



Expert Forum: Addressing Climate Risks for Coastal Transportation Infrastructure

Climate change is projected to increase the frequency and intensity of weather conditions negatively impacting Canada's coastlines. Sea level will rise and amplify storm surges in coastal areas, and precipitation will be more intense. The impacts on supply chain reliability, capacity and cost may be extreme - not just at the coast but across land-based, air and marine transportation systems. How should transportation stakeholders manage these risks? Can supply chains build, adapt and prepare for them? The expert forum on coastal transportation infrastructure to address these issues is built around three core questions:

Can the lower mainland transportation infrastructure handle current extreme weather?

BC's lower mainland is home to Canada's largest port. The terminals, warehouses, railways, roadways and other supporting infrastructure keep Canada's economy moving. However, the nature of supply chains means damage to one link will have cascading impacts. In particular, recent global experience shows extensive economic disruption and losses as a result of coastal disasters. Business leaders and public officials must take action to reduce the risk of damage to transportation infrastructure from current climate hazards.

How should we manage the current transportation risks for remote and island communities?

Coastal communities outside of the Lower Mainland, including Vancouver Island, are particularly vulnerable to disruption due to a greater dependence on ferries and a primary access road. Where transportation alternatives are few, service is infrequent, and distances are long, it is essential that coastal transportation systems do not fail or can be restored quickly.

What should be done to better prepare for future climates and rising sea levels?

Climate change is already impacting BC's transportation infrastructure. Higher temperatures, more extreme weather events, rising sea levels, and higher storm surges put our coastal transportation systems at risk. Moreover, these challenges are expected to increase over time. Taking action now to design and adapt infrastructure and services to future climates and sea level rise will build our resiliency to the effects of climate change and reduce the risk of loss, damage and disruption.

The Expert Forum will discuss the current state of knowledge about these issues and explore possible actions by private industry, governments and others to reduce the risk of loss and damage from disruption of coastal transportation infrastructure. In particular, the science community seeks direction about research that would support the current and longer-term needs of decision makers addressing coastal transportation infrastructure issues.

DAY 1 SCHEDULE: May 16th, 2018

8:00 Breakfast

Welcome Address

8:30 Paul Kovacs - Executive Director, ICLR
Ronald Pelot – Associate Scientific Director, MEOPAR
Oksana Exell – President & Chief Executive Officer, WESTAC

Setting the Scene: Current Climate Risks in the Lower Mainland and BC

8:45 Becky Denlinger – Deputy Minister, Emergency Management British Columbia

Theme 1: Current Transportation Infrastructure Risks in the Lower Mainland

Panel Discussion

9:15 **Moderator: WESTAC** – Oksana Exell, President & Chief Executive Officer
TransLink – Derek Stewart, Director, Safety, Environment & Emergency Management
Vancouver Airport Authority – Don Ehrenholz, Vice President, Engineering & Environment
Vancouver Fraser Port Authority – Willy Yung, Director, Engineering & Maintenance

10:45 Networking Break

Stakeholder Perspectives

11:15 **Moderator: Fraser Basin Council** – Bob Purdy, Director, External Relations & Corporate Development
BC Maritime Employers – Terry Duggan, President & CEO
Canadian Tire – Gary Fast, Vice President, Domestic Transportation Operation
City of Delta – Mayor Lois E. Jackson
ILWU Canada – Bob Dhaliwal, Secretary Treasurer

11:45 Audience Discussion

12:15 Lunch

Early Warning Emergency Response and Critical Infrastructure Resilience

12:45 Maryam Golnaraghi – Director, Extreme Events and Climate Risk, The Geneva Association

Theme 2: Remote & Island Communities

Panel Discussion

13:30 **Moderator: University of British Columbia** – Stephanie Chang, Professor (MEOPAR Response Core Lead)
BC Ministry of Transportation and Infrastructure – Dirk Nyland, Chief Engineer
British Columbia Ferry Services Inc. – Gregg Clackson, Director, Operations & Security Centre
Nanaimo Port Authority – Ewan Moir – President & CEO
Powell River Regional District – Ryan Thoms, Manager of Emergency Services

15:00 Networking Break

Stakeholder Perspectives

15:30 **City of Victoria** – Tanya Patterson, Emergency Program Coordinator

16:00 Audience Discussion

16:30 Wrap-up

DAY 2 SCHEDULE: May 17th, 2018

8:00 Breakfast

8:30 **Welcome Day 2**

Theme 3: Sea Level Rise & Climate Change Impacts

Panel Discussion

9:00 **Moderator: Government of British Columbia** – Thomas White, Director, Climate Risk Management
Fraser Basin Council – Steve Litke, Senior Program Manager
Natural Resources Canada – Thomas James, Research Scientist (invited)
Transport Canada – Trevor Heryet, Executive Regional Director, Issues & Program Management

10:15 Networking Break

Stakeholder Perspectives

10:45 **Adaptation to Climate Change Team** – Deborah Harford, Executive Director
Natural Resources Canada – Pamela Kertland, Program Manager
University of British Columbia – Tugce Conger, Researcher
University of Washington – Anne Goodchild, Professor (invited)

11:15 Audience Discussion

11:45 **Closing Thoughts & Next Steps**
ICLR – Paul Kovacs, Executive Director