

# The Chartered Institute of Logistics and Transport in North America

## *Transport Canada – Innovation Centre: Regulatory Update*

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# Technology is inspiring innovation ...

“I believe the auto industry will **change more in the next five to 10 years than it has in the last 50 ...**”

– Mary Barra, CEO, General Motors

“90% of the **data** in the world today has been created in the last two years alone.”

– IBM

“We stand on the brink of a **technological revolution** that will fundamentally alter the way we live, work, and relate to one another.”

– World Economic Forum

“The Internet has revolutionized the way we communicate. Can you imagine what it can do for the supply chain? The **Transport and Logistics Internet is coming...**it is a game changer.”

– Jeremy Rifkin, renowned economic and social theorist

“The transportation industry is on the verge of a **massive software-driven market disruption**, setting the stage for a significant change in the way we think about travel, city design, and transport more broadly.”

– Marc Andreessen, Entrepreneur

“...**new business models and technologies are emerging** to solve the mobility challenge.”

– McKinsey & Company

## ... and transforming transportation



Connectivity



Automation



Internet of Things



Cloud Technology



Car of the Future

Disruptive technologies have several common characteristics:

- The technology is rapidly advancing and experiencing breakthroughs
- Potential scope of impact is broad – touching many firms and industries and affecting (or creating) a wide range of products
- Significant economic value or welfare could be created
- Economic impact is potentially disruptive – changing the status quo in terms of market dynamics, daily life, or the nature of work

**Transport Canada is responding through a number of initiatives**



**Transportation 2030 – Strategic Plan**



**Legislative Modernization and Regulatory Reform**



**Digital Strategy**



**Launch of the Innovation Centre**



# Transportation 2030 – Strategic Plan



# Transportation 2030

## ACTIONS FOCUSED UNDER FIVE THEMES

A national transportation system that supports economic growth, job creation, and Canada's middle class.



# 1

## The Traveller

Provide greater choice, better service, lower costs, and new rights for consumers



Transportation is the second biggest expenditure for Canadians: \$172.6 billion in 2015.

In 2015:

- 131 million passengers in Canadian airports
- 3.82 million passengers on VIA Rail
- About 55 million passenger vehicles through Canada/United States border crossings

Establish an Air Travellers Passenger Rights Regime to better protect consumers

Change international ownership rules to increase competition and reduce fares in our domestic airline industry

Work with CATSA to ensure that travellers go through security faster, while maintaining the same high security standards

# 2

## Safer Transportation

Build a safer, more secure transportation system that Canadians trust



Canada must continue to improve the safety of its transportation system.

In 2014:

- Total accidents decreased by 7.9%
- Total fatalities decreased by 10.7%

Speed up the review of the *Railway Safety Act* to further enhance railway safety standards

Introduce requirements for locomotive voice and video recorders to be used during accident investigations

# 3

## Green and Innovative Transportation

Reduce air pollution and embrace new technologies to improve Canadians' lives



Transportation accounts for 23% of air pollution.

Innovation helps reduce inefficiencies and increases safety and security.

Work with Provinces and Territories to reduce carbon pollution from the transport sector

Investments in electric car charging and low-emissions fueling stations

# 4

## Waterways, Coasts and the North

Build world-leading marine corridors that are competitive, safe and environmentally sustainable, and enhance northern transportation infrastructure



In 2015:

- \$205 billion: value of Canadian international marine trade
- Port of Vancouver: Canada's busiest port with 138.2 million tonnes of freight
- Northern communities: most of them connected by only one mode of transportation

Introduce stronger environmental protection for our coasts

Put in place and enforce a moratorium on oil tanker traffic along the northern coast of British Columbia

Introduce a national plan to increase marine safety, emergency response and a closer partnership with coastal communities

# 5

## Trade Corridors to Global Markets

Improve the performance of our transportation system to get products to markets and grow Canada's economy

In 2015:

- \$1,057 billion: Canada's total international trade
- 65% of it with the United States

Invest \$10.1 billion for transportation infrastructure to help eliminate bottlenecks and build more robust trade corridors

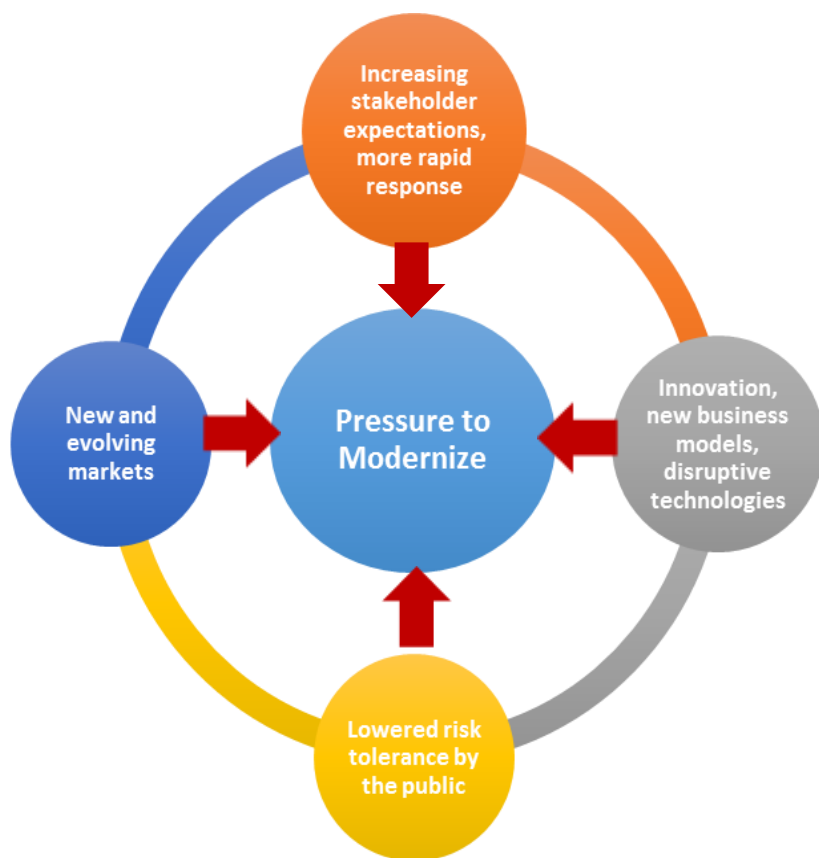


## Legislative Modernization and Regulatory Reform



# Why Do We Need to Modernize our Legislation?

## Evolving Transportation Environment



## Priorities

### Transport Canada

- **Transportation 2030** - Legislation must be able to align with global standards and adapt to evolving transportation system
- **Internal Review in 2016** - Concluded that TC's legislative and regulatory regime requires updating

### Government of Canada

- **Regulatory Reform Agenda** - Budget 2018 announcement to reform regulatory system to make it more agile, transparent and responsive
- **Other Priorities** - Transform services, address the digital economy, foster competitiveness and transparency, and demonstrate evidence-based decision-making



# Key Observations to Date



## **Inconsistent:**

There are a lack of consistent authorities across statutes; best practices are not common to all



## **Rigid:**

Acts are overly prescriptive, inflexible and outdated authorities



## **Contains gaps:**

Legislation lacks the authorities to support risk-based oversight



# Objective – Modern Legislation that is:

## COHERENT

- Clear language
- Consistent terminology for core concepts across Acts
- Clear and explicit objectives, authorities, roles and responsibilities
- Consistent, comprehensive range of Ministerial authorities
- Full suite of enforcement tools, including consistent AMPs schemes
- Consistent, broad range of inspectors' authorities
- Consistent authorities for security measures

## AGILE

- Ministerial authorities to temporarily make, suspend or modify requirements outside emergency context
- Ministerial authorities to enter into agreements for broad purposes with a broad range of partners
- Authorities to allow regulated entities to propose alternate ways of complying with requirements
- Broad “exercise of powers” authorities
- Authorities to administer Acts electronically, including using automated systems to make decisions

## RISK-BASED

- Authorities to order the provision of information for broad purposes (not just inspections)
- Authorities to order tests, analyses and studies for specified purposes
- Authorities to order companies to remedy non-compliances and risks not explicitly legislated
- Authorities to enter into compliance or consent agreements as alternative to AMPs
- Clear and explicit authorities to regulate plans, programs and management systems



# Regulatory Reform

*Budget 2018 provided \$11.5 million over three years, starting in 2018–19, for the Government to pursue a **regulatory reform agenda** focused on **supporting innovation and business investment**.*

*The goal is to make the Canadian regulatory system more **agile, transparent and responsive**, so that businesses across the country can **explore and act on new opportunities**, resulting in **benefits for all Canadians**.*

# Context & Opportunity

*Regulation has to be agile and adaptive enough to address the ways that innovative companies will continuously rewrite the rules of competition, ensuring sufficient oversight to protect the public interest without posing obstacles to innovation.*

Advisory Council on Economic Growth, 2017

2,600+



Regulations enabled by 800 Acts, in areas such as food and drug safety, environmental protection and transportation

50



Departments and agencies have regulatory responsibilities

## SHORTCOMINGS

Rapid and transformative changes in the economy and society increase need for regulatory modernization to keep pace

Regulatory modernization pursued episodically and unevenly



## OPPORTUNITIES

New policy instruments require rethinking to select better policy alternatives to regulation

Some regulatory approaches are more nimble and support innovation

New approaches to data and analysis can provide additional insights into regulatory modernization



# Digital Strategy

# Transport Canada's Digital Strategy

- Disruptive technologies are changing how we live, work, do business and ... *how we move people and goods.*
- Technologies have also dramatically *changed citizen expectations* – new approaches need to consider citizens' expectations as travelers, as recipients of our services, and their expectations as potential employees.

Our analysis and engagement efforts show that the best Digital Strategies:

- Base **Service delivery reform** on human-centred design – widely recognized as a foundation for strong digital service delivery (i.e. “*Tell Us Once*”)
- Make **Data** core to digital transformation – data sharing and exchange across stakeholder groups to inform policies and decisions
- Shift to being ‘**radically open**’ in all that we do – a consistent theme across all strategies
- Embrace **agile approaches** – innovation and experimentation are key to changing mindsets, culture and for creating a less risk-adverse culture



# Transport Canada's Digital Strategy

*Aligning to broader Government of Canada digital direction*

**Build a service-oriented culture** to provide seamless services that meet the needs of Canadians

- Put users first
- Build in inclusivity from the start
- Empower multi-disciplinary teams
- Iterate and improve frequently

**Work in the open** in order to promote innovation, transparency, re-use and to provide greater citizen choice

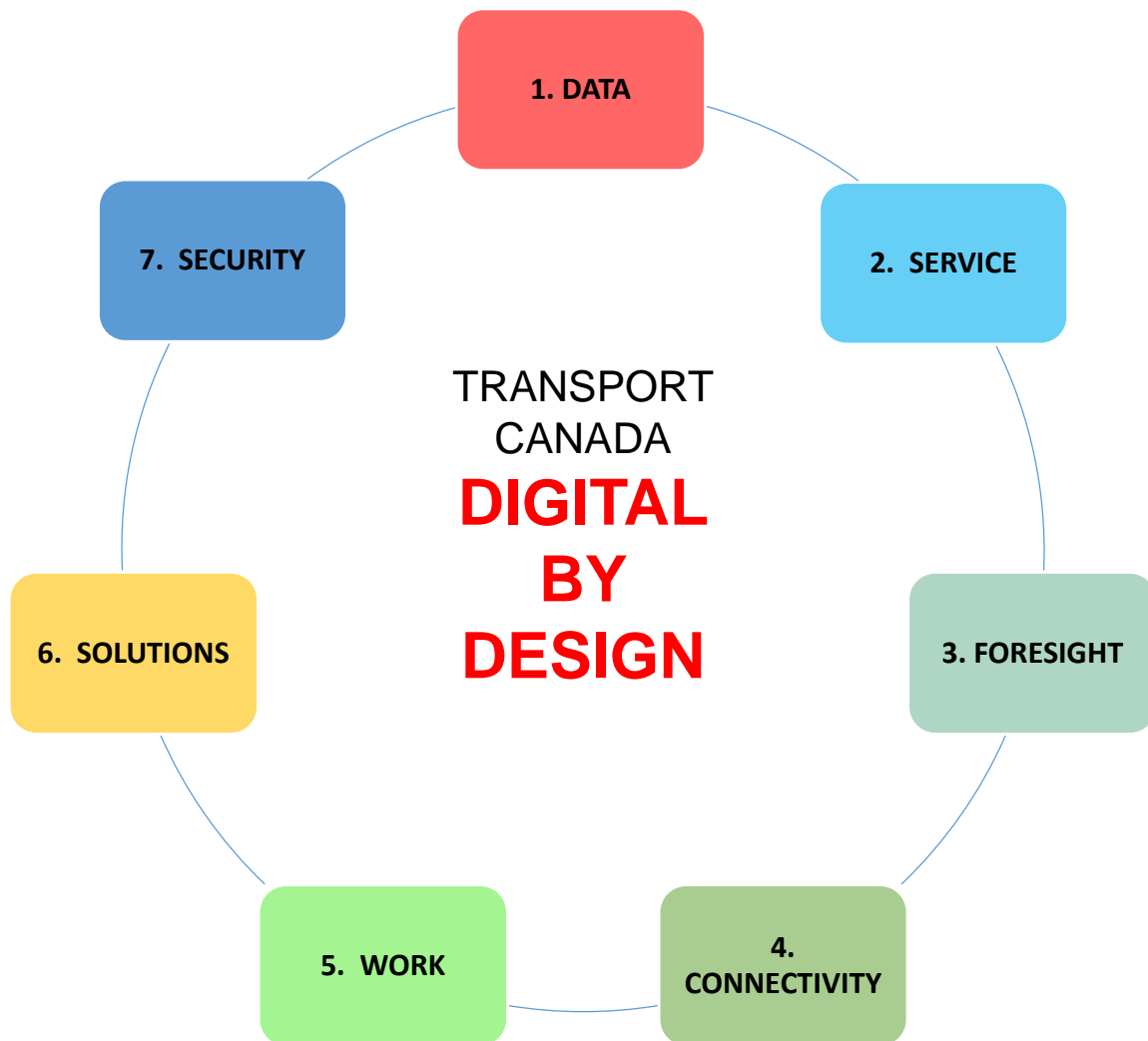
- Be open by default
- Use common solutions and approaches
- Build in an open and interoperable way
- Develop open and innovative partnerships

**Uphold public trust** so that people have confidence in their government

- Protect personal information and keep it safe
- Design ethical services
- Know and respect your data/information
- Publish real-time performance information

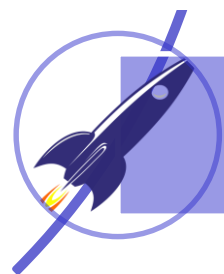
# Transport Canada's Digital Strategy

## Strategic Focus Areas



Transport Canada's Digital Strategy will pursue 7 focus areas to:

- Utilize **real-time information** to make informed decisions
- Provide **client-centred** program and service delivery
- Strengthen **foresighting** to anticipate change
- Use digital networks to **facilitate collaboration** and connectivity
- Instill modern ways of working by providing **new digital tools** and work environments
- Adopt **agile platforms that can evolve rapidly** alongside with transportation innovations
- Implement **security protocols** that protect the integrity and trust of transportation system users



# Launch of the Innovation Centre

# Launch of the Innovation Centre

In December 2017, Transport Canada announced the launch of the Innovation Centre ...

***... a transportation innovation Research Development and Deployment (RD&D) organization tasked with:***

- driving an integrated departmental approach to transportation innovation;
- partnering in new ways with government, industry and academia; and
- leveraging emerging technologies for the benefit of all Canadians.

***... with a vision: “To enable bold and innovative transportation solutions that enhance the safety, security, accessibility, and environmental performance of transportation in Canada.”***

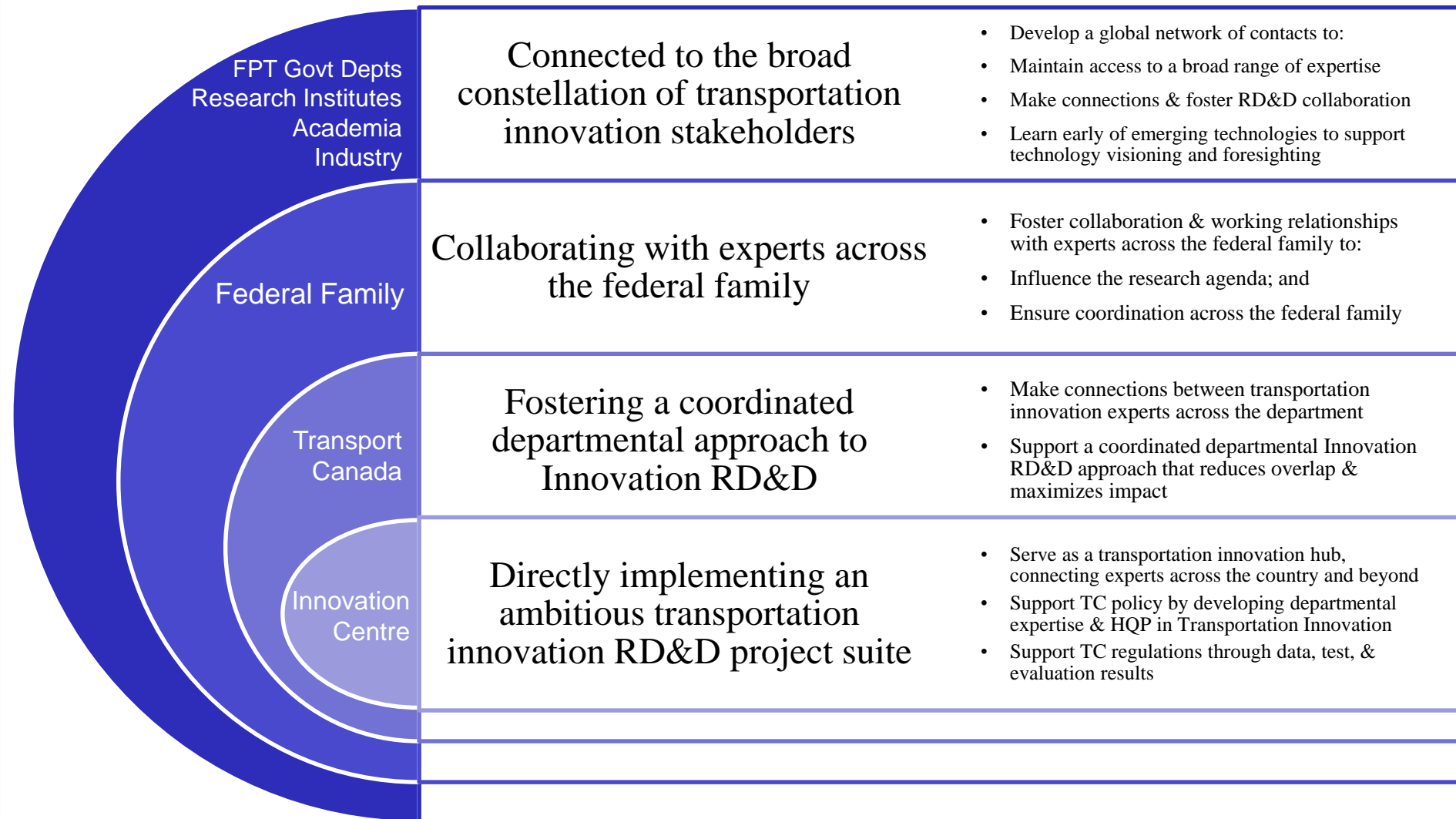
# Innovation Centre

The Centre is helping to position Transport Canada as a leader in transportation innovation and aligning with Government of Canada priorities by:

- supporting safety and environmental regulatory development through research, testing and evaluation;
- advancing early RD&D projects & bridging the commercialization gap through applied research;
- providing technical evidence to inform policy development; and
- addressing key industry concerns and knowledge gaps related to new technologies.

*The Innovation Centre will play an important role in stimulating innovation, influencing technology development, anticipating change, and reducing barriers to uptake through concurrent regulatory and policy advice.*

# The Innovation Centre as a Transportation Innovation Resource Hub





# Thank you!

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