



SNC • LAVALIN

ASSET MANAGEMENT

MNL MUNICIPAL SYMPOSIUM APRIL 2015



A world leader

Founded in 1911, SNC-Lavalin is one of the leading engineering and construction groups in the world and a major player in the ownership of infrastructure. From offices in over 50 countries, SNC-Lavalin's employees provide EPC and EPCM services to clients in a variety of industry sectors, including mining and metallurgy, oil and gas, environment and water, infrastructure and clean power. SNC-Lavalin can also combine these services with its financing and operations and maintenance capabilities to provide complete end-to-end project solutions.

Introduction

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 - › Sector lead for Atlantic Canada Municipal Infrastructure, SNC-Lavalin
- › Rennie Hynes, M.Sc.
 - › Business Manager, Newfoundland & Labrador, SNC-Lavalin
- › Who is SNC-Lavalin Inc. in Newfoundland & Labrador?
 - › Commonly know as the BAE-Newplan Group Ltd.
 - › Offices in Mount Pearl, Corner Brook and Stephenville
 - › 80 employees
 - › Multi-disciplinary engineering consulting firm operating in Newfoundland & Labrador for 40 years

What is asset management?

- › Asset Management Planning is the process of making the best possible decisions regarding the building, operating, maintaining, renewing, replacing and disposing of infrastructure assets.

Why is asset management important?

- › An Asset Management Plan (AMP) allows a municipality to make the best decisions regarding maintaining and investing in its infrastructure.
- › An AMP helps determine what is the appropriate method of upgrading and when it should be done.

What are the components of an AMP?

- › Inventory
- › Valuation
- › Location
- › Condition
- › Service level
- › Intervention method
- › Financial plan

Inventory (Asset)

- › An asset is any physical property owned by the municipality, such as:
 - › Buildings, town hall, stadium, fire hall, library
 - › Underground infrastructure:
 - › Water, sanitary and storm sewer systems
 - › Transportation network:
 - › Streets, traffic lights, bridges
 - › Equipment:
 - › Cars, trucks, snow clearing equipment, road maintenance equipment
 - › Recreation facilities:
 - › Soccer, softball fields
 - › Playgrounds

Valuation

- › What are the assets worth?
- › In today's dollars, not the cost to replace.
- › Various data bases and estimating methods are available to help provide valuation.

- › In 2009, changes to the Public Sector Accounting Board (PSAB) standards now require municipalities to report their assets in the financial statements.
- › Municipalities now have a better handle on their assets and their value.

Location

- › What are the assets located?
- › Geographical Information System (GIS):
 - › Most common method of logging location
 - › Many municipalities have and/or are working on building their GIS.

Condition

- › What is the condition of the assets?
 - › This is sometimes difficult to determine.
 - › Many methods are available depending upon effort/money the municipality wishes to invest.
 - › Buildings: Visual inspection
 - › Underground water, sanitary and storm systems:
 - › Camera inspections
 - › Flow measuring
 - › Capacity
 - › Maintenance reports
 - › Streets:
 - › Visual inspections using standard evaluation templates
 - › Laser scan of asphalt
- › There are standards for condition assessments.

Service Level

- › What is the operating condition of an asset that you and your residents are willing to accept?
 - › How many water main breaks per year?
 - › How many sewer blockages?
 - › How many potholes or level of asphalt deterioration?
- › The level of service provided has a direct link to the cost to maintain the asset.

Intervention Method

- › What should we do to improve/maintain the asset?
 - › Maintain
 - › Replace
- › Street upgrading examples:
 - › Pot hole patching
 - › Crack sealing
 - › Resurfacing
 - › Reconstruct
- › What is the best combination of methods?
 - › If we are going to reconstruct a street, is there underground infrastructure that also should be replaced or upgraded?

Financial Plan

- › What is cost to maintain our assets and how will it be funded?
- › Costs are directly related to the level of service.
- › Funding sources:
 - › Municipal taxes
 - › User fees
 - › Provincial funding
 - › Federal funding

State of the Industry

- › Alberta – AMP finalized by December 2015
- › British Columbia – Agreed to develop an AM framework
- › Manitoba – AMPs to be in place March 31, 2018
- › New Brunswick – AMPs in place for 25% of municipalities by 2017
- › North West Territories – AMP template by March 31, 2015
- › Nunavut – AMPs in place by March 31, 2018
- › Ontario – AMPs in place by December 31, 2016
- › Prince Edward Island – AMPs in place by March 31, 2018
- › Quebec – AMPs in place
- › Saskatchewan – AMPs in place by March 31, 2018
- › Yukon – Municipalities to report on progress by December 31, 2017

Newfoundland and Labrador Gas Tax Agreement

- › Schedule B - Eligible Project Categories
 - › 18. Capacity building
 - › Includes investments related to strengthening the ability of local governments to develop long-term planning practices.

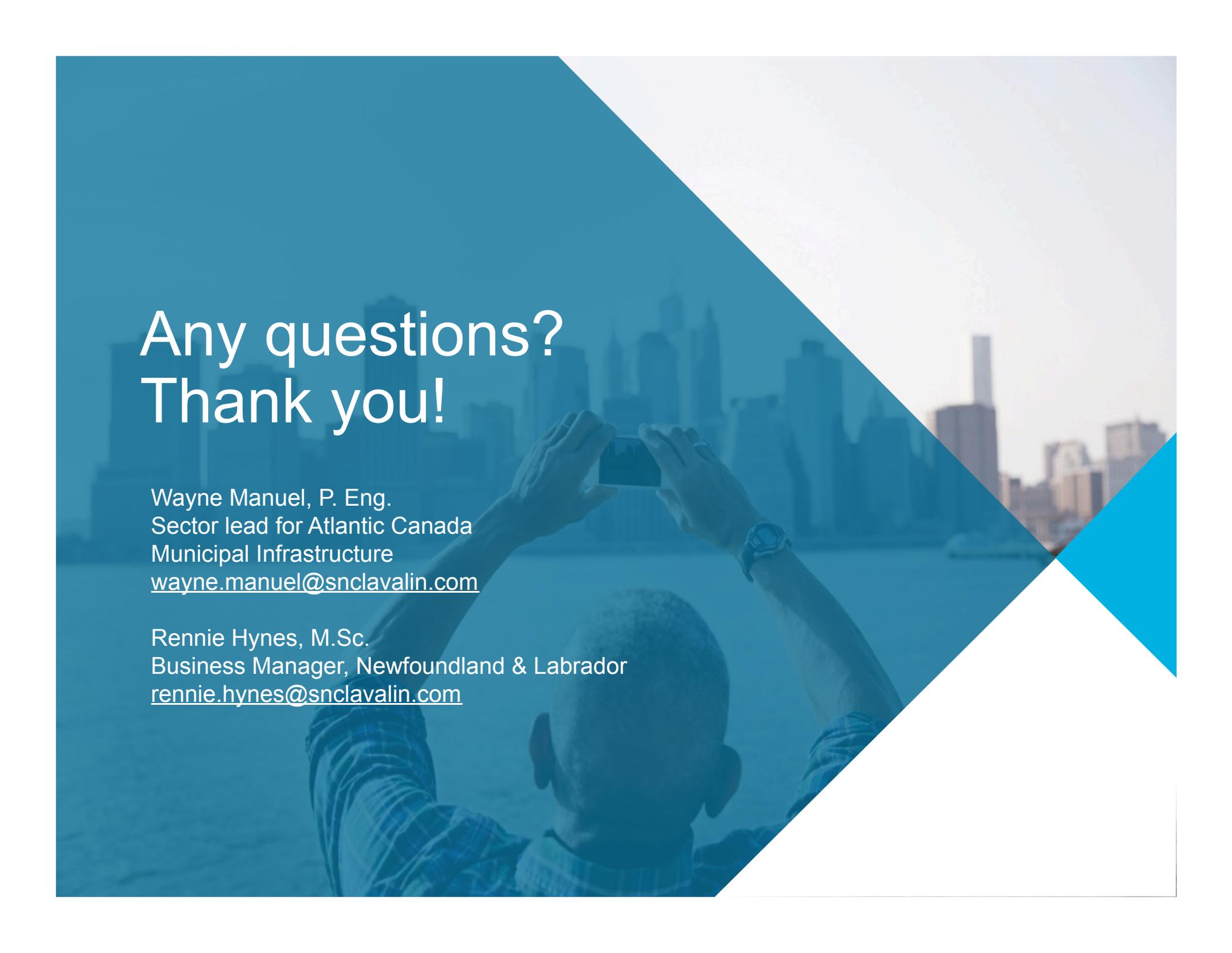
- › Schedule F
 - › Newfoundland and Labrador will develop a template and/or guidelines for local governments to use or adapt in making improvements to their asset management, asset management planning, and, as appropriate, the development and implementation of an AMP.

What are the consequences of not managing our assets?

- › Assets are under funded.
 - › Continued deterioration
 - › The level of service declines.
 - › Users/residents are unsatisfied with the level service.
 - › Cost of maintaining assets are passed on to future generations.
- › Funds spend are not providing maximum benefit.
 - › The work being done is not appropriate for the condition of the asset.
 - › The timing of the work does not provide maximum benefit.

How do we develop an AMP?

- › Engage the assistance of someone who is knowledgeable in AMPs.
- › Develop an AMP that is appropriate for your municipality.
 - › It is not one size fits all.
 - › An AMP requires continued effort to maintain so do not implement a plan that is too difficult or expensive to maintain.
- › Choose a software that is suitable for your needs. The software should have modules that you can implement as your plan grows.
- › Choose methods for condition assessments that fit your budget and can be sustained.
- › Engage asset users in developing the level of service required.
- › An AMP can be developed in phases. Start with the phase that reflects your highest priority.

A person is seen from behind, holding a smartphone up to take a photo of a city skyline across a body of water. The scene is overlaid with a semi-transparent blue filter. The background shows a city with several tall buildings under a bright sky. The person is wearing a watch on their left wrist and a plaid shirt.

Any questions? Thank you!

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