



Municipality of Wawa

Asset Management Condition Assessment

Implementation Strategy

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Background

Providing services to the community is a function of municipal government, and infrastructure assets are a conduit for service provision. The asset management program is developed with the goal of balancing costs, opportunities and risks against the desired performance of assets to achieve the Municipality's levels of service objectives.

The Corporation of the Municipality of Wawa's ("Municipality of Wawa" or "Municipality") infrastructure systems are the foundation of our community. They support a range of municipal services that enable the quality of life experience by residents, businesses, visitors to our community, and other stakeholders.

The development of this Condition Assessment Strategy was a recommendation in the 2020 Asset Management Plan, and is a further step in the ongoing advancement of the Municipality's asset management program. This project has been facilitated by a grant approved by the Federation of Canadian Municipalities (FCM) through their Municipal Asset Management Program (MAMP). The project also included conducting condition assessments on the Municipality's facilities, and provided current condition ratings of componentized assets, recommended interventions (install, repair, replace) with photos and estimated costs for facilities assets.

Purpose

The information contained herein will ultimately be incorporated into the asset management plan being prepared for July 1, 2024, as per the deadline for all municipal assets in Ontario Regulation 588/17.

This strategy has been developed in cooperation with the staff and management of the Municipality of Wawa, and relates to those assets currently owned and maintained by the Municipality and used in providing services to the community. The condition assessment strategy will be applied as current assets are maintained, rehabilitated or replaced, and as new assets are acquired.

Role of Asset Condition Data

The goal of collecting asset condition data is to ensure that data is available to inform maintenance and renewal programs required to meet the desired levels of service. Assessed condition is a key variable in the determination of an asset's probability of failure. An incomplete or limited understanding of asset condition can mislead long-term planning and decision-making.

Accurate and reliable condition data allows municipal staff to:

- ✓ determine the estimated remaining service life of assets;
- ✓ identify the most cost-effective approach to asset deterioration, whether it involves extending the life of the asset through remedial efforts or determining that replacement is required to avoid asset failure.

In addition to the optimization of lifecycle management strategies, asset condition data also impacts the Municipality’s risk management and financial strategies. Accurate and reliable condition data helps to prevent premature and costly rehabilitation or replacement and ensures that lifecycle activities occur at the right time to maximize asset value and useful life.

Guidelines for Condition Assessment

Whether completed by external consultants or internal staff, condition assessments should be completed in a structured and repeatable fashion, according to consistent and objective assessment criteria. Without proper guidelines for the completion of condition assessments, there can be little confidence in the validity of condition data and asset management strategies based on this data.

Condition assessments must include a quantitative or qualitative assessment of the current condition of the asset, collected according to specified condition rating criteria, in a format that can be used for asset management decision-making. In some cases, internal staff may have sufficient expertise or training to complete condition assessments, however, staff capacity is limited. In other cases, external consultants may need to be engaged to complete detailed technical assessments of infrastructure.

Condition Assessment Ratings

A condition assessment rating system provides a standardized descriptive framework that allows comparative benchmarking across the Municipality’s asset portfolio. The table below outlines the condition rating system used by the Municipality to determine asset condition. This rating system is aligned with the Canadian Core Public Infrastructure Survey which is used to develop the Canada Infrastructure Report Card. When assessed condition is not available, service life remaining is used to approximate asset condition.

Condition	Description	Criteria	Service Life Remaining (%)
Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated	80-100
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life	60-80
Fair	Requires attention	Signs of deterioration, some elements exhibit significant deficiencies	40-60
Poor	Increasing potential of affecting service	Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration	20-40
Very Poor	Unfit for sustained service	Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable	0-20

Developing a Condition Assessment Schedule

Condition assessments and general data collection can be both time-consuming and resource-intensive. As it is not an effective strategy to collect assessed condition data across the entire asset inventory, the goal is to prioritize the collection of assessed condition data based on the anticipated value of this data in decision-making. All of the various types of municipal assets are considered, with the aim to find the balance of assessment cost to benefits achieved in performing the assessments.

The Municipality's assets are organized in the following asset categories:

- Bridges and Culverts
- Road Network
- Storm Water Network
- Sanitary Sewer Network
- Water Network
- Buildings
- Machinery and Equipment
- Vehicles
- Land Improvements

Criteria for Consideration When Identifying Assets to be Assessed

Several factors were identified as important to consider when determining which assets to assess and setting the assessment schedules.

1. Is there legislation requiring a condition assessment/inspection?
Examples of legislation regarding infrastructure assets include:
 - DWQMS – Drinking Water Quality Management Standard;
 - SDWA – Safe Drinking Water Act;
 - TSSA – Technical Standards and Safety Authority;
 - MMS – Minimum Maintenance Standards – Road Network;
 - Our own By-laws/policies.
2. Are there reporting requirements regarding legislated inspections?
 - Completed inspections can help to fulfill reporting requirements.
3. How often are the inspections required/recommended?
 - Manufacturer recommendations should be identified;
 - Assessment should be accelerated on deteriorating assets.
4. How often are inspections being done now?
 - Appropriateness – confirm how frequently to perform the inspection.

5. What are the risks of not doing inspections? Or doing inspections less frequently?
 - Identify the probability of failure.
 - Identify the consequence of failure if not inspected.
6. Can the assessment be done by municipal staff or are outside contractors required?
 - Does Municipal staff have the training/certification to complete the assessment?
 - Does Municipal staff have the capacity/time to complete the assessment?
7. Is the cost of assessment reasonable or prohibitive?
 - Does the cost of the inspection outweigh the benefit of the data it would provide?
 - Is it labour or time intensive?
8. Are there grants available to help cover inspection costs?
 - Where possible, delay inspection until there is funding to help mitigate the cost;
 - Where possible, include inspection costs as part of a capital project.
9. Is there a collaborative opportunity with nearby communities to achieve savings when arranging condition assessments?
 - When engaging outside consultants who may have to travel to the community from larger centres – collaborating can bring a larger contract to the consultant and encourage cost savings for each community involved.
10. Is the Municipality receiving public input regarding this asset?

Informing Asset Maintenance Schedules and Inventory Records

All new assets are added to the inventory records as they are acquired or at a minimum once per calendar year. The asset maintenance schedule of new acquisitions will be determined by the staff and Director of the department managing the assets, and related lifecycle events (assessments, routine maintenance, preventative maintenance) will be added to the asset inventory records to assist with department scheduling and planning.

Assessment and maintenance schedules for existing assets will be reviewed by department Directors once per calendar year, and any needed adjustments to the schedules/lifecycle events will be adjusted in the asset inventory records.

Other than scheduled assessments, information on asset performance can also be obtained from public or staff input. Service requests, comments, or complaints submitted will be reviewed by the department Director, who will determine the actions to be taken in that situation.

As condition assessments are completed (or at a minimum once per calendar year), the results will be added to the relevant asset's inventory record, as part of the process of keeping the inventory records updated. Any required repairs will be completed as they are identified (if feasible), or added to the relevant department's list of maintenance/repairs to be scheduled.

An Action Plan has been prepared to identify steps to update assessment and maintenance data for existing assets in the inventory records.

The final step includes the incorporation of the Condition Assessment Strategy details into the draft asset management plan being prepared for July 1, 2024.

Action Plan		
Task	Who is responsible	Schedule
1. Assemble condition assessment information for current assets, including: - schedule of assessments being done/planned - reports/results for completed assessments	Asset Management Coordinator with the assistance of department Directors, Assistant Directors	In Progress Complete by Nov. 20, 2023
2. Update asset inventory records with results from completed condition assessments: - determine gaps in inventory records for assessments already done - input results that are outstanding	Asset Management Coordinator	Identify data gaps by Nov. 30, 2023 Input results to inventory records by Dec. 31, 2023
3. Assemble lifecycle events for current assets, including: - schedule of maintenance activities planned (routine maintenance, preventative maintenance) with related Costs	Asset Management Coordinator with the assistance of department Directors, Assistant Directors	In Progress Complete by Dec. 11, 2023
4. Update asset inventory records with lifecycle event details	Asset Management Coordinator	Input results to inventory records by Dec. 31, 2023
5. Incorporate Condition Assessment Strategy details into Asset Management Plan	Asset Management Coordinator	Add to draft AMP by Apr. 30, 2024

APPENDIX "A"

Wawa Building Condition Assessments						
Accent Building Sciences Inc. (ABSI)						
Consultant's Recommendations as at June 30, 2023						
	Deficiency Repairs	Replacement Costs Estimated for Years 2024-2027				Total Estimated Costs
Costs by Building (samples - not all listed)	Estimated Repair Cost 2023-2024	2024	2025	2026	2027	2023-2027
96 Broadway Ave.	\$63,250	\$359,318	\$750	\$246,050	\$60,000	\$729,368
Fire Hall	\$26,300	\$258,213	\$7,500	\$48,300	\$52,125	\$392,438
Michipicoten Memorial Community Centre	\$262,600	\$764,575	\$473,000	\$603,625	\$150,000	\$2,253,800
Municipal Offices (Town Hall)	\$265,441	\$572,513	\$273,304	\$472,500	\$23,450	\$1,607,208
Public Works Garage (Magpie)	\$25,500	\$688,605	\$23,400	\$289,155	\$0	\$1,026,660
Public Works Storage Garage (Montreal)	\$4,000	\$40,950	\$0	\$0	\$0	\$44,950
Tourist Information Centre	\$64,750	\$23,640	\$6,500	\$113,500	\$28,740	\$237,130
Total Costs by Year - All Buildings	\$1,057,571	\$3,344,811	\$1,233,912	\$1,857,010	\$981,807	\$8,475,111

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