

Asset Management Plan (Template)

Date: Click here to enter a date.

Author, Branch & Service:

Version: Click here to enter version.

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- Note: For illustration purposes only, all graphs and some tables provided in this template include random embedded data.
- Make sure to transfer the correct graphs from the supporting excel files mentioned in each section / subsection.
- Guidelines on the required data / information to develop the graphs and charts are provided in this template.
- Please refer to the "Notice" tab within the referenced excel files for specific details on how to create each graph and chart.



I EXECUTIVE SUMMARY

- Note: This is the final section to be prepared.
- Please refer to section 5.1 of the AMP Framework for more details.



2 INTRODUCTION

Please delete after completion

Please refer to section 5.2 of the AMP Framework for more details.

2.1 Asset Management within the City

Please delete after completion

Please refer to section 5.2.1 of the AMP Framework for more details.

2.2 Plan Overview

Please delete after completion

• Please refer to section 5.2.2 of the AMP Framework for more details.

2.3 Support for City Goals

Please delete after completion

• Please refer to section 5.2.3 of the AMP Framework for more details.

2.4 Linkages to Other Strategic Documents

Please delete after completion

• Please refer to section 5.2.4 of the AMP Framework for more details.

2.5 Plan Scope

Please delete after completion

Please refer to section 5.2.5 of the AMP Framework for more details.

2.6 Timeframes

Please delete after completion

Please refer to section 5.2.6 of the AMP Framework for more details.

2.7 Development Methodology



Please refer to section 5.2.7 of the AMP Framework for more details.



3 STATE OF LOCAL INFRASTRUCTURE

Please delete after completion

- 5.3. of the AMP Framework for more details.
- Provide a summary or "quick facts" of the state of local infrastructure (inventory, valuation and condition)

Core Assets

	Asset Class 1	Asset Class 2	Asset Class 3
Inventory	•	•	•
Replacement Costs			
Overall Condition			

Other Assets

	Asset Class 1	Asset Class 2	Asset Class 3
Inventory	• •	•	• •
Replacement Costs			
Overall Condition			



3.1 Asset Inventory

Please delete after completion

Please refer to section 5.3.1 of the AMP Framework for more details.

3.1.1 Inventory

Please delete after completion

• Provide a summary of the asset inventory and fill out the below table.

Table 3.1 Asset Inventory and its change

Asset Class	Asset Types	Inventory Change			nge	
ASSEL CIASS	Asset Types	2017	2020	Unit	Value	%
	Asset Type 1					
	Asset Type 2					
Asset Class 1	Asset Type 3					
	Asset Type 1					
	Asset Type 2					
Asset Class 2	Asset Type 3					
	Asset Type 1					
	Asset Type 2					
Asset Class 3	Asset Type 3					

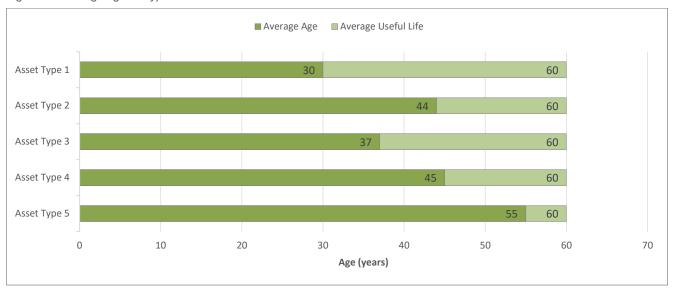
3.1.2 Average Age Summary



- Refer to "Age Charts" tab in the "State of Local Infrastructure" excel file and transfer the "Average Age" figures for each Asset Class to the following subsections.
- Required data to develop graphs below: construction year / age, expected life span / useful life and replacement value / cost.
- Provide any relevant comments related to the findings presented in the charts.

3.1.2.1 Asset Class 1

Figure 3.1 Average age vs Typical useful life - Asset Class 1



3.1.2.2 Asset Class 2

3.1.2.3 ...

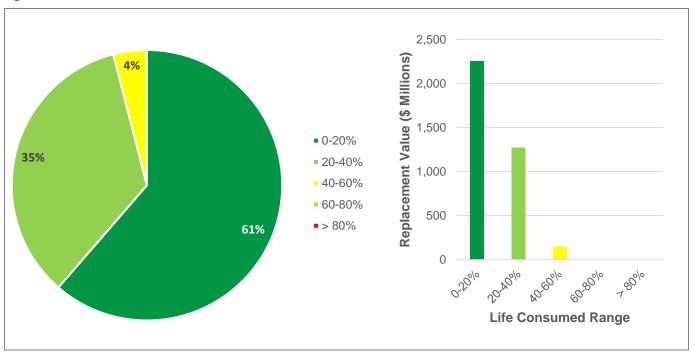
3.1.3 Life Consumed Profile

- Required data to develop the Life Consumed Profile graphs: Construction year / age, expected life span / useful life and the replacement value / cost.
- Refer to "Age Charts" tab in the "State of Local Infrastructure" excel file and transfer the "Consumed Life Profile" figures for each Asset Class to the following sub-sections.
- Provide any relevant comments related to the findings presented in the figures.



3.1.3.1 Asset Class 1

Figure 3.2. Life Consumed Profile - Asset Class 1



3.1.3.2 Asset Class 2

3.1.3.3 ...

3.2 Valuation

- Provide a summary of the asset valuation and fill out the table 3.2.
- Note: Document the various components included in the estimate of the valuation for the AMP.
- Please refer to section 5.3.2 of the AMP Framework for more details.



Table 3.2 Replacement Values and their change

Assat Observe	A T	Replacement \	/alue (\$ Millions)	Chang	e
Asset Classes	Asset Types	2017	2020	Value	%
	Asset Type 1				
	Asset Type 2				
Asset Class 1	Asset Type 3				
	Asset Type 1				
	Asset Type 2				
Asset Class 2	Asset Type 3				
	Asset Type 1				
	Asset Type 2				
Asset Class 3	Asset Type 3				
	Total				

3.3 Asset Condition Rating

Please delete after completion

- Mention the different condition indices used for the different asset classes / types and how they are being translated to the five-point rating scale in table 3.3 (PQI is provided here as an example).
- Provide a summary of condition assessment related to asset classes / types within the AMP scope and fill out the below table 3.4.
- Please refer to section 5.3.3 of the AMP Framework for more details.

The table bellow summarizes the 5-point scale and the age-based conversion method used to estimate the condition of assets based on the asset age.



Table 3.3 Five-point Scale Condition

D. C.	20. 20. 10.	Life	sumed PQI (Roads) Index 2 Index o 19% 80 to 100 to 39% 60 to 80	dition indices)	
Rating	Rating Description	Consumed	PQI (Roads) Index 2 Index 3		
Very Good	Very Good – Fit for Future Well maintained, good condition, new or recently rehabilitated	0 to 19%	80 to 100		
Good	Good – Adequate for Now Acceptable, generally in mid stage of expected service life	20% to 39%	60 to 80		
Fair	Fair – Requires Attention Signs of deterioration, requires attention, some elements exhibit deficiencies	40% to 59%	40 to 60		
Poor	Poor – Increasing potential of affecting service Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration	60% to 79%	20 to 40		
Very Poor	Very Poor – Unfit for Sustained Service Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable.	80% or more	20 or less		

Table 3.4. Condition data collection methods

Asset Class / Type	Condition data collection techniques	Frequency
Asset Class 1		
Asset Class 2		

3.3.1 Asset Class 1

- In this and the following subsections:
 - o Provide a summary of the asset condition of each asset class



- Refer to "Condition Charts" tab in the "State of Local Infrastructure" excel file and transfer the following figures for each Asset Class:
 - Asset Condition Profile Pie Chart
 - Asset Condition Profile Column Chart
 - Overall Asset Condition (Speedometer Chart)
- Refer to "Condition Charts" tab in the "State of Local Infrastructure" excel file and transfer the "Asset Types Condition Profile" for each Asset Class (100% stacked bars Chart)
- Required data to develop below graphs: Asset Condition and Replacement value / cost. Note: if Asset Condition is not available / reliable, age could be used to estimate condition based on the table 3.3 (5-point condition scale).

The overall condition of Asset Class 1 assets is ...

Figure 3.3 Asset Condition Profile - Asset Class 1





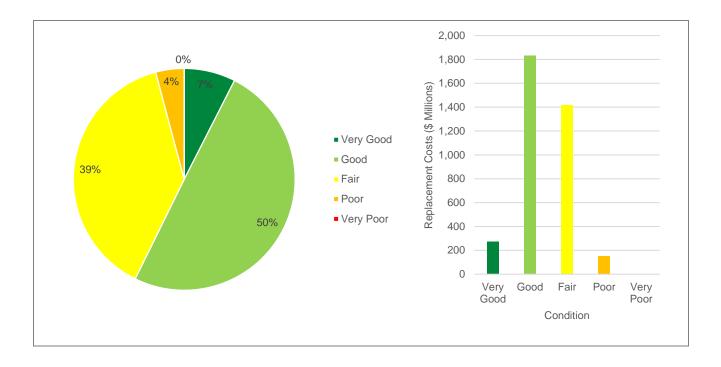


Figure below illustrates the condition of each asset type within Asset Class 1

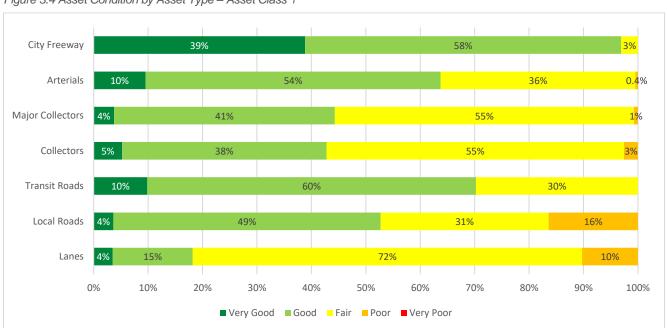


Figure 3.4 Asset Condition by Asset Type - Asset Class 1



3.3.2 Asset Class 2

3.4 Data Sources and Considerations

3.4.1 Data Sources

Please delete after completion

- Provide a summary of data sources related to asset classes / types within the AMP scope and fill out the table 3.5.
- Note: If the data sources of all asset types within the same asset class are the same, indicate only the asset class, otherwise indicate the asset types (example of asset class 2 in table 3.5)
- Please refer to section 5.3.4 of the AMP Framework for more details.

Table 3.5. Data Sources

Asset Class	Asset Type	Inventory	Condition	Replacement Value
Asse	et Class 1			
Asset Class	Asset Type 1			
2	Asset Type 2			
Asse	et Class 3			

3.4.2 Data Reliability and Accuracy

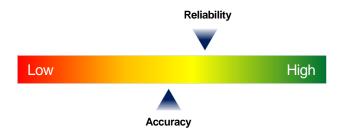
- Provide a summary of data reliability and accuracy and how they are being assessed. Table below may be presented.
- In the following subsections:
 - Discuss data accuracy and reliability and state the overall data confidence.
 - Update the data confidence graphs to reflect findings



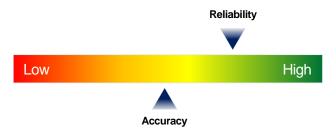
Please refer to section 5.3.4 of the AMP Framework for more details.

Measure	Description	High	Moderate	Low	Rating S	Scale
Reliability	Consistency of procedures / processes used to obtain data	Based on sound records, procedures, or analyses that have been acceptably documented, and are recognized as the best method of assessment	Based upon known reasonable procedures, or analyses that have been acceptably documented	Based upon expert verbal opinion or cursory inspections/ observations	ty High	
Accuracy	Correctness of data value in comparison with its true value	+/- 1%	+/- 10%	+/- 50%	Reliability	Accuracy

- a. Inventory
- Manually click and drag Reliability and Accuracy arrows below, to appropriate location

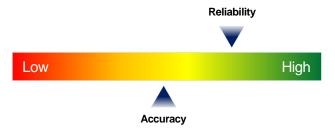


- b. Condition
- Manually click and drag Reliability and Accuracy arrows below, to appropriate location





- c. Valuation
- Manually click and drag Reliability and Accuracy arrows below, to appropriate location





4 LEVELS OF SERVICE

4.1 Level of Service Context

Please delete after completion

- Describe briefly the progress of the service area in establishing effective LOS measures
- Please refer to section 5.4.1 of the AMP Framework for more details.

4.2 Current Levels of Service

Please delete after completion

- In following subsections report the performance in delivering service to customers and stakeholders.
- Report the required LOS (O. Reg. 588/17) and the other LOS (if applicable) in separate subsections as outlined below using tables 4.1, 4.2, etc.
- Insert any charts / pictures required as Community Levels of service (maps, pictures, etc.) and mention the references (figure/charts numbers) in tables 4.1, 4.2, etc.
- Please refer to section 5.4.2 of the AMP Framework for more details.

4.2.1 Asset Class 1

4.2.1.1 Required (O. Reg. 588/17) LOS

Table 4.1 Required (O. Reg. 588/17) LOS - Asset Class 1

Service attribute	Community levels of service	Technical levels of service	2018	2019
Scope				
Quality				



4.2.1.2 Advanced LOS

Table 4.2 Advanced LOS - Asset Class 1

Service attribute	Community levels of service	Technical levels of service	2018	2019
Scope				
Quality				

4.2.2 Asset Class 2

4.2.2.1 Required (O. Reg. 588/17) LOS

4.2.2.2 Advanced LOS

4.3 Factors Affecting LOS

Please delete after completion

Please refer to section 5.4.3 of the AMP Framework for more details.



5 ASSET MANAGEMENT STRATEGY

5.1 Asset Management Practices, Procedures and Tools

Please delete after completion

- Summarize the practices and tools used for asset management to meet current and future service commitments in table 5.1.
- Provide a summary of each stage in the following sections (5.1.1, 5.1.2, etc.)
- Please refer to section 5.5.1 of the AMP Framework for more details.

Table 5.1 Asset Management Practices summary

Stage	AM practices	Related Processes / Procedures	Specific Tools
Investment	•	•	•
Planning	•	•	•
Operations & Maintenance	•	•	•
	•	•	•

5.1.1 Investment Planning

5.1.2 Operations and Maintenance

5.1.3 ...



5.2 Future Demand and Service Enhancement Activities

Please delete after completion

- Detail the strategies for addressing future service requirements brought about by growth, shifting demand, and changes to policy and legislation in subsections 5.2.1, 5.2.2, etc.
- Funding requirements related to future demand could be summarized in table 5.2 (section 5.2.5 or equivalent)
- Note: future demand drivers (Growth, shifting demand, etc.) could be customized to fit the AMP context.
- Please refer to section 5.5.2 of the AMP Framework for more details.

5.2.1 Growth

5.2.2 Shifting Demand

5.2.3 Changes to Policy and Legislation

5.2.4 ...

5.2.5 Future Demand Funding Requirements

Table 5.2 Future Demand Funding Requirements

Future Demand Category	Туре	Capital Cost (\$ Millions)
Growth		
Shifting Demand		
Changes to Policy and Legislation		



5.3 Lifecycle Management Activities

- Provide a summary of the main lifecycle activities by asset class as per tables below (Tables 5.3, 5.4, etc.), then provide detailed descriptions of each activities' category in separate sub-sections (5.3.1, 5.3.2, etc.)
- Set out the funding requirements over the planning period that are needed for the delivery of the lifecycle activities. Provide the funding requirements related to lifecycle activities by asset class, then provide an overall funding requirement for all the assets within the AMP scope (section 5.3.10).
- Please refer to section 5.5.3 of the AMP Framework for more details.

Table 5.3 Summary of Asset Lifecycle Activities – Asset Class 1

Activities category	Lifecycle Activities
Maintenance & Operations	• •
Renewal	• •
Disposal	• •
Non-Infrastructure Solutions	• •

Table 5.4 Summary of Asset Lifecycle Activities - Asset Class 2

Activities category	Lifecycle Activities
Maintenance & Operations	• •
Renewal	• •
Disposal	• •
Non-Infrastructure Solutions	• •



••	5.3.1	Maintenance & Operations
	5.3.2	Renewal
	5.3.3	Disposal
	5.3.4	Non-Infrastructure Solutions
	5.3.5	Information Technology and Asset Data
	5.3.6	People and Resources
	5.3.7	Emergency Management Plans
	5.3.8	Procurement Activities
	5.3.9	Coordination

5.3.10 Lifecyle Activities Funding Requirements



5.4 Risks

Please delete after completion

- Please fill out the following tables for each asset class.
- Please refer to section 5.5.4 of the AMP Framework for more details.

5.4.1 Asset Class 1

Table 5.5 Factors driving Risk Assessment – Asset Class 1

Category	Criteria	Factors measured by
Direct Financial		
Environmental		
Socio-Economic		

Table 5.6 Factors driving Likelihood of Failure – Asset Class 1

Criteria	Factors measured by

Table 5.7 Risk Assessment - Asset Class 1

ID	Failure Mode	Causes	Consequences	Risk Score	Likelihood	Direct Financial	Environmental	Socio-Economic	Interventions /Controls
1									
2									



3					
4					

5.4.2 Asset Class 2

5.4.3 ...



6 FINANCING STRATEGY

Please delete after completion

- Note: The financial information presented in this section should match financial information reported in other strategic documents. Any differences should be clearly explained. Financial information should be presented in consistent categories.
- Please refer to section 5.6 of the AMP Framework for more details.

6.1 Expenditure History

Please delete after completion

- Fill out Table 6.1 and provide any relevant commentary.
- Please refer to section 5.6.1 of the AMP Framework for more details.

Table 6.1 Expenditure History and Service Trends

Component	Expenditure (\$ Thousands)						Level of Service				
Component	2014	2015	2016	2017	2018	Trend	Accessible	Safe	Reliable	Regulatory	Overall
Operating											
Asset Class 1	\$22.1	\$23.2	\$24.8	\$22.2	\$26.3	F		↔		7	K
Asset Class 2											
Total / Overall											

7	Negative Upward Trend	K	Negative Downward Trend
7	Positive Upward Trend	15	Positive Downward Trend
←→	Consistent / Stable Trend		

6.2 Expenditure Forecast

Please delete after completion

• Note: The financial information presented in this expenditure forecast should be the budgeted or allocated expenditure for the service area.



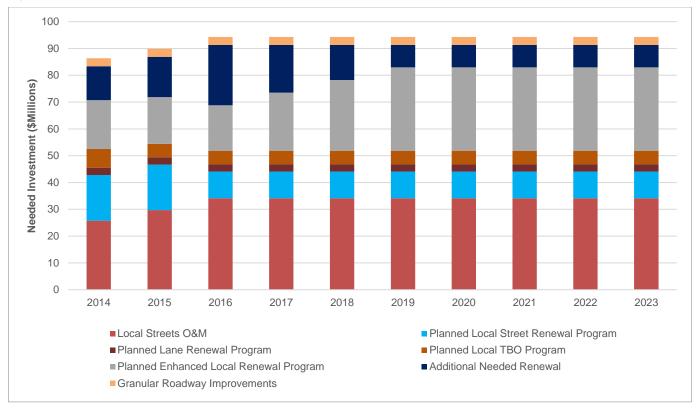
- In the following subsections:
 - Fill out the tables below
 - o Refer to the "Charts" tab in the "Financial Strategy" excel file and transfer the "expenditure forecast" chart for each asset class and the overall service.
- Please refer to section 5.6.2 of the AMP Framework for more details.

6.2.1 Asset Class 1

Table 6.2 Spending Allocation - Asset Class 1

System / Asset Class/ Type	Lifecycle Management	Service Enhancement
	•	•
	•	•
	•	•
	•	•
	•	•
	•	•

Figure 6.1 Expenditure Forecast over the next 10 years - Asset Class 1





- 6.2.2 Asset Class 2
- 6.2.3 ...
- 6.2.4 Service Overall

6.3 Revenue Sources

- Note: The total of the revenue sources should match the total of the expenditure forecast.
- Provide commentary on the stability or volatility of the revenue sources particularly from higher levels of government.
- Refer to the "Charts" tab in the "Financial Strategy" excel file and transfer the "Revenues" chart for each asset class and overall service.
- Please refer to section 5.6.3 of the AMP Framework for more details.



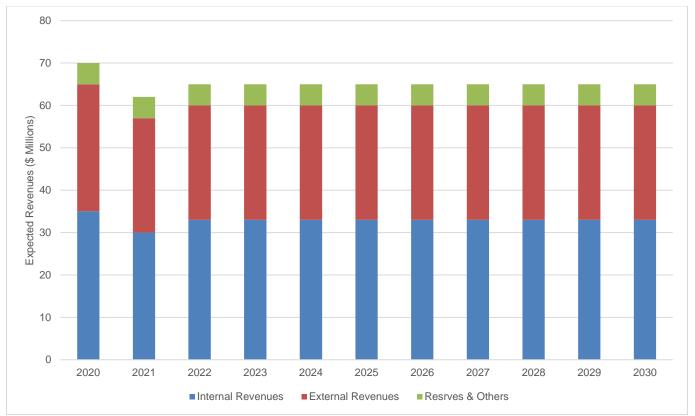


Figure 6.2 Expected Revenue Forecast over the next 10 years

6.4 Funding Gap

- Compare the expenditure forecast to the funding required to deliver the asset strategies to identify any unfunded investment requirements.
- The presentation of this section will vary, depending on whether or not the City was able to forecast its investment needs, or if it merely presented budgeted spending over the analysis period.
- Refer to the "Charts" tab in the "Financial Strategy" excel file and transfer the "Funding Gap" chart for each asset class and the overall service.
- Please refer to section 5.6.4 of the AMP Framework for more details.



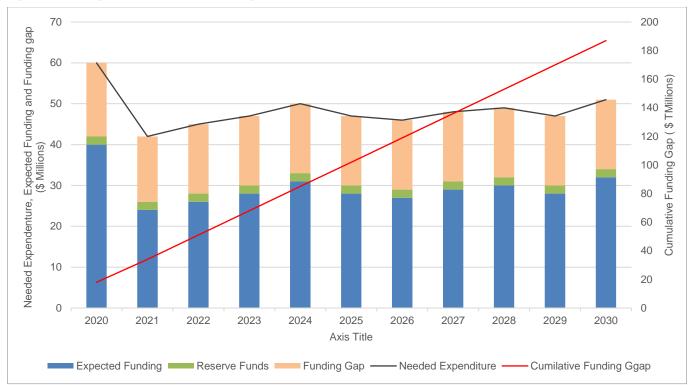


Figure 6.3 Funding Gap and Cumulative Funding Gap - Needed Investment Forecast vs. Expected Revenue Forecast

6.5 Alternative Funding (Non-Financial) Strategies

- Note: It is not the intention of this document to identify and analyze all available options, but merely to report on the planned actions, based on properly supported external analysis. Where this analysis has yet to be conducted then the City can provide a timeline for this assessment and highlight potential options under consideration.
- Please refer to section 5.6.5 of the AMP Framework for more details.



7 IMPROVEMENT & MONITORING PLAN

7.1 Asset Management System Improvement

Please delete after completion

- Highlight planned actions to improve asset management practices using table 7.1
- Present the metrics used to track the AM program progress (if applicable) using table 7.2
- Please refer to section 5.7.1 of the AMP Framework for more details.

Table 7.1 Actions for Improvement – Asset Management Program

#	Action	Responsibility	Resources	Timeline
1				
2				

Table 7.2 Metrics used to track AM program progress

Туре	Measure	Target	Frequency	Data Source

7.2 AMP Improvement Plan

- Highlight activities planned to enhance service delivery performance and subsequent versions of the AMP using table 7.3
- Please refer to section 5.7.2 of the AMP Framework for more details.



Table 7.3 Actions for Improvement – Asset Management Plan

#	Action	Responsibility	Resources	Timeline
1				
2				



8 APPENDICES

Please delete after completion

Please refer to section 5.8 of the AMP Framework for more details.

