



State of the Infrastructure – Report Cards

Presenter: Corporate Asset Management Office;

Lead By: Lisa Ellis

Date: October 19, 2020



History of the Infrastructure Report Card



- The Canadian Infrastructure Report Card is a collective effort by:



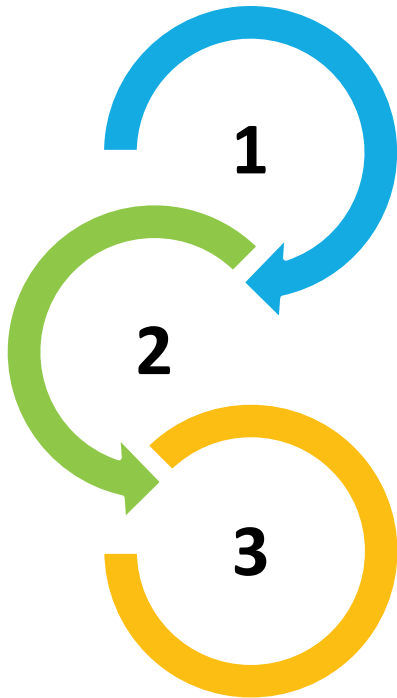
- The Town of Newmarket has aligned itself with this Nationally recognized program and best practice by developing our First Infrastructure Report Card.



Why An Infrastructure Report Card?



- Communicate the status of our assets to create a baseline for investment decision making.



What does the Town own?

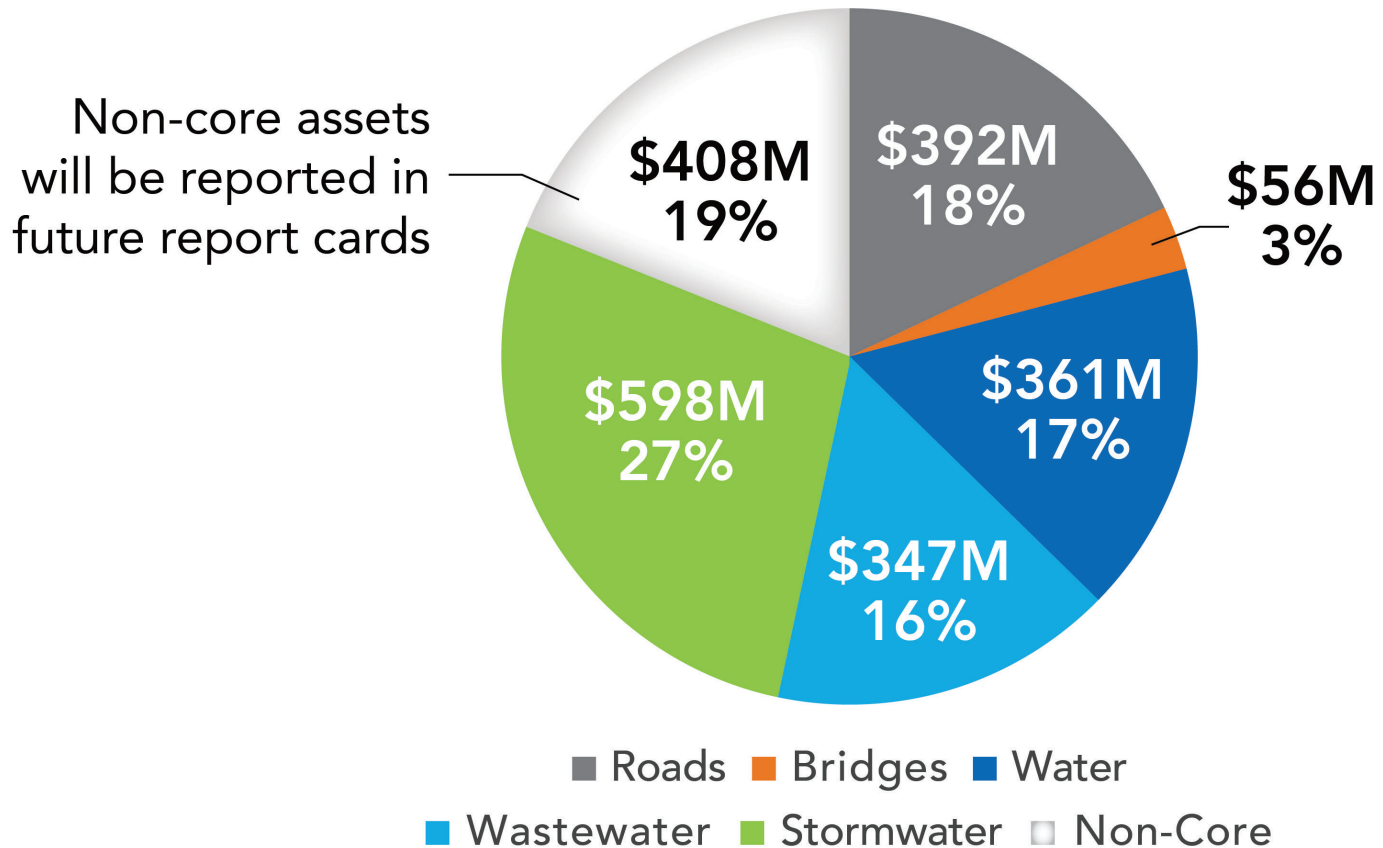
What is the cost to replace?

What condition are the assets in?



Asset Valuation

The Total Replacement Cost of Town Assets is Estimated at \$2.16B



INFRASTRUCTURE PURPOSE

The Town's local and collector roads transport people and goods quickly and safely to where they need to go. Roads are maintained to ensure safe and smooth transportation.



REPLACEMENT COST:
\$392 Million

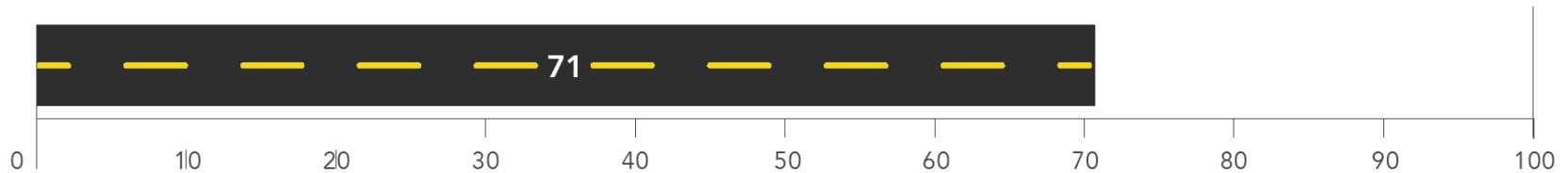


AVERAGE NETWORK CONDITION
GOOD



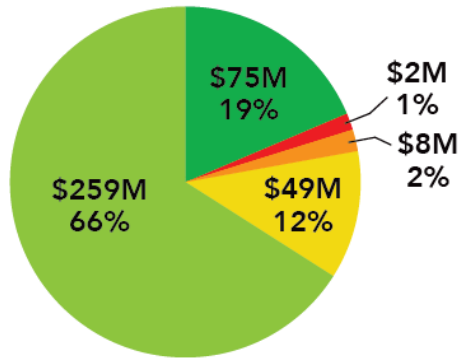
INVENTORY
Local Roads:
182 centerline km
Collector Roads:
67 centerline km

Average Road Pavement Condition (out of 100)

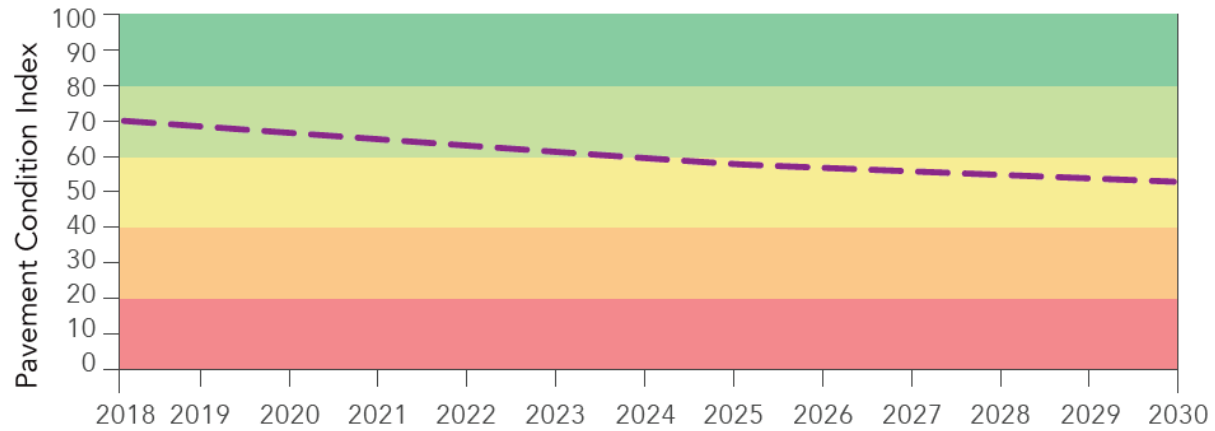


Roads Network Infrastructure Report Card

Current Condition & Replacement Cost



Road Condition Level of Service Trends



■ Very Good
 ■ Good
 ■ Fair
 ■ Poor
 ■ Very Poor
 - - - Average Spending (\$3.2M/Year)

**Actual Capital Spending
(5 Year Average)**

\$3.28M

**Actual Reinvestment Ratio
(5 Year Average)**

0.84%



Bridge Infrastructure Report Card

INFRASTRUCTURE PURPOSE

The Town's bridges provide a safe passage to vehicles, cyclists, and pedestrians. Some also serve as local landmarks in Town. Each structure is inspected every two years as mandated by the Province of Ontario.



REPLACEMENT COST:
\$56 Million



AVERAGE NETWORK CONDITION
FAIR



INVENTORY
Vehicle Bridges: 13
Foot Bridges: 36
Major Culverts: 19

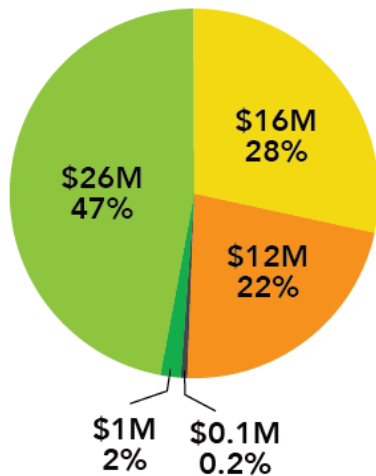


Average Expected Life: 50 Years

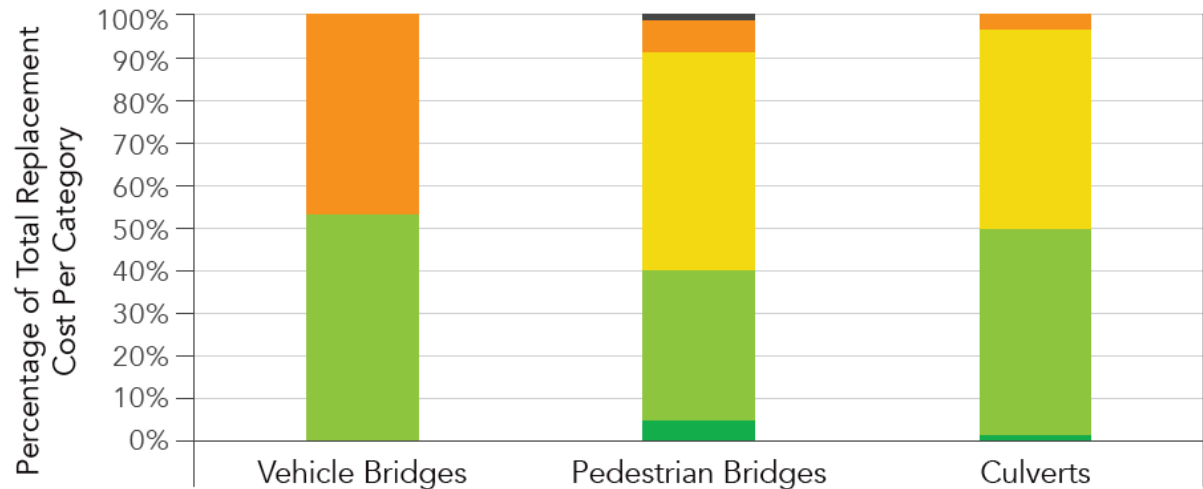
■ Current Average Age
■ Average Remaining Life



Current Condition & Replacement Cost



Current Condition Breakdown



■ Very Good
 ■ Good
 ■ Fair
 ■ Poor
 ■ Very Poor
 ■ Unknown

**Actual Capital Spending
(5 Year Average)**

\$0.37M

**Actual Reinvestment Ratio
(5 Year Average)**

0.66%



Stormwater System Infrastructure Report Card

INFRASTRUCTURE PURPOSE

The Town provides stormwater collection, treatment, and infiltration using a combination of sewer, drainage features, and facilities. Stormwater is treated for both quality and quantity to ensure adequate drainage, safe passage, and environmental stewardship.



REPLACEMENT COST:
\$598 Million



AVERAGE NETWORK CONDITION

GOOD



INVENTORY

Gravity Sewers: 284 km
Manholes & Catchbasins: 10,851
Oil Grit Separators: 37
Stormwater Ponds and LID's (Low Impact Development): 65



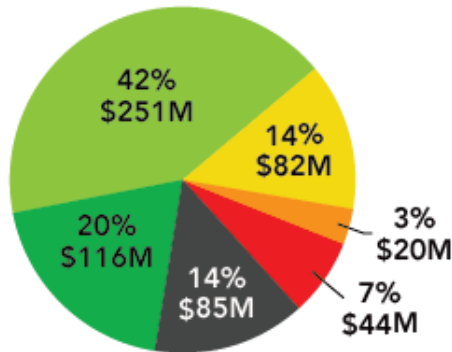
Average Expected Life: 72 Years

■ Current Average Age
■ Average Remaining Life

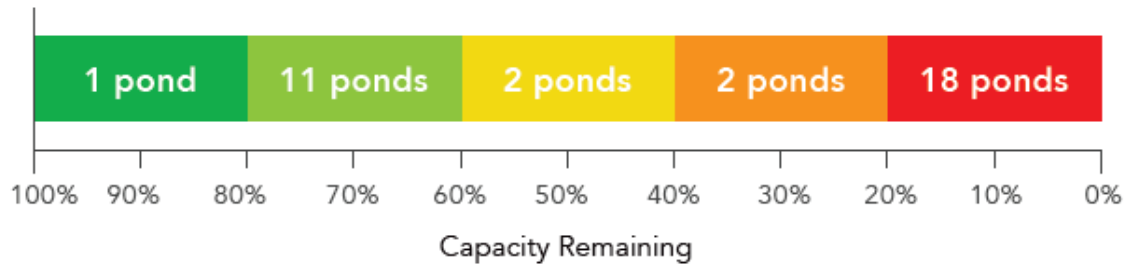


Stormwater System Infrastructure Report Card

Current Condition Breakdown and Total Replacement Cost by Category



Stormwater Ponds with Rehabilitation Needs



This graph shows the stormwater wet ponds in the Town of Newmarket, and their remaining capacity to hold sediment. Over time, wet ponds fill up with sediment and require dredging to retain their functionality.

■ Very Good
 ■ Good
 ■ Fair
 ■ Poor
 ■ Very Poor
 ■ Unknown

Actual Capital Spending (5 Year Average)	\$0.52M
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Actual Reinvestment Ratio (5 Year Average)	0.09%
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Water Distribution Infrastructure Report Card

INFRASTRUCTURE PURPOSE

The Town provides drinking water distribution to service residents, business and customers with water purchased from York Region. The distribution system is maintained by the Town for high water quality and reliable supply.



REPLACEMENT COST:
\$353 Million



AVERAGE NETWORK CONDITION
GOOD



INVENTORY
Watermains: 303 km
Valves: 3,968
Hydrants: 2,277



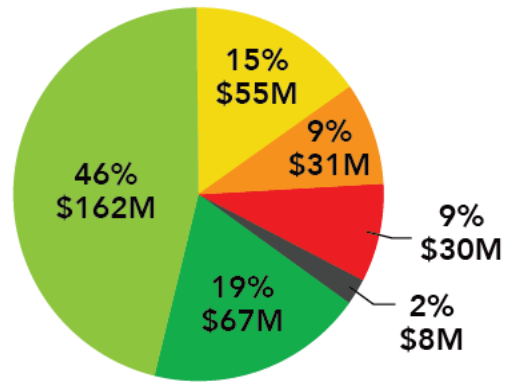
Average Expected Life: 73 Years

■ Current Average Age
■ Average Remaining Life



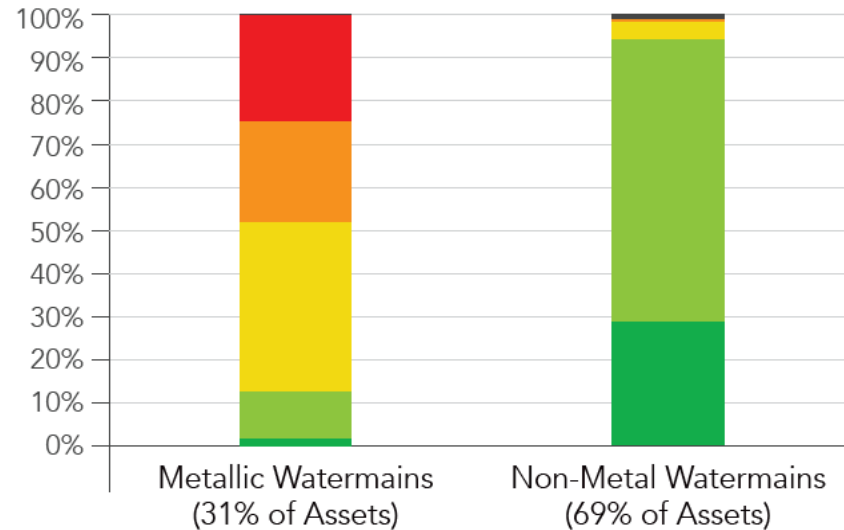
Water Distribution Infrastructure Report Card

Current Condition & Replacement Cost



■ Unknown
 ■ Very Good
 ■ Good
 ■ Fair
 ■ Poor
 ■ Very Poor

Watermain Condition by Material



Actual Capital Spending (5 Year Average) **\$1.65M**

Actual Reinvestment Ratio (5 Year Average) **0.47%**



Wastewater Collection Infrastructure Report Card

INFRASTRUCTURE PURPOSE

The Town collects wastewater from residents, sending it to York Region trunk sewers and facilities. The Town maintains the wastewater system to ensure it has the capacity to support the community's wastewater needs.



REPLACEMENT COST:
\$348 Million



AVERAGE NETWORK CONDITION
GOOD



INVENTORY
Gravity Sewers: 262 km
Forcemains & Siphons: 10 assets
Pump Stations: 6 assets
Manholes: 4,284 assets



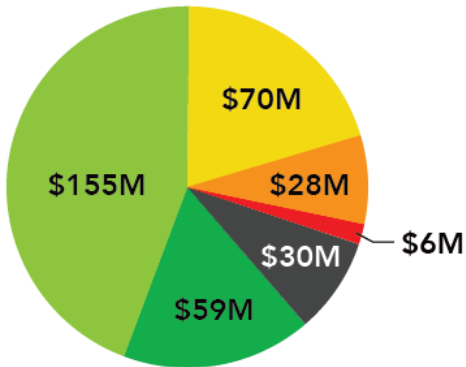
Average Expected Life: 79 Years

■ Current Average Age
■ Average Remaining Life

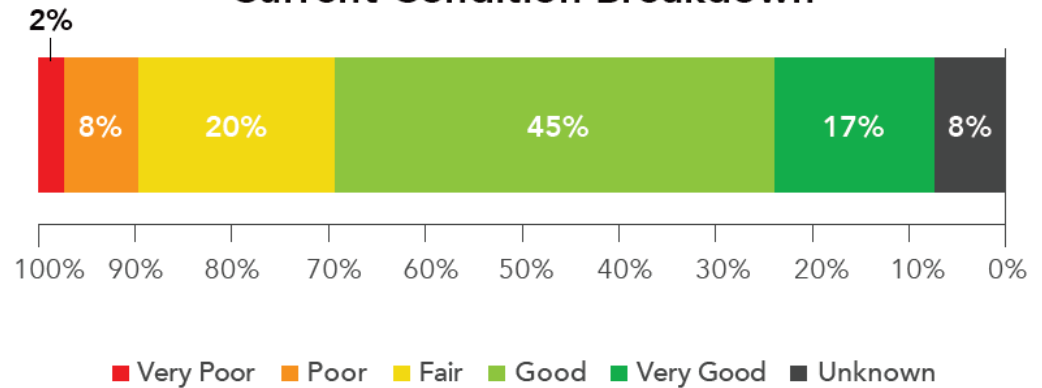


Wastewater Collection Infrastructure Report Card

Current Condition & Replacement Cost



Current Condition Breakdown



**Actual Capital Spending
(5 Year Average)** **\$0.62M**

**Actual Reinvestment Ratio
(5 Year Average)** **0.18%**



Data Confidence

Confidence Rating

- A** Verified Condition and Analytical Techniques
- B** Observed Condition
- C** Age Only
- D** Historical Knowledge
- F** Assumptions



Roads - B



Bridges - B



Water - C



Wastewater - C



Stormwater - B





TOWN OF NEWMARKET INFRASTRUCTURE REPORT CARD

Reporting on the state of our Infrastructure



Date: October 2020



Infrastructure Report Card
found on the Town's
Asset Management
Webpage



Questions / More Information



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