

# ASSET MANAGEMENT PLAN



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#### **PREAMBLE**

This Asset Management Plan has been completed based on the strategic goals, objectives, and direction contained within Town of Aylmer Policy No. 2.19: Strategic Asset Management Policy. This policy was developed in consultation with and approved by the Council of the Town of Aylmer and can be viewed on the municipal website or in person at the municipal offices at 46 Talbot Street West in Aylmer.

The 2023 Asset Management Plan for the Town of Aylmer has been endorsed by the Senior Management team of the municipality and will be presented for approval of Council at a meeting held August 9, 2023. Increased Asset Management planning is necessary to fulfill new requirements of *O. Reg 588/17 Asset Management Planning for Municipal Infrastructure*.

This plan will be reviewed by staff on an annual basis and utilized to help develop the annual municipal budget. An updated plan will be presented to and approved by Council at a minimum every 5 years.

#### INTRODUCTION

Municipalities have traditionally engaged in some form of asset management, whether it be through capital budgets, multi-year forecasts, road needs studies, parks master plans, or long-term financial planning. Informal and undocumented plans have been utilized in various manners and forms by municipal departments for decades. While these plans and forecasts continue to aid municipalities in their asset management and financial planning, today's environment requires municipalities take a formal, all-encompassing approach to asset management through the creation of a comprehensive program that addresses municipal infrastructure collectively in a single plan. By addressing the entirety of a municipality's asset inventory in a single plan, municipalities can take steps to ensure that their assets remain viable and safe for staff and general public use over the long term.

It is commonly known that municipalities do not have enough capital budget dollars available to fully fund asset replacement and renewal. Due to these financial constraints, municipalities are forced to find ways to keep and maintain assets beyond their normal lifespan. Capital budget dollars need to be properly prioritized so that critical infrastructure is renewed before it fails. To accomplish this, municipalities require a detailed accounting of all their assets, including an assessment of their current condition, estimated costs to replace, on-going costs to maintain, estimated dates for replacement, and an evaluation of the risk/consequence of failure. Only when a municipality has accumulated all this information, can it create a long-term plan to properly manage its assets. In addition, staff and Council need to engage in discussions about Service Levels (both current and future), Growth, and Climate Change so that capital planning can be adjusted to ensure assets are appropriately addressed relating to these changing priorities and expectations.

Fully financing an asset management program is challenging and difficult. All financing options available will need to be considered and utilized, including tax revenue, reserves/reserve funds, debt financing, user fees, development charges, and grants from the Provincial and Federal Government. Even with all these financing options available, most (if not all) municipalities will face a funding shortfall in their program. This shortfall is commonly referred to as an *Infrastructure Gap*. The success or failure of an Asset Management Plan will be in how this Infrastructure Gap is dealt with over time. A target date should be established as to when a fully funded program could be achieved. This date will fluctuate over time as assets are added/removed, service levels increase/decrease, and as funding levels and political wills change. One thing is clear, to achieve a fully funded asset management program will require a strong commitment from Council and staff, as well as an on-going steady increase in capital funding in order to get there.

In this document, you will find the detailed asset management program for each capital asset class owned and maintained by the Town of Aylmer. Each section will detail the current assets maintained in that class, the current state of these assets, strategies for managing and maximizing the life of these assets, and the costs to maintain and fund the eventual replacement of these assets. The final sections of this document will pull all this data together, determine the municipality's overall Infrastructure Gap and lay-out a strategy for funding this gap. Detailed lists of all municipal assets are included within the appendices to this document. Additional appendices contain the 5-Year Capital Program for each department. It is within these programs that you can see how the Town intends to finance the next 5 years of its AMP. This plan will need to change over time as needs and priorities evolve.

Town staff have undertaking significant work in departing from historical construction costs to more accurate estimates of costs for replacement. This was an important step to realistically plan for the future cost and is particularly important to addressing large increases in construction cost due to inflation and market pressures.

#### **COMPONENTS**

In order for a plan to be considered a complete asset management program, it should include all of the following components:

#### CONDITION ASSESSMENT

To assist a municipality in properly prioritizing asset replacements, each asset should be assessed based on its current condition. While some asset classes will have condition assessments closely related to the age of its assets, other classes may vary widely due to other factors such as usage, traffic counts, operating hours, weather exposure, etc. Some classes may require the use of third-party experts/consultants to properly review and evaluate the current state of the assets contained within it. Through this process, assets deemed critical to municipal operations also need to be identified, as failure of these assets will have far greater consequences than other assets in the plan. With this information in hand, only then can asset replacements be properly prioritized by ensuring that the assets in the most need are replaced first.

The scale being utilized for Condition Assessments throughout this plan is shown below:

< 20	Very Poor
20 - 39	Poor
40 - 59	Fair
60 - 79	Good
80 - 100	Very Good

NOTE: The Town of Aylmer has utilized a third-party consultant to assess the current condition of the Roads, Sidewalks, Water Network, Sanitary Sewer Network and Storm Sewer Network, which covers most assets within our Asset Management Plan. The remaining assets were assessed based on internal staff inspection and/or age-based conditions.

#### REPLACEMENT DATE

Every asset sitting in a current TCA Inventory has an estimated useful life, which represents the number of years that the asset will be amortized over to satisfy financial reporting purposes. Realistically, most assets will last well beyond these timeframes. In some cases, budget constraints and a lack of funding may force some asset replacements to be significantly delayed. Accordingly, these dates do not properly

reflect an accurate estimate of the actual replacement date. Generally, replacement dates will be several years after the useful life of the asset has expired. Utilizing condition assessments, risk analysis, budget dollars available and other factors, asset replacements in each class can be prioritized and placed out over a period of years to determine the most appropriate replacement date for each asset.

#### SERVICE LEVELS

Council and staff should engage in discussions regarding the service levels of all asset classes. What are the current service levels being provided? Are these levels currently meeting public demand? Are these levels financially sustainable over the long-term? Are increases or decreases in service wanted or needed in the future? Are possible changes in the current service level financially viable over the long-term? When municipalities have the answers to these questions, long-term plans can be put in place that meet these expectations and ensure that municipalities can provide the desired service level for each asset class.

It should be noted that increased (or decreased) service levels in one asset classes can affect assets contained within another class, so decisions on service levels should not be made in isolation.

NOTE: The 2022 Asset Management Plan is the first plan for the Town of Aylmer that includes Levels of Service measures for all its asset classes. These represent the Current Levels of Service being provided to the public and/or the target measures based on the current assets owned and staff levels.

#### REPLACEMENT VALUE

Every asset in a municipal asset management program needs a true cost for its eventual replacement. This differs from the *Historical Cost* that was attributed to each asset in the TCA Inventory completed for *PSAB 3150*. To properly plan for the funding of the new replacement asset, municipalities need to have an estimate of what it will cost to buy or construct the new asset based on current models, standards, and prices.

As discussed in the prior component, service level changes may affect the replacement cost. Will the replacement asset need to be increased (or decreased) or changed due to a different *Expected Level of Service* either now or in the future? Should the asset be upgraded or modified to increase its capacity or resistance to *Climate Change*? Will *Growth* dictate that added or upgraded infrastructure is needed? Standards can also change over time which could dictate a different type of asset be put in place. If necessary, the replacement value should reflect the cost of the new and/or improved asset, not just the replacement cost of the existing asset.

NOTE: Some assets may <u>not</u> be intended to be replaced when their useful life comes to an end due to lack of need, changing priorities and/or availability. These assets need to be identified so that their replacement costs are not reflected in the long-term plan. This would include historical assets that cannot be replaced once they are no longer viable.

#### **RISK RATING**

While the timing of asset replacement is generally closely related to an asset's condition assessment, several other factors such as financial costs, frequency of use, and criticality to operations should be considered when determining when an asset needs to be replaced. Risk is generally considered as the product of *Probability* x *Consequence*. Risk factors for each asset class are determined and assigned to either probability or consequence and then weighted in relation to their importance. Using an algorithm that considers these elements, a risk rating can be calculated for each asset. This risk factor should be utilized when prioritizing asset replacement within the plan.

The scale being utilized for Risk Ratings throughout this plan is shown below:

< 4.9	Very Low
5 - 7.9	Low
8 - 9.9	Moderate
10 - 14.9	High
15 <	Very High

NOTE: As risk analysis is a relatively new concept for the Town of Aylmer, the Risk Ratings contained within this version of the AMP are being calculated based on data that is readily available to staff. Future versions of the AMP will see further development in its risk models as data, such as traffic counts, GIS data layers, and other measures, becomes available and more refined, which should in turn result in better and more accurate analysis to utilize for asset replacement strategies and decisions.

#### MAINTENANCE / UPGRADE PLANS

Most assets within the municipal inventory will need periodic maintenance to ensure that they stay in proper working order and remain fully usable over the entire life of the asset, and sometimes beyond. A properly funded maintenance program needs to be included in an Asset Management Program. This will ensure that assets do not need to be replaced before their scheduled replacement date. Some assets may require substantial work and financial investment at various points in their life to ensure that

they continue to operate at an optimal level. This could include work such as engine rebuilds/overhauls, road treatments, parts replacements, roof, or HVAC replacements, etc. These are necessary procedures that need to be accounted for in this plan.

Beyond the regularly scheduled maintenance program there may be other opportunities where there is an option to reinvest in an asset to extend its useful life. In these cases, it is necessary to complete a cost-benefit analysis to determine if the financial investment is worth the extra useful life that will result. A good example of this type of opportunity is a paved road. Will resurfacing this road at 2 or 3 points over its useful life to extend its useful life by "x" number of years be more cost effective than just leaving the road and fully rebuilding it at the end of its normal useful life? Each type of asset needs to be analyzed to see if these opportunities exist, and, if so, if this investment is cost effective. Completing this analysis on each asset class will ensure that the municipality is making the best use of its capital dollars.

#### FINANCING STRATEGY

There are numerous sources of financing that can be utilized to fund an Asset Management Plan. The major sources are tax revenues, reserves, debt financing, user fees, development charges, and capital grants from the Provincial and Federal Governments. Other sources of funding can come from donations, subdivider monies, and other development agreements, but, as this type of revenue is inconsistent and infrequent, it will not normally be included in an Asset Management Program.

Debt financing is best utilized for assets with a longer useful life such as buildings or bridges, so that payments can be spread over the life of the asset, but this type of financing can only be used sparingly, as it will start to have adverse effects on annual budget requirements if over-used.

Capital grants from other levels of government are generally targeted for types of assets that a municipality may have difficulty including in the general budget process.

NOTE: The Town of Aylmer currently utilizes a reserve funding strategy for all its asset classes, with all capital spending being funded from the municipal capital reserves. This requires regular annual funding to be budgeted/transferred to the capital reserves to replenish them and to ensure this funding strategy continues to be effective over the long-term. Many of the funding resources mentioned above are being utilized to help fund the Town's capital reserves on an annual basis. Annual capital reserve funding and the related transfers will need to be maintained and steadily increased over time for the Asset Management Plan to remain viable.

#### GROWTH

Current growth estimates are based upon projected dwelling permit issuances under the 2021 Development Charges Study. These numbers estimate incremental growth of approximately 400 housing units over the next several years. These projections will be improved in 2023 through the Town undertaking population growth study. Efforts to improve the Town's water and wastewater infrastructure and capacity are at the study phase with improvements planned to support growth. Costs for upgrades to the infrastructure to facilitate this prospective growth will be fully funded through the user rates of these services. This growth may also result in some minor pressure to increase other hard and soft services provided by the Town; however, funding for any increases in service levels should be covered by the extra taxation and development fees that the Town will receive from this growth.

#### **CONDITION & FUNDING RATINGS**

The health of an asset class is dependent on two factors - the current **Condition** of the assets within the class and the *Funding* available to maintain and improve the assets in that class. Both factors are equally important to the overall health of the Town's Asset Management Program.

The **Condition Rating** will reflect the overall condition assessment of the assets in that class. A target condition rating should be set to measure the success of the program.

The *Funding Rating* will reflect how well the current asset class is being funded in comparison to the required level of annual funding needed to sustain a proper replacement program.

These ratings will allow the casual reader of the Town's plan (or someone unfamiliar with asset management concepts) to reach a better understanding of the current health of the assets in each class.

#### INFRASTRUCTURE GAP

To understand the current overall health of the Asset Management Program and to properly plan an appropriate long-term funding strategy, the Town has calculated its current *Infrastructure Gap*. This is the difference between the eventual cost to renew or replace all the Town's assets (prorated on an annual basis) and the current financing available to offset these costs.

The plan contains a strategy to deal with this underfunding and indicates an approximate timeframe when the Asset Management Program could be fully funded.

### **BENEFITS**

A properly prepared and effective Asset Management Program provides numerous benefits for a municipality, including:

- Enables better decision making on asset replacement priorities.
- Improves capital budget and long-term forecast preparation.
- Ensures that critical assets are replaced at the appropriate time.
- Supports better management of risk to the municipality.
- Reduces lifecycle costs of assets.
- Improves financial planning.
- Ensures continued eligibility for infrastructure grant opportunities; and
- Assists in the maintenance of expected Levels of Services.

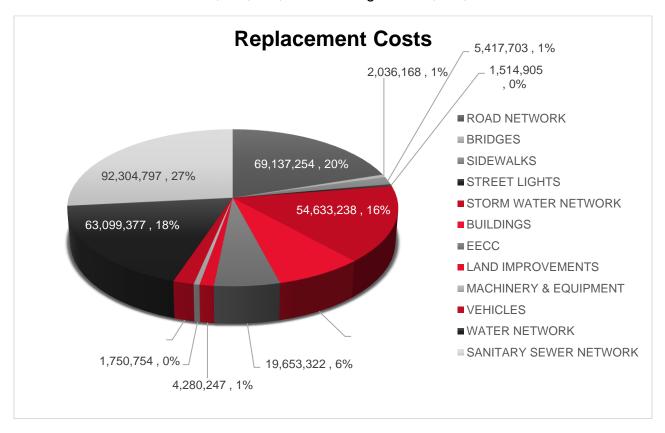
#### **EXECUTIVE SUMMARY**

The Town of Aylmer, through its *Strategic Plan*, is committed to planning for the future by:

- 1. Practicing sustainable and fiscally responsible long-term capital budgeting; and
- 2. Ensuring that community facilities, assets and all infrastructure are maintained and replaced in a responsible manner.

The Town's Asset Management Plan has been developed and constructed with these ideals in mind.

The Town of Aylmer currently owns and maintains almost 2,500 different assets over 11 different asset classes, with a total replacement cost of **\$346,462,571**. Of the 11 asset classes, the classes with the largest replacement cost are the Sanitary Sewer Network at \$92,304,797, the Road Network at \$69,137,254, the Water Network at \$63,099,377, Storm Water Network at \$54,633,238, and Buildings at \$26,372,432.

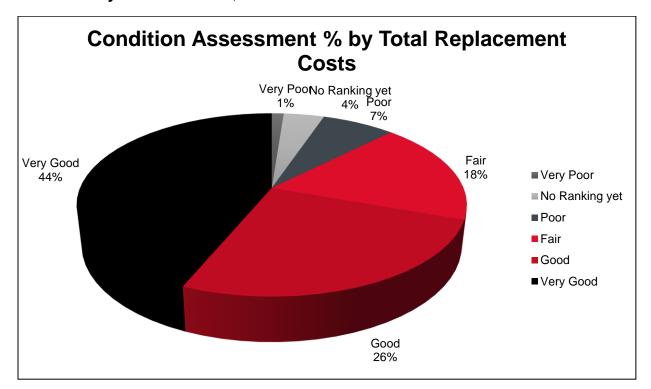


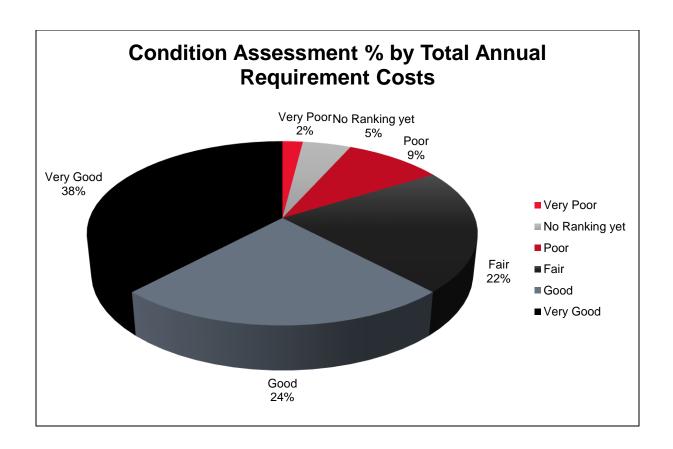
The overall health of the Town's infrastructure and the associated Asset Management Plan is based on two main factors:

- 1. The condition / risk ratings of the assets owned; and
- 2. The funding available for the replacement and upkeep of these assets.

# **CONDITION**

Current condition assessments of the Town's assets show that **70%** of the assets are in **Good** to **Very-Good** condition; with **88%** of the assets in **Fair** or better condition.





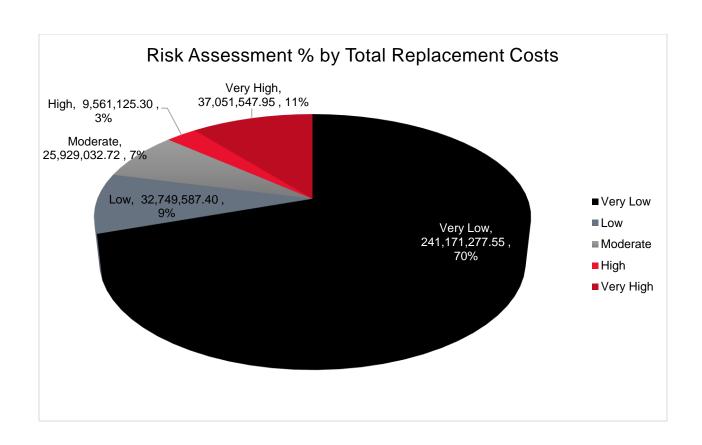
# **RISK**

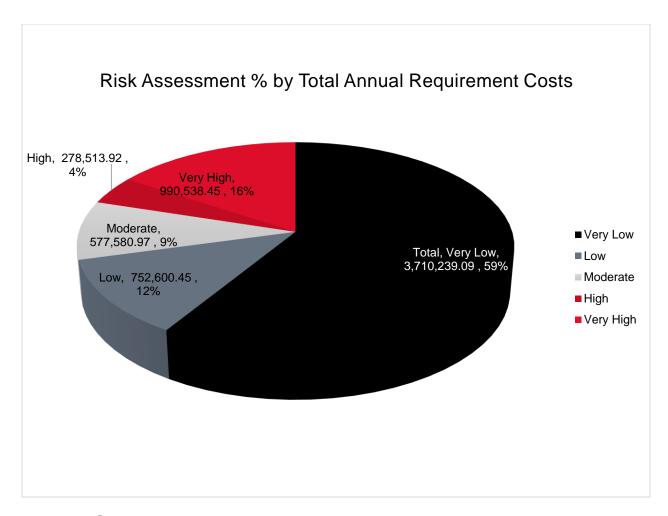
Risk analysis indicates a **Low** or **Very-Low** Risk Rating on **79%** of the current replacement value of the Town's assets; and only **14%** of assets have a **High** or **Very-High** rating.

5	1 Asset <b>(</b> 1.00 unit(s) \$1,394,306.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	1 Asset <b>②</b> 1.00 unit(s) \$11,570,070.00	0 Assets • • • • • • • • • • • • • • • • • • •
4	4 Assets <b>(2)</b> 1,933.00 unit(s), m \$4,596,459.11	4 Assets <b>3</b> 582.00 m, unit(s) \$20,280,103.60	0 Assets • • • • • • • • • • • • • • • • • • •	3 Assets <b>(2)</b> 13,727.00 unit(s), m2 \$22,730,619.77	0 Assets • • • • • • • • • • • • • • • • • • •
Consequence	10 Assets <b>(</b> 1,796.00 m, unit(s) \$13,185,593.03	6 Assets	2 Assets 341.00 m, unit(s) \$3,793,084.20	2 Assets <b>2</b> .00 unit(s) \$3,600,300.00	3 Assets (§ 19,927.00 unit(s), m, m2 \$2,750,858.18
2	99 Assets <b>②</b> 20,101.00 unit(s), m \$27,441,030.48	80 Assets <b>(</b> 19,269.00 m, unit(s) \$19,385,778.56	60 Assets <b>(</b> 15,190.00 m, unit(s), m2 \$10,501,805.84	14 Assets <b>3</b> ,066.00 m, unit(s) \$1,697,539.67	9 Assets 609.00 unit(s), m \$2,228,991.00
1	532 Assets <b>3</b> 62,674.25 unit(s), m \$76,930,591.17	387 Assets <b>3</b> 5,751.00 m, unit(s), m2 \$46,885,639.51	570 Assets <b>3</b> 1,341.00 m, unit(s) \$38,672,921.24	119 Assets <b>(2)</b> 11,403.00 unit(s), m \$17,846,194.00	52 Assets <b>3</b> ,059.00 m, unit(s) \$7,009,935.20
	1	2	3 Probability	4	5

The risks involved with maintaining the current Levels of Service (detailed in this plan) are minimal. The current age and condition of the Town's assets are adequate for their intended purpose. While the funding level for asset renewal is currently less than the required amount indicated in the plan, with the potential impacts relating to climate change being low given the infrastructure in place, as well as the adequate condition of the Town's assets, this issue can be remedied in a reasonable amount of time, well before services may be impacted.

Overall, based on condition and risk ratings, currently the Town of Aylmer's assets are in a very respectable state.





#### **FUNDING**

#### MAINTENANCE/UPKEEP OF ASSETS

Funding for the upkeep and maintenance of the Town's assets is contained within the Operating Budget of each respective department. Current operating funds budgeted are not quite adequate to complete the maintenance activities outlined under each asset class in this plan, however, we are working toward this goal with the next operating budget presentation.

#### CAPITAL RENEWAL/REPLACEMENT

Using the Replacement Costs of the Town's asset inventory and prorating these costs over the expected life of these assets, we can calculate an Annual Funding Requirement for the Town of Aylmer. Please note that, as asset replacement for both the Water Network and the Sanitary Sewer Network are to be funded through their user rates, a separate Annual Funding Requirement for these assets will be calculated. The breakdown of these funding requirements is shown below:

Annual Funding Requirement		
Road Network	\$1,325,475	
Bridges	\$34,308	
Sidewalks	\$105,403	
Streetlights	\$43,821	
Storm Water Network	\$708,057	
Buildings	\$544,095	
EECC	\$447,245	
Land Improvements/Parks	\$175,667	
Machinery & Equipment	\$113,389	
Vehicles	\$475,051	
Total annual funding required *Excluding water & wastewater	\$3,972,510	

Per Latest Estimated 10-year Capital Plan		
Road Network	\$1,283,580	
Bridges	\$0	
Sidewalks	\$79,000	
Streetlights	\$38,674	
Storm Water Network	\$685,677	
Buildings	\$689,035	
EECC	\$502,900	
Land Improvements/Parks	\$292,200	
Machinery & Equipment	\$155,850	
Vehicles	\$435,700	
Total estimated annual average *Excluding water & wastewater	\$4,162,616	

<sup>\*</sup>Excludes DC's, water & wastewater rates captured in separate studies

Based on the current plan of the Capital Program, we are forecasting very similarly to the needs of the AMP. The issue becomes how we are going to fund this infrastructure gap as our historical contribution to capital reserves has not been up to par with covering the approximate 4.0 m per year requirement.

Excluding projects that can be attributed to DC's, funding sources for these projects include OCIF, CCBF, contribution from tax and debt issuance.

Given this large level of underfunding, a long sustained annual increase in Capital Funding will be required to overcome this deficit. While this level of underfunding in the Town's Asset Management Plan may appear significant, it is a very common occurrence within the Municipal Sector in the Province of Ontario.

#### EXAMPLE ON AVERAGE

Source of Funding (Yearly Approximates – Using 2024 as an Example)	
Obligatory grants to fund infrastructure OCIF/CCBF	\$976,855
Reserves	\$808,000
DC's	\$100,000
Contribution from Debt	\$67,803
Other municipal contributions	\$97,500
Town's capital contribution from tax for AMP 2023	\$430,000
Total	\$2,480,158

<sup>\*</sup>Excludes DC's, water & wastewater rates captured in separate studies

With estimated annual requirements from the latest AMP plan projecting needs of 3.972 m the challenge is to close the funding gap through increased contributions from tax, issuance of debt and targeting grants. As well, the Town is currently not able to replenish reserves to the level required in this example.

NOTE: An additional contribution from tax is suggested to close the gap going forward to fund the Capital Program every year to close the current Infrastructure Gap but also the Town will be heavily reliant upon higher levels of government funding in order to sustain the current assets.

Annual Funding Requirement (User Rates)	
Water Network	\$785,955
Sanitary Sewer Network *Includes lagoon replacement	\$1,551,007
Total	\$2,336,962

Based on the 2021 User Rates Study, the rates were adjusted at the beginning of 2022 and the contribution to reserves for water and wastewater will be available annually to offset the Water and Wastewater Capital Requirements. This leaves the Water and Sanitary Sewer Networks inline with the 10-year estimated capital requirements. Based on the data being calculated in the AMP, the sewer network number appears inflated due to the replacement value of the lagoons being included. This was not included in the latest wastewater study as these assets would never been fully replaced.

Current user rates, as well as variances identified in the previous study, were corrected as a result of the 2021 User Rates Study. Moving forward, both the Water Network Assets and the Sanitary Sewer Network Assets will be funded at an appropriate level.

#### LEVELS OF SERVICE

The Province of Ontario, through Ontario Regulation 588/17, requires all municipalities to set Levels of Service for each asset class within its Asset Management Plan.

As this the second version of the Asset Management Plan (AMP) for the Town of Aylmer that includes Levels of Service, the measures included in the plan indicate the current Levels of Service being provided to the public and/or the target measures based on the current assets owned, as well as the current staff levels being maintained. Future versions of the AMP will need to explore whether these current Levels of Service are adequate for the public and will need to set Proposed Levels of Service for the future.

Individual Levels of Service for each asset class are shown in the detailed sections of this plan and will include the following types of measures:

CONDITION: Set acceptable ranges for Condition Ratings that should be maintained for the overall asset class.

RISK: Sets Risk Level tolerances which indicate when individual assets need to be considered for renewal.

MAINTENANCE: Indicates Maintenance Activities or Standards that should be completed and adhered to.

#### CONCLUSIONS

CONDITION: Condition Ratings indicate that the Town's assets are in relatively good condition per the latest analysis completed in the past few years.

RISK: Risk Ratings indicate low or minimal risk for the Town's asset renewal program.

FUNDING: Current capital funding levels are well below annual requirements. A long, steady increase in Capital Funding is required.

The Town's assets are currently in decent condition and the risk levels associated with its inventory are more than manageable; however, the funding available to maintain these assets in their current state is not adequate. Capital Funding needs to be increased on an annual basis to shrink the current Infrastructure Funding Gap that exists.

Council may be required to review asset lifecycles. Modest extensions of lifecycles will increase the risks and costs associated with repairs and maintenance. Balancing these risks may be required if substantial grants or new arrangements in funding of municipalities at the provincial and federal level do not occur.

The Town will likely see Condition Assessments decrease and risk levels increase on their asset inventory over the short term until Capital Funding levels can be brought up to a more appropriate level as project timelines have been adjusted based on funding abilities.

Having a proper Asset Management Plan in place will ensure that critical assets get renewed prior to failure and that the remainder of the asset inventory can be maintained at an acceptable level for use by the public and staff until asset renewal funding can be increased.

#### TOWN OF AYLMER - 2023 AMP REPORT CARD

ASSET CLASS	DESCRIPTION	REPLACEMENT COSTS	ANNUAL \$ REQUIREMENT	AVERAGE CONDITION RATING	AVERAGE RISK RATING	CONDITION TARGET	FUNDING TARGET
ROAD NETWORK	36,266 metres of Paved Roadways - 3,061 metres of Arterial Roads, 6,483 metres of Collector Roads, and 26,722 metres of Local Roads	\$69,137,254	\$1,325,475	68.75	2.92	1	×
BRIDGES	3 Bridge Structures - 2 Pedestrian Foot Bridges within Steen Park and 1 One-Lane Bailey Bridge on Myrtle Street ( <i>Not Planned for Replacement</i> )	\$2,036,168	\$34,308	71.67	7.70	1	×
SIDEWALK NETWORK	39,733 metres of Concrete Sidewalk - 9,752 metres on Arterial Roads, 6,392 metres on Collector Roads, and 23,589 metres on Local Roads	\$5,417,703	\$105,403	68.83	4.03	~	×
STREET LIGHTS	738 Street Light Fixtures and 227 Street Light Poles - majority of Street Light Fixtures are attached to Hydro Poles	\$1,514,905	\$43,821	67.34	2.97	1	×
WATER NETWORK	43,989 metres of Watermain Piping of various sizes and materials; SCADA equipment to help operate the Water Network	\$63,099,377	\$785,955	84.07	1.70	1	~
SANITARY SEWER NETWORK	42,104 metres of Sanitary Sewer Piping; 2,155 metres of Sanitary Forcemains; Sewage Lagoons; 4 Pump Stations, 3 Sanitary Siphons; SCADA equipment	\$92,304,797	\$1,551,007	92.36	1.54	<b>*</b>	~
STORM WATER NETWORK	36,805 metres of Storm Water Piping in various sizes and materials; 5 Storm Water Management Ponds; 4 Stormcepters	\$54,633,238	\$708,057	70.25	2.53	1	×
BUILDINGS	24 separate Buildings, ranging from large buildings such as Fire Hall, EECC, and Town Hall to small buildings such as Pavilions and a Band Shell	\$46,025,753	\$991,340	77.73	4.32	1	×
LAND IMPROVEMENTS	34 different Structures, such as paved pathways, parking lots, pools, baseball diamonds and play structures	\$4,280,247	\$175,667	62.00	6.34	<b>\</b>	×
MACHINERY & EQUIPMENT	44 different pieces of Machinery and Equipment such as Ice Resurfacer, Mowers, Generators, Network Servers, Traffic Lights	\$1,750,754	\$113,389	67.26	4.72	1	×
VEHICLES	29 different Vehicles such as Pick-Up Trucks, Fire Trucks, Police Cruisers and Snow Clearing Vehicles	\$6,262,375	\$475,051	54.61	5.91	×	×
	OVERALL TOTALS /AVERAGES	\$346,462,571 <u>\$0</u>	\$6,309,473 \$0	<u>71.35</u>	4.06		

CONDITION RATINGS

NOTES:

Condition Ratings are assessed based on a Scale of 0-100 with "100" being a "Brand New Asset" and "0" being "An Asset That No Longer Functions". Risk Ratings are on a Scale of 0-25 with "0"being "No Risk at All" and "25" being "Extremely Risky".

The colour scales for both Ratings are shown to the right.

1	< 20	Very Poor
1	20 - 39	Poor
1	40 - 59	Fair
1	60 - 79	Good
	80 - 100	Very Good

< 4.9	Very Low
5 - <b>7.</b> 9	Low
8 - 9.9	Moderate
10 - 14.9	High
15 <	Very High

RISK RATINGS





# **ASSET MANAGEMENT PLAN**

Adopted August 9, 2023

# **ROAD NETWORK**

#### **INVENTORY**

The Town owns 37,410 metres of paved roadways, which includes 2,957 metres of Arterial Roads, 7,740 metres of Collector Roads, and 26,713 metres of Local Roads, as defined in *Ontario Regulation* 239/02.

In addition, there is another 4,960 metres of Arterial Roads in the Town that is owned by the County of Elgin. While the County is fully responsible for all capital costs related to these road sections, the Town of Aylmer does complete some maintenance work on these roads.

See **Appendix A** for Maps showing the current inventory of road sections in the municipality.

See *Appendix B* for the detailed listing of all road segments.

#### INTEGRATED ASSETS

The following assets are integrated into the Road Network:

- Bridges
- Sidewalks
- Streetlighting
- Water Network
- Sanitary Sewer Network
- Stormwater Network

#### **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Arterial Roads	40	12.92
Collector Roads	50	33.67
Local Roads	60	34.25
	Average	31.92

#### VALUATION

The total cost to replace all assets in this class is \$69,137,254.

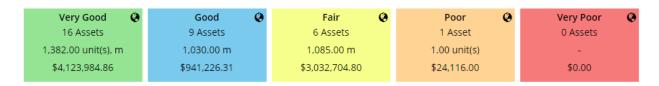
#### CONDITION ASSESSMENT

The condition of all paved road sections in this class have been assessed by an independent third-party firm (CJDL Consulting) in 2019. Current condition assessments for each category are summarized below and will be updated to reflect the current status in the next detailed asset review.

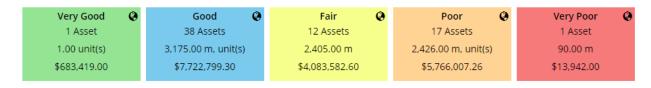
The overall average condition rating of the Road Network is **68.75 out of 100**, which indicates that this class of assets is in **Good** condition.

The overall average condition rating by sub-class is outlined below.

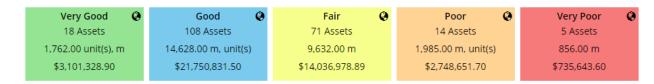
#### ARTERIAL 87.09 (Very Good)



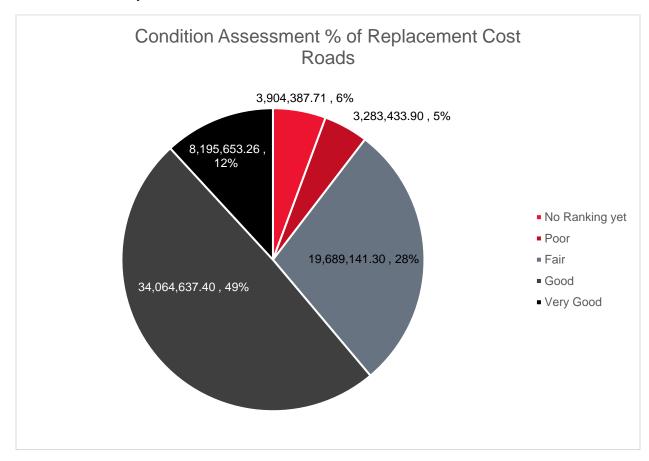
#### COLLECTOR 62.35 (Good)



#### LOCAL ROADS 67.29 (Good)



Of the 321 road segments contained within the Road Network, 61% of the road assets based on replacement costs are assessed as **Good-Very Good**, and approximately 11% of the road assets are assessed as **Poor-Very Poor** which include those that have not been ranked yet.



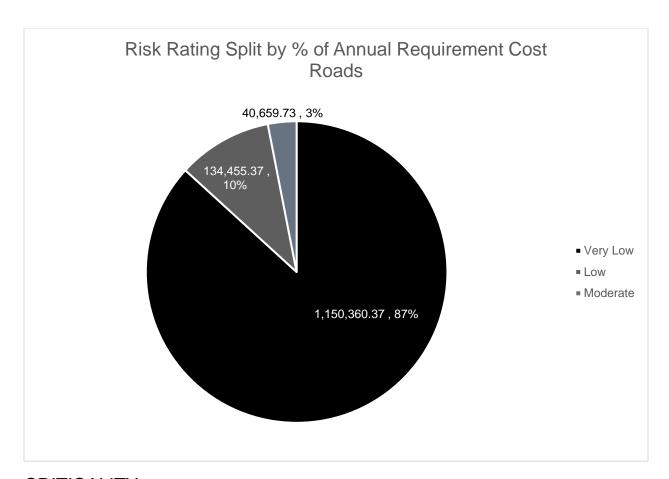
#### **RISK**

Risk factors include current condition assessment (probability), AADT traffic count (consequence), replacement cost (consequence) and criticality (consequence).

The average risk rating for the Road asset class is **2.92** or **Very Low**.



As of this report's publication, with the best information that we have currently in the asset management database, 97% of the assets are Low to Very Low risk as a % of the annual requirement cost for roads.



# **CRITICALITY**

The failure of road infrastructure has severe consequences and can result in road closures and service interruptions for residents. Road assets are classed as Critical Infrastructure.

Criticality Factor by Road Sub-class			
Arterial Roads	4		
Collector Roads	4		
Local Road	3		

#### ANNUAL REQUIREMENT

An annual investment of \$1,325,475 is required to fund the replacement of the Road Network.

While funding can vary from year to year, current funding plan (average over the 10-year Capital Plan 2022-2032) for the Road Network is \$1,283,580, however, this amount is not fully funded at this time.

# MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger	
Non-infrastructure Solutions	Includes regular inspections, brush & leaf collection, tree maintenance, and sod repair	Various review cycles depending upon asset type. Service and maintenance levels established annually by Council.	
Maintenance Activities	Includes winter maintenance (plowing and sanding or salting), sweeping, line painting, crack repairs, etc.	Minimum maintenance standards and response times O. Reg 239/06. Street sweeping cycle at time of year.	
Renewal / Rehabilitation Activities	Includes crack sealing, micro-surface application, and manhole & catch basin repair	Condition assessment road surface.	
Replacement Activities	Identify road sections for mill & pave or reconstruction	Condition assessments and lifecycle.	
Disposal Activities	Consider road closure or sale if no longer required	External request for sale of road allowance.	
Expansion Activities	Assuming Roadways developed under sub-division agreements and in the Town's industrial lands. Include new assets in the Asset Management Plan.		

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
	Paved road infrastructure should be maintained at an overall average condition rating between 60 and 70%.	Current overall assessed condition is 68.75%. When factoring in replacement cost, the overall condition of road infrastructure is 61%.
Condition	Percentage of roads in Good to Very Good condition (as reported for MPMP) should be a minimum of 50%.	The percentage of roads in Good to Very Good condition is 59.2%. When factoring in replacement cost, 61% of roads are in Good to Very Good condition.
Risk	All paved road segments controlled by the Town of Aylmer with a risk rating of ten or higher should be scheduled for capital work within the next ten years.	There are currently no roads with a risk rating of ten or higher.

Maintenance	Roadways should be maintained according to Minimum Maintenance Standards as per O. Reg. 239/02.	100% of the Town of Aylmer's roadways are maintained to Ontario Minimum Maintenance Standards.
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#### **METRICS**

Scope		
Arterial Roads	2,957 m	
Collector Roads	7,740 m	
Local Road	26,713 m	
Total	37,410 m	

The total length of the Town of Aylmer's roadways is 37,410 m, which equals 5,784.1 metres of roadway per square kilometre of land.

# OVERALL RATING Condition

Target Condition Range 60-70%

Actual Overall Condition 61%

#### **Financing**

Target Financing Range 95-105%

Actual Financing Required \$1,325,475

Actual 10-year Capital planning target \$1,283,580

Percent of Requirement planned to fund 96.84%

Current Actual Funding overall – TBD



#### **BRIDGES**

#### **INVENTORY**

The Town of Aylmer owns and maintains three bridges – two-foot bridges, located in Steen Park North and South respectively, and a single lane bailey bridge located on Myrtle Street, spanning Catfish Creek.

See *Appendix C* for maps showing the current inventory of bridges in the municipality.

See *Appendix B* for a detailed list of all bridges.

#### **INTEGRATED ASSETS**

The following assets are integrated into the Road Network:

- Road Network
- Sidewalks
- Park Pathways

# **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Foot Bridges	50	31.5
Bailey Bridge	80	23
	Average	27.25

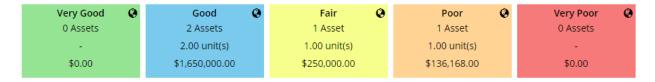
#### **VALUATION**

The total cost to replace all designated bridge assets that are road related in this class is currently almost \$2,036,168. The Myrtle Street bailey bridge is not currently scheduled for replacement at the end of its lifecycle, but further review will be required as the condition of the bridge degrades to see if the needs of this bridge change.

#### CONDITION ASSESSMENT

The condition of the foot bridge structures has been determined based on visual inspection by internal staff. The bailey bridge, however, is assessed by a third-party consultant (CJDL) every 2 years as required by law (O. Reg. 104/97). Current condition assessments for each individual bridge structure are shown in *Appendix B*.

The overall average condition rating for the Town of Aylmer's Bridge Infrastructure is **71.67 out of 100**, which indicates that this class of assets is in **Good** condition.



The bridge conditions will need an updated assessment in the near future, but with the latest information we have, overall, at least 81% were in **Very Good-Good** condition.

#### RISK

Risk factors include current condition assessment (probability), AADT traffic count (consequence), replacement cost (consequence) and criticality (consequence).

The average risk rating for Bridge Infrastructure is **7.7** or **Low**.



The two-foot bridges are rated as **Low** and **Moderate** risk, while the bailey bridge is rated as **Moderate** risk.

# **CRITICALITY**

The failure of bridge infrastructure would result in minor inconvenience to residents. The criticality factor for the Town of Aylmer's Bridge Infrastructure is **2**.

# ANNUAL REQUIREMENT

An annual investment of \$34,308 is required to fund the replacement of the Town's bridges.

At this time, there is no capital funding allocation planned for Bridge Infrastructure.

#### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Include biennial	Required for vehicular
Solutions	inspections as required by O. Reg. 104/97	bridges every two years.
Maintenance Activities	Includes minor repairs, cleaning, painting, etc.	Issues identified during inspection reports.
Renewal / Rehabilitation Activities	Repairs to abutments, surface, and railings	Timelines identified in engineers OSM Report.
Replacement Activities	Replacement or decommissioning of bridge	Major repairs or replacement identified in OSM report.
Disposal Activities	Decommissioning stage	Review replacement versus conversion to a full pedestrian and cycling bridge.
Expansion Activities	Consideration of pedestrian bridge connection across Catfish Creek near EECC	

#### LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Bridge infrastructure should be maintained at an overall average condition rating between 60 and 70.	Current overall assessed condition is 71.67%; however, based on replacement cost, the overall condition of the Town's bridges is 81%.
Risk	Bridge Infrastructure owned by the Town of Almer with a risk rating of ten or higher should be scheduled for capital work within the next ten years.	There are currently no assets with a risk rating of ten or higher.
Maintenance	The Myrtle Street bailey bridge should be maintained according to the Minimum Maintenance	The bailey bridge is maintained to the standard outlined in the Ontario Minimum Maintenance Standards.

Standards outli 239/02.	ned in O. Reg.	
1	ge is to be inspected qualified third-party	The bailey bridge is inspected biennially.
visually inspect	bridges should be ed by internal staff ets at a minimum	Foot bridges are inspected biennially.

#### **METRICS**

The Town of Aylmer owns three bridges, which equals 0.48 bridges per square kilometre of land. The overall average condition of the Town of Aylmer's Bridge Infrastructure from the last assessment was in Fair condition. There are currently zero bridges with load restrictions.

# OVERALL RATING Condition

Target Condition Range 60-70%

**Actual Overall Condition 81%** 

# **Financing**

Target Financing Range 95-105%

Actual Financing Required \$34,308

Actual 10-year Capital planning target \$0

Current Actual Funding \$0.00

Percent of Requirement planned to fund 0.00%



# **SIDEWALKS**

# **INVENTORY**

The Town of Aylmer owns 39,733 meters of concrete sidewalks, which includes 9,752 meters on Arterial Roads, 6,392 meters on Collector Roads and 23,589 meters on Local Roads.

See Appendix B for a detailed list of all sidewalk segments.

#### **INTEGRATED ASSETS**

The following assets are integrated into the Road Network:

- Road Network
- Streetlighting

#### **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Arterial Road Sidewalks	60	50.08
Collector Road Sidewalks	50	42.08
Local Road Sidewalks	40	34.92
	Average	39.67

#### VALUATION

The total cost to replace all Sidewalk Network assets is \$5,417,703.

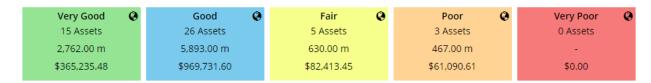
#### CONDITION ASSESSMENT

The condition of all sidewalk segments in this class have been assessed by an independent third-party firm (CJDL Consulting) in 2019. Current condition assessments for individual road segment are shown in *Appendix B*.

Overall, the average condition rating for the Town of Aylmer's Sidewalk Network is **68.83 out of 100**, which indicates that this class of assets is in **Good** condition.

The average condition rating by road sub-class is outlined below.

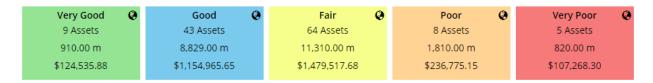
### ARTERIAL SIDEWALKS 81.53 (Very Good)



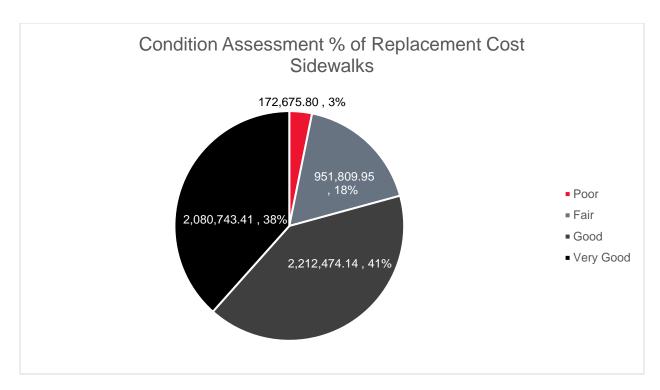
### COLLECTOR SIDEWALKS 61.90 (Good)

Very Good 🔇	Good	Fair 🔇	Poor <b>②</b>	Very Poor
0 Assets	11 Assets	25 Assets	6 Assets	0 Assets
-	1,089.00 m	3,884.00 m	1,419.00 m	
\$0.00	\$142,457.55	\$508,085.46	\$185,626.49	\$0.00

#### LOCAL ROAD SIDEWALKS 66.25 (Good)



Of the 220 sidewalk segments in the Town of Aylmer's inventory, **79%** of the value of the segments were classified as **Good-Very Good** condition. We would like to include the sidewalk review as a part of the Parks and Recreation Master Plan so that this information may be updated.



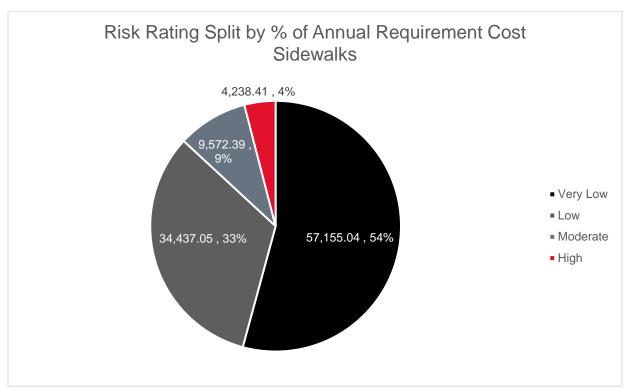
**RISK** 

Risk factors include current condition assessment (probability), replacement cost (consequence) and criticality (consequence).

The average risk rating for the Sidewalk Network is 4.03 or Very Low.



Of the 220 sidewalk segments contained in the Sidewalk Network, **87%** of these assets based on the annual requirement costs calculated are rated **Low** to **Very Low** risk. There are currently four assets rated **High** to **Very High** risk.



#### **CRITICALITY**

The failure of sidewalk infrastructure would result in minor inconveniences for residents. The criticality factor for the Town of Aylmer's Sidewalk Network is **2**.

#### ANNUAL REQUIREMENT

An annual investment of \$105,403 is required to fund the replacement of the Town's Sidewalk Network.

While funding can vary from year to year, current funding (average over the 10-year Capital Plan 2022-2032) for the Sidewalk Network is \$79,000, however, the plan to fund this amount is not established with current contribution to reserves has been minimal in the past.

## MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure Solutions	Review and inspections	Annual
Maintenance Activities	Includes winter maintenance activities (plowing and sanding or salting), patching, etc.	Minimum maintenance standards and response times O. Reg 239/06. Street sweeping cycle at time of year.

Renewal / Rehabilitation Activities	Includes leveling, crack repair, etc.	Gaps and deficiencies in excess of O. Reg 239/06 requirements for sidewalks. As identified through inspection or within prescribed timeline of reporting.
Replacement Activities	Replacement of sections of sidewalk due to lifecycle or roadway reconstruction	Lifecycle and asset condition assessment.
Disposal Activities	N/A	N/A
Expansion Activities	Expansion of sidewalks through assumption of assets constructed through sub-division agreements. Expansion of sidewalks to address walkability and connectivity issues in existing residential areas.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
	Sidewalk infrastructure should be maintained at an overall average condition rating between 60-70.	Current overall assessed condition is 68.83%. When factoring in replacement costs, the overall condition of sidewalk infrastructure is 79%.
Condition	Percentage of sidewalks in Good to Very Good condition should be a minimum of 50%.	The percentage of sidewalks in Good to Very Good condition is 79.54%; however, when factoring in replacement costs, 79% of Town sidewalks are in Good to Very Good condition.
Risk	All sidewalk segments with a risk rating of ten or higher should be scheduled for capital work within the next 10 years.	There are currently no assets with a risk rating of ten or higher.
Maintenance	Sidewalks should be maintained according to the Minimum Maintenance Standards outlined in O. Reg. 239/02.	All sidewalks in the Town of Aylmer are maintained to Ontario Minimum Maintenance Standards.

# **METRICS**

The total length of the Town of Aylmer's Sidewalk Network is 39,733 metres, which equals 6,337 metres of sidewalk per square kilometre of land in Aylmer. The overall average condition of the Town's Sidewalk Network is 68.83 out of 100.



# OVERALL RATING Condition

Target Condition Range 60-70%

Actual Overall Condition 79%

### **Financing**

Target Financing Range 95-105%

Actual Financing Required \$105,402

Actual 10-year Capital planning target \$79,000

Percent of Requirement planned to fund 74.95%

Current Actual Funding overall – TBD

# STREETLIGHT NETWORK

#### **INVENTORY**

The Town of Aylmer's Streetlight Network is comprised of 738 streetlight fixtures and 227 streetlight poles; however, the majority of municipal streetlights are attached to hydro poles owned by ERTH Corp.

See *Appendix B* for a detailed listing of all Streetlight Network fixtures and poles.

#### INTEGRATED ASSETS

The following assets are integrated into the Streetlight Network:

- Road Network
- Sidewalk Network

#### ESTIMATED USEFUL LIFE

Asset	Estimated Useful Life (Years)	Average Age (Years)
Streetlight Fixtures	20	9.42
Streetlight Poles	85	39.17
	Average	16.17

#### **VALUATION**

The total cost to replace the Town of Aylmer's Streetlight Network is \$1,514,905.

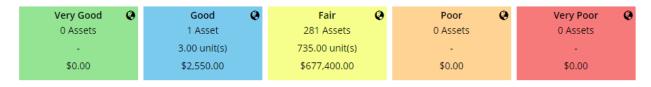
## CONDITION ASSESSMENT

The condition of the streetlight fixtures and poles have been assessed using an agebased condition rating system.

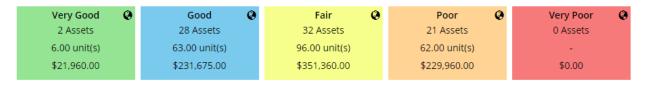
Based on the 20-year lifespan for fixtures and the 85-year lifespan for poles, the overall average condition rating for the Town of Aylmer's Streetlight Network is **67.34 out of 100**, which indicates the class of assets is in **Good** condition.

The average condition rating by streetlight component is outlined below.

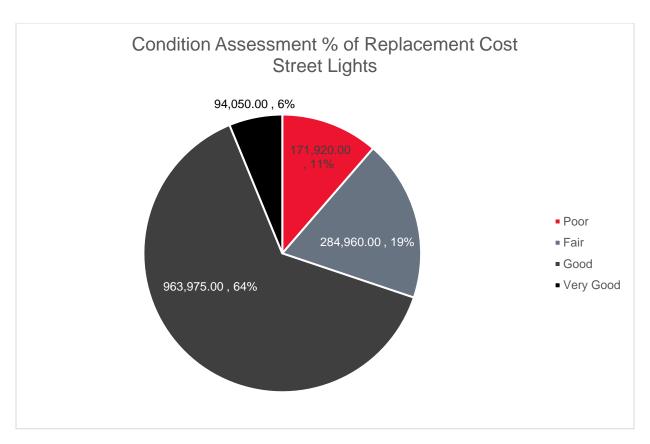
#### FIXTURES 70.09 (Good)



#### POLES 58.00 (Fair)



Of the 365 assets in the Streetlight Network, **70%** of the replacement cost that have been assessed as **Good-Very Good**, while **11%** of the value have been assessed as **Poor-Very Poor**. A coordinated plan with ERTH and the Town needs to be outlined in order to have the condition of these assets reviewed in the near future to update the AMP.



# **RISK**

Risk factors affecting the streetlight assets include current condition assessment (probability), replacement cost (consequence) and criticality (consequence).

The average risk rating for the Streetlight Network is **2.97**, which represents a **Very Low** risk rating.

5	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
4	0 Assets ( - \$0.00	0 Assets - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
Consequence 3	0 Assets - \$0.00	0 Assets - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets
2	0 Assets ( - \$0.00	• 0 Assets - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
1	2 Assets (6.00 unit(s) \$21,960.00	29 Assets 66.00 unit(s) \$234,225.00	313 Assets	21 Assets <b>6</b> 62.00 unit(s) \$229,960.00	0 Assets • • • • • • • • • • • • • • • • • • •
	1	2	3 Probability	4	5

# **CRITICALITY**

The failure of streetlight infrastructure would result in a minor inconvenience for residents. The criticality factor for the Town of Aylmer's Streetlight Network is 2.

#### ANNUAL REQUIREMENT

An annual investment of \$43,821.00 is required to fund the replacement of the Town's Streetlight Network.

# MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Includes annual inspection.	Annually
Solutions		
Maintenance Activities	Addressing burnt out	Upon complaint or
	fixtures and other minor	identification.
	maintenance issues	
Renewal / Rehabilitation	Review pole and	2026-2028
Activities	component status to	
	determine future repair	
	requirements	
Replacement Activities	Include replacement of	Completed on an as
	poles, fixture or both poles	needed basis or in
	and fixtures.	response to advancing
		technology.
Disposal Activities	N/A	N/A

Expansion Activities	Assume new streetlights constructed through sub- division application processes. Evaluate expansion of
Expansion / totivities	lights in parks and other areas of Town.

#### LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
O and disting	Streetlight infrastructure should be maintained at an overall average condition rating between 60-70.	Current overall assessed condition is 67.34%. When factoring in replacement costs, the overall condition rating of streetlight assets is 70%.
Condition	Percentage of streetlights in Good to Very Good condition should be a minimum of 50%.	The percentage of streetlights in Good to Very Good condition is 90.1%. In considering replacement cost, however, the overall condition rating is 70%.
Risk	All streetlight segments with a risk rating of ten or higher should be scheduled for capital work within the next 10 years.	There are currently no assets with a risk rating of ten or higher.
Maintenance	Streetlight outages should be repaired within 30 days of reporting.	Streetlights are repaired within 30 days of reporting.

#### **METRICS**

The Town of Aylmer owns a total of 738 light fixtures, which equals 1117.7 light fixtures per square kilometre of Town land. The overall average condition of the Town's streetlight infrastructure is 67.34 out of 100.

# OVERALL RATING Condition

Target Condition Range 60-70%

**Actual Overall Condition 70%** 

# **Financing**

Target Financing Range 95-105%

Actual Financing Required \$43,821

Actual 10-year Capital planning target \$38,675

Percent of Requirement planned to fund 88.26%

Current Actual Funding overall - TBD



## WATER NETWORK

#### **INVENTORY**

The Town of Aylmer owns and maintains 43,989 meters of watermains of various sizes and material. In addition to its linear watermain assets, the Town owns and operates SCADA equipment to monitor the Water Network.

Assets in the Water Network are funded through User Rates. While the Town completed its most recent User Rate Study in 2021, its Capital Program will need to be evaluated in the future to ensure that funding gaps resulting from residential and industrial growth are addressed in a timely manner.

See *Appendix B* for a detailed list of all Water Network assets.

#### **INTEGRATED ASSETS**

The following assets are integrated into the Water Network:

- Road Network
- Sanitary Sewer Network
- Stormwater Network

#### **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Watermain	80	34.17
SCADA & Meters	10	7.25
	Average	34

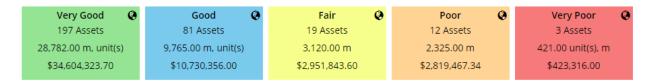
#### **VALUATION**

The total cost to replace the Town of Aylmer's Water Network is \$63,099,377.

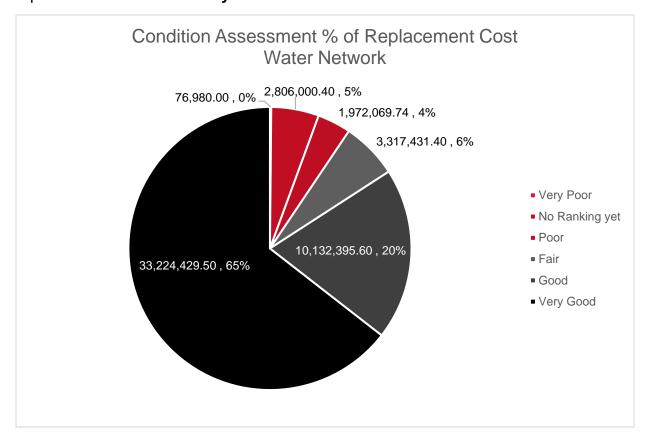
#### CONDITION ASSESSMENT

The condition of the Town's Water Network has been assessed by an independent third-party firm (CJDL Consulting) in 2019. Current condition assessments for individual segments are shown in *Appendix B*.

Overall, the average condition rating for the Town's Water Network is **84.07 out of 100**, which indicates that this class of assets is in **Very Good** condition.



Of the 313 assets in the Town of Aylmer's Water Network, **65%** of the assets based on replacement value are in **Very Good** condition.



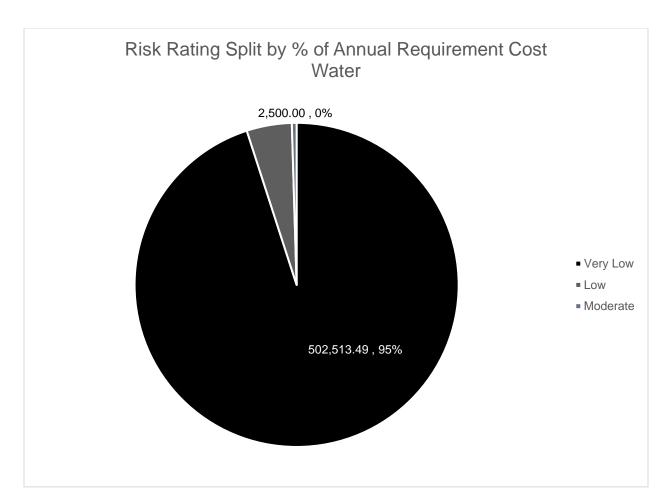
#### **RISK**

Risk factors include current condition assessment (probability), the number of users on the network, replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Water Network is **1.7** or **Very Low**.

5	1 Asset ( ) 1.00 unit(s) \$1,394,306.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets <b>②</b> - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
4	0 Assets <b>②</b> - \$0.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets <b>③</b> - \$0.00
Consequence	2 Assets <b>3</b> 66.00 unit(s), m \$1,222,932.00	0 Assets	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets
2	33 Assets <b>(</b> 7,573.00 m, unit(s) \$9,406,310.65	1 Asset <b>③</b> 350.00 m \$530,761.00	1 Asset <b>3</b> 560.00 m \$641,474.40	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
1	161 Assets <b>②</b> 20,842.00 m, unit(s) \$22,580,775.05	80 Assets <b>9</b> ,415.00 m, unit(s) \$10,199,595.00	18 Assets <b>②</b> 2,560.00 m \$2,310,369.20	12 Assets <b>②</b> 2,325.00 m \$2,819,467.34	3 Assets <b>4</b> 21.00 unit(s), m \$423,316.00
	1	2	3 Probability	4	5

Of the 313 assets contained in the Water Network, 95% of the assets split by annual requirement costs are rated **Very Low** risk. The remaining **5%** are in the **Low** risk category.



#### **CRITICALITY**

The failure of water infrastructure would have severe consequences for residents. As the asset class is considered Critical Infrastructure, the criticality factor for the Town of Aylmer's Water Network is **5**.

#### ANNUAL REQUIREMENT

An annual investment of \$641,962.00 is in the data file currently required to fund the replacement of the Town's Water Network.

While annual funding may vary year to year, the Town currently contributes \$566,184 (averaged over the 10-year User Rate study period) from user rates to Water Network replacement.

## MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Includes regular monitoring	Requirements as Safe
Solutions	and testing of water quality	Drinking Water Act, 2002
	and network.	and associated
		requirements to receive
		water license.

Maintenance Activities	Includes repairs for leaks and/or breaks, system flushing, and preventative maintenance of valves.	Response to leaks and other system issues. Also, fulfillment of requirements of Councils established under the Drinking Water Quality Management Standard.
Renewal / Rehabilitation Activities	Review asset conditions, consider items like relining or repairs to extend lifecycle.	Lifecycle analysis review of upcoming Capital Projects.
Replacement Activities	Capital replacements of water tower, mains, lines, pumps, and associated infrastructure.	Lifecycle & Asset Condition
Disposal Activities	Decommissioning old water storage facility.	Completion of new water tower.
Expansion Activities	Assumption of new infrastructure developed through sub-division agreements, new industrial park, and construction of new water tower.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Water infrastructure should be maintained at an overall average condition rating between 75 and 85%.	Current overall assessed condition is 84.07%. When factoring in replacement costs, the Town's water infrastructure condition is 85%.
	Percentage of water infrastructure in Good to Very Good condition should be a minimum of 80%.	The percentage of the Town's Water Network in Good to Very Good condition is 88.8%. In terms of replacement costs, 85% the Water Network is rated as in Good-Very Good condition.
Risk	All water infrastructure with a risk rating of twelve or higher should be scheduled for capital work within the next 10 years.	There is currently no water infrastructure with a risk rating of twelve or higher.
Maintenance	Disconnection days per year with water main breaks should not exceed 10 days per year.	There have been no disconnection days in the past year.

#### **METRICS**

The total length of the Town of Aylmer's Water Network is 43,989 metres, which equals 7,015.8 metres of watermain per square kilometre of land in Aylmer. The Town of Aylmer's Water Network serves approximately 2,803 customers (households and business), with all properties in Aylmer connected to the Municipal Water System. All properties in the Town have fire flow available.

In the past year, there have been 0 connection days where a boil water advisory notice was in place. Additionally, over the last year, there have been 0 connection days where there have been watermain breaks.

# OVERALL RATING Condition

Target Condition Range 75-85%

Actual Overall Condition 85%

## Financing

Target Financing Range 95-105%

Actual Financing Required \$785,955

Current Actual Funding \$1,909,700

Percent of Requirement 243% \*\* the new water tower has been scheduled to proceed 2023 – 2025 so this will drastically change in 2026



# **SANITARY SEWER NETWORK**

#### **INVENTORY**

The Town of Aylmer owns and maintains 42,104 meters of sanitary sewer of various size and material, 2,155 meters of sanitary force mains, three sanitary siphons, and four sanitary pump stations. In addition to these sewer assets, the Town also owns and operates sanitary sewage lagoons and SCADA equipment to monitor the Sanitary Sewer Network.

Assets in the Sanitary Sewer Network are funded through User Rates. While the Town completed its most recent User Rate Study in 2021, its Capital Program will need to be evaluated in the future to ensure that funding gaps resulting from residential and industrial growth are addressed in a timely manner.

See **Appendix B** for a detailed list of all Water Network assets.

#### INTEGRATED ASSETS

The following assets are integrated into the Water Network:

- Road Network
- Water Network
- Stormwater Network

#### **ESTIMATED USEFUL LIFE**

Asset Estimated Useful Life (Years)		Average Age (Years)
Piping	80	37.25
Force Mains	80	48.67
Siphons	80	36.25
Pump Stations	45	19
Lagoons	75	16.58

Equipment	10	8
	Average	36.58

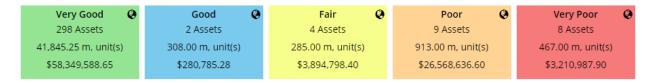
#### **VALUATION**

The total cost to replace the Town of Aylmer's Sanitary Sewer Network is \$95,304,797

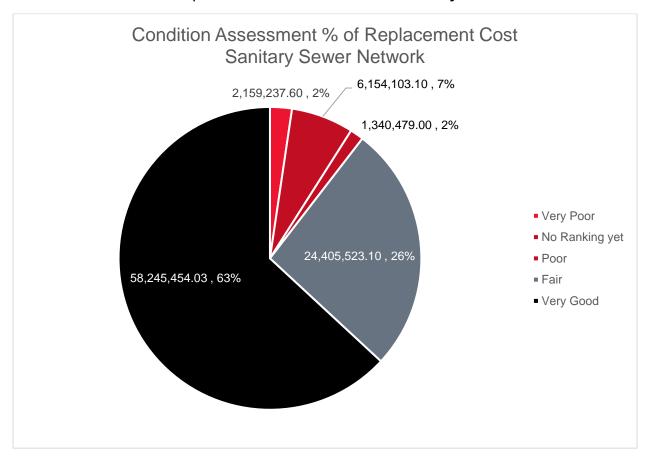
#### CONDITION ASSESSMENT

The condition of the Town's Sanitary Sewer Network has been assessed by an independent third-party firm (CJDL Consulting). Current condition assessments for individual segments are shown in *Appendix B*.

Overall, the average condition rating for the Town's Sanitary Sewer Network is **92.36 out of 100**, which indicates that this class of assets is in **Very Good** condition.



Of the 324 assets in the Town of Aylmer's Sanitary Sewer Network, approximately **63%** of the assets based on replacement cost are classified as **Very Good**.



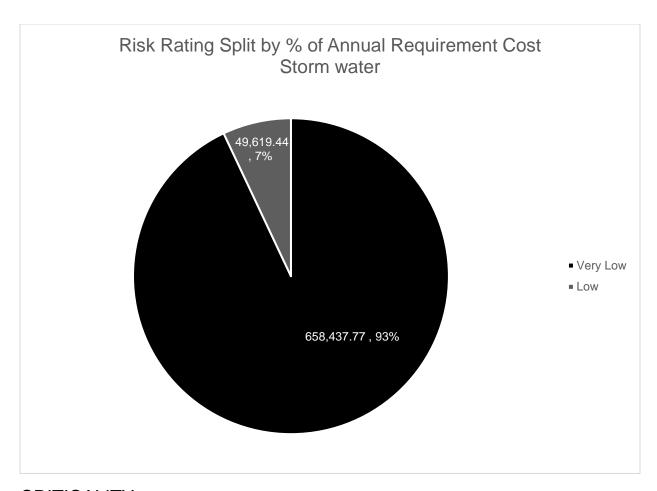
#### **RISK**

Risk factors include current condition assessment (probability), the number of users on the network, replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Sanitary Sewer Network is **1.54** or **Very Low**.



Of the 342 assets in the Sanitary Sewer Network, **93%** of the annual requirement cost for all assets are considered **Very Low** risk, while **7%** of the annual requirement costs are considered **Low** risk. The annual requirement costs will be covered through the user rate study that was just completed in 2021.



#### **CRITICALITY**

Failure of the Town of Aylmer's sanitary sewer infrastructure would have severe consequences for residents resulting in service interruptions, as well as possible road closures, sewer backups, etc. The Town of Aylmer's Sanitary Sewer Network is considered Critical Infrastructure, with all assets in the class having a criticality factor of 5.

#### ANNUAL REQUIREMENT

An annual investment of \$1,551,007 is required to fund the replacement of the Town's Sanitary Sewer Network excluding the replacement of the lagoons.

While annual funding may vary year to year, the Town currently contributes \$1,264,618 (averaged over the 10-year User Rate study period) from user rates to Sanitary Sewer Network replacement. Optimization has been started in 2023 to increase the capacity.

#### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Review and assessment of	Asset approaching end of
Solutions	condition.	lifecycle and/or significant
		incidents of failures.

Maintenance Activities	Includes sewer cleaning & flushing, minor repairs to wet wells, pumps and electrical components, regular inspection of all pump components, vegetation removal from around sewage lagoons, and monitoring water and sludge levels in sewage lagoons, etc.	Annual
Renewal / Rehabilitation Activities	Review of lagoon optimization,	Recommendations of OCWA reviews and
Activities	consideration, or relining	reports upon network.
	activities to extend	Lifecycle and asset
	lifecycle.	conditions.
Replacement Activities	Replacement pump	Lifecycle
	stations, and underground	
	infrastructure.	
Disposal Activities	Appropriate disposal AC infrastructure.	Upon replacement.
Expansion Activities	Assumption of infrastructure developed through sub- division agreements and expansion of industrial park.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
	Sewer infrastructure should be maintained at an overall average condition rating between 75 and 85%.	Current overall assessed condition is 92.36%. When factoring in replacement costs, the Town's Sanitary Network condition is rated as 63%.
Condition	Percentage of sewer infrastructure in Good to Very Good condition (as reported for MPMP) should be a minimum of 80%.	The percentage of the Town's Sanitary Sewer Network in Good to Very Good condition is 89.5%. When considering replacement costs, however, the percentage of the Town's Sanitary assets in Good-Very Good condition is 63%.
Risk	All sanitary sewer infrastructure with a risk rating of twelve or higher should be scheduled for capital work within the next 10 years.	There are currently two assets with a risk rating over twelve.

Maintenance	Number of days per year when sewage back-ups occurred should not exceed 5 days per year.	There have been no sewage backups within the last year.
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#### **METRICS**

The total length of the Town of Aylmer's Sanitary Sewer Network is 42,104 metres, which equals 6,715.15 metres of sewer infrastructure per square kilometre of land in Aylmer. The Town of Aylmer's Sanitary Sewer Network serves approximately 2,913 customers, with all properties in Aylmer connected to the Municipal Water System.

The overall average condition of the Town's Water Network is 92.36 out of 100.

In the past year, there have been 0 events where the Sanitary Sewer Network exceeded system capacity. Additionally, over the last year, there have been 0 connection days where sewer back-ups have occurred and X effluent violations due to sanitary sewer discharge.

# OVERALL RATING Condition

Target Condition Range 75-85%

Actual Overall Condition 63%

# **Financing**

Target Financing Range 95-105%

Actual Financing Required \$1,551,007

Current Actual Funding \$1,264,618

Percent of Requirement 81.54%



### STORMWATER NETWORK

#### **INVENTORY**

The Town of Aylmer owns and maintains 36,085 meters of storm sewer of various size and material. In addition to these linear assets, the Town also operate four stormceptors, as well as owns five stormwater management ponds.

See **Appendix B** for a detailed list of all Stormwater Network assets.

## **INTEGRATED ASSETS**

The following assets are integrated into the Water Network:

- Road Network
- Water Network
- Sanitary Sewer Network

#### **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Piping	80	35.67
Ponds	75	21
Stormceptor	50	5.75
	Average	34.83

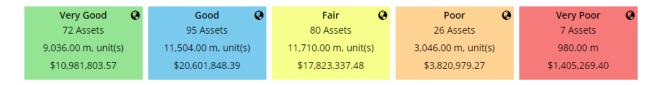
#### VALUATION

The total cost to replace the Town of Aylmer's Stormwater Network is \$54,633,238.

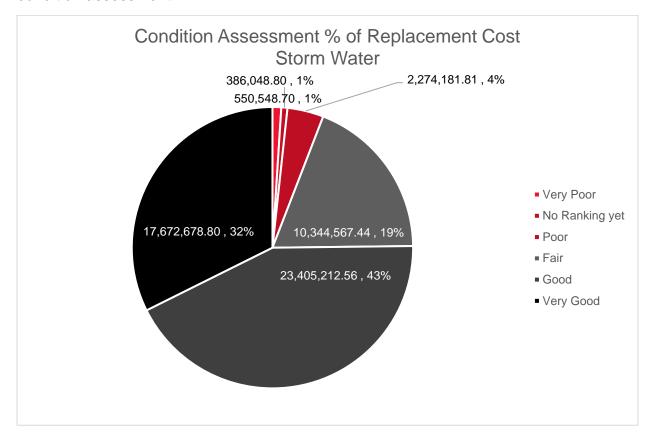
#### CONDITION ASSESSMENT

The condition of the Town's Stormwater Network has been assessed by an independent third-party firm (CJDL Consulting) in 2019. Current condition assessments for individual segments are shown in Appendix B.

Overall, the average condition rating for the Town's Stormwater Network is 70.25 out of 100, which indicates that this class of assets is in Good condition.



Of the 280 assets in the Town of Aylmer's Stormwater Network, **75%** of assets based on the replacement cost have been identified as **Good** or **Very Good** in the last condition assessment.



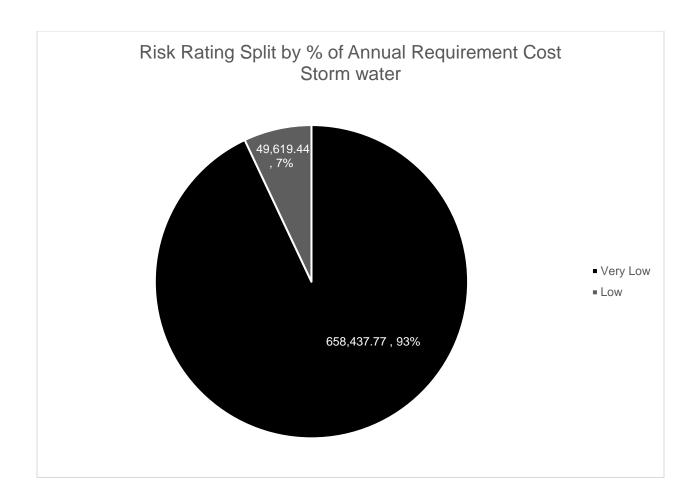
#### **RISK**

Risk factors include current condition assessment (probability), the number of users on the network, replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Stormwater Network is **2.53** or **Very Low**.



Of the 280 assets in the Stormwater Network, **93%** of the assets based on risk rating per the annual requirement cost are considered **Very Low**.



#### **CRITICALITY**

Failure of the Town of Aylmer's storm sewer infrastructure would have severe consequences for residents, resulting in road closures and service interruptions. The Town of Aylmer's Stormwater Network is considered Critical Infrastructure, with all assets in the class having a criticality factor of **4**.

#### ANNUAL REQUIREMENT

An annual investment of \$708,057 is required to fund the replacement of the Town's Stormwater Network.

While funding can vary from year to year, current funding (average over the 10-Year Capital Plan 2022-2032) weighted average between roads and stormwater for the Stormwater Network is \$685,677.

#### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Inspection and	Staff to identify issues
Solutions	maintenance.	during routine patrols.
Maintenance Activities	Includes vegetation	Storm Water management
	removal and weed control	pond dredging 10-15-year

	around SWMPs, sediment monitoring in SWMPs, minor repairs to piping because of leaks or breaks, and inspection and repair of storm drains and manholes.	cycle, catch basin cleaning and repair as required.
Renewal / Rehabilitation Activities	Minor repairs to piping and SWMP.	Upon identification and identified need.
Replacement Activities	Replacement of infrastructure.	Lifecycle & Asset Condition
Disposal Activities	Drain abandonment or decommissioning.	Result of design or plan recommending this approach.
Expansion Activities	Assumption of new infrastructure through sub-division agreements or industrial land expansion.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Stormwater infrastructure should be maintained at an overall average condition rating between 75 and 85%.	Current overall assessed condition is 70.25%. When factoring in replacement costs, the Town's Stormwater Network is rated as 75%.
	Percentage of stormwater infrastructure in Good to Very Good condition (as reported for MPMP) should be a minimum of 80%.	The percentage of the Town's Stormwater Network in Good to Very Good condition is 74.6%. When factoring in replacement costs, the percentage of the Town's Stormwater Network in Good-Very Good condition is 75%.
Risk	All storm sewer infrastructure with a risk rating of twelve or higher should be scheduled for capital work within the next 10 years.	There are currently no stormwater network assets with a risk rating of twelve or higher.
Maintenance	Number of days where flooding occurs due to the over-capacity of the storm system each year should be less than 5 days per year.	In the past 3 years, there have been 0 days of flooding due to the over-capacity of the storm system.

# **METRICS**

The total length of the Town of Aylmer's Stormwater Network is 36,085 metres, which represents 5,755.18 metres of stormwater infrastructure per square kilometre of land in

Aylmer. The Town operates a total of 4 stormceptors and manages a total of 5 stormwater management ponds representing 0.8 stormceptors per square kilometres of land and 0.64 ponds per square kilometres in Aylmer respectively.

Of the properties in the Town of Aylmer, approximately 0% are resilient to a 100-year storm, while 100% of properties are resilient to a 5-year storm.

The overall average condition rating of the Town of Aylmer's Stormwater Network is 70.25%.

## OVERALL RATING Condition

Target Condition Range 60-70%

Actual Overall Condition 75%

#### Financing

Target Financing Range 95-105%

Actual Financing Required \$708,057

Current Actual Funding \$685,677

Percent of Requirement 96.84% \*\* not funded at this time



### **BUILDINGS**

#### **INVENTORY**

The Town of Aylmer owns and maintains twenty-four different buildings, ranging from larger buildings such as a firehall, police station and town hall to smaller structures such as park pavilions and a bandshell.

See *Appendix B* for a detailed list of all of the Town's Building assets.

#### INTEGRATED ASSETS

The following assets are integrated into the building class:

- Sidewalk Network
- Land Improvements

#### ESTIMATED USEFUL LIFE

As the majority of the Town of Aylmer's buildings will be maintained indefinitely and will rarely, if ever, be completely replaced, no estimated asset life is calculated for this asset class. Instead, a complete lifecycle of components will be calculated for each structure, which will vary depending on the type and purpose of the building. While no estimated useful life has been assigned to the Town's buildings, the overall average age of assets in the building class is 21.75 years.

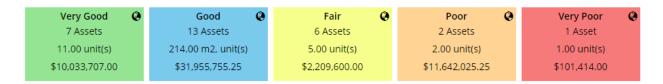
#### VALUATION

The total cost to replace the Town of Aylmer's Building class is \$46,025,753.

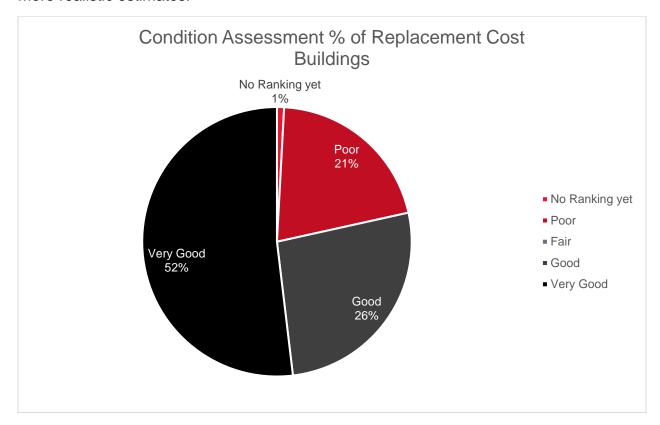
#### CONDITION ASSESSMENT

The condition of the Town's Buildings has been assessed by the Town's Chief Building Official (CBO). Current condition assessments for individual building and structure are shown in *Appendix B*.

Overall, the average condition rating for the Town's Building class is **77.73 out of 100**, which indicates that this class of assets is in **Good** condition.



Of the 22 assets in the Town of Aylmer's Building class, **52%** of the replacement cost appears to be in **Very Good** condition. The buildings will have to be re-evaluated for replacement cost related to parks and recreation in the next Master Plan to provide more realistic estimates.

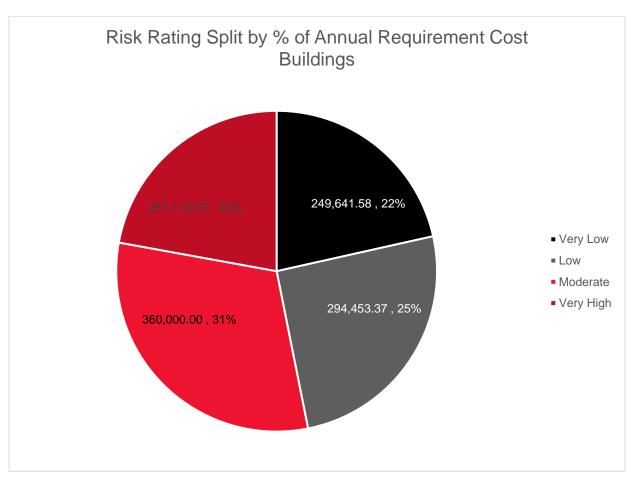


#### **RISK**

Risk factors include current condition assessment (probability), the replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Building class is **4.32** or **Very Low**.

5	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	1 Asset (3) 1.00 unit(s) \$11,570,070.00	0 Assets
4	0 Assets • • • • • • • • • • • • • • • • • • •	1 Asset (3 1.00 unit(s) \$18,000,000.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets
Consequence	2 Assets <b>2</b> .00 unit(s) \$9,200,000.00	2 Assets 2.00 unit(s) \$12,000,000.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets
2	1 Asset (2) 1.00 unit(s) \$500,000.00	2 Assets 2.00 unit(s) \$1,423,800.00	4 Assets 4.00 unit(s) \$1,929,600.00	0 Assets • • • • • • • • • • • • • • • • • • •	0 Assets • • • • • • • • • • • • • • • • • • •
1	4 Assets <b>3</b> 8.00 unit(s) \$333,707.00	8 Assets <b>2</b> 09.00 m2, unit(s) \$531,955.25	2 Assets (3 1.00 unit(s) \$280,000.00	1 Asset (3) 1.00 unit(s) \$71,955.25	1 Asset <b>②</b> 1.00 unit(s) \$101,414.00
	1	2	3 Probability	4	5



#### **CRITICALITY**

The failure of Town building infrastructure would result in health & safety issues, as well as in service interruptions. While the failure of building infrastructure would have moderate consequences, the criticality factor for most assets in the building class is **3**. For buildings associated with the Water and Sanitary Sewer Networks, however, the criticality factor is **5**.

#### ANNUAL REQUIREMENT

An annual investment of \$991,340 is required to fund the replacement of the Town's Building class.

While funding can vary year to year, current funding (average over the 10-Year Capital Plan 2022-2032) for the Building Capital Program is \$1,191,935

#### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure Solutions	Review of energy efficiency, overall facilities review undertaken by consultant.	As required for energy audits.
Maintenance Activities	Includes painting, cleaning, general maintenance and minor repair, HVAC inspection and maintenance, etc.	Inspections conducted as part of the Joint Health and Safety Committee. Maintenance and repair assessments conducted annually.
Renewal / Rehabilitation Activities	Includes roof, window and door replacement, electrical and plumbing replacement, foundation repair, etc.	Lifecycle & Asset Condition Assessment
Replacement Activities	Determination of whether continued maintenance costs are prohibitive and capital replacement is desirable.	Lifecycle condition assessment and engineer's review.
Disposal Activities	Posting unused buildings for sale.	Vacancy
Expansion Activities	Review of existing facilities and future needs.	

#### LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Buildings should be maintained at an overall average condition rating between 65 and 75%.	Current overall assessed condition rating is 77.73%. Factoring in replacement costs,

		the Town's building infrastructure has a condition rating of 78%.
Risk	Buildings with a risk rating over twelve should have capital work scheduled within the next 10 years.	There is currently one building with a risk rating of 20. It is scheduled for replacement in 2022-2023.
Maintenance	Regular maintenance and repairs should occur on all buildings to ensure the health and safety of all facility users.	100% of all assets in the building class receive regular maintenance and repairs.

#### **METRICS**

The Town of Aylmer owns and maintains 22 buildings, which represents 3.5 buildings per square kilometre of land in Aylmer.

The overall average condition rating of the Town of Aylmer's Building class is 77.73%.

# **OVERALL RATING** Condition

Target Condition Range 60-70%

Actual Overall Condition 78%

## Financing

Target Financing Range 95-105%

Actual Financing Required \$991,339

Planned Actual Funding \$1,191,935\*\* not funded at this time.

Percent of Requirement – TBD, several buildings planned for updates are not able to be funded in the next 10 years without grant funding.



# LAND IMPROVEMENTS

#### **INVENTORY**

The Town of Aylmer owns and maintains twenty-six different land improvement assets including paved pathways, parking lots, swimming pools, and play structures.

See Appendix B for a detailed list of all of the Town's Land Improvement assets.

#### **INTEGRATED ASSETS**

The following assets are integrated into the Land Improvements class:

- Sidewalk Network
- Buildings

#### **ESTIMATED USEFUL LIFE**

Asset	Estimated Useful Life (Years)	Average Age (Years)
Pathways	30-40	7.17
Play Structures	20	19.17
Parking Lots	25	16.25
Sports Lighting	25	9.25
Swimming Pools	25	39
Play Courts	20	17.5
Baseball Diamonds	30	13.5
	Average	17.17

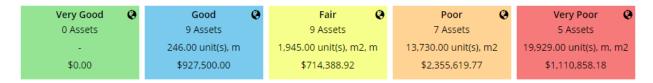
#### **VALUATION**

The total cost to replace the Town of Aylmer's Land Improvement class is \$4,280,247.

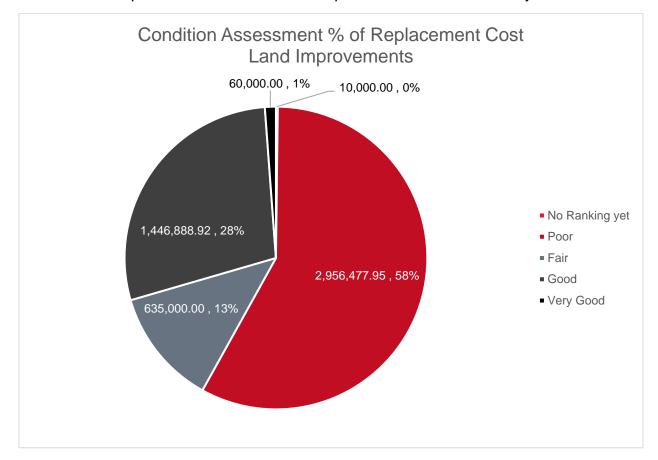
#### CONDITION ASSESSMENT

The condition of the Town's Land Improvement class has been assessed based on age and lifespan, as well as in-house assessments by staff. Current condition assessments for individual land improvements are shown in *Appendix B*.

Overall, the average condition rating for the Town's Land Improvement class is **62 out of 100**, which indicates that this class of assets is in **Good** condition.



Of the 26 assets in the Town of Aylmer's Land Improvement class the condition assessment based on replacement cost appears to be substandard, this will be reviewed in the parks and recreation master plan scheduled in the next year.



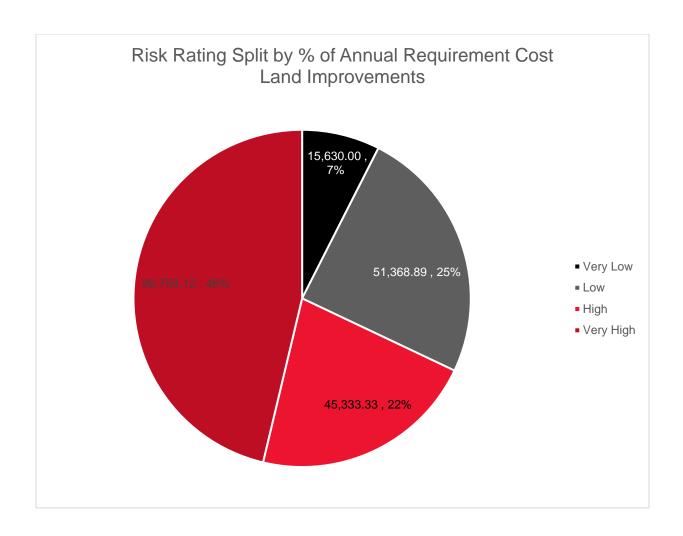
#### RISK

Risk factors include current condition assessment (probability), the replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Land Improvement class is **6.34** or **Low**.



Of the 26 assets in the Town of Aylmer's Land Improvement class the risk rating based on the annual requirement cost appears to be **High** or **Very High**, which will also be reviewed in the Parks and Recreation Master Plan scheduled in the next year. It is worthy to note that some of the parking lots are included in this number for showing **High** risk ratings.



### CRITICALITY

The failure of the Town's Land Improvement infrastructure would result in minor inconveniences including limited access and service interruptions. The criticality factor for all assets in the Land Improvements class is 1.

### ANNUAL REQUIREMENT

An annual investment of \$175,667 is required to fund the replacement of the Town's Land Improvement class.

While funding can vary from year to year, the Town currently contributes \$292,200 (average over the 10-Year Capital Plan 2022-2032) to fund Land Improvements.

### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Includes the inspection of	Annually and upon
Solutions	structures and equipment	identification of damages
	as per CSA and other	to equipment.
	technical body standards.	

Maintenance Activities	Includes the patch & repair of asphalt surfaces, the leveling of walkways to avoid tripping hazards, maintenance of depth impact areas, repair, and painting of pool structures and splashpad, repair of lighting, and maintenance of fields and fencing.	Identified through annual inspections or upon complaint basis.
Renewal / Rehabilitation Activities	Repaving of pathways, relining of pool, projects that exceed general maintenance in nature.	Lifecycle and condition assessment. Recommendations of Recreation Master Plan 2022- 2023.
Replacement Activities	Replacement of equipment and pathways.	Lifecycle and condition assessment. Need as identified in Recreation Master Plan and per CSA standards.
Disposal Activities	N/A	N/A
Expansion Activities	To be identified through Recreation Master Plan 2022-2023.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
	Land Improvement assets should be maintained at an overall average condition rating between 50 and 60%.	Current overall condition rating is 62%. When factoring in replacement costs, however, the Town's Land Improvement assets have an overall condition rating below 30%.
Condition	The percentage of Land Improvement assets in Good to Very Good Condition (as reported for MPMP) should be a minimum of 50% of total assets.	Of all Land Improvement assets, 57.9% are considered in Good to Very Good condition. When factoring in replacement costs, however, the percentage of assets in Good-Very Good condition is 29%.
Risk	All Land Improvement infrastructure with a risk rating of twelve or higher	There are currently seven assets with a risk rating over twelve. Of the seven, two will

	should be scheduled for capital work within the next 10 years.	be addressed in the next five years, while three will be addressed through the Town of Aylmer's Recreation Master Plan over the next 10 years.
Maintenance	All Land Improvement assets should be inspected on a regular basis and maintained at an adequate level to allow safe and enjoyable use by citizens and visitors of the Town.	100% of Land Improvement assets are inspected and maintained at an appropriate level to ensure safe and enjoyable use.

### **METRICS**

The Town of Aylmer owns and maintains 26 Land Improvement assets, which represents 4.15 assets per square kilometre of land in Aylmer.

The overall average condition rating of the Town of Aylmer's Land Improvements class is 62%.

## **OVERALL RATING** Condition

Target Condition Range 50-60%

Actual Overall Condition 29%

## **Financing**

Target Financing Range 95-105%

Actual Financing Required \$175,666

Current Actual Funding – TBD – not able to fund all of the works that is required in the 10 year plan without grant funding

Percent of Requirement - TBD



### **MACHINERY & EQUIPMENT**

#### INVENTORY

The Town of Aylmer owns and maintains forty-four different pieces of machinery and equipment from mowers and ice resurfacers to network servers and traffic lights.

See *Appendix B* for a detailed list of all of the Town's Machinery & Equipment assets.

#### INTEGRATED ASSETS

The following assets are integrated into the Machinery & Equipment class:

- Buildings
- Land Improvements
- Road Network

#### ESTIMATED USEFUL LIFE

As each piece of machinery and equipment has its own lifespan, a detailed listing can be found in *Appendix B*. The average age of assets in this class is 9.50 years.

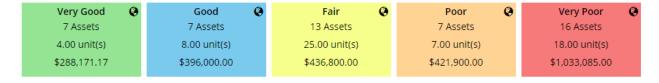
### **VALUATION**

The total cost to replace the Town of Aylmer's Machinery & Equipment class is \$1,750,754

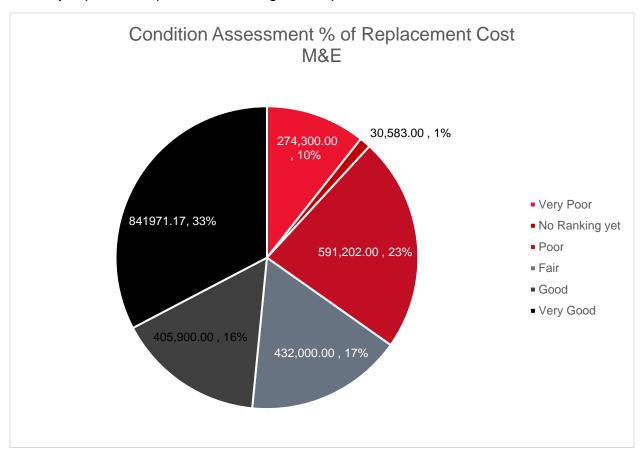
#### CONDITION ASSESSMENT

The condition of the Town's Machinery & Equipment class has been assessed based on age and lifespan. Current condition assessments for individual pieces of machinery and equipment are shown in *Appendix B*.

Overall, the average condition rating for the Town of Aylmer's Machinery & Equipment class is **67.26 out of 100**, which indicates that this class of assets is in **Good** condition.



Of the 53 assets in the Town of Aylmer's Machinery & Equipment class, **34%** of the replacement cost is considered in **Poor-Very Poor** condition or is **Not Yet Ranked**. This will be corrected over the next few years with some of the equipment in this category scheduled to be replaced in the coming years. Additionally, some equipment recently replaced requires the ranking to be updated in the database.



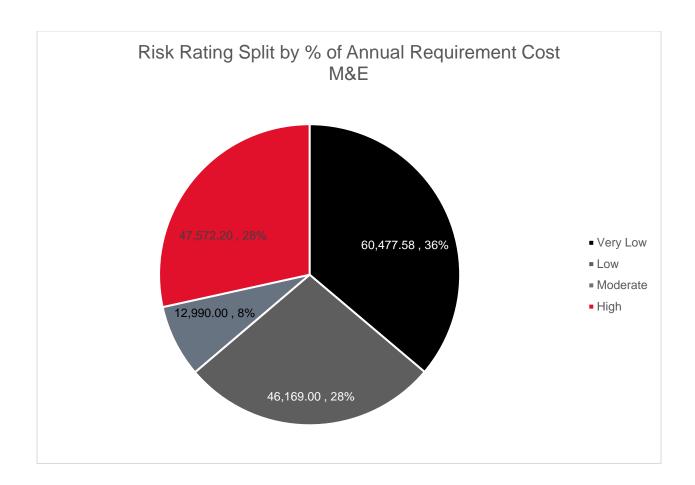
### **RISK**

Risk factors include current condition assessment (probability), the replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Machinery & Equipment class is **4.73** or **Very Low**.

5	0 Assets 🔮	0 Assets 🔮	0 Assets 🔮	0 Assets •	0 Assets 📀
5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	0 Assets 🔮	0 Assets 🔮	0 Assets	0 Assets 🔮	0 Assets 🔮
4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Consequence	1 Asset <b>②</b> 1.00 unit(s)	0 Assets 🔮	0 Assets 📀	0 Assets 🔮	0 Assets 🔮
Consec	\$174,551.03	\$0.00	\$0.00	\$0.00	\$0.00
2	0 Assets 🔮	1 Asset <b>②</b> 1.00 unit(s)	1 Asset <b>②</b> 1.00 unit(s)	2 Assets ② 2.00 unit(s)	3 Assets <b>©</b> 5.00 unit(s)
2	\$0.00	\$250,000.00	\$140,000.00	\$259,900.00	\$740,502.00
1	6 Assets 3.00 unit(s)	6 Assets <b>②</b> 7.00 unit(s)	12 Assets <b>②</b> 24.00 unit(s)	5 Assets <b>②</b> 5.00 unit(s)	13 Assets <b>②</b> 13.00 unit(s)
	\$113,620.14	\$146,000.00	\$296,800.00	\$162,000.00	\$292,583.00
	1	2	3 Probability	4	5

Of the 53 assets in the Machinery & Equipment class, just over 72% of the assets per the annual requirement cost are considered Very Low to Moderate risk. Of the higher risk assets, the majority are operated by the Parks and Recreation Department, and they will be reviewed in the Parks and Recreation Master Plan or have been requested for replacement dependent upon Council/EECC board approval within the next few years.



### **CRITICALITY**

The failure of the Town's Machinery & Equipment infrastructure may result in minor inconveniences for staff and residents. The criticality factor for all assets in the Machinery & Equipment class is **2**.

### ANNUAL REQUIREMENT

An annual investment of \$113,389 is required to fund the replacement of the Town's Machinery & Equipment class.

While funding can vary from year to year, the current funding (average over the 10-Year Capital Plan 2022-2032) for the Town's Machinery & Equipment class is \$155,850

### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Strategy	Lifecycle Activity	Trigger
Non-infrastructure	Equipment preventative	Annually
Solutions	maintenance.	
Maintenance Activities	Includes regular service as required for warranty, safety inspections, and end of season cleaning and winterizing.	Annually or as required.

Renewal / Rehabilitation Activities	Review outcomes of annual maintenance and preventative maintenance against asset lifecycle, engage external specialized repairs when required.	Arising out of annual maintenance, failures, or collision.
Replacement Activities	Replace machinery.	Review of remaining functionality to be undertaken prior to expiration of lifecycle.
Disposal Activities	Equipment beyond its useful lifecycle to be disposed of through auction on Gov Deals website.	Review of condition and lifecycle determines that the ongoing maintenance cost for the item of machinery is increasing significantly, and replacement is required.
Expansion Activities	Staff to identify need to Council during budget deliberations.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Machinery & Equipment should be maintained at an overall average condition rating between 55 and 65%.	Current overall condition rating is 67.26%; however, in factoring in replacement costs, the Town's Machinery & Equipment asset condition is 49%.
Risk	All Machinery & Equipment with a risk rating of twelve or higher should be scheduled for replacement within the next 10 years.	There are currently two assets with a risk rating over twelve. These assets will be addressed through the Town of Aylmer's Recreation Master Plan.
All Machinery & Equipment should receive regular maintenance as prescribed within the warranty and user manuals for the respective assets.		100% of Machinery & Equipment assets receive regular maintenance.

# **METRICS**

The Town of Aylmer owns and maintains 53 pieces of Machinery & Equipment.

The overall average condition rating of the Town of Aylmer's Machinery & Equipment class is 67.26%.

# **OVERALL RATING** Condition

Target Condition Range 50-60%

Actual Overall Condition 49%

# **Financing**

Target Financing Range 95-105%

Actual Financing Required \$113,588

Current Actual Funding \$155,850 - TBD, currently cannot replace all required machinery and equipment in the 10 year plan

Percent of Requirement – TBD



# **VEHICLES**

### **INVENTORY**

The Town of Aylmer owns and maintains twenty-eight different vehicles ranging from pick-up trucks, fire engines, and police cruisers to snow-clearing vehicles. Of the thirty-two vehicles in the Town's inventory, two are Not Planned for Replacement.

See Appendix B for a detailed list of all of the Town's Vehicles.

#### INTEGRATED ASSETS

The following assets are integrated into the Vehicle class:

- Land Improvements
- Road Network

### **ESTIMATED USEFUL LIFE**

As each vehicle has its own use and lifespan, a detailed listing can be found in *Appendix B*. The average age of assets in this class is 11.17 years.

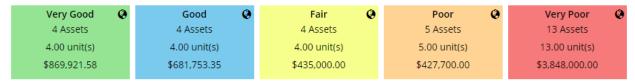
### **VALUATION**

The total cost to replace the Town of Aylmer's Vehicle inventory is \$6,262,375

### CONDITION ASSESSMENT

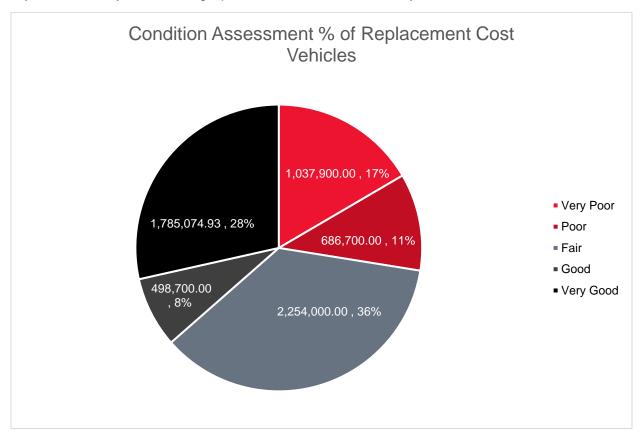
The condition of the Town's Vehicles has been assessed based on age and lifespan. Current condition assessments for each vehicle are shown in *Appendix B*.

Overall, the average condition rating for the Town of Aylmer's Vehicles inventory is **54.61 out of 100**, which indicates that this class of assets is in **Fair** condition.



Of the 32 assets in the Town of Aylmer's Vehicles inventory, 28% are assessed as

being in **Poor-Very Poor** condition. The majority of these assets are replaced every 5 to 7 years, so they are coming up for renewal in the next 2 years.



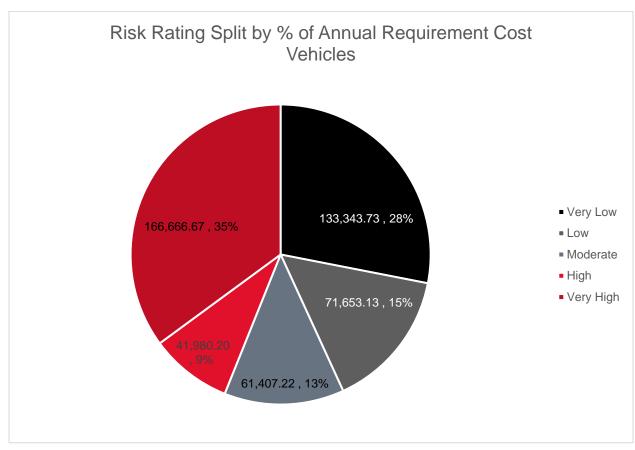
**RISK** 

Risk factors include current condition assessment (probability), the replacement cost (consequence) and criticality (consequence).

The average risk rating for the Town of Aylmer's Vehicles class is **5.91** or **Low**.



Of the 32 assets related to vehicles, **35%** are considered to be **Very High** risk, while 9% are considered **High** risk. These figures include police cruisers and fire trucks.



### CRITICALITY

The criticality factor assigned to the Town of Aylmer's Vehicle inventory is based on the use of the vehicle. The failure of staff vehicles would result in minor inconvenience to Town staff and to the public, therefore the criticality factor is assigned as a 2. For the Town's emergency fleet, the criticality factor assigned is a **5** as the failure of these vehicles would have major consequences for residents and staff.

### ANNUAL REQUIREMENT

An annual investment of \$475,051 is required to fund the replacement of the Town's Vehicle inventory.

While funding can vary from year to year, the current funding (average over the 10-Year Capital Plan 2022-2032) available for the Town's Vehicle class is \$435,700

### MAINTENANCE & CAPITAL REINVESTMENT ACTIVITES

Non-infrastructure Solutions	Equipment preventative maintenance	Annually
Maintenance Activities	Includes regular service as required for warranty, safety inspections, and end of season cleaning and winterizing.	Annually or as required.
Renewal / Rehabilitation Activities	Review outcomes of annual maintenance and preventative maintenance against asset lifecycle, engage external specialized repairs when required.	Arising out of annual maintenance, failures, or collision.
Replacement Activities	Replace fleet.	Review of remaining functionality to be undertaken prior to expiration of lifecycle.
Disposal Activities	Fleet equipment beyond its useful lifecycle to be disposed of through auction on Gov Deals website.	Review of condition and lifecycle determines that the ongoing maintenance cost for the item of fleet is increasing significantly, and replacement is required.
Expansion Activities	Staff to identify need to Council during budget deliberations.	

# LEVELS OF SERVICE

Service Attribute	Qualitative Description	Current LOS
Condition	Vehicles should be maintained at an overall average condition rating between 50 and 60%.	Current overall assessed condition is at 54.61%. When factoring in replacement costs, however, Vehicle assets are rated at 36%.
Risk	All Vehicles with a risk rating of twelve or higher should be scheduled for replacement within the next 10 years.	There are currently three vehicles with a risk rating over twelve. These assets will be addressed in the Town's 10 Year Capital Plan.
Maintenance	All Vehicles should receive regular maintenance as prescribed within the warranty and user manuals for the respective assets.	100% of Vehicles receive regular maintenance.

### **METRICS**

The Town of Aylmer owns and maintains 32 vehicles.

The overall average condition rating of the Town of Aylmer's Vehicle class is 54.61%.

# **OVERALL RATING** Condition

Target Condition Range 50-60%

Actual Overall Condition 36%

# **Financing**

Target Financing Range 95-105%

Actual Financing Required \$475,051

Current Actual Funding \$435,700

Percent of Requirement 91.72%