



FEDERATION  
OF CANADIAN  
MUNICIPALITIES

FÉDÉRATION  
CANADIENNE DES  
MUNICIPALITÉS

Canada 



## ***Advancing Asset Management Program***

# **LEVELS OF SERVICE**

## **MODULE 2**

Please take this time to change your name in the participants list to include your full name and organization



# Acknowledgements

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This initiative is offered through the Municipal Asset Management Program, which is delivered by the Federation of Canadian Municipalities and funded by the Government of Canada.



## Collaborators and Influencers



1. Overview of LOS (recap)
2. Terminology
3. LOS Template Introduction
4. LOS Template Tab 1: Introduction
5. LOS Template Tab 2: Services and Assets



# What are Levels of Service?

## 2 PERSPECTIVES

### ***Community*** (customer) LOS

The levels at which the customer is receiving service, from an experiential perspective.

### ***Technical*** (operational/asset) LOS

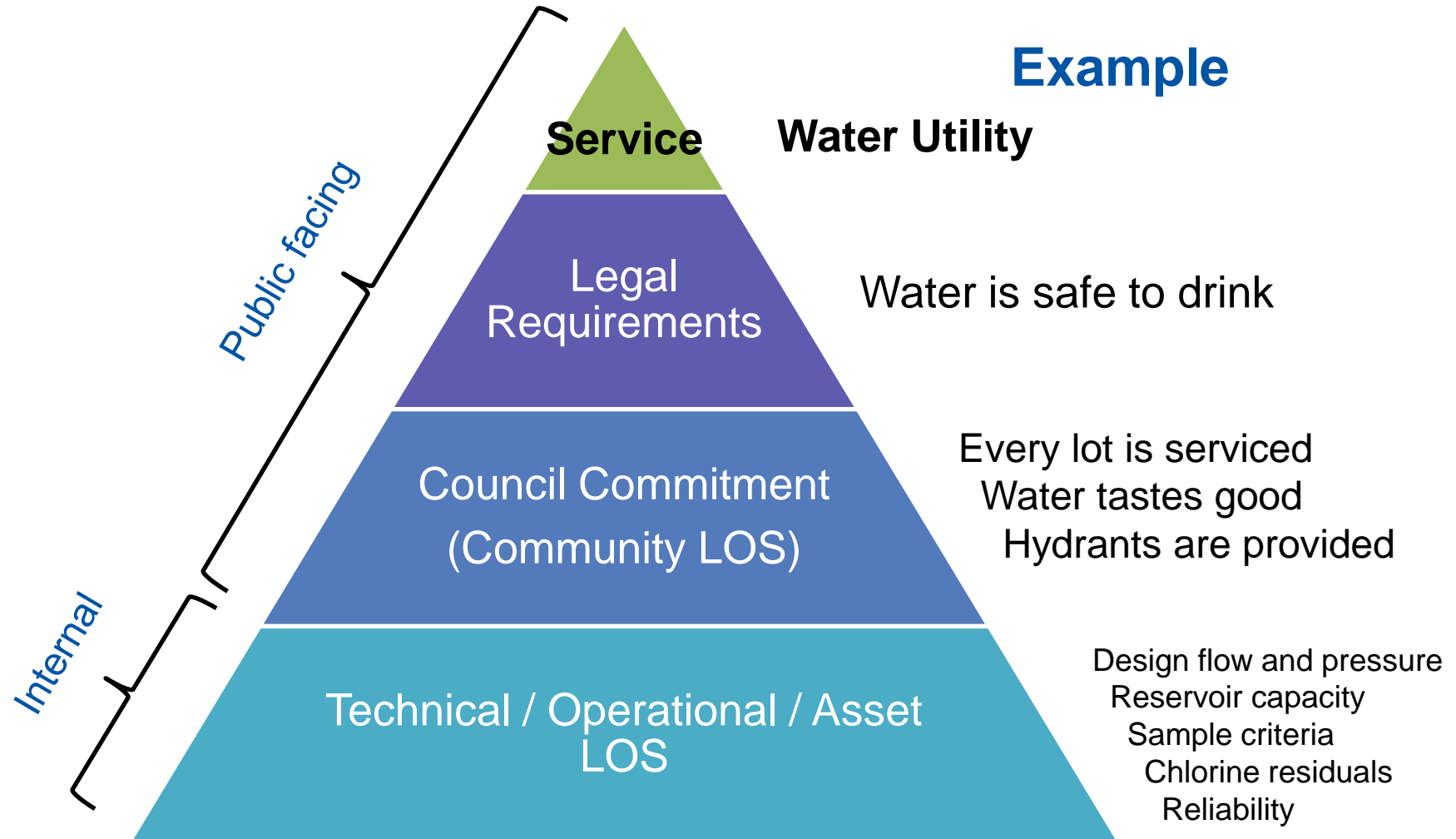
Specific, measurable parameters used to assess the adequacy of assets to provide community LOS.





# Levels of Service Hierarchy

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# Terminology – Helps keep us aligned

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<b>Community Level of Service</b>	The level at which the customer is receiving service, from an experiential perspective.
<b>Indicator</b>	A specific property of service that can be objectively evaluated.
<b>Levels of Service</b>	Specific parameters that describe the extent and quality of services that the municipality provides to users.
<b>Level of Service Commitment</b>	The level at which the municipality has formally agreed to deliver a service. This could be through a contract, legislation, or other written agreement.
<b>Level of Service Objective</b>	The level at which the municipality aims to deliver service to its customers. This is usually subjective or descriptive for community levels of service, and may be quantitative for technical levels of service.
<b>Performance Measure</b>	<p>The means used by the municipality to assess a level of service. Example measures include:</p> <ul style="list-style-type: none"><li>- O&amp;M data</li><li>- Complaints</li><li>- Expert assessment</li><li>- Service contract</li><li>- OH&amp;S records</li><li>- Program data</li></ul>



# Terminology – Helps keep us aligned

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## **Performance Gap**

The current gap, or difference, between the level of service being delivered (the current level of service) and the expected/intended level of service (the level of service objective).

## **Sustainability Gap**

The anticipated future gap between current level of service and the level of service objective. For example, there may not be a current capacity gap in a sewer service, however, based on growth projections and the ability of current infrastructure to delivery the service, a future gap is anticipated once a certain demand or growth rate has been achieved.

## **Service Characteristic**

General property, or characteristic, of service delivered by an asset or group of assets (e.g. regulatory, capacity, safety, reliability, quality, and environmental).

## **Technical Levels of Service**

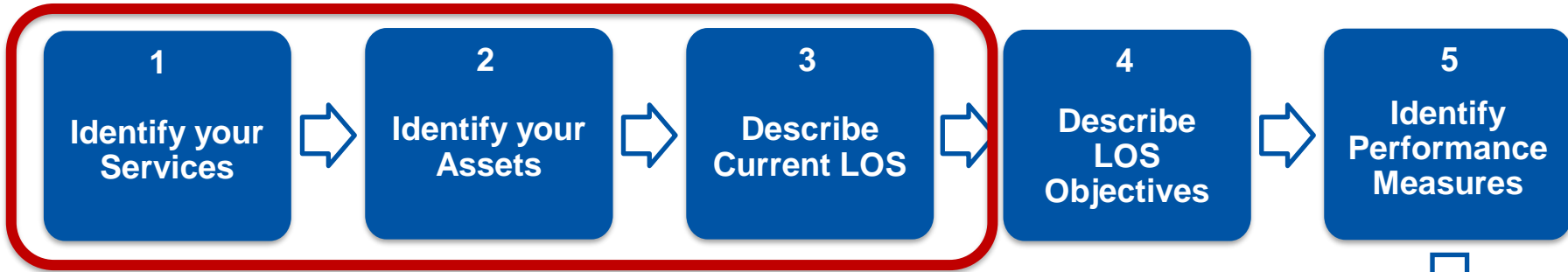
The adequacy of assets to provide customer services, from a physical characteristics perspective. This is also known as an operational/asset level of service.



# Levels of Service Process

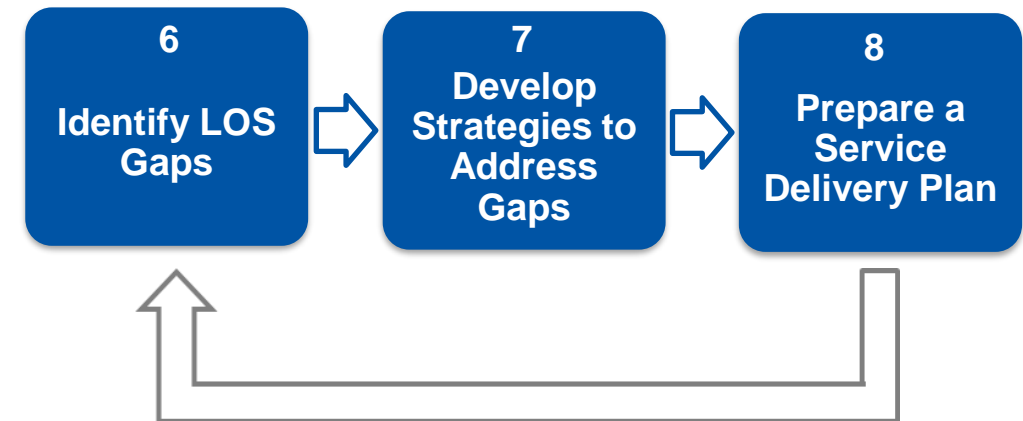
8

## DEFINING



**Today!**

## ASSESSING





# Activity: Defining and Assessing LOS



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# *Activity: Defining and Assessing LOS*



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Services

Assets

Current LOS

LOS Objectives

Performance Measures

Identify Gaps

Gap Strategy

Service Delivery Plan



## PURPOSE

Facilitate communication (via staff) with Councils, stakeholders and the public about:

- The services and levels of service currently provided;
- Gaps between current and expected levels of service; and,
- Actions or estimated resource needs to address gaps.

## METHOD

- Spreadsheet-based levels of service template, customizable by each individual user
- Workshops to assist staff in learning about LOS by populating their template
- Primary focus on community levels of service



## Excel Worksheet: 5 Tabs

### 1. Introduction

- Document service delivery goals

### 2. Services and Assets

- Describe your services and the assets used to deliver them

### 3. Describing and Assessing LOS

- Document current and target LOS, identify performance measures, identify current or future gaps & develop strategies to address them

### 4. Reporting Out

- Prepare a service delivery plan to report out key findings from the process as and priority actions

### 5. Interim Actions

- Identify short term actions to address data gaps, questions or conflicts



## 1. Introduction

- This is the “cover page” for the LOS workbook
- Instructions
- Basic definitions
- Levels of service process
- General / strategic content (entered by user)
  - community name
  - corporate service delivery goals or commitments
- Acknowledgements





# LOS Template – Introduction

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## 1) Introduction

This worksheet provides an overview of the template, as well as a place to document all community infrastructure service delivery goals.

### **General Instructions:**

Blue text indicates a user input cell. Replace the blue text with information specific to your community.

Grey cells are locked and designed to auto-populate from previous worksheets.

Categories and subcategories of services that do not apply to your community may be ignored or removed from the template by hiding those rows or replacing them with categories and subcategories which do apply. Due to linking throughout the template, it is recommended that you don't delete rows.

*NOTE: All cells except blue cells are locked and cannot be edited. The template can be unlocked so you can customize it by clicking the "Unprotect Sheet" box in the "Review" tab of Excel.*



## Levels of Service Template

Last Updated: [Date]

[Your Community Name]

### **Community Infrastructure Service Delivery Goals:**

[Describe corporate service delivery goals or commitments here, keeping in mind that we're focusing on those that require infrastructure to support them. List the source documents for future reference.]

e.g. Comply with all legislative requirements.

Source: Regulatory

Provide capacity, quality, and reliability expected by Council and residents.

Source: Official Community Plan

Ensure the safety of services and infrastructure.

Source: Strategic Plan

Consider sustainability and long-term benefits to future generations.

Source: Integrated Community Sustainability Plan

1) Introduction

2) Services and Assets

3) Describing and Assessing LOS

4) Reporting Out

5) Interim Actions

+



## 1. Introduction

### 1. Populate the intro section of the template

- Enter community name
- Enter service delivery goals from strategic plan, official community plan, etc.



## 2. Services and Assets

- Document the services the local government provides
- Identify the assets involved in delivering each service
- Ensures that assets are being organized based on function, as opposed to defining services based on assets



# LOS Template – Services and Assets

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	A	B	C
1	<b>2) Services and Assets</b>		
2	This worksheet documents steps 1 and 2 in the LOS process, focusing on the services that the community provides and the infrastructure required to deliver the service.		
3	The asset types represent major groups of assets, not individual assets.		
4			
6		<b>1</b>	<b>2</b>
7	What services are delivered by the municipality?	<b>Identify your Services</b>	<b>Identify your Assets</b>
8	What infrastructure is required for this service?		
9			
10			
11	<b>Service Area</b>	<b>Services Provided</b>	<b>Major Asset Components</b>
12	<b>Drinking Water</b>		
13		Supply	Water Mains
14		Treatment	Service Connections
15		Distribution	Treatment Plant
16			Wells
17			Storage Facilities
18			Pump Stations
19			Fire Hydrants
20			Valves and Chambers
21			Water Meters and Chambers
22			Sampling Stations
23	<b>Wastewater</b>		
24		Treatment	Sanitary Sewer Gravity Mains
25		Collection	Sanitary Sewer Force Mains

◀ ▶
1) Introduction
2) Services and Assets
3) Describing and Assessing LOS
4) Reporting Out
5) Interim Actions
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## 2. Services and Assets

### 1. List your service areas

- Modify the defaults as needed
- Describe services under each category
- Use bylaws, budgets and service plans as your references
- *Don't start with the assets!*

### 2. List the assets for each service

- Modify the defaults as needed
- Use capital plans and asset registers as your references
- *This is not a complete inventory; the purpose is to link asset groups to services*

1

Identify your  
Services

2

Identify your  
Assets





## 3. Describing and Assessing LOS

General properties that may be used to describe a service:

- **Regulatory:** What is the legal minimum?
- **Capacity/Availability:** How much, where, when and for whom?
- **Safety:** Protecting people and property
- **Quality:** How good is it (and in what respect)?
- **Reliability:** How often is service interrupted?
- **Environmental:** How well is the environment protected?
- *You do not need a level of service for each characteristic. Use this as a guide to make sure nothing key is missing.*



## 3. Describing and Assessing LOS

**Indicator** = a specific property of service that can be objectively evaluated

Service Characteristic	Indicators
Reliability	Water quality notices are infrequent and short in duration
	Service outages are infrequent and short in duration

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Describe Current LOS

4

Describe LOS Objectives

5

Identify Performance Measures

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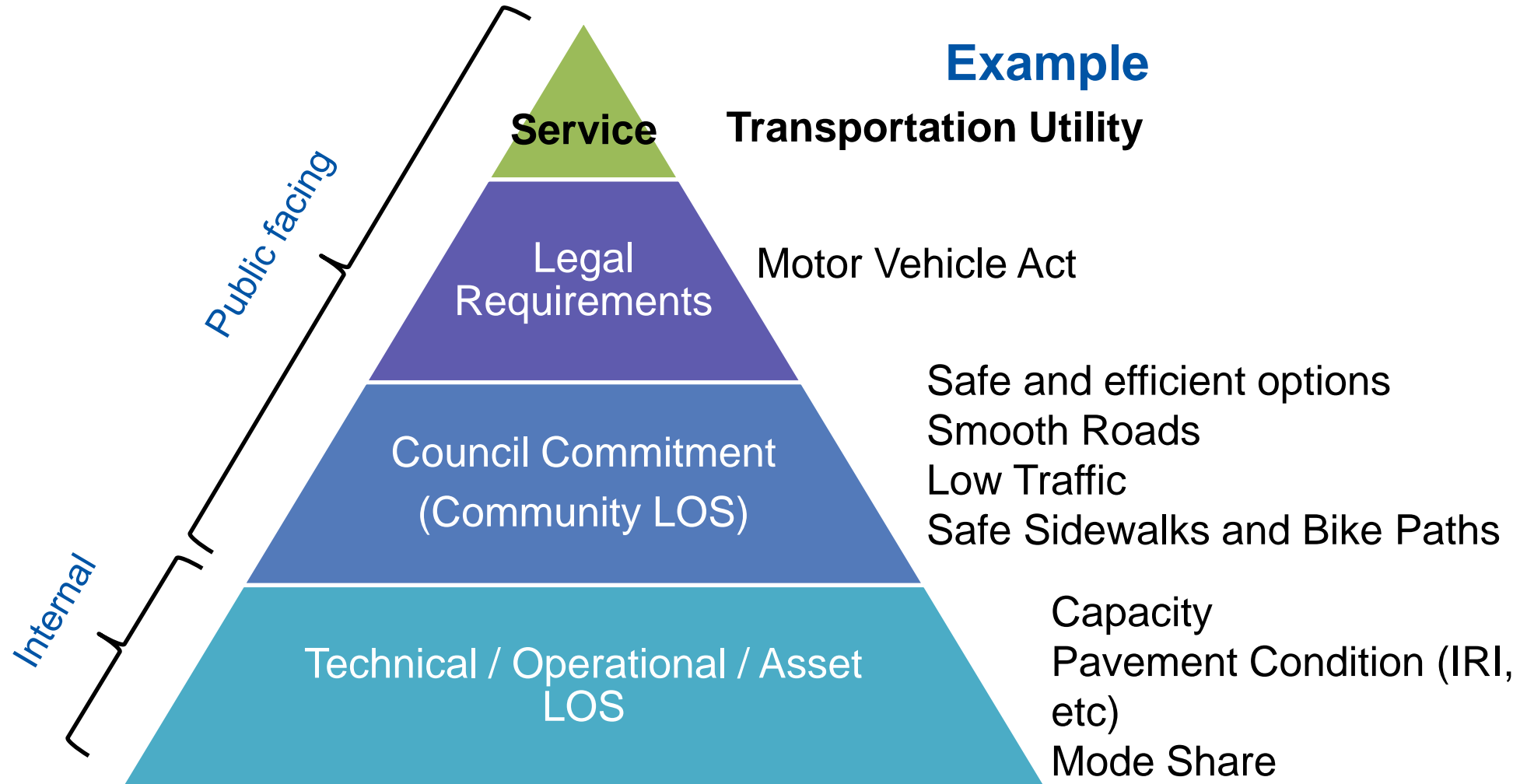
Identify LOS Gaps

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Develop Strategies to Address Gaps

## 21

	A	B	C	D	E	F	G	H	I	J	K	L	M	N					
1	3) Describing and Assessing Levels of Service																		
2	This worksheet documents steps 3-7 in the LOS process.																		
3	Hide the rows related to service areas (eg. urban transportation, if you are a rural community) that are not applicable to your municipality/regional district or alternately note "N/A" in columns H and J. Note for regional districts, you may want to copy this tab for each local service area, or duplicate each relevant service (this will mean some re-linking in tab 4)																		
5			What is the current level of service being provided?  What level of service is currently required by regulation, committed to (formally or informally), expected or targeted?						3 Describe Current LOS		Data Availability		Data Confidence		4 Describe LOS Objectives				
6											5	All required data is available.	A	Highly reliable, complete & ±2%, accurate.					
7											4	Most required data is available.	B	Reliable, complete & ±10% accurate.					
8											3	Sufficient data for essential decisions.	C	Uncertain, largely incomplete. ±25%, accurate.					
9											2	Marginal data for precautionary decisions.	D	Very uncertain, incomplete. ±40%.					
10											1	Insufficient data for essential decisions.	E	Unknown, little or no data available.					
11											NA		Not applicable						
12	Service Characteristic		Indicator		Example Levels of Service						#	Current Level of Service		Data Availability		Data Confidence		#	Level of Service Objective
Low							High												
1					2		3		4										
15	Potable Water																		
16	Regulatory	Drinking water quality complies with statutory requirements	Minimum service level.						4	Drinking water quality complies with statutory requirements	5		B		4	Drinking water quality complies with statutory requirements			
17	Capacity / Availability	Available water supply is sufficient for customers' needs	Capacity is available for basic household needs only; no garden irrigation	Capacity is available only for small gardens; no lawn watering	Drought based lawn watering restrictions occur more often than one in ten years.	Drought based lawn watering restrictions occur less often than one in ten years.													
18	Capacity / Availability	Water distribution infrastructure is accessible for servicing lots throughout the service area	Large areas of the community do not have the opportunity to connect to the service (but want/need to).	Some areas of the community do not have the opportunity to connect to the service (but want/need to).	Nearly all areas of the community that want/need the service have the service.	All areas of the community that want/need the service have the service.													
19	Safety	Water supply is sufficient for firefighting purposes	None of the community is considered to be hydrant protected for insurance grading purposes	A portion of the community is considered to be hydrant protected for insurance grading purposes	All of the community is considered to be hydrant protected for insurance grading purposes but hydrant flow testing and maintenance is not up to date	All of the community is considered to be hydrant protected for insurance grading purposes and hydrant flow testing and maintenance are fully up to date													
20	Quality	Water service pressure is adequate at customer connections	Frequent customer complaints about water pressure.	Frequent customer complaints about water pressure.	Few customer complaints about water pressure in isolated areas.	Almost no customer complaints about water pressure.													
21	Quality	Water quality is aesthetically pleasing	Fails to meet customer expectations year round on more than two of: taste, colour, odour, staining.	Fails to meet customer expectations year round on one of: taste, colour, odour, staining.	Fails to meet customer expectations seasonally on one of: taste, colour, odour, staining.	Meets customer expectations year round on all of: taste, colour, odour, staining.													
	Reliability	Water quality notices are infrequent and short in duration	Boil water notices are in effect in most years, or treated water consistently fails to meet a chemical or radiological	Boil water notices occur no more often than every 5 years, or treated water fails to meet a chemical or radiological	Water quality consistently meets all regulatory requirements.	Water quality consistently meets all regulatory requirements, and testing is done for additional identified risk parameters.													
		1) Introduction	2) Services and Assets	3) Describing and Assessing LOS	4) Reporting Out	5) Interim Actions	+												



# LOS Template – Reporting Out

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4) Reporting Out

This worksheet documents step 8 in the LOS process.

Hide the rows related to service areas that are not applicable to your municipality. Then, hide the rows where there is no level of service gap.

What are the highest priority areas to address, and what steps can be put in place to ensure services are continued to be delivered in a reliable and transparent manner?  
How can this process be communicated?

8  
Prepare a  
Service  
Delivery Plan

Documented Level of Service Report

[Your Community Name]

[Date]

This report provides a summary of staff and asset management committee estimates of the current community levels of service and actions required to bring current levels of service in line with levels of service objectives. [Your Community Name] has the following goals and commitments in service delivery:

- Comply with all legislative requirements.
- Provide capacity, quality, and reliability expected by Council and residents.
- Ensure the safety of services and infrastructure.
- Consider sustainability and long-term benefits to future generations.

Service Characteristic	Current Level of Service	Performance Gap	Describe Performance Gap to be Addressed	Sustainability Gap	Describe Sustainability Gap to be Addressed	Preferred Option	Lifecycle Costs	Timeframe	Decommissioning Cost (+\$) or Salvage Value (-\$)	Notes
Potable Water									\$0	
Regulatory	Drinking water quality complies with statutory requirements	No					The Capital Expense is Unknown The Yearly Cost is Unknown The Decommissioning Cost is Unknown			
Capacity / Availability							The Capital Expense is Unknown The Yearly Cost is Unknown The Decommissioning Cost is Unknown			
Capacity / Availability							The Capital Expense is Unknown The Yearly Cost is Unknown The Decommissioning Cost is Unknown			
Safety							The Capital Expense is Unknown The Yearly Cost is Unknown The Decommissioning Cost is Unknown			
Quality							The Capital Expense is Unknown The Yearly Cost is Unknown The Decommissioning Cost is Unknown			
Quality						Improve public information on door hanger notices for residents	The Capital Expense is One time cost of purchasing ne door hangers. Replacement cost as hangers are lost / damaged negligible over the long term.			

1) Introduction

2) Services and Assets

3) Describing and Assessing LOS

4) Reporting Out

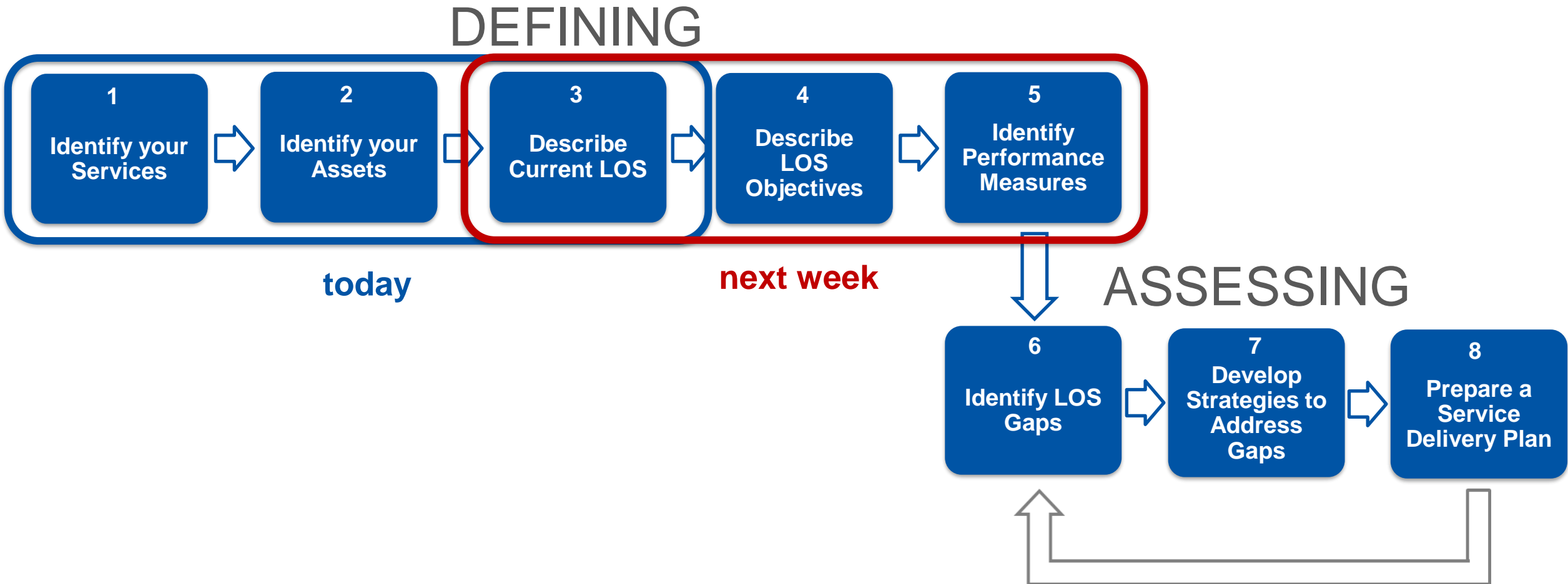
5) Interim Actions

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# LOS Template – Interim Actions

	A	B	C	D
1	<b>5) Interim Actions</b>			
2	This worksheet is intended for notes, so interim actions can be documented and tracked. For example, where you aren't ready to complete the			
3	whole table, but you've been able to identify where you're at and what next steps are needed.			
5		<b>Action</b>	<b>Target Completion Date</b>	<b>Person Responsible</b>
6	1.			
7	2.			
8	3.			
9	4.			
10	5.			
11	6.			
12	7.			
13	8.			
14	9.			
15	10.			





## Before next Thursday (Session 3)...

- Connect with colleagues to fill in gaps
- Gather and review service delivery policy

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