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2024 Infrastructure Report Card Information Report

Report Number: INFO-2025-05

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In accordance with the Procedure By-law, any member of Council may make a request to the Town Clerk that this Report be placed on an upcoming Committee of the Whole agenda for discussion.

Purpose

This report provides the 2024 Infrastructure Report Card, an annual executive summary of the Town's assets and their conditions as they have changed since the last report for 2023. The report concludes with a look to next steps for asset management (AM) and Ontario Regulation 588/17 including a Council presentation proposed for Q1 2025.

Background

The annual infrastructure report card provides important information about Town assets that can inform stakeholders, guide decision-makers, and support long-term planning. Infrastructure supports many Town services and are an important investment shared by the community. It is common in municipalities conducting AM to review and update this information annually. The report cards can be used standalone but are part of the upcoming 2025 Asset Management Plan.

The 2024 iteration is the 4th year of report cards being issued. This year's new format focuses on communicating changes since last year to emphasize changed information for return readers. It follows a template established by York Region in 2023.

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Purpose of the Infrastructure Report Card

While infrastructure assets have long service lives, the decisions made each year impact their long-term trajectory. An annual touchpoint ensures the Town remains on its desired course. Key takeaways readers will get from the report cards include:

- Asset Condition: The current condition of assets, as well as how this has changed since last year. This year-over-year change will be important once the Town sets targets through 2025 O.Reg. 588/17 compliance, as the trend can be compared with the target.
- **Inflation Impact:** The impacts of construction price inflation on replacement cost. Construction price inflation outpaced core inflation in 2023, adding pressure to funding capital replacements.
- **Growth:** The amount of new assets the Town assumed through growth. This expands the service provided but adds O&M costs and future replacements.
- **Recent Projects:** A list of major capital projects completed in 2023 is provided to give context to the change in asset conditions.

Discussion

New Rating Scale Is Provided for 2024

Condition ratings provide a standardized way to assess the current state of our assets. The ratings are assigned using a 5-point scale. For some assets, the condition ratings are derived from on-site condition inspections conducted by qualified personnel. For the remaining assets, the condition is based on the asset's age and its anticipated lifespan.

In past reports, assets have been assessed on an industry standard scale. The scale has a 5-point system and described assets as "good" or "poor". It has been found that "poor" was often too vague because it did not communicate the context and next steps for the asset. The color scheme has also been updated – the industry standard template implied a rating of "fair" is not desirable, when in fact this is often where assets should be and usually offers the lowest lifecycle cost. An updated scale is used starting in 2024:

New Condition Ratings	New Legend	Description	
1 - Very Good	Dark Green	The asset is future-ready. It is in excellent condition, well-maintained, and recently constructed or rehabilitated. It can reliably meet service needs with minimal intervention.	
2 - Good	Medium Green	The asset is performing well. It meets all service expectations and is supported by proactive maintenance to sustain its condition as it progresses through the early-to-mid stages of its service life.	
3 - Fair	*Light Green*	The asset is functioning adequately with some active maintenance. It shows visible signs of aging and wear.	
4 - Approaching Replacement Need	*Light Red*	The asset is approaching the eventual end of its service life with noticeable signs of moderate deterioration. Some components begin to require closer monitoring to maintain reliable performance and targeted maintenance is required to maintain service levels.	
5 - Ready for Replacement	*Dark Red*	The asset has reached the end of its optimal service life and is a candidate for replacement. While functional, it is not delivering services at the optimal level. There are potential increased risks of service disruption. Maintenance efforts are focused on managing risks, minimizing disruptions, and preserving functionality to provide service levels until replacement occurs.	

Benchmarking Our Assets with Statistics Canada

Newmarket is a participant in Canada's Core Public Infrastructure Survey, completed by Statistics Canada. This is a national survey collecting industry standard data on an annual basis for core assets (excludes parks and facilities). This iteration of the report card includes a snapshot of all participating small urban municipalities (population 30,000 to 100,000) from across Canada, accounting for a total of \$128 Billion of infrastructure. The results show Newmarket's roads and bridge are slightly better in condition than the average across Canada, with water, wastewater and stormwater assets generally being similar. Parks and facilities are not collected by the survey.

Observations About Assets from the 2024 Infrastructure Report Cards

There are a few points of observation about each asset category that should be noted.

Infrastructure Report Card	Observations & Notes
Parks	The data for park assets has limitations that put caveats on the relatively low condition ratings. The Town conducts a strong O&M program with high customer satisfaction. The current assessment uses age and asset useful life. As data is gained through condition assessments the report could change.
Facilities	Based on the 3 rd party building condition assessments, facilities will need more replacements in the near future. As reported in the 2024 AM Plan, there is an upcoming "wave" of heightened replacements due to the age of many facilities. The multi-year capital budget approved for 2025 already reflects this need to ramp up replacement spending.
Roads	The Town continues to enjoy good roads with strong maintenance programs. As identified in the 2021 AM Plan, roads uses financial strategies including interfund borrowing and government grants to partially fund fluctuations in replacement needs that occur as the assets age.
Bridges	Most bridges are in the midpoint of their lifecycle. Until now bridges have required limited intervention, but the amount of capital needed to maintain bridges will increase in the future.
Water	The Town is completing a study of cast iron and ductile iron watermains that could show areas of improvement. This will be reflected in 2025 reports (currently reporting 2024).
Wastewater	The Town is completing field inspections of sewers that indicate sewers are sometimes better than predicted. This will be reflected in 2025 (currently reporting 2024).
Stormwater	Stormwater assets are in good condition now, but the stormwater AM plan reflects the need to build reserves now in preparation for the future. The backlog of wet pond dredging is the focus of the approved capital budget.

Proposed Council Presentation to Prepare for O.Reg. 588/17

Following on the infrastructure report card, the next step in the process for compliance with Ontario Regulation 588/17 (AM Planning for Municipal Infrastructure) is to hold a presentation with Council and discuss levels of service.

Levels of service are to be documented with Council input in the 2025 Asset Management Plan, which is due for endorsement by July 1, 2025. The 2025 AM Plan is different than previous milestones because of requirements to address proposed levels of service for 10 years into the future including a funding strategy. To accomplish this, the presentation will consider each asset category (e.g. roads) and the level of service achieved with the Town's financial strategies.

Information will be prepared including an agenda and briefing of topics to be covered during the Council presentation. Information to be shared during the presentation for Council input will include forecasted condition ratings for each asset, cost forecasts aligned to the 2020 Fiscal Strategy and 2023 Reserve Fund Review, and supplemental information developed with subject matter experts in Engineering Services, Public Works Services, and Parks & Facilities Services.

Role of Infrastructure Report Cards in Council Presentation

The attached report cards are an important basis for the Council presentation and 2025 AM Plan because they establish the baseline for what level of service is provided by assets today as a function of their condition. The condition of the assets is a good proxy for service levels. When discussing what future service levels are targeted for 10 years from now (2034) as required by regulation, the condition of our assets today provides important context.

Consultation

Report cards are prepared in collaboration with Public Works Services, Parks & Facilities Services, Engineering Services, Financial Services, and IT Services.

Conclusion

The upcoming 2025 AM Plan is an important opportunity offered by the province to understand the level of service and funding needs of Town assets which will be explored in a Council session. The 2024 Infrastructure Report Card is an important milestone on this pathway, continuing the Town's tradition of a strong asset management program. The Town will continue to develop and continuously improve how it manages its infrastructure assets throughout its lifecycle to ensure they support the goal of a healthy, happy, and extraordinary community.

Council Priority Association

This report aligns with the following Council Priority: Community and Economic Vibrancy

Human Resource Considerations

Not applicable.

Budget Impact

Not applicable

Attachments

Attachment 1 – 2024 Infrastructure Report Cards

Approval for Distribution

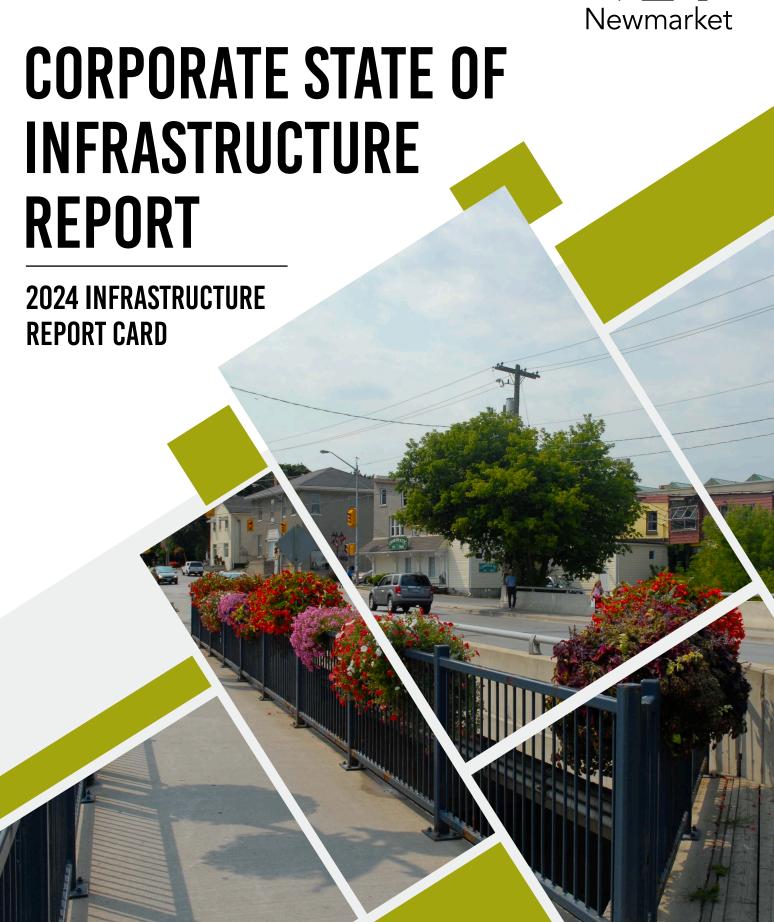
Andrea Tang, Director, Financial Services

Esther Armchuk, Commissioner, Corporate Services

Report Contact

For further information regarding this report, please contact info@newmarket.ca.





EXECUTIVE SUMMARY

Why An Infrastructure Report Card?

The annual Infrastructure Report Card provides important information about Town assets that can inform stakeholders and guide decision makers. Infrastructure supports many Town services and are an important investment shared by the community. While infrastructure assets have long service lives, the decisions made each year impact their long-term trajectory. An annual touchpoint ensures the Town remains on its desired course.

Key Questions Answered by The Report Card

Entering its fourth iteration, years of consecutive reporting not only provide the Town with a snapshot of current infrastructure conditions but also the year-over-year impacts of broader trends like aging assets, growth/intensification, construction price inflation, and new asset management innovations. Focusing on changes since last year providers readers with new information.

The report card data is staggered with present day. The data is as of December 31, 2023.

Key questions answered by the report include:

- What are the conditions of our assets, and how has this changed since the last report?
- What would our assets cost to replace, and how has this changed in light of growth and inflation?
- What are we saving and spending, and how did the projects we delivered change what we provide?

The Infrastructure Report Card includes the following service areas:



Limitations

The municipal infrastructure report card is a tool for assessment, transparency, and planning, but it has limitations. Notably:

- **Detailed Engineering Analysis:** It is not a detailed engineering assessment of every piece of infrastructure. Instead, it provides an overview and grades based on selected criteria.
- **Financial Audit:** It does not delve deeply into financial aspects or funding sources for infrastructure projects.
- **Real-time Monitoring:** It is not a real-time monitoring system. It provides a snapshot at a specific point in time.

Facilities

What Condition Is It?

Condition ratings provide a structured and standardized way to assess the current state of our assets. The ratings are assigned using a 5-point scale, as shown in the table below. For some assets, the condition ratings are derived from on-site condition inspections conducted by qualified personnel, offering detailed insights into their performance. For the remaining assets, the condition is based on the estimated remaining service life, determined through the linear relationship between the asset's age and its anticipated lifespan. This approach allows the Town to effectively monitor asset performance and make informed decisions regarding maintenance and replacement planning.

Condition Category	Condition Description
Very Good	The asset is future-ready. It is in excellent condition, well-maintained, and recently constructed or rehabilitated. It can reliably meet service needs with minimal intervention.
Good	The asset is performing well. It meets all service expectations and is supported by proactive maintenance to sustain its condition as it progresses through the early-to-mid stages of its expected service life.
Fair	The asset is functioning adequately with some active maintenance. It shows some visible signs of aging and wear.
Approaching Replacement Need	The asset is approaching the eventual end of its service life with noticeable signs of moderate deterioration. Some components beginning to require closer monitoring to maintain reliable performance and targeted maintenance is required to maintain service levels.
Ready for Replacement	The asset has reached the end of its optimal service life and is a candidate for replacement. While functional, it is not delivering services at the optimal level. There are potential increased risks of service disruption. Maintenance efforts are focused on managing risks, minimizing disruptions, and preserving functionality to provide service levels until replacement occurs.

Methodology Refinements

Each year the Corporate Asset Management Office works on refining the numbers and figures reported in asset management plans through continuous improvement. These accuracy improvements are accounted for in the report of the cost of our assets to show the impact.

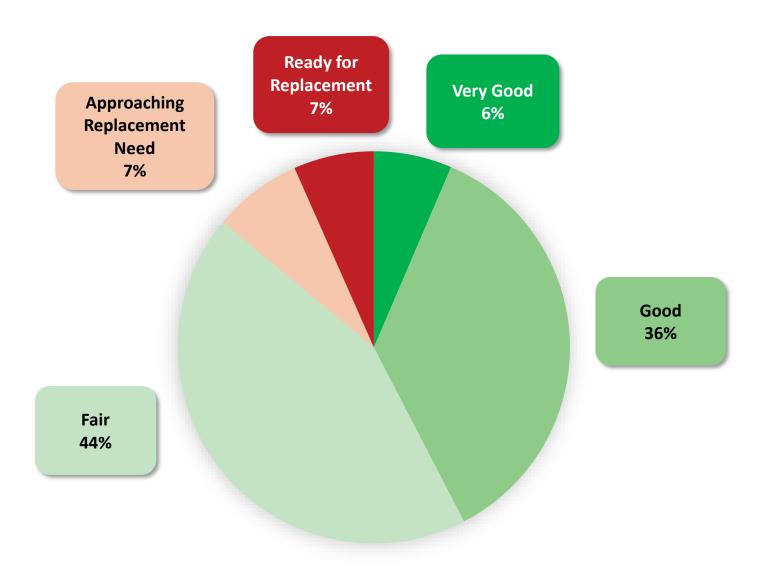
REHABILITATION AND REPLACEMENT PROJECTS IN 2023

Each year, the Town undergoes a number of state of good repair projects to maintain and improve infrastructure. The Infrastructure Report Cards should be considered in context of the steps the Town is continually taking to maintain service levels by improving infrastructure. Projects specific to the assets in the report card substantially completed in 2023 include:

	Assets						
2023 Capital Projects for Assets	Roads	Bridges	Water	Waste- water	Storm- water	Parks	Facilities
Reconstruction of Pony Drive	(>)		(>)		(>)		
Road Resurfacing of Ringwell Drive, Kerrisdale Blvd	(>)						
Queen Street Bridge Replacement (on-going)		\S					
Newmarket Heights Watermain CIPP Lining			\>				
Water Meter Replacement Program (on-going)			(>)				
27 km of Roads Crack Sealed	(>)						
Ray Twinney Center Electrical & Mechanical Upgrades							
Magna Center Roof Replacements & Control Panel Replacements							
Ray Twinney Center Fitness Center Renovation							
Other asset replacements at Town Offices, Gorman Pool, Old Town Hall							
Playground Replacements							
Best Family Park Asset Improvements							
Joe Persichini Park Sports Court Resurfacing							

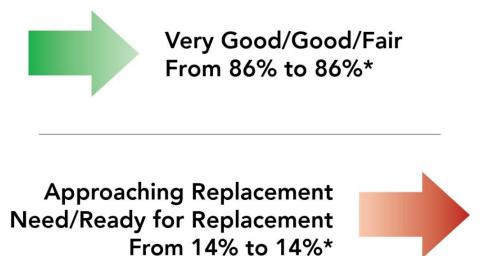
WHAT CONDITIONS ARE OUR ASSETS?

Executive Summary of Conditions for Assets



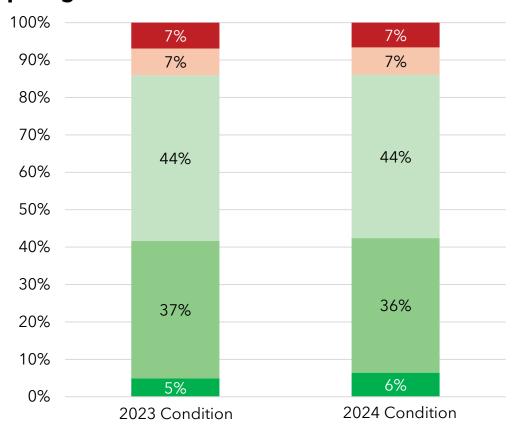
WHAT HAS CHANGED SINCE I LAST SAW THIS INFORMATION?

Infrastructure Condition Changes Since 2023



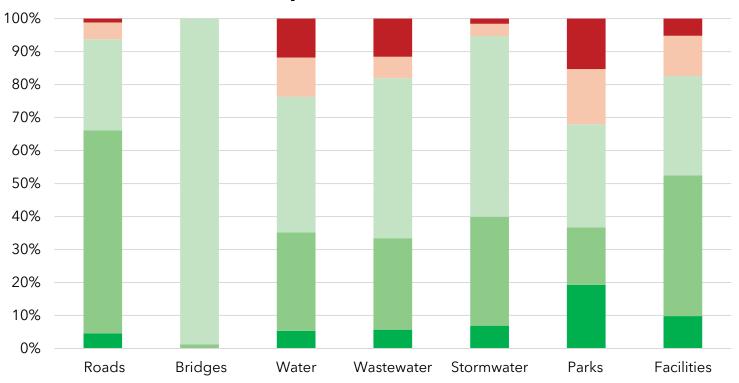
*On average, no change in condition category.

Comparing Conditions of Core Assets from 2023 to 2024



HOW DO OUR SERVICE AREAS COMPARE?

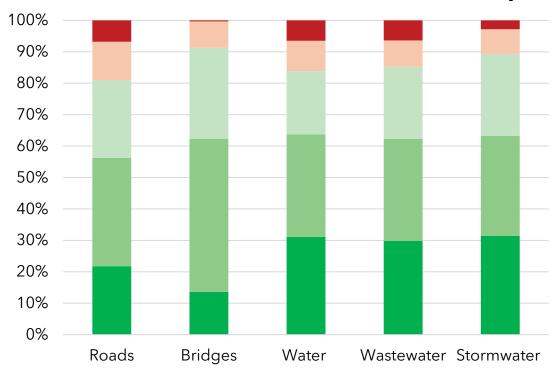




Summary of Replacement Cost			
2023 Valuation	\$3,071 M		
Methodology Refinements	-\$25 M		
Growth	\$24 M		
Inflationary Adjustment	\$123 M		
2024 Valuation	\$3,192 M		

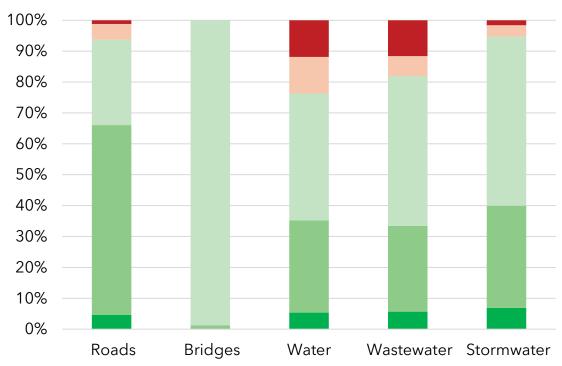
BENCHMARKING WITH SIMILAR MUNICIPALITIES IN THE STATISTICS CANADA INFRASTRUCTURE SURVEY

Core Asset Conditions (%) - Urban Canadian Municipalities



Note: This data is sourced from Statistics Canada's Core Public Infrastructure Survey, which collects information on the inventory and condition of core public infrastructure assets in Canada. Standard definitions are provided for the survey but are subject to interpretation by individual municipalities. Methods of data collection may also vary by municipality.

Core Asset Conditions (%) - Town of Newmarket





Roads Network Infrastructure Report Card

WHAT CONDITION ARE OUR ASSETS IN?



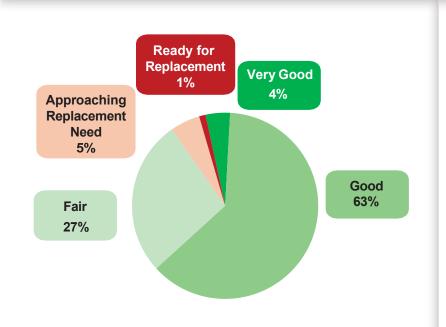
AVERAGE NETWORK CONDITION

GOOD



INVENTORY

Collector Roads (km): 66 Local Roads (km): 193 Total (km): 259



INFRASTRUCTURE CONDITION CHANGES SINCE 2023



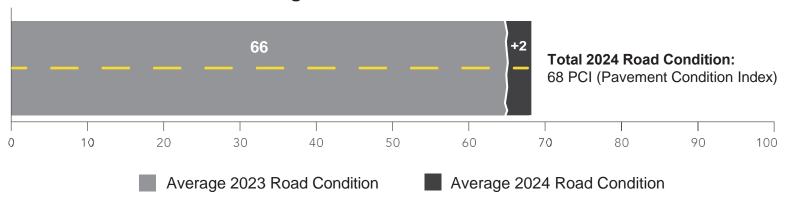
Approaching Replacement Need/Ready for Replacement From 9% to 6%





Replacement Cost Summary		
2023 Replacement Cost \$531 M		
Growth	\$1 M	
Inflationary Adjustment	\$21 M	
Updated 2024 Replacement Cost	\$553 M	

Average Road Network Condition



MAJOR 2023 PROJECTS





Bridge Infrastructure Report Card



WHAT CONDITION ARE OUR ASSETS IN?



AVERAGE NETWORK CONDITION

FAIR

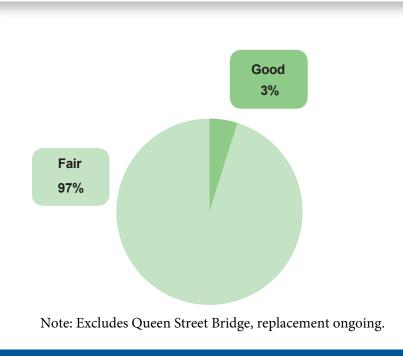


INVENTORY*

Vehicle Bridges: 13 Structural Culverts: 18

Total: 31

*Bridge network no longer reports pedestrian bridges, reporting transferred to Parks.



INFRASTRUCTURE CONDITION **CHANGES SINCE 2023**



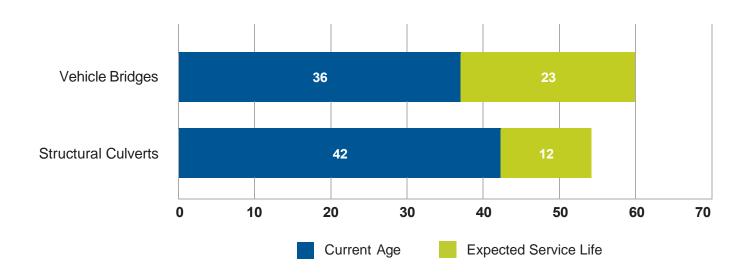
Approaching Replacement Need/Ready for Replacement From 0% to 0%*



*On average, no change in condition category.



Replacement Cost Summary			
2023 Replacement Cost \$39 M			
Growth	\$0 M		
Inflationary Adjustment	\$1 M		
Updated 2024 Replacement Cost \$40 M			



MAJOR 2023 PROJECTS

2023 Projects

Queen Street Bridge Replacement (on-going)



Water Distribution Infrastructure Report Card

WHAT CONDITION ARE OUR ASSETS IN?



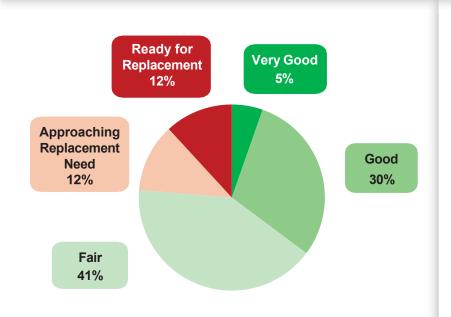
AVERAGE NETWORK CONDITION

FAIR



INVENTORY

Watermains (km): 315 Valves: 5255 Hydrants: 2383



INFRASTRUCTURE CONDITION CHANGES SINCE 2023



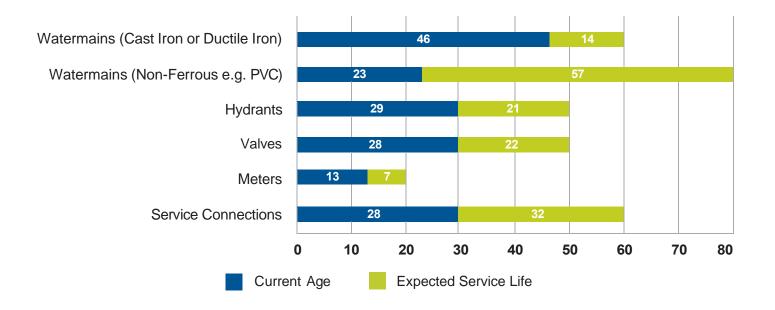
Approaching Replacement Need/Ready for Replacement From 24% to 24%*



*On average, no change in condition category.



Replacement Cost Summary			
2023 Replacement Cost \$656 M			
Methodology Refinements	-\$3 M		
Growth	\$2 M		
Inflationary Adjustment	\$26 M		
Updated 2024 Replacement Cost	\$681 M		



MAJOR 2023 PROJECTS

2023 Projects
Reconstruction of Pony Drive
Newmarket Heights Watermain CIPP Lining
Water Meter Replacement Program (on-going)



Wastewater Collection Infrastructure Report Card

WHAT CONDITION ARE OUR ASSETS IN?



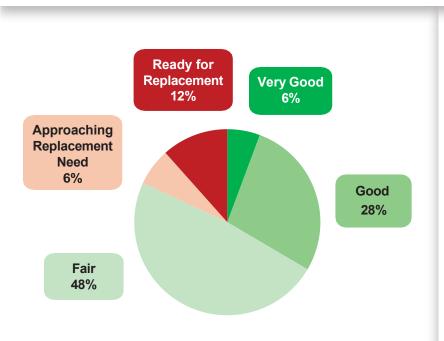
AVERAGE NETWORK CONDITION

FAIR



INVENTORY

Sewers (km): 284 Maintenance Holes: 4569 Pump Stations: 6



INFRASTRUCTURE CONDITION CHANGES SINCE 2023



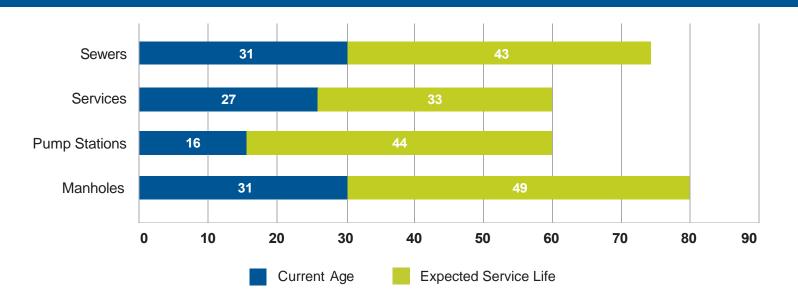
Approaching Replacement Need/Ready for Replacement From 18% to 18%*



*On average, no change in condition category.



Replacement Cost Summary			
2023 Replacement Cost \$675 M			
Growth	\$10 M		
Inflationary Adjustment	\$27 M		
Updated 2024 Replacement Cost	\$712 M		



MAJOR 2023 PROJECTS





Stormwater System Infrastructure Report Card

WHAT CONDITION ARE OUR ASSETS IN?



AVERAGE NETWORK CONDITION

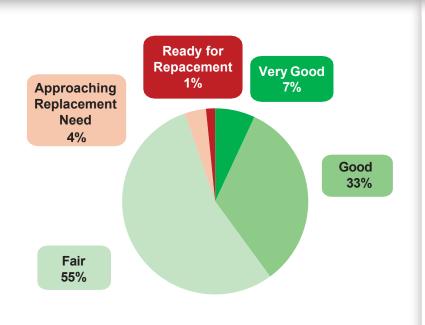
FAIR



INVENTORY

Sewers (km): 318
Maintenance Holes & Catchbasins: 11574

Oil Grit Separators: 39 Wet Ponds & LID's*: 57 *Low Impact Development



INFRASTRUCTURE CONDITION CHANGES SINCE 2023



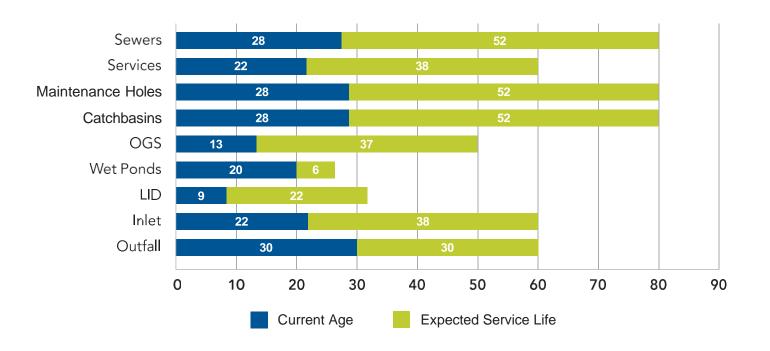
Approaching Replacement Need/Ready for Replacement From 6% to 6%*



*On average, no change in condition category.



Replacement Cost Summary			
2023 Replacement Cost \$836 M			
Methodology Refinements	-\$23 M		
Growth	\$12 M		
Inflationary Adjustment	\$33 M		
Updated 2024 Replacement Cost	\$858 M		



MAJOR 2023 PROJECTS

2023 Projects Reconstruction of Pony Drive



Parks Infrastructure Report Card



WHAT CONDITION ARE OUR ASSETS IN?



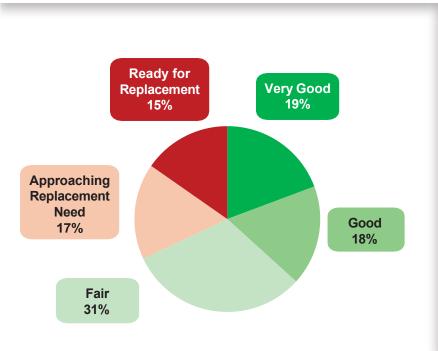
AVERAGE NETWORK CONDITION

FAIR



INVENTORY

Total Assets: 1387 Walkways & Trails (km): 47



INFRASTRUCTURE CONDITION CHANGES SINCE 2023

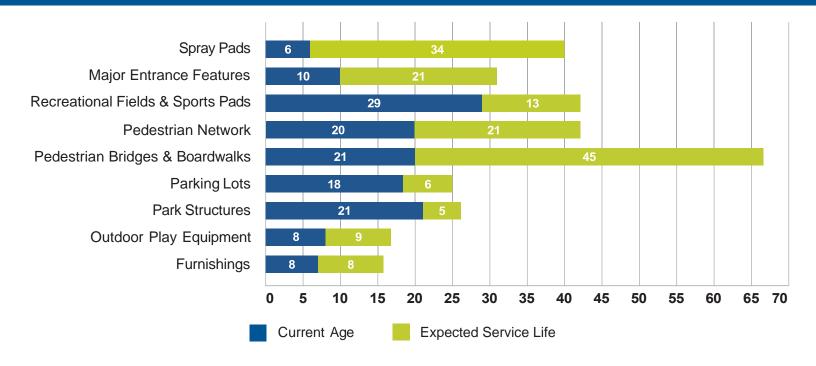


Approaching Replacement Need/Ready for Replacement From 29% to 32%





Replacement Cost Summary			
2023 Replacement Cost \$97 M			
Growth	\$0 M		
Inflationary Adjustment	\$4 M		
Updated 2024 Replacement Cost	\$101 M		



MAJOR 2023 PROJECTS





Facilities Infrastructure Report Card



WHAT CONDITION ARE OUR ASSETS IN?



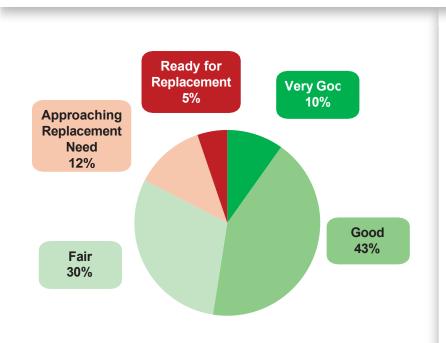
AVERAGE NETWORK CONDITION

GOOD



INVENTORY

Administration and Operations: 13
Recreation and Community: 22
Shared Fire Services: 2
Total: 37



INFRASTRUCTURE CONDITION CHANGES SINCE 2023

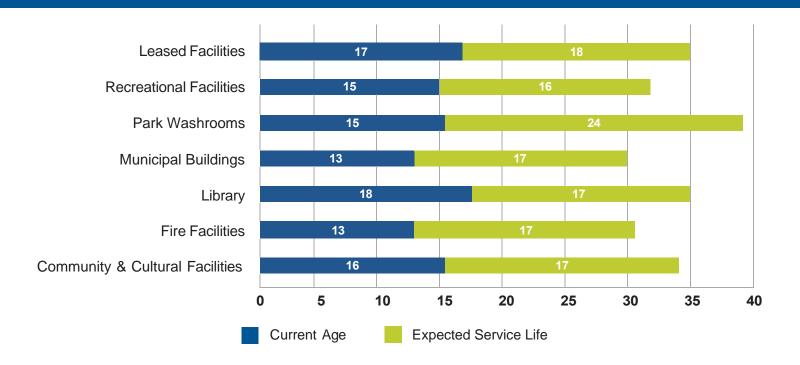


Approaching Replacement Need/Ready for Replacement From 12% to 17%





Replacement Cost Summary	
2023 Replacement Cost	\$237 M
Growth	\$0 M
Inflationary Adjustment	\$10 M
Updated 2024 Replacement Cost	\$247 M



MAJOR 2023 PROJECTS

2023 Projects

Ray Twinney Center Electrical & Mechanical Upgrades

Magna Center Roof Replacements & Control Panel Replacements

Ray Twinney Center Fitness Center Renovation

Other Asset Replacements at Town Offices, Gorman Pool & Old Town Hall