



XIII  
INTERNATIONAL  
WINTER ROAD  
CONGRESS

QUÉBEC, FEBRUARY 8 TO 11, 2010



# SUSTAINABLE WINTER SERVICE FOR ROAD USERS

*Sustainable Winter Service in a P3 Contract in  
New Brunswick*

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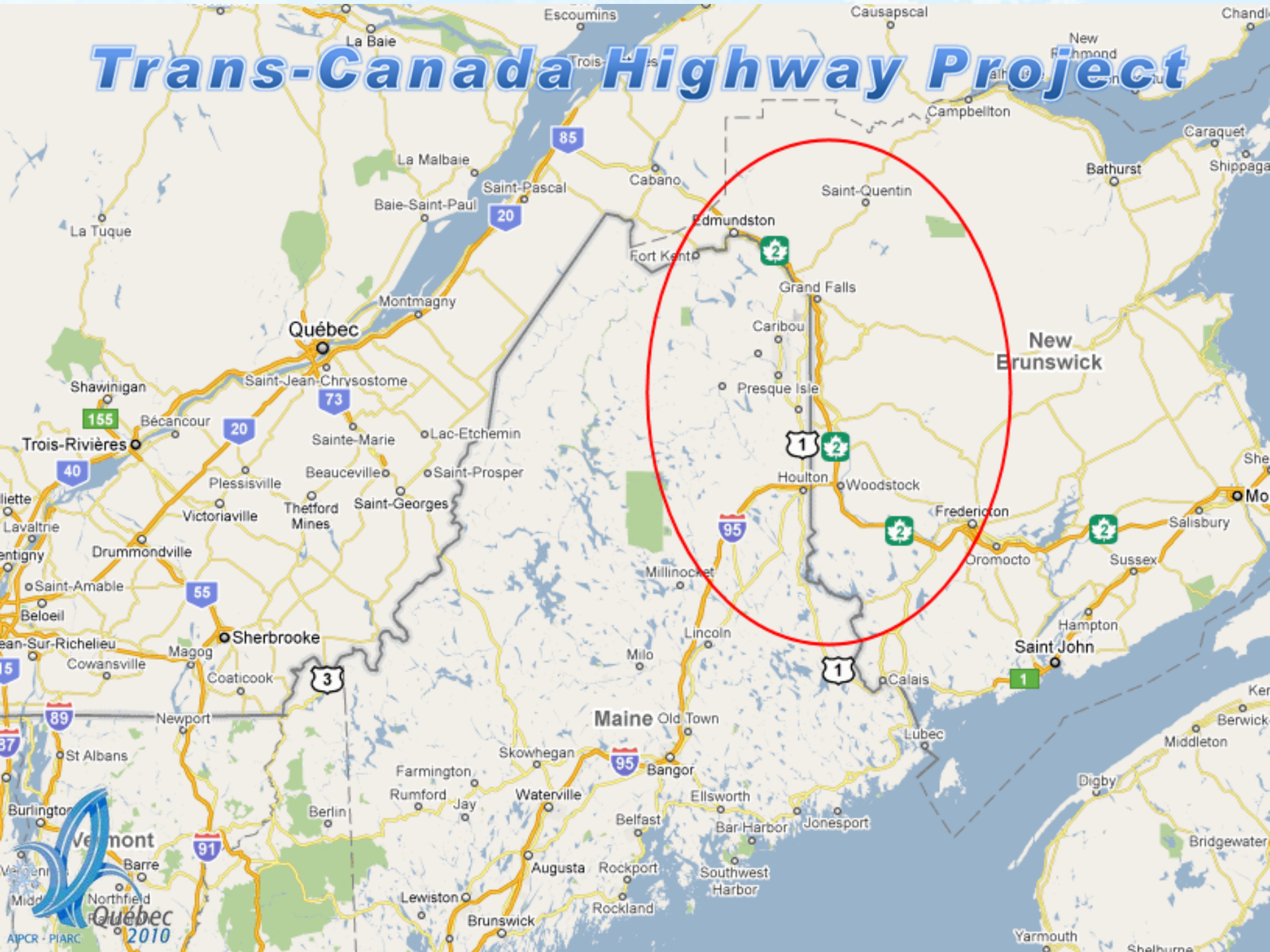
# Sustainable Winter Service in a P3 Contract in New Brunswick

## Agenda

- Overview of the TransCanada Highway Project
- TCH Project Agreements
- Winter Maintenance Standards
- Commitment from the Operator
- Compliance Monitoring









# Trans-Canada Highway Project



# Trans Canada Highway Project

## Québec Border to Longs Creek and Route 95

-  Route 2 ( 2 Lane )
-  DB Sections
-  DOT - Built Sections ( Route 2 )
-  DOT - Built Sections ( Route 95 )
-  Existing Sections
-  Project Limits





# Overview of the Trans-Canada Highway Project

- 275 km of 4-Lane Highway
  - 100 km designed and built by the Developer
  - 45 km completed by the Province
  - 130 km of existing 4-lane highway



## Winter Facts:

- Winter season: Mid November to Mid April
- Snow fall: Average 300 cm per yr / 430 cm in 2007
- Snow events: Approx. 50 storms per year > 5 cm

# TCH Project Agreements

- Main contract between the Province of New Brunswick and Brun-Way
- Project Agreement Consist of:
  - TCHP Agreement
  - Design Build Agreement
  - Operation Maintenance and Rehabilitation Agreement
  - Section 0 Maintenance Agreement
  - Others:
    - Direct Agreement
    - Purchase Agreement

# TCH Project Agreements - OMR Standards

- Performance Based Specifications
  - End Result
  - Service Oriented
- OMR Standards
  - Auditable (Clearly Defined & Measurable)
  - Inspection Schedule
  - Condition Requirement
  - Defined Response Time





# OMR Standards - Winter Standards

- Winter Standards have been developed in the following areas:
  - Winter Control
  - Snow Plowing
  - Sand & Salt Spreading
  - Snow Removal
  - Snow Fences & Hedges
  - Supply, Mixing and Stockpiling of Winter Sand & Salt





# Winter Standards – Snow Plowing

Plowing	SPECIFICATION	Plowing shall commence prior to snow accumulation reaching twenty (20) mm on any travelled lanes including interchange ramps. The maximum allowable accumulation of snow on the travelled lanes is forty (40) mm.
	OPM	MTC – Plowing commenced prior to snow accumulations of greater than twenty (20) mm .
		MRT - Ongoing
		MTC – No snow accumulations greater than forty (40) mm.
	MRT - Ongoing	

*OPM: Operator Performance Measure*

*MTC: Minimum Tolerable Condition*

*MRT: Maximum Response Time*

# Commitment from the Operator

- OMR Plans
- Quality Management
  - ISO Certification
  - Management Responsibility
  - QMS Documentation
  - Managing of Subcontractors
  - Operator Compliance Monitoring
  - Internal Auditing
  - Continual Improvement
  - QMS Reporting



# Compliance Monitoring

- Compliance Monitoring by the Province
  - Scheduled Site Audits
  - Scheduled Management System Audits
  - Site Visits
  - Follow-up Audits
- Non-Conformance Management
  - Non-Conformance Notices
  - NCN Register
  - Payment Adjustments

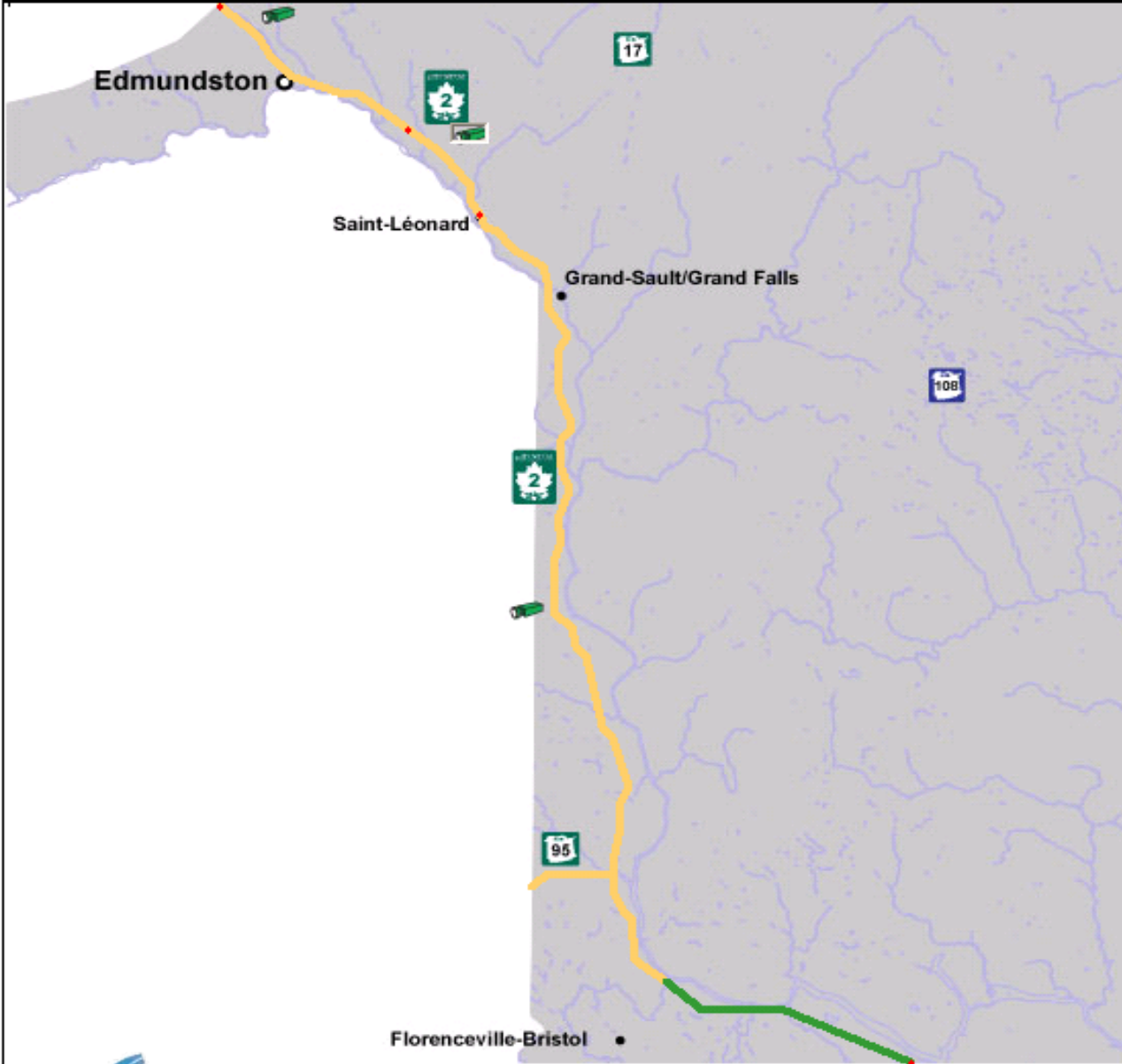




# Brun-way's Commitment To TCHP

- Maintain a safe, passable facility for highway users
- Meet or exceed the required Level of Service
- Ensure IMS adheres to Level of Service requirements
- Minimize accident & liability risk
- Assist first responders in emergencies
- Be responsive to changing weather conditions
  - Provide public access to winter road conditions





46° 55' 28" N 68° 47' 35" W

- Decimal Degrees
- Deg Min Sec

conditions as of: 2010-01-19 09:03:16

visibility

Good    Fair    Poor

<input checked="" type="checkbox"/> Bare full width	<input type="checkbox"/> Icy spots
<input type="checkbox"/> Bare centre strip	<input type="checkbox"/> Slushy
<input type="checkbox"/> Bare wheel tracks	<input type="checkbox"/> Mod drifting snow
<input type="checkbox"/> Light snow cover	<input type="checkbox"/> Heavy drifting
<input type="checkbox"/> Light drifting snow	<input type="checkbox"/> Closed
<input type="checkbox"/> Snow covered	<input type="checkbox"/> Closed flooding
<input type="checkbox"/> Snow packed	<input type="checkbox"/> Service suspended
<input type="checkbox"/> Slippery	<input type="checkbox"/> Not reporting

segment    highway    district

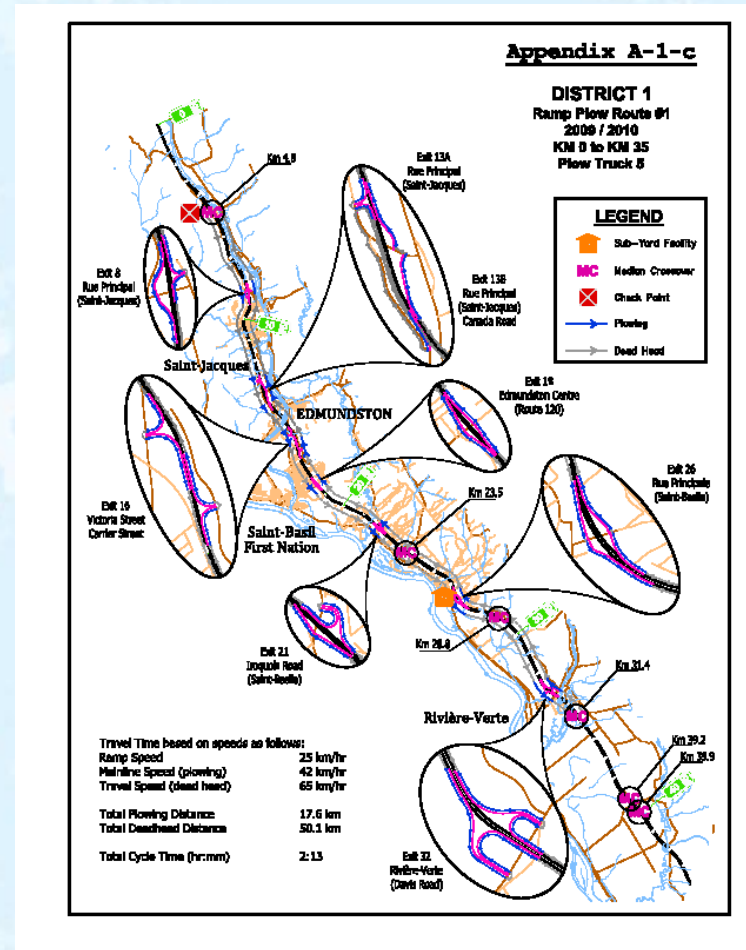
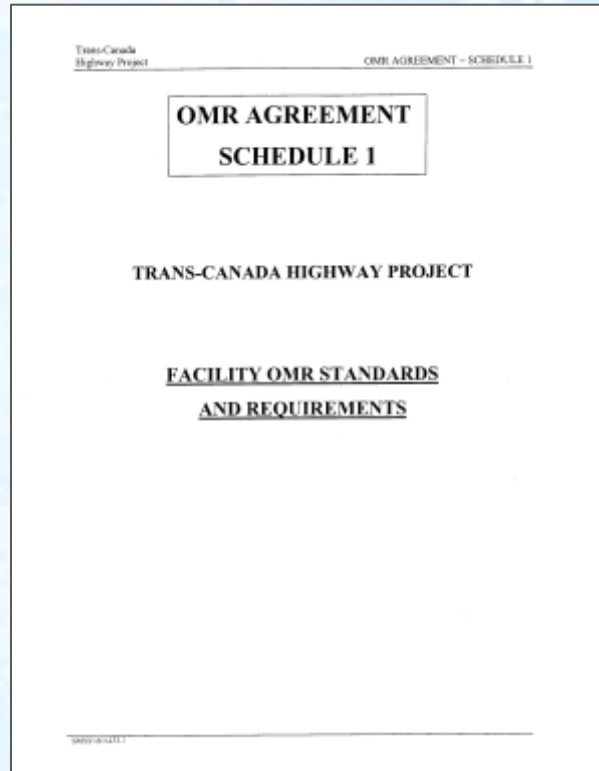
highway

from

to

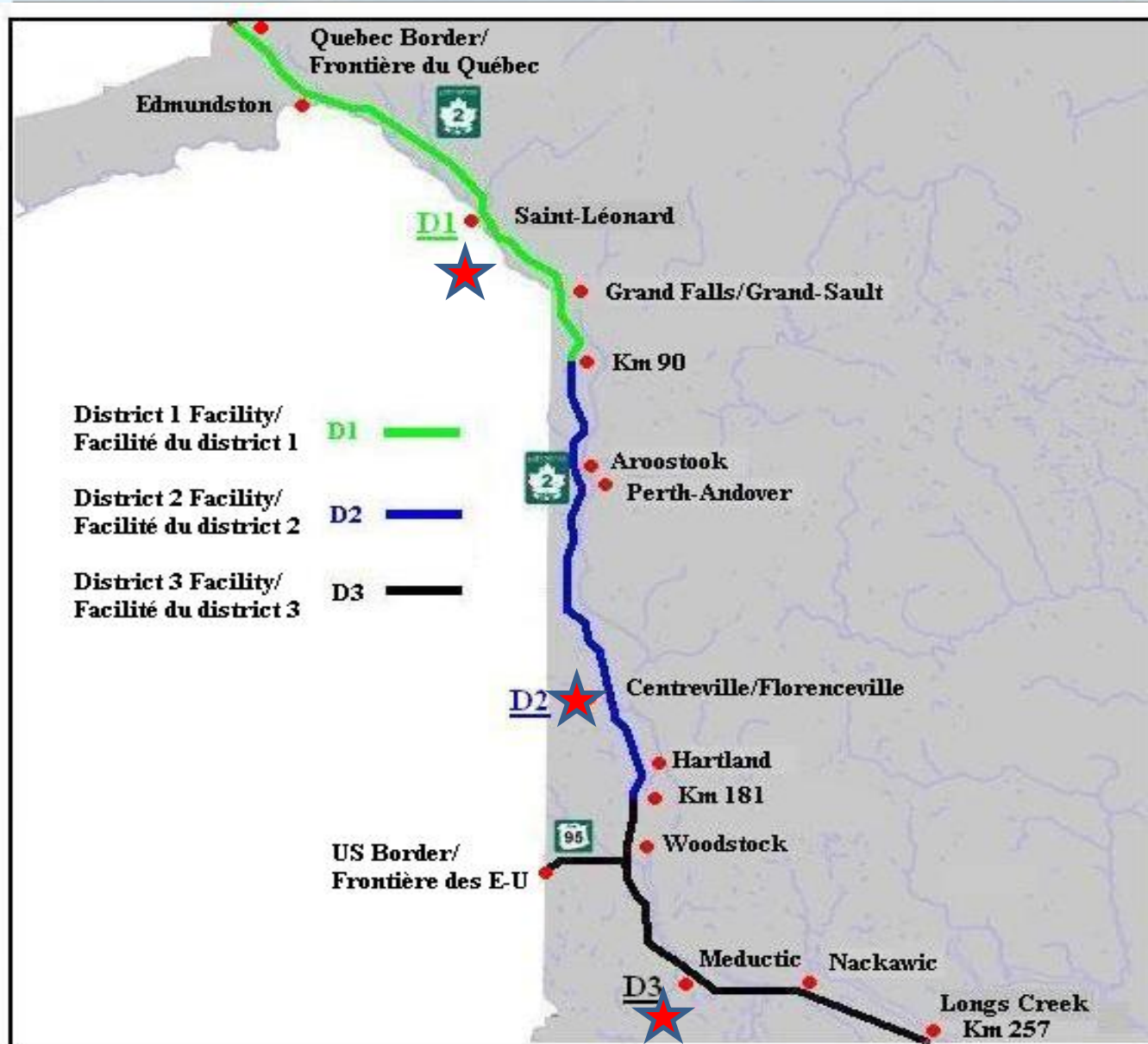
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# Strategic Planning





# Organization



# INNOVATIVE COST MANAGEMENT



# Risk & Contingency Planning





# Quality & Performance Management





Questions?