

# ACCIST:

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## Asset Condition and Climate Impact Scoring Tool



ONTARIO  
SOCIETY  
OF PROFESSIONAL  
ENGINEERS



**Darla Campbell, P.Eng.,** *Dillon Consulting*

# Knowledge Product ACCIST

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



FEDERATION  
OF CANADIAN  
MUNICIPALITIES

FÉDÉRATION  
CANADIENNE DES  
MUNICIPALITÉS



ONTARIO  
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OF PROFESSIONAL  
ENGINEERS

- Partner with FCM's MAMP Program
- Developed and delivered AM301 – Asset Management for Climate Resilience: Focus on Buildings
- Developed Knowledge Product
- Tool and video tutorial to be linked on FCM Resources page



Region of Halton  
Oakville Water Purification Plant



Meaford  
Municipal  
Building



Pembroke Operations Department

## Assets Deliver Municipal Services



3 Tay Wastewater Treatment Plant



Library and Recreation Centre



# Assets Deliver Municipal Services

Town of Renfrew



Pembroke Operations Department



Kincardine Municipal Airport







Tay Township Booster Station

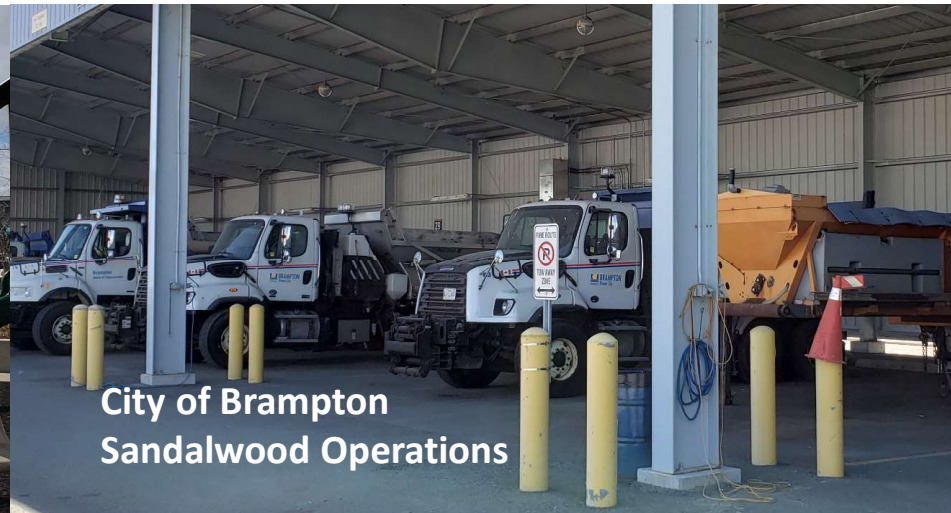


Sand/Salt Dome, Road Operations

## Assets Deliver Municipal Services



Town of Oakville Park



City of Brampton  
Sandalwood Operations



# How does asset management deliver value to my community?

**Risk**

**Performance**

**Cost**



**Value from  
services**



# Outline

- 1 Introducing: **Knowledge Product ACCIST**
- 2 **Asset Condition** + **Climate Impact**
- 3 Case Study Application and Demonstration
- 4 Frequently Asked Questions

**Asset Condition and Climate Impact Scoring Tool (ACCIST)**

# ACCIST: Asset Condition and Climate Impact Scoring Tool

- Excel Tool

- Registry of buildings

- Location
    - Age
    - Condition
    - Performance

+

- Assessment of Climate Impact

- at the system level

- Summary of condition info + climate impact

Asset Condition and Climate Impact Scoring Tool (ACCIST)



## Asset Condition and Climate Impact Scoring Tool (ACCIST)

### Facility List

		current year	2022		
Asset ID	Structure/Building Name	In-Service Date	Age	Location	Replacement Cost
	Building Example Name	2022	0	123 Sample St	\$ 363,000.00
1	Water Treatment Plant	2002	20	125 Water Street	
2	Public Works Garage	1987	35	1675 River Avenue	
3	Community Centre and Arena	1992	30	100-16 Guelph Drive	
4	Park Washroom and Refreshment Booth	2015	7	75 New Forest Road	
5	Municipal Administration Office	2014	8	125 Main Street	
6	Fire Hall	2021	1	677 Siren Way	
7	Library	1942	80	79 Quiet Lane	
8	Wastewater Treatment Plant	2016	6	1919 Ontario Street	

## Asset Condition and Climate Impact Scoring Tool (ACCIST)

[illegible]



## Asset Condition and Climate Impact Scoring Tool (ACCIST)

[illegible]

## Asset Condition and Climate Impact Scoring Tool (ACCIST)

[illegible]



# Case Study Application

Familiarize yourself with Community XYZ (map + information)

- **STEP 1:** (tab 3) **Facility Details**
- **STEP 2:** (tab 4) **Assess Condition and Performance**

Populate the ACCIST file for assigned building(s)

- **STEP 3:** (tab 5) **Climate Impacts**

Populate the ACCIST file for the same building(s)

Future Performance      Current Condition

Asset ID	Age (yrs)	NAME OF BUILDING / FACILITY	MAINTENANCE/OPERATOR NOTES Description of Facility and Major Components
1	20	Water Treatment Plant	<p>The plant is near the river edge, and in a bit of lower lying area, so sometimes we see a bit of flooding around the building. So far the systems inside haven't been affected, but the basement does have some water infiltration from time to time. We've also noticed that heavy winds have knocked out the comms system in the past. Luckily the electrical system fares ok.</p> <p>The backup generator is in the basement on a housekeeping pad, but I worry it can get damaged if there's a lot of water down there.</p>
2	35	Public Works Garage	<p>No one spends a lot of time there, so we don't really get calls for repairs to this building. But it does house important snow removal equipment, and sometimes the building is hard to access if there's been an ice storm or heavy snow fall. It's also kind of low-lying, and I worry about the creek flooding - in last year's major storm the creek overflowed and nearly flooded the site.</p>





Climate  
Impacts  
NOW

Climate  
Impacts  
FUTURE

Asset ID	Age (yrs)	NAME OF BUILDING / FACILITY	MAINTENANCE/OPERATOR NOTES Description of Facility and Major Components
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2	35	Public Works Garage	<p>No one spends a lot of time there, so we don't really get calls for repairs to this building. But it does house important snow removal equipment, and sometimes the building is hard to access if there's been an ice storm or heavy snow fall. It's also kind of low-lying, and I worry about the creek flooding - in last year's major storm the creek overflowed and nearly flooded the site.</p>



## Reflection Questions

- Q1. How might climate change affect the facilities in the future?
- Q2. What is the desired LOS of infrastructure in 10-years?
- Q3. If you “do nothing”, what is the performance of the infrastructure?
- Q4. How do you prioritize to deliver LOS in your 10-year future?
- Q5. How might this tool help you prioritize maintenance and rehabilitation work? Capital expenditures?



# Frequently Asked Questions

- Registry of buildings
  - Location
  - Age
  - Condition
  - Performance

+

- Assessment of Climate Impact
  - at the system level

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