Asset Management Planning at the Municipality of Lakeshore

Asset Management Plan for Core Assets

2022

Agenda

1. Background and Context
2. Today’s Focus: Asset Management Plan (AMP) 2022
3. Next Steps
4. Questions

Background and Context

- PSD and Lakeshore staff are collaborating on building a more formal and structured asset management program to support data-based decisions.
- The first phase of this engagement required completion of an AMP for Lakeshore's core assets to support compliance with Ontario Regulation 588/17. The Municipality is now in compliance with the regulation.
- The next phase will pivot to more corporate-level analysis of Lakeshore's asset management capacity, and will culminate in an asset management framework (or strategy).

Ontario Regulation 588/17

- As part of the *Infrastructure for Jobs and Prosperity Act*, *2015*, the Ontario government introduced *Regulation 588/17 - Asset Management Planning for Municipal Infrastructure* (O. Reg 588/17).
- Requires Ontario municipalities to develop an asset management policy and AMPs between 2022 and 2025 with increasing complexity.

Ontario Regulation 588/17

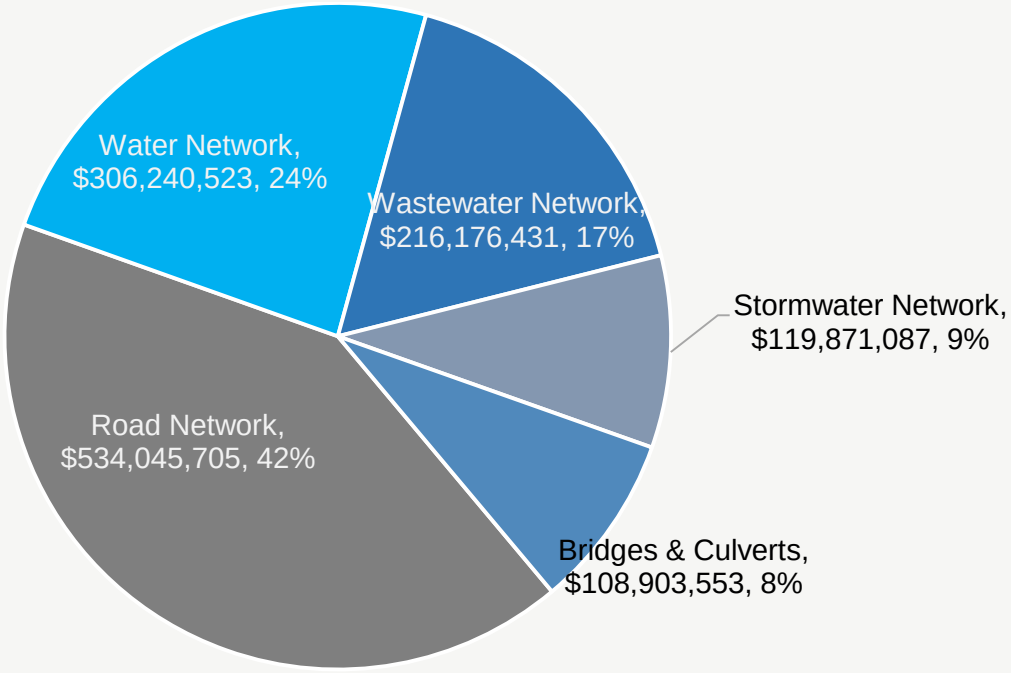
Requirement	2019	2022	2024	2025
Asset Management Policy	●		●	
Asset Management Plans		●	●	●
State of infrastructure for core assets		●		
State of infrastructure for all assets			●	●
Current levels of service for core assets		●		
Current levels of service for all assets			●	
Proposed levels of service for all assets				●
Lifecycle costs associated with current levels of service		●	●	
Lifecycle costs associated with proposed levels of service				●
Growth impacts		●	●	●
Financial strategy				●

Today's Focus: AMP 2022 for Core Assets

- Core Assets include roads, bridges & structural culverts, water distribution and treatment infrastructure, wastewater conveyance and treatment infrastructure, and stormwater management assets.
- Analysis was limited to existing infrastructure, and do not account for capacity upgrades or new assets resulting from growth-related demands.

Asset Valuation

- The current replacement cost of all core infrastructure analyzed in this AMP totaled $1.3 billion.
- Several approaches were used to establish replacement cost estimates.

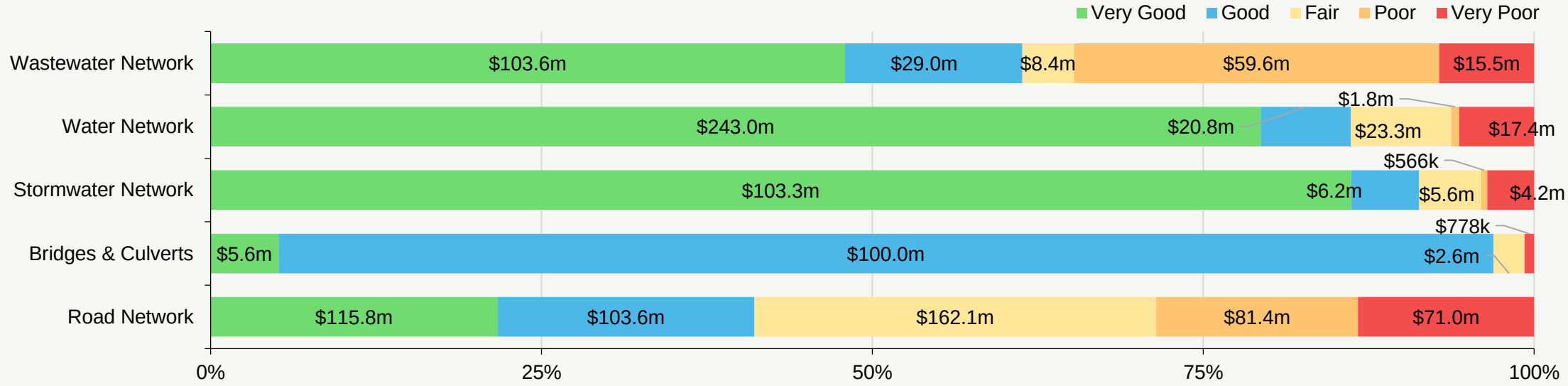


Total Current Replacement Cost

$1,285,237,300

Asset Condition

- 80% of the Municipality's infrastructure portfolio is in fair or better condition, with the remaining 20% in poor or worse condition
- Field condition data was available for only 50% of assets, based on replacement cost. For all remaining assets, age was used to approximate their condition.
- Age can provide misleading approximations of an asset's actual, physical condition.



Funding for Assets

- All assets require some reinvestment annually – either allocations to reserves for future spending or actual spending on projects in the current year
- Typically, these reinvestment levels—or "average annual capital requirements"—are substantial and much higher than most municipalities can achieve. However, they are useful benchmarks.
- Annual requirements are based on the replacement cost and serviceable life of individual assets.
- When annual funding available for infrastructure is less than the average annual requirements, it creates annual funding shortfalls, or 'infrastructure deficits'.

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Funding for Assets

- On average, $24.3 million is required each year to remain current with capital replacement needs for the Municipality's existing core asset portfolio.
- Average annual funding available totals $15.5 million for core assets. As a result, the Municipality is funding 64% of its annual capital requirements. This creates a total annual funding deficit of $8.8 million.

Asset Category	Annual Capital Requirements	Average Annual Funding Available	Annual Infrastructure Deficit	Funding Level
Road Network	$14,861,377	$10,527,489	$4,333,888	71%
Bridges & Culverts	$1,497,524	$208,425	$1,289,099	14%
Stormwater Network	$1,365,319	$438,018	$927,302	32%
Water Network	$3,386,853	$2,831,682	$555,172	84%
Wastewater Network	$3,188,736	$1,477,102	$1,137,574	46%
Total	**$24,299,810**	**$15,482,715**	**$8,817,095**	**64%**

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Funding for Assets

- Addressing annual infrastructure funding shortfalls is a difficult and long-term endeavour for municipalities.
- Considering the Municipality's current funding position, it will require many years to reach full funding for current assets.
- Short phase-in periods to meet these funding targets may place too high a burden on taxpayers too quickly, whereas a phase-in period beyond 20 years may see a continued deterioration of infrastructure, leading to larger backlogs.
    - To close annual deficits for tax-funded assets, we recommend the Municipality review feasibility of implementing a 3.4% annual increase in revenues over a 5-year phase-in period.
    - Similarly, water rate revenues would need to increase at 1.2% to achieve full-funding over a 5-year phase-in period. For wastewater, a 10-year phase-in is recommended, requiring a 2.3% increase in rate revenues annually to close annual funding gaps.

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Building an Asset Management Program

- Although additional revenue may be necessary to support proactive asset management activities, it is one of several important instruments in building a good asset management program. Other critical steps include:
  - Building a strong data management and governance framework
  - Incorporating risk models to help prioritize investments
  - Building a deep understanding of how the Lakeshore community is evolving to determine infrastructure requirements and appropriate levels of service

Building an Asset Management Program

- Building an maintaining an asset management program is time consuming and may require additional staff. Municipalities across Ontario and Canada are increasing their staff capacity through full-time asset management coordinators and managers. The rationale is strong.
    - Even before detailed componentization, Lakeshore's current asset register contains more than 13,000 unique asset records.
    - Each asset may have, at minimum, 15 attributes or data fields—producing a total of **195,000** data points that must be maintained. However, assets can have dozens of attributes, which can substantially increase the volume of data that requires management.
    - Once major facilities and buildings are componentized, the amount of data will further multiply.

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Next Steps

- Pivot to phase two of the engagement and begin developing a long-term asset management strategy or framework. The strategy will:
  - evaluate the ‘current state’ of Lakeshore’s asset management program
  - help identify business process gaps and uncover hidden problems
  - address data management and governance
  - provide a long-term path for elevating Lakeshore’s asset management maturity