



# Asset Management Levels of Service Target or Consequence?

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# Asset Management Levels of Service



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# Overview

- There are very different perspectives on Levels of Service
- A view from an different “angle”
- The more expected approach



# Perspectives on Level of Service

- Can mean very different things depending on your perspective
- What do you want?
- Detailed Performance measures?
- Asset View
- Financial View

# Perspectives on Level of Service

What are we trying to achieve by considering Asset Management Levels of Service?

&

Doesn't it come back to some fundamentals?

# What Fundamentals? Can we reliably answer these Questions!

# Do we have enough funding to:

1. Operate
2. Renew
3. Maintain
4. Upgrade / New

our infrastructure to meet  
the organization's needs ....

And at what service  
standard is this based on?



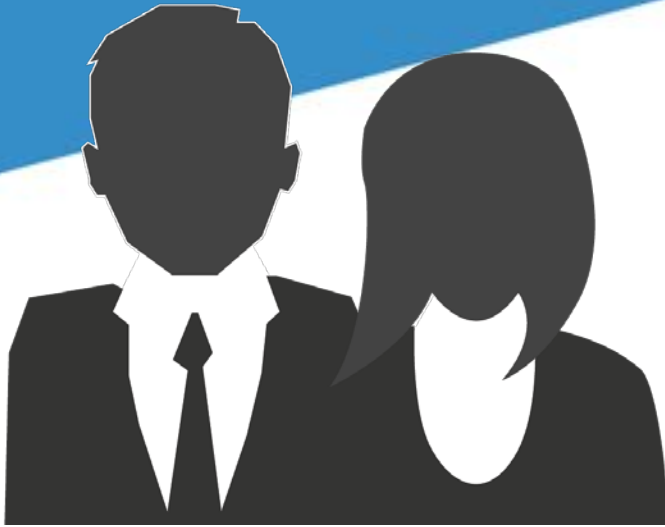
And at what service  
standard is this based?

# What if the answer is NO?

Does that lack of funding and resources represent a service risk to your community going into the future?







Who chooses the best value plan?



Do they have full knowledge of the consequences, with risk and service impacts being the main items?

## Broader Approach

Levels of Service are part of the balancing act ..... So for a change lets start talking about them from a financial view



# From a financial perspective of ASSET MANAGEMENT

# How can financial reporting tell the story about Levels of Service?

Understand and use accrual accounting for planning purposes and discussing Levels of Service



And how can this assist us to measure service level sustainability?

Are things getting “better, worse or staying about the same?”



# Lets look at 2 of the Statements reflecting the financial state of delivering the “Service”

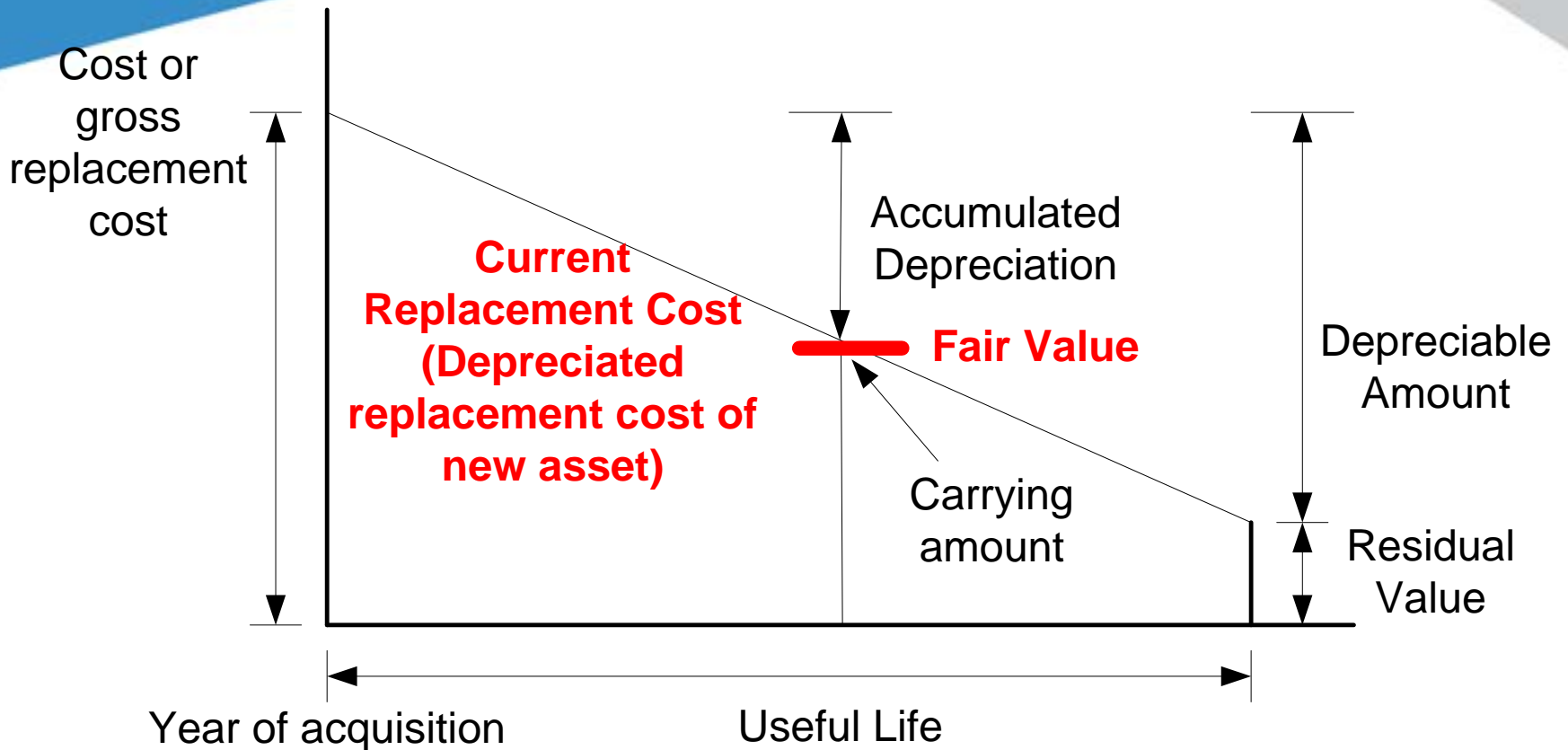
**Income Statement** shows financial performance for a period

**Balance Sheet** shows financial position at a point in time

Financial performance for a period will be reflected in change in Balance Sheet between start and end of period

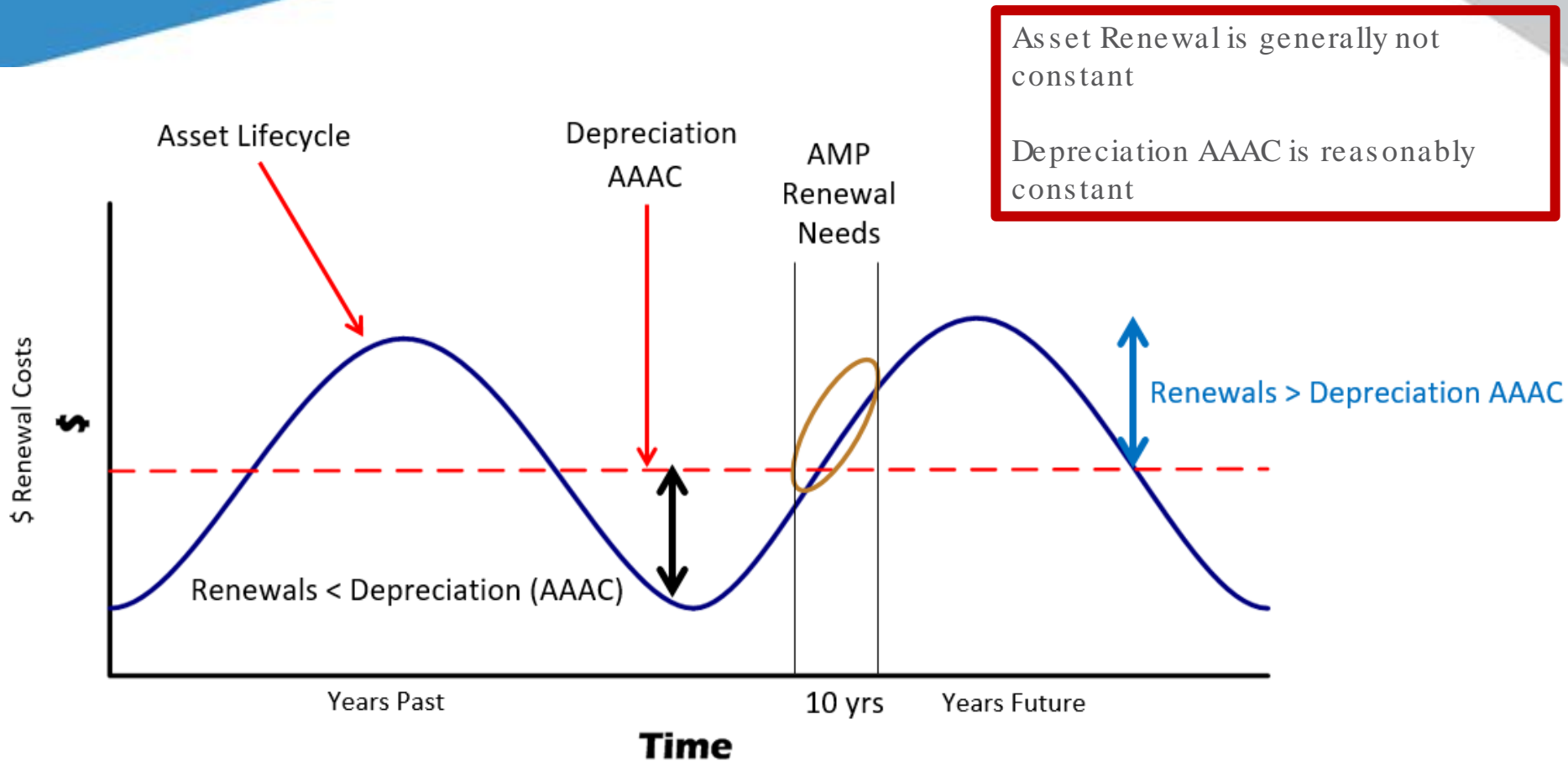


# Infrastructure Financial Values – In Current Cost



Ref: AIFMM Sec 12.1.2, p 12|5.

# Renewal Costs are Independent of Average Annual Asset Consumption (Depreciation)





# ILLUSTRATIVE INCOME STATEMENT Do we generate sufficient income to sustain long term service levels?

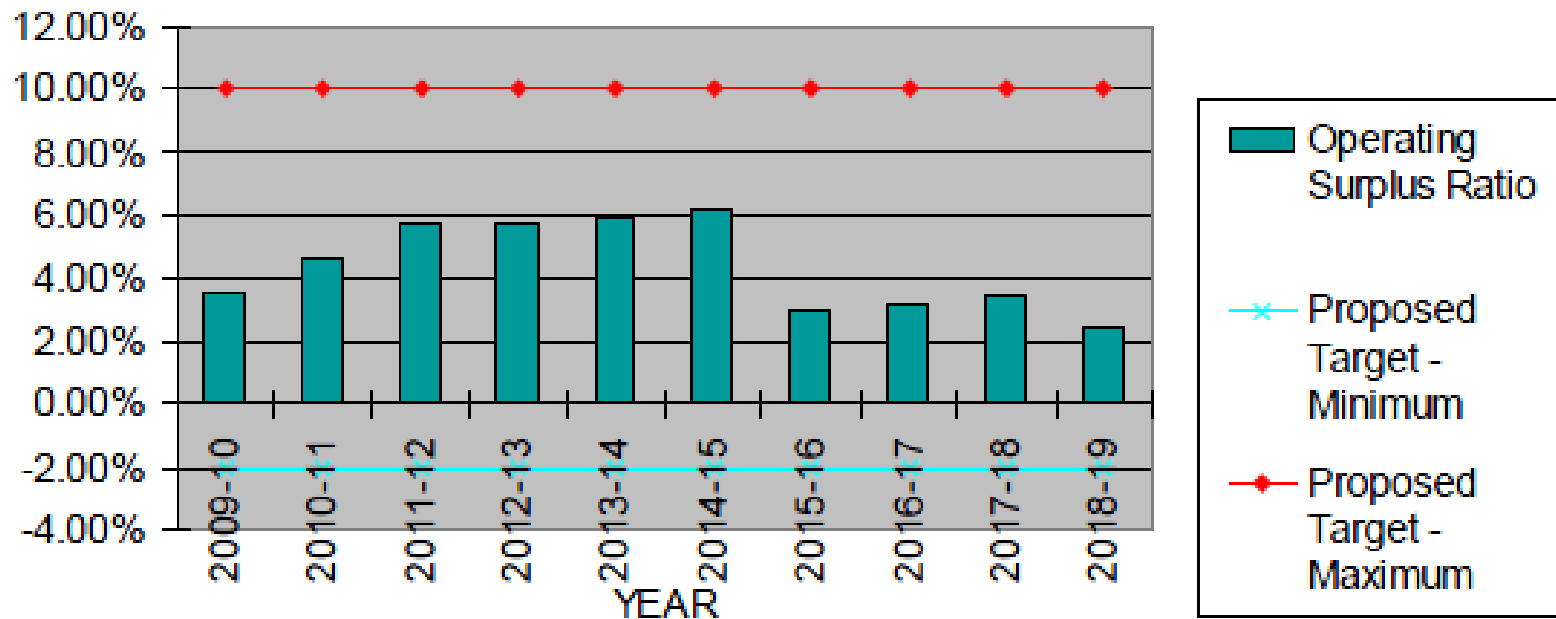
	(\$'000)
<b>Operating Income</b>	
Taxes	X
Other Income	X
<b>Total Operating Income</b>	<b>X</b>
<b>Operating Expenses</b>	
Other	X
Depreciation	X
<b>Total Operating Expenses</b>	<b>X</b>
<b>Operating Result</b>	<b>X</b>
Other items (e.g. capital revenues) to get net surplus	X
Other items to get total comprehensive income	X

Ref: AIFMM, Table 2.6.1, p 2 | 8

# LTFP FINANCIAL INDICATORS

## 6.3.2 Indicator 2 - Operating Surplus / (Deficit) Ratio

Graph- Consolidated Projected Operating Surplus / (Deficit) Ratio 2009-10 to 2018-19



# ILLUSTRATIVE BALANCE SHEET Are we maintaining equity?

	(\$'000)
<b>Assets</b>	
Cash, Inventories & Receivables	X
Infrastructure, Property, Plant & Equipment	X
<b>Total Assets</b>	<b>Xt</b>
<b>Liabilities</b>	
Payables	Y
Borrowings	Y
Provisions	Y
<b>Total Liabilities</b>	<b>Yt</b>
<b>Equity</b>	<b>Xt - Yt</b>

Ref: AIFMM, Table 2.6.1.1, p 2|9.

# From an operational perspective of ASSET MANAGEMENT

# Asset Management Plan

Documents information that specifies:

activities, resources and timescales, **required for an individual asset or grouping of assets**, to achieve the organisation's asset management objectives **along with the reality of what can provide.**

PARADISE COUNCIL



TRANSPORT SERVICES  
Asset Management Plan



Version 2.4

July 2010



PARADISE COUNCIL - TRANSPORT SERVICES ASSET MANAGEMENT PLAN

# The Asset Plan Provides us the: Activities, Resources and Timeframes

## Activities:

- Operations
- Maintenance
- Capital renewal
- Capital Upgrade/New

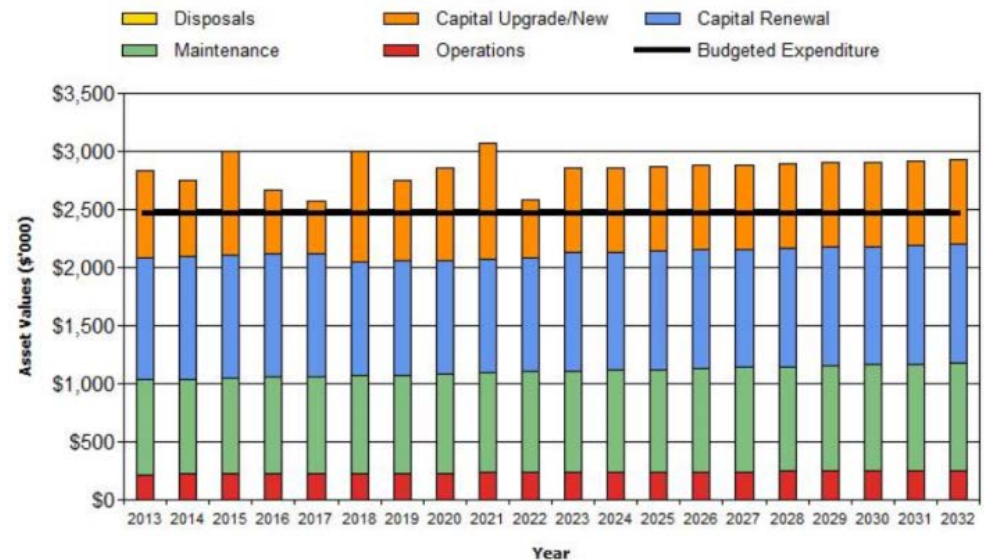
## Resources:

- Financing and staffing

## Timeframes:

- Work programs

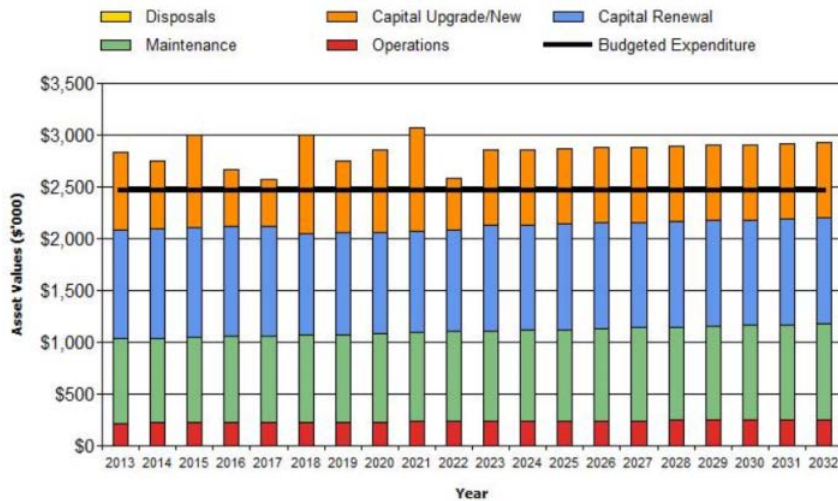
**Sample Council - Projected Operating and Capital Expenditure (COMRIE\_S2\_V1)**



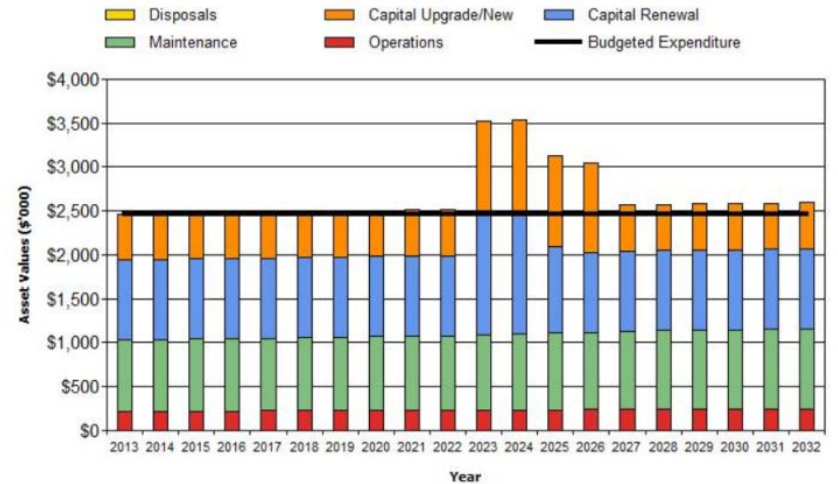
# Achieving the Organization's AM Objectives and Service Sustainability

balancing costs, risks, and performance

**Sample Council - Projected Operating and Capital Expenditure (COMRIE\_S2\_V1)**



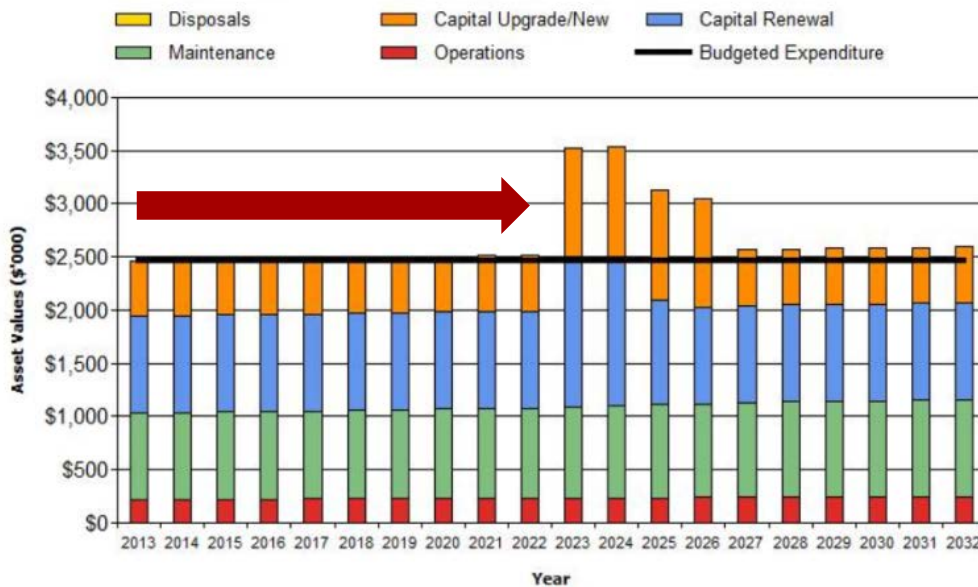
**Sample Council - Projected Operating and Capital Expenditure (COMRIE\_S3\_V1)**



# Achieving the Organization's AM Objectives and Service Sustainability .... Reality Check!

balancing costs, risks, and performance

**Sample Council - Projected Operating and Capital Expenditure (COMRIE\_S3\_V1)**



Projections based on projected funding



Deferral of activities and programs



Likely reduction in service levels



Generation of additional service risks



# Asset Management informs Asset Investment Decisions

balancing costs, risks, and performance



# Having Productive Discussions on Affordable Service Levels

Matching levels of service provided by an asset with the expectations and capacity/willingness of customers to pay.

Expected Service



Provided Service

# Perfect World – Desired Level of Service



May be unrealistic



# Reality of Affordable Level of Service



**Is this acceptable ...** or can we consider other options?



# Levels of Service in the AMPs

# Why do we need Level of Service Objectives?

- customers are prepared to pay for
- strategies to deliver that level of service
- link between the cost and level of service

# Customer Values

Building customers value  
different things



# Drivers

Customer expectations

Legislative requirements

Strategic plan

Resources

# Level of Service Types

## Customer LOS

How the customer receives the service



## Technical LOS

How the organization provides the service using technical terms



# Key Points in Developing LOS

## Start Basic and Develop with Experience

- relevant
- measurable
- meaningful
- manageable
- monitor



# Getting Started – An Approach for AMPs

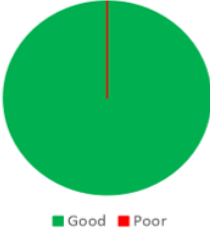
## Customer Service Levels – Quality Example

	Expectation	Performance Measure Used	Current Performance	Expected Position in 10 Years based on the current budget.
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Expectation	Performance Measure Used	Current Performance	Expected Position in 10 Years based on the current budget.
Roads are smooth and clear.	Customer service requests related to quality.	Low number of complaints	Expected to get worse
Organizational measure	Road Condition Assessments <i>(Medium Confidence)</i>	<p> <span style="color: black;">■</span> Unknown           <span style="color: green;">■</span> Good           <span style="color: yellow;">■</span> Fair           <span style="color: red;">■</span> Poor         </p>	Expected to get worse <i>(Low Confidence)</i>

	Equipment for users.	related to quality.		
	Organizational measure	Asset Condition <i>(High Confidence)</i>	Provincial Fleet and Fire daily inspections / per use and in depth annually	Expected to stay the same

# Customer Service Levels – Function Example

	Expectation	Performance Measure Used	Current Performance	Expected Position in 10 Years based on the current budget.
<b>Function</b>	Water service is provided reliably	Service requests related to water reliability	Negligible.	Expected to stay the same
	Organizational measure	Number of service interruptions per year. <i>(High Confidence)</i>	2017 – 0 breaks 2017 - 5 service leak repairs	Expected stay the same <i>(High Confidence)</i>
<b>Function</b>	Constant Road access is available.	Service Requests	< 10 requests per year	Expected to stay the same.
	Organizational measure	Review of network functionality. <i>(Low Confidence)</i>		Expected to stay the same. <i>(Low Confidence)</i>

# Customer Service Levels – Capacity Example

	Expectation	Performance Measure Used	Current Performance	Expected Position in 10 Years based on the current budget
<b>Capacity and Use</b>	Safe drinking water	Service requests	Negligible.	Expected to stay the same
	Organizational measure	Compliance with Water Standards. <i>(High Confidence)</i>	2017 – 0 boil water advisory's	Expected to stay the same <i>(High Confidence)</i>
<b>Capacity/ Utilization</b>	No Waste water contamination. Meets environmental regulations.	Service requests.	None.	Expected to stay the same.
	Organizational measure Confidence levels Medium.	Testing to Provincial regulations. <i>(Medium Confidence)</i>	Meet 100% of the regulations.	Meet 100% of the regulations. <i>(Low Confidence)</i>

# Technical Service Levels

Activities undertaken and linked to budget allocations

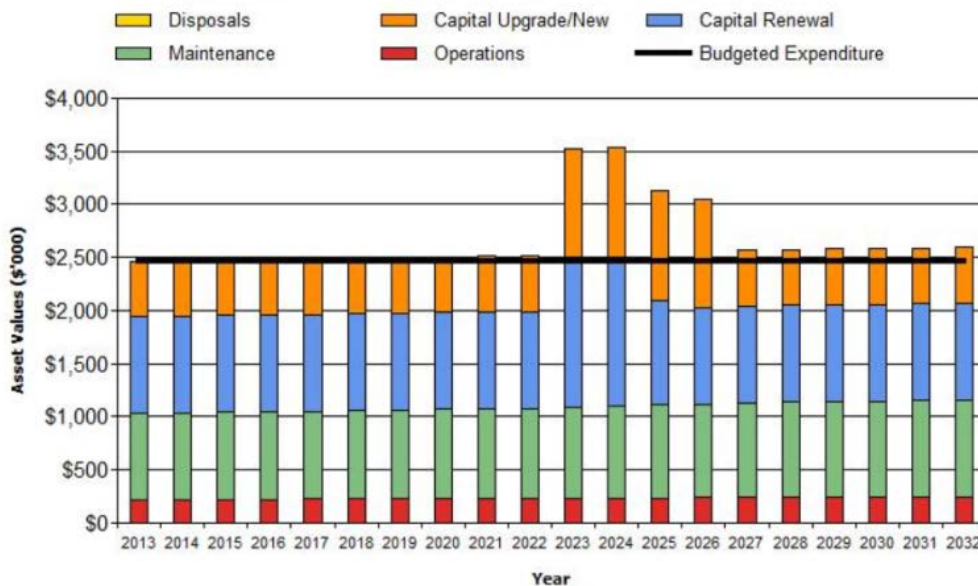
- Operations
- Maintenance
- Renewal
- Upgrade/new



Make the link to the costs...

# Achieving the Organization's AM Objectives and Service Sustainability .... **Reality Check!**

**Sample Council - Projected Operating and Capital Expenditure (COMRIE\_S3\_V1)**



Projections based on projected funding



Deferral of activities and programs



Likely reduction in service levels



Generation of additional service risks

# Technical Service Levels – Operations Example

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
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Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
<b>ROAD SERVICE</b>			
Streets are clear	Frequency of snow clearing	Per policy	Adequate
Street are clean	Frequency of sweeping	Spring cleanup and weekly	Adequate
Good traction	Sanding	Per policy	Adequate
Sidewalks are clear	Frequency of clearing	Per policy	Adequate
	<b>Budget</b>	<b>\$450,000 on average over the next 10 years on roads.</b>	<b>\$450,000 on average over the next 10 years on roads.</b>

Budget \$550,000 on average over the next 10 years on Sanitary Sewer.

\$550,000 on average over the next 10 years on Sanitary Sewer.

# Technical Service Levels – Maintenance Example

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
<b>TECHNICAL LEVELS OF SERVICE</b>				
<b>Maintenance</b>	Crack sealing of roads	Frequency	\$20,000 per year	\$25,000 per year
	Patching of roads	Frequency	\$60,000 per year	Adequate
	Minor pipe repairs	Frequency	Reactive	Adequate
	Minor sidewalk repairs	Frequency	Planned and reactive	Adequate
	Minor Pedestrian bridge repairs	Frequency	Planned and reactive	Adequate
			<b>Budget \$425,000 on average over the next 10 years on roads.</b>	<b>\$430,000 on average over the next 10 years on roads.</b>



# Technical Service Levels – Renewals Example

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
<b>TECHNICAL LEVELS OF SERVICE</b>				
<b>Renewal</b>	Renewal of road surface / structural	Amount	\$175,000 per year	\$400,000 per year Series of projects road and underground
	Renewal of sidewalks	Amount	\$50,000 per year	Adequate
	Renewal of Bridges	Amount	Planned	Adequate
		<b>Budget</b>	<b><i>\$225,000 on average over the next 10 years on roads.</i></b>	<b><i>\$400,000 on average over the next 10 years on roads.</i></b>
<b>Renewal</b>	Relining of lines	Amount	Annually. Condition based. Reline all concrete/clay mains over next 10 years.	Adequate
		<b>Budget</b>	<b>\$160,000 on average every year for the sanitary mains.</b>	<b>\$160,000 on average every year for the sanitary mains.</b>

# Technical Service Levels – Upgrade / New Example

Service Attribute	Service Activity Objective	Activity Measure Process	Current Performance *	Desired for Optimum Lifecycle Cost **
<b>TECHNICAL LEVELS OF SERVICE</b>				
<b>Upgrade/New</b>	Sanitary Main New Development	Amount	As needed. Have serviced lots available.	Adequate
	Sanitary Sewer Auxiliary power to lift stations	Amount	None Planned.	\$120,000
		<i>Budget</i>	<i>\$0 on average over the next 10 years on Sanitary Sewer.</i>	<i>\$120,000 in 2020</i>

## Have the right discussion! Levels of Service should:

Inform of aspirations  
Link to the affordable reality

Support an informed  
discussion about choices and  
consequences

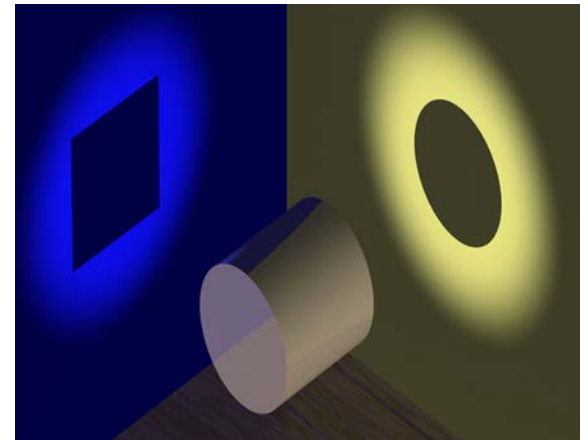


# The broader impact of Levels of Service

Levels of Service are described in our:

Community Planning  
Asset planning and also  
Financial planning and reporting

We have to integrate those if we are to facilitate informed decision making .... and make “square pegs fit in round holes”



# NAMS Canada Training Opportunities



## Professional Certificate in Asset Management Planning

An intensive but practical and rewarding 10 week course, resulting in a usable draft Asset Management Plan and Improvement Plan.



[View Details](#)

- 8 modules over 10 weeks
- Interactive & engaging course
- Hands-on experience with tools & templates
- AM Plan as course output

**Contact: Nicole Allen**

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