Asset Management Analysis and Planning

May 28th, 2024



Legislated Framework Ontario Reg 588/17

July 2019 Strategic AM Policy

Required to articulate specific principles and commitments that will guide decisions around when, why and how money is spent on assets. The City of Niagara Falls has an AM Policy. Required to document current LOS and costs to sustain current LOS provided by **the water**, **wastewater**, **stormwater**, **road and bridge assets**

July 2022

AM Plan

Current LOS

Core Assets

July 2024 AM Plan Current LOS All Assets

Required to document current LOS and costs to sustain current LOS for non-core assets, including library assets and infrastructure. July 2025 AM Plan Proposed LOS All Assets

Required to document proposed LOS, costs to achieve proposed LOS, and the financial strategy to fund these expenditures

Levels of Service (LOS)

Corporate Priorities

STRATEGIC PLAN 2023-2027

Financial Sustainability

- Balanced budget
- Responsible
 Spending

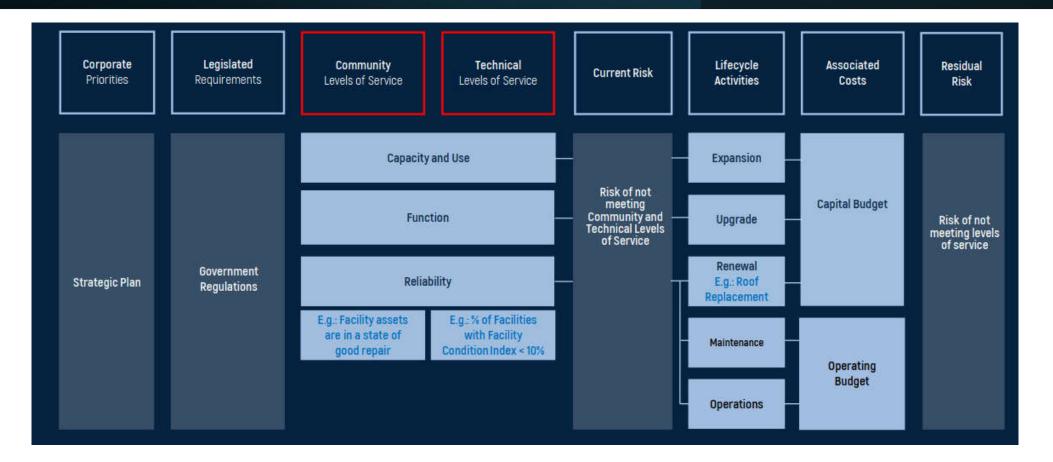
Environmental Sustainability

 Infrastructure to support sustainable development & protect the environment

Economic Diversity and Growth

 Infrastructure to support growth (capacity)

ASSET MANAGEMENT ANALYSIS & PLANNING



State of the Infrastructure





ASSET PORTFOLIO

ESTIMATED REPLACEMENT VALUE \$2.7 BILLION

RATE-BASED

Water

Sanitary

TAX-BASED							
Roads	Bridges & Culverts						
Stormwater	Transportation						
Parks & Trails	Natural Assets						
Municipal Administration	Culture						
Cemeteries	Fire Services						
Recreation							

THIRD PARTY (tax)					
Niagara Falls Libraries					
Niagara Falls District Airport					

Niagara Falls Convention Centre

Corporate Function embedded in service delivery areas. E.g. IT, Facilities, Fleet

Levels of Service

Customer Levels of Service - establishes the levels of service the customer is receiving **Example:** As a resident I want all bridges in the City to be in fair or better condition

Technical Levels of Service measures the adequacy of assets to provide customer levels of service

Example: Average network bridge condition inspection value is greater than 60 (Fair or Better)

2025

- The City must establish its Levels of Service performance targets in consultation with stakeholders and,
- Develop a lifecycle funding strategy to determine the level of resources (funding) required to achieve and maintain LOS performance targets

Risk Exposure in Year 2024\$, millions							Risk Exposure Ratings		
an	Certain	\$1.68	\$17.51	\$4.38	\$34.61	\$8.00	Very High	\$45.3	8.7%
Likelihood of Failure	Likely	\$0.42	\$14.12	\$2.72	\$13.55	\$2.72	High	\$48.2	9.2%
	Possible	\$0.87	\$35.97	\$4.74	\$23.04	\$4.50	Moderate	\$137.2	26.3%
	Unlikely	\$6.18	\$113.10	\$11.01	\$37.83	\$6.41	Low	\$187.8	36.0%
	Rare	\$3.60	\$84.42	\$30.24	\$43.14	\$7.95	Very Low	\$94.2	18.1%
		Insignificant	Minor	Moderate	Major	Catastrophic	Unknown	\$9.1	1.7%
Consequence of Failure						TOTAL	\$521.8	100.0%	

\$45.3 million or 8.7% of the City's non-core assets are in the Very High-risk exposure category related to provision of reliable services.

The City mitigates its exposure to risk through the planned lifecycle strategies, such as renewal and maintenance. (E.g. Sewer lining)

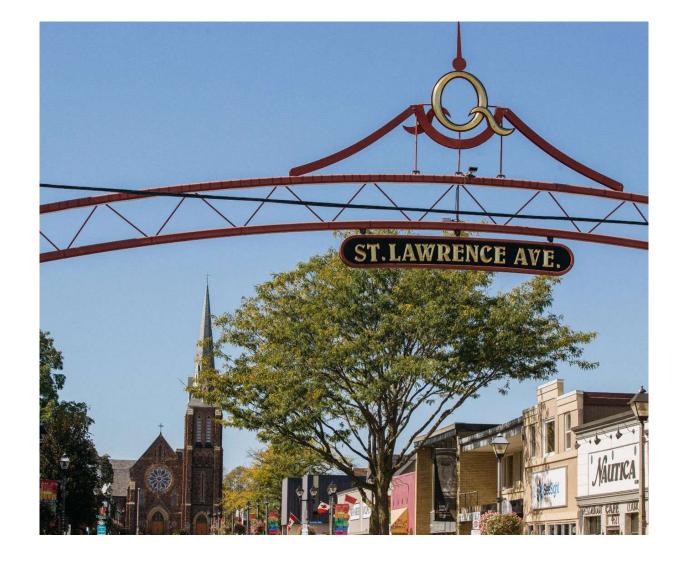
Examples: Streetlight Poles & Electrical Distribution (condition unknown, age-based), facilities, vehicles, & equipment

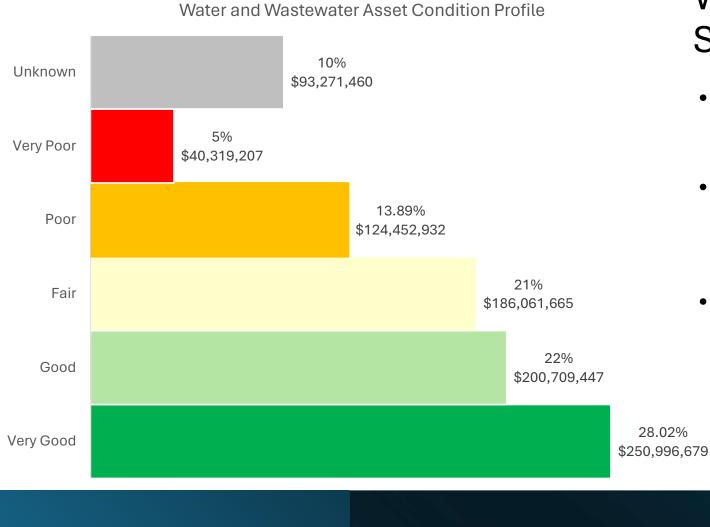
Consequence of Failure x Likelihood of Failure = TOTAL RISK

Risk Analysis

Results

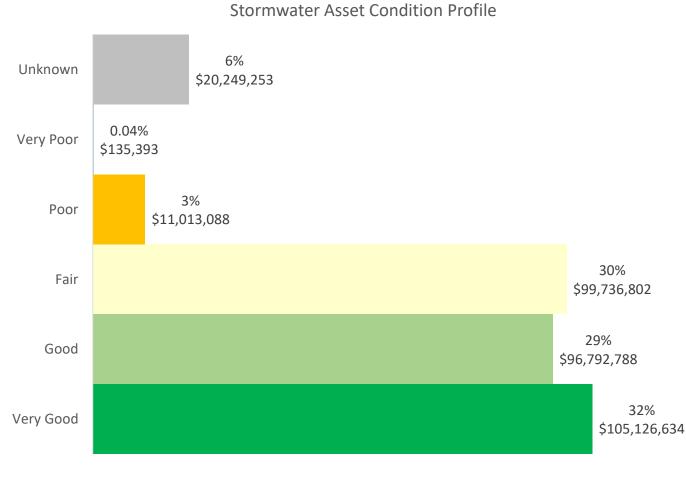
Service Delivery Area Results





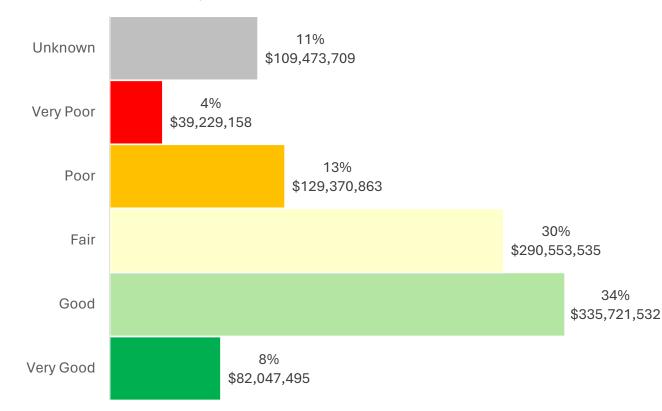
Water & Wastewater Services

- 71% of the assets are in fair or better condition
- 5% of the assets are considered to be in very poor condition
- Annual Capital Requirement \$15.7 Million



Stormwater Services

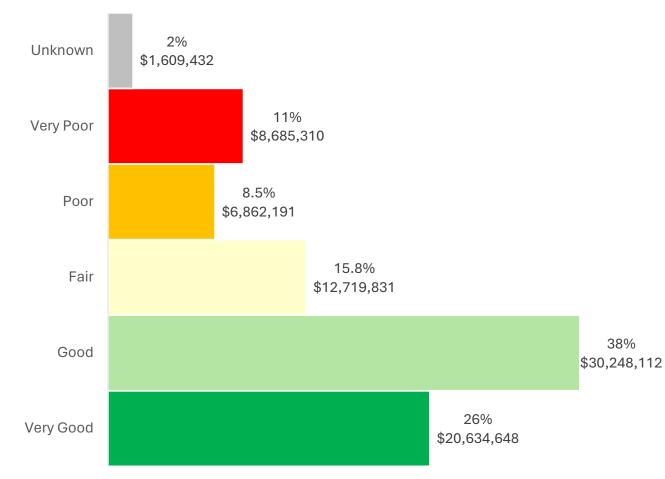
- 91% of the assets are in fair or better condition
- 0.04% of the assets are considered to be in very poor condition
- Annual Capital Requirement \$4.6Million



Transportation Services Asset Condition Profile

Transportation (Roads, Bridges, Traffic, Parking, ancillary assets)

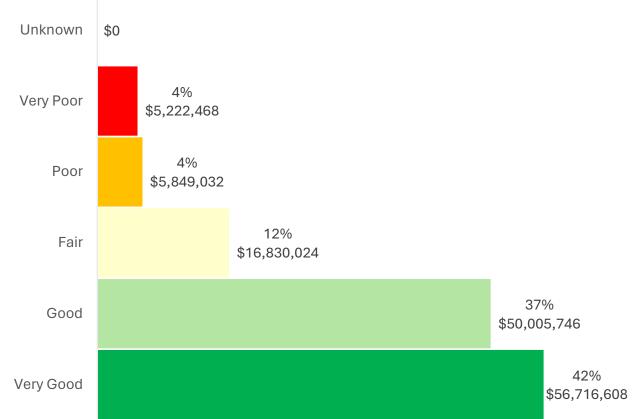
- 71.8% of the assets are in fair or better condition
- 4% of the assets are considered to be in very poor condition
- Annual Capital Requirement \$24.3Million



Parks & Trails Asset Condition Profile

Parks & Trails

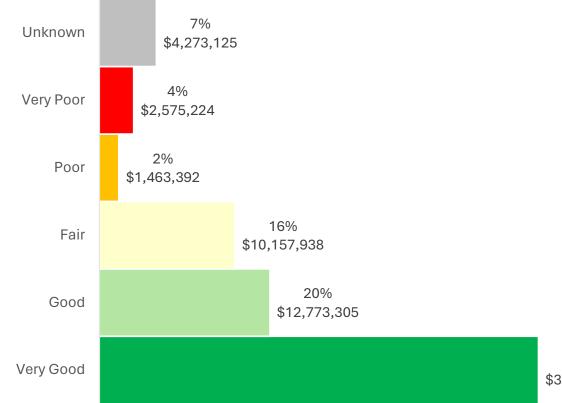
- 79% of the assets are in fair or better condition
- 11% of the assets are considered to be in very poor condition
- Annual Capital Requirement \$3.3Million



Recreation Services Asset Condition Profile

Recreation Services

- 91.8% of the assets are in fair or better condition
- 3.9% of the assets are considered to be in very poor condition
- Annual Capital Requirement
 \$2.0Million

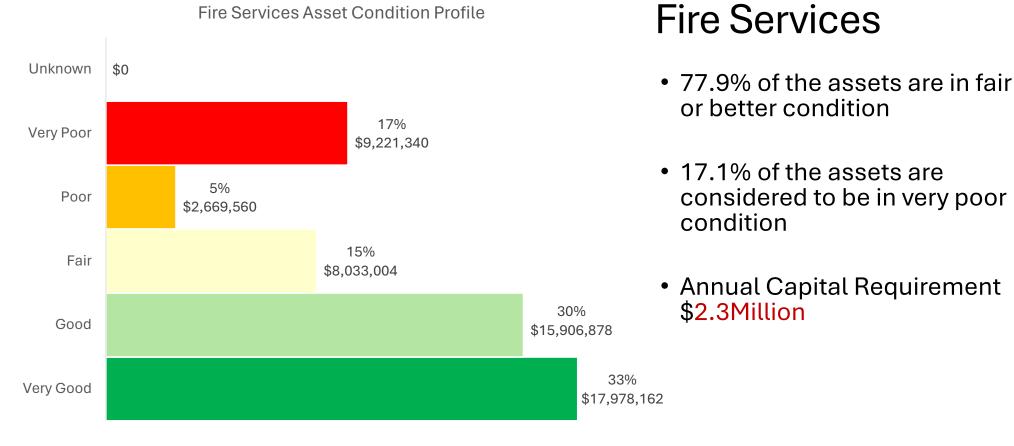


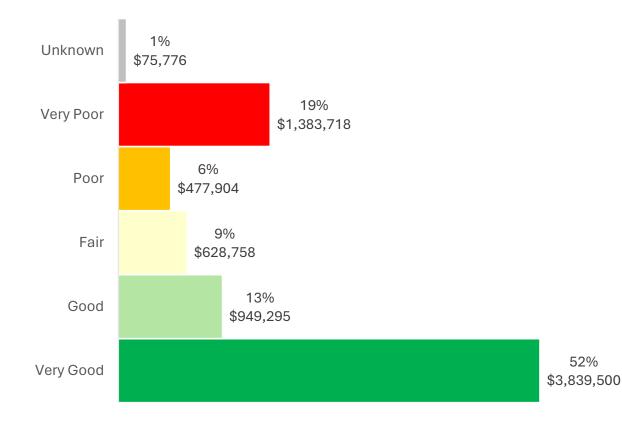
Municipal Administration Asset Condition Profile

Municipal Administration

- 87.0% of the assets are in fair or better condition
- 4.0% of the assets are considered to be in very poor condition
- Annual Capital Requirement
 \$1.9Million

51% \$32,873,225

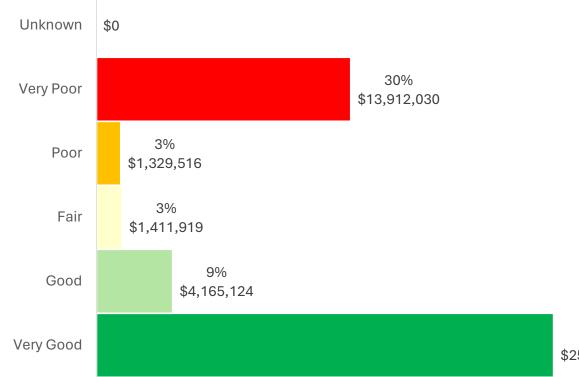




Cemetery Services Asset Condition Profile

Cemetery Services

- 73.7% of the assets are in fair or better condition
- 18.8% of the assets are considered to be in very poor condition
- Annual Capital Requirement
 \$0.4Million

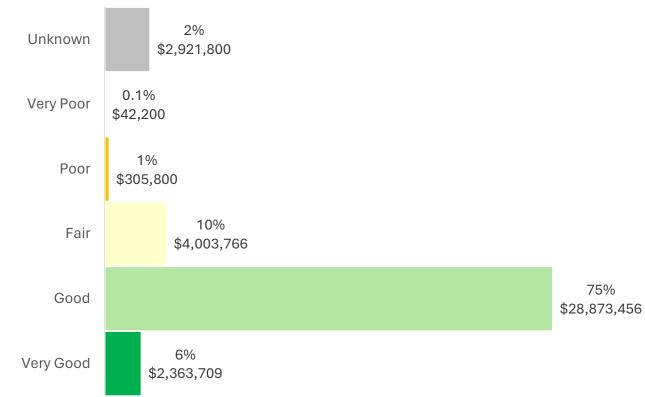


Cultural Services Asset Condition Profile

Culture Services

- 66.7% of the assets are in fair or better condition
- 30.4% of the assets are considered to be in very poor condition
- Annual Capital Requirement
 \$0.8Million

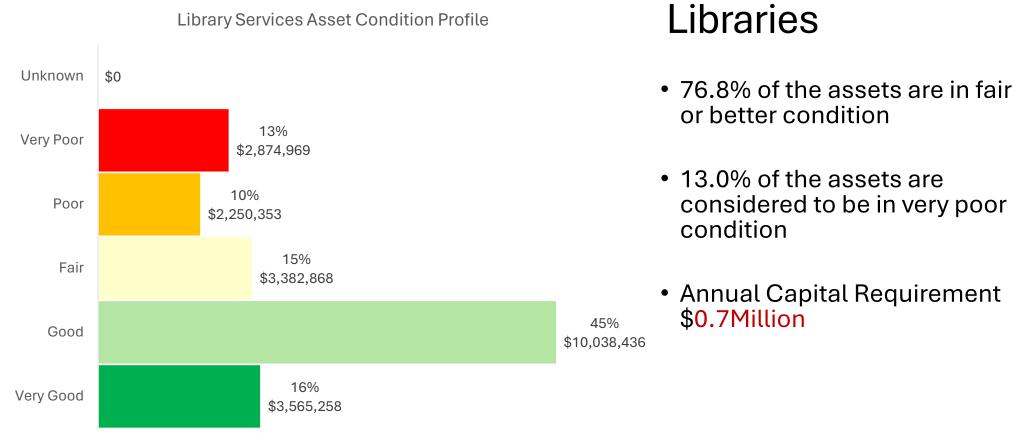
55% \$25,007,838

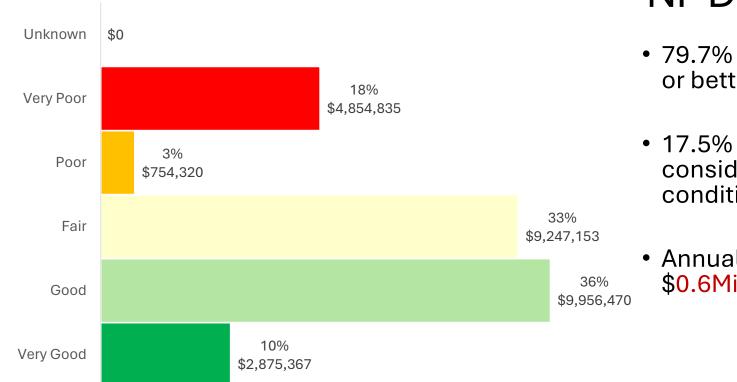


Natural Assets Asset Condition Profile

Natural Assets

- 91.5% of the assets are in fair or better condition
- 0.1% of the assets are considered to be in very poor condition
- Annual Capital Requirement
 \$0.1Million

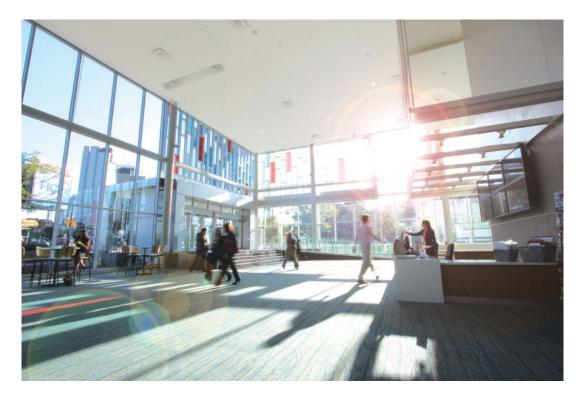




Niagara District Airport Asset Condition Profile

NF District Airport

- 79.7% of the assets are in fair or better condition
- 17.5% of the assets are considered to be in very poor condition
- Annual Capital Requirement \$0.6Million

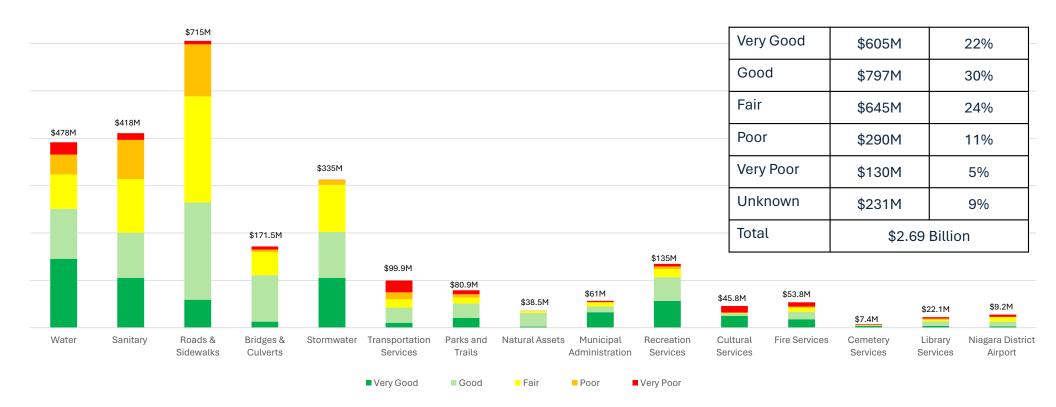


NF Convention Centre

 Annual Capital Requirement \$0.7Million

CONDITION PROFILE SUMMARY – All Assets

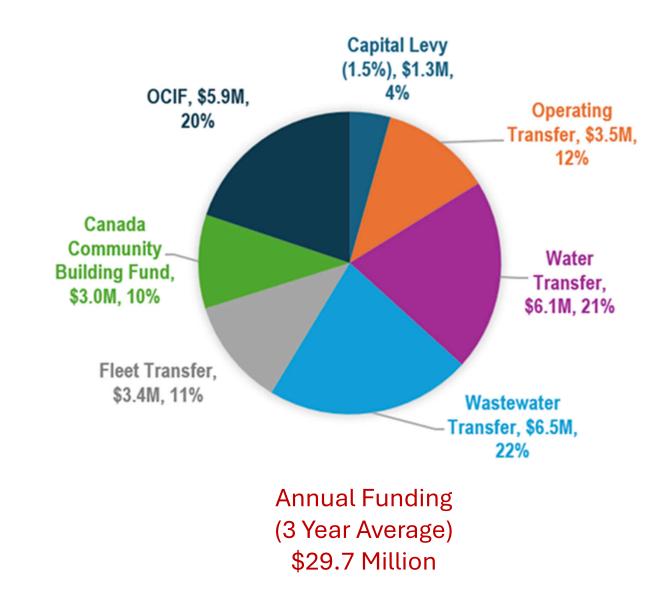
Condition Distribution of the City's Asset Portfolio

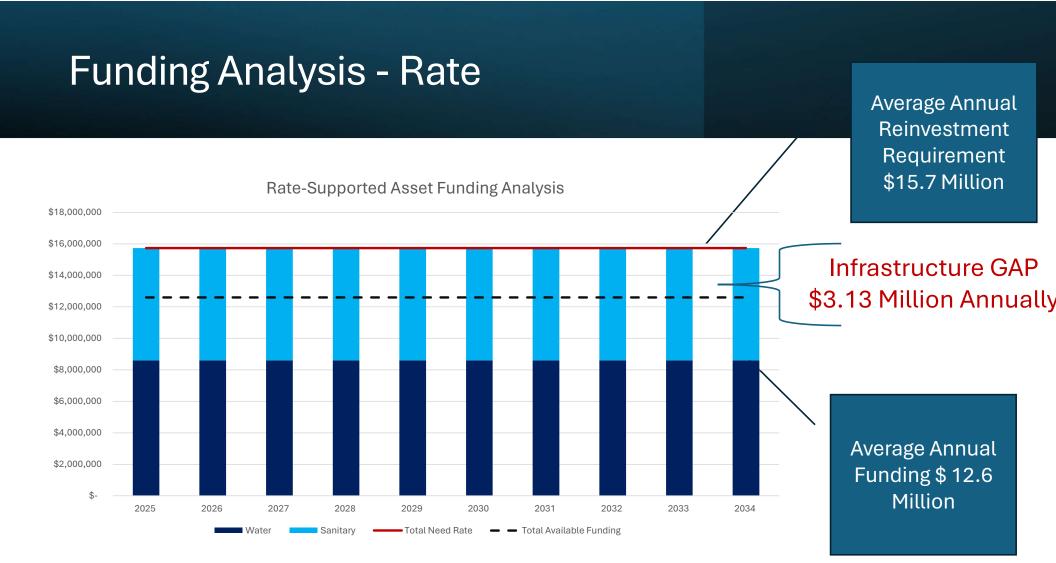


Financial Analysis

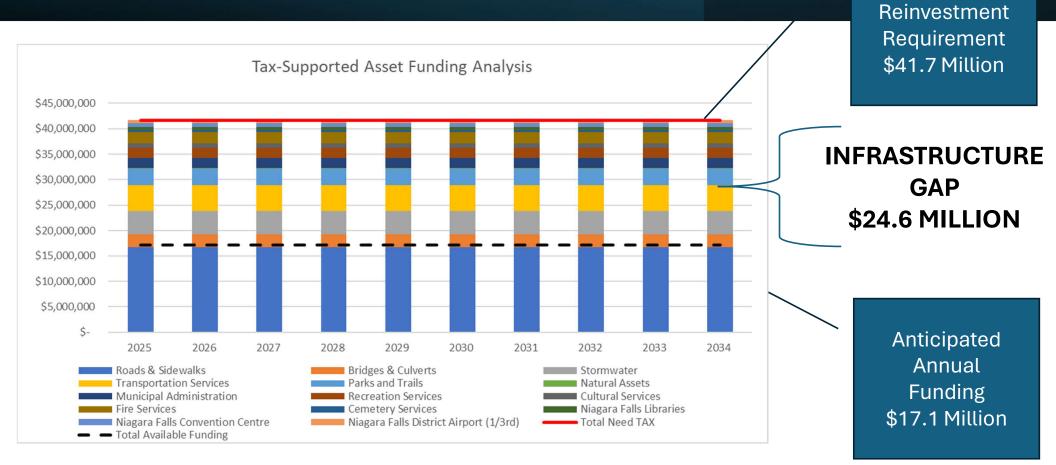


FUNDING SUMMARY

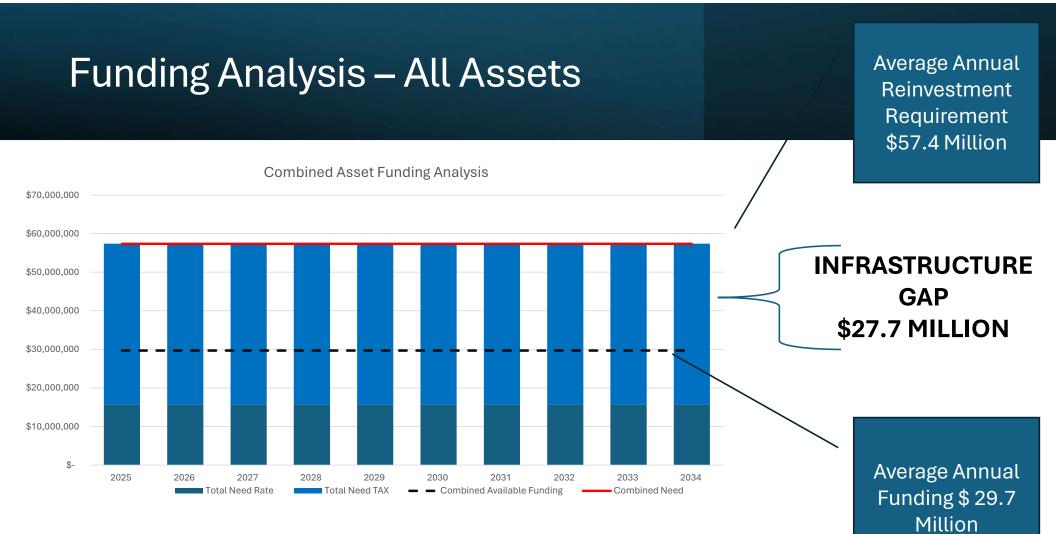




Funding Tax



Average Annual



Data Driven Risk-Based Planning

Asset Planning Decisions must:

- ✓ Be data-driven
- ✓ Be based on full lifecycle activities including capital, operations, and maintenance
- ✓ Work to achieve an acceptable level of risk to the organization
- Optimize long-term funding strategies

Best practices / principles:

- Invest in data
- "Worst is first" does not always work as it doesn't consider risk or LOS
- Maintain assets in a state of good repair to avoid increasing the infrastructure gap
- Incorporate customer and technical LOS into planning

Recommendations / Conclusions

- There is a significant Funding Gap (**\$27.7M annually** or **\$277/person annually**) requiring attention and a further discussion
- Work is continuing on **Levels of Service** and **10-Yr Capital Forecasting**
- The City may need to Recalibrate our Levels of Service to balance program areas are currently "overfunded" versus those that are "underfunded"
- **Grant Funding** may be in jeopardy if we do not have a strategy to address our financial challenges.
- **Development Charges** that are not funded will exacerbate our Funding Gap.
- Council to consider **Strategies** to close the gap through the Budget Process

THANK YOU