Municipality of West Grey

Asset Management Plan 2022

Version: June 21, 2022
Core Assets

Amendment to original West Grey Asset Management Plan

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The municipality recognizes situations, such as certain portions of this Asset Management Plan, where it is not practicable to present content in an accessible format. In these cases, best efforts are used to provide citizens an accessible alternative or assistance in acquiring the information they need. Please contact the Clerk's Department at 519-369-2200 ext. 229 if you need assistance in obtaining an accessible alternative for non-accessible content.

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1. Introduction

The Municipality of West Grey (West Grey) owns and manages a diverse range of assets and infrastructure which is used to provide safe and reliable access to a variety of essential services. These assets include roads, bridges/culverts, water and wastewater systems, known as core assets.

To continue to effectively and efficiently plan the future of West Grey, proper asset management practices are necessary. Managing West Grey's assets will allow Council and municipal staff to make accurate and informed decisions regarding infrastructure and budgeting based on continually evolving strategies.

Asset management is an integrated business approach, within an organization, that aims to strike a balance between the following tasks:

- managing the lifecycle costs of owning, operating and maintaining assets;
- managing an acceptable level of risk;
- managing the continuous delivery of established levels of service for current and future customers; and
- doing all of these tasks in a manner designed to be environmentally and financially sustainable.

There are many factors that influence the continual evolution of an asset management plan including:

1. New technologies and techniques that may impact the timing of repair, rehabilitation, and replacement strategies;
2. Resistance to increasing taxes to pay the cost for repair, rehabilitation, and replacement of infrastructure assets;
3. Responding to changing customer expectations and/or increased demands for services;
4. Changing regulatory requirements from senior levels of government.

Members of council play the critical leadership role in decision making to determine the levels of service provided within the municipality. Council's impact on asset management is reflected in the policies adopted, annual asset reviews and with ongoing impacts to assets based on service levels and demand. Municipal staff, provide support and recommendations to council based on asset lifecycles and risk implications.

2. Scope and Methodology

Requirements of O. Reg. 588/17
Strategic Asset Management Policies

An asset management policy represents a statement of the principles guiding the municipality's approach to asset management activities. It aligns with the organizational strategic plan and provides clear direction to municipal staff on their roles and responsibilities as part of the asset management program. O. Reg. 588/17 requires every municipality to prepare its first strategic asset management policy by July 1, 2019 and that it must be reviewed and, if necessary, updated at least every five years

Council approved the Municipality's Strategic Asset Management Policy (T01-19) included in Appendix A, on June 18, 2019, in accordance with Ontario Regulation 588/17.

Requirements of O. Reg. 588/17
Asset management plans, current levels of service

Below is summary of O. Reg. 588/17 requirements for asset management plans and Appendix B details of the Provincial Regulation outlining the full requirements of asset management plans and current levels of service, along with the required completion dates.

Phase 1 Core Assets	Due by July 1, 2022	1. Inventory analysis 2. Current levels of service 3. Costs and lifecycle activities required to maintain current levels of service 4. Only if population > 25,000: population and employment forecasts, and costs to service growth in the next 10 years
Phase 2 All Assets	Due by July 1, 2024	Same requirements as Phase 1 above, but applied to all infrastructure assets
Phase 3	Due by July 1, 2025	1. Proposed levels of service for next 10 years 2. Updated inventory analysis 3. Lifecycle management strategy 4. Financial strategy 5. Addressing financial shortfalls 6. Only if population > 25,000: how growth assumptions impact lifecycle management and financial strategy

Every asset management plan prepared under the regulation must be approved by a resolution passed by the municipal council.

Integration with Other Plans

The municipality's budget process integrates with asset management planning, as both require a projection of capital and operating costs of a future period. Both the capital budget and the asset management plan should contain a ten-year forecast window for capital assets. Situations will change and assets may become damaged or worn-out earlier than expected. The annual budget process can respond to these circumstances because it is more frequent (annual) than the asset management plan process. The annual municipal budget-setting process acts as an asset management plan update process.

Both asset management and PSAB 3150 (Public Sector Accounting Board) accounting rules require a complete and accurate asset inventory. The significant difference between the two lies in valuation approaches; PSAB 3150 requires historical cost valuation, while asset management requires future replacement cost valuation. Historical cost values can be misleading when an asset is very old, because the difference between its historical cost and its replacement cost will likely be large.

Further integration into other municipal financial/planning documents will be ongoing and will continue to enhance the accuracy of the asset management plan. This asset management plan has been developed to allow linkages to documents such as:

- Development Charge Background Study;
- Official Plan;
- Water and Wastewater Rate Study;
- Road Needs/Condition Study;
- OSIM Structure studies (every structure updated in a two-year cycle); and
- Insurance valuations and records.

Annual Progress Review

After Phase 3 (July 1, 2025), the Regulation (section 9) requires every municipal Council shall conduct an annual review of its asset management progress on or before July 1 in each year and the review must address:

- The progress in implementing the asset management plan;
- Any factors impeding the ability to implement the asset management plan; and
- A strategy to address the factors described above.

The review may be done through a status update report to Council. A completely re-done asset management plan is not necessary for this annual review. The requirements for entirely re-done asset management plans are outlined as part of Phases Two and Three. After the Phase Three requirements are met, asset management plans must be updated (re-done) at least every five years.

Core Assets Scope

This document pertains to the municipality's core assets: roads, structures such as bridges and culverts, and underground infrastructure including the sanitary, storm water and water mains. The core assets have been evaluated on the following criteria:

1. asset condition,
2. average age,
3. level of service and
4. replacement cost.

In the future, all of municipality's assets will be evaluated and included in the asset management plan to comply with O. Reg. 588/17.

Levels of service

Level of service is a metric by which the quality of the service provided can be measured. The metrics for levels of service can be categorized in two groups: customer and technical.

1. Customer levels of service outline the overall quality, performance, availability and safety of the service being provided.
2. Technical levels of service outline the operating, maintenance, rehabilitation, renewal and upgrade activities expected to occur.

Level of service is a balance between user (customer) expectations for overall quality, performance, availability and safety of infrastructure assets with a cost that is affordable. Concurrent with the development/revision of customer levels of service, technical levels of service must be considered that also look at the risk associated with providing the service.

Asset management should reflect the priorities and expectations of the community. It is necessary to ensure that the services provided do in fact reflect the community's priorities and expectations. In compliance with O. Reg. 588/17 municipalities must provide the current levels of service with respect to the core municipal assets in accordance with the technical metrics and qualitative descriptions as contained in the regulation.

Asset Condition

Asset condition is an indicator of the quality of the asset and plays a part in assessing the risk associated with the asset's function. For example, an asset left in poor condition possesses a greater risk of failure in comparison to a brand-new asset. Maintaining an up-to-date inventory as well as monitoring asset condition is integral to the process to managing risk and ensuring levels of service are met. This report uses multiple ways to assess asset condition and differs depending on the asset type and the process involved with condition assessment.

3. Roads

Roads Current Level of Service
Based on O. Reg. 588/17 requirements

Service attribute	**Community levels of service** (qualitative descriptions)	**Technical levels of service** (technical metrics)
Scope	The roads network includes a total of 733.29 km of roads of various types: High Class Bituminous (HCB) 80.36 km Low Class Bituminous (LCB) 199.26 km Gravel 453.67 km See Appendix C for a map of the road network	Number of lane-kilometers of each as a proportion of square kilometers of land area of the municipality: arterial roads 23.06 km/876.16 km^2 collector roads 545.02 km/876.16 km^2 local roads 165.21 km/876.16 km^2
Quality	The condition of the municipality's roads were assessed on a 0-100 scale. Road assets scoring below 55 are considered poor, and assets scoring above 85 as excellent. See Appendix C for a breakdown of the pavement condition ratings for the road network.	Average pavement condition index value for paved roads in the municipality 65% Average surface condition for unpaved roads in the municipality Fair

The Road Network is a critical component of the provision of safe and efficient transportation services and represents one of the highest value asset categories in the municipality's asset portfolio. It includes all municipally owned and maintained roadways in addition to supporting roadside infrastructure including sidewalks, signage, and streetlights. The municipality also shares boundary roads with other municipalities in which they are only responsible for 50% of the capital improvement costs.
The municipality's roads and sidewalks are maintained by the Infrastructure and Public department, who is also responsible for winter snow clearing, ice control and snow removal operations in accordance with Minimum Maintenance Standards (O. Reg. 366/18).

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment. The adoption of lifecycle strategies such as maintenance, rehabilitation and reconstruction are measured through the collection of condition ratings. For roads assets lifecycle events may include;

- Grading
- Maintenance activities
- Crack Sealing of HCB Roads
- Annual Right-of-way brushing and ditch cleaning
- Culvert flushing

- Dust suppression

Road Surface Type	No. of Assets	Length in km	Average Age (yrs.)	Average Condition	Replacement Value
Paved (HCB)	215	80.36 km	30	Fair	
Surface Treated (LCB)	145	199.26 km	30	Poor	
Gravel	308	453.67 km	50	Fair	
Total					$371,634,170

The Pavement condition index (PCI) was used to assign condition values to the road assets. StreetScan technology was used to establish the PCI of each pavement section based on MTO SP-024 for asphalt concrete surface and MTO SP-021 for surface treated pavement.

The condition ranges for PCI are as follows:

100-86	Excellent
85-71	Good
70-56	Fair
55-41	Poor
40-26	Very Poor
25-11	Serious
10-0	Failed

4. Bridges and Culverts

Bridges and Culverts Level of Service
Based on O. Reg. 588/17 requirements

Service attribute	Community levels of service (qualitative descriptions)	Technical levels of service (technical metrics)
Scope	Structural bridges and culverts are a key component of the municipality's transportation network, and support the movement of pedestrians, trucks, emergency vehicles, and motor vehicles in and around West Grey. There are 70 structures that have loading and/or dimensional restrictions.	58% of bridges in the municipality with loading or dimensional restrictions
Quality	The following descriptions apply to both bridges and culverts: Good (BCI 70-100) are generally considered to be in good-excellent condition, and repair or rehabilitation work is not usually required within the next 5 years. Routine maintenance, such as sweeping, cleaning, and washing are still recommended. Fair (BCI 50-70): Generally considered to be in good-fair condition. Repair or rehabilitation work recommended is ideally scheduled to be completed within the next 5 years. Poor (BCI Less than 50): Generally considered poor with lower numbers representing structures nearing the end of their service life. The repair or rehabilitation of these structures is ideally best scheduled to be completed within approximately 1 year. However, if it is determined that the replacement of the structure would be a more viable, the structure can be identified for continued monitoring and scheduled for replacement within the short-term.	For bridges in the municipality, the average bridge condition index is 71. For structural culverts in the municipality, the average bridge condition index 69.

Bridges & Culverts represent a critical portion of the transportation services provided to the community. The Infrastructure and Public Works Department is responsible for the

maintenance of all the bridges and culverts located across municipal roads with the goal of keeping structures in an adequate state of repair and minimizing service disruptions. These structural assets are assessed over a period of two years, with half of them being inspected during odd-numbered calendar years and the other half during even-numbered calendar years.

To ensure that the municipality's bridges and culverts continues to provide an acceptable level of service, the municipality should monitor the average condition of all structures. If the average condition declines, staff should re-evaluate their lifecycle management strategy to determine what combination of maintenance, rehabilitation, and replacement activities is required to increase the overall condition of the bridges and culverts.

Asset Type	No. of Assets	Average Condition	No. of Assets	Average Age	Replacement Value
Bridge	63	Good	29	50	
		Fair	29	60	
		Poor	5	80	
Culverts	87	Good	33	50	
		Fair	45	60	
		Poor	9	80	
Total					$73,484,737

Bridges and structural culverts are inspected every 2 years in accordance with the Ontario structure inspection manual - O. Reg. 472/10, s. 2. requirements. Bridges and structural culverts are inspected in detail and assigned a condition value between 1 and 100. The explanation of the condition values is shown below.

Condition	**BCI Range**	**Description**
Very Good	80 – 100	Overall, the components of the structure are in very good condition. Generally, the structure has been constructed within the last 10 years and does not require any work within the next 10 years.
Good	70 – 79	Overall, the components of the structure are in good condition. Generally, the structure is adequate or requires only minor maintenance within the next 10 years.
Fair	60 – 69	Overall, the components of the structure are in fair condition. Generally, the structure requires major rehab or replacement within the next 10 years, or requires Deck Condition Surveys (DCS), Load Capacity Evaluation (LCE) or Rehabilitation/Replacement Analysis (RRA).
Poor	0 - 59	Overall, the components of the structure are in poor condition. Generally, the structure requires replacement within the next 5 years.

Life Cycle Activities include the following:

Construction

After a new bridge or structural culvert is installed, it is inspected every 2 years to evaluate its condition and identify any issues.

Rehabilitation

Over time the condition of a bridge or structural culvert will decrease. Minor issues may include scaling, cracking, erosion, etc. in various degrees of severity and require corrective action.

Replacement

Eventually the condition of a bridge will decline significantly and it will need to be replaced with a new asset. Inspections and recommendations for bridges and culverts are also categorized by importance. For example, there may be a bridge with an overall good rating with a recommendation for immediate work to be done such as minor scour and erosion mitigation work.

5. Sanitary Sewer, Storm Sewer, and Water mains

Water Level of Service
Based on O. Reg. 588/17 requirements

Service attribute	Community levels of service (qualitative descriptions)	Technical levels of service (technical metrics)
Scope	Durham and Neustadt are connected to the municipal water systems. Durham and Neustadt have fire flow.	Percentage of properties connected to the municipal water system - Durham 99% - Neustadt 98% Percentage of properties where fire flow is available - Durham 100 % - Neustadt 100%
Reliability	There have been no boil water advisories and service interruptions.	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 The 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

Wastewater Level of Service
Based on O. Reg. 588/17 requirements

Service attribute	Community levels of service (qualitative descriptions)	Technical levels of service (technical metrics)
Scope	Durham and Neustadt are connected to the municipal wastewater system. See Appendix D for a map	Percentage of properties connected to the municipal wastewater system - Durham 91% - Neustadt 91%
Reliability	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes. - Not applicable, no combined sewers present	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.

	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches. - Not applicable, no combined sewers present Storm water can enter sanitary sewers due to cracks in sanitary mains, manholes, private services or through indirect connections (e.g., weeping tiles). In the case of heavy rainfall events, sanitary sewers may experience a volume of water and sewage that exceeds its designed capacity. In some cases, this can cause water and/or sewage to backup into homes. The municipality follows a series of design standards that integrate servicing requirements and land use considerations when constructing or replacing sanitary sewers as outlined in their Development Standards Policy A09-T-05. These standards have been determined with consideration of the minimization of sewage overflows and backups. The Environmental Compliance Approval (ECA) identifies the effluent criteria for municipal wastewater treatment plants. Municipal staff adhere to the Design Guidelines for Sewage Works (MOECC, 2008); the effluent is discharged with established minimum requirements for critical parameters such as the organic loading rate, hydraulic retention time, CBOD5, pH levels, and phosphorus and sulfur levels. The treated effluent seeps into the groundwater table and eventually combines with the Saugeen River.	- Not applicable, no combined sewers present 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 effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system - 0

Storm water Level of Service
Based on O. Reg. 588/17 requirements

Service attribute	Community levels of service (qualitative descriptions)	Technical levels of service (technical metrics)
Scope	The municipal storm water network is accessible in Durham and Neustadt and is maintained in good condition to enable continuous and reliable provision of services.	Percentage of properties in municipality resilient to a 100-year storm - 75% Percentage of the municipal storm water management system resilient to a 5-year storm – 95%

The condition of the sanitary, storm water, and water main assets has been estimated using the age of the asset with respect to the expected useful life of the asset. The Public Works department was consulted to provide value for asset life expectancy according to the asset material. Asset age has been divided into 4 categories with respect to the life expectancy of the asset.

The categories are as follows:

Very good <= 75% of life expectancy,
Good <= 50% of life expectancy,
Fair <= 25% of life expectancy,
Poor >25% of life expectancy.

Assigning condition values according to the age of the asset makes the assumption that the asset's age reflects the condition of the asset meaning an asset which is near the end of its life expectancy is also assumed to be in poor condition, however this is not always the case. As CCTV inspections of the sanitary, storm and water systems are completed then this data will be used in the future to assign condition values to the municipality's sanitary/storm/water infrastructure. The engineers have recently completed capacity assessments for both the Durham and Neustadt water/wastewater systems which will be used to identify deficiencies in the water and wastewater systems and improve the capabilities of forecasting impacts to the municipality with respect to proposed developments.

Asset Inventory

Asset Type	Quantity	Average Age (yrs.)	Average Condition	Replacement Value
Water network	31.114 km	30	Fair	$17,341,222
Wastewater network	32,364 km	38	Fair	$21,459,941

6. Risk

Another aspect of asset management that is directly linked to level of service is risk. Risk represents the combination of the chance, or likelihood, of an event occurring, and its potential positive or negative consequences to customers/residents. In asset management, the event we are talking about is the failure of an asset to provide services; for example it could be caused by a weather-related event.

A Risk Matrix with sliding scales of values for Likelihood and Consequence is often used, such as this one:

	Consequence				
Likelihood	Insignificant = 1	Minor Impact = 2	Moderate = 3	Major Impact = 4	Catastrophic = 5
Rare = 1	1 * 1 = 1	2 * 1 = 2	3	4	5
Unlikely = 2	2 * 1 = 2	4	6	8	10
Possible = 3	3	6	9	12	15
Likely = 4	4	8	12	16	20
Almost Certain = 5	5	10	15	20	25

Assets can be assigned a likelihood of failure, and consequence of failure, such as a bridge closure, with consequences based on where the asset is located, available detour options, and traffic volume. A methodology is needed to identify where the most cost-effective risk reductions are, and what amount of risk can be mitigated, as risk cannot be fully eliminated, for example we cannot control the weather.

This will lead to a prioritization of asset needs. Prioritization is a necessary step to develop the asset strategy and the financial strategy. It will become clear that there are insufficient resources available to address all asset needs, and so choices must be made, priorities set, and projects delayed and possible service levels changed.

Moving forward, level of service measures, and risk measures, should be factored-in during capital budget discussions. Past practice for the selection and timing of capital projects, for the capital plan, has been influenced by a combination of:

1. the results received from external consultants, such as in the most recent OSIM inspection report and the road condition scans; and
2. the advice and input of municipal staff, based on their hands-on knowledge and experience of the state of existing assets, that they use every day.

Part 6 of the Regulation requires future versions of the asset management plan to include by July 1, 2025 a discussion of proposed levels of service, including:

1. the proposed levels of service measures
2. an explanation why the proposed levels of service are appropriate
3. proposed performance of each asset category, for each of the next ten years
4. a lifecycle management and financial strategy, in each asset category.

7. Population Growth

The Municipality of West Grey is expected to grow significantly in the next 2 decades. Based on Grey County's population growth forecast to 2046, West Grey in forecasted to grow by 1,750 (increase from 13,360 in 2021 to 15,110 by 2046). Grey County has forecasted West Grey's households to increase by 840 (from 5,410 in 2021 to 6,250 by 2046). It is anticipated that the largest portion of our increased population and households will occur within the urban borders of Durham and Neustadt, which will put increased pressure for expansions of municipal water and sewer services.

8. Climate Change Considerations

The impacts of climate change present an increasingly serious challenge to municipal infrastructure. As temperatures and sea levels rise, and extreme weather events occur with greater frequency, it is critical that municipalities attempt to understand the emerging threat of climate change and develop strategies to ensure that vital services and critical infrastructure continue to operate as expected. Globally, there has been a serious increase in weather-related loss events, resulting in property damage and/or bodily injury. Municipal infrastructure is at particular risk to meteorological, hydrological and climatological events, potentially leading to an increasing rate of asset deterioration, failure and service disruption.

Municipal governments should take into consideration the four key factors of climate change at every stage of an asset's lifecycle:

- exposure,
- vulnerability,
- resiliency, and
- adaptation.

Exposure refers to the state of being in a place, or situation, where there is no protection from something harmful or unpleasant. Exposure is a combination of the probable range of a climate stressor and the physical characteristics of a geographic location, for example sea-level concerns for a coastal region.

Vulnerability refers to a weakness in the ability of a person, structure, or natural system to respond to a negative force, such as a hazard. A municipality's vulnerability to a hazard can be addressed, by developing adaptation strategies that strengthen infrastructure, support local eco-systems, and build community awareness and preparedness.

Resiliency is the capacity to recover quickly from difficulties. A resilient municipality has the capacity to survive, and adapt, to chronic stresses and acute shocks, such as population growth (or decline), aging populations, influxes of new immigrants, economic swings, or climate change impacts like severe storms, or flooding. Resiliency is the ability to continue to operate, for example, despite the loss of a single road or bridge. It also refers to the physical restraints on repair or replacement of an asset (how quickly can it be returned to service?). Municipal resiliency can be improved by reducing short-term and long-term risks resulting from climate change. Some municipalities are creating Reserves for Climate Impact Recoveries. A portion of net operating surplus that would normally just go into a Tax Rate Stabilization Reserve is earmarked instead for use when the municipality needs to perform recovery actions, following a weather event that caused damage to its corporate assets.

Adaptation refers to taking actions to help communities and their eco-systems cope with changing climate conditions. FCM states that about 44% of Canada's GHG emissions, that cause climate change, are under the direct or indirect control of municipalities. Although private sector industry, and residential homes, also contribute to GHG

emissions, the substantial impact from municipal assets explains why so many municipalities are devoting time and resources to this subject. Many municipalities have recently been working on Climate Change Action Plans (CCAP), identifying some actions that can be taken locally, and setting targets for future local levels of GHG emissions. West Grey is currently working on its own CCAP which will be used in the future to help shape its asset management plan.

Green Infrastructure

Another growing aspect of climate change work, within asset management, involves Green Infrastructure, also referred to as Natural Assets. Municipalities often have not collected very much data on these assets, and they have not assigned values to them. Natural assets do not fall under the core assets required for this AMP, but should be accounted for, moving forward. Natural assets can serve as mitigation tools against many of the hazards of climate change, such as excessive heat waves and soil erosion. Natural assets can be grouped into three categories:

1. Naturally occurring assets
2. Enhanced natural assets
3. Engineered natural assets

Some examples of each category are:

Naturally occurring assets

- Forests, parks and open space, wetlands, fields, lakes, creeks, rivers, soil

Enhanced natural assets

- urban street trees, urban parks, rain gardens, storm water ponds, community gardens on municipal land

Engineered natural assets

- green roofs, green walls, cisterns, permeable pavement, rain barrels.

Next Steps

Data Review/Validation
Continue to review and update inventory data, assessed condition data and replacement costs for all assets. Incorporate rehabilitation recommendations and strategies accordingly for a more accurate and proactive capital forecast. This will minimize the instances of hidden or unexpected failures that are typically costlier and more resource-intensive.

Risk Management Strategies
Review risk models on a regular basis and adjust according to an evolving understanding of the probability and consequences of asset failure.

Levels of Service
Continue to measure current levels of service in accordance with the metrics identified in O. Reg. 588/17 and those metrics that the municipality believes provide meaningful and reliable inputs into asset management planning.

Work towards identifying proposed levels of service as per O. Reg. 588/17 and identify the strategies that are required to close any gaps between current and proposed levels of service.

ACCOUNTING FOR TANGIBLE CAPITAL ASSETS

1. Background

The Corporation of the Municipality of West Grey is committed to providing service to residents in a fiscally responsible manner that supports a healthy and vibrant community. With this commitment in mind, assets must be managed in a way that allows the Municipality to achieve its goals, plans and policies.

2. Purpose

The purpose of this policy is to establish consistent standards and guidelines for management of the Municipality's assets applying sound technical, social and economic principles that consider present and future needs of users, and the service expected from the assets. This means leveraging the lowest total lifecycle cost of ownership with regard to the service levels that best meet the needs of the community while being cognizant of the risk of failure that is acceptable. The standards and guidelines must adhere to the following:

Statutory requirements

The Infrastructure for Jobs and Prosperity Act, 2015 sets out principles to guide asset management planning in municipalities in Ontario. The Municipality of West Grey will strive to incorporate the following principles whenever possible into the day to day operation of the Municipality:

- **Forward looking**: The Municipality shall take a long-term view while considering demographic and economic trends in the County.
- **Budgeting and planning**: The Municipality shall take into account any applicable budgets or fiscal plans, such as fiscal plans released under the Fiscal Transparency and Accountability Act, 2004 and Budgets adopted under Part VII of the Municipal Act, 2001.
- **Prioritizing**: The Municipality shall clearly identify infrastructure priorities which will drive investment decisions.
- **Economic development**: The Municipality shall promote economic competitiveness, productivity, job creation, and training opportunities.
- **Transparency**: The Municipality shall be evidence-based and transparent. Additionally, subject to any prohibition under an Act or otherwise by law on the collection, use, or disclosure of information, the Municipality shall make decisions with respect to infrastructure based on information that is publicly available or made available to the public and share information with implications on infrastructure and investment decisions with the Government and broader public sector entities.

- **Consistency**: The Municipality shall ensure the continued provision of core public services.
- **Environmental conscious**; the Municipality shall minimize the impact of infrastructure on the environment by respecting and helping maintain ecological and biological diversity, by augmenting resilience to effects of climate change and by endeavouring to make use of acceptable recycled aggregates.
- **Health and safety**: The Municipality shall ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
- **Community focused**: The Municipality shall promote community benefits, being the supplementary social and economic benefits arising from an infrastructure project that are intended to improve the well-being of a community affected by the project, such as local job creation and training opportunities, improvement of public spaces within the community, and promoting accessibility for persons with disabilities.
- **Innovation**: the Municipality shall create opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques, and practices developed in Ontario.

In addition the Municipality must adhere to the requirements outlined in the Minimum Maintenance Standards currently in force, The Growth Plan for the Greater Golden Horseshoe, the Greenbelt Plan, the Lake Simcoe Protection Plan, and any other legislation specific to the Municipality.

Existing Plans and Policies

The Municipality has developed and adopted a Strategic Plan, an Official Plan, an Emergency Management Plan, a Multi-Year Accessibility Plan, a Community Improvement Plan, and an Asset Management Plan. These plans were designed to meet the legislative requirements and work together to achieve the Municipality's mission of providing innovation and excellence in service delivery. These plans will be reviewed regularly by staff and annual spending requirements in support of the plans' objectives will be incorporated into the budgeting process. All of the Municipality's plans rely to some extent on the physical assets owned by the Municipality and the commitment of staff to ensure their strategic use. This includes the long term maintenance, repair, and replacement of existing assets along with the acquisition of new assets to meet the evolving needs in the Municipality.

In addition, the existing Municipality policies complement the planning documents by providing details for the implementation of strategic objectives.

3. Scope and Responsibility

The Director of Finance/Treasurer will assume the lead role and be responsible for the maintenance of and reporting on the activity related to the management of Municipality assets. The Director of Infrastructure and Public Works together with the other department heads will assist in this task through the utilization of condition assessment information and service level requirements to update the long and short term asset requirements. This information will be reviewed and presented to the Committee of the Whole annually for consideration during the budget deliberations.

4. Definitions

In this policy the following definitions are used:

a) "**Asset management Plan**" - Means 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.

b) **"Capitalization Thresholds" –** The Municipality's Asset Management Policy applies to all assets whose role in service delivery requires deliberate management by the Municipality. The Service-focus intent of this policy differentiates its requirements for identifying assets from the capitalization thresholds which are developed for the purposes of financial reporting. For this reason, the capitalization threshold developed for financial reporting will not be the guide in selecting the assets covered by the asset management planning process.

c) **"Infrastructure" -** Means municipal tangible capital assets primarily for public use or benefit in Ontario.

5. Guiding Principles

The policy requires the commitment of key stakeholders within the Municipality's organization to ensure the policy contains a clear plan that can be implemented, reviewed and updated.

Council, on behalf of the citizens, will be entrusted with the responsibility of overseeing the management of the assets. They will approve the Asset Management Planning documents and required updates every five years. They will review management's implementation of the plan as part of the annual budget process. They will support efforts to improve the plan and ensure it includes changes necessitated by updates to other Municipality strategic documents.

Management will oversee the policy implementation and ensure both the Asset Management Plan and the Asset Management Policy are in compliance with Provincial Asset Management regulations. Management will ensure that current year and long range asset requirements are incorporated into the budget presented to Council annually. Management will update the Policy and Plan to reflect changes as needed and present them for Council approval at least every five years. These changes will include those reflected in the updates to the Development Charges Study, Roads Needs Study, Structural assessment reports, and all other condition assessments commissioned for assets covered by the plan.

6. General Policy

The asset management plans and progress made on the plans will be considered annually in the development of the Municipality's capital budgets, operating budgets, and long-term financial plans.

Service area personnel will reference the asset management plan for their area in order to look up forecasted spending needs identified in the plan, verify progress made on the plan to identify potential gaps, and prioritize spending needs, across the gap identified in the plan and recent developments, for the year to be budgeted for.

Finance staff will be involved in the asset management planning process to coordinate the information from the service personnel in the preparation of the budget submission.

Asset management planning will be aligned with the Municipality's Official Plan. The asset management plans will reflect how the community is projected to change and the related asset impact. The Municipality will achieve this by consulting with those responsible for managing the services to analyze the future costs and viability of projected changes. Methods, assumptions, and data used in the selection of projected changes should be documented to support the recommendations in the Asset Management Plan.

Climate change will be considered as part of the Municipality's risk management approach embedded in local asset management planning methods. This approach will balance the potential cost of vulnerabilities to climate change impact and other risks with the cost of reducing these vulnerabilities. The balance will be struck in the levels of service delivered through operations, maintenance schedules, disaster response plans, contingency funding, and capital investments. The Municipality will continue to work with the County in regard to climate change mitigation and adaptation.

The Municipality recognizes the need for stakeholder input into the planning process and will foster informed dialogue using the best available information.

Français

ONTARIO REGULATION 588/17

made under the

INFRASTRUCTURE FOR JOBS AND PROSPERITY ACT, 2015

Made: December 13, 2017
Filed: December 27, 2017
Published on e-Laws: December 27, 2017
Printed in *The Ontario Gazette*: January 13, 2018

ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE

CONTENTS

INTERPRETATION AND APPLICATION

Definitions

1. (1) In this Regulation,

"asset category" means a category of municipal infrastructure assets that is,

(a) an aggregate of assets described in each of clauses (a) to (e) of the definition of core municipal infrastructure asset, or

(b) composed of any other aggregate of municipal infrastructure assets that provide the same type of service; ("catégorie de biens")

"core municipal infrastructure asset" means any municipal infrastructure asset that is a,

(a) water asset that relates to the collection, production, treatment, storage, supply or distribution of water,

(b) wastewater asset that relates to the collection, transmission, treatment or disposal of wastewater, including any wastewater asset that from time to time manages stormwater,

(c) stormwater management asset that relates to the collection, transmission, treatment, retention, infiltration, control or disposal of stormwater,

(d) road, or

(e) bridge or culvert; ("bien d'infrastructure municipale essentiel")

"ecological functions" has the same meaning as in Ontario Regulation 140/02 (Oak Ridges Moraine Conservation Plan) made under the *Oak Ridges Moraine Conservation Act, 2001*; ("fonctions écologiques")

"green infrastructure asset" means an infrastructure asset consisting of natural or human-made elements that provide ecological and hydrological functions and processes and includes natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces and green roofs; ("bien d'infrastructure verte")

"hydrological functions" has the same meaning as in Ontario Regulation 140/02; ("fonctions hydrologiques")

"joint municipal water board" means a joint board established in accordance with a transfer order made under the *Municipal Water and Sewage Transfer Act, 1997*; ("conseil mixte de gestion municipale des eaux")

"lifecycle activities" means activities undertaken with respect to a municipal infrastructure asset over its service life, including constructing, maintaining, renewing, operating and decommissioning, and all engineering and design work associated with those activities; ("activités relatives au cycle de vie")

"municipal infrastructure asset" means an infrastructure asset, including a green infrastructure asset, directly owned by a municipality or included on the consolidated financial statements of a municipality, but does not include an infrastructure asset that is managed by a joint municipal water board; ("bien d'infrastructure municipale")

"municipality" has the same meaning as in the *Municipal Act, 2001*; ("municipalité")

"operating costs" means the aggregate of costs, including energy costs, of operating a municipal infrastructure asset over its service life; ("frais d'exploitation")

"service life" means the total period during which a municipal infrastructure asset is in use or is available to be used; ("durée de vie")

"significant operating costs" means, where the operating costs with respect to all municipal infrastructure assets within an asset category are in excess of a threshold amount set by the municipality, the total amount of those operating costs. ("frais d'exploitation importants")

(2) In Tables 1 and 2,

"connection-days" means the number of properties connected to a municipal system that are affected by a service issue, multiplied by the number of days on which those properties are affected by the service issue. ("jours-branchements")

(3) In Table 4,

"arterial roads" means Class 1 and Class 2 highways as determined under the Table to section 1 of Ontario Regulation 239/02 (Minimum Maintenance Standards for Municipal Highways) made under the *Municipal Act, 2001*; ("artères")

"collector roads" means Class 3 and Class 4 highways as determined under the Table to section 1 of Ontario Regulation 239/02; ("routes collectrices")

"lane-kilometre" means a kilometre-long segment of roadway that is a single lane in width; ("kilomètre de voie")

"local roads" means Class 5 and Class 6 highways as determined under the Table to section 1 of Ontario Regulation 239/02. ("routes locales")

(4) In Table 5,

"Ontario Structure Inspection Manual" means the Ontario Structure Inspection Manual (OSIM), published by the Ministry of Transportation and dated October 2000 (revised November 2003 and April 2008) and available on a Government of Ontario website; ("manuel d'inspection des structures de l'Ontario")

"structural culvert" has the meaning set out for "culvert (structural)" in the Ontario Structure Inspection Manual. ("ponceau structurel")

Application

2. For the purposes of section 6 of the Act, every municipality is prescribed as a broader public sector entity to which that section applies.

STRATEGIC ASSET MANAGEMENT POLICIES

Strategic asset management policy

3. (1) Every municipality shall prepare a strategic asset management policy that includes the following:

1. Any of the municipality's goals, policies or plans that are supported by its asset management plan.
2. The process by which the asset management plan is to be considered in the development of the municipality's budget or of any long-term financial plans of the municipality that take into account municipal infrastructure assets.
3. The municipality's approach to continuous improvement and adoption of appropriate practices regarding asset management planning.

4. The principles to be followed by the municipality in its asset management planning, which must include the principles set out in section 3 of the Act.
5. The municipality's commitment to consider, as part of its asset management planning,
    i. the actions that may be required to address the vulnerabilities that may be caused by climate change to the municipality's infrastructure assets, in respect of such matters as,
        A. operations, such as increased maintenance schedules,
        B. levels of service, and
        C. lifecycle management,
    ii. the anticipated costs that could arise from the vulnerabilities described in subparagraph i,
    iii. adaptation opportunities that may be undertaken to manage the vulnerabilities described in subparagraph i,
    iv. mitigation approaches to climate change, such as greenhouse gas emission reduction goals and targets, and
    v. disaster planning and contingency funding.
6. A process to ensure that the municipality's asset management planning is aligned with any of the following financial plans:
    i. Financial plans related to the municipality's water assets including any financial plans prepared under the *Safe Drinking Water Act, 2002*.
    ii. Financial plans related to the municipality's wastewater assets.
7. A process to ensure that the municipality's asset management planning is aligned with Ontario's land-use planning framework, including any relevant policy statements issued under subsection 3 (1) of the *Planning Act*, any provincial plans as defined in the *Planning Act* and the municipality's official plan.
8. An explanation of the capitalization thresholds used to determine which assets are to be included in the municipality's asset management plan and how the thresholds compare to those in the municipality's tangible capital asset policy, if it has one.
9. The municipality's commitment to coordinate planning for asset management, where municipal infrastructure assets connect or are interrelated with those of its upper-tier municipality, neighbouring municipalities or jointly-owned municipal bodies.
10. The persons responsible for the municipality's asset management planning, including the executive lead.
11. An explanation of the municipal council's involvement in the municipality's asset management planning.
12. The municipality's commitment to provide opportunities for municipal residents and other interested parties to provide input into the municipality's asset management planning.

(2) For the purposes of this section,

"capitalization threshold" is the value of a municipal infrastructure asset at or above which a municipality will capitalize the value of it and below which it will expense the value of it. ("seuil de capitalisation")

Update of asset management policy

4. Every municipality shall prepare its first strategic asset management policy by July 1, 2019 and shall review and, if necessary, update it at least every five years.

ASSET MANAGEMENT PLANS

Asset management plans, current levels of service

5. (1) Every municipality shall prepare an asset management plan in respect of its core municipal infrastructure assets by July 1, 2021, and in respect of all of its other municipal infrastructure assets by July 1, 2023.

(2) A municipality's asset management plan must include the following:

1. For each asset category, the current levels of service being provided, determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan:
    i. With respect to core municipal infrastructure assets, the qualitative descriptions set out in Column 2 and the technical metrics set out in Column 3 of Table 1, 2, 3, 4 or 5, as the case may be.
    ii. With respect to all other municipal infrastructure assets, the qualitative descriptions and technical metrics established by the municipality.

2. The current performance of each asset category, determined in accordance with the performance measures established by the municipality, such as those that would measure energy usage and operating efficiency, and based on data from at most two calendar years prior to the year in which all information required under this section is included in the asset management plan.
3. For each asset category,
    i. a summary of the assets in the category,
    ii. the replacement cost of the assets in the category,
    iii. the average age of the assets in the category, determined by assessing the average age of the components of the assets,
    iv. the information available on the condition of the assets in the category, and
    v. a description of the municipality's approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate.
4. For each asset category, the lifecycle activities that would need to be undertaken to maintain the current levels of service as described in paragraph 1 for each of the 10 years following the year for which the current levels of service under paragraph 1 are determined and the costs of providing those activities based on an assessment of the following:
    i. The full lifecycle of the assets.
    ii. The options for which lifecycle activities could potentially be undertaken to maintain the current levels of service.
    iii. The risks associated with the options referred to in subparagraph ii.
    iv. The lifecycle activities referred to in subparagraph ii that can be undertaken for the lowest cost to maintain the current levels of service.
5. For municipalities with a population of less than 25,000, as reported by Statistics Canada in the most recent official census, the following:
    i. A description of assumptions regarding future changes in population or economic activity.
    ii. How the assumptions referred to in subparagraph i relate to the information required by paragraph 4.
6. For municipalities with a population of 25,000 or more, as reported by Statistics Canada in the most recent official census, the following:
    i. With respect to municipalities in the Greater Golden Horseshoe growth plan area, if the population and employment forecasts for the municipality are set out in Schedule 3 or 7 to the 2017 Growth Plan, those forecasts.
    ii. With respect to lower-tier municipalities in the Greater Golden Horseshoe growth plan area, if the population and employment forecasts for the municipality are not set out in Schedule 7 to the 2017 Growth Plan, the portion of the forecasts allocated to the lower-tier municipality in the official plan of the upper-tier municipality of which it is a part.
    iii. With respect to upper-tier municipalities or single-tier municipalities outside of the Greater Golden Horseshoe growth plan area, the population and employment forecasts for the municipality that are set out in its official plan.
    iv. With respect to lower-tier municipalities outside of the Greater Golden Horseshoe growth plan area, the population and employment forecasts for the lower-tier municipality that are set out in the official plan of the upper-tier municipality of which it is a part.
    v. If, with respect to any municipality referred to in subparagraph iii or iv, the population and employment forecasts for the municipality cannot be determined as set out in those subparagraphs, a description of assumptions regarding future changes in population or economic activity.
    vi. For each of the 10 years following the year for which the current levels of service under paragraph 1 are determined, the estimated capital expenditures and significant operating costs related to the lifecycle activities required to maintain the current levels of service in order to accommodate projected increases in demand caused by growth, including estimated capital expenditures and significant operating costs related to new construction or to upgrading of existing municipal infrastructure assets.

(3) Every asset management plan must indicate how all background information and reports upon which the information required by paragraph 3 of subsection (2) is based will be made available to the public.

(4) In this section,

"2017 Growth Plan" means the Growth Plan for the Greater Golden Horseshoe, 2017 that was approved under subsection 7 (6) of the *Places to Grow Act, 2005* on May 16, 2017 and came into effect on July 1, 2017; ("Plan de croissance de 2017")

"Greater Golden Horseshoe growth plan area" means the area designated by section 2 of Ontario Regulation 416/05 (Growth Plan Areas) made under the *Places to Grow Act, 2005*. ("zone de croissance planifiée de la région élargie du Golden Horseshoe")

Asset management plans, proposed levels of service

6. (1) Subject to subsection (2), by July 1, 2024, every asset management plan prepared under section 5 must include the following additional information:

1. For each asset category, the levels of service that the municipality proposes to provide for each of the 10 years following the year in which all information required under section 5 and this section is included in the asset management plan, determined in accordance with the following qualitative descriptions and technical metrics:
    i. With respect to core municipal infrastructure assets, the qualitative descriptions set out in Column 2 and the technical metrics set out in Column 3 of Table 1, 2, 3, 4 or 5, as the case may be.
    ii. With respect to all other municipal infrastructure assets, the qualitative descriptions and technical metrics established by the municipality.
2. An explanation of why the proposed levels of service under paragraph 1 are appropriate for the municipality, based on an assessment of the following:
    i. The options for the proposed levels of service and the risks associated with those options to the long term sustainability of the municipality.
    ii. How the proposed levels of service differ from the current levels of service set out under paragraph 1 of subsection 5 (2).
    iii. Whether the proposed levels of service are achievable.
    iv. The municipality's ability to afford the proposed levels of service.
3. The proposed performance of each asset category for each year of the 10-year period referred to in paragraph 1, determined in accordance with the performance measures established by the municipality, such as those that would measure energy usage and operating efficiency.
4. A lifecycle management and financial strategy that sets out the following information with respect to the assets in each asset category for the 10-year period referred to in paragraph 1:
    i. An identification of the lifecycle activities that would need to be undertaken to provide the proposed levels of service described in paragraph 1, based on an assessment of the following:
        A. The full lifecycle of the assets.
        B. The options for which lifecycle activities could potentially be undertaken to achieve the proposed levels of service.
        C. The risks associated with the options referred to in sub-subparagraph B.
        D. The lifecycle activities referred to in sub-subparagraph B that can be undertaken for the lowest cost to achieve the proposed levels of service.
    ii. An estimate of the annual costs for each of the 10 years of undertaking the lifecycle activities identified in subparagraph i, separated into capital expenditures and significant operating costs.
    iii. An identification of the annual funding projected to be available to undertake lifecycle activities and an explanation of the options examined by the municipality to maximize the funding projected to be available.
    iv. If, based on the funding projected to be available, the municipality identifies a funding shortfall for the lifecycle activities identified in subparagraph i,
        A. an identification of the lifecycle activities, whether set out in subparagraph i or otherwise, that the municipality will undertake, and
        B. if applicable, an explanation of how the municipality will manage the risks associated with not undertaking any of the lifecycle activities identified in subparagraph i.
5. For municipalities with a population of less than 25,000, as reported by Statistics Canada in the most recent official census, a discussion of how the assumptions regarding future changes in population and economic activity, set out in subparagraph 5 i of subsection 5 (2), informed the preparation of the lifecycle management and financial strategy referred to in paragraph 4 of this subsection.

6. For municipalities with a population of 25,000 or more, as reported by Statistics Canada in the most recent official census,

   i. the estimated capital expenditures and significant operating costs to achieve the proposed levels of service as described in paragraph 1 in order to accommodate projected increases in demand caused by population and employment growth, as set out in the forecasts or assumptions referred to in paragraph 6 of subsection 5 (2), including estimated capital expenditures and significant operating costs related to new construction or to upgrading of existing municipal infrastructure assets,

   ii. the funding projected to be available, by source, as a result of increased population and economic activity, and

   iii. an overview of the risks associated with implementation of the asset management plan and any actions that would be proposed in response to those risks.

7. An explanation of any other key assumptions underlying the plan that have not previously been explained.

(2) With respect to an asset management plan prepared under section 5 on or before July 1, 2021, if the additional information required under this section is not included before July 1, 2023, the municipality shall, before including the additional information, update the current levels of service set out under paragraph 1 of subsection 5 (2) and the current performance measures set out under paragraph 2 of subsection 5 (2) based on data from the two most recent calendar years.

Update of asset management plans

7. (1) Every municipality shall review and update its asset management plan at least five years after the year in which the plan is completed under section 6 and at least every five years thereafter.

(2) The updated asset management plan must comply with the requirements set out under paragraphs 1, 2 and 3 and subparagraphs 5 i and 6 i, ii, iii, iv and v of subsection 5 (2), subsection 5 (3) and paragraphs 1 to 7 of subsection 6 (1).

Endorsement and approval required

8. Every asset management plan prepared under section 5 or 6, or updated under section 7, must be,

(a) endorsed by the executive lead of the municipality; and

(b) approved by a resolution passed by the municipal council.

Annual review of asset management planning progress

9. (1) Every municipal council shall conduct an annual review of its asset management progress on or before July 1 in each year, starting the year after the municipality's asset management plan is completed under section 6.

(2) The annual review must address,

(a) the municipality's progress in implementing its asset management plan;

(b) any factors impeding the municipality's ability to implement its asset management plan; and

(c) a strategy to address the factors described in clause (b).

Public availability

10. Every municipality shall post its current strategic asset management policy and asset management plan on a website that is available to the public, and shall provide a copy of the policy and plan to any person who requests it.

TABLE 1

WATER ASSETS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	1. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system. 2. Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	1. Percentage of properties connected to the municipal water system. 2. Percentage of properties where fire flow is available.
Reliability	Description of boil water advisories and service interruptions.	1. 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. 2. The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.

TABLE 2

WASTEWATER ASSETS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	Percentage of properties connected to the municipal wastewater system.
Reliability	1. Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes. 2. Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches. 3. Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. 4. Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph 3. 5. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	1. 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. 2. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system. 3. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.

TABLE 3

STORMWATER MANAGEMENT ASSETS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	1. Percentage of properties in municipality resilient to a 100-year storm. 2. Percentage of the municipal stormwater management system resilient to a 5-year storm.

TABLE 4

ROADS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity.	Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality.
Quality	Description or images that illustrate the different levels of road class pavement condition.	1. For paved roads in the municipality, the average pavement condition index value. 2. For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor).

TABLE 5

BRIDGES AND CULVERTS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Percentage of bridges in the municipality with loading or dimensional restrictions.
Quality	1. Description or images of the condition of bridges and how this would affect use of the bridges. 2. Description or images of the condition of culverts and how this would affect use of the culverts.	1. For bridges in the municipality, the average bridge condition index value. 2. For structural culverts in the municipality, the average bridge condition index value.

COMMENCEMENT

Commencement

11. This Regulation comes into force on the later of January 1, 2018 and the day it is filed.

Français

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Français

ONTARIO REGULATION 193/21
made under the
INFRASTRUCTURE FOR JOBS AND PROSPERITY ACT, 2015
Made: March 11, 2021
Filed: March 15, 2021
Published on e-Laws: March 15, 2021
Printed in *The Ontario Gazette*: April 3, 2021

Amending O. Reg. 588/17
(ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE)

1. Subsection 5 (1) of Ontario Regulation 588/17 is revoked and the following substituted:

(1) Every municipality shall prepare an asset management plan in respect of its core municipal infrastructure assets on or before July 1, 2022, and in respect of all of its other municipal infrastructure assets on or before July 1, 2024.

2. (1) Subsection 6 (1) of the Regulation is amended by striking out "by July 1, 2024" in the portion before paragraph 1 and substituting "on or before July 1, 2025".

(2) Subsection 6 (2) of the Regulation is revoked and the following substituted:

(2) With respect to an asset management plan prepared under section 5 on or before July 1, 2022, if the additional information required under this section is not included before July 1, 2024, the municipality shall, before including the additional information, update the current levels of service set out under paragraph 1 of subsection 5 (2) and the current performance measures set out under paragraph 2 of subsection 5 (2) based on data from the two most recent calendar years.

Commencement

3. This Regulation comes into force on the day it is filed.

Français

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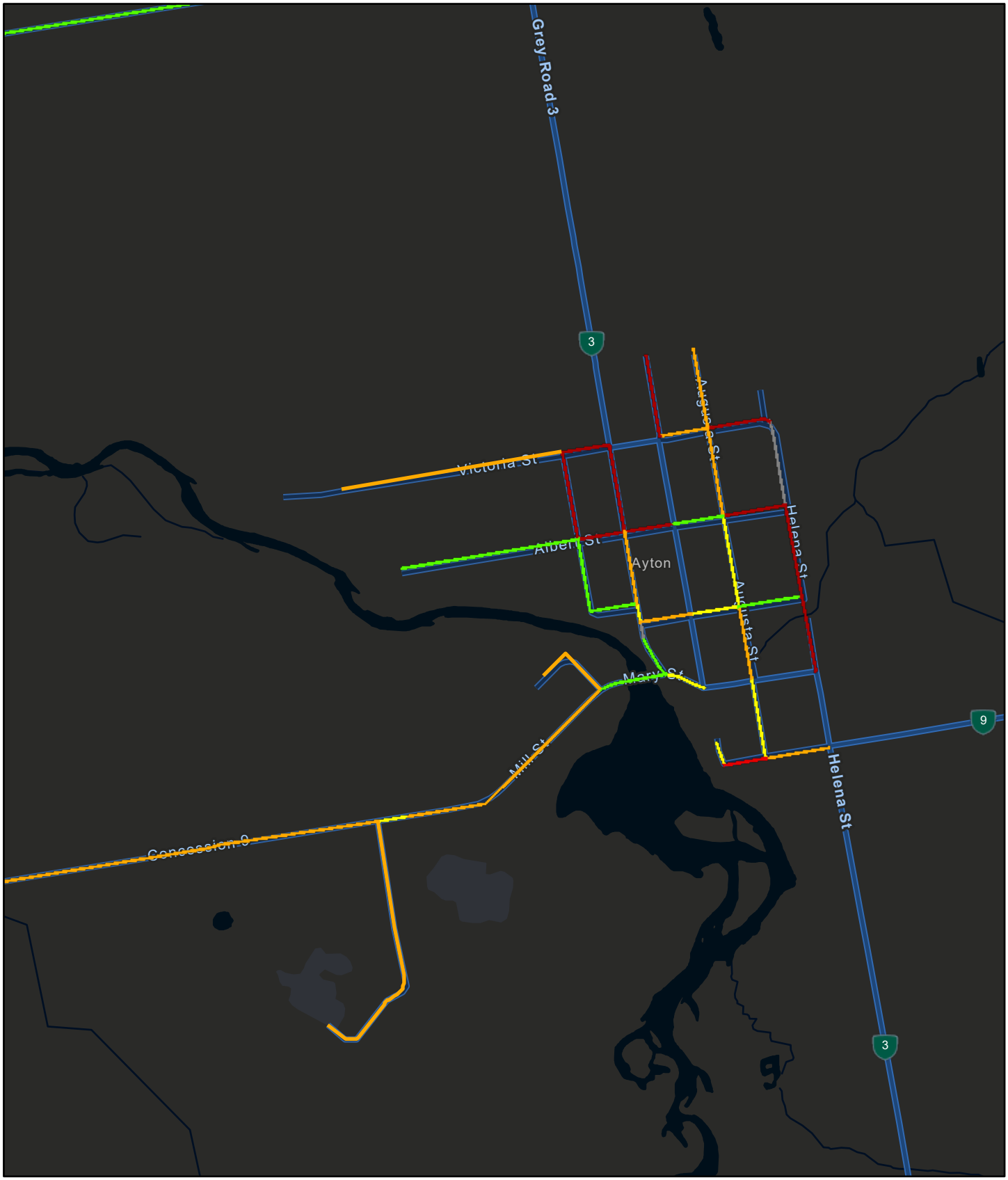
Ayton



6/13/2022

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0 0.17 0.35 0.7 km

Gravel Roads

Poor

Pavement Condition Index

Failed (0 - 10)

Serious (10 - 25)

Very Poor (25 - 40)

Poor (40 - 55)

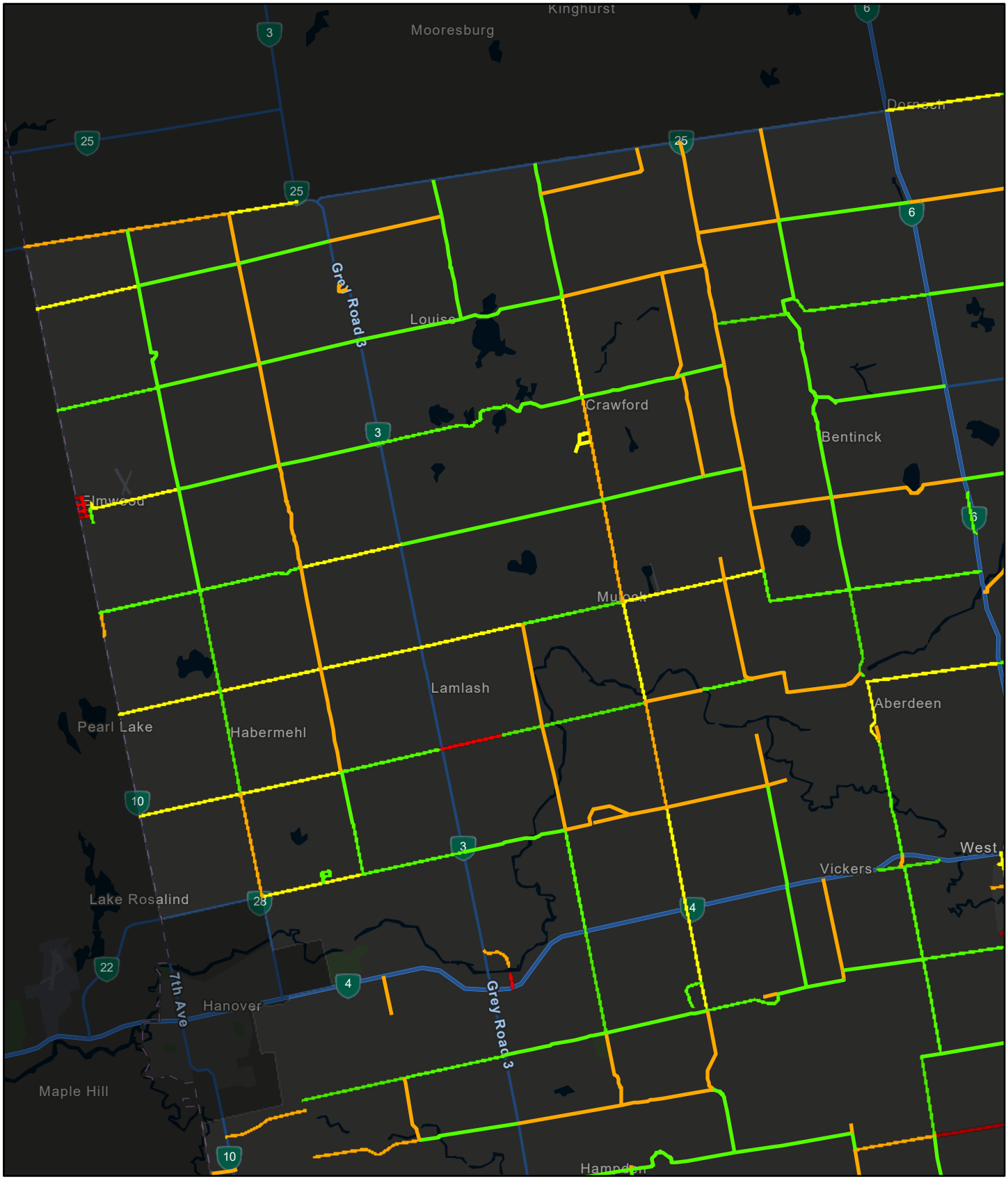
Fair (55 - 70)

Good (70 - 85)

Excellent (85 - 100)

Municipality Boundaries

Bentinck



6/13/2022

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0 1.25 2.5 5 km

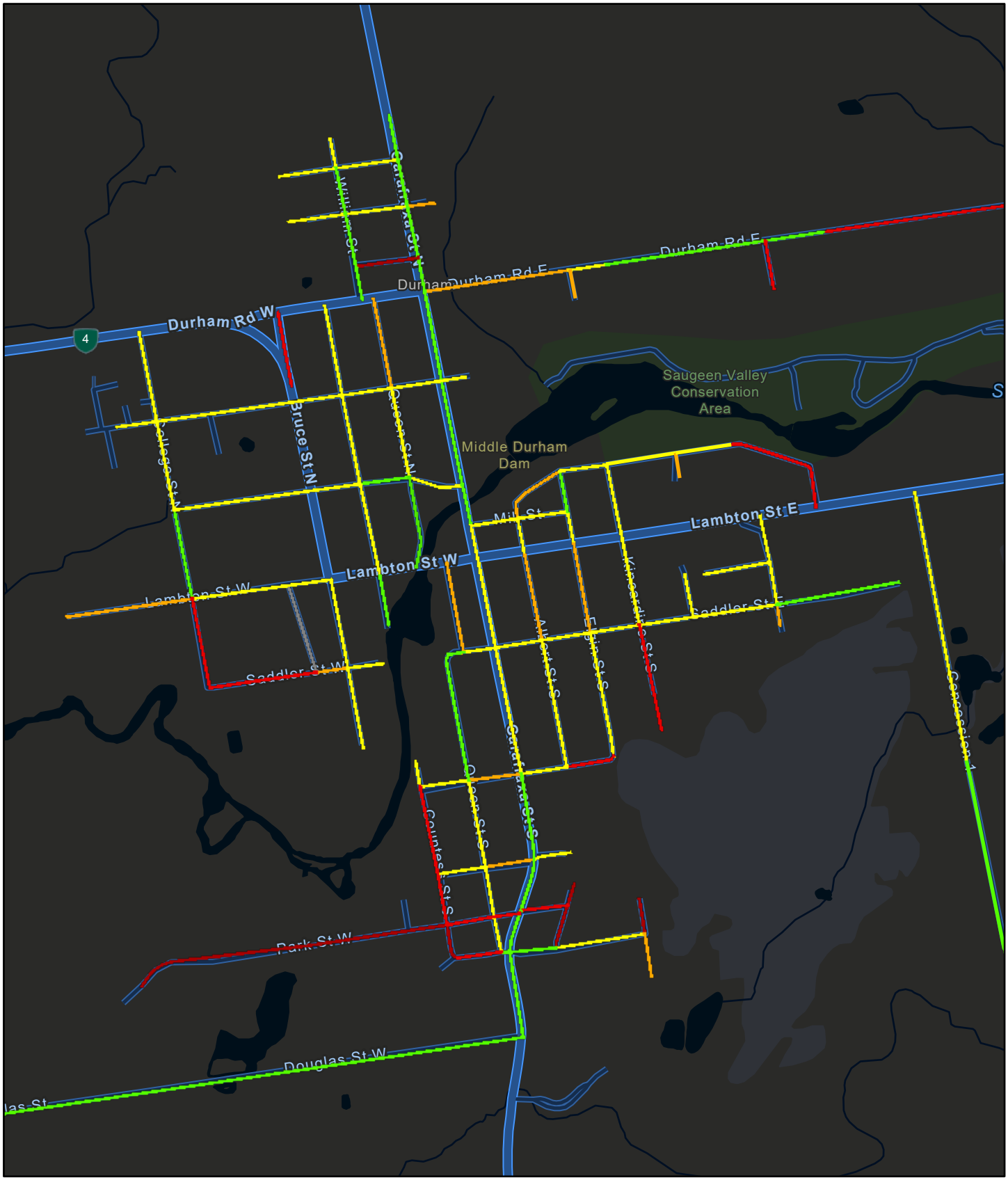
Gravel Roads

- Good
- Fair
- Poor

Pavement Condition Index

- Failed (0 - 10)
- Serious (10 - 25)
- Very Poor (25 - 40)
- Poor (40 - 55)
- Fair (55 - 70)
- Good (70 - 85)
- Excellent (85 - 100)
- Municipality Boundaries

Durham



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0 0.17 0.35 0.7 km

Gravel Roads

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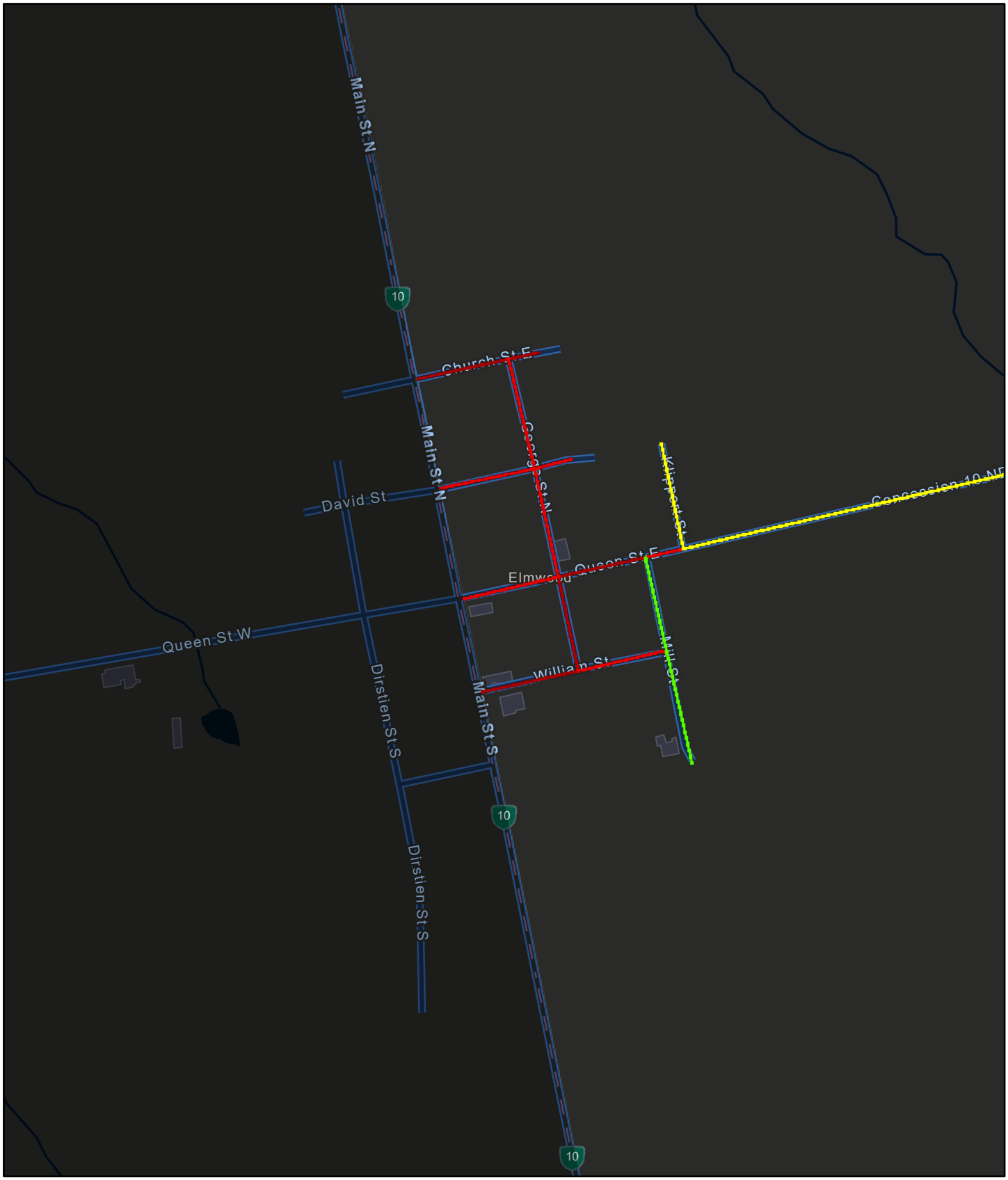
- Good (70 - 85)
- Excellent (85 - 100)
- Municipality Boundaries

Elmwood



6/13/2022

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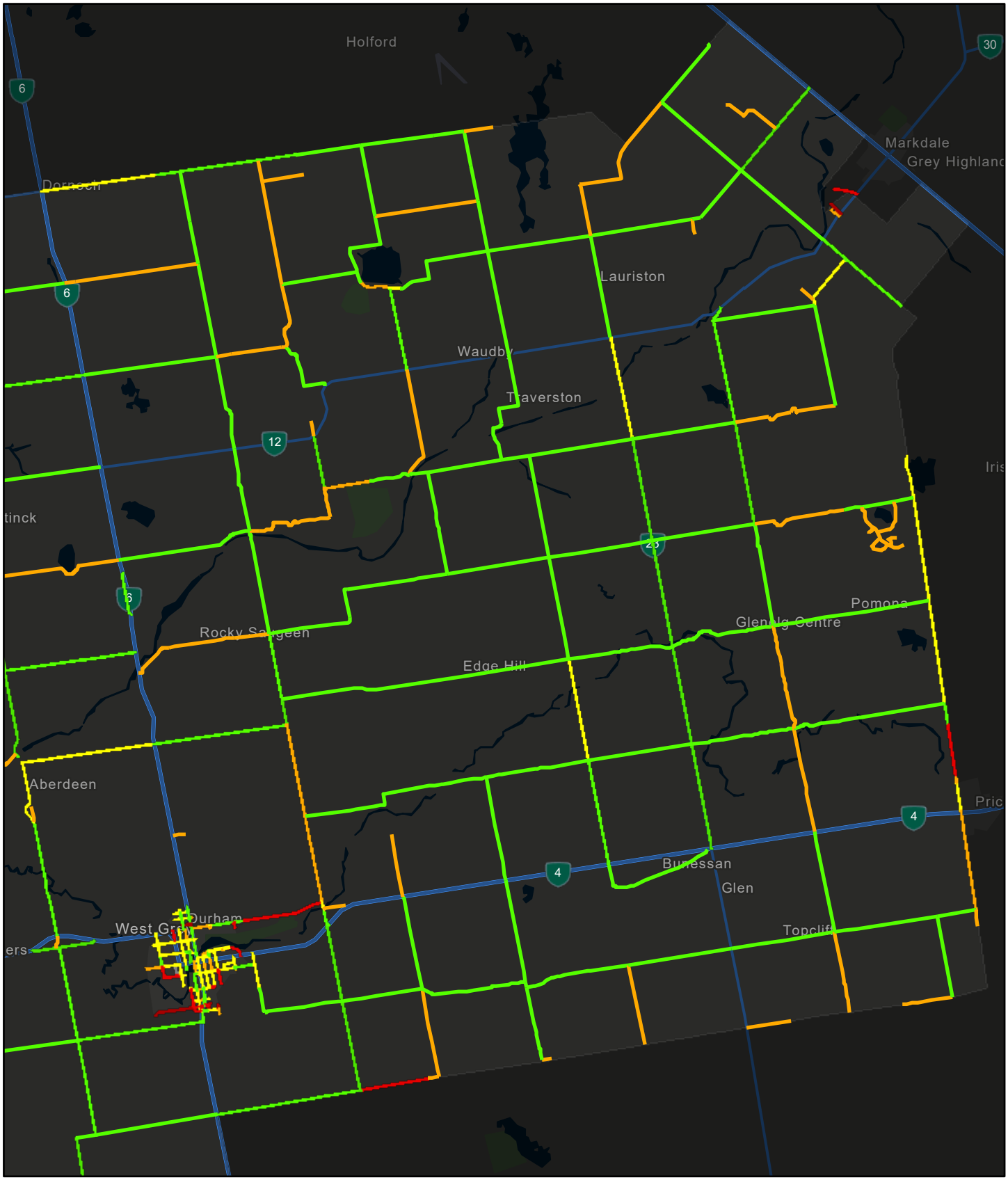
Pavement Condition Index

- Failed (0 - 10)
- Serious (10 - 25)
- Very Poor (25 - 40)
- Poor (40 - 55)
- Fair (55 - 70)
- Good (70 - 85)
- Excellent (85 - 100)
- Municipality Boundaries

Glenelg



6/13/2022

1:144,448

0 0.75 1.5 3 mi

0 1.25 2.5 5 km

Gravel Roads
- Good
- Fair
- Poor

Pavement Condition Index
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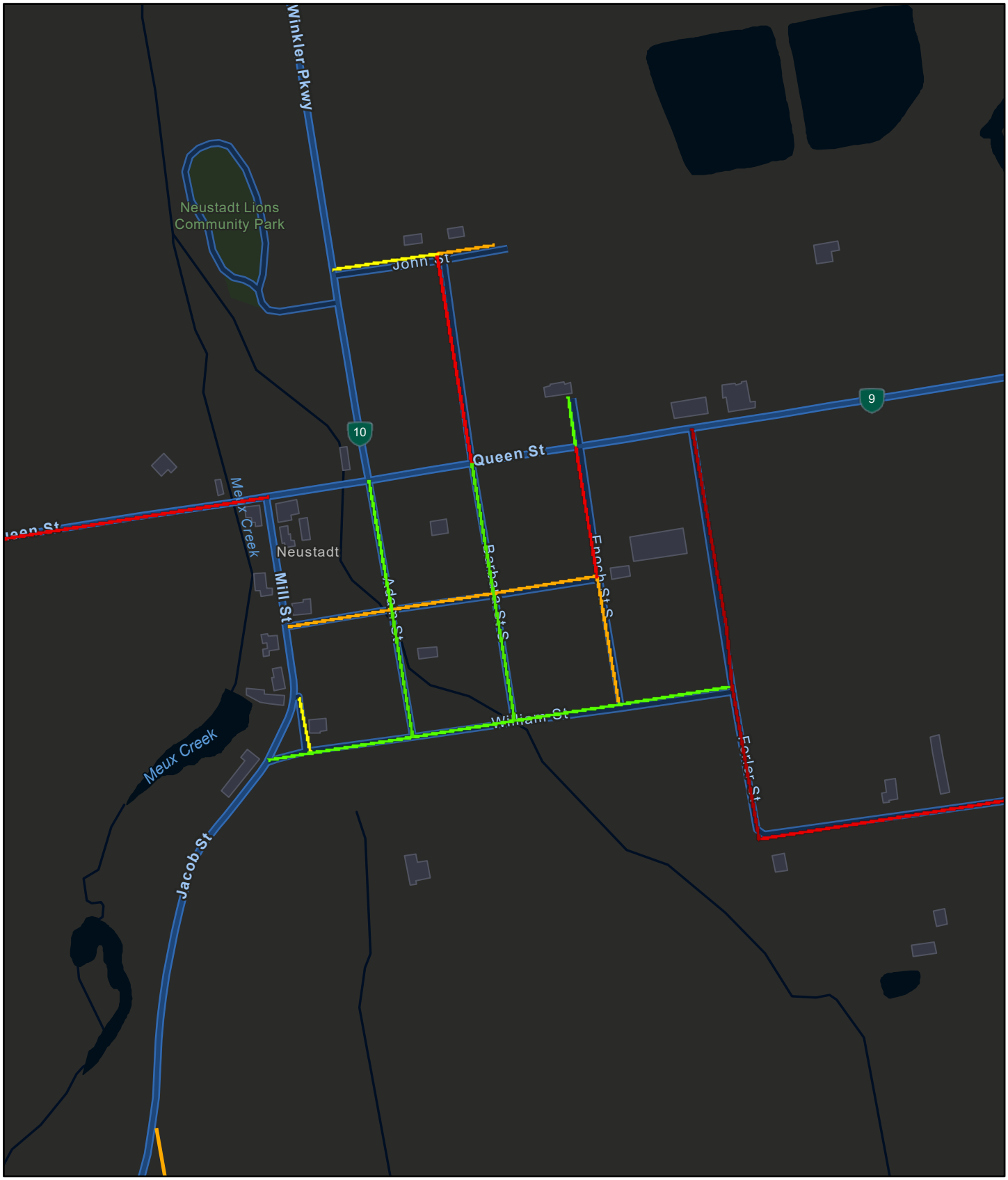
- Poor (40 - 55)
- Fair (55 - 70)
- Good (70 - 85)
- Excellent (85 - 100)
- Municipality Boundaries

Neustadt



6/13/2022

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0 0.07 0.15 0.3 km

Gravel Roads

Poor

Pavement Condition Index

Failed (0 - 10)

Serious (10 - 25)

Very Poor (25 - 40)

Poor (40 - 55)

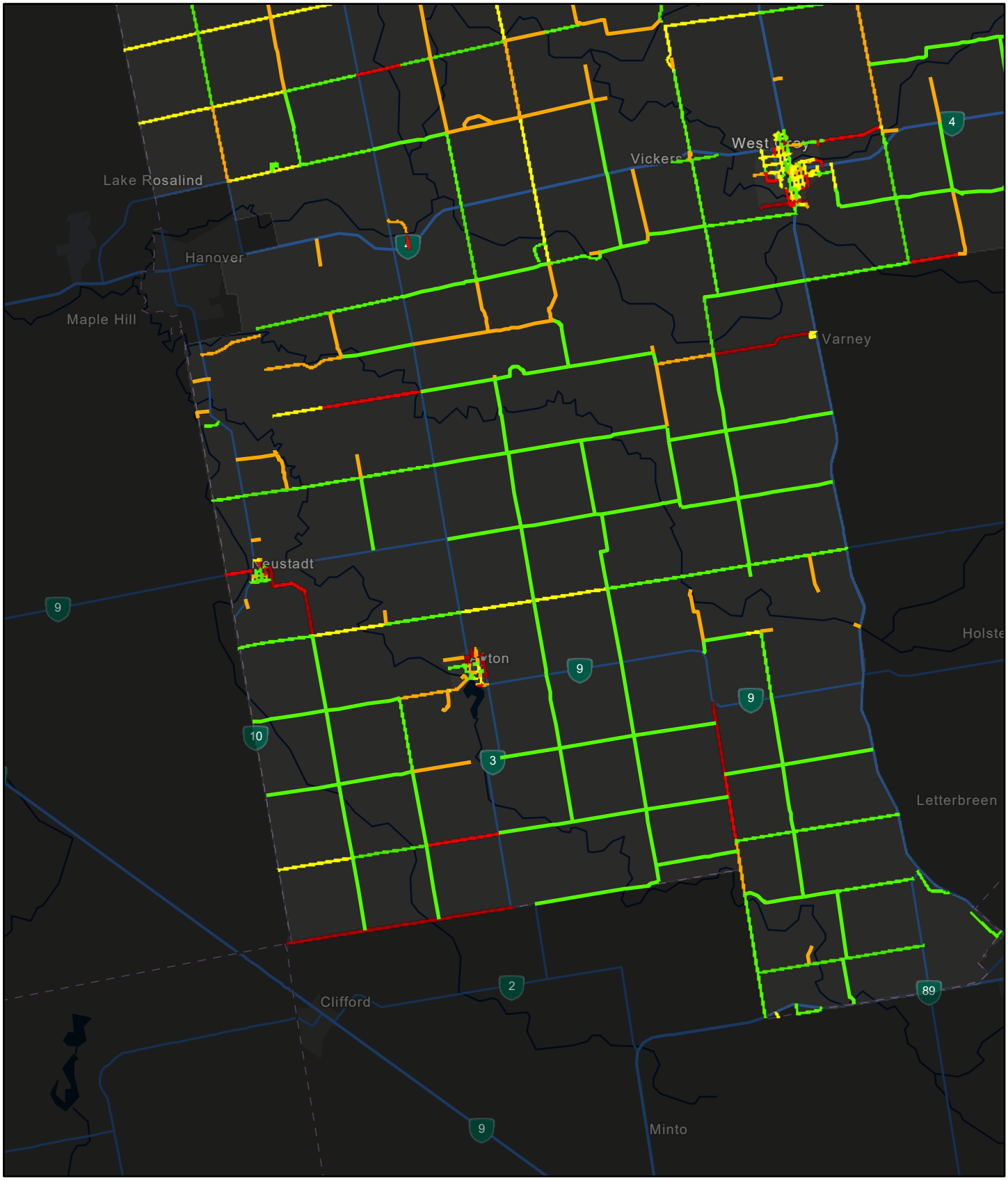
Fair (55 - 70)

Good (70 - 85)

Excellent (85 - 100)

Municipality Boundaries

Normanby



6/13/2022

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0 2 4 8 km

Gravel Roads
- Good
- Fair
- Poor

Pavement Condition Index
- Failed (0 - 10)
- Serious (10 - 25)
- Very Poor (25 - 40)
- Poor (40 - 55)
- Fair (55 - 70)
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- Excellent (85 - 100)
- Municipality Boundaries