



Reach Farther

An Overview of CN

A large black and red CN locomotive is shown from a low angle, moving along a set of railroad tracks that recede into the distance. The scene is set at sunset or sunrise, with a vibrant orange and yellow sky and silhouetted trees on the right. The locomotive has the CN logo on its side.

Robert Bart | Sr Mgr Business Development
Oct 3, 2019 | EBTC, Fredericton, NB

Who We Are

A leading North American transportation and logistics company.

CN is a world-class transportation leader and the only transcontinental railway in North America. Our 19,500 mile network spans Canada and Mid-America, connecting three coasts.

We offer fully integrated rail and other transportation services, including intermodal, trucking, freight forwarding, warehousing, and distribution. Our extensive network coupled with our unique supply chain partnerships provide connections to all points in North America and beyond.

A true backbone of the economy, CN handles over \$250 billion worth of goods, hauls about 20% of Canada's exports and carries more than 300 million tons of cargo annually.

If you eat it, drive it, or use it, chances are **we move it.**



2018 HIGHLIGHTS

25,000+ employees

C\$14 billion in revenue

38.4% operating margin

C\$3.5 billion in capital investments

19,500 route miles

~C\$79 billion market capitalization

6 million carloads

Our Franchise

Unparalleled reach coupled with profound geographic and product diversity.

End Market Diversity

- 25% Intermodal
- 20% Petroleum & Chemicals
- 16% Grain & Fertilizers
- 13% Forest Products
- 11% Metals & Minerals
- 6% Automotive
- 5% Coal
- 4% Other Revenues

Economic Diversity

- 35% Canada/U.S. Trade
- 25% Global Trade – Asia
- 16% Domestic Canada
- 15% Domestic U.S.
- 5% Global Trade – Europe
- 4% Global Trade – South America

Based on Q2 2019 revenues



CN by the Numbers

470 train starts and
16,400 shipments moving each day (6 M shipments/year)

1,550 high HP locomotives and
120,000 active cars on line on any given day

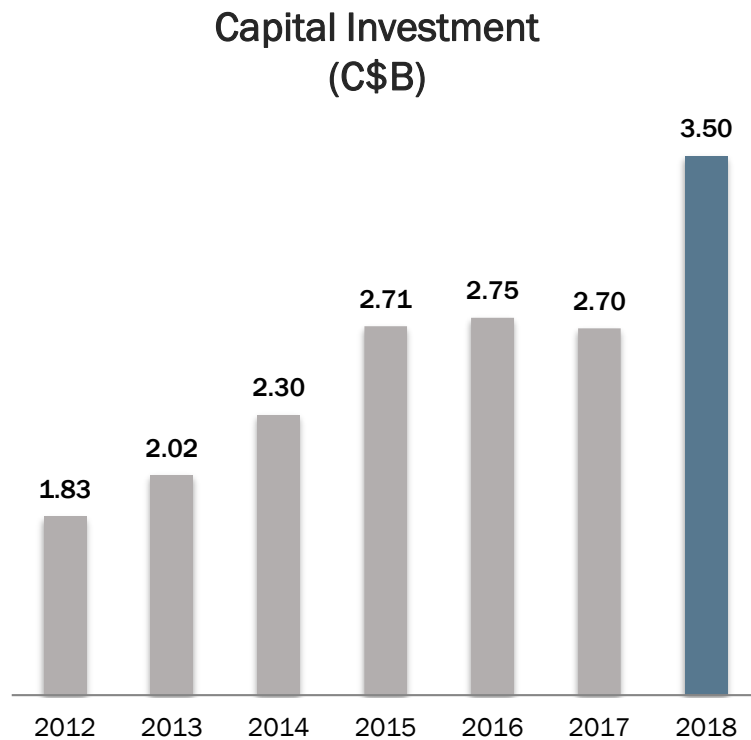
6 major port connections,
10 main yards,
18 automotive compounds,
23 intermodal terminals,
40 transload centres,
200 interchange locations

13,000 origin/destination pairs
4,300 active customers

All working together to enable
\$250 billion worth of trade every year



Investing Smartly to Support our Business



\$22 Billion
capital investments
over last 10 years

\$3.9 Billion
capital investments
planned for 2019

- Focused on advancing safety, service and productivity through infrastructure maintenance, strategic growth initiatives and new technology
- Investment in ~200 long sidings and double track since 2000
- Replacement of 2M rail ties, installation of ~ 600 miles of new rail, plus work on bridges, branch line upgrades and other general track maintenance

Building a Fluid Network with Extended Capacity

~200

long siding and
double track investments
since 2000

- Pre-2000 long siding, long siding extension or double track investment
- New long siding, long siding extension or double track investment

Total network of

~20K route miles

Over 7K bridges

owned and maintained by CN

~600 miles of track

installed in each of last few years

~2 million ties

installed in each of last few years



Adding Capacity and Equipment in 2019

Capacity / Growth

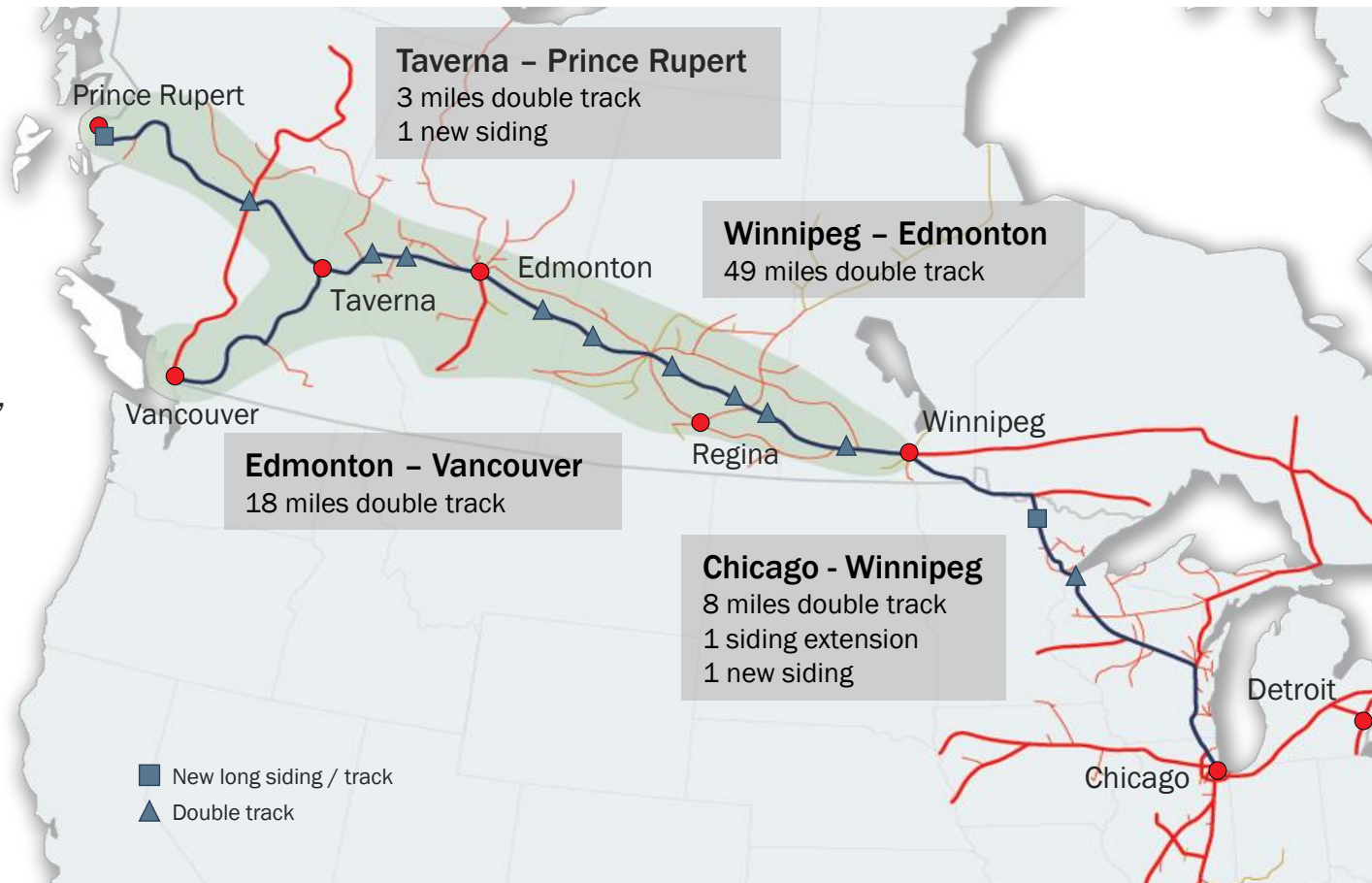
- Key major infrastructure projects, mainly in Western Canada
 - Close to 80 miles of additional double track

Equipment / Growth

- 140 new high horsepower locomotives, mainly in H1
- 500 new grain hopper cars in H1
- Intermodal equipment (cranes, chassis, containers and tractors)

Deploying key technology projects

Meeting PTC milestones



Investing in Technology

Improving safety, efficiency and productivity



Autonomous Track Inspection Program



Automated Inspection Portals



Handheld Technology for Mechanics



Handheld Technology for Train Crews



Enterprise Automation



Smart Network (Digital Twin)



We Put Safety First

- Safety is of the utmost importance at CN. We all have an important role to play - we need to look out for each other. This means keeping our railroad, our employees, our communities, our customers and their goods safe.
- We must all be engaged and responsible for practicing safety and protecting one another no matter the season.

Download your copy of the
Customer Safety Handbook
at www.cn.ca/seasonalsafety



Delivering Responsibly – Our Sustainability Commitment

Delivering Responsibly determines how we conduct our business every day and defines our contribution to building a more sustainable future.

Five principles anchor our sustainability commitment:

ENVIRONMENT

Conduct our operations with minimal environmental impact, while providing cleaner, more sustainable transportation services to our customers.

SAFETY

Be the safest railroad in North America by establishing an uncompromising safety culture and implementing a management system designed to minimize risk and drive continuous improvement.

PEOPLE

Provide a safe, supportive and diverse work environment where our employees can grow to their full potential and be recognized for their contributions to our success.

COMMUNITY

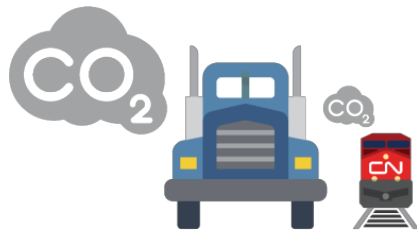
Build safer, stronger communities by investing in community development, creating positive socio-economic benefits and ensuring open lines of communication.

GOVERNANCE

Continuously improve our culture of integrity and ethical business, building trust and confidence with all our stakeholders.

The Benefits of Shipping Rail

75%



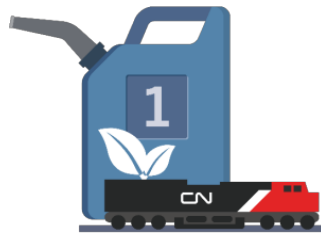
GHG Reduction Moving Freight by Rail
Instead of Truck

4X



Railroads are Approximately Four Times More Fuel Efficient
Than Trucks. Leveraging rail for the long haul and trucking
over shorter distances reduces GHG emissions.

479 miles



One Train Can Move on Average a Ton of
Freight 479 Miles on a Single Gallon of Fuel

300 Trucks



A Single Freight Train Can Replace Over
300 Big Trucks

Sources: The Railway Association of Canada; The Association of American Railroad



Providing an environmentally friendly way to move goods

Global Reach

CN is the only railroad with direct access to all three coasts.

West Coast

Key supply chain advantage to Asian markets

- Closest port to Asia: Prince Rupert
- Lowest grades through the Rockies, leading to fuel efficiency and quick speed to market

East Coast

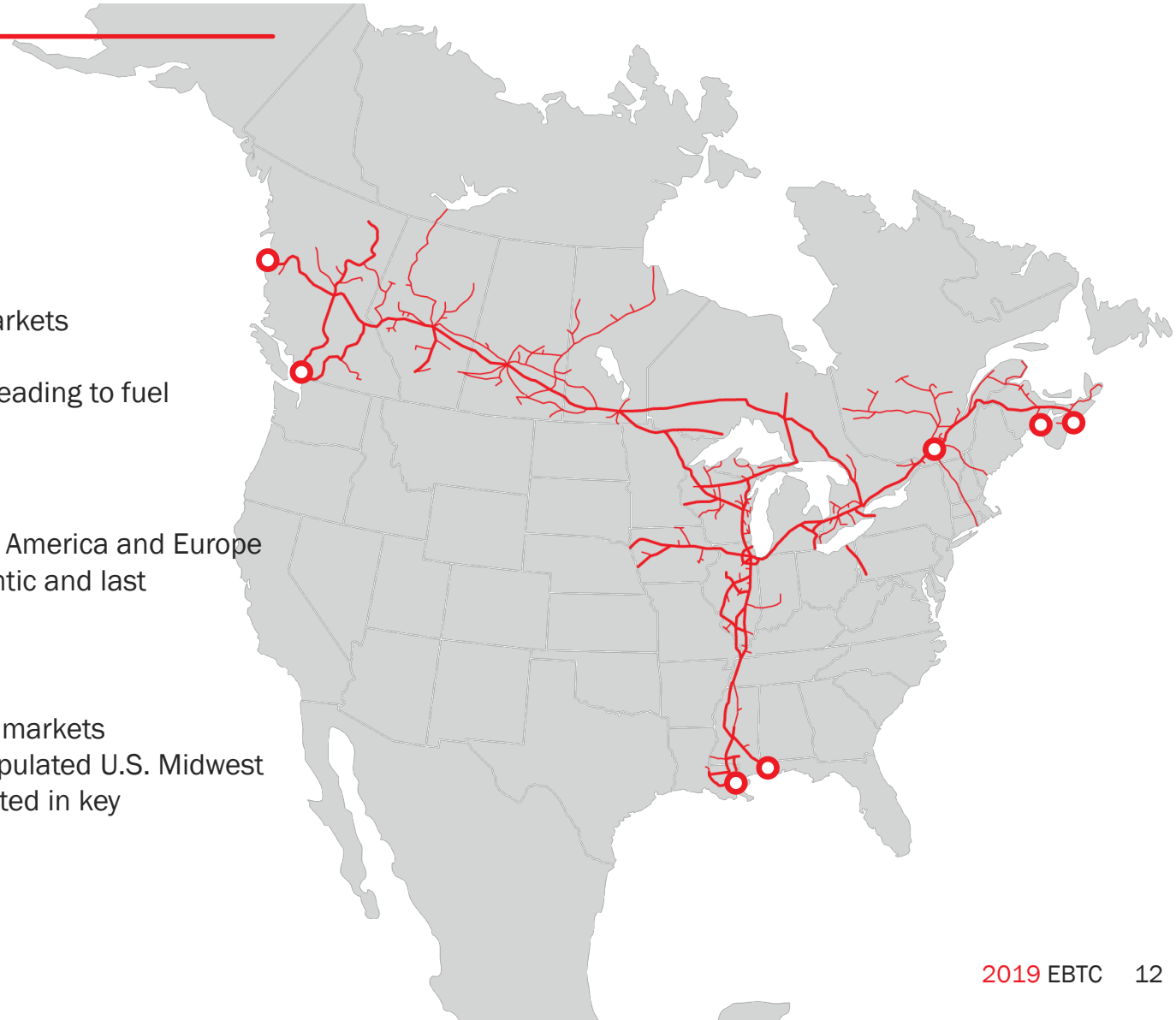
Providing key trade links between North America and Europe

- First port of call from across the Atlantic and last leaving North America: Halifax

Gulf Coast

An alternative coast to reach key inland markets

- Directly connecting to the densely populated U.S. Midwest
- Gateway to U.S. inland terminals located in key growth markets



Working with our Port Partners

Prince Rupert
After completion of next phase of expansion, capacity will increase from 1.35M to 1.8M TEUs by 2022.

Vancouver
(4 terminals)
Combined capacity of 4.2M TEUs

Halifax
(2 terminals)
Capacity of 1.4M TEUs

Saint John
\$205M invested to increase capacity by 2021

Montreal
(4 terminals)
• Capacity: 1,850k TEUs (+250k TEUs to come)
• New terminal in Contrecoeur adding 1,150k TEUs by 2023

Mobile
Capacity of 475K TEUs;
expansion to 650K TEUs to be completed by end of 2019

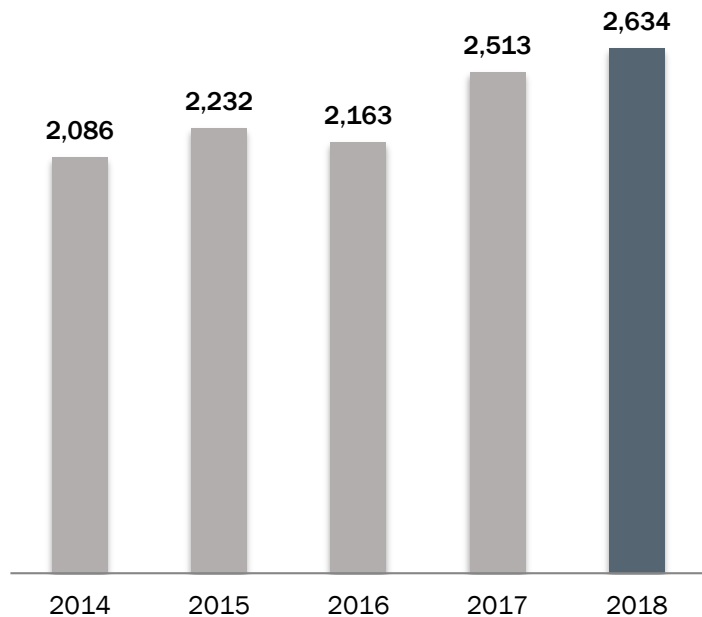
New Orleans
(2 terminals)
Increasing capacity to 1.5M TEUs by 2020



Our Intermodal Franchise

Driven through an end-to-end perspective and focused collaboration with our customers and key partners.

Intermodal Volumes
(in thousand units)



26% volume growth
over the last five years

78%

of our intermodal traffic
moves internationally

22%

of our intermodal traffic
moves domestically

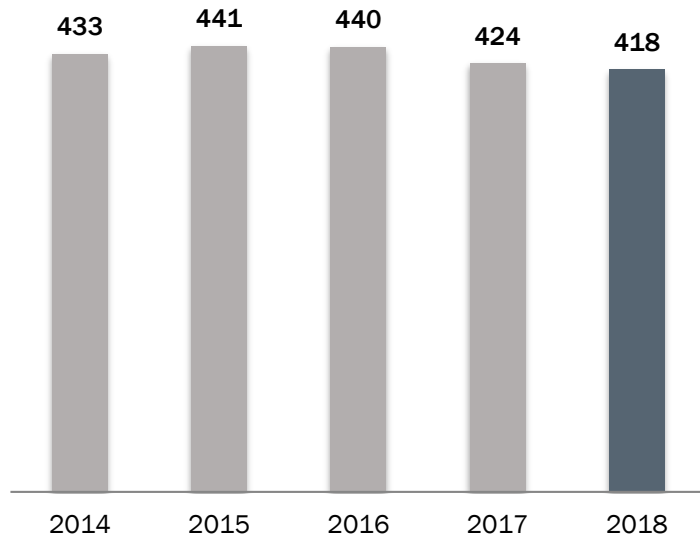
-
- Supply chain approach through innovative collaboration agreements with major ports and terminal operators, developed with real-time performance metrics and proactive communication
 - Helping our customers grow and win in their markets



Forest Products

Offering superior expertise in moving natural resources domestically and internationally

Carloads
(in thousands)



Largest carrier

of forest products among Class 1 railroads

16

forest products transload facilities and 23 strategically located Intermodal terminals

72%

of CN's lumber and panel shipments were destined for the U.S.

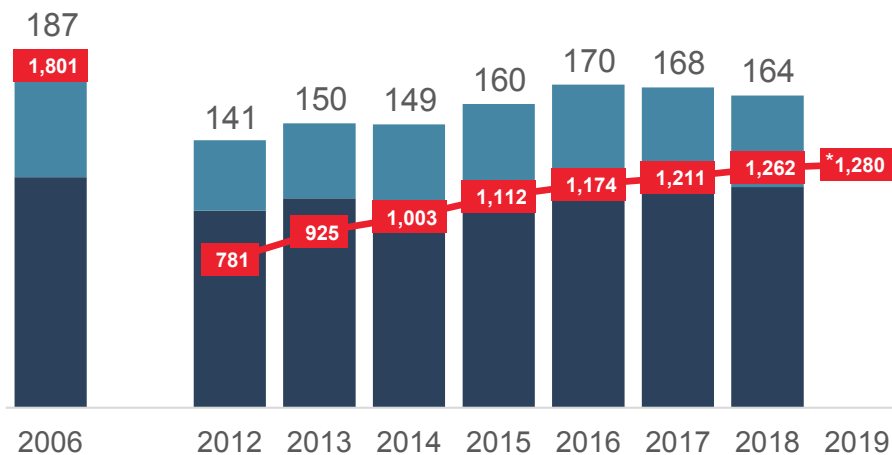
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- Access to the largest fiber sources in Canada
 - We move lumber, wood pulp, paper, panels and other fibers, such as wood pellets, chips and logs
 - Added over 1,000 centerbeams to our fleet of 11,000
 - We provide the flexibility to use CN Intermodal services to access domestic and international markets



Forest Products

U.S. Housing Starts – A Full Supply Chain Opportunity

CN Lumber / Panel Volumes to the U.S.
(thousands of carloads)



CN volumes include Canadian and U.S. origins

*CN assumption

■ Panels ■ Lumber — U.S. Housing Starts (000s)

Estimated
1.28M housing starts
in **2019**

- Over 10% of CN revenues tied to housing
- U.S. remains an important market for Canadian lumber producers
- The housing market includes not only lumber and panels, but also the furniture and electronics needed to equip a new house, the metals and plastics needed for the home's plumbing and appliances, and the roofing shingles needed to cover it





Moving Forward Through Innovation

Focus on Technology & Innovation

CN plans to deliver a high level of service through a combination of business process innovation, automation and optimization of key activities. CN will be investing in technology and information systems to deliver improved safety, efficiency and service.

These are the 4 areas of focus:



Safety



**Effective
Capacity**



Efficiency



**Customer
Experience**

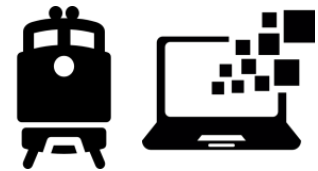
Transformation Through Advanced Technologies

ONE
TEAM

Driving a business-led,
technology-enabled
mindset



Leveraging our
Enterprise Architecture
roadmap to enable
business agility



Implementing rail and
non-rail technology to
further drive innovation

Increasing speed to market with repeatable
and reusable technology

Autonomous Track Inspection Program

Specially equipped railcars in regular train service at track speed with the latest sensor and AI technology to fully automate track inspections.

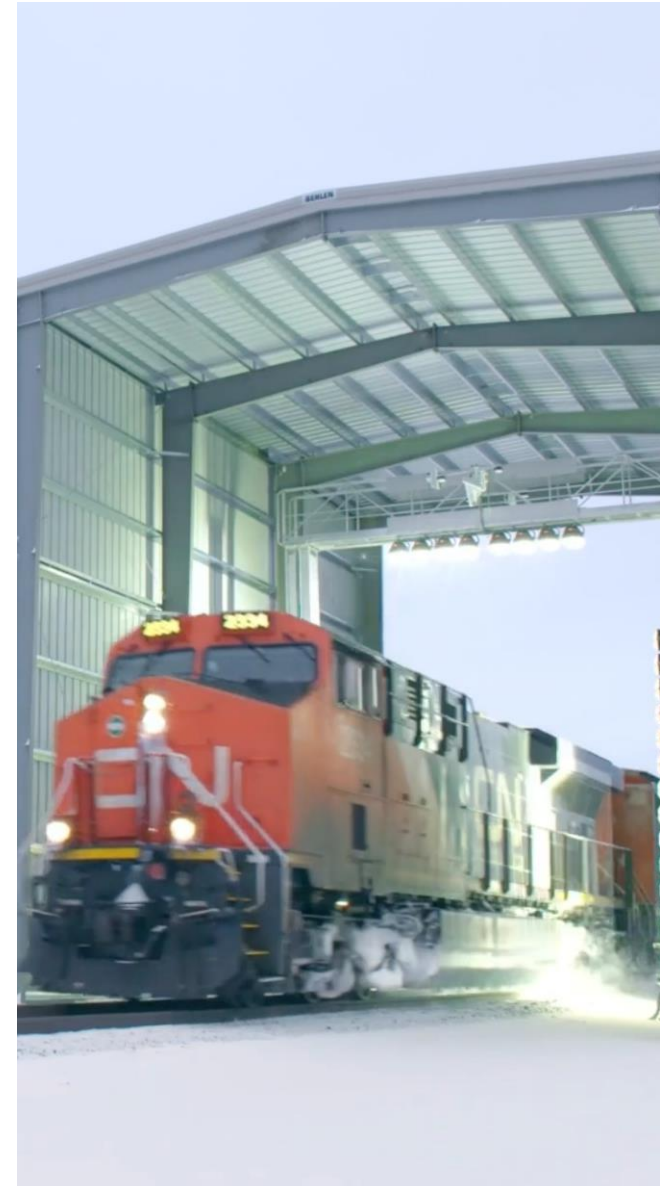
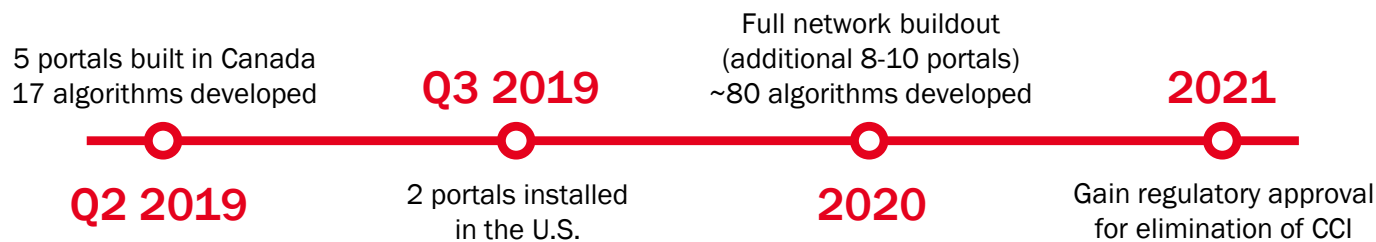
- Avoids slow speed hi-rail vehicles on the tracks performing manual/automated inspections
- Increases inspection frequency, quality and more accurate preventative maintenance to support our safety agenda
- Unlocks capacity and improves service reliability by reducing track disruptions



Automated Inspection Portals

High resolution imaging hardware coupled with powerful machine learning software is changing how we inspect our fleet.

- Immediate benefits from reduction of mechanical manual roll-by inspections at train departure from the yard, significantly reducing initial train start delays and improving yard capacity
- Significant future benefits from elimination of time consuming manual Certified Car Inspections (CCI)
- Contributing to improved border fluidity for intermodal trains by ensuring manifest accuracy ahead of border crossing
- Increased frequency and improved quality of inspections, especially on difficult parts of the railcar, including the undercarriage, supporting our safety agenda



Handheld Technology

A Mobile Foundation Starting with 3 Applications

Mobile Device for Mechanics

- Increase data accuracy and scope of work billed
- Improve supervisors' visibility of work progression and efficiency with remote communication of instructions

Mobile Device for Train Crews

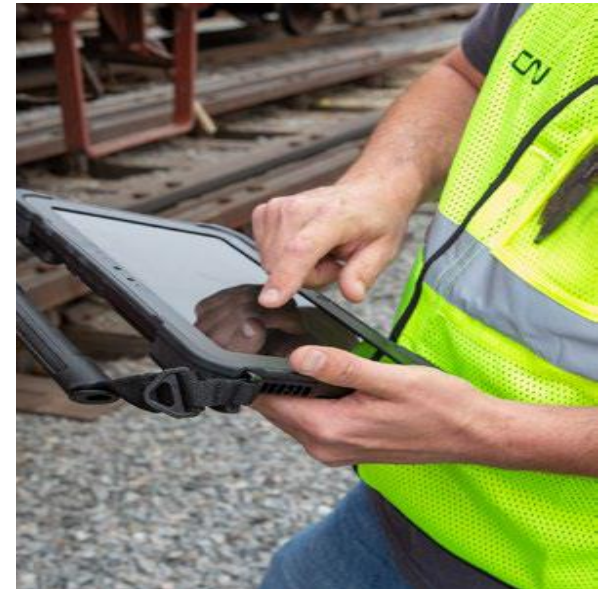
- Speed up information flow to customers and increase accuracy and completeness in reporting work performed
- Enable dynamic planning and work assignment, staying current on progress

Documentation on Mobile Devices

- Improve safety and productivity with easier navigation and access to operating rules, customization of content and more robust update process



Digitization of manual processes driving standardization, improved productivity, reduced costs and better revenue capture



Enterprise Automation

Using technology to automate and eliminate manual and time consuming tasks

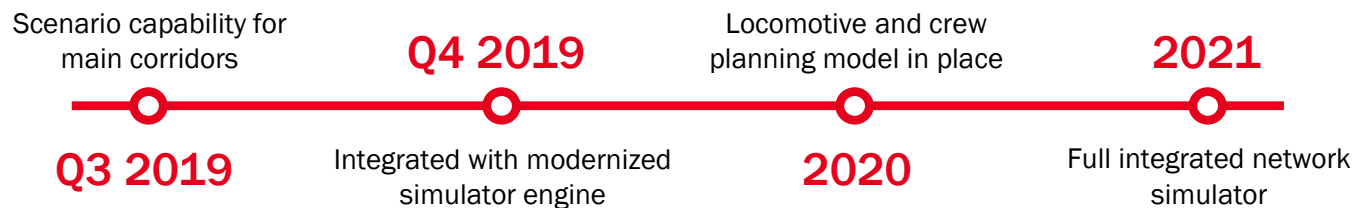
- Leveraging a variety of tools, such as Robotic Process Automation (RPA), smart data capture, conversational interfaces (chatbots), cognitive automation and agile orchestration technologies
- Scalability at low incremental cost
- Enables employees to focus on value added tasks



Smart Network (Digital Twin)

An integrated digital scenario analysis and simulation tool to improve insight and enhance capacity planning relative to changing demand

- Simulates train movements on the network to gain insight on capacity, cost and operational fluidity
- Anchored on simulation and a holistic view of network operations
- Stress testing scenario analysis will help identify options/trade-offs to handle forecasted volume, including identification of specific pinch points, on a more timely basis
 - Particularly important given long lead times to bring new capacity online, such as infrastructure construction, crews, and locomotives



Seamless Border Crossing

Live-Lift at Ranier and Port Huron Border Crossings

Live-Lift for single container inspection minimizes train delays - speeding up border crossings for our customers

CN efficiently facilitates the handling of containers and train loading plans for inspection releases. Live-Lift has eliminated the majority of U.S.-rejected containers - reducing transit times and delays

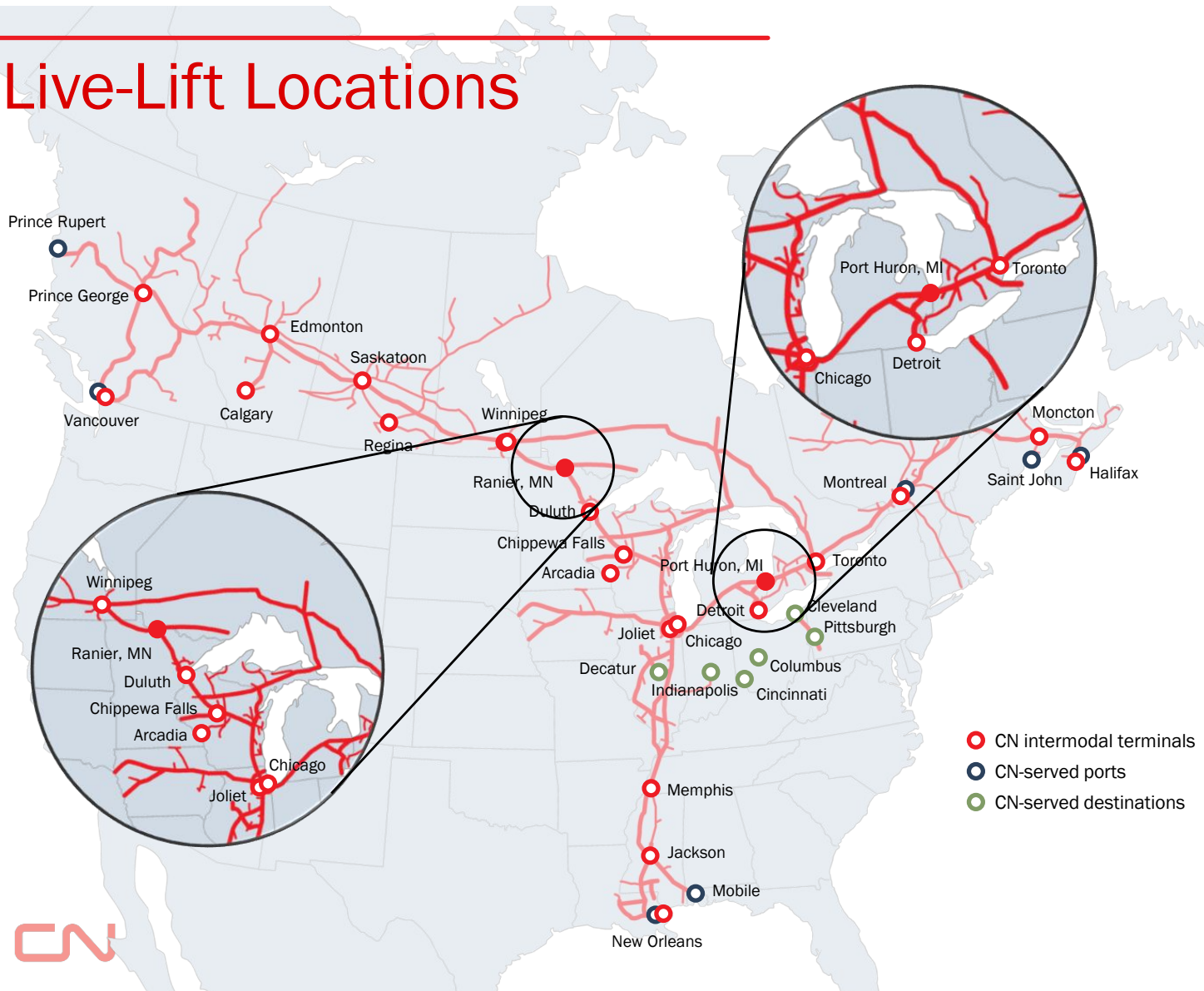
Robotic Process Automation

Robotic Process Automation (RPA) is used to automatically and proactively monitor shipments crossing the border for completeness of customs information, in an effort to speed up the traffic through the border, minimize stops and reduce overall clerical effort.

Since spring 2018, a total of 12 out of 13 borders are now monitored via RPA, resulting in a 70% reduction of related border stops. RPA at Rainer border crossing was implemented last year.



Live-Lift Locations



CN Customs Brokerage Services



Personalized service with a single point of contact – 24/7

We'll introduce you to an associate - a licensed customs broker - who will handle all your needs, from the time documents are received until your shipment is cleared through customs and delivered. You will receive detailed reports and customs-adapted invoicing, all available at the click of a mouse thanks to Electronic Data Interchange (EDI). CN Customs Brokerage software can also generate customized reports to assist you with compliance management, establishing costs and monitoring quantities - all based on your particular needs.



1 Where can I ship using CN Customs Brokerage Services?



- Canada to U.S.
- Canada to Mexico
- U.S. to Canada
- U.S. to Mexico
- U.S. via Canada to a third country
- Canada via U.S. to a third country
- Imports into Canada, U.S. or Mexico
- Exports from Canada, U.S. or Mexico

2 What are some of the services provided by CN Customs Brokerage Services?

Our services include:

- Ensuring you benefit from the most favorable duty rates
- Obtaining releases for imported goods via electronic customs clearance prior to arrival
- Preparing, obtaining and transmitting documents via EDI to all appropriate parties
- Bond services - creation of T & E, IT and IE to a bonded facility for furtherance to Mexico or overseas
- For exports from Mexico - the creation and filing for pedimento
- Payment of all applicable duties
- Responding to any Canada Customs and Revenue Agency concerns
- Record management

Choose only the services you need

- Customs clearance
- Permits and licenses
- Drawbacks and refunds
- Remissions
- Post-audit services
- Temporary importation
- Advisory services
- Insurance

www.cn.ca/cbs

3

Why use a customs brokerage firm?

Customs requirements can be a complex maze of paperwork and frustration. We have the knowledge and expertise to get the documentation done quickly and efficiently in order to move your goods for on-time delivery. CN Brokerage is leading the industry with the most consistent record of customs clearance. We'll help you avoid potential problems, by classifying goods and determining correct valuations, minimizing tariffs and penalties and reducing storage fees by moving shipments more efficiently. We ensure that we are always up-to-date on the latest regulatory mandates or any other initiatives pertaining to your shipments. Everything we do is designed to reduce both delays and the costs of non-compliance.



Why is CN Customs Brokerage the right choice?

4

Once you've decided to hand over the responsibilities of customs documentation to a broker, there are a few things you should consider when choosing the right brokerage firm. Remember, not all brokerage companies are the same!



The CN advantage:

- Experienced licensed brokers who work for you and know your business
- One single point of contact 24/7 and no voice mail
- Rapid support for all inquiries
- Precision management and organization of all your documents
- Full visibility with customer access to compliance management etool - one button search for all your shipments
- State-of-the-art technology systems for tracking and tracing
- Confidentiality of all documents
- One invoice for all transactions
- Customized solutions to meet individual customer needs

"We have had the pleasure of working with the CN Customs Brokerage department for a full year now. They have been extremely helpful in the startup of our Canadian business, from providing advice on goods and services tax, to top-notch customer service in regards to our shipments into Canada. With the high volume of traffic we send into Canada, it's wonderful not having to worry about our shipments incurring charges while awaiting clearance at the border, as CN Customs Brokerage always ensures our product is cleared seamlessly."

Sabrina Henn
Customer Service Manager
Superior Silica Sands
Fort Worth, Texas



Wrap Up

