



Safety and Operations Management Committee Meeting 2021-01

May 11, 2021

**People. Goods.
Canada moves by rail.**



Railway Association
of Canada

Competition Law Compliance Policy

STATEMENT

The RAC believes in fair competition for businesses in the transportation sector and for their customers.

The RAC is committed to comply with competition laws applicable in Canada.

Under the leadership of its Board of Directors, the RAC carries out its activities, in a way as to not prevent or lessen competition, provides guidance to its committees and its employees on how to comply with applicable competition laws, and promotes with them the importance and value to the RAC of complying with competition laws.

The RAC Corporate Secretary ensures that RAC, its committees and its staff are familiar and comply with this policy.

COMPETITION LAW

The thrust of competition laws is to maintain and encourage competition in the market place and as a result to prohibit any act or agreement that might lessen competition. Non-compliance with the law could constitute a criminal offence to which significant fines might be attached.

RAC is a forum for railway members to exchange information and views on the railway sector. Particularly because RAC is an association that represents most of the players in the rail sector in Canada, any activity it conducts that might have the result of lessening competition or might be perceived as such should be carefully scrutinized.

PROHIBITED ACTIVITIES

Any activity, including discussions or agreements that relates to the following issues could result in the lessening of competition and as such is strictly not allowed.

- Prices (rates) charged to shippers for services provided by members of the RAC
- Prices (costs) paid to suppliers for services provided to members of the RAC
- Any other conditions associated with services provided to shippers or received from suppliers of RAC members, including discounts, rebates, etc. and level of service provisions
- Customer or territory allocation
- Limitation of supply of services provided by RAC members to their customers

GUIDANCE

Any activity, including discussions or agreements that could even remotely be construed as being an agreement or arrangement covering issues that could prevent or lessen competition, cannot take place at the RAC or any of its committees or any meeting organized or attended by RAC staff.

When meeting, members of a RAC committee or of the Board of Directors should

- Have a preset agenda and take minutes, recording resolutions adopted and summarizing the essentials of conversations that took place.
- Limit themselves to issues identified on the agenda, except if circumstances call for other issues to be addressed.
- Require legal assistance if any issue to be discussed might cause the members to believe that competition laws could be infringed.
- Suspend or even postpone to a later date discussions on such issues if legal advice cannot be sought in a timely manner.

Staff of the RAC shall in their duties ensure the confidentiality of information brought to their attention by members, avoid conflict of interest or situations that would discredit the RAC.

September 2016

SOMC Meeting Briefing Book 2021-01 May 11, 2021

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**SAFETY AND OPERATIONS MANAGEMENT COMMITTEE (SOMC)
MEETING 2021-01**

May 11, 2021; 10:00 (ET)

TELUS BUSINESS CONNECT – [CLICK HERE](#)

**Meeting ID: 143 035 5454
Meeting password: SOMC202101**

AGENDA

SCHEDULE	DISCUSSION LEADER	TIME
1. Welcome, Call to Order, Roll Call, Approval of Minutes (October 14, 2020) 1.1 Competition Law Compliance Policy – Forward statement	Tom Brown (Chair)	10:00» D
2. President's Report	Marc Brazeau	10:10»
3. Opening Remarks by EVP	Caroline Healey	10:25
4. Regulatory Affairs	M. Barfoot /C. Healey / M. Fahmy	10:30»
5. Association of American Railroads	Mike Rush – Sr VP	11:00
6. ETC Working Group	Michael Hendry, PhD	11:20»
HEALTH BREAK		12:00
7. Transport Canada – Rail Safety	Michael DeJong – DG	12:30**
8. Transportation Safety Board	Paul Tréboutat – Dir / André Lapointe – COO	12:55**
9. OliverWyman	Patrick Lortie / Lili Meyer	13:15**
10. Follow-up Discussion on GoC Presentations	All	13:35
11. Miscellaneous / Adjournment	Tom Brown (Chair)	13:45
D	Decision Required	
»	<i>Supporting material in briefing book</i>	
**	<i>Guest speaker(s) exit meeting</i>	

SOMC – SCENARIO NOTES

1. WELCOME, CALL TO ORDER, ROLL CALL, APPROVAL OF MINUTES **October 14, 2020**

The meeting of the Safety and Operations Management Committee (SOMC) of the Railway Association of Canada (RAC) held on Tuesday, May 11, 2021, is called to order by the **CHAIR** of the meeting.

CHAIR reports that notification of the meeting was given in accordance with RAC Bylaw #43. *“Notice of Meetings – General Committees and Committees. Ten days' notice of all meetings of general committees or committees shall be given to all members thereof by the Secretary; provided, however, that the Chair of any general committee or committee may direct the Secretary to call a meeting on shorter notice. The Secretary may delegate to the Chair of a general committee or committee the role of secretary thereof who shall give or cause to be given notice of meeting, shall record all votes and minutes of all proceedings, and shall provide members of the committee with copies of the minutes of the proceedings.”*

CHAIR asks Kim Buffone to conduct a roll.

CHAIR notes that there is a quorum and declares the meeting to be properly constituted for the transaction of business.

CHAIR will invite Caroline Healey, RAC EVP and General Counsel, to address the Competition Law Compliance Policy by reading the following statement:

This is a meeting of the Railway Association of Canada (RAC) Safety and Operation Management Committee (SOMC). Like all RAC committee meetings, the SOMC meetings operate under the RAC's Competition Law Compliance Policy (Policy) that is included in your meeting documents. This Policy directs that at all times RAC and its SOMC members, will act in complete compliance with competition laws applicable in Canada.

To begin, we will be proceeding in accordance with the agenda that has been provided to you. Discussion should be limited to the topics that are listed on the agenda.

Additionally, during our meetings there shall be no discussion or agreements, explicit or implicit, on any matter where your company may be in competition, or may potentially compete, with others. Specifically, there should be no discussion about:

- 1) any aspect of your company's (or any company's) rates and prices, including, but not limited to, surcharges, discounts, rebates and credit terms;
- 2) any other commercial arrangements with, or markets for, customers, suppliers or other vendors, or business strategies;
- 3) industry capacity or the type or level of service your company provides, whether current or planned for the future; or
- 4) wages, salaries, benefits, leave policies, or other terms and conditions of employment for existing employees or to be offered to potential employees.

There also should be no agreements not to hire or seek to hire the employees of any railroad or other organization, or any discussion of those subjects.

Nor should there be discussion of how individual companies intend to respond commercially to potential market/economic scenarios or government action; nor should there be any discussion about whether or not to use, or disparaging remarks made about, any specific vendors, suppliers or services.

If, during the course of this meeting, you believe that the discussion may be straying into impermissible subject areas, you must immediately raise your concerns with the Chair. The discussion of the questioned subject matter must then be tabled until counsel has been consulted and has advised whether it is a proper matter for SOMC discussion and consideration.

CHAIR reviews the [agenda](#) and asks if any items need to be added.

CHAIR requires approval of the Minutes of the October 14, 2020.

RESOLUTION: It was moved by _____ and seconded by _____ that the Minutes of the *Safety and Operations Management Committee* meeting held on Wednesday, October 14, 2020, be and hereby taken as read and approved.

2. **PRESIDENT'S REPORT – MARC BRAZEAU**

Mr. Brazeau provides a report on the activities of the RAC since the last SOMC meeting. The RAC report is included in the briefing book under [PRESIDENT'S REPORT SECTION](#).

3. **OPENING REMARKS BY EVP – CAROLINE HEALEY**

Ms. Healey welcomes everyone to the meeting and introduces Michael Barfoot as the new Director of Regulatory Affairs and Lori Kennedy, CP as the replacement for Keith Shearer then goes over housekeeping items such as:

- Since we are using technology, please note that there may be disruptions and we ask for your patience.
- Please ensure your microphone is muted unless you are speaking.
- The meeting is being recorded for our minutes.
- This meeting will be locked once all participants have joined for security purposes.

The Safety and Environment Awards were launched on March 5, 2021. The deadline to submit nominations is May 28, 2021. For information on how to submit a nomination visit the RAC members' website at <https://www.railcan.ca/members/resources-2/awards/>. Let us know if you do not have username and password to access the RAC members website.

**4. REGULATORY AFFAIRS UPDATE – MICHAEL BARFOOT/MAGDY FAHMY/
CAROLINE HEALEY**

Mr. Barfoot, Mr. Fahmy and Ms. Healey review the current regulatory and rule-making priorities. They provide an update on policy direction of Transport Canada and the industry. Updates and discussion items focus on the recent Ministerial Orders, and Rule changes. A comprehensive summary of ongoing regulatory, rulemaking, and working groups are included in the briefing book under the [REGULATORY AFFAIRS SECTION](#).

5. AAR UPDATE – MIKE RUSH

Mr. Rush provides a regulatory update on directions and priorities in the U.S.

6. ETC WORKING GROUP UPDATE – MICHAEL HENDRY

Dr. Hendry provides a presentation on Enhanced Train Control (ETC) on behalf of the RAC Working Group. The ETC report is included in the briefing book under the [ETC SECTION](#).

7. TRANSPORT CANADA – RAIL SAFETY – MICHAEL DEJONG

Mr. DeJong presents the directions and priorities of Transport Canada's Rail Safety division.

8. TRANSPORTATION SAFETY BOARD – PAUL TRÉBOUTAT / ANDRÉ LAPOINTE

Mr. Tréboutat and Mr. Lapointe provide a presentation on statistics and trends.

9. OLIVERWYMAN – PAUL LORTIE/LILI MEYER

Mr. Lortie and Ms. Meyer provide a presentation on the post impact of the pandemic on the rail industry.

10. FOLLOW-UP DISCUSSION ON GoC PRESENTATIONS -ALL

SOMC members, discuss priorities, confirm, and develop action items in reference to the meeting.

11. MEETING ADJOURNMENT

RESOLUTION: There being no further business, it was moved by _____ and seconded by _____ that the meeting be adjourned.

The next SOMC meeting will be held virtually on October 13, 2021.

The Chairman thanked the members for their participation and declared the meeting adjourned at _____ hours.

SAFETY AND OPERATIONS MANAGEMENT COMMITTEE MEETING (SOMC)

SOMC MINUTES 20-02 Conference Call/Virtual Meeting October 14, 2020; 10:00 HOURS (ET)

Attendance:

Present:	Mr. K. Shearer, CP (Chair)	Presenters:	Mr. M. DeJong, TC
	Mr. P. Bedrossian, RAC		Mr. F. Gaspar, CBSA
	Mr. L. Bourdon, GWCI		Dr. M. Hendry, U of A, RAC
	Mr. M. Brankley, VIA Rail		Mr. A. Lapointe, TSB
	Mr. M. Brazeau, RAC		Mr. J. Lothrop, TC
	Mr. M. Fahmy, RAC		Mr. P. Tréboutat, TSB
	Mr. M. Gallagher, Metrolinx		
	Mr. E. Harvey, CN		
	Ms. C. Healey, RAC		
	Ms. S. Kazaka, RAC		
	Ms. L. MacLeod, CN		
	Mr. K. Nordin, SRY		
	Ms. M. Papas, GCRC		
	Ms. T. Peterson, TRT		
	Mr. R. Ringelman, BNSF		
	Mr. M. Rush, AAR		
	Mr. M. Southern, GCRC		
Absent:	Mr. G. Barney, CSX		
	Mr. J.-P. Boucher, AMIC		
	Mr. T. Brown, CN		
	Mr. J. Corley, ONTC		
	Mr. D. Duquette, ONR		
	Mr. R. Gaudet, exo		
	Mr. G. Huggins, TTR		
	Mr. M. Le Boulair, QNS&L		
	Mr. G. Linden, SRY		
	Mr. R. McLellan, GWCI		
	Mr. J. Moller, AAR		
	Mr. K. Mosher, QNS&L		
	Mr. M. Schulze, BNSF		
	Mr. J. Schwichtenberg, CSX		
	Mr. D. Vallières, VIA Rail		
	Mr. G. Wilson, CP		

1. Welcome, Call to Order, Roll Call and Approval of Minutes (May 12, 2020) – K. Shearer

The Chair noted that the required quorum was achieved and called the meeting to order in accordance with the RAC bylaws. Mr. Shearer reminded all about adhering to the Railway Association of Canada (RAC) Competition Guidelines. The attendees introduced themselves. It was moved by Ms. Peterson and seconded by Mr. Shearer to approve the minutes of the May 12, 2020, meeting.

2. President's Report – M. Brazeau

Mr. Brazeau stated the RAC has organized several virtual events during the last several months, including a very successful event held a few weeks ago with Québec stakeholders. The purpose of the event was to support the RAC's key messages and ensure to promote the importance of rail from an economic, safety and sustainable development perspective.

Mr. Brazeau stated a few months ago Ms. Caroline Healey, joined the RAC as the new Executive Vice President and General Counsel. Mr. Brazeau stated the RAC is going to be increasing its efforts and engagement with the shortline members. Ms. Healey will be leading this initiative given her background and experience. Mr. Brazeau stated building the RAC brand out in the regions is a high priority. The goal is to make sure to continue to engage key provinces on a number of the issues that is listed on our priority list.

Ms. Healey will also be accelerating our engagement with the Québec government.

Ms. Jenelle Saskiw, Project Manager, FCM / RAC Proximity Initiative, will be liaising with the government in Western Canada. Mr. Ben Chursinoff, who joined the RAC last fall and is also originally from Western Canada will be working with his contacts out West. The plan is to increase the RAC's presence and engagement even with the challenges posed by the pandemic by using virtual opportunities moving forward in both of these key regions.

Mr. Brazeau stated Earnscliffe was hired to consult with RAC members to allow us to come up with a very defined strategic plan that was in line with the expectations of the industry. One result of the consultation was to review the RAC's programs and services that are currently being offered. One of the results of the consultation is that the Load Securement, Security and Containment Program is highly used by our members. This is a service which we will continue to offer and will be offered in 2021.

Mr. Brazeau discussed some of the significant wins, risks and hedges from the Business Plan:

Wins

- Coalition letter with a number of shippers to support shortline railway competitiveness.
- Hired RAC Proximity Initiative Program Manager (Ms. Jenelle Saskiw).
- Operation Lifesaver received renewal of it's 3-year funding from RSIP.

Risks

- COVID-19 continues to be a moving target.
- Economic downturn due to the pandemic may impact the RAC and its members.

Hedges

- Rail Safety Week digital strategy results an increase in consumer awareness and engagement. Very successful week in terms of social media exposure which generated new partnerships due to remote strategy.

Mr. Brazeau provided an updated on Q3 of the RAC's performance dashboard:

Communications and Media Relations on track.

Public and Corporate Affairs at a slight delay as a result of COVID-19.

Operations and Regulatory Affairs continues to be on track.

Operation Lifesaver renewal of funding program caused some delay.

Finance and Operations on track with original forecast.

3. **Opening Remarks by EVP – C. Healey**

Ms. Healey recently joined the RAC team as Executive Vice President and General Counsel. Prior to the RAC, she worked at Genesee Wyoming as Vice President Legal and External Affairs. Ms. Healey's role at the RAC is to oversee operations (mechanical, dangerous goods, radio spectrum and communications) and regulatory affairs as well as its government relations activities and general counsel.

4. **Regulatory Affairs – P. Bedrossian**

Mr. Bedrossian provided an update on recent developments that have occurred since the last SOMC meeting.

Roll-Away Protection Rule

The *Roll-Away Protection Rule* was separated into 2 phases. Transport Canada (TC) conditionally approved Phase 1 in the spring. To obtain TC's approval of Phase 2 and for the rule to come into effect, the RAC submitted a White Paper along with a comprehensive risk assessment on June 30th. The submission outlined the strengths and weaknesses of the roll-away protection system being used as a secondary means of securement and how those weaknesses can be mitigated in precise performance parameters and conditions of use. TC has not sent any notice or response on their assessment of our submission and the resulting outcome of the rule approval.

Duty and Rest Period Rules

RAC filed the Rules with the Minister of Transport on September 11th. At a minimum, TC can take 60-days to respond with an outcome of their assessment, but there's a good chance given the complexity of the Rules, their assessment could take us well into next year.

Proposed Fatigue Risk Management System Regulations

Recent conversations with TC have indicated that the regulatory development process was put on hold for reasons not shared with the RAC. Given this hold up TC did not proceed with further pre-consultation sessions as originally planned since their update at the last SOMC. Mr. Bedrossian underscored the importance of these pre-consultation sessions to TC. In response, the Rail Safety division of TC, reassured us, irrespective of any delays or their timelines, that further pre-consultation sessions will be held before the draft Regulations are posted in Gazette 1.

Grade Crossing Regulations

Since the last SOMC meeting in May, TC followed-up with an updated survey to members requesting further information and data that would enable TC to internally assess the status of compliance with the regulations and to assess the need for regulatory relief of the *Grade Crossing Regulations*. Industry has communicated to TC the need for a risk-based approach and to inform the request for regulatory relief to the Minister. TC is cognizant of this approach but maintains any type of application for regulatory relief submitted to the Minister should be accompanied by a plan on how each company will achieve compliance on any revised statutory deadline. This is to provide reassurance to TC that industry won't come back again with another request down the road.

The RAC has asked the Federation of Canadian Municipalities (FCM) to join the RAC's efforts to request regulatory relief but they have resisted as this is not a primary priority for their larger members. The FCM noted that many smaller members have maintained that more financial assistance is needed to comply with the regulations. The federal government has announced that they were investing an additional \$25 million to improve rail safety. A good portion was earmarked for grade crossing infrastructure.

Train Speed Restrictions

SOMC members discussed if other stakeholders should be engaged to provide additional support placed on the train speed restrictions and *Grade Crossing Regulations*. The Canadian Federation of Agriculture and other organizations have been very supportive in the past of many challenges that the railway sector has faced in terms of any representation with TC and the Minister of Transport. SOMC members agreed. The work that the Rule Making Group is undertaking will sufficiently mitigate the risk without significantly reducing train speed. The bigger challenge will be operations for this winter where we are bound by those restrictions in MO 20-05.

Locomotive Video and Voice Recorders Regulations

The Regulations were published in Gazette II on September 2, 2020. The requirements come into affect in 2 years following this date on September 2, 2022. TC has offered to hold webinar sessions with railways to clarify requirements to ensure companies understand their obligations. TC has committed to develop guidance material to compliment the regulations, in particular a privacy guidelines along with an installation and implementation guidelines.

Key Trains and Key Routes Rules and the Track Safety Rules

On April 1st, the Minister issued a Ministerial Order (MO) 20-05 which requires railway companies to take immediate action in the areas of speed restrictions of key trains and higher risk key trains and the management of rail joints and installation of replacement rail. MO 20-06 was also issued at the same time as MO 20-05 and instructed to revise those key train rules with these immediate actions as the basis for change. The timelines that they provided were a bit aggressive, so we submitted a request for an extension to the Minister of Transport. On September 21st, the Minister approved the RAC's request for a 60-day extension to the filing deadline of the revised *Key Trains Rules*. The industry is now required to file on December 27, 2020, instead of the original filing date of October 28th. As requirements of the MO 20-06 area replication of requirements of MO 20-05, it was deemed that there is no safety risk associated with extending the deadline. Since the safety concerns are presently mitigated by the implementation of the immediate actions of MO 20-05, which is in effect and will remain in effect until the Minister approves the revised *Key Train Rules*. The additional time granted by the Minister allowed the Industry Working Group to finalize the proposed rule changes based on investigation of results, risk assessments and to obtain input from TC. The 60-day consultation with labour groups should start imminently.

MO 20-07, which was also issued on April 1st, the Section 19 Order, requires industry to revised the *Track Safety Rules* which is divided into 3 Phases and the associated deadline to file each phase spans over a year and half, with the first phase due on April 1, 2021, to which industry must address, most notably, Track Geometry, Rail Wear Management, and Rail Surface Management.

The same Industry Working Group of the *Key Trains Rules* has already started analysis work to support the revision of the *Track Safety Rules*. The RAC is looking into hiring a consultant to further support the work and to enable industry to meet the first filing deadline of April 1st.

Ministerial Order (MO) 20-09

The MO issued on September 29th, requires the industry to develop a new *Switching Rule* for the *Canadian Rail Operating Rules (CROR)* by June 1, 2021. The Rules Revision Team which is currently working on revising the CROR has initiated the work to address the requirements of this Order. Unfortunately, the original timeline to file a revised CROR has been deferred to next year as a result of this new Ministerial Order.

Canada's Clean Fuel Standard (CFS) Regulations

The proposed *Clean Fuel Standard Regulations* aims to reduce carbon emissions by setting lifecycle-based carbon intensity requirements for fuels in transportation. Once the regulations come into effect, biodiesel and renewable diesel blend rates in locomotive diesel are expected to increase as fuel suppliers are required to lower the carbon intensity of their products. The *Liquid Class Regulations*, Phase I of the CFS, will be published in Gazette I sometime in the fall. They will grant industry 75 days to comment. The RAC has engaged multiple experts to conduct a review of the regulations and to highlight the implications to industry. The outcome of their review will be brought forward to SOMC's Environment Committee for further consideration and to feed into industries final review and submission of comments by the end of the consultation period. The Canadian Chamber of Commerce has launched a campaign, during the 75-day comment period, to target MPs and Cabinets urging them to work with Environmental and Climate Change Canada to address key competitiveness concerns. The Canadian Chamber of Commerce supports a clean fuel standard, but not in current format. They maintain the requirements will hurt economic recovery and undermine long-term competitiveness on the International stage.

Matters related to COVID-19

Temporary exemptions issued on March 20th that touch on the recertification requirements, had been extended to November 15th. The RAC has originally requested an extension until January 30th but TC would only provide an extension to November 15th because of cold temperatures that start at around that time. The exemption applied to the Medical Fitness requirements for positions of Critical Safety were left to expire on September 20th. There was not a collective need from members to submit a request for an extension, however, should the situation present itself where the outcome of the second wave create further challenges, there is nothing that precludes the RAC from working with TC to request a reapplication of this exemption.

Work of the Medical Committee

Most of the work that was earmarked for this year had been put on hold as priorities of the Medical staff has shifted to address the pandemic. Activities of the Medical Advisory Group are expected to resume in 2021. The approved funding allocation to cover their work will be roll over into next year.

5. Association of American Railroads – M. Rush

Mr. Rush provided a regulatory update on current priorities in the U.S. Mr. Rush is hopeful by the end of the year the FRA will issue a rule which would be in alignment with TC's with respect to when you have to do a brake inspection after a train has been off air. In Canada, the basic benchmark when you have to do brake testing is 24 hours in some cases 48 hours. In the U.S. it has been 4 hours, they are expecting the rule to be 24, not sure they will get 48. The 24 is key and critical.

With the election in the U.S., planned rule making changes are uncertain. If there are any rule making changes, they would include proposing using electronic airbrake slip, if you did, it would enable you to do a couple of things you cannot do today. One of which is to insert and move a block of cars and trains without any restrictions. Limited to one such action in the U.S. before you have to do a brake test. Intermediate inspection requirements which Canada has gotten rid of. It would extend the intermediate inspection requirements of certain trains. Another pending rule making proceeding would be to extend the alcohol and drug testing program to mechanical employees and the single inspection requirements which have not been updated in a long time.

A final administrative action is to amend the PTC safety plan amendment process. We agree with the FRA in terms of how to reform the process. The FRA is going to give them a waiver for the amendment process this year but will not see a start of a rule change process until next year.

The U.S. has issued several waivers for regulations during the COVID-19 pandemic which include training, recertification requirements which have been extended several times. It was a 60-day waiver. There is now a longer waiver in place until there is a declaration that the COVID-19 pandemic is over.

The FRA published a final rule on *Track Inspections* permitting continuous rail inspections. There is an RSAC working group working on automated track inspections. There are several railroads that have waivers today which permit them to undertake reduced manual inspections in return for doing more frequent track geometry inspections. Trying to get to final rule.

Crew size is a very significant issue in the U.S., a few years ago, the FRA proposed a rule to prohibit the use of 2 person crews for freight operations. Under FRA's proposal you would be able to get approval, but it would be a very burdensome process. This administration withdrew that rule making and declared any state laws government crew size would be preempted and labours made any effort to get crew size laws enacted. A decision from the court in the state of Illinois holding that the FRA action decision to preempt the Illinois crew size law was valid. However, the court said the FRA's ability to preempt but wasn't deciding on what the FRA properly concluded to withdraw the proposed 2-person crew. That decision in the 9th circuit, should come at the end of the first quarter next year. In a collective bargaining phase with Class 1 railroads. Crew size is an issue on the bargaining table.

The DOT issued a rule authorizing the transportation of LNG by rail. Never had authorization in this country before. That rule is being challenged in court.

Deadline by the end of this year to have an interoperable PTC system in place. On the freight side all the routes that are required to have PTC are operable with PTC. Interoperability is not yet complete but will be completed by the end of the year on the freight side.

6. Innovation Centre – Transport Canada – J. Lothrop

Mr. Lothrop provided a presentation on the work being done by the Innovation Centre's Rail RD&D Program. Mr. Lothrop noted some recent changes internally to the Railway Research Advisory Board which used 2 sections, a Technical Advisory Committee and a Management Board, after a review of the governance structures, and some feedback from the membership, they have merged the Technical Committee and Management Board into one organization.

Key Areas of Work

- New technologies and approaches to decrease GHG and CAC impacts from rail including electrification and alternate fuels, where safety considerations need to be explored.
- New approaches to minimize the impact of Climate Change on rail operations.
- Investigations of automated technologies to improve safety and efficiency of rail.

Key Project Updates

- 1) Hydrogen Switcher Locomotive Feasibility Study – *Complete*. Mr. Lothrop is looking for partners that would be interested in piloting and deploying switcher locomotives within their operations and figuring out how to work together.
- 2) Hydrail (TOES) Study: Technological, Operational, Economical, and Societal – *Underway*. Anticipated completion March 31, 2021.
- 3) Wearable Technology to Improve Rail Safety Project – *Underway*. Factor Safe Solutions completed the literature review (September 2020). Next step is RODS Data Analysis.
- 4) Cold Climate Rail Research Project – *Anticipated Start Fall 2020*. RFP closed in July – anticipating contract award (Fall 2020).

RRAB Research Plan for Automated Inspection Technologies

With feedback from the RRAB members - automated machine visioning inspection systems (AMVIS) was identified as a technology area that should be analyzed in-depth because of its potential to enhance the efficiency and effectiveness of inspections.

Members of the task force met on September 23rd to discuss potential AMVIS projects. The research question was centered on the following two elements: a) are the cameras capturing everything that needs to be captured; and b) how effective is the analysis of the images. A potential project that was agreed upon would compare and evaluate technology-based inspection practices with current inspection practices to gather evidence of their effectiveness. The scope of work and methodology for the project is expected to be further defined in the coming weeks and finalized by end of 2020.

Mr. Harvey met with Ms. Diogo at the beginning of the year to discuss potential sharing of information between the FRA and TC for the purpose of facilitating and coordinating the issuance of some exemptions. Mr. Harvey believed an agreement was shared and provided to TC legal. Mr. Lothrop has reached out to the FRA about these technologies.

7. ETC Working Group – M. Hendry

Dr. Hendry provided an update on the progress of the work being done by the ETC Working Group (WG).

The objectives of the WG are to develop a recommended industry approach for ETC implementation; specifically, to develop:

1. A risk-prioritization criterion and a recommended application methodology to rank corridors with respect to risk (**completion in 2020**);

2. A common definition of required minimum functionalities to address identified risk levels (**completed**); and,
3. *ETC technology standards and communication protocols which must enable interoperability (2020– onwards).*

Definition of ETC Functions - Completed

The definition of ETC functions was conducted through consensus. This resulted in two categories of functions:

- Base ETC Functions are those that: address prominent risks; include capabilities that were common to expected systems for all participating operators; and, may be possible to implement with intermittent communications. There is consensus that *Base ETC* functions are those that a host railway must provide on ETC enabled track.
- Additional ETC Functions are those that are likely to be implemented by one or more Railway Operator with continued development of ETC systems. These include functions that passenger railways have stated are essential for the systems that they will deploy. The work plan for the RAC includes development of standards for both categories.

Development of ETC Standards

- Started the process of developing standards based on IEEE standards. This includes the completion of Operational Concepts that defines the desired operation of the system, & how it is intended to interface with the primary users (crew and Rail Traffic Controller).
- Despite the challenges of 2020, the WG made *significant progress at a cost much lower than estimated* for completed work.
- Collins Aerospace was contracted this past year to develop a detailed multi-year plan, project timelines, and effort required to complete the milestones.
- The development requires a structure of sub-committees of experts drawn from participating railways to develop the detailed system requirements, standards and Interface Control Documents (ICDs) for different segments of the ETC systems.
- The ETC Working group projects the earliest completion date for the interoperability standards and ICDs to be mid-2024 if fully resourced for the remainder of FY2020 and onwards.

Dr. Hendry discussed the cost required, resources required to complete the standards and the distribution of costs to participating railways. He also discussed alternative budget options.

During a meeting with TC on January 17, 2020, the end of 2023 was conveyed as a reasonable time frame for the completion of the interoperability standards and ICDs. (This timeline was based on a lesser defined project plan, and increased funding requested for early 2020.)

Transport Canada stated that they did not intend to legislate ETC at this time. However, needed to see continued progress and updates on ETC development and testing.

Subsequent meeting with Transport Canada on August 6, 2020. Focus was to introduce new Director General (DG) of Rail Safety. No discussion of timelines, however DG stated that ETC is a high priority for the government. Next update to Transport Canada is scheduled for October 27, 2020.

The industry has been upfront with Transport Canada in each of our ETC meetings:

- While an ETC system will provide a safety benefit, particularly for passenger train operators, ETC preventable accidents are not among the top causes of accidents in the Canadian rail industry.
 - Available resources are better allocated to different initiatives in order to increase safety.
 - Transport Canada is pushing for the development of ETC systems, need to support it with the funding.
- ETC systems will require a reliable communications network
 - TC stated next steps are to facilitate the assessment of telecommunications options necessary for successful ETC implementation.
 - Railways are dependent on Transport Canada for this critical component.

Note: Completion of requirements is required to identify and communicate the needs to Transport Canada.

Proposed Workplan

Remainder of FY2020

- Completion of Operational Concepts & high-level System Requirements for all functions;
- Develop Terms of Reference for each subcommittee and identify required skillsets & participants from member railways; and,
- Start Development of a Safety Case.

FY2021 onwards

- Implementation of subcommittee structure to review precedents from other jurisdictions & develop detailed system requirements;
- Completion of Safety Case;
- Development of standards & coordination between ETC segments; and,
- Expected completion by mid-2024 (if fully resourced).

Benefits to Proceeding (recognize difficult financial times)

- Continuing with development of interoperability standards and ICDs for ETC demonstrates the continued commitment and progress necessary to avoid regulation.
- This collaborative development provides for cost sharing, reduced duplication and ensures resulting systems are interoperable.
- Committing to a multiyear plan provides a foundation on which railways can implement their own internal multiyear plans for the development and deployment of ETC systems.
- Employees participating in this program will develop the understanding of ETC systems required for the subsequent implementation.

Mr. Shearer who sits on the ETC Steering Committee is very pleased with the work done to date but concerned on the fiscal side and funding. Meeting with TC later this month will discuss with the Director General again.

8. Transport Canada – Rail Safety – M. DeJong

Mr. DeJong provided a high-level update on COVID-19, rules development, ETC and speed restrictions.

COVID-19

TC is working closely with staff at Public Health Agency of Canada by tracking guidance from them and will share any information with members. TC will continue to renew every 30 days the Passenger Health Check Order, extending the temporary exemption for the

recertification under the *Canadian Rail Operating Rules* and the *Employee Qualification Regulations* until November 15th. The intent of the shorter timeframe that had been requested by members and the reason for this was to provide enough time for online solutions to be developed.

Regulations

Locomotive Voice and Video Regulations (LVVR), were published on September 2nd and there is a compliance deadline of September 2022. Invitations were sent to members for information sessions to provide additional context and explanation on the regulations. Guidance material will also be prepared and finalized at the end of this fall.

Grade Crossing Regulations, there has been considerable angst amongst the community, rail companies, municipalities, landowners, farmer associations with respect to the compliance date for the *Grade Crossing Regulations*. TC is taking this seriously, in the process of gathering information and exploring options about what to do with respect to compliance date. TC will engage with the RAC and members as they decide on the path forward. No dates on timelines for implementation. Mr. Harvey discussed funding with TC raising the issue that the industry is facing resistance from the other parties to contribute and assume sharing costs. There is a need for a funding solution. Mr. DeJong stated the Minister is aware of the safety implications of these regulations and notes that the fatalities and serious injuries associated with crossings. TC's efforts will have to be balanced as a safety case as well as the economic realities during a pandemic as well as the intergovernmental and diversity of stakeholder and community implications. TC will be providing a comprehensive follow-up briefing to the Minister, including potential options and measures moving forward for his consideration.

Fatigue Risk Management Systems Regulations, moving forward on this regulation. The current focus is on the *Duty & Rest Period Rules* (aka *Work Rest Rules*). TC wants to complete work on this and use their completed review on the *Work Rest Rules* to figure out how to position the *Fatigue Risk Management Systems Regulations* to ensure that they can co-exist and make sense working together. TC has a deadline of November 10th to review and assess the *Work Rest Rules* that has been submitted to TC. The process is underway and will propose next steps and approvals for the Minister's consideration.

Ministerial Order (MO) 20-06 which refers to the revisions of the *Key Trains and Key Routes Rules*. The deadline has been extended and feedback has been provided to the RAC Working Group.

Ministerial Order (MO) 20-09 which refers to switching without air which is a response to TSB's recommendation R20-01 which is a statutory requirement for TC to respond quickly to TSB recommendations that led to TC to issue that Ministerial Order. Moving forward with development of a proposed rule within the CROR with respect to switching without air. Mr. Shearer stated the Rules Revision Team is already working on incorporating the switching rule in the new version of the CROR that was being done at department's behest. Now with the MO the entire revision of the CROR is on hold, there are 105 updates which are not going forward until there is clarity.

There was a press release the other day which discussed MO 20-09 but also stated that TC is continuing to revise the *Railway Employee Qualifications Standards Regulations* which was a surprise to the industry. Mr. DeJong stated when TC receives a TSB recommendation on a safety issue, TC is getting into practice of taking quicker action. In this case, with the MO issued quickly, it puts TC in a position to work collaboratively with industry to work together on the rule.

Mr. DeJong stated that ETC is considered by the Minister a signature rail safety initiative for him. TC is looking at the next step which is to build on the consultations and the work completed by the advisory committee by scheduling a working group meeting with TC, railway members, RAC and other federal department and agencies to push forward and to accelerate efforts. The meeting would be to consider what the appropriate level of automation might be with respect to ETC and rolling out in Canada. TC will put on the table for consideration and feedback an approach that would involve a crew advisory system implemented across Canada, however, a more elaborate automatic train protection system focused on high risk corridors.

Mr. DeJong stated the deadline for the revisions to the *Key Trains and Key Routes Rules* is not until December 27th but the reason to pay attention to this issue is because the November 15th date is the trigger for the speed restrictions to be in place in the winter months. TC is contemplating to move away from a date-based approach of speed restrictions to a temperature base approach with additional risk mitigation measures. Also, calling for a winter operation risk management plan, specific to defined portions of the subdivision that would layout what the conditions, what the risk mitigation measures are in order to improve safety in this area. The plans would have to be approved by a professional engineer assigned by the railway and followed by TC. Mr. Shearer stated the industry is supportive of a shift from date-based system to a temperature-based system.

9. Transportation Safety Board – P. Tréboutat / A. Lapointe

Mr. Tréboutat stated as of September 30, 2020, there have been 745 rail accidents reported to the TSB. This represents a net decrease of 269 accidents for 2019 compared to the 5-year average of 89 fewer accidents. Accidents involving dangerous goods are fewer compared to 2019 and the 5-year average values and number of releases are fewer too. Total fatalities have decreased compared to 2019. Uncontrolled movements including accidents and incidents compared to 2019 and the 5-year average is lower this year. Mr. Tréboutat stated 4 safety letters were issued in 2020.

Mr. Tréboutat discussed LVVR, if required under authority of the *CTA/ISB Act*, Section 28(3), in accordance with Section 28(3) of the *CTA/ISB Act*, a TSB investigator shall obtain on-board recordings that relate to a transportation occurrence if required for the purposes of conducting an investigation. Rail-specific procedures to be developed.

Mr. Tréboutat stated in May 2019 the TSB gave a presentation to RAC and industry describing some rail data issues which discussed the differences in definitions of main track & non-main track, the need to improve how we measure safety performance, and uncontrolled movements data. It was agreed to create a small working group (TSB, TC, RAC and railways) to resolve these data issues and improve statistical reporting. The 1st meeting was held on September 26, 2019. Data issues, main track definitions and Terms of Reference were discussed. There have been several attempts made to schedule subsequent meetings without success. Terms of References have been circulated and awaiting industry review. The RAC offered to schedule the next working group meeting with industry and TC in October 2020.

It is TSB's understanding that there is *no longer an interest* in pursuing the September 2019, concerns around TSB data? Mr. Shearer stated this is not an issue of lack of interest but lack of capacity. Significant amount of regulatory activity underway at this point and time. SOMC member are still interested in pursuing but in due time. Mr. Tréboutat agreed to contact the RAC in 6 months.

Mr. Tréboutat stated there has been a recent change to RODS, an addition of a sub-category for “occurrence type” Incident, which is: “Component failure that affects safe operation of R/S”. Mr. Tréboutat asked for feedback regarding another possible change to RODS. A proposal to make cause codes and contributing codes available in the data flat file on the TSB website. This would apply to all class 5, 4, 3, 2 investigations (cause codes 323, 324, 325, 326). Personal information would be stripped out. Mr. Shearer stated making the codes publicly available can be problematic when dealing with class 5 investigations given limited where extent of details on the cause of incident communicated to TSB. Ms. MacLeod stated that CN would not want codes available in the public domain but having them available for industry would be useful because there are times when the railways want to correct the industry data to do some analysis. Mr. Tréboutat stated this is a challenge for the TSB because they cannot make data available for one railway and not others. Mr. Treboutat see a benefit to discussing this concern with the data working group when it resumes.

10. Canada Border Services Agency (CBSA) – F. Gaspar

Mr. Gaspar provided a high-level overview of the agency focusing on the commercial and trade business line. CBSA is very focused now on the deployment of CARM (CBSA Assessment and Revenue Management). Commercial Programs have several different priorities from the government which are often in response to long-term strategic objectives as well as short-term initiatives. The Border Commercial Consultative Committees (BCCC) is CBSA’s tool to touch base with the railways. It is a structural organization which has multiple working committees, including a rail working committee started earlier this year, in response to request by members. These committees agree to work together on key issues that are important to rise to level of success and/or impact the likelihood of success

11. Follow-up Discussion on GoC Presentations - ALL

The Committees discussed briefly the day’s presentations.

12. Miscellaneous / Adjournment – K. Shearer

Ms. Healey thanked Mr. Shearer on behalf of the RAC for presiding as Chair of SOMC over the last two years. A gift will be mailed to Mr. Shearer as a token of appreciation on behalf of Committee members. As per the SOMC Terms of Reference, a new Chair and Vice Chair must be selected by members. The RAC will follow-up via email to members with the next steps to ensure the positions of the Chair and Vice Chair are filled before the next SOMC in May 2021. A Chair and Vice Chair mandate can be renewed.

A motion to close the meeting was put forward by Ms. MacLeod and seconded by Mr. Shearer. The meeting was adjourned at 14:05.

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**People.
Goods.
Canada
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by rail.**

President's Report Spring 2021



Railway Association
of Canada

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
ENHANCED TRAIN CONTROL (ETC)	<p>A multiyear plan was approved by the BoD on October 15, 2020. The three deliverables planned for 2020 are completed:</p> <ul style="list-style-type: none">• Risk-prioritization criteria and a recommended application methodology to rank corridors with respect to risk;• A common definition of minimum functionalities to address identified risk levels;• Operational Concepts standards; <p>Work has started on other standards (System Requirements); Five sub-committees, with members from the participating railways, were established to focus on different areas of the development. A project manager has been hired.</p>	Ongoing
INFRASTRUCTURE INVESTMENTS	<ul style="list-style-type: none">• Promoted the importance of railway infrastructure funding in RAC's 2021 Pre-Budget Submission that was submitted to FINA on August 7, 2020.• Worked in cooperation with shortline members to advance Budget 2021 asks for federal and provincial-level programs to support shortline infrastructure renewal. (COMPLETE)• Worked with the Vancouver Board of Trade to sponsor a supportive resolution passed successfully at the Canadian Chamber of Commerce AGM last Fall.• Ongoing development to maintain a relationship with the Office of the Minister of Infrastructure and Communities to underscore the importance of federal investments into rail-based supply chain.	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
SUICIDE PREVENTION	OL has completed filming its English and French <i>Today is Better/ Ça va mieux</i> suicide-prevention campaign videos, which are currently in post-production. The Canada Suicide Prevention Service and the Association Québécoise de prévention du suicide (AQPS) each completed “safe messaging” reviews of the campaign materials in March, and OL also secured the Québec government’s approval to promote its 1-866-APPELLE number through the campaign in the province. OL’s rail partners – Metrolinx, TransLink, and exo – and the Toronto Transit Commission will also be promoting <i>Today is Better</i> through in-kind ads across their networks once the campaign is launched in May 2021.	Ongoing
PROXIMITY INITIATIVES	<p>Outreach to provincial ministers of transportation and municipal affairs, provincial / territorial municipal associations, and local governments continues to raise awareness and support for the proximity guidelines.</p> <p>Transport Canada will be formally endorsing the proximity guidelines through a policy statement of endorsement. Proximity Initiative will work closely with TC to communicate this news once finalized.</p> <p>An initiative to begin a proximity guidelines revision has been supported by the steering committee. Planning out the initiative will begin Q2 2021 with an anticipated completion in 2021-22.</p>	Q3-Q4

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
FEDERAL OUTREACH	<p>Over the past several months, RAC has hosted a series of more than 40 one-on-one meetings with targeted MPs and Senators to raise relevant issues and promote the RAC's 2021 pre-budget submission.</p> <p>Now that the federal budget has been released, meetings between relevant Ministers (Finance, Infrastructure, Industry, Environment, etc.) and RAC Board members are now being scheduled to take place in Q2.</p>	Q2
REGIONAL OUTREACH (NEW)	<p>RAC outreach in the Province of Quebec, as well as in Western Canada, is well underway. In the coming months, we will continue to meet with stakeholders in both regions. We will also expand our efforts in the Province of Ontario.</p> <p>GR firms in Ontario and Western Canada may be enlisted to help the RAC expand its network in both regions.</p>	Q2 - Q3
FEDERAL RAIL CAUCUS	<p>RAC met with the two Co-Chairs of the Federal Rail Caucus (MP Sherry Romanado & MP Dane Lloyd).</p> <p>The Rail Caucus has not met in over two years. Given the on-going COVID-19 pandemic, there is no immediate plan for the group to reconvene in person or virtually.</p> <p>Instead, the RAC is now focused on meeting with individual MPs and Senators and forging partnerships with members of the Transport, Finance, Environment, and Agriculture Committees.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
EVENTS	The RAC has held seven Lunch & Learns in 2021: Bank of Canada Monetary Policy Report; 4 sessions for Transport Canada on the railway supplier and manufacturing sector; Angus-Reid and Kevin Page on Canadian perceptions during COVID and Canada's economic forecast; and one on RAC's Dangerous Goods team and the services they offer.	Ongoing
	RAC will hold three virtual Business of Rail sessions this year. The BC Outreach session will take place on May 5. The Alberta session will follow once we know when the election will be held. The RAC will hold another QC outreach session in the Fall, follow-up to last year's event.	Ongoing
	RAC held a virtual Rail 101 session over a two-day period with 60 participants from Transport Canada, being a huge success with 100% positive feedback. We will continue to offer the virtual Rail 101 until such time as we can meet again in person.	Ongoing
	RAC will hold the first Women in Rail workshop in Canada, planned for May 25-26. We will take the opportunity to highlight all the wonderful achievements that women have made over the years in rail; whether it's in operations, management, or technology.	Ongoing
	RAC is working with the University of Alberta and Transport Canada on a Research and Development virtual conference for November 9-10. RAC is on the technical committee and will help select abstracts for presenters for the conference.	Q3-Q4

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
DRUG AND ALCOHOL TESTING	On hold.	Ongoing
SHORTLINE CAPITAL IMPROVEMENTS	<p>Survey RAC members to develop an investment profile to support shortline railway growth opportunities across Canada; (Data collection is on-going, poor response rate, further analysis required)</p> <p>Survey shortline members and provide data to Transport Canada to demonstrate funding needs of shortline railways (Completed in Q4 of 2020)</p> <p>Execute an awareness campaign (targeted at relevant MPs and MPPs) that leverages the Canadian Chamber of Commerce Policy Resolution for Shortline Railway support (Completed in Q3 of 2020)</p> <p>RAC Shortline Committee met on November 23, 2020.</p> <p>Work in cooperation with shipper groups to develop a program to enhance shortline competitiveness in Canada (Co-signed letter sent to Min. McKenna in Q2 of 2020)</p> <p>Our three prebudget submissions (Quebec, Ontario and Federal) each contained a recommendation supporting the creation/enhancement of funding programs dedicated to shortlines.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
CLEAN FUEL STANDARD (CFS)	Proposed regulations were published in Canada Gazette Part II on December 19, 2020. RAC enlisted Delphi to review the proposed regulations and leverage their expertise to formulate an industry response with support from the RAC Environment Committee. Comments were submitted to Environment and Climate Change Canada on March 4, 2021. Final regulations will be published in late 2021, with the coming into force of the regulatory requirement in December 2022.	Ongoing
ROLLAWAY PROTECTION	<p>Locomotive Inspection and Safety Rules, 2 phase amendment process regarding Rollaway Protection. Phase 1 filed with TC and conditionally approved subject to the approval of phase 2. A RAC revised White Paper was developed in support of proposed phase 2 rule change. Phase 2 rule (White Paper and supporting Risk Assessment) development completed and filed with TC on June 30. Feedback from TC received in February 2021.</p> <p>On March 10, 2021, TC issued MO 21-02 which requires railway companies and local railway companies to amend the <i>Railway Locomotive Inspection and Safety Rules</i> and the <i>Canadian Rail Operating Rules</i>. A RAC working group will be developing rules revisions shortly to address the MO's requirements</p>	Ongoing
SHORTLINE COMMITTEE	<p>Shortline committee was held on November 23, 2020, and gathered approximately 25 shortlines. The next SL Committee meeting is scheduled on May 19, 2021. Chuck Baker, the President and CEO of the American Short Line and Regional Railroad Association (ASLRRRA) is confirmed as guest speaker. The creation of a shortlines steering committee that would meet on a more regular basis is also contemplated.</p> <p>13 one-on-one meetings with shortlines were conducted in Q1 following the SL Committee of November 2020 to discuss advocacy opportunities and general collaboration/assistance from RAC. High participation and quick turnaround time for confirmation of attendance to upcoming SL Committee meeting on May 19, 2021.</p>	Q2

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
PASSENGER RAILWAY COMMITTEE	<p>Create passenger railways sub-committee to focus RAC's efforts to advocate effectively on behalf of members.</p> <ul style="list-style-type: none">• Committee members have been identified & contacted. First meeting will be held May 10, 2021:• We will re-establish committee Terms of Reference and priorities / Actions required• Have an Operation Lifesaver presentation in response to high trespassing incidents on passenger rail networks• Roundtable discussion: about how to attract passengers back to rail• Set up subsequent meetings for 2021 to execute action plan	Ongoing
BUILD RAC BRAND IN QUEBEC	<p>The RAC reached out to 19 stakeholders in Quebec in Q3-Q4 of 2020 and Q1 of 2021 from political staff (Premier's Office, Transport, Economy & Innovation and Finance), official opposition and public administration. These meetings served as an introduction to RAC, invitation to collaborate and to develop RAC brand in Quebec.</p> <p>Business of Rail event held in Q4 of 2020 that gathered more than 80 attendees.</p> <p>On February 12, 2021, the RAC submitted a Quebec prebudget submission and sent it separately to stakeholders met and attendees to Business of Rail event. A plan is underway to cover the municipal elections in the Fall of 2021.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
BUILD RAC BRAND IN WESTERN CANADA	<p>Formalize a working relationship with relevant Chambers of Commerce, Boards of Trade, and other stakeholder groups.</p> <p>Two Western outreach events were held on December 9, 2020, for Manitoba and Saskatchewan. Two additional events (Alberta & B.C.) will take place Q2 2021.</p> <p>Identify future GR partnership opportunities in Western Canada.</p>	Ongoing
MUNICIPAL RAIL SAFETY OUTREACH	<p>OL continues to find innovative ways to promote rail safety in municipalities across Canada, despite physical distancing requirements. In January, OL added additional materials to its rail safety “toolkit” for municipalities (first launched during Rail Safety Week) by launching two new animated videos about the dangers of trespassing and taking risks at rail crossings. These videos were promoted through a campaign on social media, which generated more than 541,000 views. Beginning on March 15, OL also ran a two-week radio and digital media campaign promoting its #STOPTrackTragedies messaging on 22 stations in 8 markets through Bell Media, and on another 20 stations in 12 markets outside of Bell’s network. Markets were chosen based on OL’s rail incident hotspot analysis, and the campaign reached an estimated 4 million listeners and generated 915,000 video views in those areas.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
CORPORATE PARTNERSHIPS	OL is currently working on a key corporate partnership with Mattel, which would allow OL to produce two rail-safety focused books (a storybook for young children, and an activity book for older kids), as well as an interactive website, all featuring the iconic Thomas the Tank Engine characters. This partnership would greatly amplify OL's rail safety message, particularly with children and their caregivers. In Q1, OL secured a \$15K corporate sponsorship for its Thomas & Friends initiative, and continued partnership discussions with technology company TRAINFO to support its general rail safety campaigns/outreach.	Ongoing
TRACK SAFETY RULES (MINISTERIAL ORDER 20-07)	Revision of the Track Safety Rules (TSR) is required under Section 19 of the Railway Safety Act as per Ministerial Order 20-07 issued on April 1, 2020. The required filing is phased over a two-year period with the final phase (Phase 3) due on April 1, 2022. Phase 1 rule revisions were filed on April 1, 2021, and the RAC working group is developing rule revisions to address Phase 2 requirements for filing by the deadline of October 1, 2021.	2020-2022
COVID-19 REGULATIONS & PROTOCOLS	Work with federal regulatory authorities (i.e., TC, Labour Canada) to grant temporary regulatory relief (i.e., exemptions, extension, and certificates) to help mitigate the impacts of the pandemic on members and support their compliance with guidance and directives of Public Health Authorities.	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
FATIGUE RISK MANAGEMENT REGULATIONS	TC identified that there are significant adjustments being made to the framework that was initially consulted on in March of this year. The proposed FRMS Regulations are now evolving into an Safety Management Systems-like process and will likely layout a process of managing the risk of fatigue and will no longer be used as a mechanism to receive an exemption from the (draft) Duty & Rest Period Rules. Further pre-consultation webinars are anticipated in advance of the Draft Regulations being published in Gazette I. This file is still under development by TC and regular follow up by RAC is being done to update timeline for consultation and the regulatory process.	Ongoing
GRADE CROSSING REGULATIONS	<p>Railways are pursuing activities to comply with the regulations; however, Transport Canada were advised that full compliance will not be achieved by the deadline of November 2021, and discussions with TC are ongoing to consider regulatory relief with support from industry.</p> <p>Relief under consideration:</p> <ul style="list-style-type: none"> • Change the scope of the regulations so that defined low-risk crossings don't need to meet all requirements; • Extend the deadline using a risk-based approach for all grade crossings (one year for high-risk grade crossings and three years for all other crossings) <p>Transport Canada indicated that they are expecting to finalize their decision and proceed with the required regulatory process for the relief in the summer of 2021.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
PATHWAY INITIATIVE	<p>Phase 1, completed in August 2020, catalogued ongoing and potential activities related to rail sector decarbonization that are led by industry and government, or collaborations between the private and public sectors. It fulfilled the following objectives:</p> <ul style="list-style-type: none">• To develop a common understanding of the current state of rail sector decarbonization in Canada, which can be used as a tool for collaboration between industry and government;• To create a repository of current federal, provincial and territorial GHG reduction legislative instruments and activities impacting the rail sector; and• To contribute to next-phase work on a roadmap to achieving future GHG reductions in Canada's rail sector. <p>Phase 2 of the Pathways Initiative is leveraging extensive stakeholder engagement to develop a roadmap to deeper decarbonization in the rail sector. This entails establishing a common vision, developing a framework for assessing GHG reduction opportunities, and creating a comprehensive pathway. Due to high cost, long-lasting equipment with high energy requirements, decarbonizing this sector presents unique challenges. It will require alignment and strategic cooperation from several sectors including academia/research organizations, OEMs, fuel producers/ energy suppliers, rail operators and government bodies. This phase will have the following objectives:</p> <ul style="list-style-type: none">• Develop an analytical framework for assessing GHG reduction opportunities in the rail sector;• Identify and assess potential GHG reduction measures;• Create a roadmap framework and work plan for GHG reduction actions; and• Develop and implement a roadmap implementation strategy. <p>Phase 2 is projected to be completed by the end of June 2021.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
LOCOMOTIVE EMISSIONS MONITORING REPORT - 2018	As of April 23, the report has been translated, laid-out and designed. Remaining steps include final edits and MOU Management Committee approval. Expected publication in first week of May 2021.	Ongoing
LOCOMOTIVE EMISSIONS MONITORING REPORT - 2019	As of April 23, the initial calculations for the report have been completed and the Consultant's Quality Assurance / Quality Control is underway. Key milestones over the next 90 days include: draft report (May 21); final draft report (June 18); translated and laid-out designed report (first half of July). Final Report (public release) is targeting a publication date of September 2021.	Ongoing
RAIL TRENDS REPORT - 2021	Rail Trends surveys were sent out to members on April 13, 2021. Over the next 90 days, RAC will be collecting, verifying, and consolidating the industry data. Report drafting is expected to begin on July 23, 2021, and the report (public release) is targeting a publication date of October 4, 2021.	Ongoing
CANADIAN RAIL ATLAS UPDATES	Completed Atlas Refresh: On April 23, 2021, the Atlas was updated with the most recent data and enhanced functionality. Training (within next 90 days): Provide training to RAC Staff and Members on new data and functionality.	Completed/ Ongoing

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
ENVIRONMENTAL MANAGEMENT SYSTEM (PILOT)	<p>The objective is to support railway companies in the development and implementation of an EMS, in order to improve the environmental performance of member companies, better enable members to share information and best practices related to environmental management and support continuous improvement in the sector.</p> <p>A new contract was developed for additional work on the EMS pilot with SRY. Additional work includes risk ranking to environmental aspects and impacts table, development of an environmental policy, development of a procedure pertaining to DTL fueling, and revisions to the EMS guidance document to improve usability based on pilot and feedback from SRY.</p>	Ongoing
MANAGEMENT OF 3-YEAR PLAN AND RISK ASSESSMENT	Maintaining Net Assets at required levels; Clean Audit of 2020 Financial Statements; Tracking of key performance metrics; Special assessment for funding of ETC initiative.	Q1 & Q2
EMPLOYEE WORKPLACE	Increase and improve employee communications and engagement	Quarterly

Business Plan: Top Priorities

Key Priorities	Expectations	Timeline
NEW CANADIAN RAIL OPERATING RULES (CROR)	Transport Canada issued a Ministerial Order 20-09 on September 30, 2020, to develop a new Switching Rule to be included in the CROR. This new requirement has delayed the completion and consultation process on the approximately 100+ proposed changes already incorporated into the revised CROR. Filing with TC is required by June 1, 2021. Furthermore, a new order was issued on March 10, 2021, under section 32.01 of the RSA, which requires all railway companies and local railway companies to implement safety measures outlined in the order which are designed to ensure that an accident caused by the unintentional release of the air brakes does not reoccur. The industry issued procedures/instructions to their operating staff to comply with the order, and the RAC rules revision working group is developing a revised CROR rules to incorporate requirements outlined in the order. Filing of the revised CROR is not expected to occur until the various changes to the CROR required to address the Ministerial Orders are completed, filed and approved.	Q2 – 2022
LOCOMOTIVE VOICE AND VIDEO RECORDERS (LVVR)	<p>The Regulations were published in Gazette II on September 2, 2020. The requirements come into affect on September 2, 2022.</p> <p>Transport Canada prepared a draft guidance material to complement the Regulations. RAC is coordinating discussions with TC to obtain clarifications on certain regulatory requirements and to address identified implementation issues.</p>	Ongoing

Business Plan: Top Priorities

Key Priorities	
REFLECTORIZATION	Completed
STAFF LEADERSHIP DEVELOPMENT	Completed
RECOVERY ON GRADE (MINISTERIAL ORDER 19-03)	Completed
RSIP PROPOSAL	Completed
RAILWAY SAFETY WEEK CAMPAIGN	Completed
PAID SICK LEAVE	Completed
DUTY AND REST PERIOD RULES	Completed
COST/BENEFIT ANALYSIS - SERVICES IDENTIFIED IN RAC'S MISSION/MANDATE REVIEW	Completed
LAUNCH RIGHT TRACK	Completed
RECOVERY ON GRADE (MINISTERIAL ORDER 20-08)	Completed
KEY TRAINS AND KEY ROUTES RULES (MINISTERIAL ORDER 20-06)	Completed
RAIL TRENDS REPORT – 2020	Completed

Business Plan: Top Priorities

Significant Wins

- OL secured a \$15K corporate sponsorship for its Thomas & Friends project.
- OL's spring #STOPTrackTragedies radio/digital media campaign reached 4 million listeners and generated 915,000 video views in 20 hotspot communities.
- Rail 101 – 60 Transport Canada employees attended, and feedback was 100% positive.
- TC will be formally endorsing the proximity guidelines.
- Key Trains/Key Routes rule was approved by Transport Canada on February 22, 2021. Effective date is August 22, 2021.
- The CRTC approved the deployment of broadband wireless for railway applications.
- Federal budget announcement and support for railways.

Risks

- COVID-19 continues to challenge some railway members, including passenger, commuter and tourism railways.
- Auditor General's report focusing on Transport Canada's response to rail safety.
- TRAN Committee. Increased attention on Canadian Railways' transportation of Dangerous Goods and accident/safety record.

Hedges

- COVID-19 vaccination could lead to increased ridership for inter-city passenger and commuter trains.
- COVID-19 economic recovery may lead to increased demand for goods delivered by freight trains.

Border Committee

Mike	Tamilia	CN
Allan	Schepens	CP
Caroline	Healey	Railway Association of Canada

The following update describes current customs issues that the RAC is engaged with either directly or through its representative membership in the AAR Transborder Committee and the AAR/RAC EDI Rail Customs Task Force. **These initiatives have all carried over from 2020 into 2021, with limited issues resolution in 2020 due to impact of COVID on government agencies and trade.**

CBSA

There are multiple initiatives currently underway with CBSA that affect rail that we are monitoring closely and for which we are engaged on the issues and that we progress through CBSA committees and working groups. **For 2021 there is a new issue tabled under e-House Bill, and one new subheading related to train crew reporting.**

The following are the CBSA related committee meetings for 2020 – 2021 that the RAC was represented either in person or via teleconference:

- Border Commercial Consultative Committees (BCCC) collective
- BCCC E-House Bill Working Group
- CBSA Assessment and Revenue Management (CARM) Working Group
- BCCC Canadian Export Reporting System (CERS)/Working Group
- PreClearance Working Group
- BCCC Rail Working Group
- North American Plant Protection Organization (NAPPO)
- ***CanAM Border Trade Alliance (Ottawa session) was not held due to COVID-19

E-House Bill

CBSA's E-House Bill project is part of larger E-Manifest initiative that includes rules on electronic reporting of cargo that is either being imported to, or transiting Canada, for all modes of transport. Updates are provided for each of the e-House Bill items, and each of these is ongoing. Implementation of new reporting requirements of E-House Bill and CBSA system enhancements had been delayed to November 1, 2020. All of these initiatives are currently underway.

E-House Bill elements that currently affect rail:

1. CBSA release of rail shipments on a secondary **Freight Forwarder 8000 Manifest**.
2. Inclusion of a **CBSA Sublocation Code** on rail cargo EDI arrival messages to CBSA.
3. Inclusion of a **Consolidated Load Indicator** on CBSA rail manifests for transborder cargo.
4. **NEW for 2021: Electronic Arrival of Truck Manifest** at rail intermodal facility.

- 1) **Freight Forwarder 8000 Manifest:** This long-awaited process automation by CBSA will benefit Canadian rail carriers. Import ocean containers traveling by rail from Canadian marine ports to inland ports in-bond typically do so on the marine carrier's primary manifest (9000). Canadian rail carriers handle thousands of these import shipments each week (largely CN and CP). Under Canadian regulation, each one of these containers requires some type of release or "acquittal" against the marine 9000 manifest in order for the rail carrier to allow the container out of the rail terminal gate without risk of CBSA penalty. CBSA allows Freight Forwarders to post a secondary manifest (8000 series) against the primary 9000 marine manifest as a form of gate release, essentially assuming liability for the shipment, however this is a paper process requiring CBSA stamped documents being forwarded to the rail company. There are hundreds of containers each week affected in this way and requiring manual processing by rail carriers. This automation by CBSA will match the primary and secondary manifests in their internal system

and provide an electronic release message to rail carriers.

UPDATE: Although CBSA's electronic processing of freight forwarder manifests at rail facilities is generally going well, an issue has been identified with CBSA's system that is causing daily additional manual work for rail carriers and the freight forwarder community. Specifically, a timing issue has emerged with the CBSA electronic processing of freight forwarder manifests where if the freight forwarder transmits their documents prior to the rail company electronically transmitting a cargo arrival message, the rail carrier will not receive an electronic release message authorizing an out-gate. Since the rail carrier will not have visibility to the issue the work-around process is to have the freight forwarder notify the rail carrier of disconnect in electronic processing, whereby the rail carrier then needs to notify local CBSA to manually create a cargo arrival in their system. This is a priority system fix for CBSA and they expect resolution by summer 2021.

- 2) **CBSA Sublocation Code:** CBSA's Sublocation Code is a code that identifies the specific location of cargo within an inland Canadian port of entry. Rail carriers will need to provide this code on their EDI cargo arrival message that is transmitted to CBSA, advising at which specific rail yard or terminal a bonded shipment has arrived at. Additionally, the sublocation code on the arrival message must match the code that is supplied on the carrier manifest, otherwise CBSA will not provide an electronic release of the cargo. System programming on the part of the rail carrier is required. In the case where a transborder rail carrier transmits both the manifest and cargo arrival EDI messages to CBSA there should be no issue. In the case of marine containers where cargo moves in-bond on the marine carriers, those carriers will need to ensure they include the correct sublocation code on the marine 9000 manifest that they transmit to CBSA, otherwise the cargo will not release. Rail carriers and marine carriers (being the rail customer) will need to be closely coordinated with this item in order to avoid cargo delay and rail intermodal terminal congestion.

UPDATE: There are business complexities with having marine carriers, rail carriers, and freight forwarders being synchronized and referencing the same Sublocation Code that is required for an automated release of import marine containers. Although generally the CBSA release process for these common shipping scenarios works fairly well, there are instances where these data streams don't properly align and cause delays to release of containers from rail intermodal terminals, or result in a freight forwarder not receiving the proper disposition from CBSA, and these are being raised by CIFFA (Canadian Importers and Freight Forwarders Association) industry representatives. In these cases, manual intervention of an automated system is required. These items are addressed through joint industry forums with CBSA and through direct communication between the affected parties. As the process matures it is expected that these types of issues between trade chain partners will be reduced.

- 3) **Consolidated Load Indicator:** Part of the E-House Bill roll out on November 1st will be a requirement for rail carriers to transmit an indicator on the transborder rail manifest when a Freight Forwarder is involved with the cargo release in Canada. This would typically apply to intermodal containers arriving in North America at a US ocean port and then transit the US to Canada. In the case of rail this intermodal traffic would typically be interline business where a US railroad is loading containers at a US port and then interchanging with a Canadian transborder rail carrier. At this point it is largely CN and CP that are affected. The ocean carrier would need to transmit the consolidation indicator to the US origin road who would then provide it on the interline waybill (EDI 417). The Canadian transborder carrier maps this piece of data to their EDI manifest that they transmit to CBSA. If the indicator is not present, and a Canadian Freight Forwarder is involved with the cargo handling, then CBSA will not release the cargo. The result will be delayed freight and a penalty potentially issued to the importer or Freight Forwarder.

UPDATE: This new data requirement has meant rail shippers and their related freight forwarder partners have had to adjust their system and business processes which has generated some joint industry discussion to ensure cargo release fluidity. There have been a few customs

release issues causing slight delays to container freight, however the process is generally working well.

- 4) NEW: Electronic Arrival of Truck Manifest:** CBSA regulations require that Sufferance Warehouses (i.e. bonded rail yards and terminals) transmit electronic manifest arrival messages to CBSA, this includes for in-bond truck shipments (typically from the US) that arrive at a rail intermodal terminal. All modes of transport are required to be electronically transmitting manifest data to CBSA, however CBSA does not have an electronic link between the modes. As such, managing multi-modal shipment reporting can be problematic with a manual workload imposed by CBSA on trade partners in an otherwise electronic process. Rail carriers have pushed back on CBSA on this issue as we do not feel that trade members should be incurring the costs of manual entry into an electronic system reporting design that only benefits CBSA. Currently, and as a stop gap measure, local CBSA port offices are manually connecting and processing the disconnected reporting between the modes, however CBSA has telegraphed that this interim process does not meet the regulatory requirements. In informal discussions with CBSA leadership we explained that rail terminals are highly automated and in many cases there is no physical person to accept a paper document from a truck driver upon arrival of a container and then convert this into an electronic arrival message. We have, however, identified a way for the trade partners and CBSA to electronically link these documents which would require some system programming from both rail carriers and CBSA as a solution. This item will be formally tabled with the CBSA BCCC Rail Working Group.

CBSA Assessment and Revenue Management (CARM)

CARM is a redesign of CBSA's broker entry filing process for the release of goods and which will be hosted on a new system. The system will have a web portal frontend where all related parties, including rail carriers, will need to be registered. There are significant changes required to the broker community processes and systems, requiring more data earlier in their business process and more accurate reporting of shipment valuation and accounting. The risk that we have identified for rail carriers, and that we have raised with CBSA through the CARM working group in which we participate, is that if brokers have difficulty in the timely filing of their entries it can easily translate to unreleased railcars that will congest rail yards. CBSA was expecting to start piloting the new system in summer of 2020 with select brokers and importers, with a roll out date in Q2 2021, however due to the COVID pandemic there is no longer a firm date available. CBSA timelines for this initiative will be re-established at a post pandemic point.

UPDATE: CBSA is still targeting June 2021 for roll out of Release 1 of their client portal which is the new gateway for brokers and importers to manage their accounts with CBSA, including payment of accounts and querying import tariff items. Carriers, including rail carriers, will be invited to participate in the client portal process, by registering and thereby linking themselves to the shipper's release process, in June 2022. Enforcement dates for mandatory participation that impact rail is not yet published. There have been some conversations between the importing community and rail carriers raising concern that entry and release processing in CARM may delay customs release of rail shipments due to onerous requirement placed on importers by CBSA, however these claims have not been widely expressed and as of now are still unsubstantiated. We will be monitoring this closely.

Canadian Export Reporting System (CERS)

CERS is a new CBSA exporter reporting system that will replace their legacy CAED system and that will eliminate remaining paper export reporting. From a Canadian transborder rail perspective, these would essentially be goods that are destined to either Mexico or a US ocean port to overseas destinations. The implication has been that a rail carrier cannot have a shipment depart from Canada on train unless the exporter has first filed the export declaration with CBSA. The new CBSA CERS system will have some functionality that will change the sequencing of some of the data for rail shippers, however we have worked with CBSA on a solution that maintains a streamlined EDI data process between shippers and railroads with no change in the rail data structure.

CBSA started a limited exporter pilot in January 2020 and that was inclusive of potential rail shippers. Full participation of Canadian exporters was originally scheduled for June of 2020, but due to COVID-19 this date was extended to Oct 1st.

UPDATE: To our knowledge, there have been no issues reported by rail shippers regarding CBSA's and Canadian exporters migration to the CERS program.

Rail PreClearance Pilot

CBSA and CBP have been working with CN and CP on a rail preclearance pilot under the provisions of Bill C-23. This initiative is essentially a second tier to the Beyond the Border preclearance initiative that had CN participate in a pilot from 2012 to 2014 between Prince Rupert BC and International Falls MN as a proof of concept where CBSA at Prince Rupert inspected containers on behalf of CBP. The current rail pilot tested joint CBSA-CBP Large Scale Imaging (LSI) processing at Rouses Point NY, where CBSA officers from Lacolle QC coordinated with CBP officers from Rouses Point to view select northbound train images using CBP LSI equipment. This joint LSI testing occurred from summer 2018 to summer 2019. The next phase of the current pilot is expected to have CBSA officers stationed at a US location, such as Chicago, reviewing and potentially jointly inspecting rail cargo in collaboration with CBP prior to a shipment being added to a train destined to Canada. Additionally, a CBSA officer would have the ability to identify a shipment on a northbound train departing Chicago and then coordinate with CBP operating LSI equipment at the US border point of exit to view the image of the selected container. Preclearance of northbound shipments allow CBSA to meet mandates to review and inspect import rail shipments into Canada without the need to physically intervene at rail border crossing points, but rather either at the US point of origin or at the Canadian destination. COVID-19 has impacted any timetable that CBSA has on this initiative and we expect discussions to resume post pandemic.

UPDATE: This was a key discussion item on CBSA BCCC Rail Working Group virtual meeting that was last held on February 3, 2021. Rail Pre-Clearance in the US for shipments to Canada is still a top initiative for CBSA and they have been progressing talks internally and with CBP, however they have not been able to deploy resources to the identified CBP Chicago facility due to the pandemic. Once travel restrictions are removed it is CBSA's intent to move forward with establishing a Chicago based rail inspection pilot using CBSA officers. We raised the issue of other governmental department interests being addressed as part of the pre-clearance process to avoid having one agency clear a shipment for delivery while another agency has interest of holding or inspecting a rail shipment in Canada. CBSA acknowledged that the ultimate intent is to have all issues addressed at point of US origin with shipments cleared through to the Canadian consignee upon broker entry. Currently there is no reengagement date for the physical portion of the pilot.

CBSA Paper Re-Manifest Process

Although CBSA regulations require all modes of transport to transmit customs manifest information electronically they do not have the system functionality to electronically link manifest information when one carrier hands in-bond shipments to a subsequent carrier for furtherance. An example of this would be a highway carrier who imports a container into Canada, from the US, on a highway carrier's manifest and then delivers the container to a rail carrier for haulage to a Canadian seaport. The container would be transiting Canada "in-bond" and as such a transfer of liability would occur between the highway carrier and the rail carrier that is referred to as a re-manifest. All carriers transmit electronic manifests to CBSA, however in the case of re-manifested shipments described above the importing highway carrier must print a copy of their electronic manifest and provide it to the rail carrier who must then print a rail manifest, collate it with the highway manifest, submit it for manual processing, and then manually update the rail system. There are thousands of these truck/rail shipments that must be processed every month by rail carriers and CBSA offices across Canada creating significant and unnecessary manual workload and cost. CBSA acknowledges this deficiency and has expressed interest in building system functionality to address it, however there is no timeline established to date. We continue to lobby at various CBSA and industry forums to get this important issue addressed.

UPDATE: This was a discussion item on CBSA BCCC Rail Working Group virtual meeting that was last held on February 3, 2021. Tamara Allard, Director, Commercial Operations Division at CBSA indicated that there is some forward movement on this issue and that the agency is aware of the commercial impacts and has committed to keep moving forward towards resolution.

This item can be directly linked to the **New Item 4 of e-House Bill** above as it the system functionality will tie in truck and rail manifest and provide an electronic mechanism for reporting truck shipments into rail intermodal terminals.

NEW: CBSA/PHAC Crew Reporting

Historically, CBSA has not had in place a standard method of rail crew reporting across the more than 20 rail border crossing points between the US and Canada, largely due to remote operations where CBSA does not have an office at the physical border crossing point. With the emergence of PHAC rules for entering Canada in the face of COVID restrictions, standardized reporting to Health Canada became mandatory, including for essential service providers such as train crew members. PHAC has developed an app (ArriveCan App) that can be downloaded onto a cell phone or a desktop computer where personal crew information can be entered prior to a crew member crossing the border from the US into Canada. Problems were identified with this process in that crew members cannot use cell phones while on duty for rail safety reasons, and crew members do not always have access to a desktop computer prior to starting their train run from the US into Canada. Further, if a train crew member does use the ArriveCan App they are still required to communicate the authorization number returned on the app after their declaration to a CBSA officer prior to crossing the border, with the officer then entering the number into the PHAC system. This now becomes a problematic 2-step process. Alternatively, CBSA has been able to gather the information from crew members and then entering the information into the PHAC system, making this an efficient one step process. Recently there has been concern raised by CBSA that this is too onerous of a process for CBSA officers and a push by CBSA to have crew members go to the 2-step process. However our position is that since a CBSA officer has to access the PHAC system to record the crew member name and the ArriveCan App authorization number that this is not a burdensome task, and that it would be much burdensome for rail crews to have to communicate with 2 agencies and potentially delay trains by having to access a device on which to report to PHAC. This issue is still under review by CBSA.

CBP

There are several CBP developing regulations that affect rail that we are monitoring closely and are in close dialogue with the agencies to ensure rail interests are protected and that rail carriers remain compliant. The following are the CBP related committee meetings that myself and/or CP's Allan Schepens attended virtually on behalf of the RAC Since the last update in 2020:

- Customs Electronic Systems Action Council (CESAC)
- AAR Transborder Committee
- AAR/RAC EDI Rail Customs Task Force
- Commercial Customs Operations Advisory Committee (COAC) In-Bond Subcommittee
- COAC Trade Support Network In-Bond Technical Working Group
- ***CanAm Border Trade Alliance (DC session) was not held due to COVID-19

In-Bond Regulation

CBP implemented new in-bond regulations in July of 2019 that require the following:

1. The use of **FIRMS Codes** for reporting cargo arrivals at specific locations in the US
2. Carrier must use **Electronic Bond Diversion** to requests diversion of in-bond traffic while moving in the US.
3. The inclusion of **Harmonized Codes (HS)** in all electronic manifests.

FIRMS Codes

Rail carriers were encouraged, prior to the CBP rule coming into effect, to make programming changes to have this data element included in their EDI rail manifest for US in-bond traffic. As of this date CBP is processing the FIRMS codes if received on the EDI rail manifest, however they do not yet have a system edit in place to enforce use of this data element.

Electronic Bond Diversions

CBP is currently enforcing electronic bond diversions and rail carriers are in compliance.

HS Codes

Acquiring these codes and moving them electronically through the trade chain is very problematic due to different carrier capabilities. This item is currently not being enforced and CBP has no timeframe available for enforcement.

CN is currently a member of the COAC In-Bond subcommittee, along with a representative from the Kansas City Southern railroad. This is a joint CBP/Industry group that is focusing on multimodal in-bond issues for all modes of transport, but that has a significant ocean/rail component. There are two key issues that affect how railroads in the US do business with ocean carriers that have emerged; the need for CBP to make release information for goods bonded to US inland locations to be available prior to train arrival the destination terminal (i.e. Chicago), and the marine carrier push for US rail carriers to manage the electronic release of ocean freight, similar to how rail carriers do this in Canada. The former issue would be welcome by Canadian transborder railroads, where as US railroads are not involved with the container release process at this time and would derive no benefit. US railroads are opposed to the latter issue raised by marine carriers as they are not the importing carrier of the ocean containers and it will require significant computer programming from them to comply. Canadian railroads who handle transborder in-bond containers into the US do not have an issue with this latter item as this is an existing requirement by CBP, given that the railroad is the importing carrier into the US.

UPDATE: No change on this item and no significant impact to rail carriers to date.

Rail Electronic Export Manifest

CBP has been working with rail industry for several years to develop system functionality that will have rail carriers transmit electronic export cargo and train data to CBP's ACE system. Rail carriers have been testing EDI manifest and train consist transactions with CBP for the last several years in a pilot environment, however CBP has not provided a mandatory participation timeframe in the rail EDI export program. There are potential benefits to automated export reporting, such eliminating paper processing of outward trains from the US with CBP and being to identify data and process issues early to avoid train issues at the border. However, there is risk that CBP targeting of export containers for inspection can increase.

Rail manifest data is derived from bill of lading data that is available to CBP shortly after the rail waybill is created. CBP has advised that electronic export data will be subject to both electronic and officer review as soon as received and can be used to hold shipments for inspection at the US border point of exit, thereby increasing border delays. Of particular interest to CBP is international container traffic that is destined to countries other than Canada and Mexico. Container traffic is a type for which inspections are most difficult to manage at border locations and could significantly affect both CN and CP who are large carriers of this traffic type. The rail industry's view is that data or inspection issues should be identified and managed by CBP as early as possible in the data exchange process, this in order to allow rail carriers to manage these issues at the US point of origin as opposed to at border. The rail industry, through the AAR, has requested that CBP address rail shipment inspections at US point of origin as a policy matter. CBP continues to work with the rail industry on both the electronic export requirements and related inspection policy issues, which are under review.

CN is in advanced stages of production test of CBP's export manifest system, having been in an operational phase of testing since May of 2020, and has not experienced any additional border delay as a result.

UPDATE: This initiative is progressing with all railroad with multiple rail carriers now engaged in the pilot. There are still some technical issues to work out with CBP's IT department regarding handling of bonded freight, and as well as new rail carrier export scenarios emerge CBP is working to fold these into the overall process. No date yet on mandatory participation in the pilot or future dates for electronic export reporting enforcement.

Electronic Crew Reporting

CBP has reinitiated discussions with the rail industry on CBP electronic crew reporting processes. Discussions to date have been very preliminary with very limited views by CBP on an overall approach. Confidentiality issues make it difficult to manage personal crew information through existing rail-customs transactional processes, as well as managing crew admissibility issues. The KCS/KCSM railroad has advised that they are currently in a pilot with CBP on crew reporting at the southern US border using FAST cards that are being scanned by trackside readers. While this approach can work with southern border railroads it is likely not optimal for northern border railroads for a variety of reasons, including crew management process, train operational requirements, and climate.

This view by northern border rail carriers has been tabled with the AAR Transborder Committee for future dialogue with CBP. CBP has recently begun soliciting comments on electronic crew reporting and rail is expected to submit comments through the AAR.

UPDATE: No change on this item.

US Border Agriculture Inspections

This issue was discussed at the following committee meetings:

- CanAm Border Trade Alliance
- BCCC Commercial and Operations Committee
- Customs Electronic Systems Action Council (CESAC)

Containers Rejected at the US Border

Daily between 1500 and 2000 containers from overseas arrive at Canadian ocean ports that can transit over a thousand kilometers through Canada to arrive at the US border for continuance to US destinations. Every one of these containers is scrutinized by CBP and USDA/APHIS for pest, seed or solid wood packaging material issues which may make a shipment inadmissible into the US. These issues eclipse CBP security issues today. If CBP or APHIS officers identify pest or seed issues in a container at the US border, the affected container can be rejected by the US agencies and then must be transported back to the original Canadian ocean port for export back to country of origin. Prior to re-entering Canada, however, CFIA requires that the affected containers be fumigated prior to providing authorization certificates for movement through Canada. The cost of inspecting import containers at the US border, arranging for fumigation, and transportation to move rejected containers back to Canadian ocean ports is extremely expensive to all trade partners and the process is very disruptive to rail carriers who handle this business. Given that CFIA has the same concerns as CBP, which is evidenced by the fact that CFIA requires fumigation prior to allowing a US rejected container to transit back to Canadian ocean ports, CFIA needs to partner with USDA/APHIS to interdict on pest issues at the time that containers first arrive at Canadian ocean ports. The RAC is pushing this agenda item through various customs industry forums including the BCCC subcommittees, the CanAM Border Trade Alliance and CESAC.

Starting in 2020, CN and CP were invited to join the North American Plant Protection Organization (NAPPO) working group by CFIA. This group is made up of the Canada, US, and Mexico agricultural agencies and trade representatives. Part of this group's focus is on compliance with ISPM-15 Solid Wood Packaging Material (WPM). In North America, issues related to WPM have become a significant part of border enforcement to prevent the spread of pests arriving from overseas in containers and that burrow into the solid wood used in pallets and blocking/bracing and subsequently cause significant ecological damage (trees, crops, etc.). These joint government/trade committee discussions tie directly into the larger agriculture related issue faced by Canadian rail carriers at the US border, and the need to push these back to the North American perimeter.

NOTE: No change on this item. We continue to work with the related agencies and participate in the NAPPO working group (monthly calls) to progress rail interests on resolution of agricultural inspection issues.

Dangerous Goods Committee

Christine	Gatti	CN, Chair
Jim	Kozey	CP, Vice Chair
Guy	Langis	Ontario Northland
Normand	Adams	Genesee & Wyoming
Ryan	Paine	Southern Railway of British Columbia
Sylvain	Brière	Genesee & Wyoming
Andy	Ash	Railway Association of Canada

The RAC Dangerous Goods Team (DGT), is currently operating under a RAC mandated travel ban (apart from emergencies) due to the COVID-19 pandemic.

NOTE: A Standard Operating Guideline (SOG), has been developed for required travel outside of emergencies with the travel ban. This SOG is referred to as **DG-COV-001, RAC DG Team Travel Guideline for COVID-19. For emergency travel, the DGT is in possession of a “Letter of Access” from the RAC and Transport Canada.** This allows RAC DGT to travel amid COVID-19 restrictions.

The three RAC Transportation of Dangerous Goods Specialists (TDGS), based in Montreal, Toronto and Edmonton currently have the following objectives for 2021:

- The DGT works under the auspices of the RAC Dangerous Goods Committee.
- Work with Shortline railway members by providing regulatory updates and provide DG operational advice. (e.g. DG tank car storage, employee training) **NOTE: TDG Training is available to RAC Member Railways virtually.** Some online sessions have taken place for member railways.
- Project ERP (Emergency Response Plan) template has been sent to Shortline railway members. This template is an optional tool for railway emergency planning. Training for shortlines to use the plan has been temporarily postponed, this is still planned for 2021.
ICS-100 – Incident Command System training for RAC members is presently available on the RAC members website.
- Railway Emergency Response training – two 40-hour courses are normally scheduled to take place at the Justice Institute of British Columbia in June and September. The June course has been cancelled due to pandemic safety concerns. The viability of the September course is currently being analyzed.
NOTE: JIBC management is currently not allowing field rentals at the Maple Ridge Fire and Safety campus to third party users.
- Conducting TRANSCAER® activities – on-site activities have mostly been suspended. Some activities are planned in Quebec and Ontario.
CIAC and RAC have produced a V/R tool that incorporates a training tour of the CCPX911 that currently resides at the Fire and Emergency Services Training Institute (FESTI) at Toronto Pearson airport. This tool can be used for TRANSCAER operations remotely with first responders. This is an available option to adapt to COVID-19 travel restrictions.
- Continue to supply training services to member plants (shippers). Some virtual training has been conducted.
- Continue to maintain an operational readiness, 24/7, for RAC members in the event of a dangerous goods incident. There been assistance rendered at one-member railway incident presently in 2021.
- Committee work: **NOTE: all currently operational, but, virtual.**
 - **AAR Tank Car Committee** – past Chair and voting member.
 - **AAR Security Working Group** – member.
 - **TRANSCAER®** – National and Regional – railway member.
 - **TEAPIII** – Transportation Emergency Assistance Plan, Executive and Editorial Board – member and Assessment Team Leader.
 - **CERCA** – Canadian Emergency Response Contractors’ Alliance - stakeholder member.
 - **ERAC Executive Committee** – Emergency Response Assistance Canada – railway member.
 - **GPAC** – General Policy Advisory Council – railway member representing RAC Shortlines.

- **TC subcommittees** on ER Training, Classification, Electronic Shipping Documents, Curriculum and Facilities – railway member.
- **MACTDG** – Multi Association Committee on TDG – railway member.
- **CIAC Safety Train Committee** (development and construction of the new training tank car) – member and Sub-Committee Chair.
- **Transport Canada Rail Security Working Group** – railway member.
- **RAC Dangerous Goods Committee** (facilitator)
- **RAC Security Committee** (facilitator)

Canada: *Transportation of Dangerous Goods Regulations, Standards, Other Initiatives*

- **Notice – Publication of updated Transport Canada standard Containers for the Transport of Dangerous Goods by Rail TP 14877 (January 2018)**
 Transport Canada has engaged the CGSB to carry out the process to revert the TP14877 Transport Canada standard back to a CGSB National Standard of Canada.
 The CGSB Committee will be tasked to review the existing Transport Canada standard and to develop a National Standard of Canada that will continue to support the Transportation of Dangerous Goods Regulations. On April 15, 2021, a second working DRAFT was published incorporating 179 comments from 16 member of the committee. The RAC is represented on the Committee. (Ongoing)
- **Consultation on the International harmonization updates to the *Transportation of Dangerous Goods Regulations***
 Transport Canada is currently consulting on proposed amendments to the *Transportation of Dangerous Goods Regulations* (TDGR) to harmonize, where possible, with the most recent changes in the UN Recommendations (20th Revised Edition), ICAO TI (2019-2020) and IMDG Code (2018). Publication in the Canada Gazette, Part II planned in spring 2021.
- **Client Information Database (CID) Consultation**
 Proposed Scope for TDG CID: Any person who imports, offers for transport, handles, or transports dangerous goods in Canada is required to register with TC via TDG CID. Registrants are required to provide their basic identifying information (e.g., legal business name, DG site addresses, etc.) and risk-relevant information on specific DG activities (e.g., UN numbers, types and frequency of DG activities, type and volumes of DGs involved, etc.); and stakeholders are required to renew their registration at regular intervals to ensure TDG CID remains up to date and accurate. Due to unforeseen pandemic measures the new forecast is:
 - Legislative changes in the *Transportation of Dangerous Goods Act* (TDG Act) to be tabled in Parliament → April-June 2021;
 - Regulatory changes in the *Transportation of Dangerous Goods Regulations*, with publication in Canada Gazette I → January 2022;
 - Regulatory changes in the *Transportation of Dangerous Goods Regulations*, with publication in Canada Gazette II → September 2022; and
 - CID launch → October 2022.
- **BC Ministry of Environment and Climate Change**
 BC Court of Appeal held that BC's proposed amendments to its *Environmental Management Act* were beyond the powers of the province and consequently unconstitutional. These amendments would have imposed a mandatory permitting regime on all railroads and pipelines carrying heavy oil through BC. Nineteen groups intervened, including oil producers, oil industry associations, first nations, and select provinces. BC launched an appeal to the Supreme Court of Canada and ultimately upheld the BC Court of Appeal's decision that the proposed amendments were beyond the powers of the province and as a result unconstitutional.

The BC Environmental Appeal Board Hearing on Spill Information Orders issued to BNSF, CN and CP, which required reporting volumes of crude oil shipments and plans to publish public reports on crude oil transportation in BC. The BC Environmental Appeal Board (EAB) hearings took place in late 2019. In 2020, EAP reached its decision and determined that the Spill Information orders were

invalid as ultra vires and alternatively inapplicable to the federal railways on the bias of interjurisdictional immunity. The BC Ministry of Environment is appealing the decision. (Ongoing)

- **CGSB Committee Standard 192.3 TDG Training Competencies**

In 2017, the CGSB established a standards committee to develop a new standard for competency-based training and assessment for the transportation of dangerous goods. The standard will be incorporated by reference into the *Transportation of Dangerous Goods Regulations* and published in part I of the Canadian Gazette in the fall of 2021.

- **Initial Consultation Part 6 Training May 1, 2020**

Transport Canada shared a working document for a rewrite of Part 6 of the *Transportation of Dangerous Goods Regulations* which includes the proposed draft provisions for the incorporation by reference of the proposed standard CGSB-192.3, *Transportation of Dangerous Goods Training, Assessment and Competency* to the *Transportation of Dangerous Goods Regulations*. RAC comments were submitted May 14, 2020. Expected to be published in Gazette II in fall of 2022.

- **Ministerial Order (MO 20-06) - Key Trains Speed Issued on November 6, 2020**

The Minister of Transport approved revised *Rules Respecting Key Trains and Key Routes*. These revised rules were filed in response to Ministerial Order MO 20-06, which was issued on April 1, 2020. The revised Rules take effect on August 22, 2021.

- Speed restrictions for Key Trains and Higher Risk Key Trains very similar to restrictions already in effect under Ministerial Order MO20-10 were issued on November 6, 2020. This includes the option to implement a Winter Operations Risk Mitigation Plan and mitigating measures in order to operate at higher speeds as defined below:

	Outside CMA		Within CMA
	Without Winter Plan	With Winter Plan	
Signaled Territory			
Ambient Temperature > -25°C	50	50	30
Ambient Temperature ≤ -25°C	30	50	25
Non-Signaled Territory			
Ambient Temperature > -15°C	50	50	30
Ambient Temperature ≤ -15°C	25	30 w/o Broken Rail Detection Tech. 40 with Broken Rail Detection Tech.	25

- Relative to Main Track and Subdivision Track Portions of Key Routes, track related requirements:
 - To develop and adhere to a maintenance and inspection plan approved by a professional engineer for Continuous Welded Rail Joint Management.
 - For the installation of replacement rail including ultrasonic inspection; recordkeeping requirements and the following restriction if ultrasonic testing of a replacement rail cannot be done prior to installation:
 - *A Company must, until the replacement rail has been ultrasonically inspected and verified to be free from rail defects, either:*
 - limit the maximum speed to 10 MPH; or
 - implement a speed restriction reviewed and approved by a professional engineer.
 - Other changes in the revised rules include revisions to definitions; wording consistency and numbering in the rule to align with the other changes.

- **Electronic Shipping Documentation Equivalency Certificates**

Transport Canada issued equivalency certificates to CN and CP for the use of electronic shipping documents in lieu of paper documentation when goods are transported by rail. The equivalency certificate was issued as part of the Sandbox Regulatory Pilot Project which Transport Canada is currently undertaking to evaluate whether an equivalent or greater level of safety can be achieved with electronic shipping documents.

United States: Rulemaking

- **49 CFR Part 130 Final Rule (HM-251B)**

DOT's PHMSA in coordination with the FRA issued a final rule HM251B that requires railroads to develop and submit Comprehensive Oil Spill Response Plans for route segments traveled by High Hazard Flammable Trains (HHFTs). The rule revises the oil spill response plan (OSRP) requirements currently in place to require railroads to establish geographic response zones along various rail routes and ensure that both personnel and equipment are staged and prepared to respond in the event of an accident. Railroads are required to identify the qualified individual responsible for each response zone and the organization, personnel, and equipment capable of removing and mitigating a worst-case discharge. The rule also requires rail carriers to provide information about HHFTs to state and tribal emergency response commissions in accordance with the FAST Act of 2015. Appeals concerning certain requirements in the final rule were submitted by AAR on March 28, 2019, PHMSA responded basically denying the AAR appeal to modify or eliminate certain requirements as stated in the final rule. Railroads were required to submit their OSRP by August 27th, 2019. PHMSA is reviewing submitted OSRP's and responded to individual railways in regards to any deficiencies in their plans. Railroads are responding to comments in PHMA's letters.

- **HM-219C Final Rule**

Published November 25, 2020: Adoption of Miscellaneous Petitions to Reduce Regulatory Burdens rule. Will address various outstanding HM petitions. Of rail interest:

- Revising § 173.31 to prohibit the use of tank cars with shells or heads constructed of non-normalized steel in the transportation of poison-by-inhalation hazard (PIH) materials by rail after December 31, 2020. Account AAR had already adopted a phase-out schedule.
- PHMSA is amending §§ 173.314(c) and 173.244(a)(2) of the HMR to make the HM-246 rail tank car specifications (known as the "I" car) permanent for the transportation of PIH materials and is assigning the unique identifier of "DOT-105H600W" for HM-246 tank cars transporting PIH materials by rail. Revising § 173.31 to prohibit the use of certain rail tank cars for the transportation of PIH materials after December 31, 2027.
 - The rule did not address retrofitting existing cars. This is a concern to the car owners since many want to retrofit their cars and offer as HM-246 compliant. The shippers and car owners are taking the lead in a petition for rulemaking to DOT to address retrofitting.
 - Most carriers acknowledge that some cars built prior to 2009 meet the HM-246 standard but are hesitant to support a petition allowing retrofitting. The retrofitting of legacy DOT111 tank cars to DOT117R has been a concern due to the low improvements in survivability and safety.
- PHMSA is revising § 172.101(c) to clarify that the word "stabilized" must be included as part of the proper shipping name when the HMR requires stabilization before transportation.

- **HM-215O Final Rule**

Published May 11, 2020: Harmonization with International Standards rule.

- Allows full reciprocity of Canadian Temporary Certificate car movements across US/Canadian border.

- **HM-264 Final Rule Final Rule**

Published 7/24/2020: Authorization of LNG in DOT-113 Tank Cars. A notice of proposed rulemaking (NPRM) was issued on October 23, 2019, to allow LNG to be transported in DOT-113C120W rail tank cars. AAR and ASLRRA filed joint comments on December 23, 2019, supporting the NPRM with qualification.

- The final rule included a new specification cryogenic tank car DOT113A120W9 which requires a 9/16" outer tank instead of a 7/16" outer tank
 - In addition, the final rule included a requirement to do a route risk assessment and operational controls similar to HHFT trains.
 - The rule making is in legal battles from several states and environmental groups. The new administration issued a Presidential Order to review the rule making.
- **HM-260A Final Rule**
Miscellaneous Editorial Corrections. Published December 21, 2020.

Pending Rulemaking

- **HM-215P NPRM:** Harmonization with International Standards rule. 2021
- **HM-233G Final Rule:** Special Permit conversion rule. Will address what existing SP's can be converted into the regs. Sent to Secretary for Final Review/Approval. Expected Issuance: 2021
- **HM-250A NPRM:** IAEA Harmonization/RAM Regs. Being drafted. Review and concurrence stage. Modal Coordination. Expected Issuance: 2021.
- **HM-265 NPRM:** Modal Regulatory Reform Initiatives. Of rail interest – To address rail issues from HM RSAC/AAR M-1002 and updating Parts 174, 179 and 180. Is currently in drafting stage. Expected Issuance: 2021.
- **HM-265A ANPRM:** Modal HM Regulation Update. 2021

Enhanced Train Control (ETC)

Steering Committee

Working Group

Tom	Brown	CN		Jean-Francois	Allaire	VIA Rail Canada
Thomas	Casselman	Metrolinx		Michelle	Ardron	VIA Rail Canada
Keith	Shearer	CP		Zvonko	Trajkovic	VIA Rail Canada
Michael	Brankley	VIA		Dwarak	Punja	Metrolinx
Caroline	Healey	Railway Association of Canada		Tony	Wu	Metrolinx
				Charles	Cleary	CN
				Mathieu	Ducharme	CN
				Tim	Pulak	CN
				Ravi	Raj	CP
				Anmesh	Tanwer	CP
				David	Thurston	CP
				Cory	Wogrinc	CP
				Michael	Hendry	Railway Association of Canada / University of Alberta
				Scott	McDade	Railway Association of Canada
				Magdy	Fahmy	Railway Association of Canada

The Railway Association of Canada's (RAC) Enhanced Train Control (ETC) program, consisting of representatives from Freight and Passengers railways, has been working to coordinate the development of ETC systems to address the safety concerns which resulted in TSB recommendations; and, to proactively address the recommendations of the 2018 Review of the *Railway Safety Act* in a manner that results in an ETC system(s) that meets the needs of the Canadian railway industry.

Transport Canada (TC) has continued to indicate that the implementation of an ETC-like system is a high priority for rail safety. The industry's objective of avoiding imposed rules or regulations requires a reasonable rate of progress in the ETC development. The industry continues to meet with Transport Canada and is able to demonstrate progress. Transport Canada has requested a common risk threshold for where ETC systems are required as well as the level of functionality deployed, this will require quantitative risk assessment for which CaRRL has been engaged. The industry continues to push Transport Canada for support in securing the communications necessary, and funding required, for ETC implementation.

In order to complete the development of Standards and Interface Control Documents (ICDs) within a reasonable timeframe, five additional committees have been established to focus on specific segments of the ETC system. The current organization for this industry effort is made up representatives from CN, CP, Metrolinx and VIA structured into six groups:

- A Steering Committee (SC) with representation of senior management to provide direction for the development of ETC;
- A Lead Team (LT) which consists of subject matter experts and supplemented by external experts. The LT is responsible for developing and maintaining the vision for the overall system, specifying the high-

level functional decomposition and system requirements. The LT provides oversight and coordination of the subcommittees;

- A Safety and Risk Committee (SRC) responsible for, and interfaces with all committees, for the development of the system and subsystem safety requirements and safety assurance of the developed ETC system;
- A Back-Office Committee (BOC) which, in addition to the Back Office system and subsystem requirements, is responsible for the structure of dynamic and static data;
- An Onboard Committee (OC) responsible for the development of onboard system and subsystem requirements for locomotive sensors and display;
- A Wayside Committee (WC) responsible for wayside system and subsystem requirements for signals, switches and track circuits;
- A Communications and Security Committee (CSC) that interfaces with all committees, is responsible for the development of communications system and subsystem requirements, system security and ICDs.

Terms of Reference which includes roles and responsibilities of members as well as the specific mandate for each committee have been developed. A Lead and alternate have been appointed and ongoing meetings established for each committee. Currently, the committees are identifying existing standards and ICDs from other jurisdictions that could be reused for ETC.

An experienced Senior Project Manager has been hired and will be working closely with each of the committees in order to validate assumptions, revise as required and monitor progress towards the ETC multi year-plan.

Environment Committee

Emily	Mak	Southern Railway of British Columbia, Chair
Michael	Barfoot	Railway Association of Canada
Jean-François	Boucher	VIA Rail Canada
Ben	Chursinoff	Railway Association of Canada
Keith	Dagg	West Coast Express Ltd.
Stéphanie	Daneau	exo
Chantale	Després	CN
Rob	Eagar	New Brunswick Southern Railway
Benoît	Gingras	exo
David	Huck	CP
Stella	Karnis	CN
Arjun	Kasturi	Metrolinx
André	Lapalme	Québec Gatineau Railway
Jérémie	Largeaud	Genesee & Wyoming Canada
Murray	MacBeth	Genesee & Wyoming Canada
Bruno	Riendeau	VIA Rail Canada
Sylvain	Rodrigue	exo
Thomas	Rolland	exo
Marta	Swiercz	Metrolinx
Adrian	Tena-Russell	Genesee & Wyoming Canada
Jonathan	Thibault	Railway Association of Canada
Joe	Van Humbeck	CP

RAC Environment Chairperson

Emily Mak with Southern Railway of British Columbia Ltd. has taken on the chairperson duties for the RAC Environment Committee. The RAC wishes to acknowledge the contributions of the previous co-chairs, Chantale Despres (CN) and David Huck (CP) for their leadership over the last two years.

Carbon Pricing

In December 2020, the federal government announced that the carbon price will increase to \$170 per tonne in 2030. For the 2020 compliance year, the carbon tax is set at \$30 per tonne of CO₂e.

On March 25, 2021, the Supreme Court of Canada ruled that the *Greenhouse Gas Pollution Pricing Act* is constitutional. The majority of judges noted that global warming causes harm beyond provincial boundaries and that it is a matter of national concern under the “peace, order and good government” clause of the Constitution. Furthermore, the majority noted that the term “carbon tax” has nothing to do with the concept of taxation, as understood in the constitutional context. As such, the fuel and excess emissions charges imposed by the Act are constitutionally valid regulatory charges and not taxes.

Clean Fuel Standard (CFS)

The proposed *Clean Fuel Regulations* (the proposed Regulations) would require liquid fossil fuel primary suppliers (i.e. producers and importers) to reduce the carbon intensity (CI) of the liquid fossil fuels they produce in and import into Canada from 2016 CI levels by 2.4 gCO₂e/MJ in 2022, increasing to 12 gCO₂e/MJ in 2030. The proposed Regulations would also establish a credit market whereby the annual CI reduction requirement could be met via three main categories of credit-creating actions:

1. actions that reduce the CI of the fossil fuel throughout its lifecycle,
2. supplying low-carbon fuels, and
3. specified end-use fuel switching in transportation.

Parties that are not fossil fuel primary suppliers would be able to participate in the credit market as voluntary credit creators by completing certain actions (e.g. low-carbon fuel producers and importers).

In addition, the proposed Regulations would retain the minimum volumetric requirements (at least 5% low CI fuel content in gasoline and 2% low CI fuel content in diesel fuel and light fuel oil) currently set out in the federal Renewable Fuels Regulations (RFR). The RFR would be repealed.

On March 4th, the RAC provided a submission to Environment and Climate Change Canada (ECCC) detailing concerns with the proposed Regulations. Recommendations provided to ECCC include:

1. That ECCC reintroduce an energy efficiency ratio (EER) for rail to the Regulation, allowing railroads to generate end-used fuel switching credits under Compliance Category 3.
2. That ECCC broaden the definition of transportation end-use fuel switching under Compliance Category 3 to include yard equipment.
3. The RAC asks that ECCC protect Canadian railway companies' commercial agreements with OEMs – and improve ongoing investment certainty – by requiring vendor disclosure of energy density and percent of renewable content whenever a batch of fuel contains more than 5% biodiesel or 30% renewable diesel.
4. That ECCC earmark a portion of the compliance fund to support rail specific technology research, development, and deployment

Rail Pathways Initiative

The Pathway Initiative aims to identify short, medium, and long-term GHG reduction opportunities both within the rail sector and enabled by the rail sector through modal shift in alignment with federal priorities to reduce transportation sector GHG emissions. This project has been divided into two phases, of which Phase 1 has been completed.

Phase 1, completed in August 2020, catalogued ongoing and potential activities related to rail sector decarbonization that are led by industry and government, or collaborations between the private and public sectors. It fulfilled the following objectives:

- To develop a common understanding of the current state of rail sector decarbonization in Canada, which can be used as a tool for collaboration between industry and government;
- To create a repository of current federal, provincial and territorial GHG reduction legislative instruments and activities impacting the rail sector; and
- To contribute to next-phase work on a roadmap to achieving future GHG reductions in Canada's rail sector.

Phase 2 of the Pathways Initiative is leveraging extensive stakeholder engagement to develop a roadmap to deeper decarbonization in the rail sector. This entails establishing a common vision, developing a framework for assessing GHG reduction opportunities, and creating a comprehensive pathway. Due to high cost, long-lasting equipment with high energy requirements, decarbonizing this sector presents unique challenges. It will require alignment and strategic cooperation from several sectors including academia/research organizations, OEMs, fuel producers/energy suppliers, rail operators and government bodies. This phase will have the following objectives:

- Develop an analytical framework for assessing GHG reduction opportunities in the rail sector;
- Identify and assess potential GHG reduction measures;
- Create a roadmap framework and work plan for GHG reduction actions; and
- Develop and implement a roadmap implementation strategy.

Phase 2 is projected to be completed by the end of June 2021.

Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations

An industry working group continues to engage with ECCC to raise awareness of current processes that railway companies use for handling shipments of hazardous waste as well as railway's anticipated processes for complying with requirements of the proposed regulations.

Among the issues being raised are:

- The reporting requirement compliance costs under the regulations.
- The logistical challenges in changing the EDI systems to track individual cross-border movements of rail ties.
- The limits to the benefits brought on by the additional reporting requirements included in the regulations.
- Tracking of waste railway ties that are moved interprovincially within Canada when railways are the generator of the waste or recyclable material (i.e. railway ties). The collection and transport of these material does not trigger any of the internal documentation process that is triggered for other movements of hazardous waste/recyclable material.
- The timing to produce a Movement Document when railway companies are carriers of hazardous waste. The working group indicated that railways would not be able to produce the Movement Document while in transit, but after the shipment has been completed.

On February 10, 2021, a draft PELES application was submitted to ECCC for their review to determine suitability of meeting the proposed regulatory requirements. The document was developed with support from railway subject matter experts and Aureus Solutions Inc. Subsequently, the regulations were published in Canada Gazette, Part II, on February 26, 2021, with a coming into force on October 31, 2021.

A period of approximately six months between the final publication of the regulations and the coming into force will allow industry to familiarize themselves with the regulatory requirements and to obtain necessary permits. It is intended that the draft application will allow the RAC to receive valuable feedback on the proposed PELES before the regulations come into force, providing railways with an approved alternative arrangement to meet the regulatory requirements.

Monitoring files: Single-Use Plastic Regulations, Glyphosate, and CEPA

Single-Use Plastics

The Government of Canada is taking steps toward eliminating plastic pollution in Canada, including potentially banning or restricting certain harmful single-use plastic products, where warranted and supported by science.

Management framework approach for single-use plastics	
Steps	Details
1. Categorize:	Group single-use plastic items into categories and identify considerations for exemptions: <ul style="list-style-type: none"> 1. environmentally problematic 2. value recovery problematic
2. Set management objectives:	For priority categories, determine which objective in the waste management hierarchy should be pursued: (1) eliminate or reduce from the Canadian market, or (2) increase recycling or recovery rate.
3. Choose an instrument:	Based on the objective chosen for each product, choose the appropriate instrument to achieve the goal informed by the <i>Instrument Choice Framework for Risk Management under the Canadian Environmental Protection Act</i> .

Items being considered for a ban include:

- Checkout bags
- Stir sticks
- Beverage six-pack rings
- Cutlery
- Straws
- Food packaging made from plastics that are difficult to recycle

Regulations will be finalized by the end of 2021.

Glyphosate Monitoring

Statements and reports published by Health Canada and the U.S. Environmental Protection Agency since January 2019, have indicated that the use of glyphosate (active ingredient in Roundup) does not increase risks to human health when the product is used in accordance with its label.

Health Canada continues granting registration of products containing glyphosate for sale and use in Canada, with changes to product labels to provide Canadians with additional information on how to use these products safely.

Railways have an interest in the product since it is used for vegetation control along rail right of way. Environmental Non-Government Organizations (ENGOS) continue to push back against Health Canada's 2017 revaluation of glyphosate however no new statements have been issued by Health Canada.

Laval, QC has become the first city in Quebec to ban the use of glyphosate through a bylaw adopted on April 13, 2021. The City of Montreal is considering a similar ban. Other Canadian jurisdictions with restrictions on the use of glyphosate in public spaces include Vancouver and New Brunswick.

Canadian Environmental Protection Act Reform

The RAC continues to monitor developments relative to CEPA reform. On April 8th, Minister Wilkinson introduced Bill C-28, *Strengthening Environmental Protection for a Healthier Canada Act*. Proposed key amendments include:

- recognizing that every individual in Canada has a right to a healthy environment
- confirmation of the government's commitment to implement the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
- recognizing the importance of considering vulnerable populations in risk assessments and of minimizing the risks posed by the cumulative effects of toxic substances
- endeavouring to reduce, refine or replace the use of animal testing
- recognizing the importance of Canadians having information regarding the risks of toxic substances, including by labelling products
- strengthening chemicals management (e.g. risk management, risk communications, research, and monitoring)
- new provision to allow any person to request that the Ministers assess a substance to determine whether it is toxic or capable of becoming toxic.

Mechanical Committee

Kyle	Mulligan	CP, Chair
Matthew	McClaren	CN, Vice Chair
Stephane	Boudreault	Quebec North Shore and Labrador Railway Company Inc
Laszlo	Czihaly	Southern Railway
Dave	Dallaire	Québec Gatineau Railway Inc
Claude	Gagnon	Railway Association of Canada
Lonnie	Little	Ontario Northland Transportation Commission
Murray	MacBeth	Genesee & Wyoming Canada Inc.

Broken Wheels

The Mechanical Committee has recently re-engaged with stakeholders from CN, CP, and several Canadian shortline railways (Southern Railway of British Columbia, Quebec North Shore and Labrador, Quebec Gatineau Railway, Ontario Northland Transportation Commission and Genesee Wyoming Canada). The current focus of the Committee is to study broken wheels which have resulted in derailments. The Canadian shortlines have expressed a concern that in the event of a broken wheel derailment, they must receive the analysis support from the originating Class 1 railways. As a result, the Committee ensured that immediate analysis support would be provided through the CP Winnipeg Test Department. The results are to be shared in Q2 2021 in efforts to support the shortlines with the detection and handling of broken wheels. As broken wheels are not just a shortline issue, but an industry issue, detection of broken wheels is therefore a topic which will be part of ongoing discussions with the Committee in support of both the Class 1's and the shortlines based on the laboratory results.

AAR Damage Prevention & Freight Claim

Recently approved the following closed car documents:

GIS No. 858, Bales of Wood Pulp in Boxcars

GIS No. 859, 69 in. Diameter Rolls Loaded in 50 ft. Boxcars Secured with Anchored U-Straps

GIS No. 860, 50 in. Diameter Paper Rolls T-Loaded in 50 ft. Boxcars

The recently approved closed car documents and all AAR closed car and intermodal loading publications are available online to download for free at: <http://www.aar.com/standards/damage-prevention.html>

Medical Committee

Gina	Stirpe	CN, Chair
Lisa	Trueman	CP, Vice Chair
Gurpreet	Bola	Metrolinx
Robert	Gaudet	exo
André	Houde	Genesee & Wyoming Canada
Marie-Claude	Laporte	VIA Rail Canada
Caroline	Healey	Railway Association of Canada
Magdy	Fahmy	Railway Association of Canada
Michael	Barfoot	Railway Association of Canada

Medical Advisory Group

Dr. George	Lambros	Chief Medical Officer, CP, Chair
Dr. Linda	Garand	Chief Medical Officer, CN, Vice Chair
Dr. John	Cutbill	Chief Medical Officer, Canadian Independent Railways (Shortlines)
Dr. Nigel	Adams	Chief Medical Officer, BNSF Canada

2020 MAG Update – Dr. George Lambros

None of the allocated budget for 2020 (\$ 26,000.00) has been spent. Although some of the work may have been initiated, it would be inaccurate to say that any of the 2020 projects listed below have been progressed in any meaningful way. The unfortunate reality is that the current COVID-19 pandemic, with its multiple complexities and changing variables at Federal, Provincial and State levels, has required the extraordinary attention of all of the members of the MAG. Both the Medical Committee & MAG propose that the unused 2020 budget (\$ 26,000.00) be reallocated to the MAG for 2021 scope of work.

2021 BUDGET UPDATE: from Medical Advisory Group – Dr. George Lambros

Subsection 4.7 Diabetes	Total anticipated spend for 2021 = \$7,500.00
Subsection 4.2 Hearing	Total anticipated spend for 2021 = \$2,500.00
Subsection 4.4 Neurological Disorders	Total anticipated spend for 2021 = \$16,000.00

The unused budget from 2020, \$26,000.00, should be sufficient to cover the MAG 2021 scope of work. The only foreseeable issue that may delay the completion of the above is the ongoing COVID-19 Pandemic.

Operation Lifesaver

Sarah	Mayes	National Director
Maryse	Bétournay	Coordinator, Operation Lifesaver Programs

Operation Lifesaver (OL) Canada continued to make solid progress on its objectives over the past six months. The following is a summary of its key activities and deliverables from January 2020 – May 2021.

OL's 40th Anniversary

In celebration of its 40th anniversary this year, OL produced and launched [two new videos](#) in early 2021 featuring a diverse group of Rail Safety Ambassadors. The videos highlighted their life-saving work and encouraged others to consider volunteering their time with OL to promote rail safety. The videos were promoted through a campaign on Facebook and YouTube/Google Adwords in February and March which generated 1,518,857 impressions, 335,263 video views, and hundreds of new social media followers. In addition, a dozen new Ambassadors have signed up to help spread the rail safety message with OL in the last 6 months.

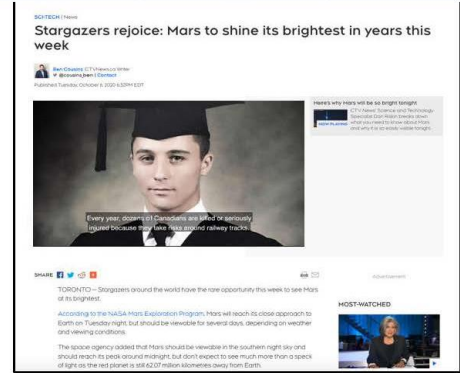
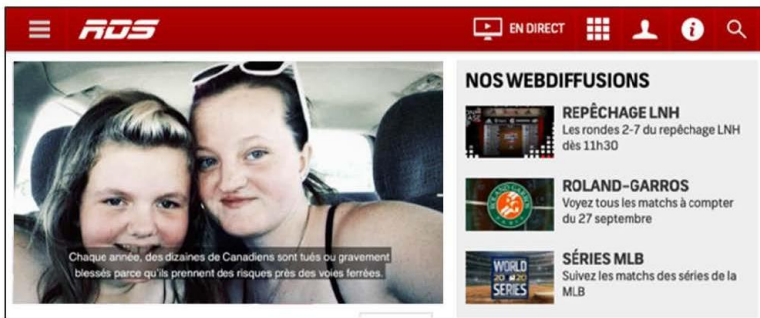


#STOPTrackTragedies campaign

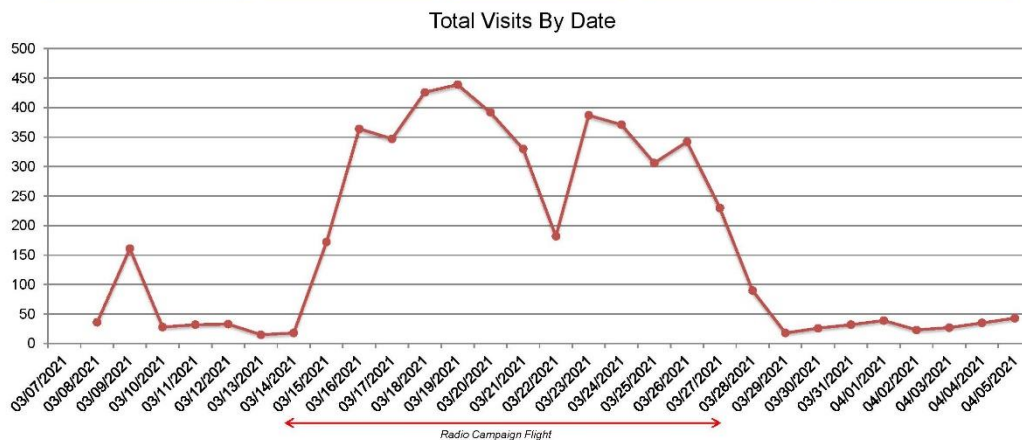
In March, OL launched a robust two-week radio and digital media campaign with Bell Media and other key broadcasters to promote its #STOPTrackTragedies messaging in hotspot communities across Canada. OL's ads aired more than 2,300 times on 42 radio stations in 20 markets. In addition, Bell provided more than 1.8 million "un-skippable" video views/impressions across its various websites (CTV News, TSN, Discovery Channel, etc.). Many [smaller incident hotspot markets](#) were targeted through this campaign, with the goal of reaching new listeners/viewers that hadn't seen or heard OL's message as part of the 2020 Rail Safety Week campaign. Overall, the campaign reached more than 3.8 million listeners and generated close to 2 million video views.

The Bell Media campaign alone generated close to 5,000 visits to [STOPTrackTragedies.ca](https://stoptracktragedies.ca), and had a digital ad click-through rate of 0.36% (above the industry average).

Advertiser : OPERATION LIFESAVER CANADA						
17219_Network-Operation Lifesaver Canada - Preroll-						
Campaign Name : March '21						
Campaign Summary						
Order	Line item	Line item start date	Line item end date	Ad server impressions	Ad server clicks	Ad server CTR
17219_Network-Operation Lifesaver Canada - Preroll-March '21	99719_Bell Media (EN) - RON - All Platforms - :15 Preroll	3/15/21	3/28/21	21,905	70	0.32%
17219_Network-Operation Lifesaver Canada - Preroll-March '21	99723_Bell Media (EN) - RON - Desktop & Mobile Web - :15 Outstream	3/15/21	3/28/21	1,787,139	6,422	0.36%
17219_Network-Operation Lifesaver Canada - Preroll-March '21	99741_TSN (EN) - ROS - All Platforms - :15 Preroll	3/15/21	3/28/21	3,215	25	0.78%
17219_Network-Operation Lifesaver Canada - Preroll-March '21	99747_TSN (EN) - ROS - Desktop & Mobile Web - :15 Outstream	3/15/21	3/28/21	16,100	72	0.45%
Total				1,828,359	6,589	0.36%



LIFT 17.4%	VISITS TOTAL DAYS WITH ADS 4.9k 4.4k	AD VISITS 648	NEW AD USERS 599	TOTAL ADS 319
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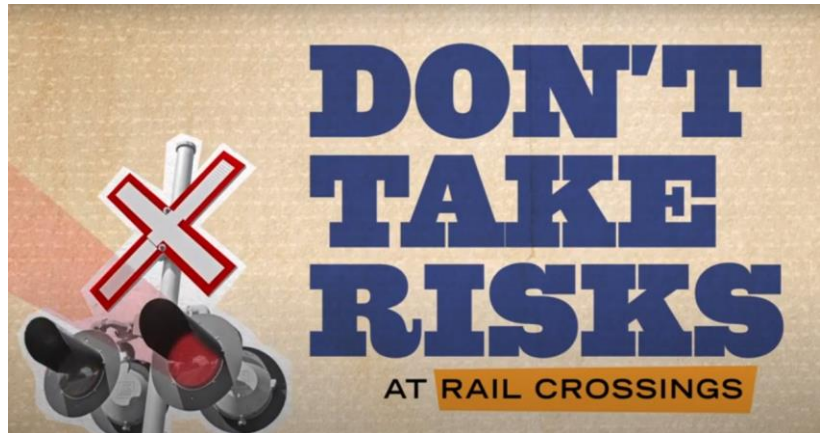


Municipal Outreach: New Animated Videos

In January, OL also launched [four new animated videos](#) (2 English, 2 French) as part of its [Rail Safety Toolkit for Canadian Municipalities](#). The goal was to create videos that were lighter in tone than the #STOPTrackTragedies campaign, and that could convey the rail safety message even with the sound turned off. The videos were promoted through a social and digital media campaign on Facebook and YouTube/Google Adwords which generated more than 541,000 video views and 888,000 impressions. OL has also been reaching out to municipalities across Canada to encourage them to play the videos on

screens in city halls, arenas, and other public buildings, and for local cable stations to play them as public service announcements. The Aboriginal Peoples Television Network (APTN), the Valemount Community Channel in B.C., TVYou in Alberta, Access TV in Saskatchewan, Rogers TV and YourTV in Ontario, NousTV and TV 09 Laval in Quebec, and Rogers TV in New Brunswick and Newfoundland are now airing OL's rail safety content on their channels through in-kind donations of airtime.

In January, OL also launched [four new animated videos](#) (2 English, 2 French) as part of its

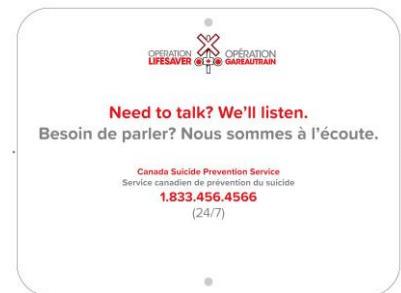


Today is Better — Ça Va Mieux Campaign

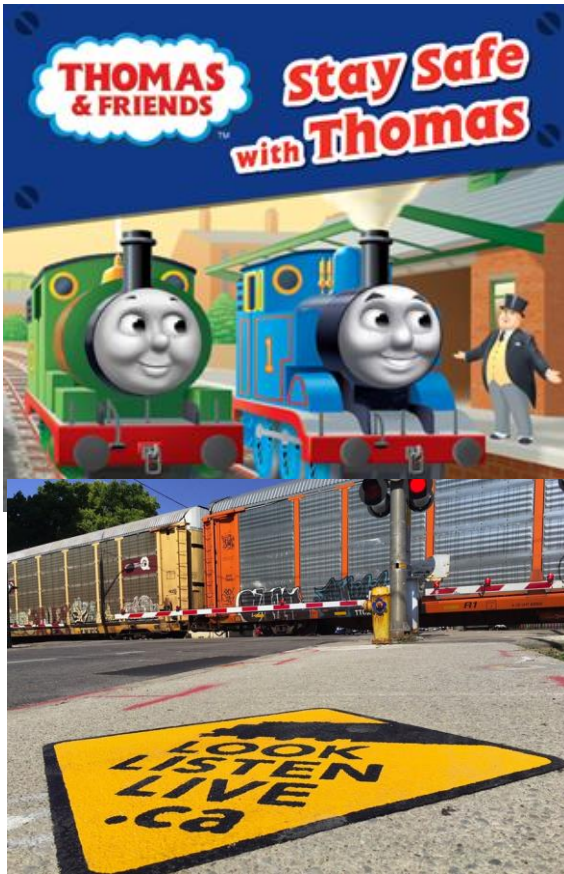


OL will be launching its bilingual *Today is Better* suicide-prevention public-awareness campaign in May. The campaign consists of 11 poignant and hopeful videos (six English and five French), featuring the personal stories of Canadians who have experienced suicidal thoughts but sought help.

Today is Better will be promoted through a paid social and digital advertising campaign in areas of concern for rail suicide across Canada, and through in-kind ads on the TransLink, exo and Metrolinx rail networks, and on the Toronto Transit Commission's subway platforms. OL's rail partners will also be installing more than 3,000 signs (pictured above) along their rights-of-way to promote the Canada Suicide Prevention Service (or Québec's 1-866-APPELLE hotline) to people who may be trespassing on rail property and in distress. OL's mental health and rail partners will also promote *Today is Better* through organic social media posts in support of the campaign launch.



Rail Safety Week – September 20-26, 2021



This September, OL plans to launch its Thomas & Friends campaign (featuring rail-safety activity and storybooks and an interactive website for children of all ages) as part of Rail Safety Week. It is unclear whether in-person Rail Safety Week events will be feasible because of the ongoing pandemic, however a Thomas-themed event would be an ideal way to engage children and adults alike about the importance of rail safety.

OL also plans to re-broadcast its latest #STOPTrackTragedies videos through a paid campaign during Rail Safety Week 2021, in an effort to reach older target audiences. OL will also be unveiling more rail safety decals in communities from coast to coast throughout the week, and has already reached out to 27 communities (10 of which have confirmed) to encourage their participation in OL's [Look. Listen. Live. Community Safety Partnership Program](#). Finally, OL will also be partnering with OLI and Amtrak on Operation Clear Track again this year, with the goal of engaging more than 500 Canadian police departments and detachments in rail safety outreach and enforcement activities throughout Rail Safety Week.

Operating Rules Committee

James Gamble	CP, Chair
Luca Frappier-Charron	CN, Vice Chair
Normand Adams	Genesee & Wyoming Canada
Michelle Ardron	VIA Rail Canada
Guy Langis	Ontario Northland Transportation Commission
Magdy Fahmy	Railway Association of Canada
Michael Barfoot	Railway Association of Canada

There has been a flurry of regulatory activity in the Canadian railway industry within the six months since our last report. In the October 2020 report, the Committee outlined their industry efforts over the last five years to progress the next round of improvements to the *Canadian Railway Operating Rules* (CROR). The Committee noted that though the arrival of COVID-19 resulted in unexpected challenges and delays, we were actively working to submit the next version of the CROR to unions for consultation. These efforts included the development of rules relating to switching which would codify common existing industry instructions and expectations.

Despite this ongoing effort, on September 14, 2020, the Minister of Transport issued MO 20-09 which requires “railway companies and local railway companies to revise the CROR to incorporate provisions governing switching operations pursuant to subsection 19(1) of the *Railway Safety Act* (RSA). This resulted in the Operating Rules Committee pausing our work on the 100+ CROR rule changes in progress in order to meet the timeline mandated in the Order. A new package of CROR changes was developed which provides safer, more thoughtful and viable solutions than those proposed in MO 20-09. This package of rules is currently in the consultation phase with industry and unions. The Order requires these rules be filed with the Minister no later than June 1, 2021.

When representing the industry, the Operating Rules Committee has made every possible effort to ensure that TC’s concerns are correctly understood, and provided opportunities to be engaged in developing a collaborative solution. On February 1, 2021, a shortline operator in Ontario experienced the loss of control of a movement. Recognizing the likelihood of resulting regulatory action, the Operating Rules Committee began work that same afternoon on developing a new rule which would address root cause of the incident. When TC reached out to us for ideas later that week, we shared with them our progress. We finalized the rule and provided it to TC for further discussion. Unfortunately, no discussions took place after, and TC opted to issuing two further Ministerial Orders on March 10, 2021, MO 21-01 pursuant to subsection 32.01 of the *Railway Safety Act* (RSA) to prevent accidents caused by the unintentional release of the air brakes, and MO 21-02 pursuant to subsection 19(1) of the *Railway Safety Act* (RSA) to revise the *Railway Locomotive Inspection and Safety Rules* to incorporate design and performance parameters for locomotives with roll-away protection, and to revise the CROR to develop a precise definition of attended versus unattended equipment as well as incorporate requirements on the use of roll-away protection to reduce the risks of an uncontrolled movement.

It is disappointing that efforts to engage TC in meaningful collaborative discussions were not pursued by TC, however, they opted to the issuance of Ministerial Orders. This approach unfortunately resulted in seeing years of effort in development of a revised CROR will again be paused as our efforts are diverted in response to the new Orders.

In closing, on behalf of the passionate, expert members of the Operating Rules Committee, I would like to assure everyone reading that we remain more committed than ever to operating safely, with integrity, to rise above these challenges. We will continue to proudly demonstrate our collective values and strong leadership in the face of the unfortunate deteriorating relationship between industry and regulator.

Proximity Committee

Sean	Finn	CN, Co Chair
Randy	Goulden	City of Yorkton, Co Chair
Jeff	Browaty	City of Winnipeg
Philippe	Cannon	VIA Rail Canada
Chris	Fonseca	City of Mississauga
Steve	Gallagher	Cando Rail Services
Mike	LoVecchio	CP
Rhona	Martin	Columbia Shuswap Regional District
Michelle	Morin-Doyle	Ville de Québec
Monika	Pezdek	CN
Marion	Robinson	Transport Canada
Jenelle	Saskiw	Village of Telkwa, Project Manager, FCM
Keith	Shearer	CP
Adam	Snow	Metrolinx
Jason	Tsang	Canadian Transportation Agency
Eve Danièle	Veilleux	VIA Rail Canada
Christina	Vietinghoff	Federation of Canadian Municipalities
Ben	Chursinoff	Railway Association of Canada

The Federation of Canadian Municipalities (FCM) – Railway Association of Canada (RAC) Proximity Initiative continues to work with stakeholders to raise awareness of rail safety and to promote the adoption of the *Guidelines for New Development in Proximity to Railway Operations* by municipalities and provincial governments across the country.

Advocacy Update

Meetings have been held with the following stakeholders.

Municipalities	PTAs	Provincial Ministers	Provincial Departments	Port Authorities	Federal Officials	Other
Toronto	AUMA	Ontario Minister of Transportation	Manitoba Municipal Relations Planning Department	Port of Montreal	Transport Canada Rail Safety Directorate	Dillon Consulting
Winnipeg	RMA	Alberta Minister of Transportation & Infrastructure	BC Municipal Affairs Planning Department	Port of Vancouver	Lloyd Longfield, MP for Guelph	
Pitt Meadows, BC	UBCM					
District of North Vancouver	SUMA					
Langley City, BC	Nova Scotia Federation of Municipalities					
Township of Langley, BC						
Port Coquitlam						
Montreal						

These engagements have allowed the proximity initiative to raise awareness of the guidelines with stakeholders. As a result, the guidelines will be officially enacted in both Winnipeg and by the Manitoba Municipal Relations Planning Department as they are responsible for reviewing and approving local developments outside of Winnipeg and Brandon.

Alberta Minister of Transport has agreed to work with the proximity initiative and to promote adoption of the proximity guidelines.

Transport Canada Statement of Support

Transport Canada will be officially endorsing the proximity guidelines with an official policy statement of support. TC is in the process of gathering support through the Ministers Roundtable to solicit provincial ministers' support as well. It is anticipated that federal government support will help with encouraging provinces, municipalities, and territories to incorporate the proximity guidelines in their regulatory frameworks and/or land use plans. TC continues to update the Proximity Initiative on development of the statement as publication is TBD at this time.

Proximity Guidelines Update

- The Proximity Guidelines were last updated in 2013. As we are approaching our nearly 10-year anniversary of the update and nearly 20 years since its inception, it is time to review the guidelines once again.
- To date, we are happy to report that 120 municipalities have adopted the guidelines fully or in part. This is a first step in ensuring that our communities can remain safe and consistent development considerations will help mitigate development issues for communities. Being that FCM represents nearly 2000 communities, it is imperative that this number increase. It is interesting to note that most of the communities that have adopted the guidelines are from eastern Canada. This tells us that there is tremendous opportunity for us to continue to promote the guidelines from coast to coast.
- Jenelle Saskiw proposed that the steering committee establish a formal working group to review the guidelines. She suggested that the committee follow a similar format to review the guidelines as was done in 2013. She would like us to establish a working group made up of municipal leaders, industry representatives and stakeholders that can share pertinent information. She will also be contacting those communities that have adopted the guidelines to get some "testimonials" and create benchmarks that can be used to help us promote the guidelines. If we have positive endorsement from communities, it will help us promote them in the future.
- Once the committee is established, it will focus on:
 - 1) Gathering data from municipalities. Why have they adopted the guidelines, did it mitigate issues. Why has your community not adopted the guidelines?
 - 2) Gathering data from railway partners and technical experts
 - 3) Reviewing the guidelines and implementing changes if/where necessary
 - 4) Promote new guidelines and increase adoption rate.
- Gaps as identified by stakeholders include clarifying guidelines for commercial and industrial developments, developing guidelines for locations with limited physical space where a 30m setback is not feasible (e.g., urban intensification), and raised railway infrastructure.

Steering Committee

The steering committee held a virtual meeting on Monday March 15, 2021. Notable discussion items include:

- There has been an increase in proximity issues over the last year received by CN, CP, the CTA, and Metrolinx. This may be attributed to the impacts of the pandemic as most citizens are spending more time at home thus becoming more aware of proximity issues during the day.
- The Committee discussed how to measure the benefits of adopting the guidelines. This is an item that will require continued engagements with municipalities that have already adopted the guidelines as it may be somewhat difficult to quantify livability.
- An FAQ document was developed and published on the proximity initiative website:
<https://www.proximityissues.ca/proximity-initiative-frequently-answered-questions-faq/>

Regulatory Affairs and other Operations Initiatives

RULES

Canadian Railway Operating Rules (CROR)

Three Ministerial Orders issued requires changes to the CROR. MO 20-09 issued September 29, 2020, with a filing date of June 1, 2021 requires railways to revise the CROR to incorporate provisions governing switching operations. MO 21-01, issued March 10, 2021, issued pursuant to section 32.01 of the *Railway Safety Act* (RSA), and came into force immediately, requires railways to implement certain safety measures outlined in the Order which are designed to ensure that an accident caused by the unintentional release of the air brakes does not reoccur. MO 21-02, issued March 10, 2021, with a filing date of March 10, 2022, requires railways to amend the *Railway Locomotive Inspection and Safety Rules* and the CROR to include setting performance standards for locomotives equipped with roll-away protection, and revisions that will clarify when a train is unattended and must be secured as per the rules.

Roll-Away Protection Rule

In response to a Technical Bulletin on Rollaway Protection, the RAC held a series of discussion with Transport Canada (TC), where it was agreed to a two-phased approach to revising the *Locomotive Inspection & Safety Rules*. The first phase, which was filed with TC on October 25, 2019, entails the deletion of Section 13.2b – the incorporation by reference of the *Association of American Railroads Standard* (AAR S5513) to address overlapping and inconsistent requirements between the rule and the reference.

Phase 1 received approval on February 14, 2020, on condition that it will not come into effect until both phases are approved by the Minister of Transport. Phase 2 will articulate the requirements under s.13.2c for different locomotive types with rollaway protection that are being used as a secondary means of securement as defined under Rule 112 of the *Canadian Rail Operating Rules*.

The RAC working group had several exchanges and virtual meetings with TC staff to discuss TC's comments and concerns on the RAC's White Paper on Rollaway which was submitted in the Fall of 2019. Following these exchanges and meetings, on June 30, 2020, the RAC submitted to TC a revised White Paper on Rollaway. The submission also included a detailed analysis of the proposed Rollaway Protection operational parameters and thresholds and a detailed risk assessment of the proposed rule modifications.

On February 17, 2021 Transport Canada provided their feedback on the RAC's White Paper, and shortly thereafter, in the wake of a Goderich - Exeter Railway train incident, TC issued 2 ministerial orders, one of which, MO 21-02, issued on March 10, 2021, and it requires railway companies and local railway companies to amend the *Railway Locomotive Inspection and Safety Rules* and the *Canadian Rail Operating Rules*. The amendments should include setting performance standards for locomotives equipped with roll-away protection, which is a feature designed to apply the air brakes when movement is detected, and revisions that will clarify when a train is unattended and must be secured as per the rules.

The RAC working group will be shortly developing rules revisions to address the MO's requirements

Track Safety Rules

Ministerial Order (MO) MO 20-07, issued April 1, 2020, required railway companies to revise the *Rules Respecting Track Safety* (TSR) and identified three Phases to revise the Rules.

Phase 1 scope includes, training, Qualification and Quality Assurance; Continuously Welded Rail Management; Track Geometry; Rail Wear Management; and Rail Surface Management.

Phase 2 scope includes track inspection frequency & automated track inspection technology

Phase 3 scope includes structures & other requirements.

The filing dates for the 3 phases is as follows: Phase 1 (April 1st, 2021); Phase 2 (Oct 1st, 2021); Phase 3 (April 1st, 2022).

Phase 1 proposed revisions to the rules were filed on April 1, 2021. The RAC's working group are currently working on phase 2 revisions.

Duty and Rest Period Rules

A new *Duty & Rest Period Rules for Operating Employees* (DRPR) came into effect November 25, 2020.

The new DRPR are based on the latest fatigue science principals and provide for new limits on the length of duty period, they increase the length of minimum rest period between shifts, and introduces a rest break which provides the employees with a minimum amount of time away from work. The new DRPR provides for a phased-in compliance plan, with full compliance by 30 months from coming into force of the rules for freight railways, and 48 months from coming into force of the rules for passenger railways.

In support of the implementation of the new DRPR, the RAC, and its working group, are coordinating and responding to questions and clarification inquiries from members that arise as the implementation progresses.

Rules Respecting Key Trains & Key Routes (KT/KR Rules) – MO 20-06

On April 1, 2020, Ministerial Order MO 20-06 was issued requiring railway companies to amend the *Rules Respecting Key Trains & Key Routes* to address requirement outlined in the MO and which includes speed restrictions, requirements for continuous welded rail and requirements for replacement rail.

The proposed revised rules were filed on December 24, 2020 and were subsequently approved by TC on February 2021 with an effective date of August 22, 2021. The revised Rules provides for a temperature-based speed restriction and provides for exceptions to speed restrictions for companies that develop and adhere to Winter Operation Risk Mitigation Plan.

REGULATIONS & OTHER

Grade Crossings

A new *Grade Crossing Regulations* came in force as of November 27, 2014. Railways are required to achieve full compliance within 7 years (November 27, 2021). Transport Canada's goal for this new regulation was to provide consistent grade crossing safety standards that would improve enforcement capabilities. It also includes a definition of roles, responsibilities and collaboration between road authorities and railway companies.

The RAC and industry formed a working group and have had important progress towards the compliance with the new Regulations. However, and as initially indicated to Transport Canada in the Fall of 2017, achieving full compliance with the Regulations by November 2021 is almost impossible due to the lack of crossings data that were to be provided by road authorities, and the significant challenges and issues encountered in the field.

Discussions have been ongoing with Transport Canada to consider some regulatory relief; Transport Canada is aware of, and understands, the challenges encountered by the railways, and are considering an application for regulatory relief with support from industry. It is our understanding that the relief under consideration includes:

- Change the scope of the regulations so that defined low-risk crossings don't need to meet all requirements; and
- Extend the deadline using a risk-based approach for all grade crossings (one year for high-risk grade crossings and three years for all other crossings).

Transport Canada indicated that it is expecting to finalize their decision and proceed with the required regulatory process for the relief in the summer of 2021.

Locomotive Voice and Video Recorder Regulations (LVVR)

On September 2, 2020, the *Locomotive Voice and Video Recorder Regulations* (LVVR) have been published in the Canada Gazette, Part II. The Regulations come into force on September 2, 2022 – the second anniversary of the day of publication.

<http://gazette.gc.ca/rp-pr/p2/2020/2020-09-02/html/sor-dors178-eng.html>

The Regulations will provide data about in-cab operating employee actions that are not otherwise available and will further be useful in providing proactive data to strengthen safety management systems and prevent accidents and incidents by providing the opportunity to mitigate risks before accidents occur.

Transport Canada prepared draft guidance material to complement the Regulations, and this will be posted on their website. The RAC is coordinating discussions with Transport Canada to obtain clarifications to certain regulatory requirements and to address identified implementation issues.

ENHANCED TRAIN CONTROL (ETC)

Refer to detailed report under a separate section.

GUIDELINES, BULLETINS & OTHER DOCUMENTS ISSUED BY TRANSPORT CANADA (TC)

Transport Canada issued a *Culvert Safety Management Guideline* and the RAC provided feedback on the proposed guidelines and is continuing its discussions with Transport Canada on these guidelines so as Transport Canada can finalize and post them on their website.

COVID-19

RAC continues to work closely with members and Transport Canada to identify issues related to the Covid-19 pandemic and ensure they are adequately addressed. Transport Canada has granted a set of temporary exemptions to certain sections of the rules and regulations, pertaining to the qualification of railway personnel.

In January 2021, the RAC addressed a letter to the Chair of the National Advisory Committee on Immunization urging them to work with the provinces to prioritize the immunization of essential railway employees, which will help ensure that Canada's supply chain and essential passenger transportation services across the country can continue to operate safely and without disruption.

The RAC is also working with Critical Infrastructure (CI) to identify opportunities to deploy/implement Government of Canada's initiative to provide rapid tests for regular workplace screening of close-contact workers in critical industries

Transport Canada continued with its Ministerial Order to require passenger railway companies to conduct a health check, as described in the order, of every person prior to their boarding the railway equipment. This order is in effect until May 31, 2021.

Safety Culture Committee

Keith	Nordin	Southern Railway of British Columbia, Chair
Barney	Gregory	CSX Transportation
Bola	Gurpreet	Metrolinx
Brown	Tom	CN
Cameron	Mark	Metrolinx
Cregan	Brianna	CHSOS
Dennard	Renota	Norfolk Southern
Dillon	Doug	Prairie Dog Central Railway - Vintage Locomotive Society
Fleming	Mark	St. Mary's University
Gingras	Benoit	exo
Hamilton	Becky	CSX Transportation
Kelly	William	OmniTRAX Canada
Laronde	Laurie	Ontario Northland Transportation Commission
Leonard	Michael	BNSF Railway
Linden	Gerald	Southern Railway of British Columbia
Livingstone	Jeff	Prairie Dog Central Railway - Vintage Locomotive Society
McCauley	Jocelyn	Metrolinx
Moller	Jeffrey	Association of American Railroads
Murta	Thomas	Short Line Safety Institute
Newsome	Paul	Prairie Rail Solutions - Vintage Locomotive Society Inc.
Riendeau	Bruno	VIA Rail Canada
Ringelman	Ryan	BNSF Railway
Rodrigue	Sylvain	exo
Smith	Lisa	Cando Rail & Terminals
Strang	Jo	American Short Line & Regional Railroad Association
Tardif	Stéphane	Genesee & Wyoming Canada
Tully	Robert	CP
Chursinoff	Ben	Railway Association of Canada

The Safety Culture Improvement Initiative (SCII) continues to operate in accordance with its 2021 work plan that focuses on:

- Completing safety culture assessments in partnership with Railway Association of Canada (RAC) member companies;
- Developing tools and guidance material to improve safety culture in the railway industry; and
- Educating/informing government officials and stakeholders about the importance of safety culture within the railway industry.

Safety Culture Steering Committee Chairperson

Following the retirement of Mr. Steve Gallagher (Cando Rail & Terminals Ltd.) at the end of 2020, Mr. Keith Nordin (Southern Railway of British Columbia Ltd.) was identified as the new chair of the safety culture steering committee and will be starting this role in the second quarter of 2021.

Safety Culture Assessments

Safety culture assessments have been completed for the Ontario Northland Railway (ONR) and is nearing completion for Quebec Gatineau Railway (QGRY). A finalized action plan has been submitted to the RAC Safety Culture Team from ONR and QGRY has submitted a draft of their action plan with a final draft coming soon. The RAC team will shift to the monitoring phase while the railways begin implementing initiatives to enhance their safety culture. The RAC remains available to both railways for any additional support that may be required.

Looking forward to the 2021 assessment year, interest in the Safety Culture Improvement Initiative has been building. The RAC released its call for applications in March 2021 and received 3 applications for assessments. These are from the Ottawa Valley Railway (OVR), Universal Rail Systems, and Toronto Terminals Railway (TTR). An assessment framework has been developed to determine assessment order for 2021 which indicates that the preferred order will be OVR to launch the survey in the summer, followed by TTR's survey launch in September / October and then Universal Rail Systems assessment to begin in late fall / early winter going into 2022. Timelines will be reviewed with these railways and may be subject to change due to continued impacts of COVID-19 as well as summer vacations of employees at respective railways.

Transport Canada Safety Culture Policy Statement

In accordance with recommendations made in the *Railway Safety Act Review*, the RAC is supporting Transport Canada's (TC) efforts to develop a safety culture policy statement. Mr. Sam Berrada (of the RAC Safety Culture Team) has been in contact with TC to identify opportunities for the Department to support and advance safety culture in the Canadian rail sector. Mr. Berrada developed a document that provides potential initiatives that the regulator can undertake to support safety culture in the rail industry. Because TC's focus over the past several months continues to be on COVID-19, Regulatory Changes, and briefing the new Minister of Transport, the Department has made minimal progress on the draft safety culture policy statement but is committed to keeping the RAC engaged.

Safety Culture Indicators / Metrics

The 2021 Work Plan pursues the RAC's progress to work with members to develop safety culture indicators to complement the assessment process and enable members to gauge their progress on improving safety culture through a short-focused perception survey. The Safety Culture Indicators / Metrics report shows that safety culture is complex and cannot be described accurately with a single metric. The report, drafted by Mr. Berrada, identifies several indicators which provide insight and a directional trend of changes in safety culture. The following three indicator categories are identified in the report:

1. Perceptions; and
2. Initiatives; and
3. Outcomes.

Southern Railway of British Columbia (SRY) has volunteered to pilot the short-focused perception survey in 2021. This will provide an opportunity for SRY to measure the impacts of its safety culture initiatives and for the RAC to learn about the effectiveness of the safety culture indicators in the short-focused perception survey. Due to the continued impacts of COVID-19, SRY has indicated it prefers to launch this initiative in the fall of 2021.

RAC Safety Culture Focus Group

On December 3rd, 2020 a two-hour long safety culture focus group was held with representatives from Cando Rail, CP Rail, Genesee & Wyoming Railway, Prairie Dog Central Railway, Southern Railway of British Columbia, and VIA Rail; providing a broad range of railway experiences with differing operations and perspectives. The RAC Safety Culture Team facilitated the discussions.

The objectives for the session were to:

- Consult about challenges and opportunities relative to pursuing the journey to assess and strengthen safety culture for the railway industry;
- Solicit feedback on the RAC Safety Culture Improvement Initiative
- Identify any gaps in the initiative; and
- Identify how the RAC can best support railway's safety culture journeys.

To begin the session, a presentation overview of the Safety Culture Improvement Initiative was provided to participants. The presentation provided information on the governance model of the initiative, the safety culture assessment process, leadership training, the compendium of best practices and tools, and safety culture research efforts (e.g., safety culture indicators and short-focused survey). Afterwards, discussion questions were presented to the focus group to help guide conversation. The four discussion questions were:

1. What are your key opportunities and challenges in advancing safety culture?
2. What support do you need to achieve this?
3. What can the RAC do to better support its members in advancing safety culture?
4. How can railway members best support each other in advancing safety culture?

The focus group was productive with the identification of several opportunities which can be advanced to help members strengthen their safety culture. The focus group prioritized the following items for development.

1) Leadership / Management Safety Culture Training

Participants reported that the differing levels of knowledge or understanding of safety culture amongst senior railway leaders and line managers is a challenge to advancing safety culture. An integral factor in developing a strong safety culture is having leadership commitment and buy-in, which encompasses having a good comprehension of what safety culture is. Discussions also indicate that companies are challenged by ensuring that leaders have the support and skills needed to be effective leaders (e.g., knowing how to intervene and understanding how to successfully establish relationships with employees). Additionally, it is perceived that changes amongst leadership can cause discontinuities in an organization's safety culture progression, therefore ensuring that safety culture training is available is key for maintaining knowledge and onboarding of new leaders / managers. This speaks to the need for the RAC to continue with leadership and safety culture training opportunities for railways.

2) Guidance Document on Advancing Safety Culture

Railway members suggested that further support for the safety culture journey be provided in the form of a safety culture standard, or guidance document, which explains the characteristics of a strong safety culture and outlines a practical approach for members to progressively strengthen safety culture. This guidance document would describe the behaviours and characteristics associated with a strong safety culture, how companies can define and brand their culture, and identify best practices which can be used and adapted to make progress while suiting individual company needs.

3) Safety Culture Resource Information and Communication / Awareness Document

Enhancing and increasing communications to RAC members about safety culture resources and best practices was identified as a need. Members felt that they don't necessarily have a good knowledge or easy access to such information. As well, members suggested that a robust communication / awareness document be developed to help them raise the level of knowledge and awareness of safety culture in their company.

4) Peer Review Process

A peer review process for sharing initiatives and best practices amongst RAC members was suggested to facilitate and encourage peer learning and exchange. It was identified that the RAC is in a position to develop and facilitate this amongst its membership. This would allow railways to see what initiatives other railways have implemented relative to safety culture, thereby enabling peer support and learning.

Proposed Next Steps

Based on the feedback from the focus group, the Safety Culture Team plans to address the priority findings through four buckets (below). These buckets are sufficiently broad in scope to address most of the feedback; however, it is important to note that not all feedback may be addressed through these initiatives. The work will continue to evolve as initiatives are completed and additional feedback is received.

The Safety Culture Team will be working in the following areas in 2021 to increase the support available to RAC members to assist with their respective safety culture journeys. This development effort will include consultation with members to ensure that deliverables are aligned with needs and opportunities.

1. Leadership / Management safety culture training

- **Action:** The Safety Culture Team will produce a roadmap of training offerings in Q1 2021.

2. Safety culture resources and communication / awareness document

- **Action:** Two deliverables will be developed:
 - a) a document detailing resources available to members; and
 - b) a safety culture communication / awareness document.

Both will be developed along with a communication strategy in 2021 by the Safety Culture Team.

3. Developing a safety culture guidance document for members

- **Action:** Development of a guidance document to begin after completion of item #2, in collaboration with industry, targeted for the second half of 2021.

4. Develop peer review process for sharing of best practices

- **Action:** Item to be included in 2021 RAC work plan for Q3. An initiative entitled “Peer Safety Culture Sharing Initiative” (below) was launched in Q1-2021 to support the sharing of best practices.

New Safety Culture Initiatives

The RAC Safety Culture Team is introducing new initiatives to increase knowledge and supports available to RAC members relative to safety culture. These include:

- Strategic Safety Culture Development Initiative
- Peer Safety Culture Sharing Initiative
- Safety Culture Assessment Railway Commitment

Strategic Safety Culture Development Initiative

Objectives:

1. Enhance and elevate safety culture knowledge of steering committee members by leveraging external experts.
2. Provide ongoing safety culture education to steering committee members, in order to:
 - ✓ Elevate strategic safety culture knowledge;
 - ✓ Provide updates on research and advancements;
 - ✓ Connect safety culture with railway issues and opportunities;
 - ✓ Provide a foundation for members to partake in the formulation of the steering committee vision, initiatives and development efforts.

Concept:

1. Initiate ‘Strategic Safety Culture Development’ initiative with 2 educational installments on Leadership delivered by Dr. Mark Fleming:
 - Educational installments to be delivered during safety culture steering committees;
 - Duration will be approximately 15 – 20 minutes;
 - Initial installments will cover:
 - ✓ Critical role of leadership and line management in a strong safety culture;
 - ✓ Effective leadership skills and interventions;

- ✓ Leadership and Line management Training – progressing from singular training events to a development process.
- 2. Following the initial educational installments on leadership delivered by Dr. Fleming on March 12th, a second installment will be delivered at the next safety culture steering committee meeting, and subsequently the intent will be to consult with the steering committee to identify additional themes which are relevant and valuable to members, for subsequent ‘Strategic Safety Culture Development’ installments.

Peer Safety Culture Sharing Initiative

Objectives

1. Leverage the strengths and experience of safety culture steering committee members by creating a process to share and exchange safety culture practices and experience amongst members;
2. Leverage collective knowledge, best practices and experience for the benefit of all members;
3. Understand common challenges and opportunities faced by members, as well as approaches which have been successful;
4. Create a catalyst for sharing and learning, as well as identifying development opportunities;
5. Create opportunities for members to connect, partner and support each other.

Concept

1. Inception:

- ✓ A short survey* was sent to steering committee members in March in order to identify the key issues and opportunities faced by members in advancing safety culture;
- ✓ Results will be analysed and shared with members for purposes of identifying the top 3 most significant / relevant issues and opportunities.

2. Process:

- ✓ RAC Safety Culture team to develop agenda and process for starting initiative during a steering committee meeting in 2021. The intent is to integrate this initiative with a safety culture steering committee meeting agenda.
- ✓ Theme, agenda and process will be shared with steering committee members in Q2 – 2021;
- ✓ Members will be asked to come to the next steering committee prepared to present / discuss their experience, best practices (if available), challenges, opportunities and/or development opportunities for the specific theme identified.
- ✓ RAC Safety Culture Team to take notes during ‘Peer Safety Culture Sharing’ process and share with members for subsequent consultation and prioritization.
- ✓ The key themes will be reviewed / updated at the beginning of each year for purposes of identifying one theme each year to use this initiative.

* Survey Link: https://smuniversity.qualtrics.com/jfe/form/SV_bQpMhLTqU28q7c

Safety Culture Assessment – Railway Commitment

A document, entitled “Safety Culture Assessment – Railway Commitment” was developed and shared with the safety culture steering committee to enable members to fully understand the safety culture assessment process, including roles, responsibilities, and expectations.

This document complements existing RAC documents and is expected to help members who undertake a safety culture assessment to engage effectively in each of the steps, and thereby achieve a positive outcome which will meet their objectives.

Security Committee

Lori	Kennedy	CP, Chair
James	Babe	Capital Railway
Bryan	Bass	BNSF Railway
Christopher	Bennett	CSX Transportation
Jeff	Briggs	BNSF Railway
Stephen	Covey	CN
Patrick	Desaulniers	exo
Jack	Gibson	CSX Transportation
William (Bill)	Grodzinski	Metrolinx
Mitch	Jardine	CN
Peter	Lambrinakos	VIA Rail Canada
Brandon	Myers	CN
Brian	Schwab	Amtrak
David	Smith	CN
Curtis	Stanley	Norfolk Southern
Stéphane	Tardif	Genesee & Wyoming
Pierre-Luc	Vachon-Gravel	exo
Jared	Wagar	CP
Todd	Wallace	West Coast Express
Robert	Zawerbny	CN
Andy	Ash	Railway Association of Canada

Transport Canada (TC) has issued new passenger related regulations under the *Railway Safety Act* (RSA). The members of this Committee continue to actively engage with TC to provide input on what is being considered as opportunities arise but there has been minimal interaction at the industry level in the last 6 months. Following is a brief overview of the key activities that this Committee has been focused on.

RSA Passenger Rail Security Regulations

Update: On October 28, 2020, final regulations were published in Canada Gazette II. There were minimal changes in the final regulation and TC did not fully address industry's comment. Most of the changes made the regulatory language more specific, including more prescriptive timelines to complete certain actions e.g. reviews of security risk assessments within "seven days" instead of "as soon as feasible". For operations-based security exercises, the final regulation does reduce the frequency from 3 years to 5 years.

Background: The *Passenger Rail Security Regulations* were issued under the *Railway Safety Act*. TC had been engaging with railways that operate and/or host passenger operations for input since early 2017.

The requirements:

- Are similar to what is in the Memorandum of Understanding and what is required under the *Transportation of Dangerous Goods Act* for freight rail.
- Has a staggered implementation.
- Vary depending on if the company is a:
 - Large passenger company;
 - "Small passenger company": transported <60,000 passengers in one of the two previous calendar years; or
 - "Host company": a railway company that authorizes a passenger company to operate on its railway.
- Requires passenger railway and host companies to:

- Effectively manage their passenger rail system security risks primarily using a management-based approach.
- Implement security processes to effectively manage their identified security risks; and
- Report and keep records to document compliance with requirements.
- Gives railway companies the flexibility to adopt security practices and measures that are unique to their operations and adapt to a changing risk environment.
- Following is a summary of the key requirement and the required compliance dates:

Proposed Requirements	Railway Company			Length of Time After Registration Before Coming into Force
	Large Passenger	Small Passenger	Host	
1. Security awareness training	Yes	Yes	Yes	3 months (Jan. 6/21)
2. Rail security coordinator	Yes	Yes	Yes	Registration day (Oct. 6/20)
3. Security reporting	Yes	Yes	Yes	Registration day (Oct. 6/20)
4. Security inspections	Yes	Yes	No	3 months (Jan. 6/21)
5. Security risk assessment	Yes	No	No	9 months (July 6/21)
6. Security plan	Yes	No	No	9 months (July 6/21)
7. Security plan training	Yes	No	No	15 months ¹ (Jan. 6/22)
8. Security exercises	Yes	No	No	15 months ¹ (Jan. 6/22)
Recordkeeping	Yes	Yes	Yes	

- *i.e. 6 months after security plan requirements come into force*

Transportation of Dangerous Goods Security Regulations

Update: On October 20, 2020, the committee in collaboration with Transport Canada and the AAR, put a new process in place that allows railway companies to use the AAR Common Operating Environment (COE) as an option to electronically report security incidents that are required by the regulation. Reporting still requires a telephone notification to TC but the details of the incident can be sent electronically. This reduces time spent and improves report quality, as well as provides a central record of incidents to enhance industry visibility and trend analysis. Electronic reporting can also be done to meet the incident reporting requirements of the new RSA *Passenger Rail Security Regulations*.

MOU Management Committee

No change since the last meeting.

Wireless Communications Committee

Kevin	Waldern	CP Rail, Chair
Frederik	Chevrier	VIA Rail Canada Inc.
Simon	Beliveau	CN Rail
Diane	Neese	CN Rail
Yves	Cloutier	Québec Gatineau Railway
Pavel	Danshin	Metrolinx
Antonio	Aranibar	CN Rail
Xavier	Hall	Metrolinx
Celina	Kawasima	CP Rail
Marc	Lavallée	EXO
Marc	Levesque	IOC
Trevor	Smith	CP Rail
Alain	Vachon	CN Rail
Enzo	De Benetti	Railway Association of Canada

CRTC 2019-57 Consultation

The Railway Association of Canada (RAC) has just received the report from the government resulting from the [Telecom Notice of Consultation CRTC 2019-57](#) (NOC 2019-57), requesting that Critical Infrastructure Operators such as rail have access to Mobile Network Operator (MNO) and the future Public Safety Broadband Network (PSBN) infrastructures and spectrum. The RAC filed its final submission on July 15, 2020, emphasizing the need for Critical Infrastructure Operators (CIOs), such as rail, have access to broadband spectrum as a means of implementing the future railway applications requiring broadband access. This initiative is important due to the fact that without having access to a critical infrastructure Mobile Network Code (MNC) it will not be possible to deploy a private LTE broadband solution.

In the government's report, it was identified that granting the CEA and RAC's request would have benefits to the public interest since it would lead to more reliable, innovative, and integrated networks for CIOs. The government realizes that the MNCs are a finite resource and has requested a report to explore the best way to allocate MNCs efficiently to CIOs and amend the IMSI Guideline to allow CIOs to acquire MNCs.

Recently the RAC has supported the Canadian Electricity Association (CEA) in their efforts to encourage the government to allow industry access to broadband spectrum. A meeting was held with Innovation, Science and Economic Development (ISED) to address the lack of broadband spectrum available to the industry and to advocate a different method of assigning frequencies rather than by auctioning them off. ISED showed interest in the Shared Radio Access Network (RAN) proposal which would allow Critical Infrastructure operators to share the spectrum with Public Safety Canada.

Spectrum-E Management Application

Spectrum-E is the application used by the RAC to manage the railway spectrum. This application will be updated in April to bring it up to date and add several improvements. Several training sessions have been held with the members over the past year to make them aware of the capabilities of the tool. Once the new version is operational, a training session will be provided to introduce the members to the improvements.

CP has made a significant effort to bring their records up to date with accurate information in the recent months. A total of over 900 updates have been entered since February 2021. The information from CN's yard audit performed last year has all been entered into Spectrum-E resulting in over 1300 new and updated records.

Enhanced Train Control (ETC)/Positive Train Control (PTC)

A sub-committee has been formed from members of the Wireless Communications Committee (WCC) whose railroads will be implementing ETC (CN Rail, CP Rail, Metrolinx, and VIA). The goal of the sub-committee is to determine the radio communications requirements of an ETC system which will allow the railroad industry to formulate a clear request to Transport Canada. The sub-committee will evaluate various technologies and provide a report to the ETC Lead Team. Transport Canada has agreed to work with ISED in obtaining spectrum for the implementation of ETC.

The RAC has been holding meetings with the AAR about the 220 MHz border sharing agreement between the Canadian and American governments. The present rules are preventing deployment of the Canadian PTC primary channels on the US side of the US-Canada border area (consisting of a 75-mile zone on either side of the border) which is impacting the PTC network in the United States.

Metrolinx Dispatch

The RAC was successful in identifying 20 very narrow band frequencies for Metrolinx to use for their new radio dispatch system in Toronto. Metrolinx will be turning up its very narrow band digital (NXDN) radio dispatch system starting in June 21 of this year.

US 900 MHz Re-Banding

The Federal Communications Commission (US government agency responsible for managing spectrum) issued the order for the transition of the American 900 MHz railroad spectrum to a new set of frequencies by September 14, 2025. This presents a risk to Canadian railroads still using the spectrum. US railroads have committed to moving off of the frequencies by that date. The existing coordination agreement between the US and Canada identified the channels as being used by the railroad industry. Coordination of these channels was performed between the RAC and American Association of Railroads (AAR).

This agreement will need to be modified since the AAR will no longer coordinate these channels in the US. There are over 1800 radios in operation in Canada and a number of these radios operate in the border zone and may be impacted by any required changes in the agreement between Canada and the US. There are newly anticipated uses and yet to be determined channel plans for the new 900Mhz frequencies around the US border.

The RAC is participating in the AAR Next Generation Head-End End-of-Train (NGHE) project to ensure that the solution will maintain interoperability with Canadian railroads.

RAC WCC Committee Organization

The Chair of the RAC WCC, Kevin Waldern of CP, has announced his retirement as of July 2021. The Committee wishes to express their appreciation to him for the hard work and commitment that he has shown to the RAC over the years and wishes him the best in his retirement. His replacement will be selected at the next WCC meeting.

Workforce Development

The Railway Association of Canada's (RAC) Human Resources Committee is in the process of creating new industry-approved curriculum for conductors that will be issued to approved colleges across Canada this year. RAC, CN, CP and RAC's consultant have been working on the curriculum throughout 2020 and plan to have the curriculum finished by the Fall.

There are five colleges across Canada offering the conductor curriculum: Red River College in Winnipeg, Confederation College in Thunder Bay, British Columbia Institute of Technology, the Southern Alberta Institute of Technology and Lambton College. There is also the possibility of a new college coming on board in 2021 who will deliver a bilingual conductor program.

RAC completed the design of the Career Awareness campaign. However, due to the rail blockades and COVID-19, this has been deferred.

RAC's training initiative for short line railway members was launched in 2019. The initiative focussed on delivering four modules in English: Securing unattended equipment/Rule 112; car air brakes; freight car inspection; and track inspection. RAC sent out a survey at the end of 2019, and the survey results were very positive, and members would like RAC to continue developing modules. Early in 2021, the RAC released its security awareness module and it has been a hit with our short line members. We will be working on getting the modules translated into French over Q2 and Q3.

TSB Stats March 2021

Monthly rail transportation occurrence statistics

March, 2021

Table 1

Railway occurrences and casualties

	March			Year to date (March)		
	2021	2020	2016-2020 average	2021	2020	2016-2020 average
Accidents	104	93	103	272	253	303
Main-track train collisions	2	1	0	3	1	1
Main-track train derailments - 1-2 cars*	4	7	6	11	14	16
Main-track train derailments - 3-5 cars	0	0	1	0	0	2
Main-track train derailments - 6 or more cars	3	2	1	11	6	6
Crossings	13	8	13	42	32	43
Non-main-track train collisions	9	7	10	20	22	31
Non-main-track train derailments - 1-2 cars*	38	44	46	115	115	130
Non-main-track train derailments - 3-5 cars	3	6	7	5	20	22
Non-main-track train derailments - 6 or more cars	0	3	3	2	7	8
Collisions/Derailments involving track units	7	2	3	11	3	8
Employee/Passenger	1	0	2	3	1	4
Trespassers	6	5	4	15	11	12
Fires/Explosions	13	5	4	19	9	8
Other	5	3	5	15	12	14
Incidents	12	21	29	43	70	92
Main-track train derailments - 1-2 cars* (no damage)	0	0	0	1	0	1
Non-main-track train collisions* (no derailment, no damage)	0	0	0	0	0	0
Non-main-track train derailments - 1-2 cars* (no damage)	1	6	12	6	16	38
Dangerous goods leakage**	0	0	0	0	0	1
Main-track switch in abnormal position	0	0	2	3	1	3
Movement exceeds limits of authority	7	11	11	26	40	37
Uncontrolled movement of rolling stock	2	4	2	2	7	5
Others	2	0	2	5	6	8
Million train-miles (a)	-	-	-	21.26	21.17	20.96
Accidents/Million train-miles	-	-	-	12.79	11.95	14.46
Accidents involving dangerous goods	9	12	13	26	33	43
Main-track train derailments	1	2	1	3	4	4
Crossings	1	1	1	1	1	2
Non-main-track train collisions	3	2	3	7	6	11
Non-main-track train derailments	2	7	7	13	21	24
All others	2	0	1	2	1	2
Accidents with a DG release	0	1	1	0	3	2
Accidents involving passenger trains	3	2	3	7	9	12
Accidents involving an uncontrolled movement of rolling stock	7	2	4	9	6	12
Fatalities	4	3	4	13	11	12
Crossings	1	0	1	2	3	4
Trespassers	3	3	3	10	8	7
All others	0	0	0	1	0	1
Serious Injuries	3	3	4	10	6	14
Crossings	1	1	2	5	2	7
Trespassers	2	2	1	3	3	4
All others	0	0	1	2	1	4

Data extracted 19 April 2021

All 5-year averages have been rounded. The totals sometimes do not coincide to the sum of these averages.

a. Train-miles estimated. (Source: Transport Canada)

New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.

* Under new reporting requirements all derailments are reportable. The TSB has reviewed derailments and collisions back to January 1, 2014 and recategorized occurrences with minimal consequences as reportable incidents including: derailments involving 1 to 2 cars, with no equipment or track damage, no injuries, no fires, and no release of dangerous goods; Non-main-track collisions, with no equipment or track damage, no injuries, no fires, no release of dangerous goods, and did not foul the main track.

** TSB Regulations have been harmonized with Section 8.4 of the Transportation of Dangerous Goods Regulations, under which TSB DG leakage incidents are only reportable if they result in death or serious injury, evacuation, or the closure of a DG loading facility, a road, a main railway line, or a main waterway.

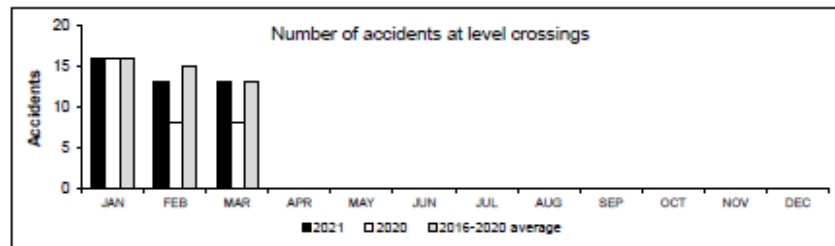
Monthly rail transportation occurrence statistics

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Table 2

Railway crossing and trespasser accidents by province

	Crossings with type recorded (year to date 2021)				All crossings (year to date)		Trespasser (year to date)	
	Public automated	Public passive	Private	Farm	2021	2020	2021	2020
Newfoundland								
Accidents	0	0	0	0	0	0	0	0
Fatalities	0	0	0	0	0	0	0	0
Serious Injuries	0	0	0	0	0	0	0	0
Nova Scotia								
Accidents	0	0	0	0	0	1	0	0
Fatalities	0	0	0	0	0	0	0	0
Serious Injuries	0	0	0	0	0	0	0	0
New Brunswick								
Accidents	0	1	0	0	1	1	0	0
Fatalities	0	0	0	0	0	0	0	0
Serious Injuries	0	0	0	0	0	0	0	0
Quebec								
Accidents	4	1	1	0	6	11	1	1
Fatalities	1	0	0	0	1	2	0	1
Serious Injuries	1	0	0	0	1	2	0	0
Ontario								
Accidents	4	2	0	0	6	3	11	2
Fatalities	1	0	0	0	1	0	9	2
Serious Injuries	0	1	0	0	1	0	1	0
Manitoba								
Accidents	1	2	0	0	3	2	0	1
Fatalities	0	0	0	0	0	0	0	1
Serious Injuries	0	0	0	0	0	0	0	0
Saskatchewan								
Accidents	3	2	0	0	5	1	0	0
Fatalities	0	0	0	0	0	0	0	0
Serious Injuries	0	0	0	0	0	0	0	0
Alberta								
Accidents	4	8	1	0	13	10	1	3
Fatalities	0	0	0	0	0	1	0	3
Serious Injuries	1	1	0	0	2	0	0	0
British Columbia								
Accidents	3	2	2	0	7	3	2	4
Fatalities	0	0	0	0	0	0	1	1
Serious Injuries	1	0	0	0	1	0	2	3
Northwest Territories								
Accidents	0	1	0	0	1	0	0	0
Fatalities	0	0	0	0	0	0	0	0
Serious Injuries	0	0	0	0	0	0	0	0
Canada								
Accidents	19	19	4	0	42	32	15	11
Fatalities	2	0	0	0	2	3	10	8
Serious Injuries	3	2	0	0	5	2	3	3



Data extracted 19 April 2021

New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.

Transportation Safety Board of Canada

Page 2

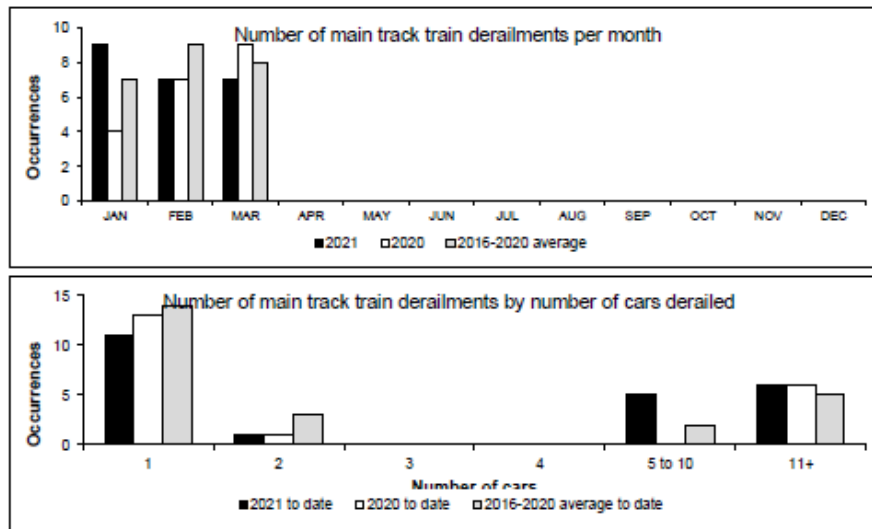
Monthly rail transportation occurrence statistics

March, 2021

Table 3

Main track derailment accidents and incidents by province

	March			Year to date (March)		
	2021	2020	2016-2020 average	2021	2020	2016-2020 average
Canada	7	9	8	23	20	24
Newfoundland	2	0	0	2	1	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	1	0	0
Quebec	1	1	1	2	4	3
Ontario	1	3	2	2	6	5
Manitoba	0	1	0	2	1	1
Saskatchewan	0	0	1	3	1	3
Alberta	0	2	2	3	3	5
British Columbia	3	2	1	8	4	6
Northwest Territories	0	0	0	0	0	0
Canada - with dangerous goods involved	1	2	1	3	4	4
Newfoundland	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	1	0	0
Quebec	0	0	0	0	0	0
Ontario	1	1	0	2	2	2
Manitoba	0	0	0	0	0	1
Saskatchewan	0	0	0	0	1	0
Alberta	0	0	0	0	0	1
British Columbia	0	1	0	0	1	1
Northwest Territories	0	0	0	0	0	0



Data extracted 19 April 2021

All 5-year averages have been rounded. The totals sometimes do not coincide to the sum of these averages.

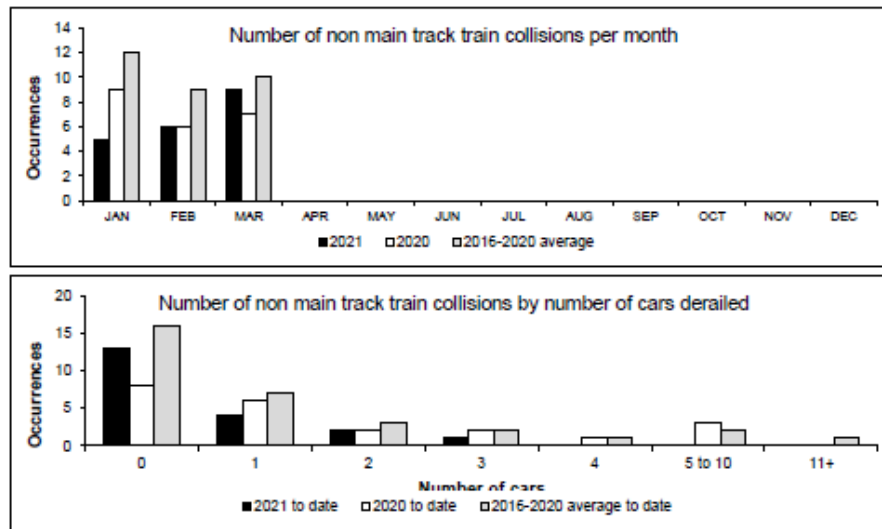
Monthly rail transportation occurrence statistics

March, 2021

Table 4

Non-main track collision accidents and incidents by province

	March			Year to date (March)		
	2021	2020	2016-2020 average	2021	2020	2016-2020 average
Canada	9	7	10	20	22	31
Newfoundland	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	1	0	0	1	1	2
Ontario	1	3	3	1	7	8
Manitoba	1	1	1	2	4	4
Saskatchewan	1	1	2	3	2	4
Alberta	1	2	2	3	4	7
British Columbia	4	0	2	10	4	6
Northwest Territories	0	0	0	0	0	0
Canada - with dangerous goods involved	3	2	3	7	6	11
Newfoundland	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	0	0
Quebec	0	0	0	0	0	0
Ontario	1	0	1	1	2	3
Manitoba	0	1	1	0	1	1
Saskatchewan	0	0	0	0	0	1
Alberta	0	1	1	1	1	4
British Columbia	2	0	1	5	2	2
Northwest Territories	0	0	0	0	0	0



Data extracted 19 April 2021

All 5-year averages have been rounded. The totals sometimes do not coincide to the sum of these averages.

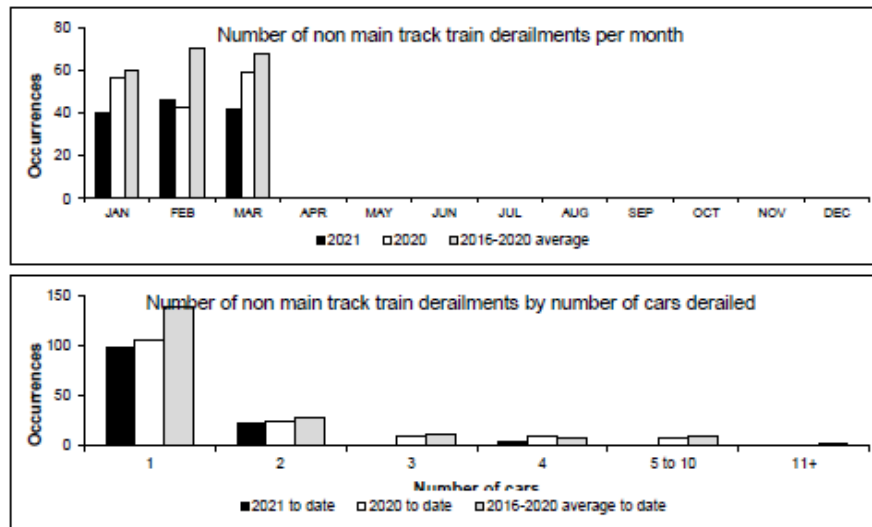
Monthly rail transportation occurrence statistics

March, 2021

Table 5

Non-main track derailment accidents and incidents by province

	March			Year to date (March)		
	2021	2020	2016-2020 average	2021	2020	2016-2020 average
Canada	42	59	68	128	158	198
Newfoundland	1	0	1	3	4	4
Nova Scotia	0	1	0	2	2	1
New Brunswick	1	1	1	2	2	3
Quebec	10	14	17	21	27	43
Ontario	11	12	11	27	31	33
Manitoba	4	5	8	14	10	21
Saskatchewan	5	5	7	14	13	19
Alberta	3	10	11	18	35	38
British Columbia	7	11	11	26	34	35
Northwest Territories	0	0	0	1	0	0
Canada - with dangerous goods involved	2	7	8	14	21	28
Newfoundland	0	0	0	0	0	0
Nova Scotia	0	0	0	0	0	0
New Brunswick	0	0	0	0	1	1
Quebec	0	0	1	1	1	5
Ontario	1	1	1	1	4	5
Manitoba	0	1	1	2	3	4
Saskatchewan	0	0	0	1	1	2
Alberta	1	2	2	6	5	7
British Columbia	0	3	2	2	6	5
Northwest Territories	0	0	0	1	0	0



Data extracted 19 April 2021
All 5-year averages have been rounded up.
Transportation Safety

ANNEX A – PRESENTATIONS

**People.
Goods.
Canada
moves
by rail.**

Enhanced Train Control (ETC) Update to SOMC

May 11, 2021



Railway Association
of Canada

The *Review* of Railway Safety Act (2017-18)

Recommendation 5 – It is recommended that Transport Canada, in partnership with industry, develop a Canadian approach to enhanced train control (ETC) technologies and establish a technology road map for implementing ETC in a staged and cost-effective manner.

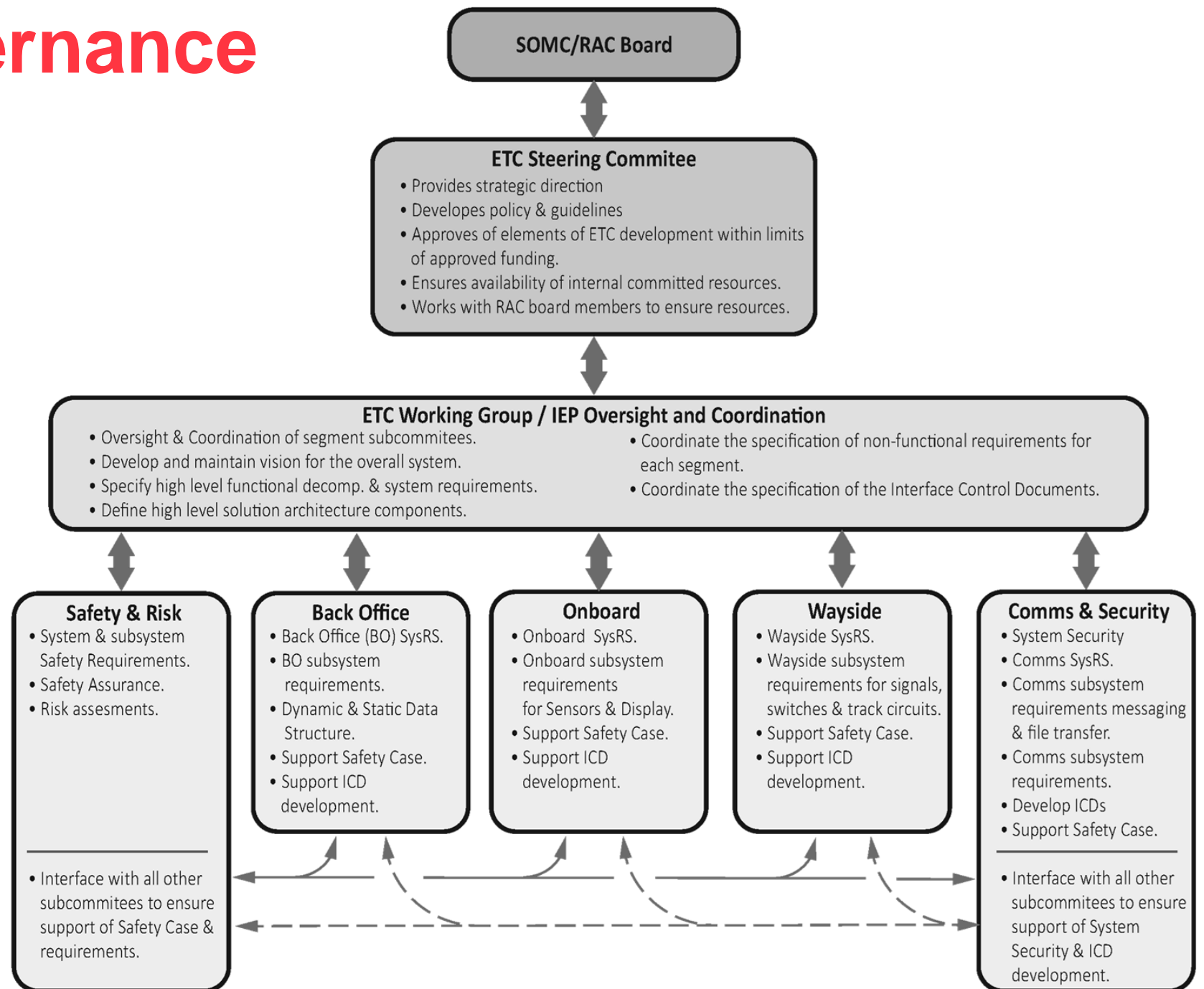
- There were acknowledgements of the lessons learned from the US PTC implementation, specifically that: ***there may be multiple solutions***, this is a ***staged process*** as opposed to a readily implemented solution, with ***successive levels of implementation***.

The *Review* of Railway Safety Act (2017-18)

Transport Canada has officially responded to the *Review* with the stated 'next steps':

- Take a ***corridor approach by emphasizing priority on the highest-risk corridors***, such as the Quebec City/Windsor corridor and other locations, where the risk is higher due to mixed passenger and freight service and train operation in areas of higher population density
- ***Define interoperability standards*** that serve all operators on the rail network
- Facilitate the assessment of telecommunications options necessary for successful ETC implementation

Project Governance & Structure



Project Governance & Structure

- Recognized that the program required a structure of sub-committees of experts drawn from participating railways to develop the detailed system requirements, standards and Interface Control Documents (ICDs) for different segments of the ETC systems.
 - Terms of Reference, a Lead and alternate for each committee has been established;
 - Initial kick off meetings held and committees meeting regularly; and,
 - Provide monthly updates to the ETC Lead Team
- Senior Project Manager onboarded in order to assist in the development of the revised MYP and ensure that agreed timelines are maintained.

2021 ETC Project Deliverables

ETC System Standards

- Continued development of ETC technology standards and communication protocols which must enable interoperability.
 - Utilizing IEEE processes.
 - Operational Concepts being revised to include other agreed to functionality.
 - System Level System Requirements to be completed in 2021.
 - Commence development of subsystem requirements

ETC Safety Case

- Development of Safety Case with tasks performed in parallel with system development to verify desired outcome.
- Forms the workplan for the Safety & Risk Committee and will be guided by industry leading Rail Safety Consultants

2021 ETC Project Deliverables

Revise Multi-year Plan (MYP)

- Validate assumptions contained within the approved MYP
 - Processes in place to accurately capture industry FTE committed time.
 - Committees currently identifying existing standards and Interface Control Documents which may be able to repurposed for ETC and the timeline for review.
- Start development of revised MYP in Q2, assemble and develop consensus for refined plan for end of Q3, early Q4.

Communications solution

- ETC Communications & Security committee focused on the requirements.
- RAC Wireless Communications Subcommittee (WCS) exploring communications options to determine solutions which will support ETC implementation.

2021 ETC Project Deliverables

Common Risk Threshold

- Objective to develop an industry risk threshold which would require the implementation of ETC systems.
- Conducted a review of the Risk Ranking methodology developed 2019-2020 to evaluate if that risk metric would be suitable for use as a threshold. It was found insufficient for this purpose.
- CaRRL to be engaged to develop a quantitative risk assessment methodology, this work will be included in the revised MYP.

Transport Canada

- The ETC Steering Committee continues to meet with Transport Canada, and has committed to provide quarterly updates.
- The Steering Committee:
 - Will continue to provide quarterly updates and respond to any additional questions posed;
 - Has not provided a revised timeline for the completion of ETC standards; and,
 - Will continue to push funding and a communications solution.
- Transport Canada has:
 - Recognized the continued progress and commitment of the industry;
 - Continued to request documents; and,
 - Stated expectations that deployment of common ETC functions for common risk levels.



Update on Rail Safety

RAC SOMC May 11, 2021



Transport
Canada

Transports
Canada

Canada

Purpose

- To update RAC SOMC on:
 1. TC's COVID-19 Measures;
 2. Rail Safety Regulations
 3. Rules; and
 4. TSB Recommendations

COVID-19 Measures

- Passenger Health Check Order
 - Renewed every 60 days now
 - Updating guidance material
- Temporary Exemptions:
 - Re-issued exemption for recertification under the CROR, Track safety Rules and Employee Qualification Regulations on a 30 day cycle.
- Continue to monitor progress on the third wave.

Regulations

- Grade Crossing Regulations
 - Working towards publication of draft amendments by June 2021.
- Railway Employees Standards Qualification Regulations
 - Pre-consultation during June.
- Fatigue Risk Management System
 - Reviewing the approach in light of the requirements of the new Duty/Rest Rules

Rules

- Duty/Rest Rules
 - Interpretation letter to follow
- Track Safety Rules (MO 20-07)
 - Work is currently ongoing to complete the first set of revisions.
- Rollaway Protection
 - Performance-based approach to revising the Locomotive Inspection and Safety Rules
- Revisions to CROR
 - Switching (MO 20-09)
 - Rollaway protection
 - Attended vs. unattended

TSB Recommendations

- Transport Canada has closed three recommendations related to derailments and in-cab voice and video recording.
- We continue to work on addressing TSB Recommendation R20-01
 - Workshop on Uncontrolled Movements



Mise à jour sur la Sécurité ferroviaire

CGSO de l'ACFC – 11 mai 2021



Transport
Canada

Transports
Canada

Canada

Objet

- Informer le CGSO de l'ACFC sur :
 1. les mesures de TC contre la COVID-19;
 2. les règlements sur la sécurité ferroviaire;
 3. les règles;
 4. les recommandations du BST.

Mesures contre la COVID-19

- Arrêté sur le contrôle de la santé des passagers
 - Renouvelé tous les 60 jours maintenant
 - Document d'orientation mis à jour
- Exemptions temporaires
 - L'exemption est émise de nouveau aux fins de la recertification en vertu du REE, du Règlement concernant la sécurité de la voie et du règlement sur les compétences des employés sur un cycle de 30 jours.
- On continue de surveiller la progression de la troisième vague.

Règlement

- Règlement sur les passages à niveau
 - Travail sur la publication d'une ébauche des modifications d'ici juin 2021.
- Règlement sur les normes de compétence des employés ferroviaires
 - Travail avant consultation en juin.
- Système de gestion des risques liés à la fatigue
 - Examen de l'approche à la lumière des exigences des nouvelles Règles relatives au temps de travail et de repos

Règles

- Règles relatives au temps de travail et de repos
 - Une lettre d'interprétation suivra
- Règlement concernant la sécurité de la voie (MO 20-07)
 - Travail présentement en cours pour achever le premier ensemble de révisions.
- Protection contre les dérives
 - Approche axée sur le rendement pour réviser le Règlement relatif à l'inspection et à la sécurité des locomotives de chemin de fer
- Révisions au REE
 - Manœuvre (MO 20-09)
 - Protection contre les dérives
 - Surveillé ou non surveillé

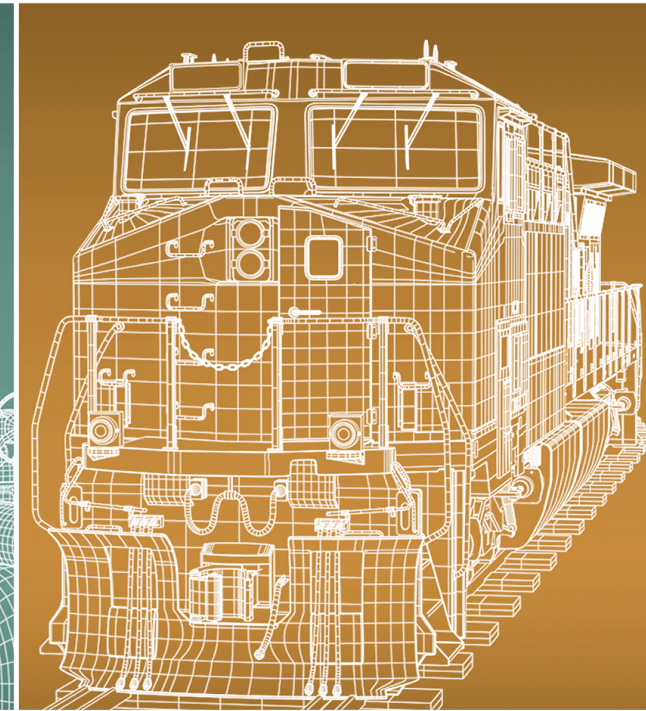
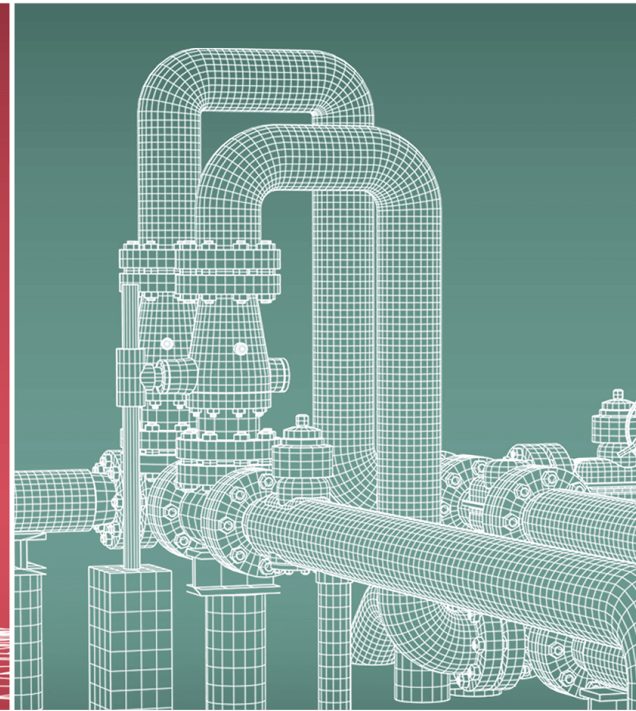
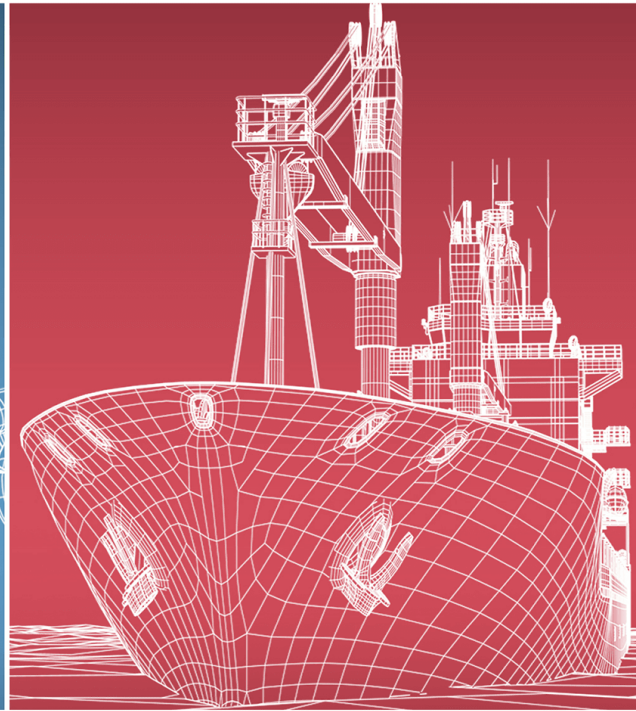
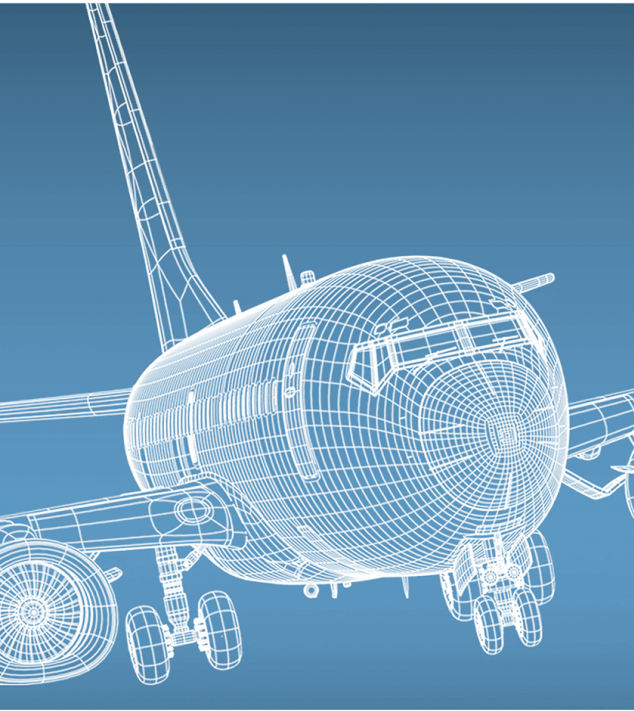
Recommandations du BST

- Transports Canada a clôturé trois recommandations associées aux déraillements et à l'enregistrement de la voix et de la vidéo dans la cabine.
- Nous continuons à travailler pour répondre aux recommandations R20-01 du BST
 - Atelier sur les mouvements non contrôlés

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Presentation to RAC – Safety & Operations Management Committee

May 11th 2021

Canada

Overview

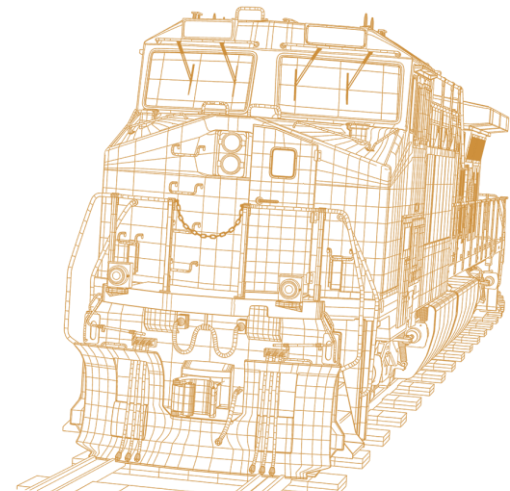


- Rail Accident Statistics
- Recommendation Re-Assessments
- Locomotive Voice & Video Recorders
- Data Working Group

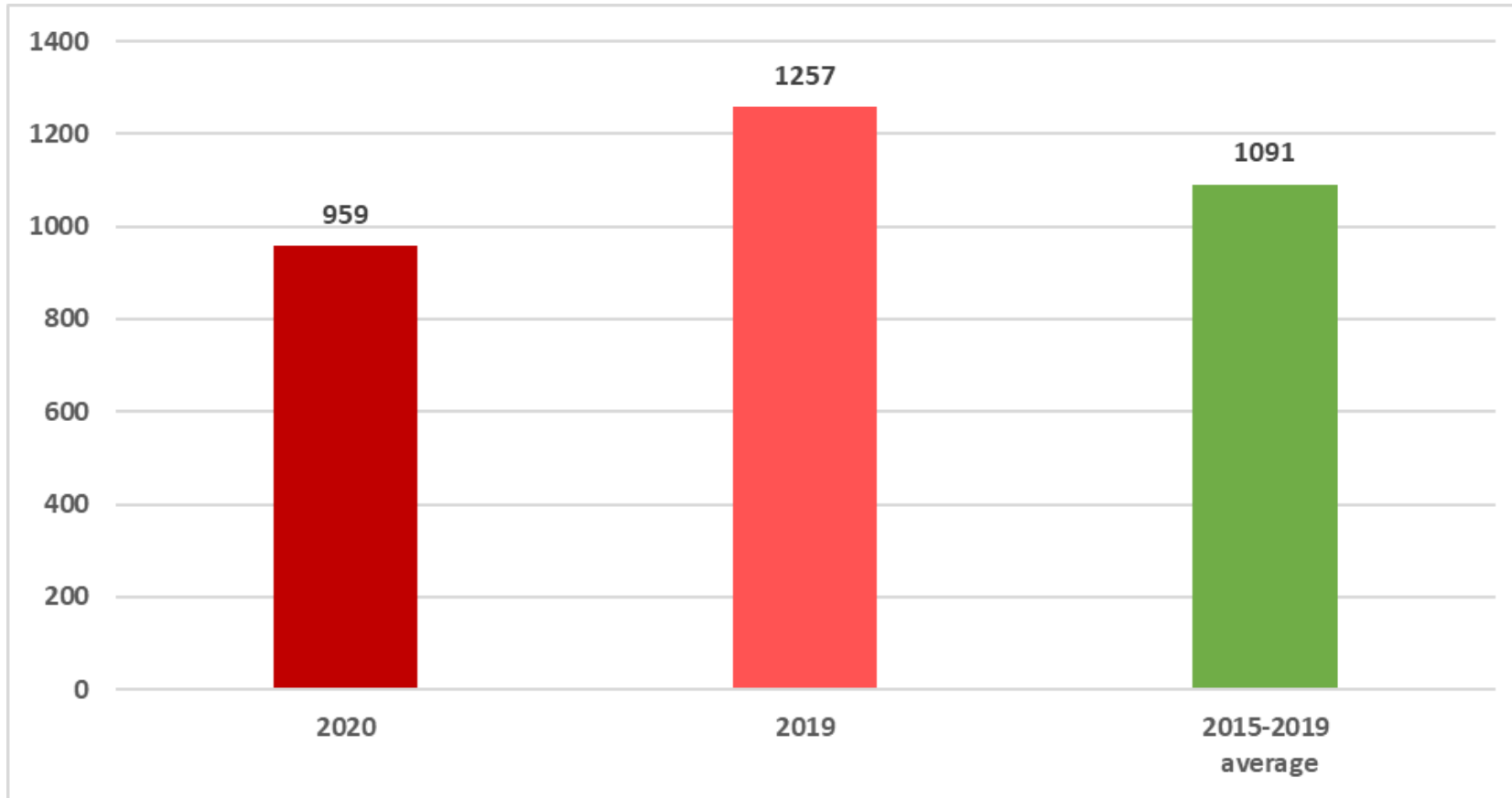


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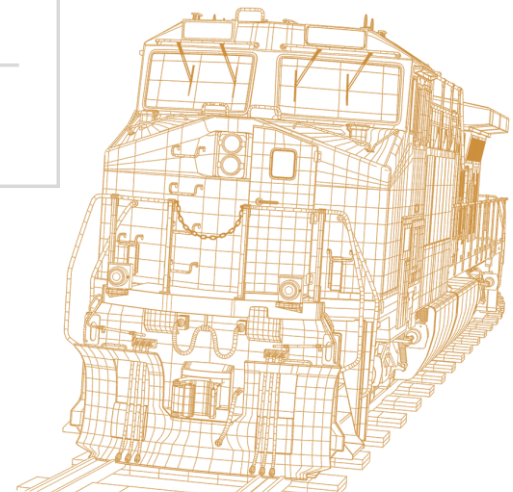
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Total Accidents in 2020



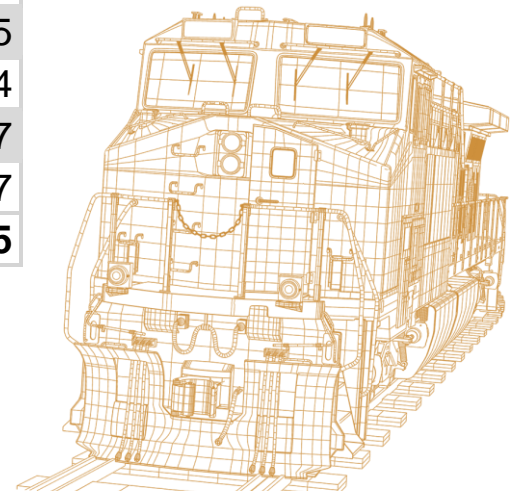
* The TSB will release its complete and final statistical reports for 2020 in the spring; these will include accident rates and a more thorough analysis of the updated data (which may vary slightly from this preliminary data).



Accidents by Type (by the numbers)



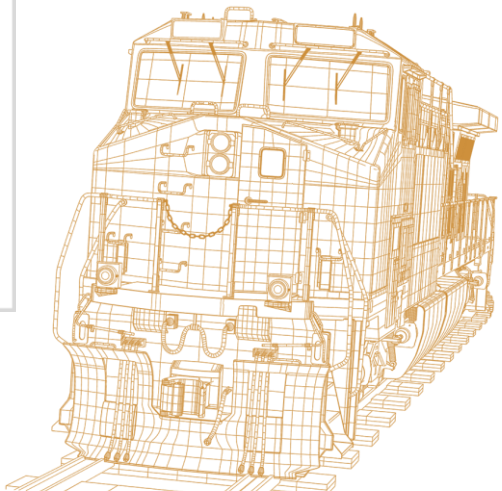
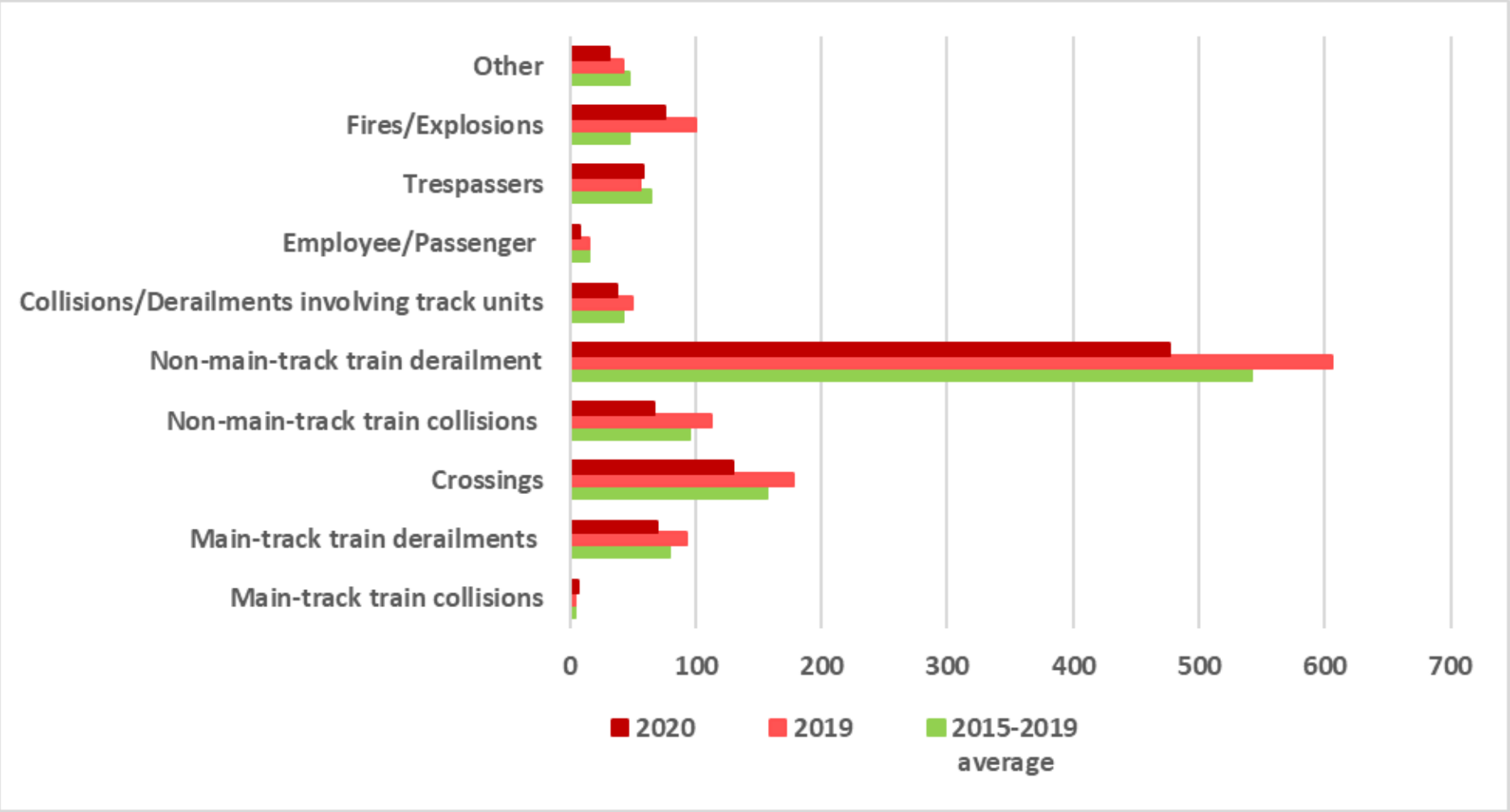
	2020	2019	2015-2019 average
Accidents	959	1257	1091
Main-track train collisions	7	4	4
Main-track train derailments - 1-2 cars	39	54	43
Main-track train derailments - 3-5 cars	3	6	7
Main-track train derailments - 6 or more cars	27	33	29
Crossings	129	178	157
Non-main-track train collisions	67	112	95
Non-main-track train derailments - 1-2 cars	390	492	430
Non-main-track train derailments - 3-5 cars	66	87	84
Non-main-track train derailments - 6 or more cars	21	27	28
Collisions/Derailments involving track units	37	50	42
Employee/Passenger	8	15	15
Trespassers	58	56	64
Fires/Explosions	76	100	47
Other	31	42	47
Accidents/million train miles	11.52	14.14	12.85



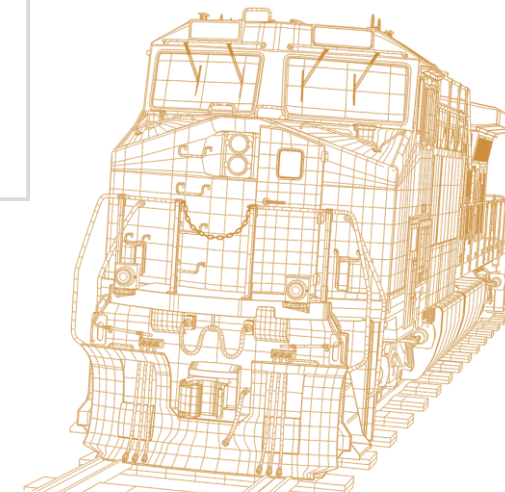
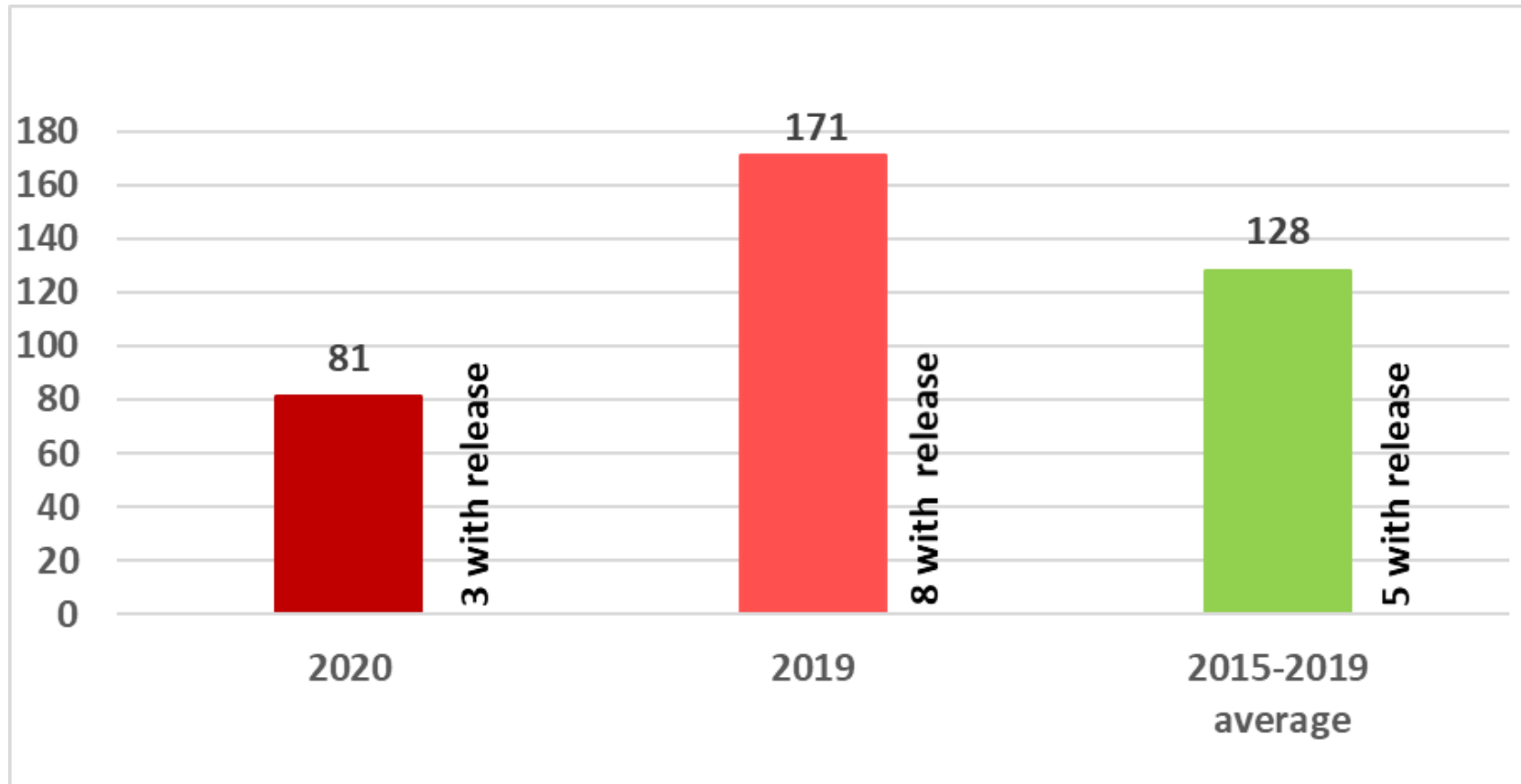
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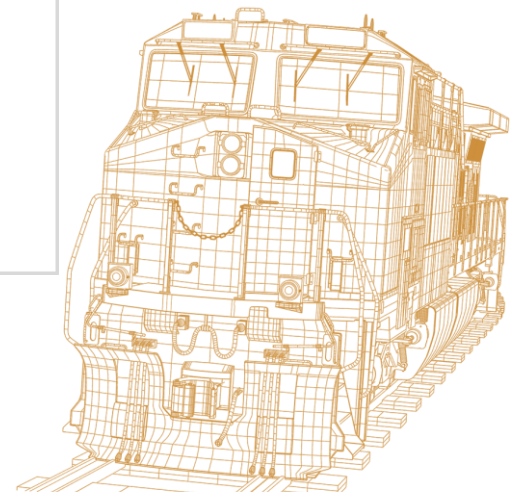
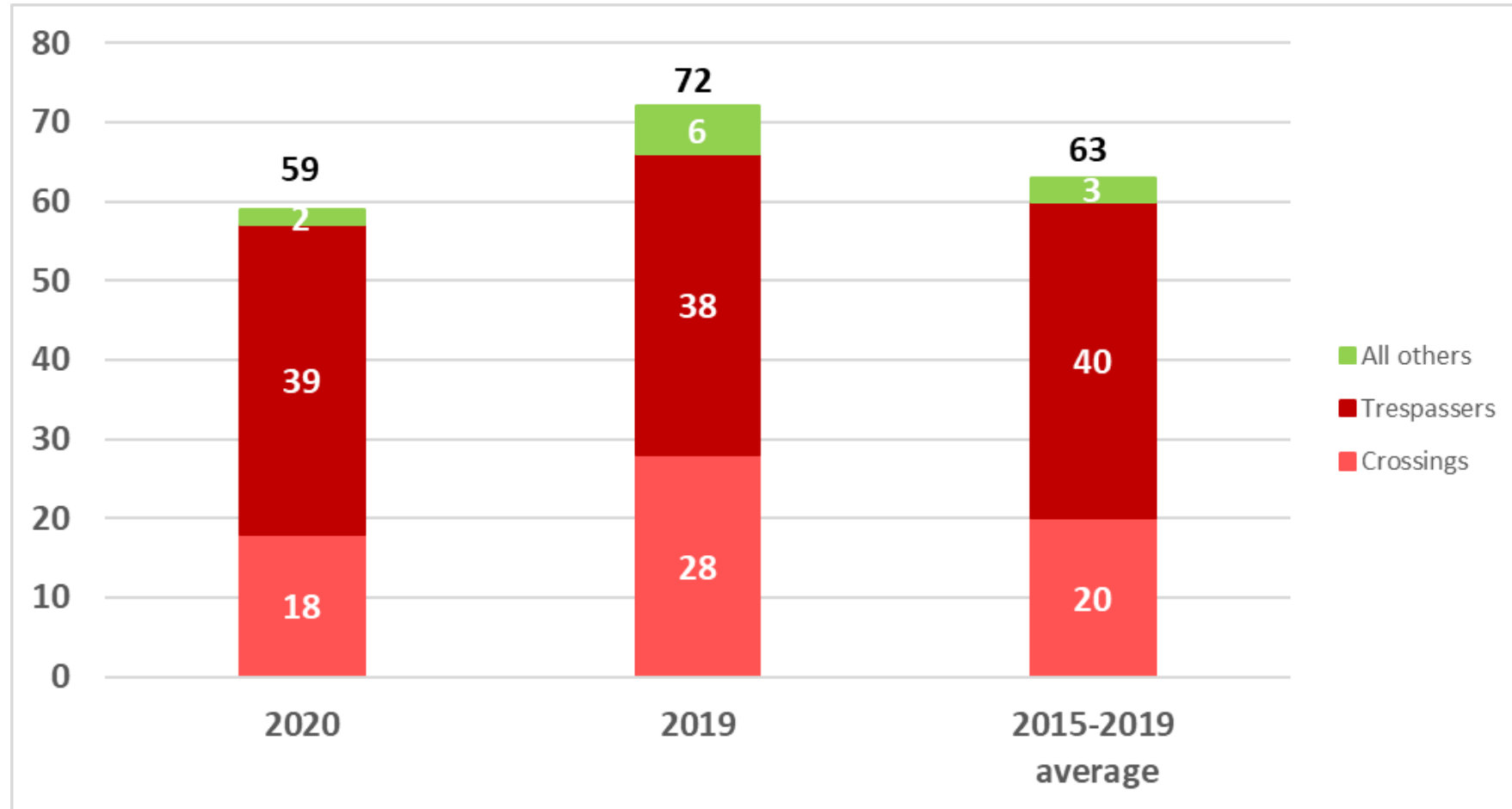
Accidents by Type (Chart)



Accidents involving Dangerous Goods



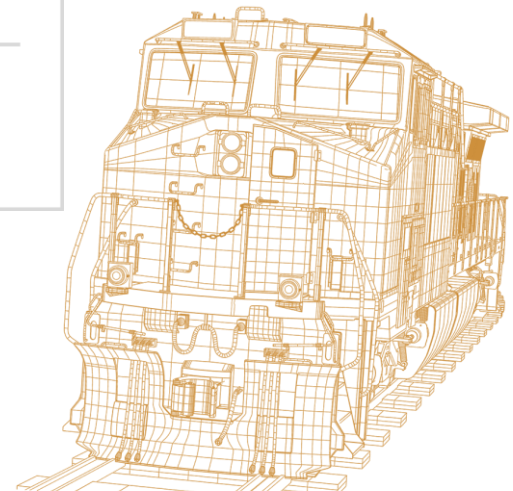
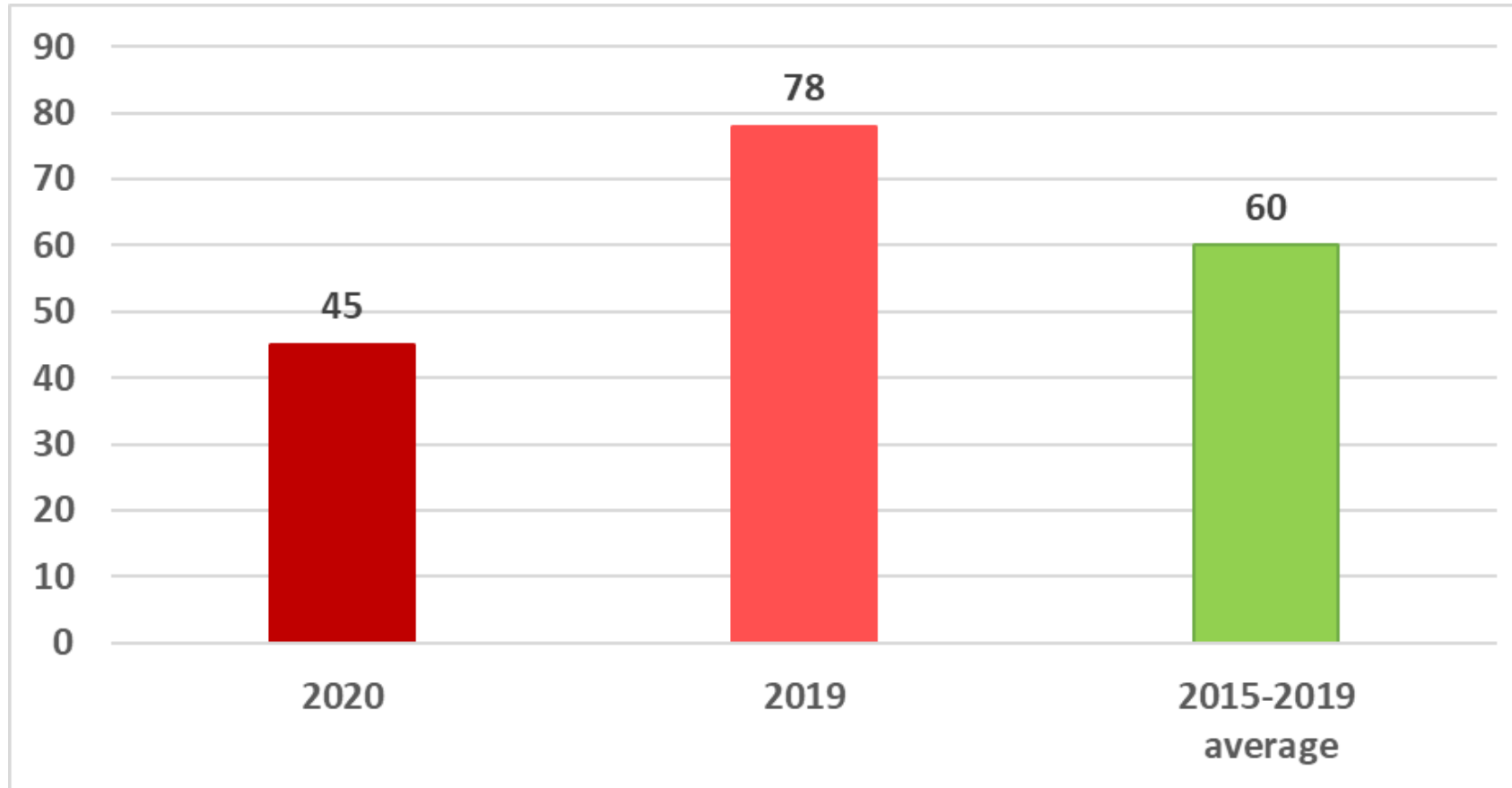
Fatalities for 2020



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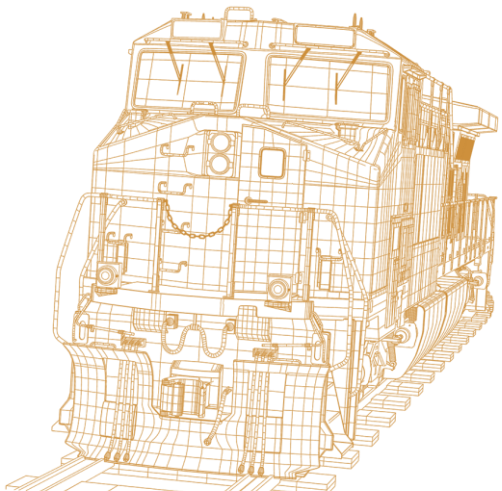
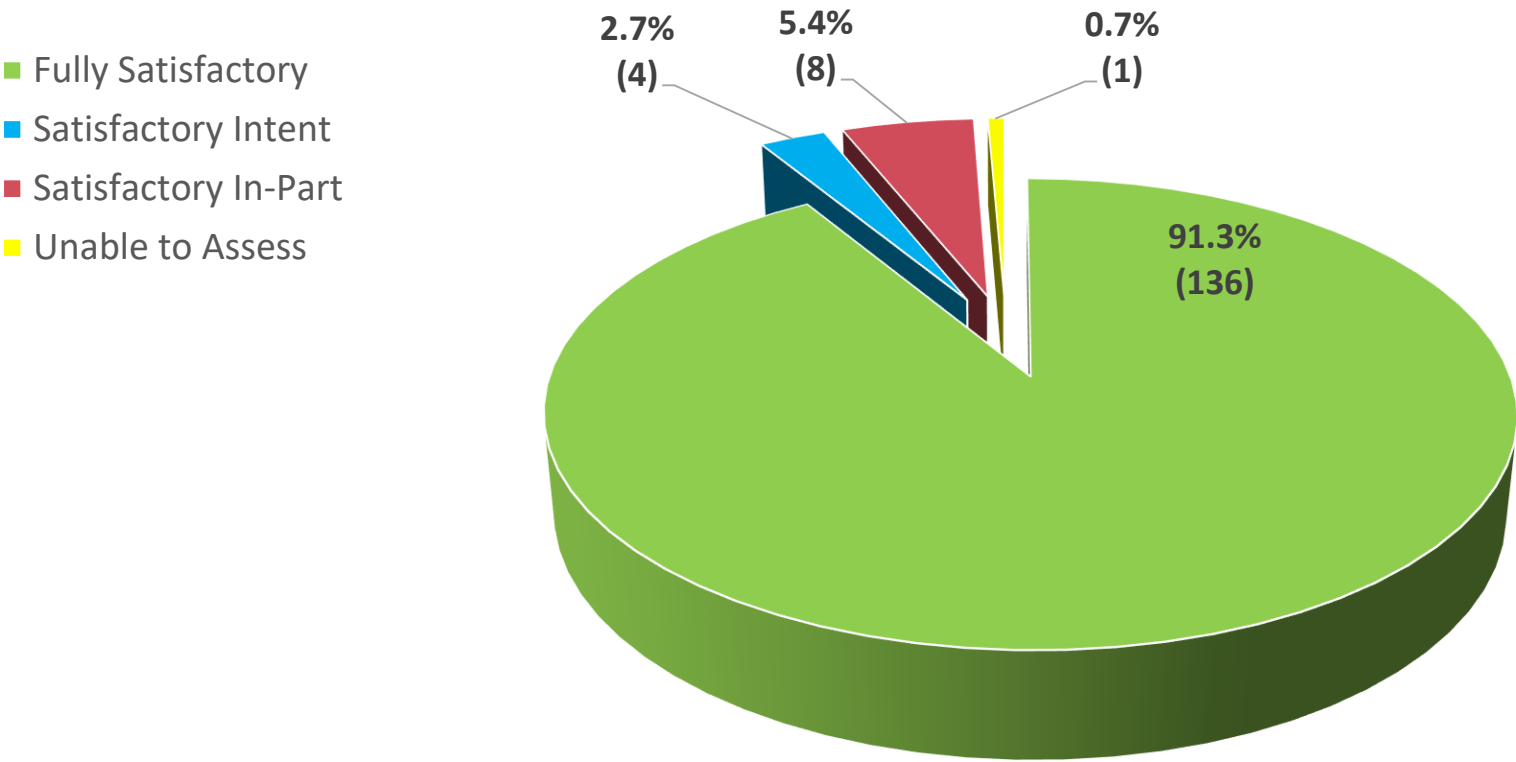
Accidents and Incidents – Uncontrolled movements for 2020



Status of Rail Safety Recommendations






Board Assessments of Responses to Recommendations
from 29 March 1990 to 31 March 2021



Outstanding Rail Recommendations



TSB Recommendation No.	Safety Issue Identified	Latest Board Reassessment
R13-01	Physical fail-safe train controls	Satisfactory in Part 
R14-01	Tank Car Standards	Satisfactory Intent
R14-04	Train Securement	Satisfactory in Part 
R14-05	Effectiveness of Railways' SMS	Satisfactory Intent
R18-02	Railway Employee Qualifications	Satisfactory Intent
R20-01	Uncontrolled Movements	Satisfactory in Part 



TSB Watchlist: Key Safety Issues



- Risk of collisions from runway incursions
- Runway overruns
- Commercial fishing safety
- Following railway signal indications
- Unplanned/uncontrolled movement of rail equipment
- Fatigue management
- Regulatory surveillance
- Safety management

WATCHLIST
2020

KEY SAFETY ISSUES
IN CANADA'S TRANSPORTATION SYSTEM



Following Railway Signal Indications (R13-01, R00-04)



Watchlist issue since 2012

- Since 1990, the TSB has investigated 79 occurrences that could have been prevented using a physical fail safe defence such as enhanced train control (ETC). These occurrences resulted in:
 - 52 derailments (520 derailed rolling stock)
 - 40 train collisions (of which 34 resulted in a derailment)
 - 8 fatalities
 - 316 injuries to employees and passengers
- The TSB has made two recommendations on following railway signal indications, first in 2000 and again in 2013. Although TC and the railway industry are studying the issue, **the work has not sufficiently advanced to indicate if, or when, additional physical safety defences will be implemented.**
- This issue **will remain on the Watchlist until TC requires that railways implement additional physical safety defences to ensure that signal indications governing operating speed and operating limits are consistently recognized and followed.**



Unplanned/Uncontrolled Movement of Rail Equipment (R14-04, R20-01)



- Uncontrolled movements are low-probability events, but when they occur, they can have catastrophic consequences—particularly if they involve dangerous goods.
- The TSB categorizes unplanned/uncontrolled movements into **three distinct types**:
 - When there is insufficient securement of rolling stock
 - When switching occurs without the use of air brakes
 - When crew member loses control of a train
- Despite significant safety action taken by TC and the railway industry since the Lac-Mégantic accident to reduce the number of unplanned/uncontrolled movements of rail equipment, **the number of occurrences has continued to trend upwards, posing a significant risk to the rail transportation system.**
- In fact, **in 2019, there were 78 uncontrolled movements, the highest annual number in the past 10 years**
Over the 2011 to 2020 period, there has been an annual average of 60 occurrences involving unplanned/uncontrolled movements of rail equipment per year, and 35% of these involved switching without air. These uncontrolled movements continue to pose a significant risk to the rail transportation system.



Locomotive Video and Voice Recorder (LVVR) Regulations



- LVVR Regulations introduced pursuant to changes to the *Railway Safety Act*, were approved by Order-in-Council on 23 Aug 2020 and published in the *Canada Gazette*, Part II on 2 Sep 2020
- LVVR Regulations will come into force on 2 Sep 2022
- Under authority of the *CTA/ISB Act*, Section 28(3), a TSB investigator shall obtain on-board recordings that relate to a transportation occurrence if required for the purposes of conducting an investigation
- More details available on TSB website, Policy on Handling of On-board Recorders - <https://www.tsb.gc.ca/eng/lois-acts/recorders-enregistreurs.html>
- Rail-specific procedures are under development





Background

- May 2019 - TSB gave a presentation to RAC describing some rail data issues. For example:
 - Differences in definitions of main track & non-main track
 - Need to improve how we measure safety performance
 - Uncontrolled movements data
- It was agreed to create a small working group (TSB, TC, RAC and railways) to resolve these data issues and improve statistical reporting.
- First meeting held 26 September 2019
 - Data issues and Terms of Reference were discussed





Current Status & Expectations

- From September 2019 Meeting:
 - Brief discussion on main track definitions
 - Discussions centered on mandate and need to have ToRs
- Several attempts made to schedule subsequent meetings without success
- ToRs circulated and awaiting industry review
- RAC offered to schedule next WG meeting with industry and TC in October 2020
- Following last October SOMC meeting, it was indicated that there would be re-engagement in the first half of 2021 – we'd like to propose to work with RAC to organize a Data Working Group meeting in June



RAIL & THE COVID-19 RECOVERY

An Oliver Wyman Webinar

May 11, 2021

INTRODUCTIONS AND AGENDA

Oliver Wyman Team



**Patrick
Lortie**

Partner and Practice Lead,
Transportation & Services



**Lili
Meyer**

Engagement Manager,
Transportation & Services

	Agenda item	Duration
01	Passenger rail outlook	10 minutes
02	Freight rail outlook	10 minutes

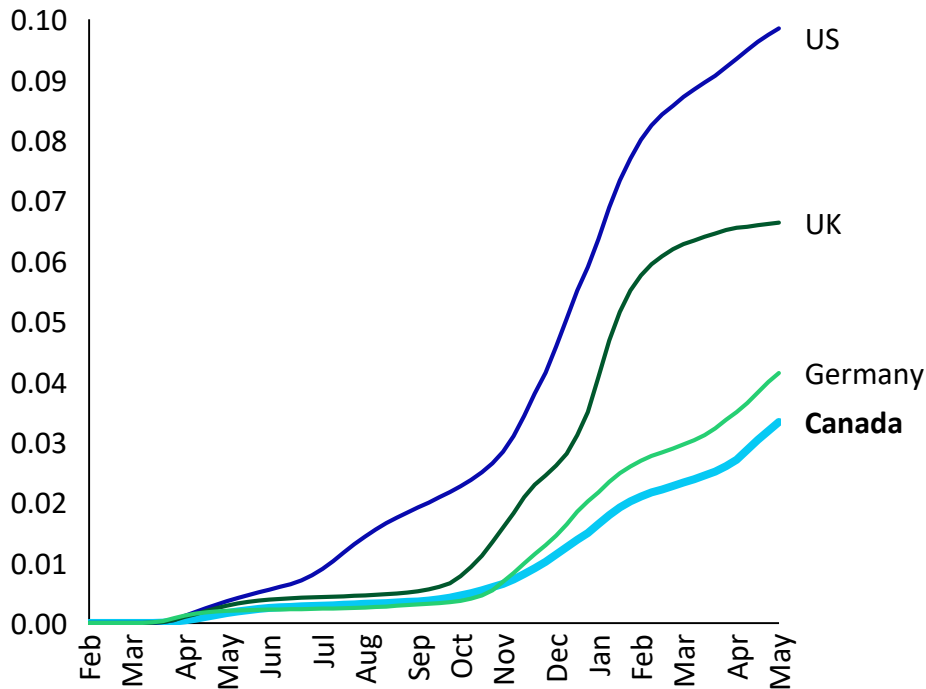
01

PASSENGER RAIL OUTLOOK

CANADA HAS HAD SIGNIFICANTLY FEWER CONFIRMED CASES OF COVID-19, COMPARED TO SIMILAR ECONOMIES

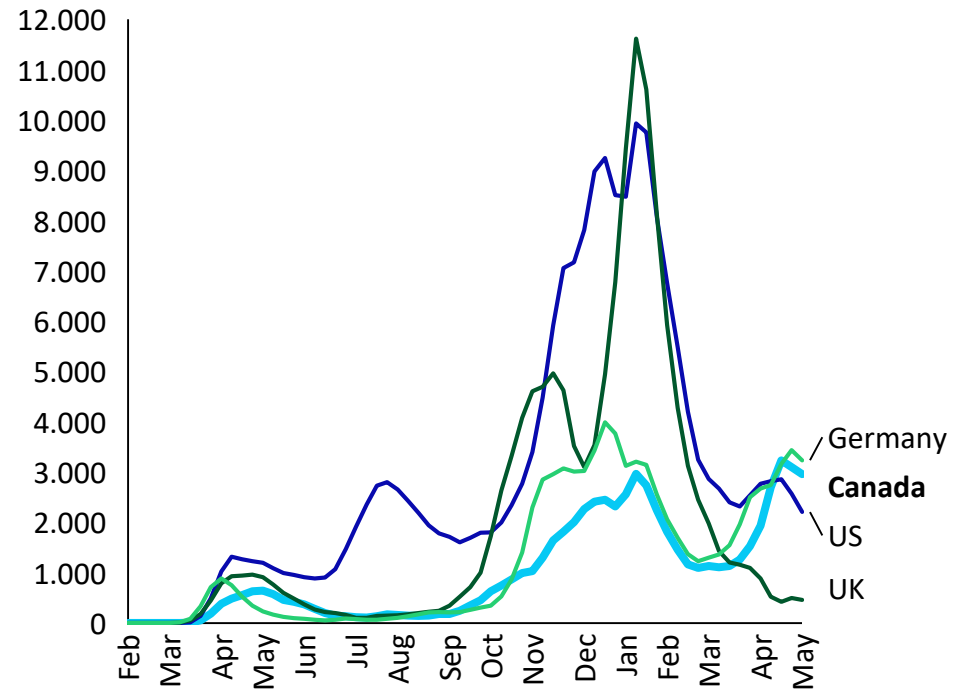
Cumulative detected cases as % of population

February 2020 – May 2021, as of May 5th, 2021



Active cases¹ per million

February 2020 – May 2021, as of May 5th, 2021

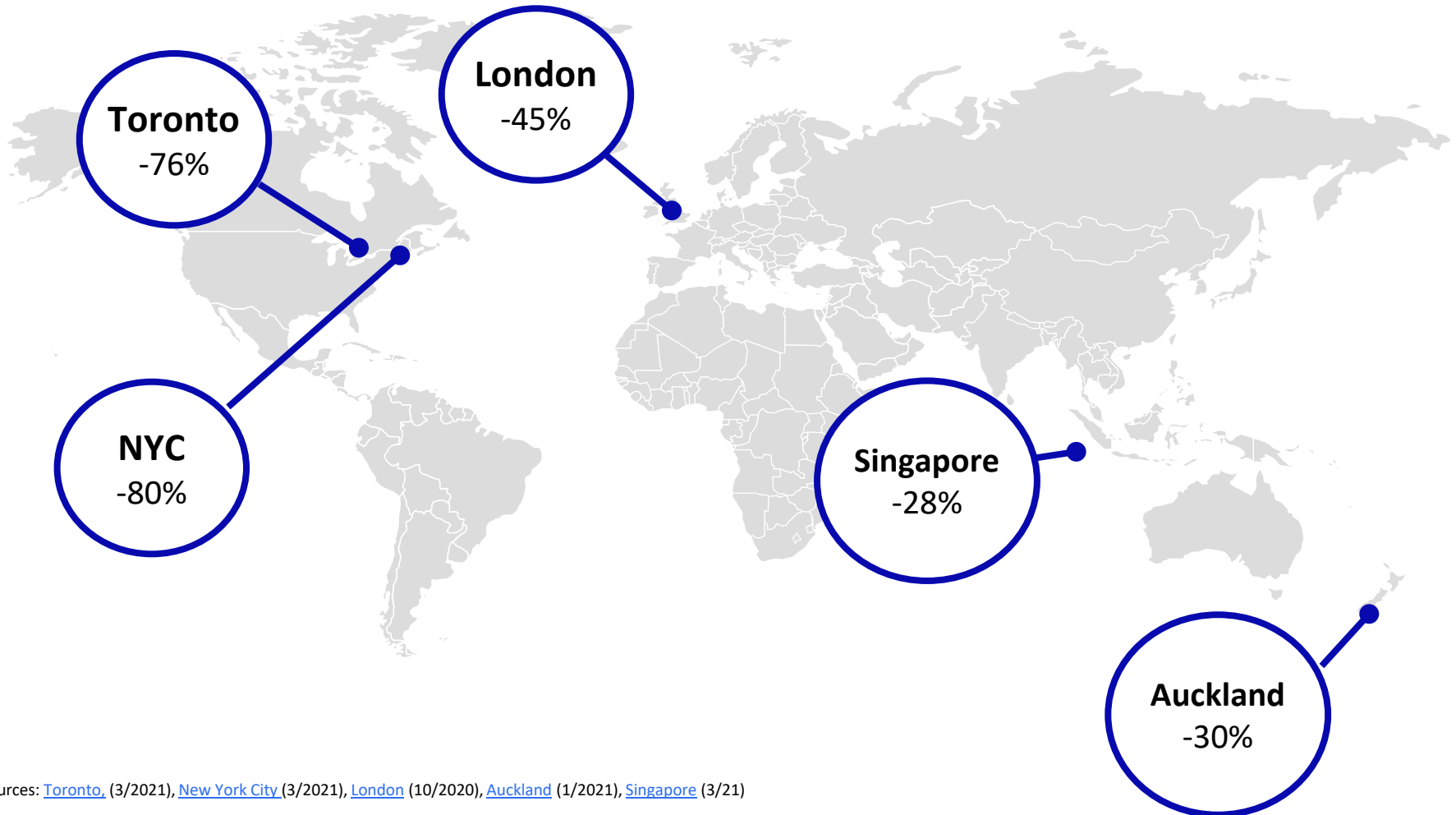


Oliver Wyman developed the Pandemic Navigator platform in February 2020 to both track and project COVID-19 cases globally; data can be viewed at the Provincial-level as well

1. Active cases are defined as the new cases detected in the last 14 days
Source: Oliver Wyman Pandemic Navigator data

HOWEVER OVERALL, TRANSIT VOLUMES REMAIN DEPRESSED GLOBALLY, EVEN IN AREAS THAT HAVE RECOVERED FROM COVID

Percent decline from 2019 transit system ridership

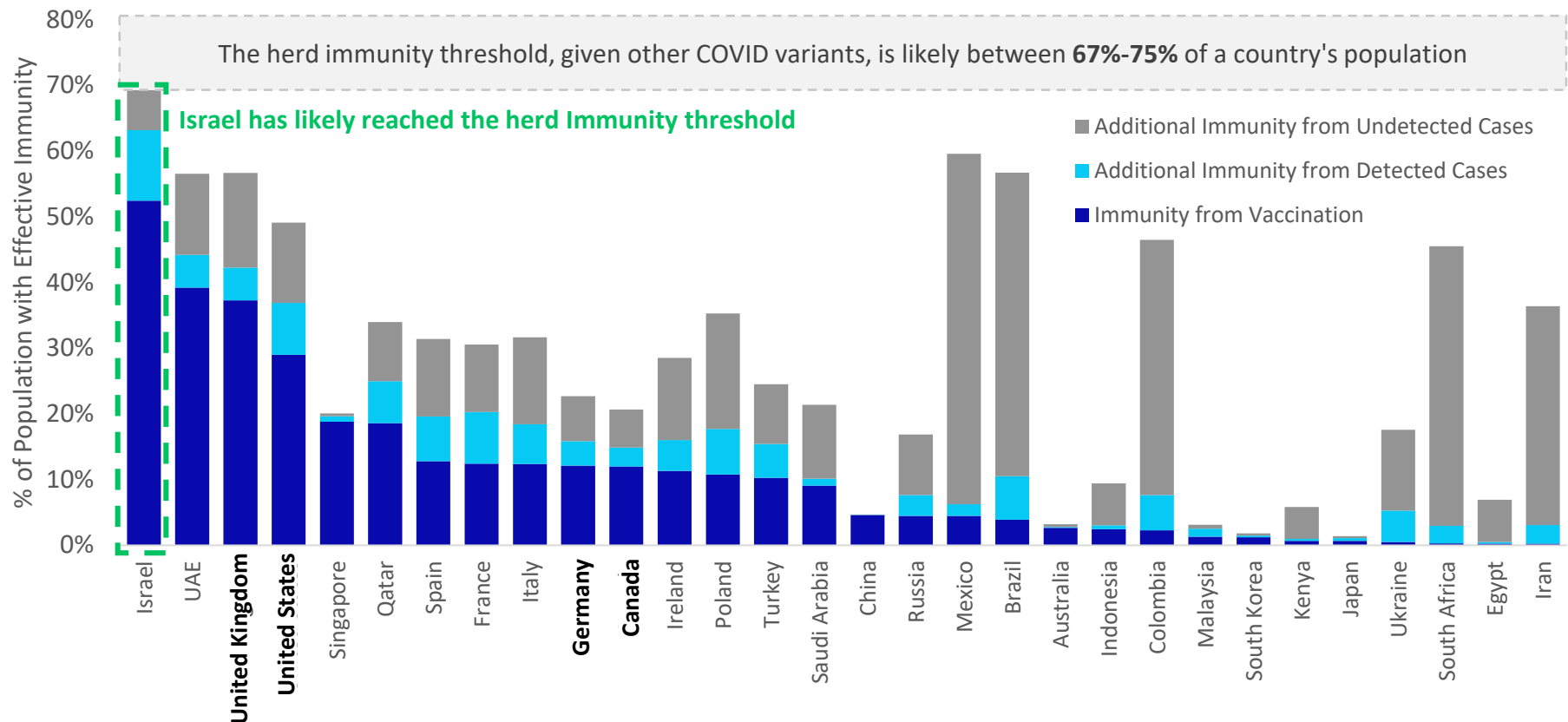


Sources: [Toronto](#), (3/2021), [New York City](#) (3/2021), [London](#) (10/2020), [Auckland](#) (1/2021), [Singapore](#) (3/21)

CANADA IS EXPECTED TO REACH HERD IMMUNITY LATER THAN OTHER COUNTRIES DUE TO LOWER NATURAL INFECTION RATES AND SLOWER VACCINE ROLL-OUT

% with immunity by natural infection or effective vaccination by country^{1,2}

Data as of Apr 25th, 2021



1. As we learn more about the risk of reinfection, we may see some countries relying on high levels of natural infection lose significant progress towards herd immunity threshold. 2. Effective vaccination counts use a weighted average of efficacy rates for first injections across manufacturers. We also assume individuals who were naturally infected and received a vaccine dose will be counted towards immunity from vaccination and not natural infection (assumes those with previous natural infection are just as likely as the noninfected population to receive a vaccination). Undetected cases vary by region and are estimated based on IFR data and deaths. Vaccination data from [Bloomberg](#); 2. [BBC](#)
Source: OW Analysis

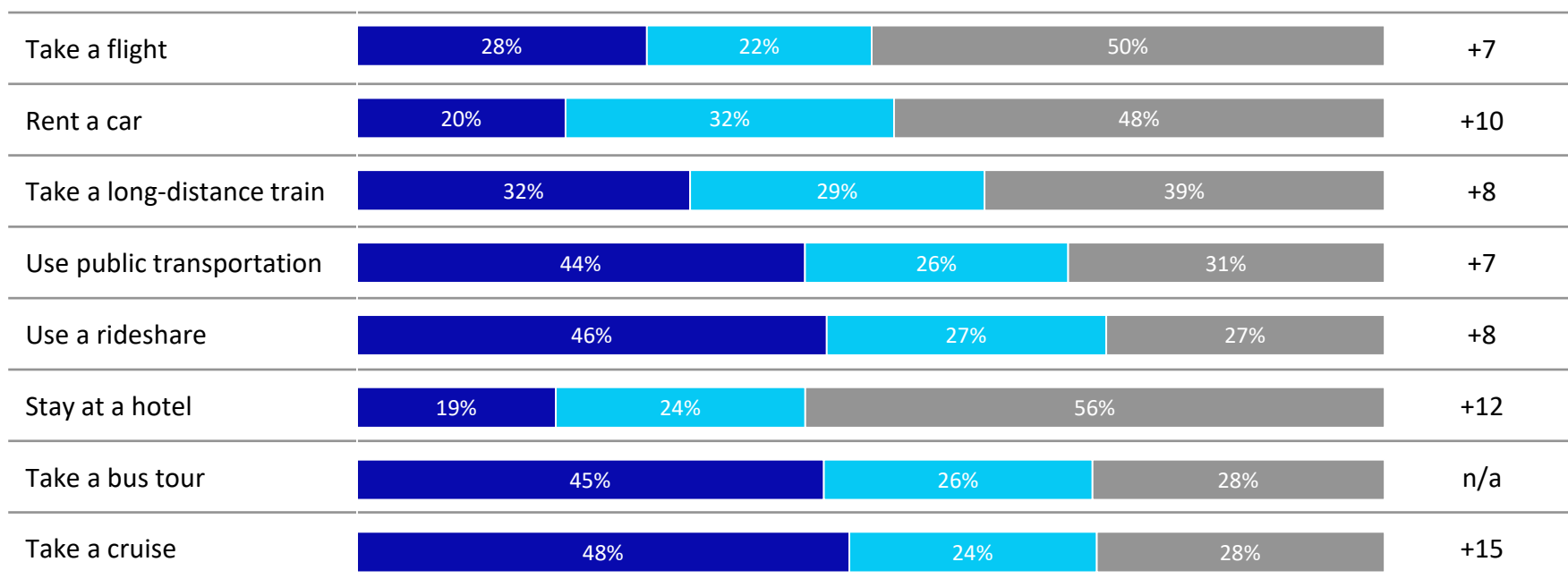
AS DEMAND RECOVERS, DRIVING AS A MEANS OF TRAVEL WILL LIKELY INCREASE, WITH EXPECTED USAGE OF TRAINS AND PUBLIC TRANSPORT DROPPING

After travel restrictions are lifted, how comfortable will you feel doing each of these activities?¹

% of global respondents (n=4,630)

Uncomfortable Neutral Comfortable

Pts. Δ in comfort vs.
Survey in May 2020



In a 6-month period, comfort-levels across all modes increased by a factor of 7-15 percentage points and are expected to continue to rise, however relative gaps in comfort level have remained consistent

1. Uncomfortable = "Very uncomfortable" or "Somewhat uncomfortable"; Comfortable = "Very comfortable" or "Somewhat comfortable"

Source: Oliver Wyman Traveler COVID-19 Survey Edition 2, Oliver Wyman analysis

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MOVING FORWARD, TRAVELLERS NOW PLACE INCREASING IMPORTANCE ON HEALTH AND SAFETY MEASURES WHEN MAKING TRAVEL DECISIONS

Which of the following measures to ensure traveler health and safety are most important to you?

Top three choices, % of respondents (n=4,630)

Category	Safety measures	Percent ranked in top three choices		% of respondents who ranked as top choice
Cleaning	Surface Cleaning	<div></div> 49%		35%
	Special Air Filtration	<div></div> 42%		16%
Employees	Employee PPE	<div></div> 17%		2%
	Daily Temperature Checks	<div></div> 7%		1%
	Covid Tests Weekly	<div></div> 7%		1%
Onboard distancing	Empty Seat Next To You	<div></div> 40%		12%
	Change Travel If Next Seat Occupied	<div></div> 17%		5%
	Strict Back To Front Boarding	<div></div> 13%		3%
PPE	Masks Mandatory Onboard	<div></div> 42%		11%
	Purchase Sanitizer And Mask	<div></div> 12%		3%
Airport/rail station	Limited Capacity Lounge	<div></div> 3%		1%
	Touchless Travel Experience	<div></div> 3%		1%
Testing	Rapid Testing At Airport	<div></div> 17%		3%
	Proof Within 72 Hours Of Travel	<div></div> 23%		6%
	Antibody Test Certificate	<div></div> 9%		1%

In order to re-engage customers, cleaning and safety protocols should remain a top priority and need to be clearly communicated to the public

OPERATORS WILL NEED TO REASSURE COMMUTERS ABOUT NEW SAFETY PROTOCOLS AND FILL THE REVENUE GAP RESULTING FROM REDUCED DEMAND

01

- A large swath of the population **will likely continue to work, learn, shop and receive their healthcare from home**
 - Substitutes are likely to endure because they are often **faster, cheaper, and safer than traditional options**, without compromising on quality



02

- As a result, this suggests a **lasting drop in demand** of mobility services
 - **Public transportation could be facing a dip in ridership** as users have less of a need to use buses, metros/subways, and regional/commuter trains



03

- In addition, there will likely be a **shift in preference to private** modes of transportation
 - The mobility market will **favor modes that people feel are the safest** from a health perspective (e.g., personal cars, bicycles, e-scooters, etc.)



04

- **Safety perception of modes of travel** has become a key driver and consideration when making travel decisions
 - In some cases, drastic changes or **new safety protocols will be required to bring people back** to certain mobility modes



02

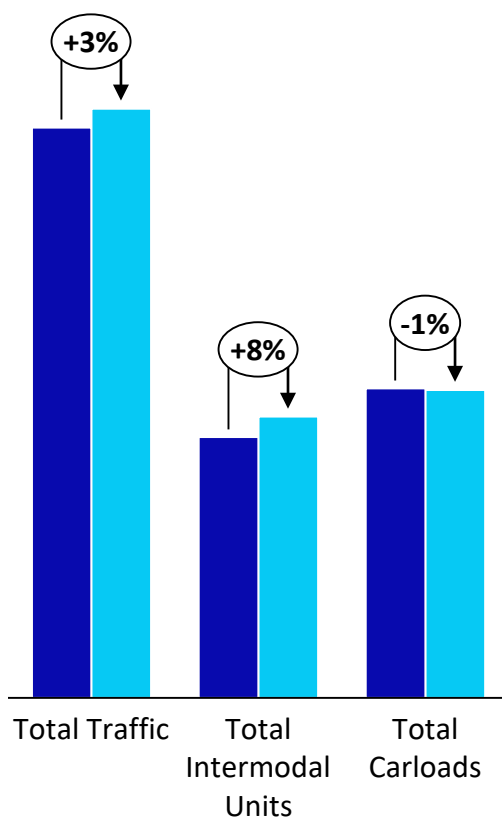
FREIGHT RAIL OUTLOOK

WHILE OVERALL RAIL VOLUMES HAVE REBOUNDED, LARGE VARIANCES EXIST ACROSS COMMODITY VOLUMES

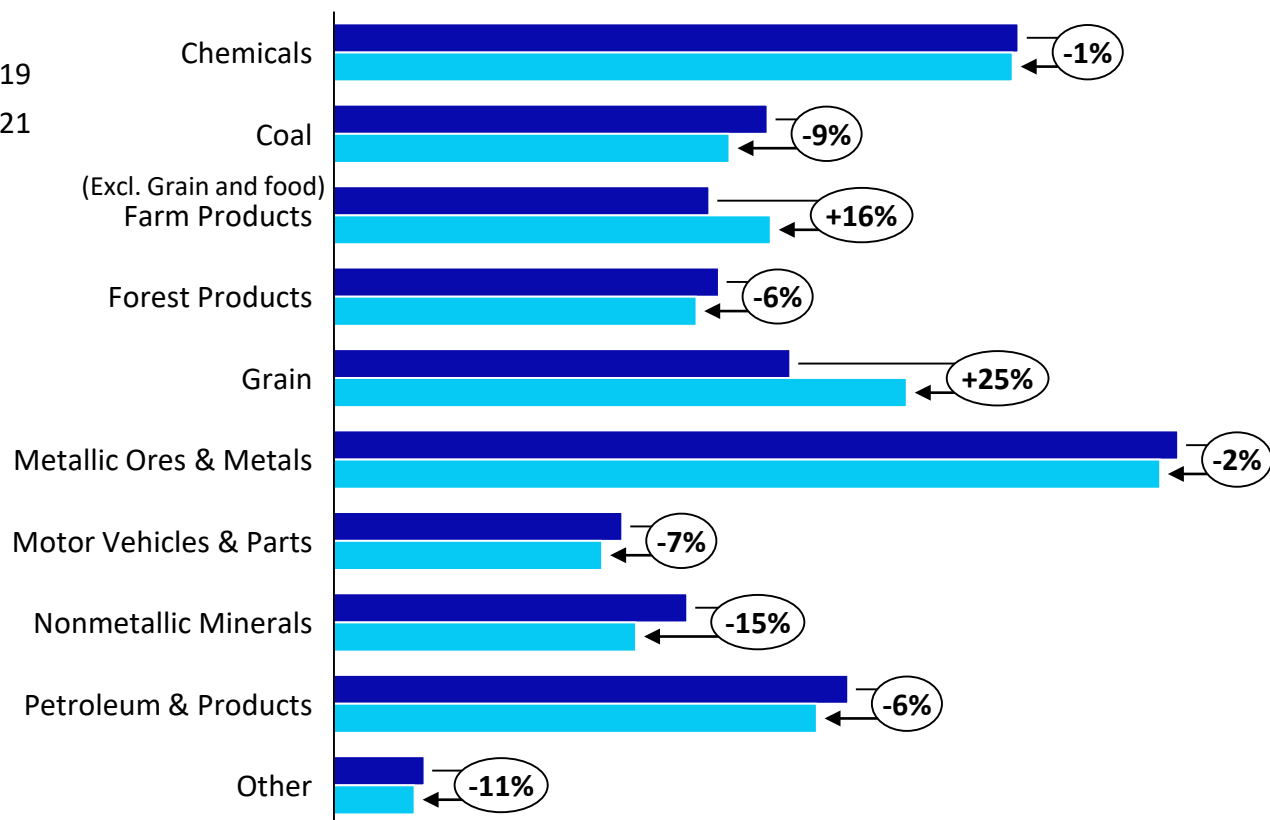
2019 vs. 2021 Q1¹ Canadian Rail Traffic² Comparison by Type and Commodity

(in carload and intermodal units)

Total view

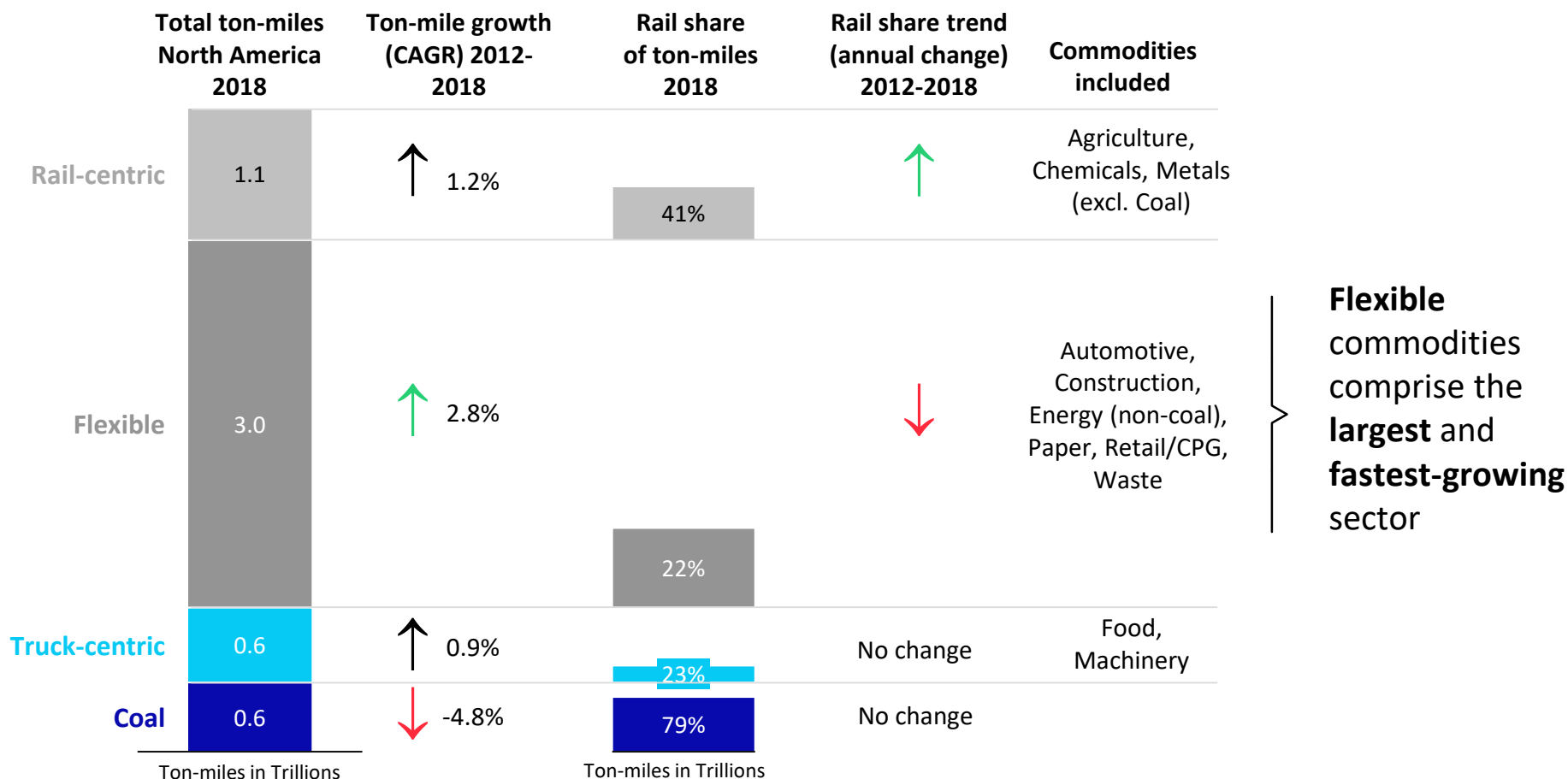


Commodity view



1: "Week 14" Data, 2019 backed into from 2020, data through week ending April 4th. 2021 data through week ending April 10th. 2: Includes U.S. operations of Canadian Pacific and CN
 Sources: "Week 14" AAR Data, <https://www.railwayage.com/freight/class-i/aar-the-impact-of-coronavirus-on-railroads-is-growing/?RAchannel=home>, <https://www.railwayage.com/freight/class-i/aar-week-14-carload-intermodal-traffic-up/?RAchannel=home>

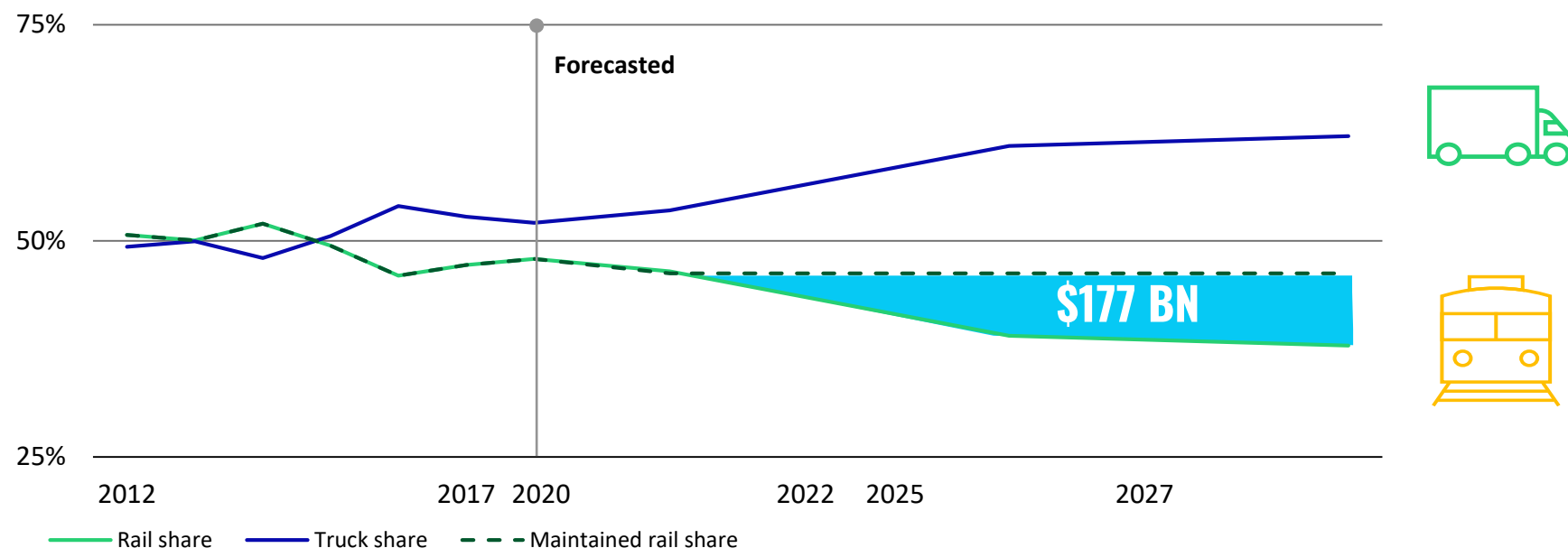
THERE IS GROWTH AND STRENGTH IN RAIL-CENTRIC COMMODITIES, HOWEVER RAIL IS MISSING OUT ON INCREASING SHARE IN GROWING MARKETS



Source: 1980-2011 Bureau of Transp. Statistics; 2012-2018 STB Public Waybill Sample (Rail), USDOT FAF4 (Total and truck), 2020-2045 forecast USDOT FAF4, Oliver Wyman analysis

RECAPTURING GROWTH IS IMPERATIVE, AS FLEXIBLE COMMODITIES EARN A HIGHER AVERAGE REVENUE PER TON-MILE THAN RAIL-CENTRIC COMMODITIES AND COAL

Freight market share analysis and forecast by ton-mile



Recapturing the volume for flexible commodities will require a new focus on customer needs

Note: Flexible commodities include Automotive, Construction, Energy non-coal, Paper, Retail/CPG, Waste; Rail-centric commodities include Agriculture, Chemicals, Metals, Coal.
Maintained rail share revenue opportunity in 2018 dollars, based on winning additional share of flexible commodity freight
Source: 1980-2011 Bureau of Transp. Statistics; 2012-2018 STB Public Waybill Sample (Rail), USDOT FAF4 (Total and truck), 2020-2045 forecast USDOT FAF4, Oliver Wyman analysis

A SHIFT IN BEHAVIOR AROUND CUSTOMER EXPERIENCE HAS THE POTENTIAL TO INFLUENCE CUSTOMER SENTIMENT AND SLOW SHARE EROSION



of surveyed executives found
truck superior to rail on all attributes
of customer experience



The most important customer experience attributes, excluding price are:

Rail is
better

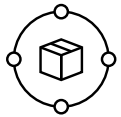
Equipment/
capacity

On-time
performance

Shipment
visibility

Truck is
better

RAIL MUST ADAPT IN THREE AREAS TO RE-ENGAGE SHIPPERS AND DIVERT VOLUME FROM TRUCK



Serve the NEW Supply Chain



- Increased focus on total landed cost and customer-specific solutions
- Proactive preservation and cultivation of rail as a viable mode as shippers move closer to their customers, tighten precision, and further economize in their supply chains.



Improve the Transit Experience



- Tender acceptance, equipment availability & quality, on-time pickup
- Proactive in-transit problem notification and resolution
- Shipment transparency and visibility with reliable & accurate ETAs, on-time delivery

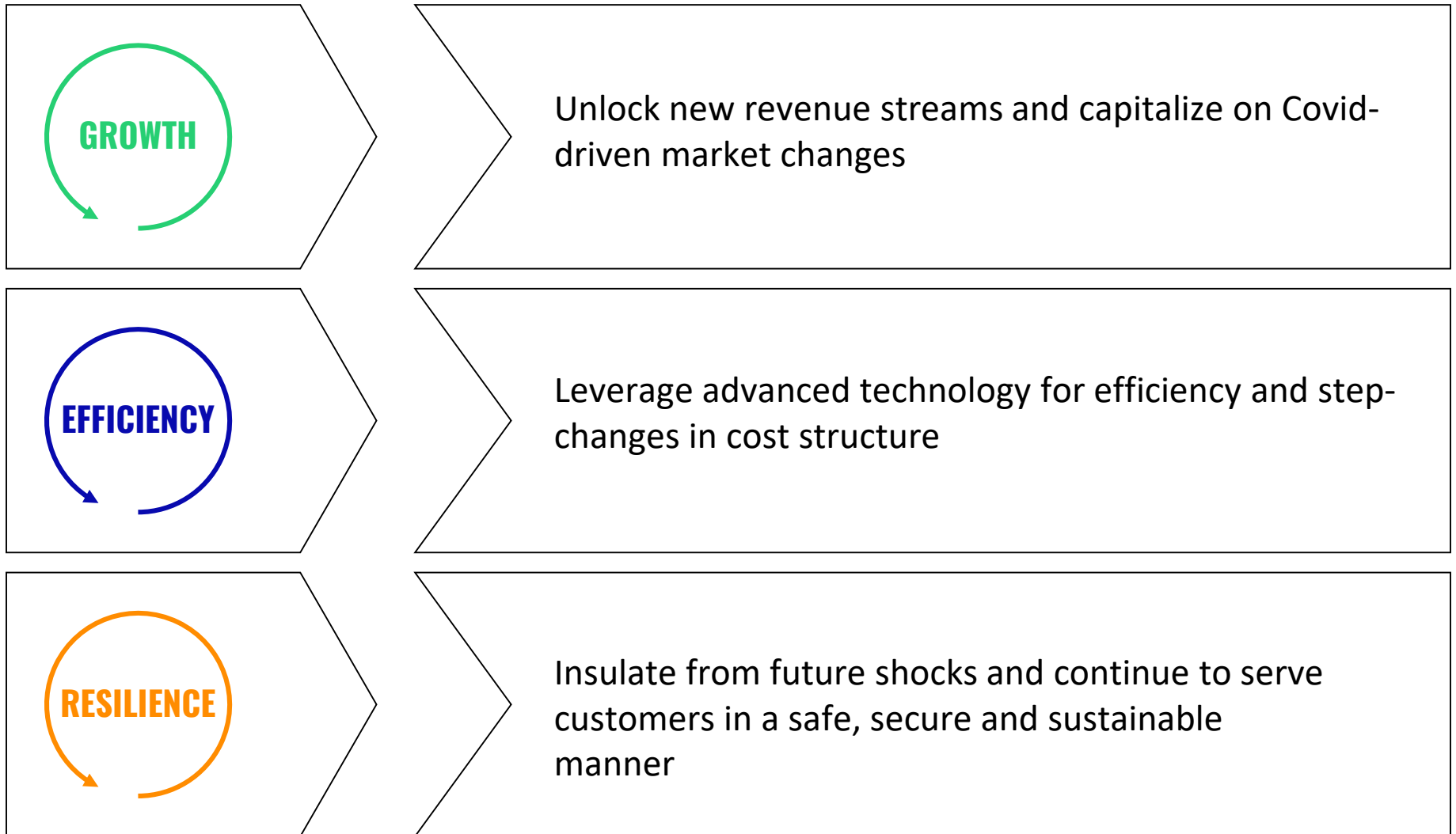


Embrace Customer-centricity



- Easy & accessible customer facing business processes – e.g., responsive/timely pricing and new lane authorization, accurate & timely billing with limited unplanned accessorials
- Customer-centric communication and prioritization: customer-specific metrics, communication & action plans for improvement

THREE OBJECTIVES OF GROWTH, EFFICIENCY AND RESILIENCE WILL BE AT THE CENTER OF RETHINKING OF HOW TO BUILD BACK BETTER IN THE NEW NORMAL



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