Agenda

- Asset Management at Peel
- Leveraging Risk Management
- Reporting & monitoring
- Benefits & take-aways

“We are all asset managers!”
The Region of Peel

• 1.3 million people
• Over $19B in capital assets:
  ▫ Water & Wastewater vertical & linear assets
  ▫ Roads infrastructure
  ▫ Waste Management Processing
  ▫ Long Term Care Centres
  ▫ Paramedic stations
  ▫ Heritage museum & art gallery
  ▫ Affordable Housing
  ▫ Regional administration offices
  ▫ Works yards
  ▫ Shelters
  ▫ Child Care Centres
  ▫ Fleet

“We are all asset managers!”
Peel’s Asset Management Status

- Asset management is a way of business in Peel:
  - Asset Management Policy
  - Approved asset levels of service
  - Enterprise Asset Management Strategy
  - Enterprise Asset Management Plan
  - The annual Infrastructure Status & Outlook Report
    - A public report on the state & direction of Peel’s infrastructure
  - Enterprise Data Management Plan
  - Regular reporting to Executive Management:
    - State of the infrastructure
    - Infrastructure investment needs
    - Updates on key infrastructure issues & risks
  - Regular risk assessments for all assets
  - Program asset management plans in progress

“We are all asset managers!”
“We are all asset managers!”
Role of Corporate Asset Management

- Strategic analysis & planning
- Not full asset management
- Programs provide the “frontline” asset management

“We are all asset managers!”
“We are all asset managers!”
Leveraging Risk Management

“We are all asset managers!”
The Asset Management Advantage:

• Making better decisions!
The Challenge:

- What are the organization’s asset priorities?
- Need a consistent systematic approach

“We are all asset managers!”
The Answer: Risk Management

- Use risk to assess & prioritize asset needs
- A strategic decision enabler

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Risk

- The chance of something happening that will impact the achievement of an organization’s objectives
- Can be an opportunity or threat
- Cannot be eliminated – only managed
Risk Management

• Processes & structures directed towards the effective management of potential opportunities & threats

• Continuous, proactive & systematic

• Includes policies, procedures & practices to ID, prioritize, respond to, & monitor risks

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Risk Management Advantages/Considerations

• Provides a strategic, objective measure of organizational priorities

• Initial assessments can be done with little data (improves as data matures)
  ▫ Does not need to be overly precise for strategic decision-making
  ▫ Rely on the expert judgement of staff
  ▫ Factor in the unknowns as part of the risks
  ▫ Can be modelled with simple tools (e.g. Excel)

• Requires some knowledge of risk management
  ▫ Setting the consequence & likelihood measures
  ▫ Facilitating the risk assessment sessions – asking the right questions

“We are all asset managers!”
How it Works

• The common factor: Public Services

• Assets provide services

• Asset risks = risk to services

• Good assets = less service risk

• Critical assets are not always the priority
  • weighted higher, but if the assets are good, the risk is being well managed

“We are all asset managers!”
Connecting Asset Risks with Service Risks

• Asset Levels of Service (ALOS) control asset risk to services
  ▫ ALOS are condition, performance & maintenance targets/requirements to enable assets to provide customers with safe, adequate & reliable services
  ▫ Peel’s Enterprise AM Strategy focuses on condition & performance ALOS to forecast long-term infrastructure investments

• ALOS should be designed to achieve desired service outcomes

<table>
<thead>
<tr>
<th>Asset Level of Service</th>
<th>Service Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structurally Sound Bridges</td>
<td>Health &amp; Safety</td>
</tr>
<tr>
<td>Adequate Pipe Capacity</td>
<td>Sufficient Quantity</td>
</tr>
<tr>
<td>Comfortable Building Temperatures</td>
<td>Adequate Quality</td>
</tr>
<tr>
<td>Back-up Power Supply</td>
<td>Reliability</td>
</tr>
</tbody>
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"We are all asset managers!"
Asset LOS Dictate Risk & Needs

Meeting Asset Levels of Service
Less risk to services
Fewer asset needs

Not Meeting Asset Levels of Service
More risk to services
More asset needs

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Example: Assessing Asset Needs

Road in **Good** Condition

- Meeting Asset Levels of Service
- Good service quality & low risks
- No immediate need for major investment

Road in **Poor** Condition

- Not meeting Asset Levels of Service
- Poor service quality & higher amount of risk
- Higher need for capital investments to reduce risk

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Example: Assessing Asset Priorities

“\textit{We are all asset managers!”}
Making the Connections:

Customer Services ↔ Assets ↔ Asset Levels of Service ↔ Risk

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Connecting Services to Assets: Roads

“We are all asset managers!”

A safe, reliable road network

Safe Roads

Strategic Service Objective

CLOS

Major Assets Affected

Threats

Inherent (Maximum) Risk Level

ALOS

Residual (Target) Risk Level

Current State of Assets

Current Risk

Priority

Pavement & Base

Pavement collapse

High

PCI = 70

Medium

PCI = 55

High

#2

Bridges & Major Culverts

Structural collapse

High

Condition = B (Good)

Medium

Condition = D (poor)

High

#1

Storm Sewers

Pipe & road collapse

Medium

Condition = B (Good)

Low

Condition = C (Fair)

Medium

#4

Retaining Walls

Road collapse

High

Condition = C (Fair)

Medium

Condition = C (Fair)

Medium

#3

Storage Facilities

Roof/Wall collapse

Medium

FCI = 10% (Fair)

Low

FCI = 12% (Fair)

Low

#5

A safe, reliable road network

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Reporting

“We are all asset managers!”
Peel’s Capital Plan Reporting Process

Pre Capital Plan Reporting:
- Current state of the infrastructure
- Current & projected asset risk levels
- Recommended 10-year investments to achieve asset LOS & risk targets

Prepare 10-year Capital Plan

Post Capital Plan Reporting:
- Variances from Pre Capital Plan investment recommendations
- Reassess projected risk & state of infrastructure
- Make recommendations on Program Capital Plans

Quarter 2
Quarter 3
Quarter 4

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Measuring the Risk

Inherent (Unmitigated) Risk – Highest Estimated level of risk. No ALOS controls.

Target Risk – Desired risk after implementing all practical ALOS controls.

Current Risk – Estimated level of risk under present infrastructure conditions.

Projected Risk (over given time period) assuming no investments in the infrastructure

Estimated Risk assuming recommended capital investments are implemented over the given time period

“We are all asset managers!”
“We are all asset managers!”
We are all asset managers!
Reporting Benefits

• Clear & defensible reporting:
  ▫ state of the infrastructure
  ▫ asset & service risks
  ▫ organizational asset needs & priorities

• Shifts the discussion from “where are we?” to “where we go”

• Aligns capital plans with asset priorities

• Builds the Public’s & Council trust in decision-making
Take-aways

• Don’t try to make it perfect first time
  ▫ Realistic, achievable goals
  ▫ Manage expectations
  ▫ Recognize opportunities for later improvements

• Keep it simple
  ▫ Clear, meaningful measures & reporting

• Process before software
  ▫ Adapt software to the processes

• Communicate, Communicate
  ▫ Maintain open channels & an open mind

• A mix of art & science
  ▫ Combine expert judgement with facts & stats
Questions

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