

# Panelist



**SNC • LAVALIN**



**Kevin Vokey, P.Eng**

**Director, Rail Systems**

**SNC-Lavalin, Inc.**

**Experience in:**

- **Planning, Design, & Construction**
- **Tramways, LRT's, Metro's, Heavy Haul**
- **Design-Bid-Build, Design-Build, P3**



# SNC-Lavalin at a Glance

## OUR MISSION:

*Contributing to the success of our clients  
through value-added services and  
continuous improvement*



- **Largest E&C firm in Canada**
  - Providing Study, Design, Project Management, Construction & Operations and Maintenance
- **Global leader in project delivery with worldwide project experience**



# SNC-Lavalin

## Capabilities & Services

### Diversified Range of Industries & Expertise

#### Infrastructure



- Railways
- Roads
- Ports & Marine
- Mass Transit
- Airports

#### Operation & Maintenance

- Infrastructure
- Industrial
- Remote Camps



Environment  
Chemical & Petroleum  
Power  
Telecommunication  
Mining & Metallurgy

Infrastructure Concession Investment  
Agri-Food  
Industrial  
Pharmaceuticals  
& Biotechnology



## Design-Bid-Build Model

Owner's Preferences & Experience

Consultant's Design & Oversight

Contractor's QMS

Owner's Acceptance

High Sensitivity to Individual Budgets

Highest Owner Financial Risk

## Design-Build Model

Owner's Specifications

DB Contractor:

- Design
- Construction
- QMS
- Warranty

Owner's Acceptance

Motivation to Solve Construction Issues with Engineering Solutions

Reduced Owner Risk

## P3 Model

Owner's Stated Needs

Concessionaire:

- Internal WBS
- Life-Cycle Cost
- Risk

Owner's Inheritance

Motivation to Assure O&M Cost

Minimized Owner Risk





# Recent Projects



# SkyTrain Millennium Line

- Vancouver, BC Canada
- 20.3 km Extension to Existing 28.9 km System
- 13 Stations + Depot Expansion
- Design-Build Model
- Revenue Service: January 2, 2002





# Calgary C-Train

- **Calgary, AB Canada**
- **4 Extensions to the Existing NE & NW Lines**
- **Design-Bid-Build Model**
- **Conventional LRT, Manual, Ballasted Track**
- **Extensions Opened: 2003, 2007, 2009, 2014**



# Canada Line

- **Vancouver, BC Canada**
- **19.2 km Stand-Alone System**
- **16 Stations, Dedicated OMC**
- **Public-Private-Partnership (P3 DBFOM) Model**
- **Revenue Service: August 17, 2009**



# Reims Tramway

- Reims, Champagne-Ardenne, France
- 11 km Stand-Alone System
- 23 Stops, Dedicated OMC
- P3 DBOM Model
- Revenue Service: April 18, 2011





# Calgary West LRT

- **Calgary, AB, Canada**
- **8.2 km Extension to the C-Train Network**
- **6 Stations**
- **Design-Build Model**
- **Revenue Service: December 10, 2012**





# Metro Line

- **Edmonton, AB, Canada**
- **3.3 km Extension to the Edmonton LRT Network**
- **3 Stations, Mined Tunnel, DF and Embedded**
- **“CM At-Risk” Model**
- **Opening: Winter 2014**



# Evergreen Line

- Vancouver, BC, Canada
- 10.9 km Extension to the SkyTrain Network
- 6 Stations, Satellite VSF
- Design-Build Model
- Opening: 2016



# Confederation Line

- Ottawa, ON, Canada
- 12.5 km Low Floor LRT System
- 13 Stations & Dedicated OMC
- DBFM Model with Operation by OCTranspo
- Opening: 2018



