



The Town of Fort Frances

2018 Asset Management Plan

Agenda

About PSD	Research, Consulting, Software
Asset Management Program Overview	An overview of the progress acheived through Fort Frances' Asset Management Program Development
Asset Management Plan	A high-level overview of the Town's State of Infrastructure and Financial Capacity
Questions	Q & A

About Us

ENTERPRISE ASSET MANAGEMENT & BUDGETING



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RESEARCH

- Public Sector Digest
- Applied Research
- Policy Analysis & Grant Services

CONSULTING

- Asset Management Training
- Asset Management Plan & Program Development
- Climate Change Adaptation Plans

SOFTWARE

- Enterprise Asset Management (EAM)
- CMMS & GIS
- Enterprise Budget Management

Fort Frances Asset Management Program Development

- | | |
|--|------------------------------|
| 1 State of Maturity Report | 5 Lifecycle Activity Models |
| 2 Asset Management Policy | 6 Financial Strategies |
| 3 Condition Assessment Protocols
& Data Capture Tools | 7 Level of Service Framework |
| 4 Risk & Criticality Models | 8 Asset Management Plan |



Framework

- Strategic Asset Management Policy
 - Leadership
 - Guidance
 - Roles
 - Responsibilities
- First requirement of O. Reg. 588/17 has been met

THE TOWN OF FORT FRANCES

Section: Operations and Facilities

Policy: Strategic Asset Management

Creation Date:	May 2017
Revised Date:	June 2019
Resolution Number:	In Consent
Supersedes Resolution Number:	N/A
Policy Number:	4.28

Purpose:

The purpose of this policy is to provide leadership and guidance for the Town of Fort Frances to ensure the strategic development of its infrastructure asset management program, including roles and responsibilities. The policy will facilitate logical and informed decision-making for the management of the municipal infrastructure to support the delivery of sustainable community services.

Background:

A comprehensive approach to infrastructure asset management will ensure levels of service (LOS) are being delivered in the most efficient and effective manner and that due regard and process are applied to the long-term management and stewardship of the Town's capital infrastructure assets. This document will provide a high-level statement of the organization's approach, principles and expectations related to asset management and will provide a focus for the creation, implementation, sustainment and continuous improvement of the Town's asset management program.

Asset Management Practices Audit

- State of Maturity Report
 - Identifies Gaps
 - Internal Capacity
 - Data
 - Processes
 - Communication
 - Provides Direction
 - Building the team
 - Fine tuning asset inventory data
 - Performance analysis initiatives
 - Risk prioritization techniques
 - Infrastructure life cycle management strategies
 - Levels of service monitoring
 - Program Continuity

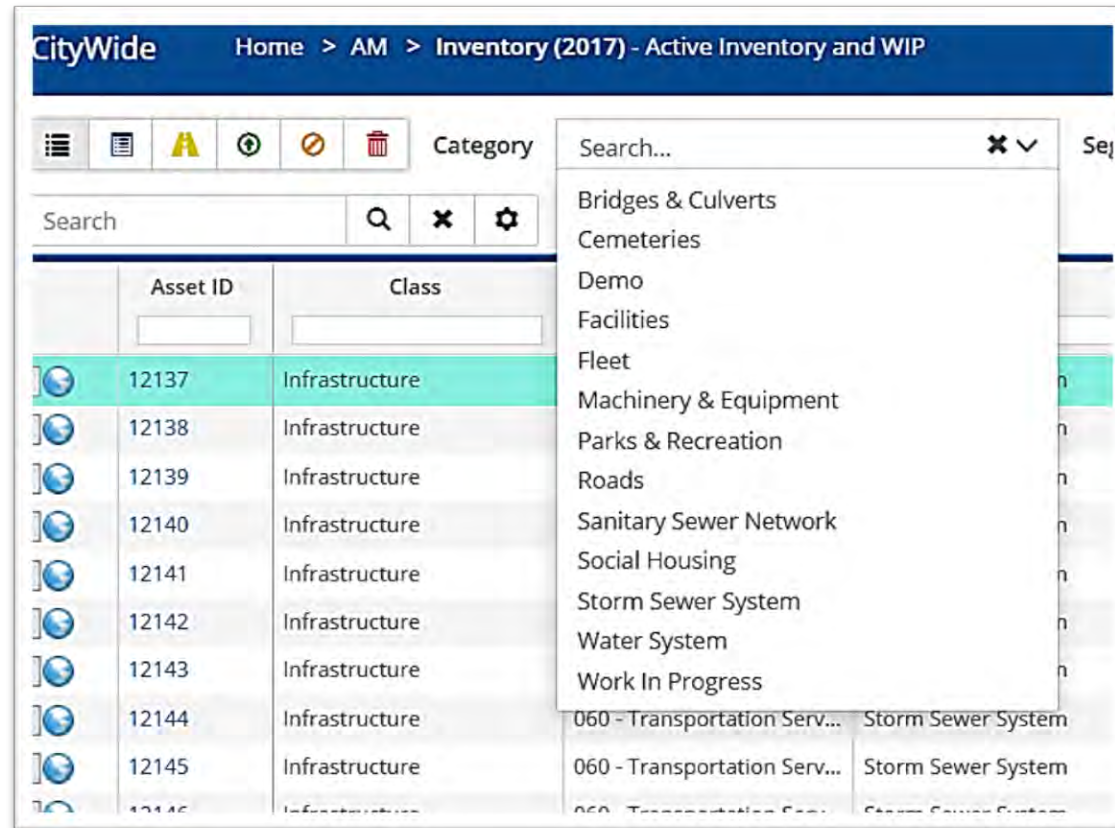
THE CURRENT STATE OF MATURITY REPORT
FOR THE TOWN OF FORT FRANCES

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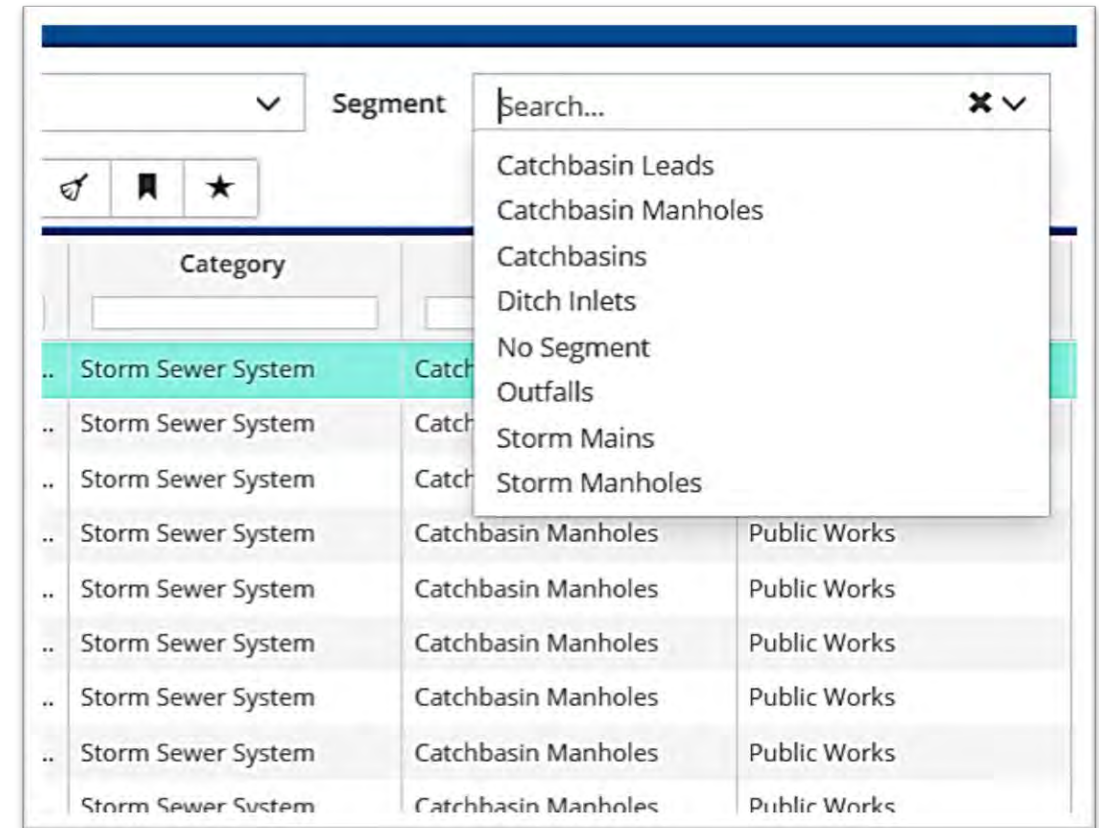
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Database Structure

- Categorization



- Proper Segmentation



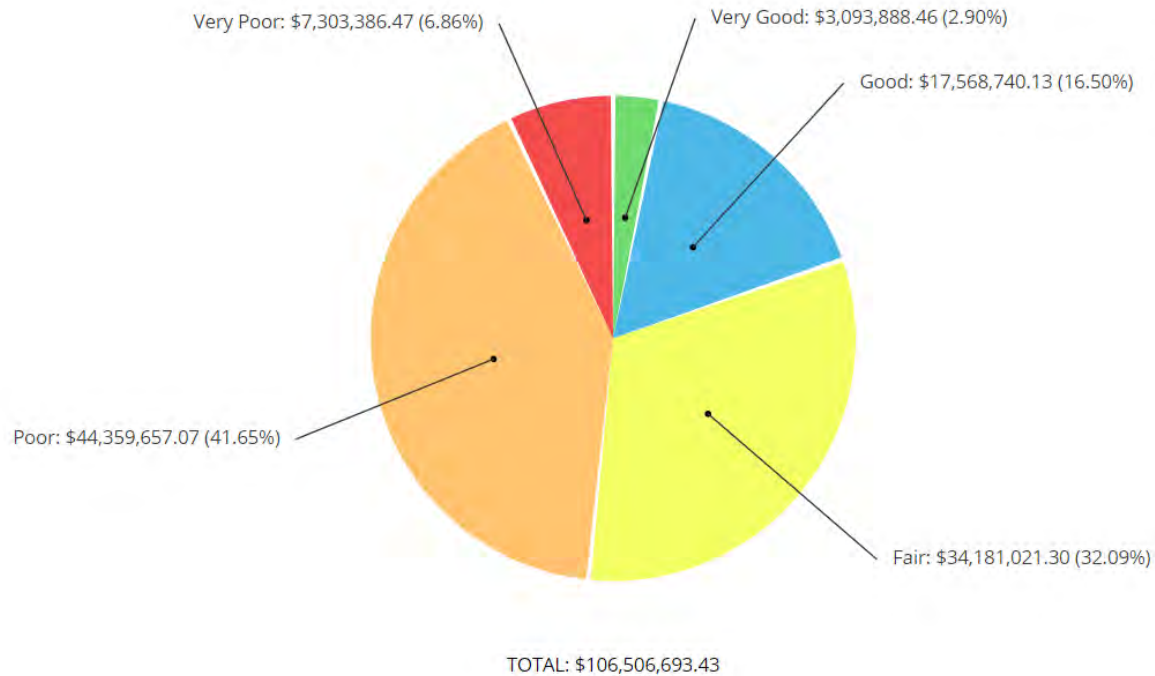
Measuring Asset Performance

- Condition Assessment Program

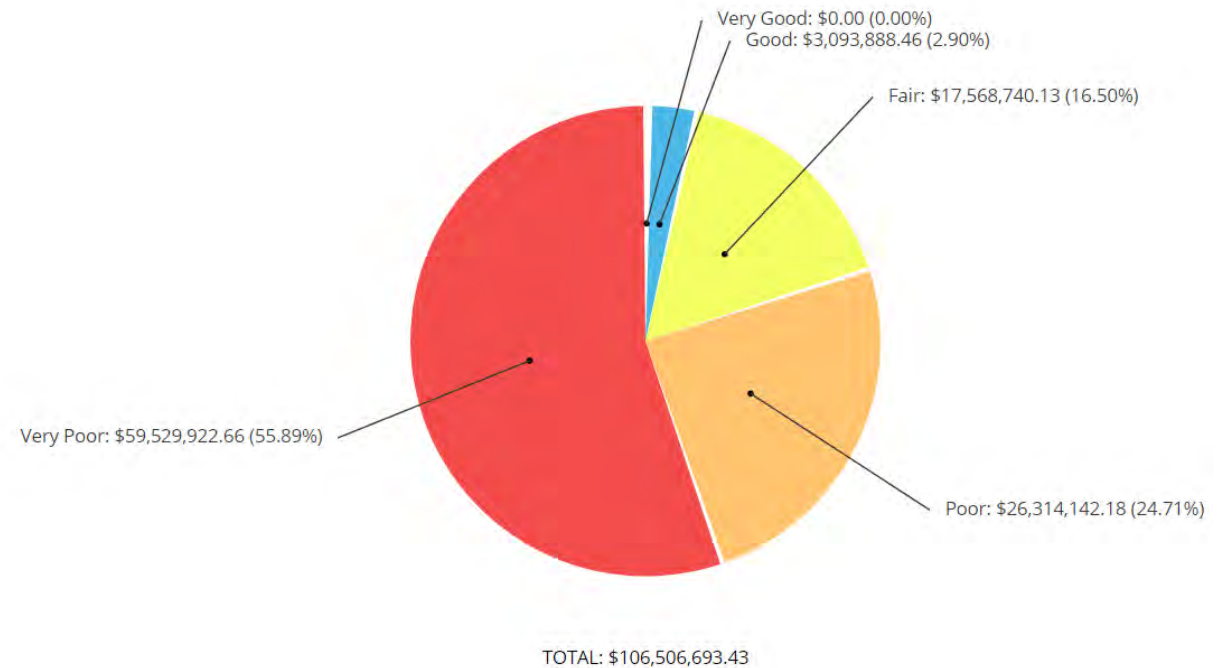
	Avg. In-Service Year	Avg. Asset Age	Avg. Service Life Remain...	Avg. Assessed Condition	Avg. Age-Based Condition
Bridges & Culverts					
Bridges	1967	52 Years 7 Months	(2 Years 7 Months)	59.56%	8.28%
Bridges & Culverts Total	1967	52 Years 7 Months	(2 Years 7 Months)	59.56%	8.28%
Roads					
Paved	1981	39 Years 6 Months	(19 Years 6 Months)	49.71%	2.65%
Surface Treatment	1966	53 Years 7 Months	(33 Years 7 Months)	34.74%	1.17%
Unpaved	1909	111 Years 2 Months	(91 Years 2 Months)	34.93%	0%
Roads Total	1975	45 Years	(25 Years)	47.25%	2.34%
Sanitary Sewer Network					
Sanitary Sewer Mains	1964	55 Years 7 Months	1 Year 7 Months	42.6%	28.39%
Sanitary Sewer Network Total	1964	55 Years 7 Months	1 Year 7 Months	42.6%	28.39%
Infrastructure Total	1968	51 Years 5 Months	(8 Years 11 Months)	44.48%	18.06%
Cumulative Total	1968	51 Years 5 Months	(8 Years 11 Months)	44.48%	18.06%

Assessed Performance Projections

- Current Condition (Paved Roads)



- 5 Yr Projected Condition (Paved Roads)

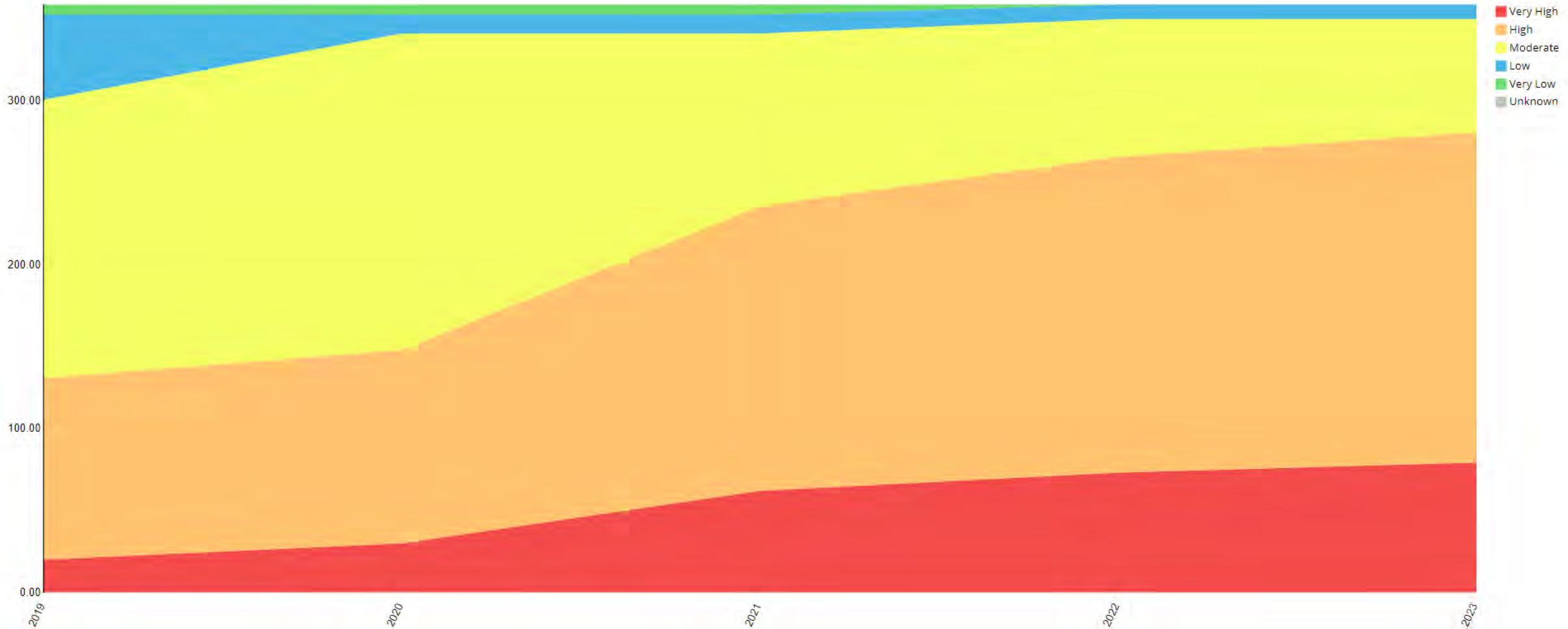


Risk Management

- Current Risk

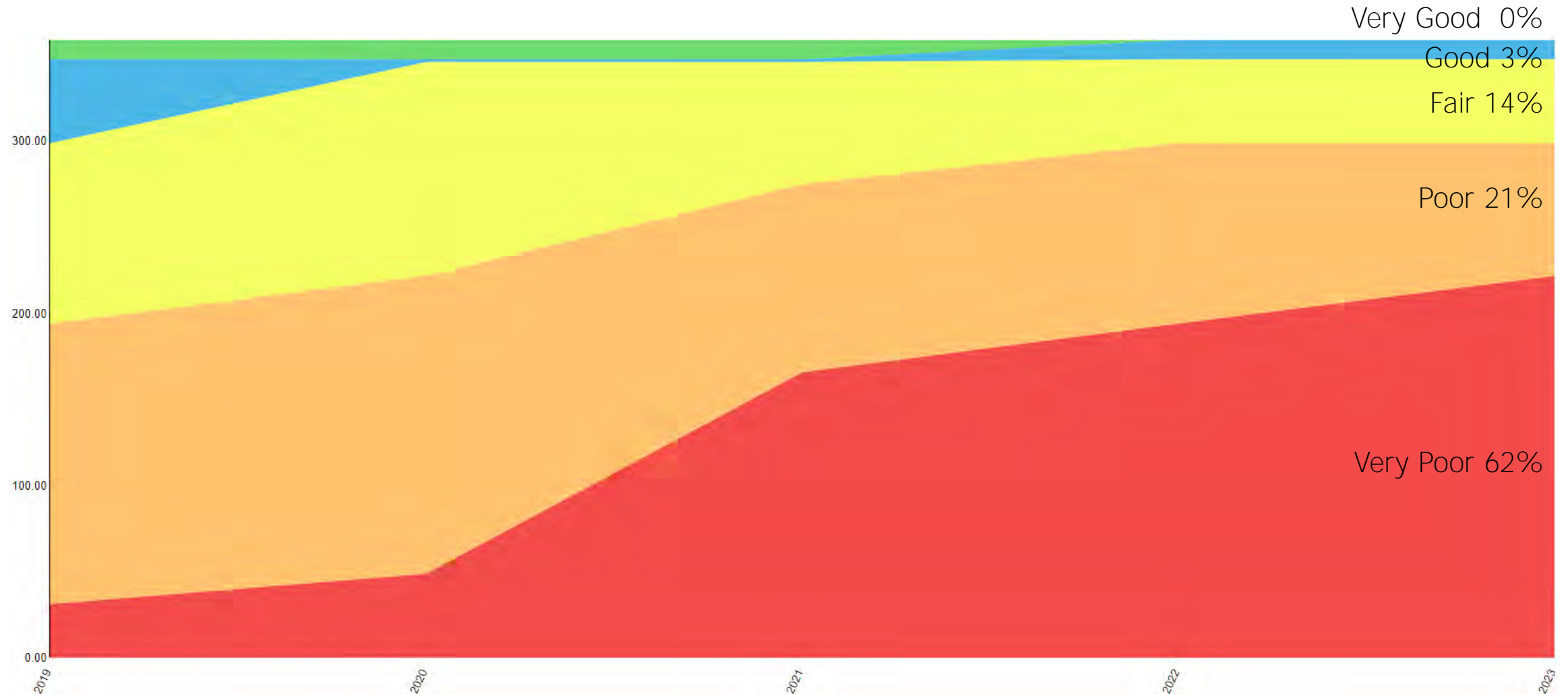
- 5 Yr Projected Risk

PSD - RESEARCH CONSULTING SOFTWARE



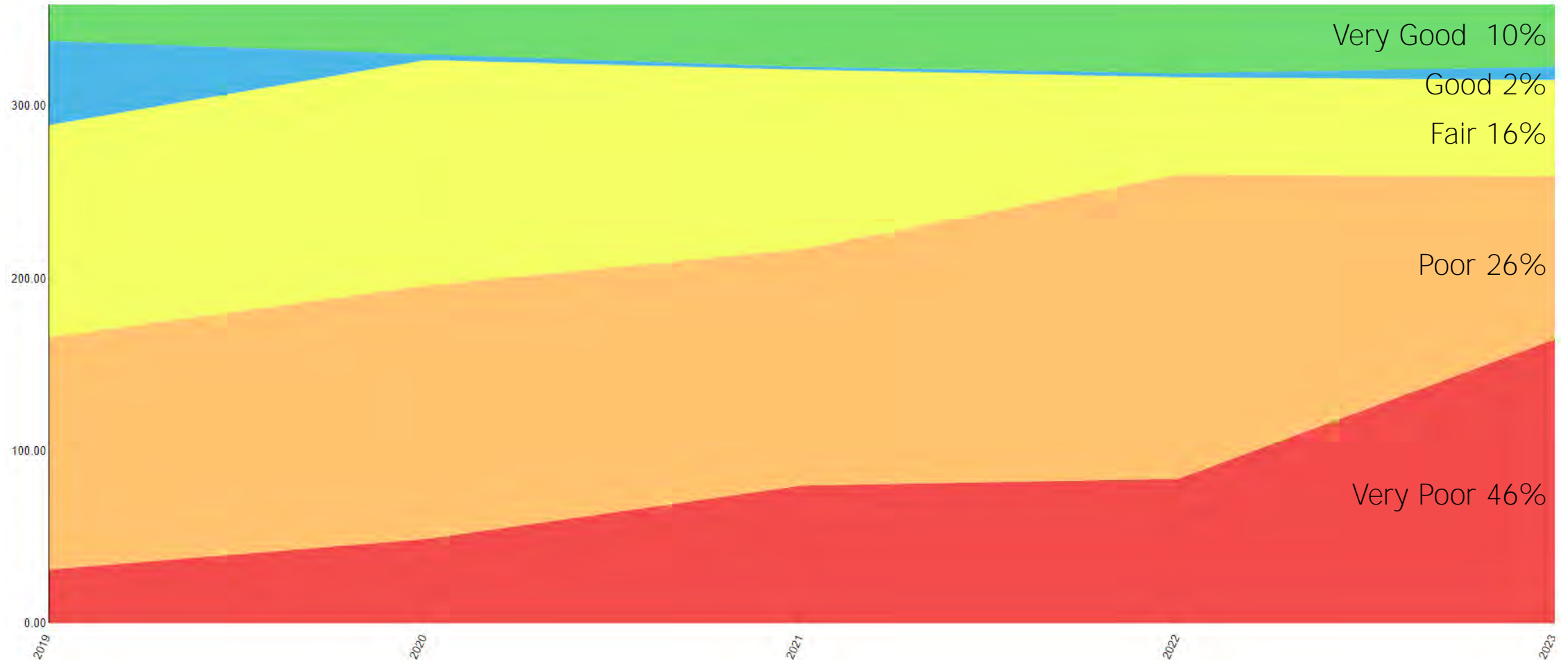
AM Program Development

- Reactive Asset Management 5Yr Projections



AM Program Development

- Proactive Lifecycle Management 5 Yr Projections



AM Program Development

- Levels of Service Tracking

- Core Values

- Assessible & Reliable
- Safe & Regulatory
- Affordable
- Sustainable

- Level of Service Statement

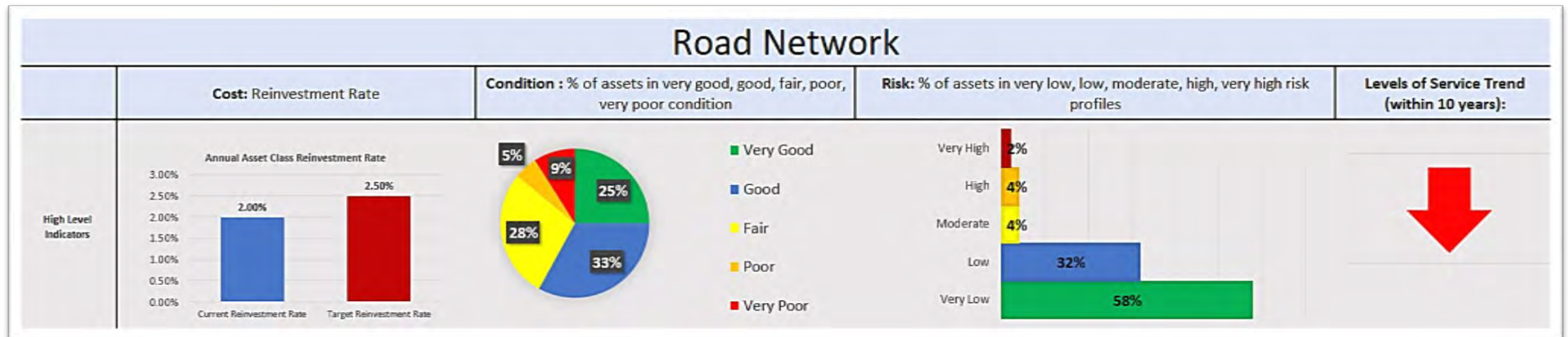
- What do end users receive from infrastructure and public services

- Community Level of Service

- Communication to the public

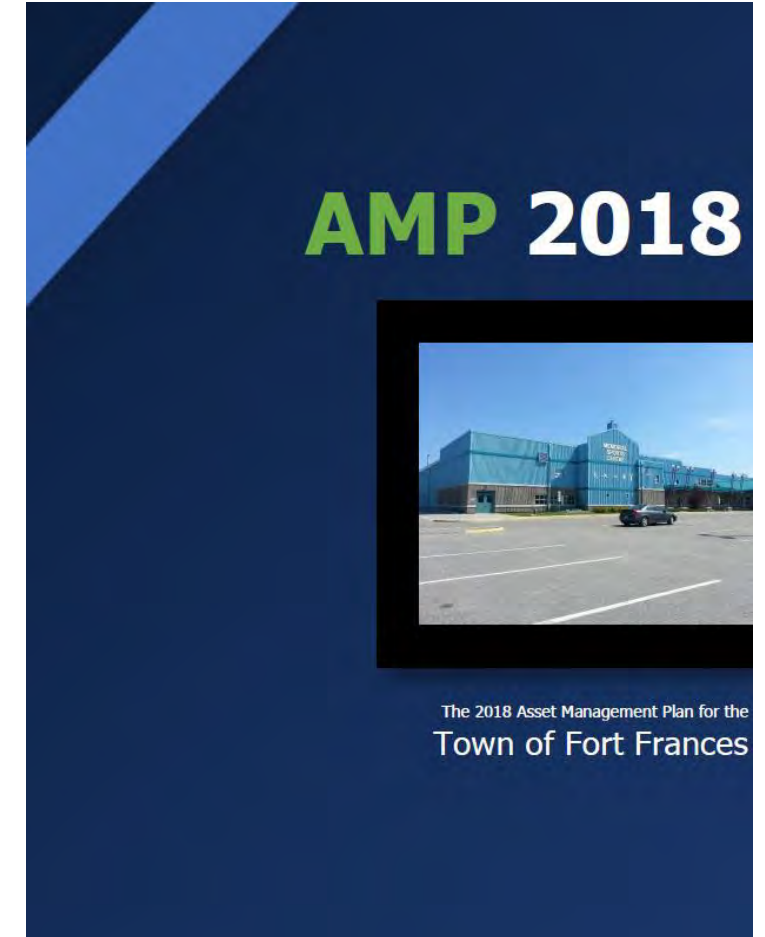
- Technical Level of Service

- Measurement



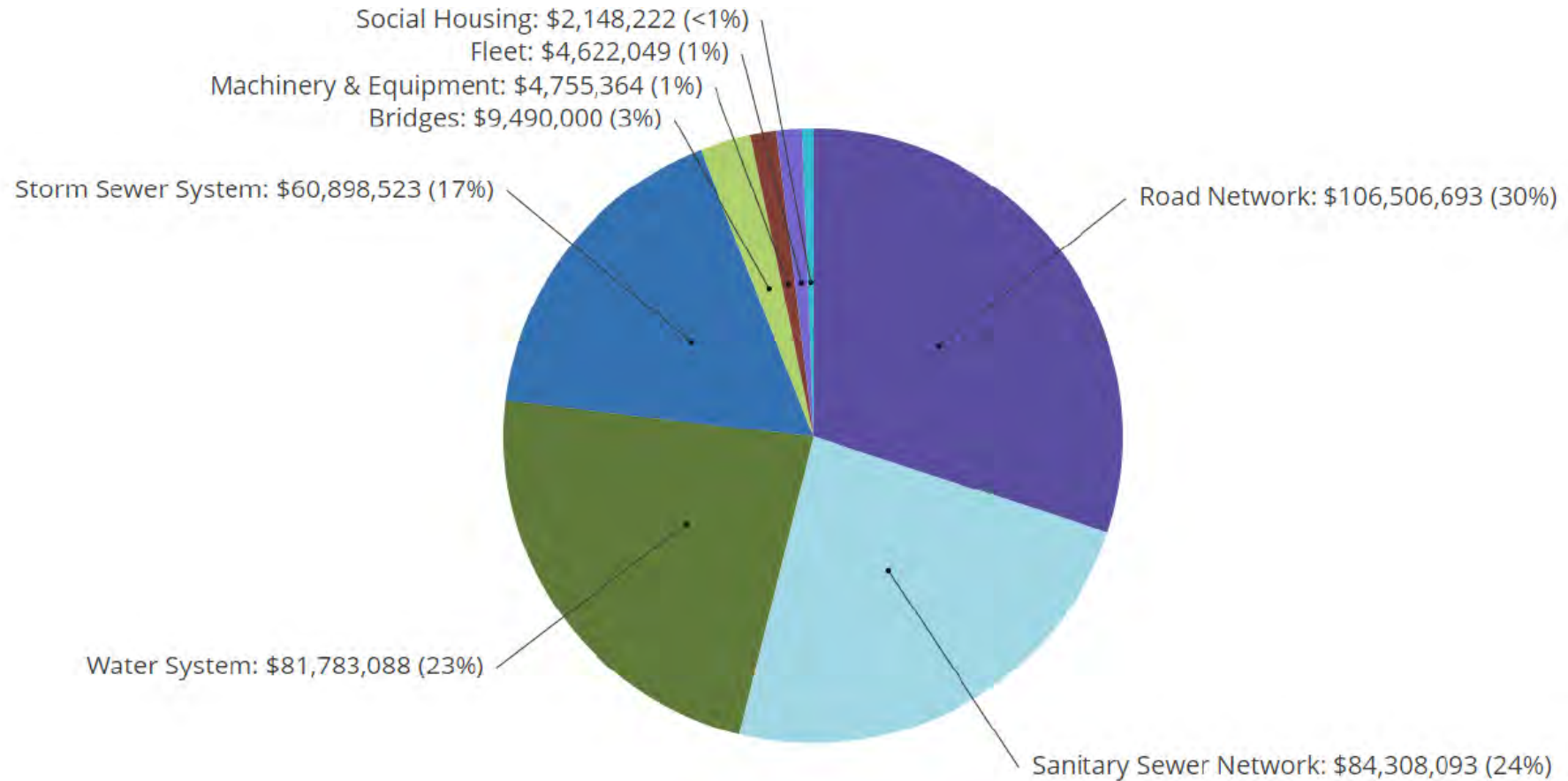
AMP 2018

Outlines the state of existing municipal infrastructure and the **Town's financial capacity to meet** sustainability requirements.



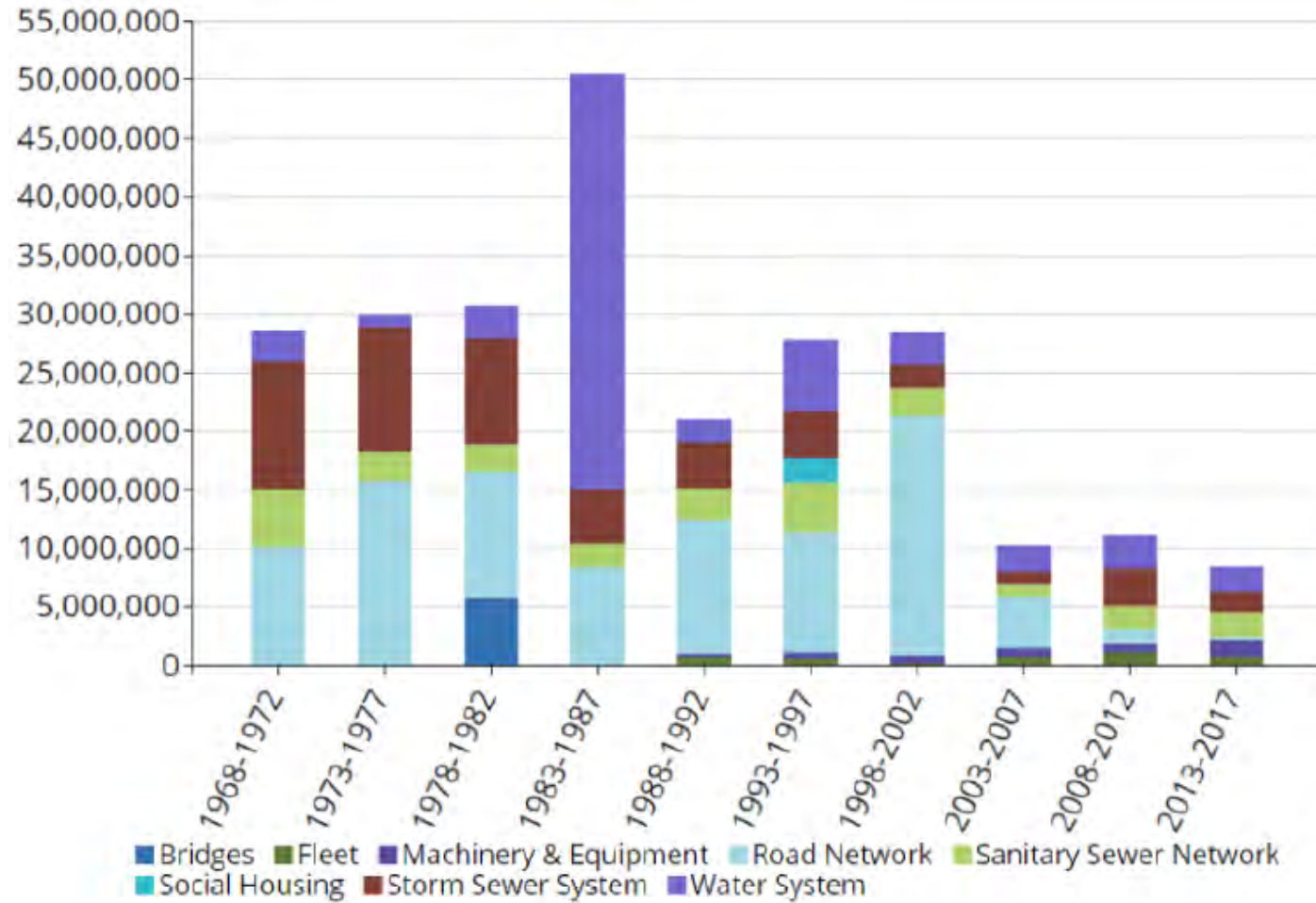
Asset Replacement Cost

Total Asset Replacement Cost: \$355 million



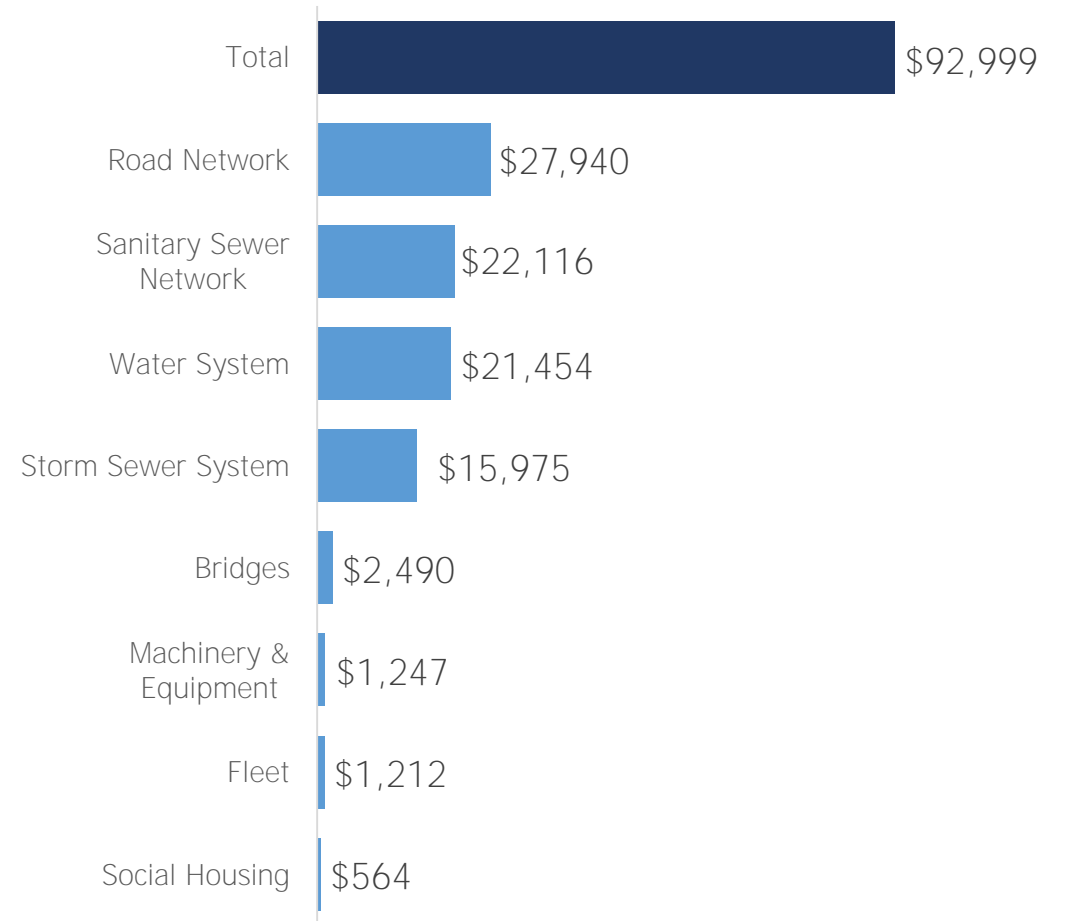
*Does not include Facilities or Parks & Recreation assets

Historical Investment in Infrastructure



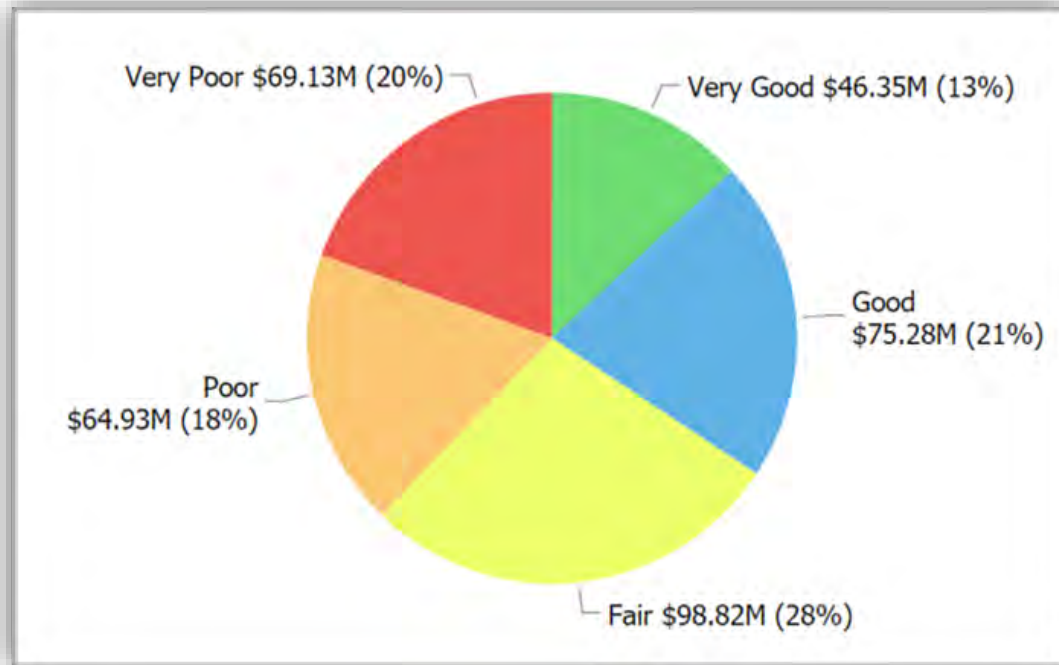
Asset Ownership per Household

Asset ownership per household totals \$92,999 based on 3,812 residential units in the Town of Fort Frances.



State of the Infrastructure

Asset Condition



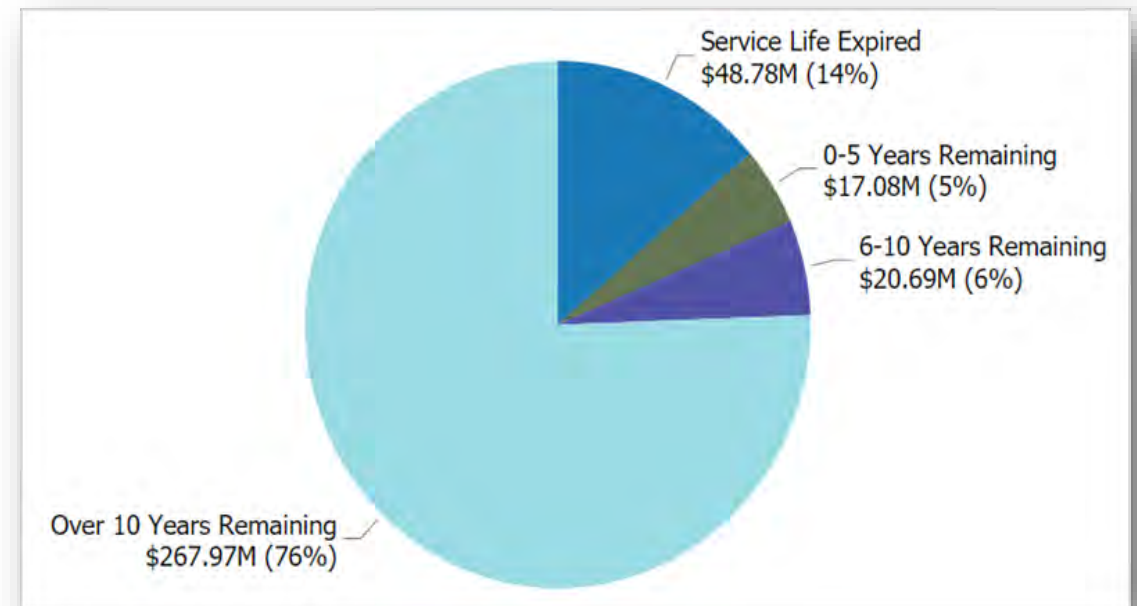
Assessed Condition:

- Paved Roads (100% Assessed)
- Bridges (100% Assessed)
- Sanitary Mains (47% Assessed)

Age-based:

- All Others

Service Life Remaining

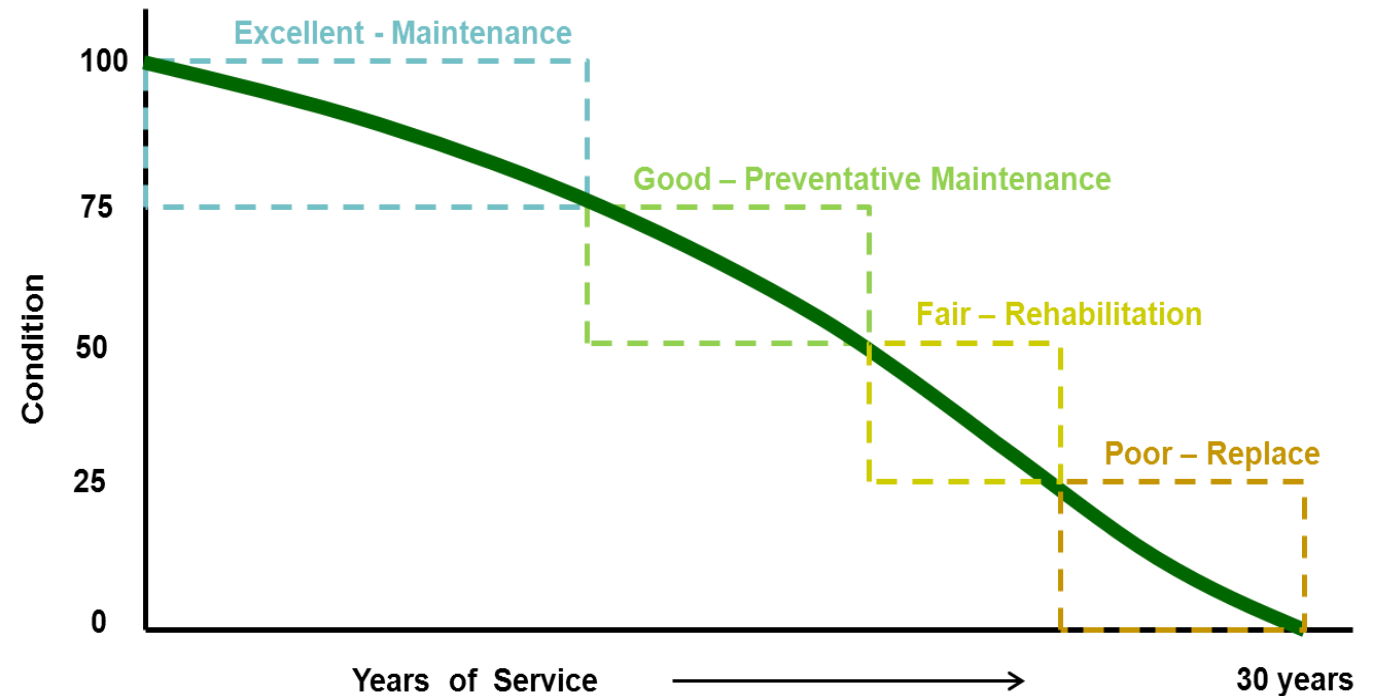


Asset Requirements & Long Term Financial Analysis

Scenario 1 – End-of-Life Replacement

End of Life Scenario:

Based on the assumption that assets deteriorate and without regularly scheduled maintenance and rehabilitation are replaced at the end of their service life.

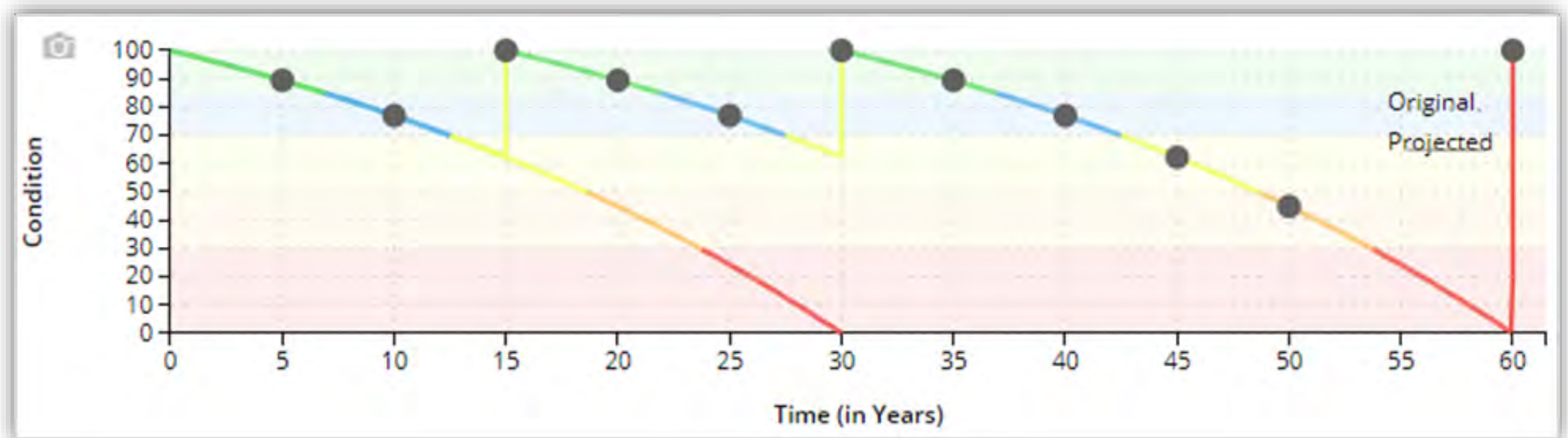


Scenario 2 – Lifecycle Activities Scenario

Lifecycle Activities Scenario:

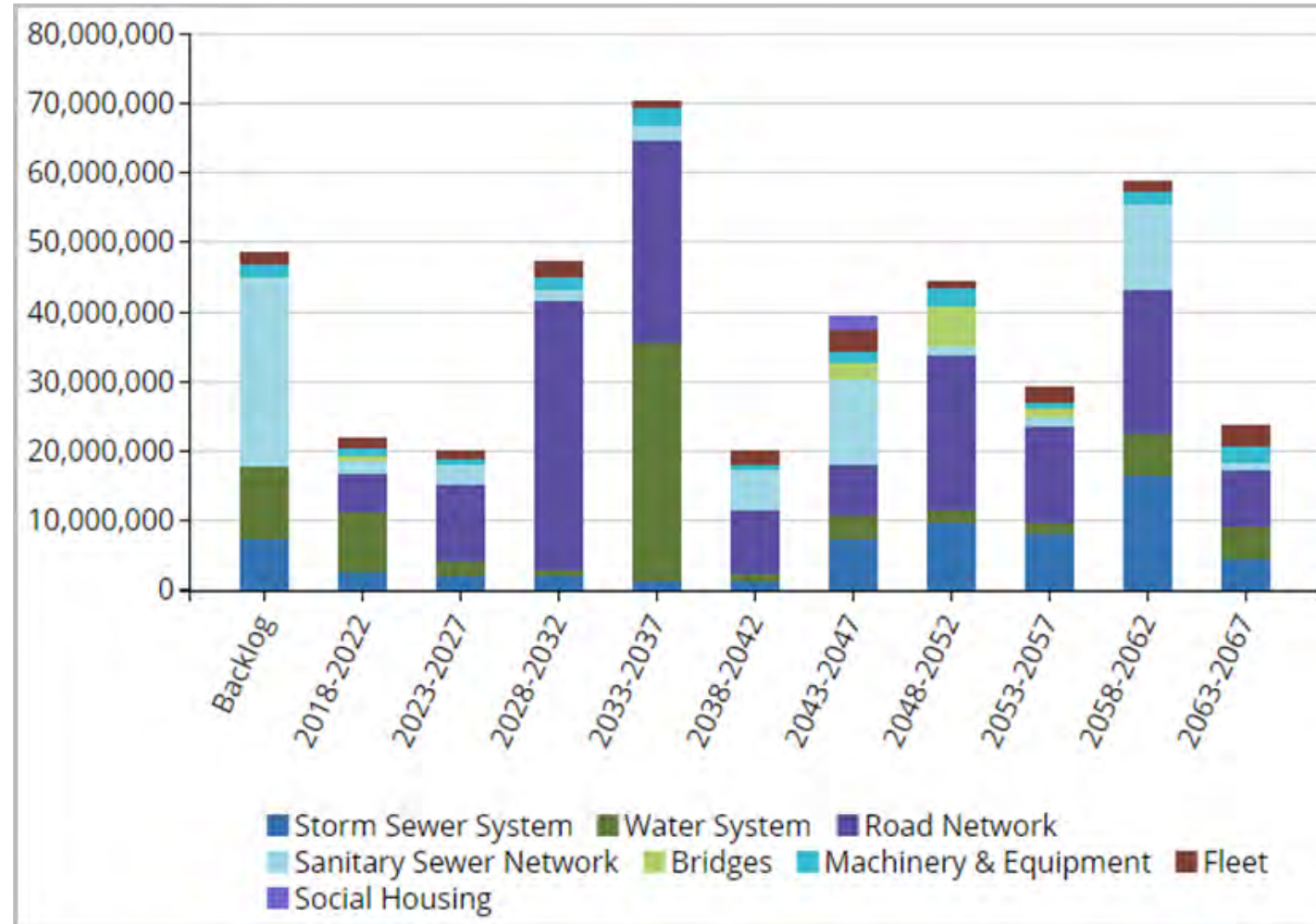
Based on the assumption that lifecycle activities are performed at the optimal time to extend the estimated useful life of assets at the lowest cost; assets are replaced at the end of the extended estimated useful life.

Lifecycle Strategy for Asphalt Roads (Superpave)



Forecasted Capital Requirement

Average Annual Capital Requirement: \$7,949,000



Scenario Comparison

(End of Life Replacement vs. Lifecycle Activities)

Asset Type	Annual Capital Requirement (End of Life)	Annual Capital Requirement (Lifecycle)	Difference
Tax-Funded Assets	\$5,499,000	\$5,215,000	\$284,000
Rate-Funded Assets	\$2,821,000	\$2,734,000	\$87,000
Total:	\$8,320,000	\$7,949,000	\$371,000

The implementation of the lifecycle activities strategy described for paved roads is estimated to lead to annual capital savings of \$371,000.

Annual Capital Requirement & Infrastructure Deficit

Asset Type	Annual Capital Requirement (Lifecycle)	Funding Available	Annual Capital Deficit
Tax-Funded Assets	\$5,215,000	\$1,945,000	\$3,270,000
Rate-Funded Assets	\$2,734,000	\$1,760,000	\$974,000
Total:	\$7,949,000	\$3,705,000	\$4,244,000

Based on a historical analysis of available capital funding from sustainable sources, the Town is facing an annual capital deficit of \$7,421,000.

A financial strategy is required to close the gap between capital requirements and available funding.

Financial Strategy for Tax-Funded Assets

Includes the following:

- Road Network, Storm Sewer System, Bridges, Social Housing, Machinery & Equipment, Fleet

Asset Type	Years Until Full Funding	Total Tax/Rate Change	Average Annual Tax/Rate Change
Tax-Funded Assets	20 Years	28.1%	1.4%

For tax-funded assets, we recommend a 20-year plan to achieve full funding by:

- a) increasing tax revenues by 1.4% each year for the next 20 years solely for the purpose of phasing in full funding to the asset categories covered
- b) when realized, reallocating the debt cost reductions of \$80,000
- c) allocating the current gas tax and OCIF revenue as outlined
- d) allocating the scheduled OCIF grant increases to the infrastructure deficit as they occur
- e) increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in

Financial Strategy for Rate-Funded Assets

Asset Type	Years Until Full Funding	Total Tax/Rate Change	Average Annual Tax/Rate Change
Sanitary Sewer Network	15 Years	18.5%	1.2%
Water System	15 Years	18.1%	1.2%

For rate-funded assets (Water & Sanitary Network) we recommend a 15-year plan to achieve full funding by:

- increasing rate revenues by 1.2% for sanitary services and 1.2% for water services each year for the next 15 years solely for the purpose of phasing in full funding to the asset categories covered
- increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in

Infrastructure Report Card

Overall Grade D	Infrastructure Report Card The Town of Fort Frances			
Asset Category	Asset Health (Condition)	Financial Capacity	Overall Grade	Comments
Road Network	C	D	D	Only 25% of the Town's Road Network is in Very Good or Good condition. The average annual capital allocation required to sustain Fort Frances's Road totals approximately \$3,266,000 . Based on Fort Frances's current annual funding of \$1,512,000 , there is an annual deficit of \$1,754,000 .
Bridges	C	F	F	Currently 74% of the Town's Bridges are in Very Good or Good condition. The average annual capital allocation required to sustain Fort Frances's Bridges & Culverts totals approximately \$190,000 . Based on Fort Frances's current annual funding of \$28,000 there is an annual deficit of \$162,000 .
Water System	D	C	D	Only 29% of the Town's Water System is in Very Good or Good condition. The average annual capital allocation required to sustain Fort Frances's Water System totals approximately \$1,464,000 . Based on Fort Frances's current annual funding of \$964,000 , there is an annual deficit of \$500,000 .
Sanitary Sewer Network	D	C	D	Only 24% of the Town's Sanitary Sewer Network is in Very Good to Good condition. The average annual capital allocation required to sustain Fort Frances's Sanitary Sewer Network totals approximately \$1,270,000 . Based on Fort Frances's current annual funding of \$796,000 , there is an annual deficit of \$474,000 .
Storm Sewer System	C	F	F	67% of the Town's Storm Sewer System is in Very Good to Good condition. The average annual capital allocation required to sustain Fort Frances's Storm Sewer System totals approximately \$998,000 . Based on Fort Frances's current annual funding of \$445,000 , there is an annual deficit of \$553,000 .

Machinery & Equipment	D	F	F	Only 37% of the Town's Machinery & Equipment is in Very Good to Good condition. The average annual capital allocation required to sustain Fort Frances's Machinery & Equipment totals approximately \$333,000 . Based on Fort Frances's current annual funding of \$123,000 , there is an annual deficit of \$210,000 .
Fleet	F	F	F	Only 21% of the Town's Fleet are in Very Good to Good condition. The average annual capital allocation required to sustain Fort Frances's Fleet totals approximately \$385,000 . Based on Fort Frances's current annual funding of \$131,000 , there is an annual deficit of \$254,000 .
Social Housing	C	F	F	All the Town's Social Housing assets are in Fair condition. The average annual capital allocation required to sustain Fort Frances's Social Housing totals approximately \$43,000 . Based on Fort Frances's current annual funding of \$6,000 , there is an annual deficit of \$37,000 .







Key Recommendations

- Develop a formal condition assessment program
- Adopt a long term financial strategy
- Continue to refine asset inventory and centralization of data
 - Merge existing financial dataset with asset management dataset
- Endorse structured change management practices
- Continue asset management training and education

Ontario Regulation 588/17 – Next Steps

- Update AMP by July 1, 2021 to include the following:
 - Current Levels of Service Data
 - Technical and Community LOS
 - Framework has been provided to assist with this process
 - Growth Assumptions
 - Identify projected population and employment growth forecasts
 - Determine impact on infrastructure requirements
- July 1, 2023
 - Current Levels of Service for non-core asset categories
- July 1, 2024
 - Identify Proposed Levels of Service for all asset categories
 - Develop Lifecycle and Financial Strategy to achieve proposed LOS

Benefits Realized from Good Asset Management Practices

Benefits of Asset Management	
	Good governance and increased accountability
	Data-driven decision-making
	Enhanced sustainability of infrastructure
	Improved level of service and quality of life
	Accurate forecasting of infrastructure replacement and enhancement needs
	Compliance with federal and provincial regulations

Get in Touch

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