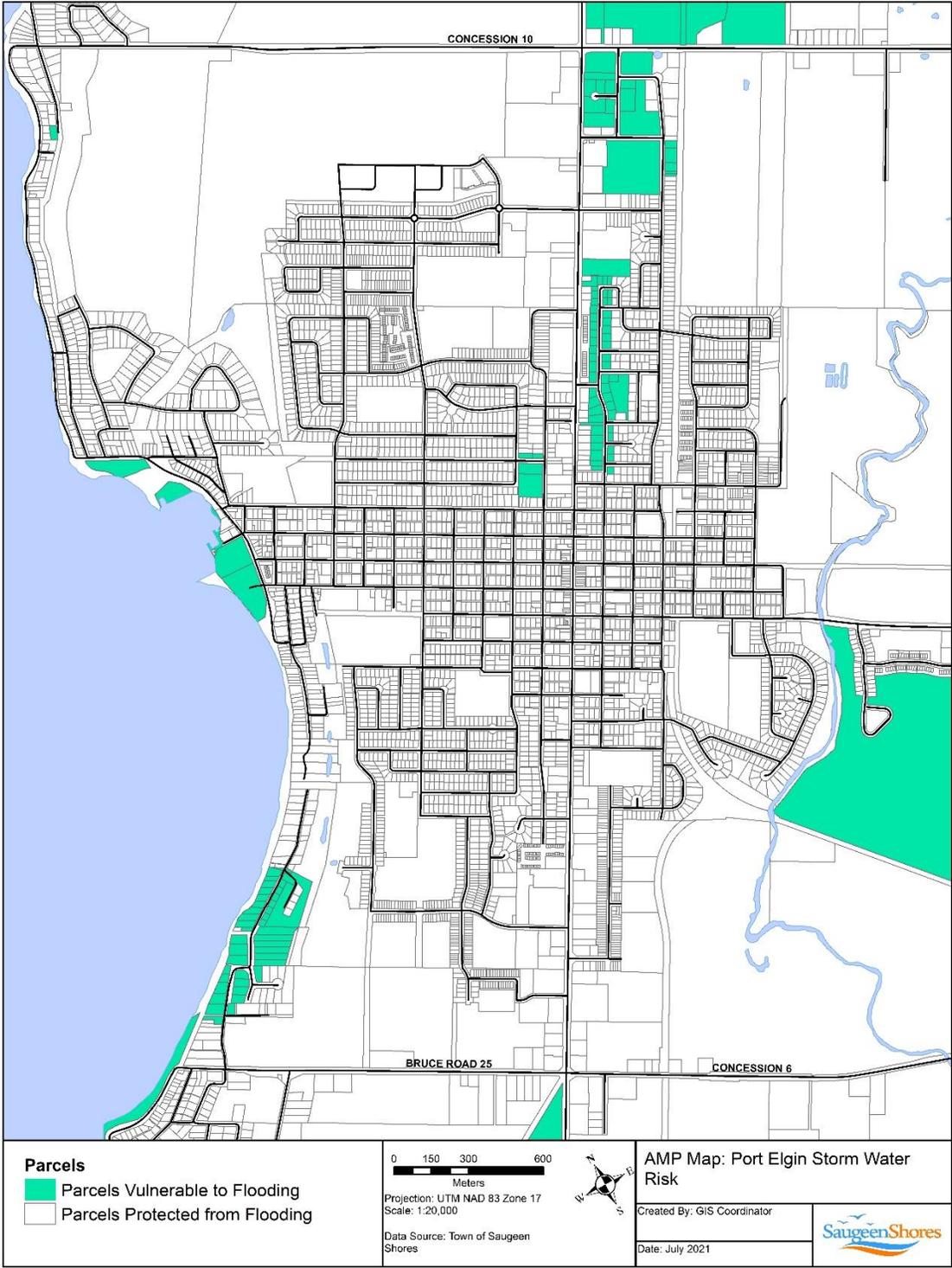
Storm Water Network Condition – Southampton



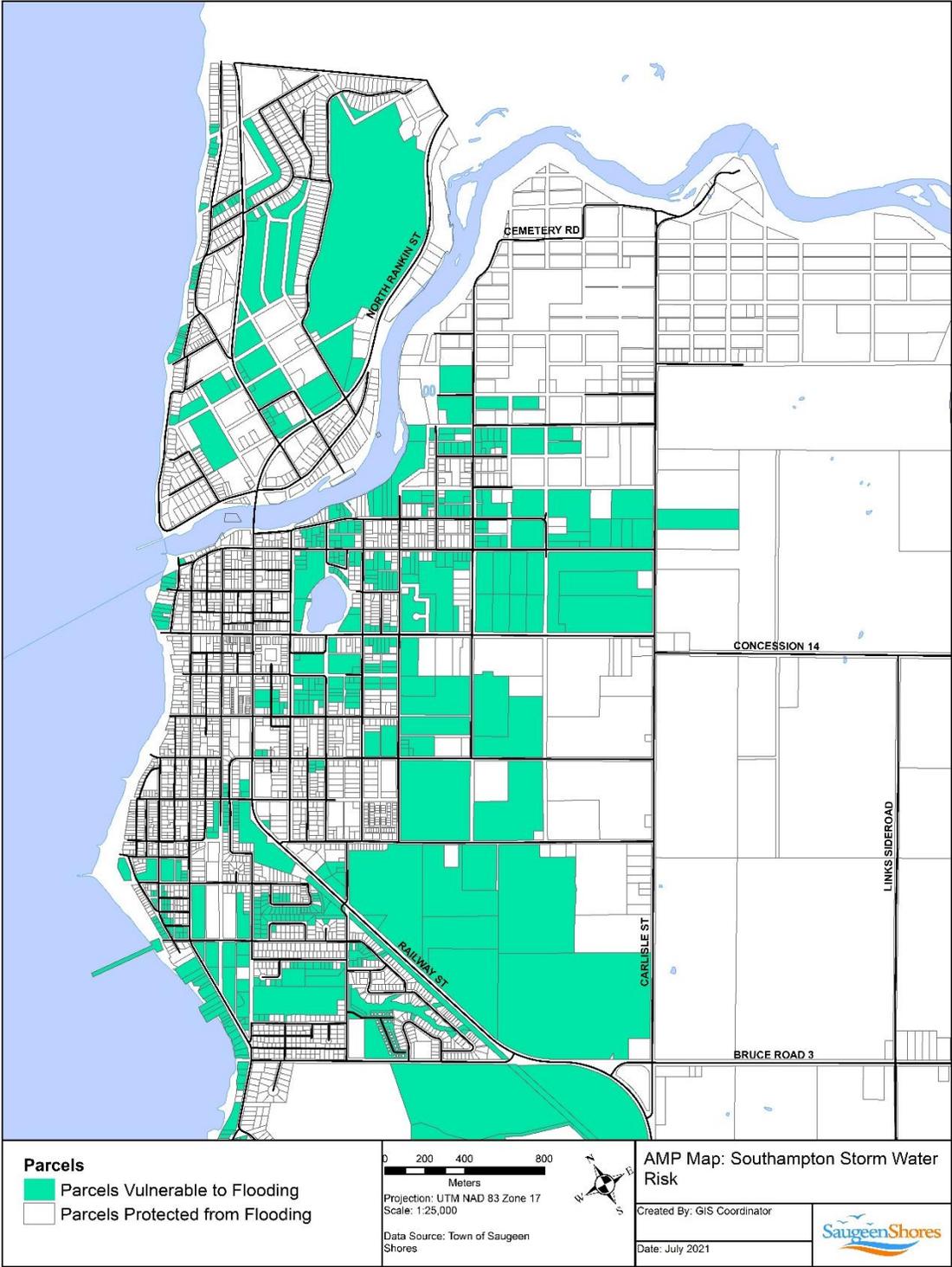
Parcels Vulnerable to a 100-year Storm – Saugeen Shores

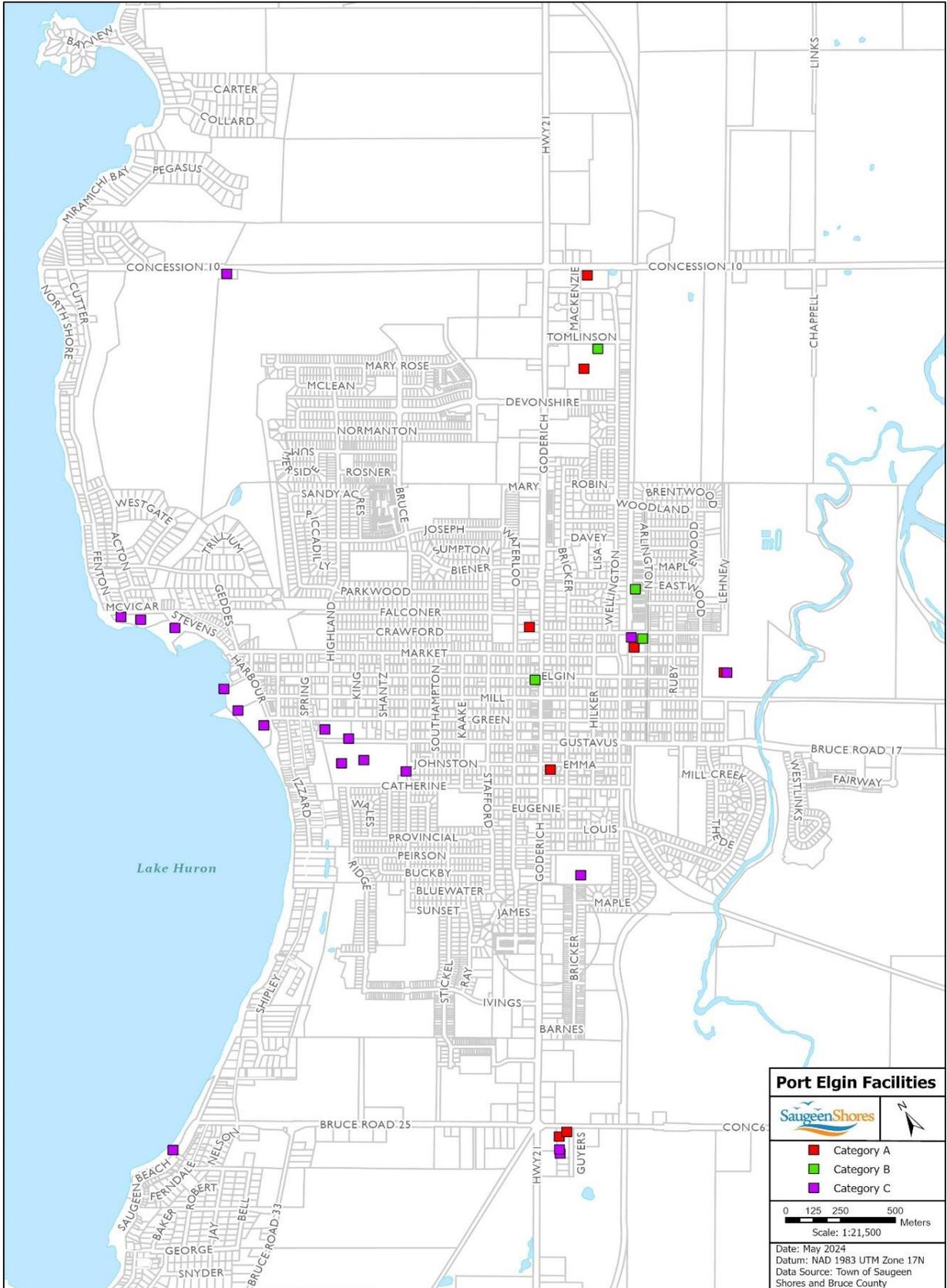


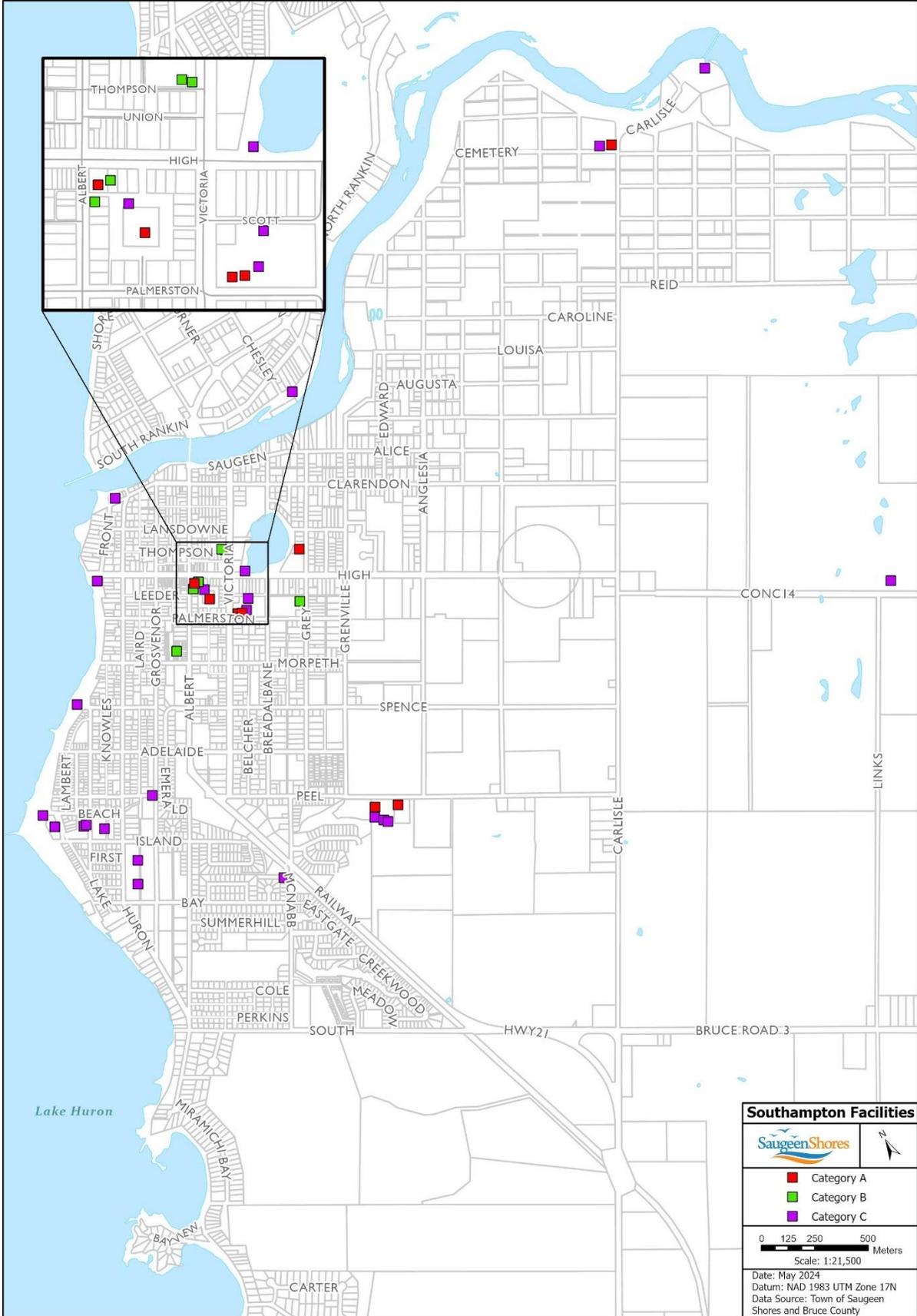
Parcels Vulnerable to a 100-year Storm – Port Elgin

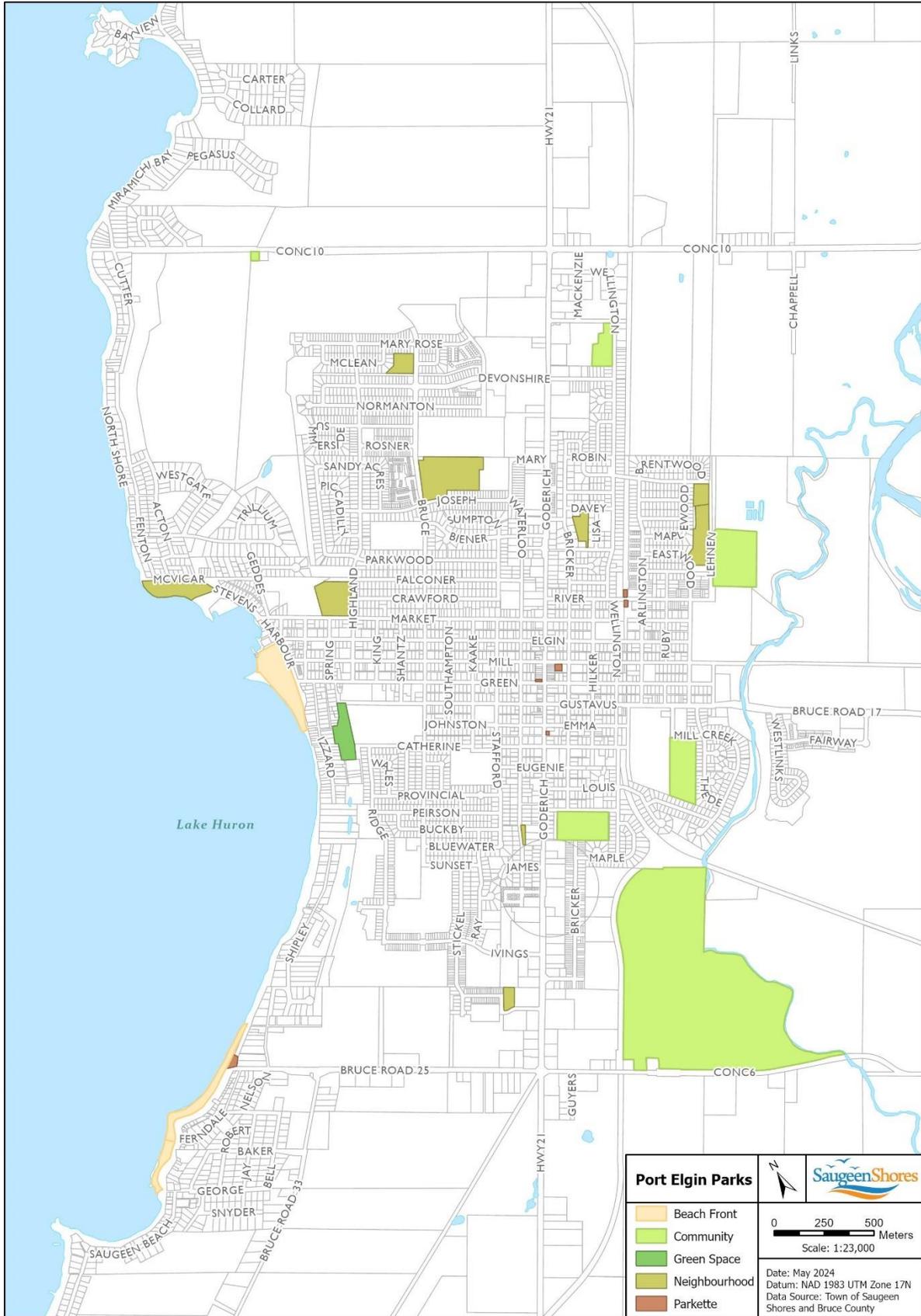


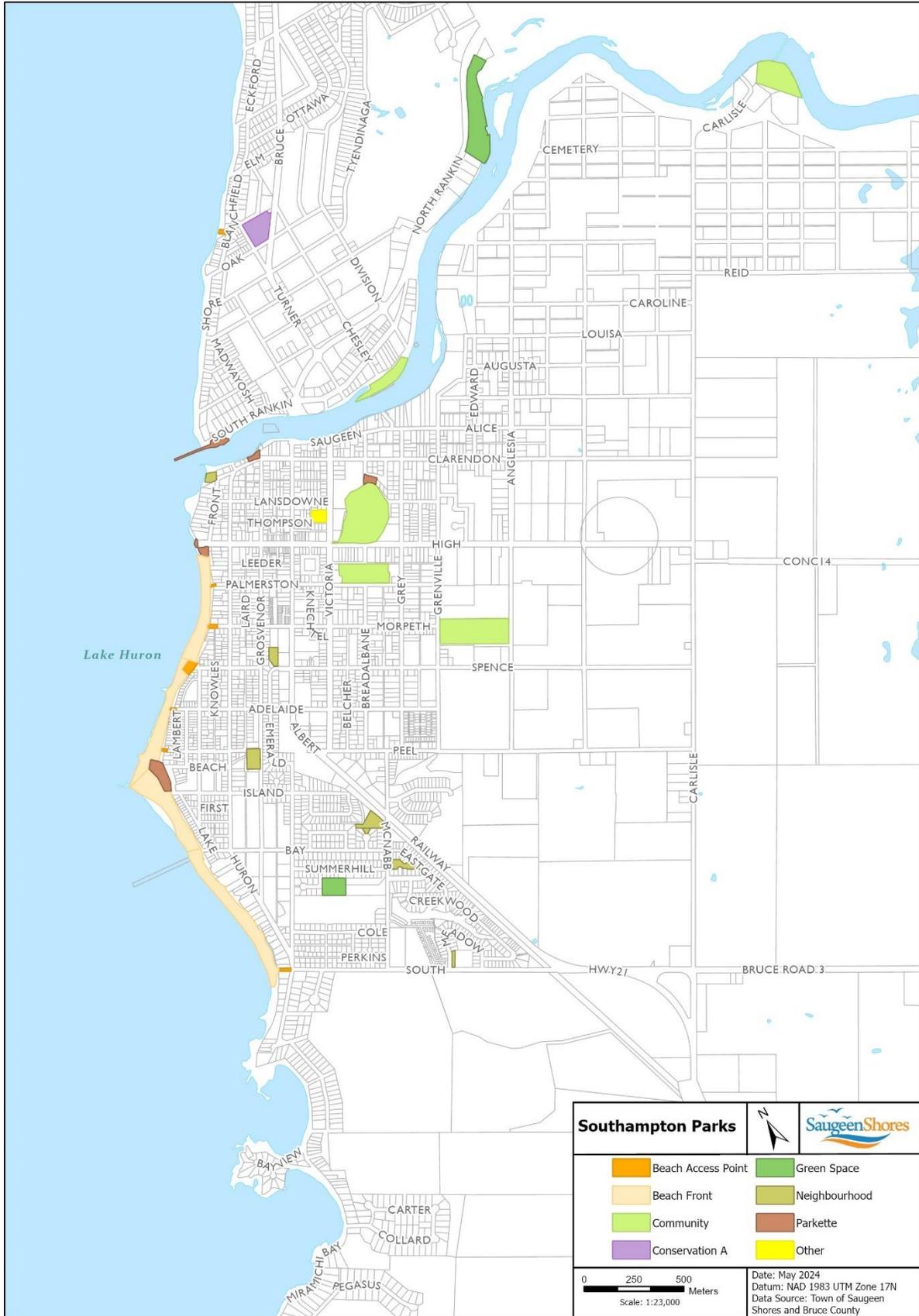
Parcels Vulnerable to a 100-year Storm – Port Elgin



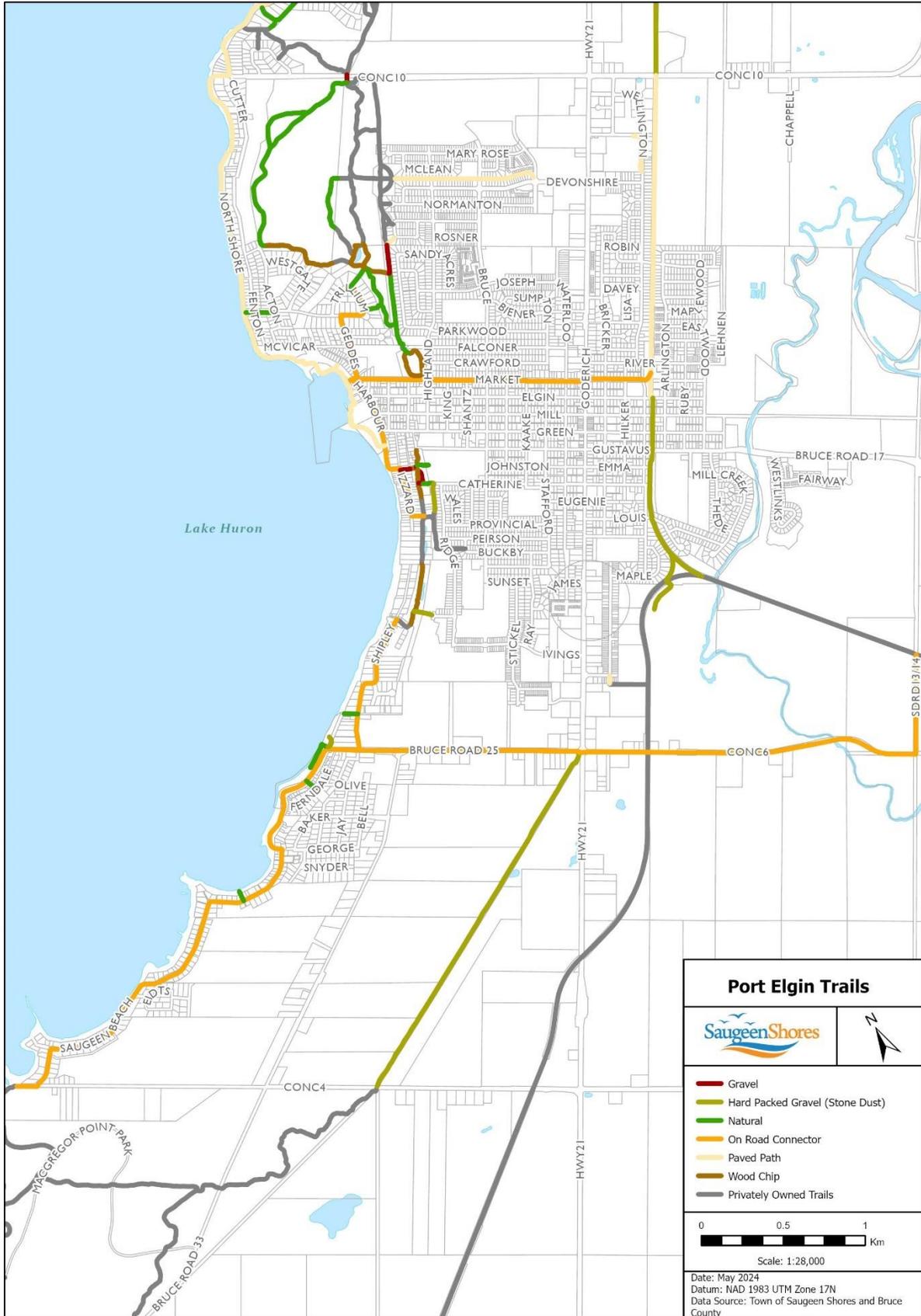




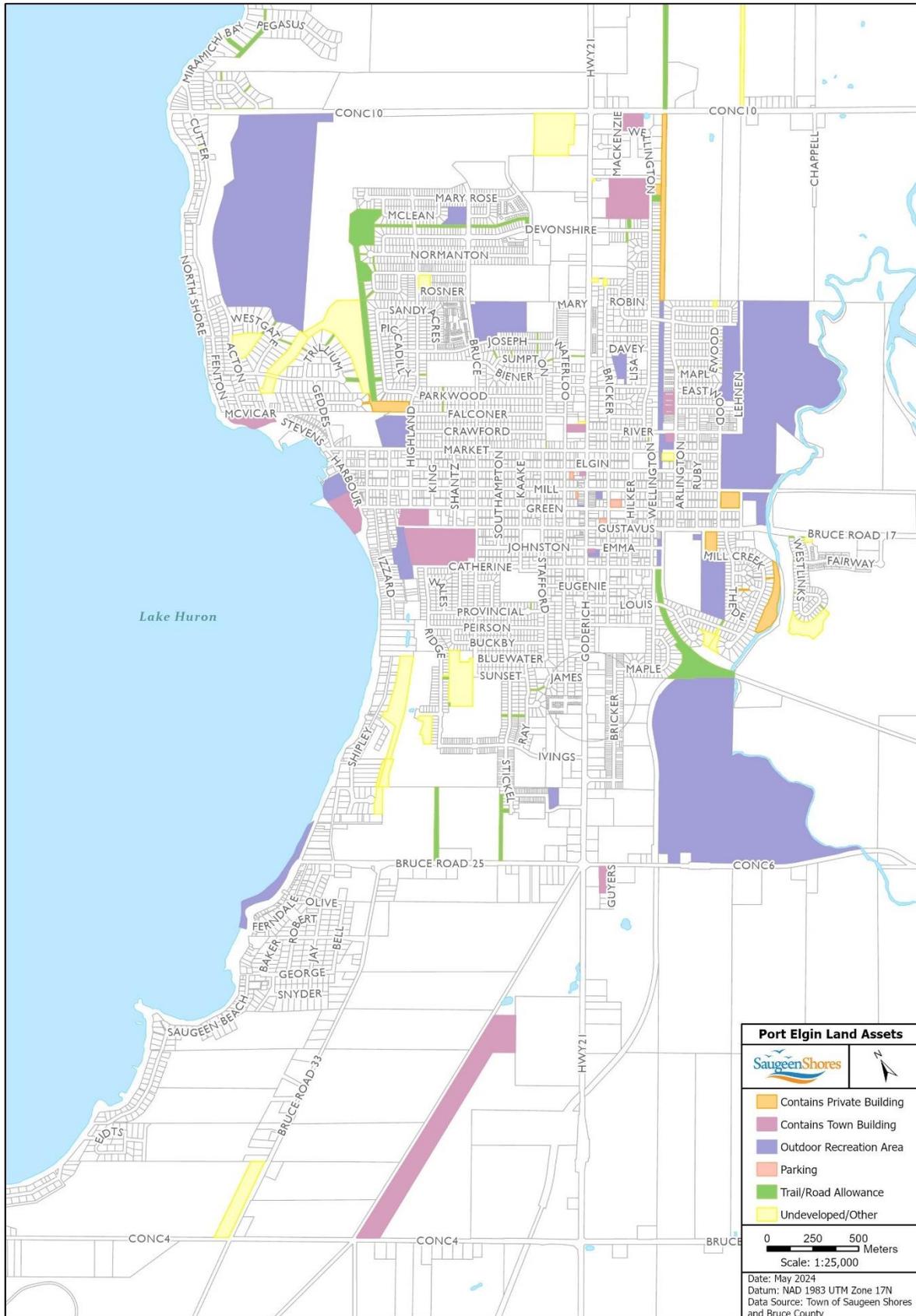


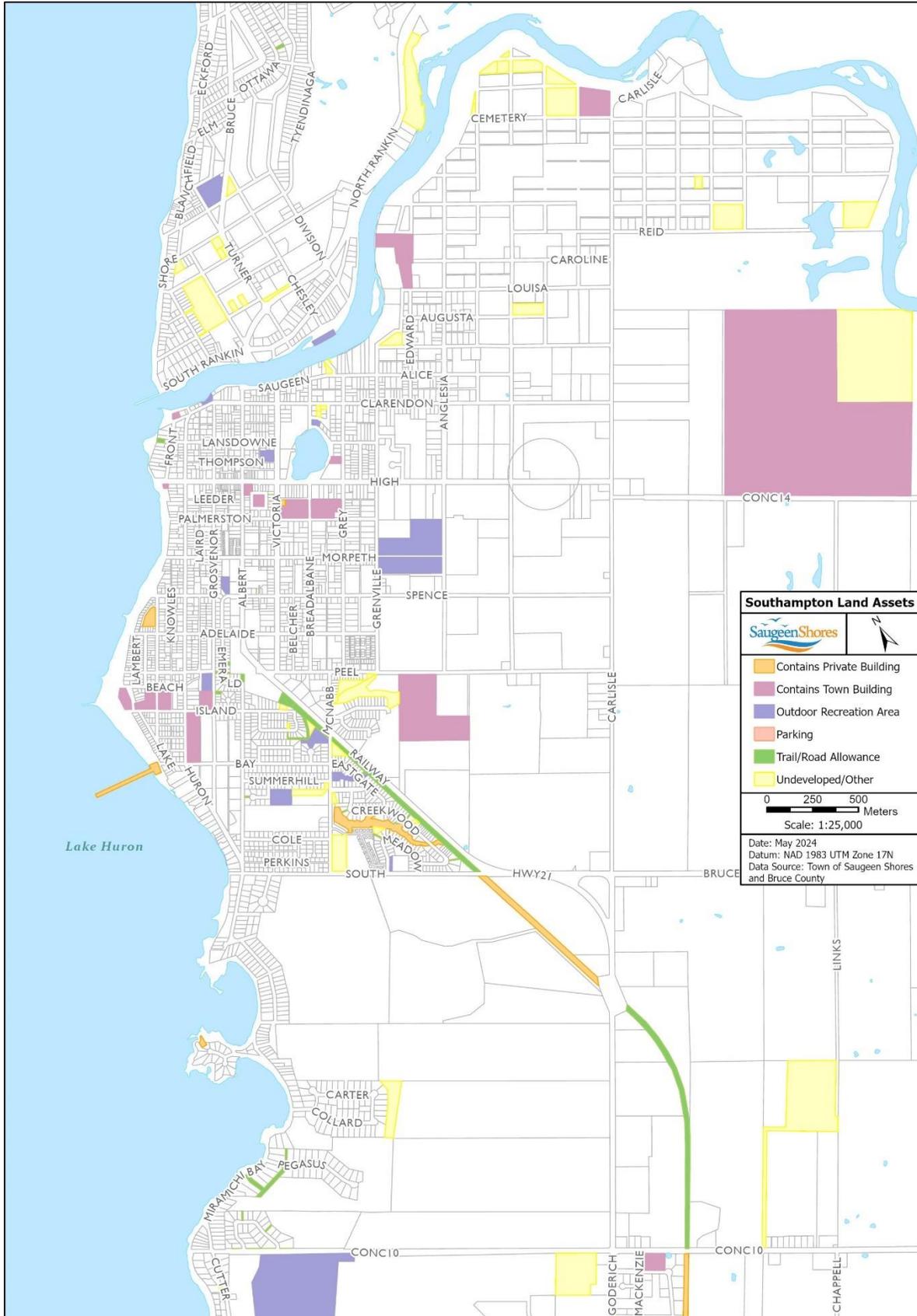


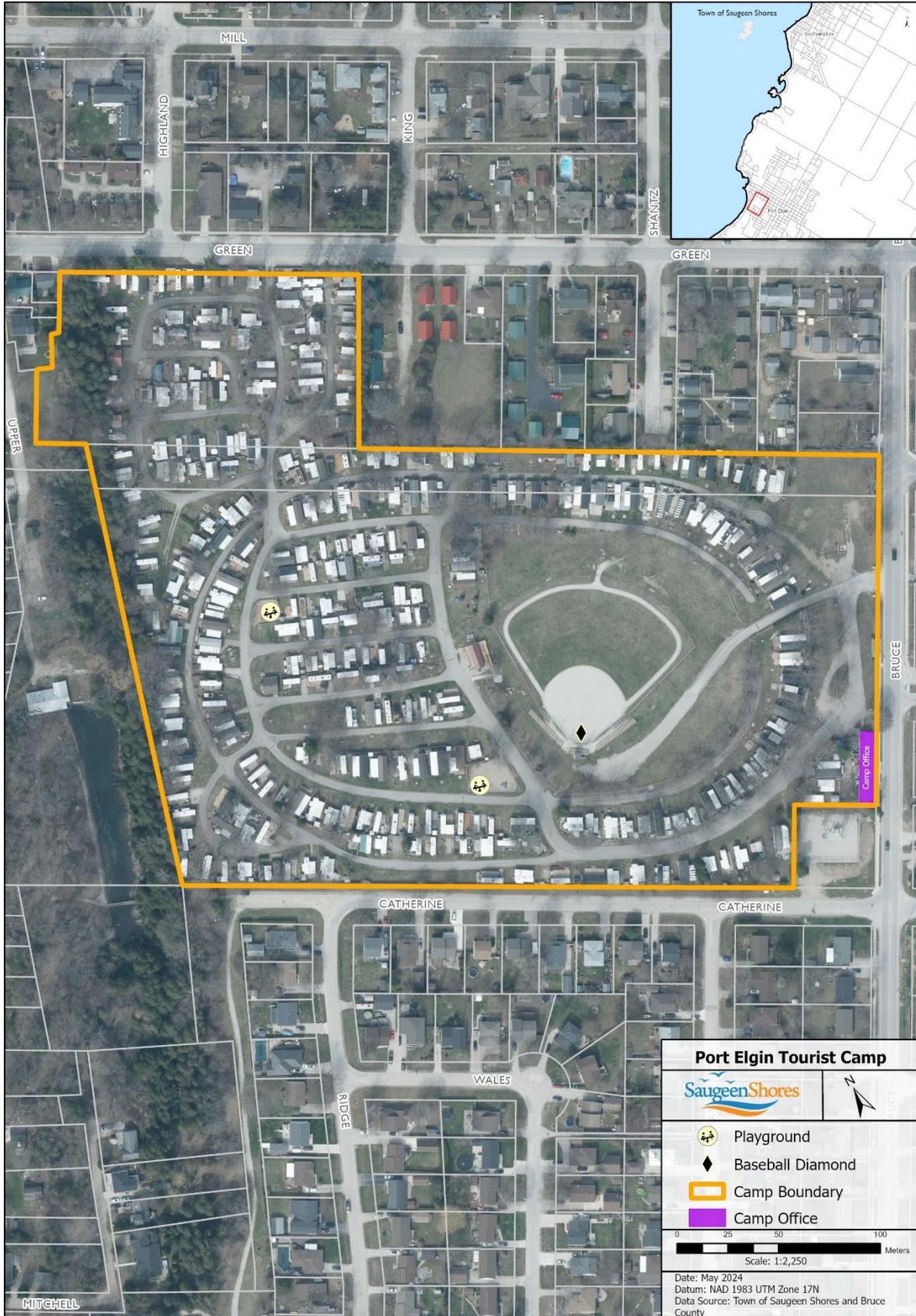
Southampton Parks			
	Beach Access Point		Green Space
	Beach Front		Neighbourhood
	Community		Parkette
	Conservation A		Other
 Scale: 1:23,000		Date: May 2024 Datum: NAD 1983 UTM Zone 17N Data Source: Town of Saugeen Shores and Bruce County	











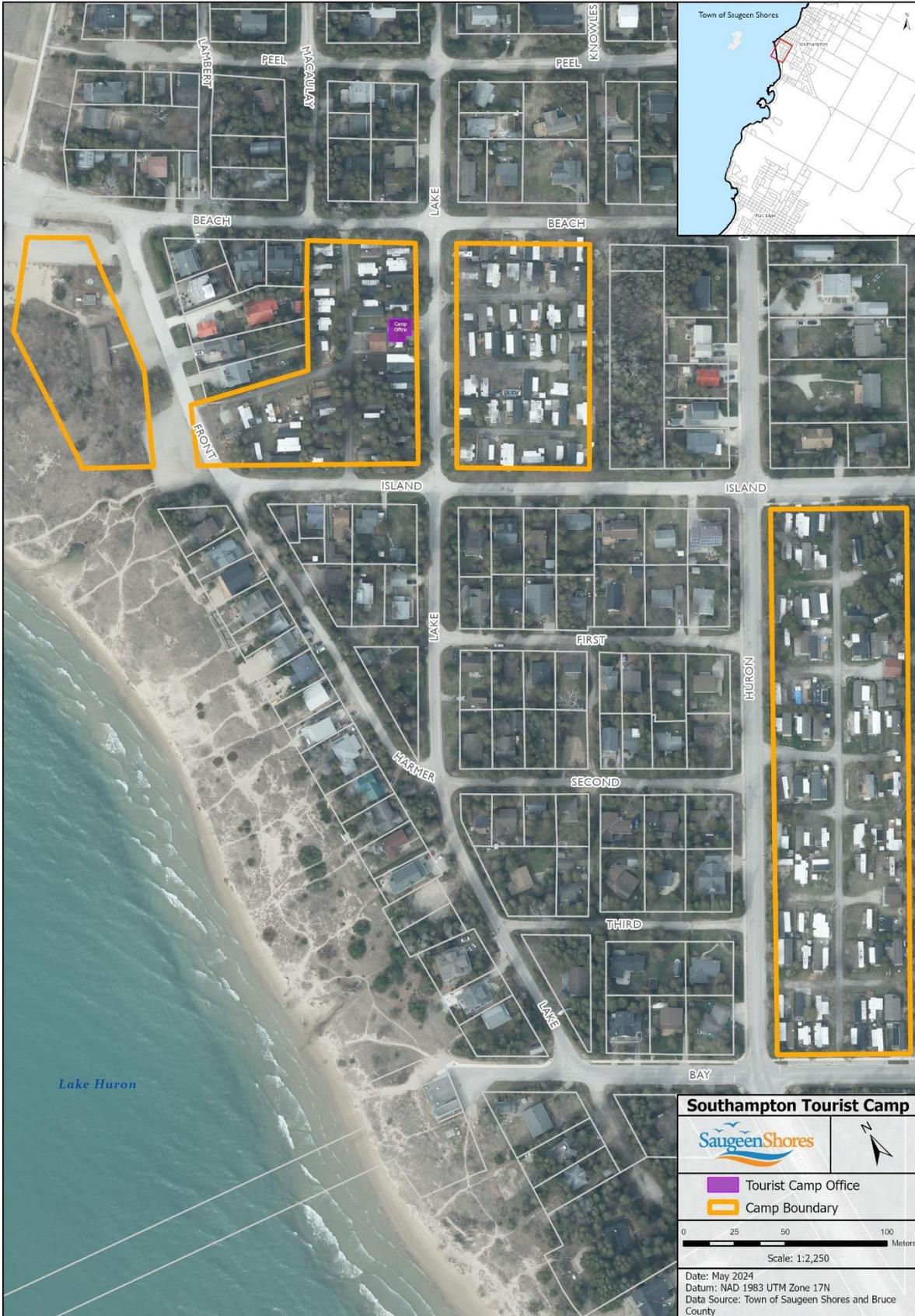
Port Elgin Tourist Camp

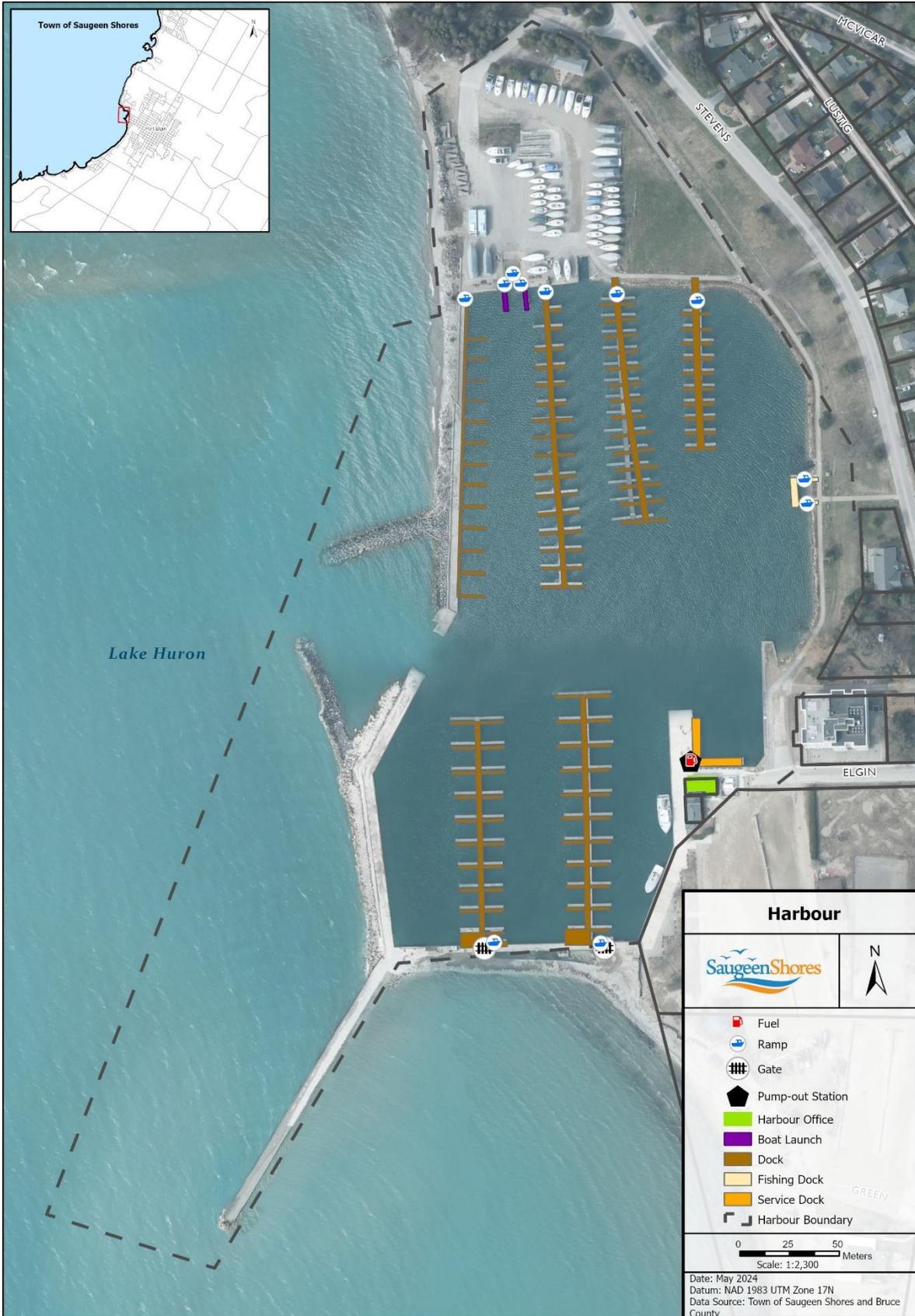
 

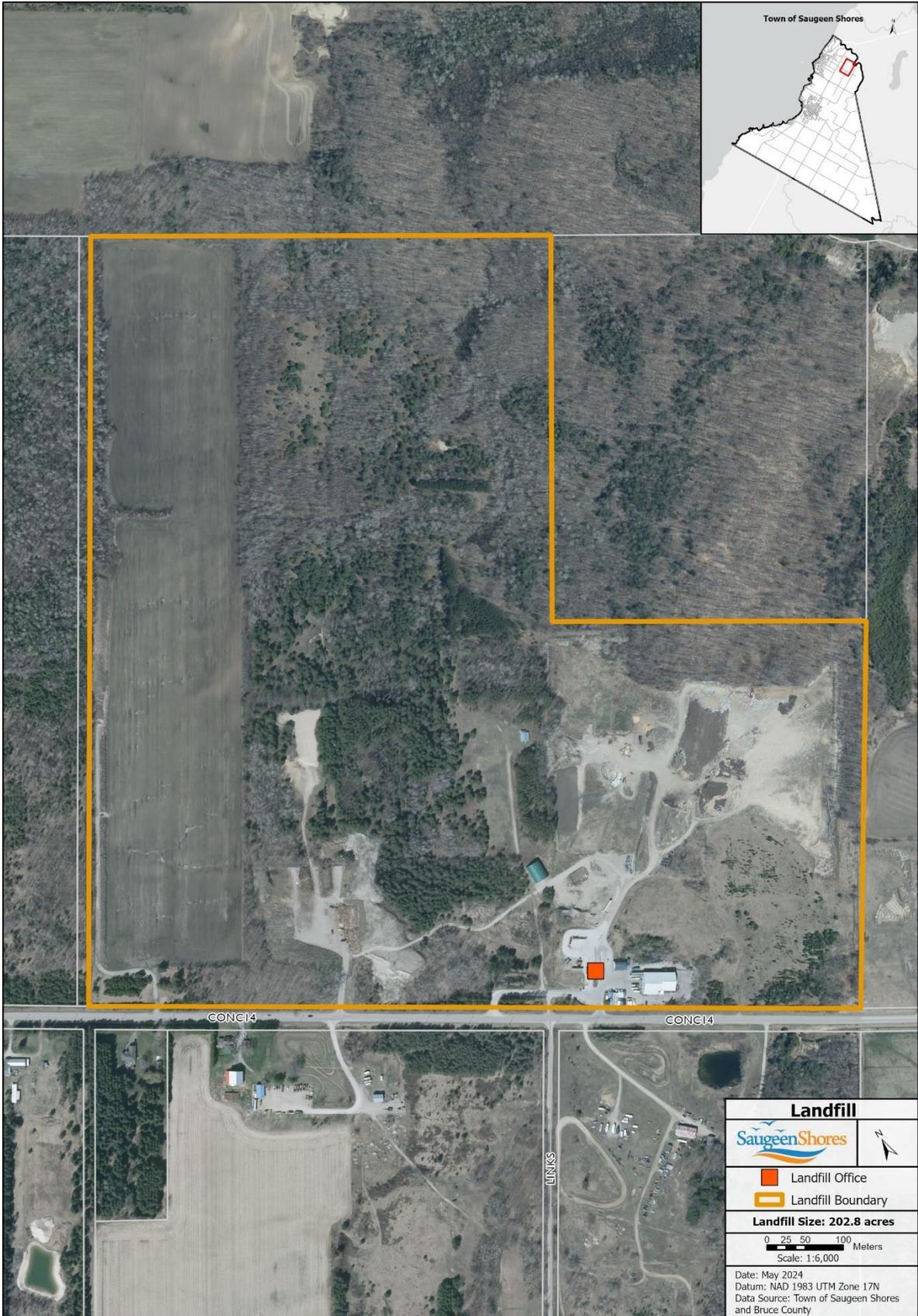
-  Playground
-  Baseball Diamond
-  Camp Boundary
-  Camp Office

0 25 50 100 Meters
Scale: 1:2,250

Date: May 2024
Datum: NAD 1983 UTM Zone 17N
Data Source: Town of Sauguen Shores and Bruce County







19.8 COMMUNITY SERVICE ASSETS & PARK ATTRIBUTES

19.8.1 COMMUNITY SERVICE ASSETS SUMMARY TABLE

Asset Category	Quantity
BBQ Pit	5
Bench	545
Bike Rack	82
Bleacher	39
Garbage Receptacle	155
Ground Bed No Tree	2
Ground Bed with Tree	61
Information Sign	25
Other	19
Picnic Table	135
Planter	168
White Muskoka Chair	48
Grand Total	1284

19.8.2 PARK ATTRIBUTE SUMMARY TABLE

Attribute Type	Quantity
Baseball Diamond	11
Basketball Court	3
Boat Launch	1
Dock	1
Fountain/Water Feature	1
Other	33
Outdoor Fitness	1
Pavilion	7
Playground	18
Potable Water	54
Skate Park	1

Attribute Type	Quantity
Soccer Field	9
Splash Pad	2
Storage Building	21
Sun/Picnic Shelter	9
Swing Set	24
Tennis Court	2
Volleyball Court	2
Walkway/Boardwalk	2
Washroom	14
Washroom / Fish Cleaning	2
Grand Total	218

19.9 TREE CANOPY STUDY AREA



Figure 2. Points sampled and assessed in canopy cover and plantable areas analysis using i-Tree Canopy. The analysis included 1000 points over the 17,334 ha area of the municipal boundary.



Figure 3. Points sampled within Urban Settlement Area using i-Tree Canopy. The randomly distributed 3200 points included 1200 in Southampton and 2000 in Port Elgin.

19.10 EQUIPMENT TYPE LIST

Equipment Type	Count
Air Exchanger	4
Appliance	1
Archer 2 Meter Reader	1
ARGO	1
Attachment	44
Battery Pack	2
Camera	20
Chainsaw	11
Compressor	5
CPR/First Aid	24
Crane	2
Engine	1
Firearm	39
Flag Pole	1
Fuel System	1
Generator	10
Hose	167
Ice Edger	4
Implement (tow behind)	2
Irrigation Gun	1
Leaf Blower	14
LEAK DETECTION EQUIPMENT	1
Lift	4
Line Painting	1
Locator Equipment	3

Mower	19
Other Equipment / Misc Tools	59
Pole Saw	1
Power Broom	1
PPE	245
Pressure Washer	9
Pump	2
Radar	5
Road Maintenance	3
Road Painting	2
Road Sweeper	1
Sanding	1
Saw	14
Screening Device	13
SEWER INSPECTION EQUIPMENT	2
Sidewalk Maintenance	1
Snow removal	16
Surveying Equipment	7
Trailer	7
Trimmer	28
Water Pump	8
Water Tank	2
Welder	4
Total	814

19.11 TRAIL COUNT DATA

Site	Estimated Yearly Traffic	Days with Data Collection
Biener Trail	27,304	266
Denny's Dam	18,509	341
Gerry's Fries	76,029	319
Lock Box - Water Tower Trail	6,299	365
Miramichi Bay Rd	74,417	341
North Shore Park	98,259	365
Rail Trail - Hi-Berry Farm	26,271	288
Rail Trail - Highway 21	29,042	202
Rail Trail - Mill Creek Bridge	23,324	365
Rail Trail - River Street	52,992	365
Shipleigh Trail	43,526	344
Woodland Trail	23,706	365
Total Yearly Trail Traffic	499,678	

20 REFERENCES

- BM Ross. (2020). *Water and Wastewater Servicing Master Plan Update 2020 - DRAFT*. Retrieved from Town of Saugeen Shores: https://www.saugeenshores.ca/en/town-hall/resources/Documents/MasterPlan/2021-05-28-Master-Plan-_DRAFT.pdf
- Canada, G. o. (2014, July 11). *Administrative Agreement on the Federal Gas Tax Fund*. Retrieved from Infrastructure Canada: <https://www.infrastructure.gc.ca/prog/agreements-ententes/gtf-fte/2014-on-eng.html>
- Canadian Infrastructure . (2019). *Canadian Infrastructure Report Card*. Retrieved from Canadian Infrastructure: <http://canadianinfrastructure.ca/downloads/canadian-infrastructure-report-card-2019.pdf>
- Federation of Canadian Municipalities . (2018). *How to develop an asset management policy, strategy and governance framework* . Retrieved from FCM: <https://fcm.ca/sites/default/files/documents/resources/guide/how-to-develop-asset-management-policy-strategy-mamp.pdf>
- Federation of Canadian Municipalities . (2023, October 24). *Tool: Asset management readiness scale*. Retrieved from Federation of Canadian Municipalities : <https://fcm.ca/en/resources/mamp/tool-asset-management-readiness-scale>
- GM Blue Plan. (2020, December). *Master Drainage Plan - Town of Saugeen Shores*. Retrieved from saugeenshores.ca: https://www.saugeenshores.ca/en/living-in-our-community/resources/Documents/11-30-20_2134_Master_Plan_-_Draft_for_Review_December_2020.pdf
- Government of Ontario. (2024, April). *Municipal road allowances* . Retrieved from Ontario.ca: <https://www.ontario.ca/page/municipal-road-allowances#:~:text=Road%20allowances%20refer%20to%20allowances,generally%2066%20feet%20in%20width.>
- Hemson Consulting Ltd. (2018, May 29). MEMORANDUM: Updated Development Residential and Non-Residential Forecasts.
- MDB Insight. (2017). *Saugeen Shores - Corporate Strategic Plan*. Retrieved from Saugeen Shores : <https://www.saugeenshores.ca/en/town-hall/corporate-strategic-plan.aspx>
- Ministry of Transportation. (1989). *SP-024 Manual for condition rating of flexible pavements*. Toronto: The Research and Development Branch MTO.
- Ontario. (2019, July 16). *Archived - Building together – Guide for municipal asset management plans*. Retrieved from Ontario.ca: <https://www.ontario.ca/page/building-together-guide-municipal-asset-management-plans>
- The Institute of Asset Management. (2015, December). *Asset Management - an Anatomy*. Retrieved from The IAM: https://theiam.org/media/1486/iam_anatomy_ver3_web-3.pdf

Town of Saugeen Shores. (2014). *Town of Saugeen Shores Official Plan*.

Town of Saugeen Shores. (2020). *Transportation Master Plan*.

Town of Saugeen Shores. (2020). *Town of Saugeen Shores Corporate Strategic Plan*.

What is Asset Management? (2023, August). Retrieved from The IAM: <https://theiam.org/what-is-asset-management>