Understanding the Emerging Challenges and Opportunities Facing Canada’s Transportation System

CILTNA Transport Workshop
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Purpose

• Provide an update on the next review of the Canada Transportation Act.

• Identify emerging challenges and opportunities facing the Canadian transportation system.

• Seek your perspectives to deepen the understanding of key trends and issues.
The Canada Transportation Act

• The *Canada Transportation Act* is the **umbrella economic legislation for transportation services** in Canada.

• Major sections include:
  – national transportation policy declaration;
  – mandate and operation of the Canadian Transportation Agency;
  – air and railway transportation provisions;
  – provisions regarding the transportation of persons with disabilities; and
  – other general and administrative provisions.

• The next statutory review of the *Canada Transportation Act* will be launched in 2015.

• Stakeholders will be formally consulted as part of the review.
National Transportation Policy
- S.5 of the Canada Transportation Act

5. It is declared that a competitive, economic and efficient national transportation system that meets the highest practicable safety and security standards and contributes to a sustainable environment and makes the best use of all modes of transportation at the lowest total cost is essential to serve the needs of its users, advance the well-being of Canadians and enable competitiveness and economic growth in both urban and rural areas throughout Canada. Those objectives are most likely to be achieved when:

a. competition and market forces, both within and among the various modes of transportation, are the prime agents in providing viable and effective transportation services;

b. regulation and strategic public intervention are used to achieve economic, safety, security, environmental or social outcomes that cannot be achieved satisfactorily by competition and market forces and do not unduly favour, or reduce the inherent advantages of, any particular mode of transportation;

c. rates and conditions do not constitute an undue obstacle to the movement of traffic within Canada or to the export of goods from Canada;

d. the transportation system is accessible without undue obstacle to the mobility of persons, including persons with disabilities; and

e. governments and the private sector work together for an integrated transportation system.
The transportation system continues to play a key role as an economic enabler…

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<th>Canada is the world’s 2nd largest country with the world’s longest coastline and shared border.</th>
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… connecting three coasts, workers with jobs, travellers with destinations, people to communities, and products with markets.
Canadian transportation system is connected to global commerce networks…

In 2012, 62 percent of Canada’s merchandise trade was with the U.S. (and growing), while 7 percent was with China (and growing).

…with implications for the competitiveness, safety, security and environmental agendas.
Emerging global pressures during the next 20 years…

- Rising Socio-Economic Complexity and Uncertainty
- Growth of ‘BRICs’ and Emergence of ‘Breakout’ Nations
- Greening of Global Growth
- Climbing the technological ladder
- Shifting Demographics
- Growing Natural Resource Trade

… will present a number of new interconnected challenges and opportunities for Canada and its transportation system.
Uncertainty and complexity of the socio-economic environment…

Global Driver Characterized by:
• Interconnectedness of global economies and events beyond the control of any single government.
• High and rising sovereign and consumer debt levels that constrain and threaten economic recovery.
• Evolving security threats posed by geopolitical instability, terrorism, pandemics, etc.

Implications for Canada and its Transportation System
• Slower global growth, falling demand, fluctuating commodity prices and a strong Canadian dollar are forcing companies to re-evaluate strategic supply chain decisions, including facilities location.
• Fiscal restraint faced by governments at all levels driving need for innovative infrastructure financing arrangements (e.g., road pricing and public private partnerships).
• Secure transportation systems becoming a market access issue.
• Interconnectedness of issues driving need for collaboration across governments and the private sector.

… is the “new normal”.
Continued growth of “BRICs” and emergence of “Breakout” nations...

Global Driver Characterized by:
• Economic growth that is highest in the “BRIC” countries and the “Breakout” nations.
• Rise of emerging economies, particularly South Asia, is changing business models and driving competition.
• A diminished presence for the United States in the global economy.

Implications for Canada and its Transportation System
• Transportation will continue to support increasingly diversified networks of trade to sustain economic growth and maintain a competitive advantage.
• Shifting trade patterns will force transportation providers to realign service offerings, particularly in light of new developments, from recent trade agreements (e.g., European Union) and potential new trade agreements (e.g., Trans-Pacific Partnership) to the expansion of the Panama Canal.
• United States to remain Canada’s largest trading partner, but slower growth and increasing competition is generating protectionist behaviour.

…is generating opportunities but also changing the terms of competition.

“Breakout” nations defined as Indonesia, South Korea, the Philippines, Turkey, Poland and the Czech Republic.
Innovation and the pace of technological change is quickening...

Global Driver Characterized by:
• New business models and practices that are driven by technological change.
• Many countries developing policies to aggressively attract R&D and commercialization activities that leverage investment and productivity growth.

Implications for Canada and its Transportation System
• Intelligent Transportation Systems (ITS) is a major growth area delivering gains in all modes and underpinning new technological advances (e.g., self-driving cars, aerospace innovation, geographic positioning tools, mobile communications, advanced data management processes, etc.).
• New technology will demand efficient regulatory frameworks that remove barriers to growth while continuing to ensure high standards for safety and security matters (e.g., emergency response, road safety, collision avoidance).
• Productivity gains in Canada’s transportation system have slowed in recent years, challenging transportation providers to better integrate innovative approaches and technologies in service offerings (e.g., impact of 3D printing on logistics chains).

…raising questions as to how to continue to foster productivity and system performance gains.
Demand for natural resources...

Global Driver Characterized by:
- Volatile but generally high prices for key commodities, including energy.
- Exploration and extraction activities taking place in more challenging environments such as the Arctic.
- Increasing pressure to improve the energy efficiency of all transportation modes.
- Increasing global investment in the natural resources sector, including from state-owned enterprises (SOEs) such as sovereign wealth funds (SWFs).

Implications for Canada and its Transportation System
- Increasingly diversified energy mix to develop gradually across all modes.
- Despite progress, transportation sector to remain heavily dependent on fossil fuels until 2030.
  - High energy prices will continue to exert pressure on service providers to generate efficiencies and pass along costs to consumers.
- Significant new and planned resource exploration and extraction is taking place in Canada’s rural and remote communities, including the North.
- New requirements being placed on Canada’s transportation system with respect to the movement of raw commodities, including energy (e.g., liquefied natural gas (LNG), petroleum products, etc.).

...leading to new economic opportunities in many regions of Canada.
Shifting demographics are creating new pressures...

**Global Driver Characterized by:**
- Global population growth projected at over 8 billion by 2030.
- Stable/declining populations in developed countries leading to increased competition for skilled labour.
- Aging populations in developed countries is raising demand for better health care and accessible services.

**Implications for Canada and its Transportation System**
- Canada’s population is projected to increase from about 34 million to around 42 million by 2030, increasing pressure on aging infrastructure to provide workforces with efficient mobility choices, matching skills with opportunities.
- Growing populations in cities will place pressure on increasing transportation volumes that will challenge capacity as well as current high levels of safety.
- Some regions will experience greater population growth (the West, cities, etc.), with implications for congestion but will also provide opportunities to shift away from the automobile to other modes such as public transit and cycling.
  - Remote, rural and northern communities in Canada will continue to be dependent on essential transportation links for year-round access.
  - As the population ages, the proportion of residents with disabilities will generate greater demand for accessible transportation services.

...to provide a range of viable and accessible transportation choices.
Environmental pressures are rising...

Global Driver Characterized by:
• Growing tension between economic development and the need to protect the environment.
• Transportation policies in other international jurisdictions that are increasingly incorporating “sustainable”/“liveable” community concepts.
• Growing pressure to reduce GHG emissions and air and water pollutants.

Implications for Canada and its Transportation System
• Transportation sector the largest source of GHG emissions (24 percent).
• Impacts of climate change on the North are raising pressure for governments to implement adaption/mitigation measures but are also opening up new opportunities for alternative shipping routes.
• Pressure for investment to provide alternative modes of transportation, including public transit, promoting more compact communities, commercial fuel efficiency programs, and promotion of alternative fuels.
• Some Canadian companies are seeking competitive advantages through “green supply chains” to mitigate negative transportation impacts on communities (e.g., management of noise, water and air quality reserves).
• “Social Licence” becoming a prerequisite to advance some projects.

…requiring a climate-friendly/resilient transportation system to optimally move people and goods.
The demands on Canada’s transportation system are continuing to evolve…

…and effective action will be based on a deeper understanding of emerging challenges and opportunities.
Key Questions For Discussion

1. Are there other major emerging challenges or opportunities with implications for Canada’s transportation system that haven’t been covered in the presentation?

2. What steps should Canada take to address some of these challenges?

3. From your perspective, how can we encourage Canadians to take advantage of the emerging opportunities?