



Nova Scotia Federation of Municipalities

CN's Safety Story

November 28, 2024



OUR PURPOSE IS TO POWER THE ECONOMY

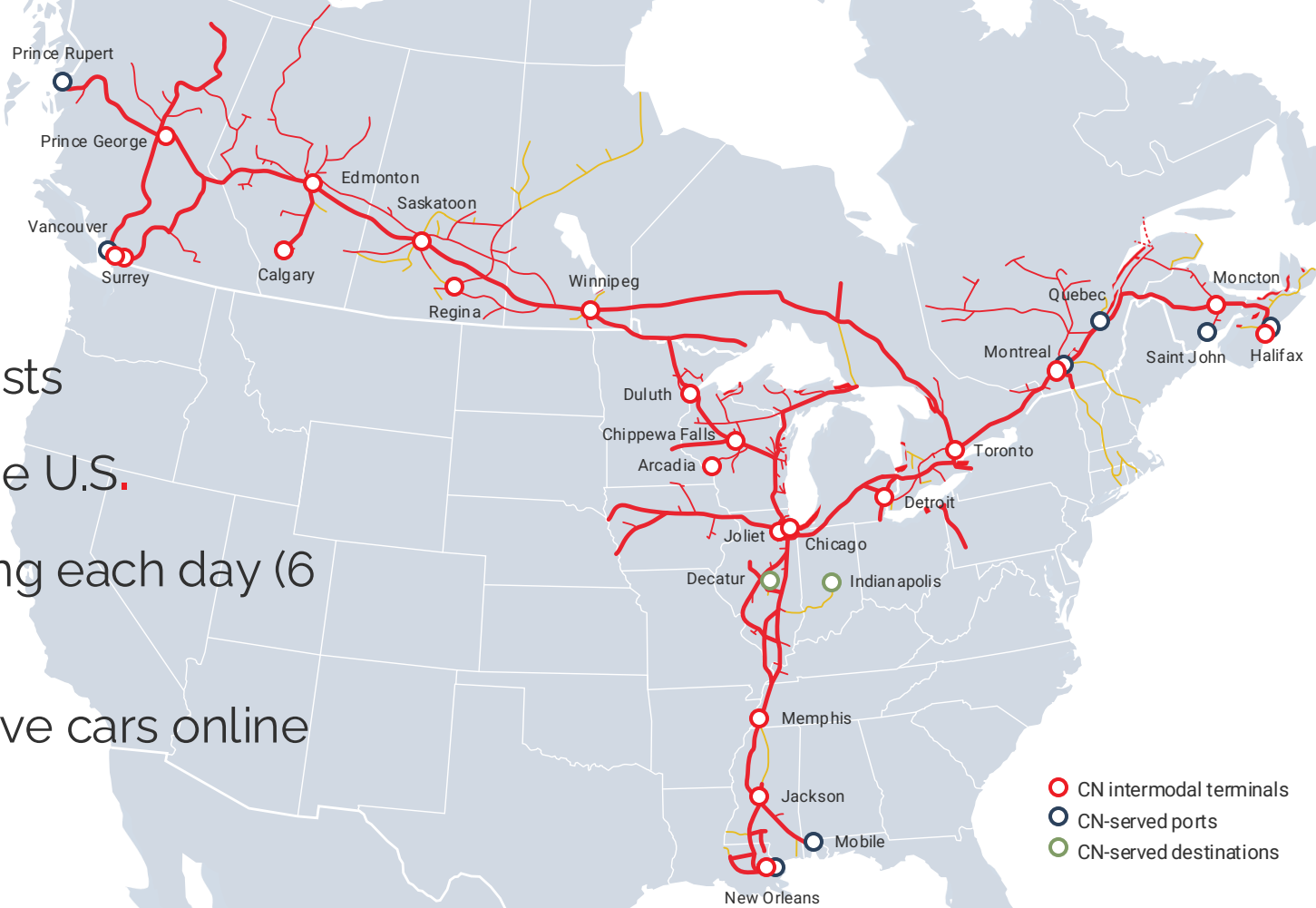


~**20,000** miles of track spanning three coasts

~**24,000** employees across Canada and the U.S.

~**508** train starts, ~**15,650** shipments moving each day (6 M shipments/year)

~**1,557** high HP locomotives, ~**115,000** active cars online on any given day



CN in Nova Scotia

~ **309** miles of track spanning

~ **419 Nova Scotians employed**

~ **\$31M** in capital spending, **\$7.7M** in taxes, **\$28M** in local spending and **\$429k** in community investments.

~ Moves roughly **60%** of containerized traffic to and from Port of Halifax

**2023 figures*



Autonomous Track Inspection Program (ATIP)



ATIP car:
Operating in a revenue train at track speed



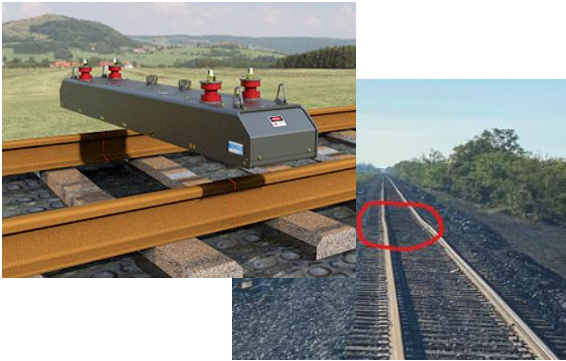
CN Hi-rail in the field:
Revenue trains cannot occupy the same track while the hi-rail is performing a visual inspection

ATIP cars use the latest sensors and AI technology – measures beyond what the eye can see

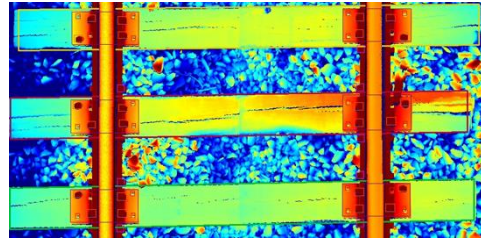
Technology Engineering - ATIP

CN operates the *largest autonomous track testing fleet* in North America and has operationalized the *most comprehensive suite of autonomous inspection technologies* available.

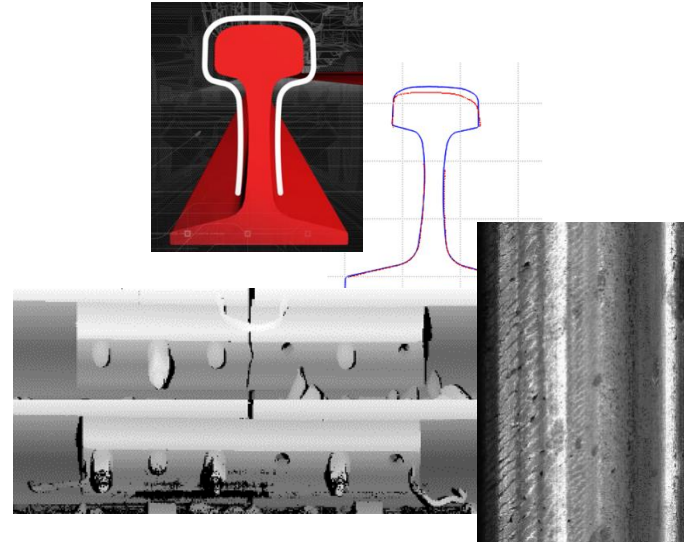
Track Geometry



Tie Assessment



Rail and Joint Assessment



ROW Assessment



ATIP enables proactive infrastructure risk management, maximizing network efficiency

Wayside Detector Technology



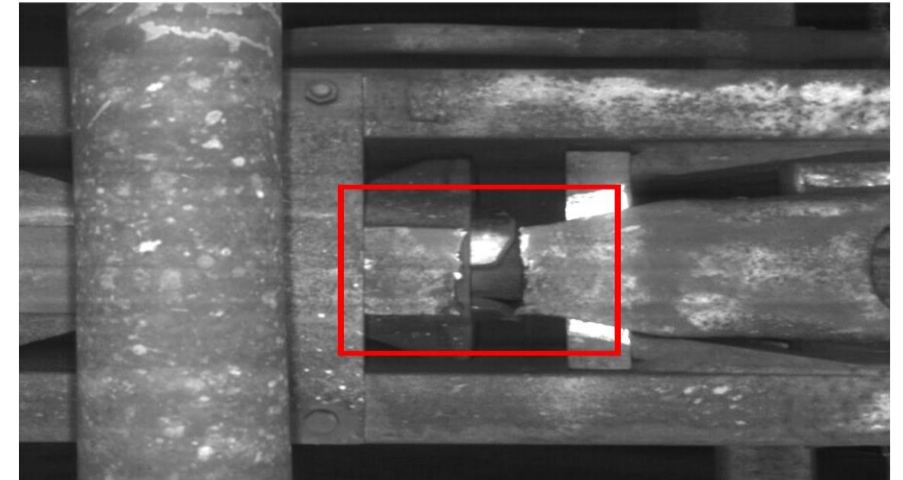
Wayside Detectors help to identify a problem BEFORE It can CAUSE A SIGNIFICANT OR SERIOUS OUTCOME

Technology Mechanical – Inspection Portals

- **Safety** – More frequent and higher quality inspections help reduce accidents related to railcar defects.
- **Capacity** - Increased thanks to real-time train inspection as trains travel at track speeds.
- **Fluidity** - Artificial intelligence helps experienced railcar mechanics identify railcars requiring repair before a train arrives at a yard.



The red box shows an example of a broken yoke.
This defect could result in a pulled drawbar.



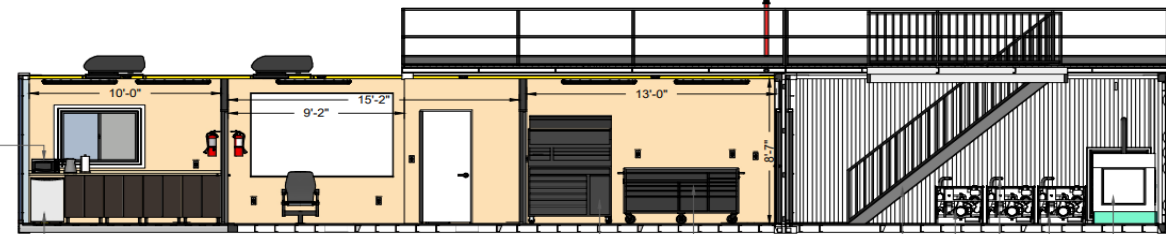
Successfully identified and addressed over a thousand critical defects, preventing potential failures

Community Outreach and Training



CN Fire Prevention and Suppression

Poseidon, Neptune, and Trident



Community Partnership



CN Wildfire Resources Map



7/8/2022, 7:28:54 AM 1:36,978,555

Fire Trailer	High Volume Water Supplier	Contractor Fire Suppression Pump
CN	Fire Apparatus	Water Tender
Non CN	CN Bridge Sprinkler Kit	

0 200 400 600 mi
0 200 400 600 km
Map Source: CN, NOAA, USGS, etc.
© 2022 CN Rail
This is a production of a Canadian National Railway.

Fire Mitigation

- Fire danger levels are monitored by CN through the Canadian Wildland Fire Information System (CWFIS)
- CN has leveraged other carriers' assets as well as sent equipment for other carriers to use at incidents.
- Fire suppression kits are available on all track equipment and inspection vehicles.
- CN has access to firefighting trailers through mutual aid, contracted agreement and CN company-owned equipment that is staged at strategic locations across the network.



CN has an “Extreme Weather Fire Risk Mitigation Plan” that is shared with Transport Canada

Fire Mitigation



20 tank cars filled with water strategically placed across our network



CN Fire Suppression Command and Control Car



CN Fire Mobile Trailers



CN Fire Mitigation Cars

CN proactively deploys equipment to strategic locations on the Network as a fire mitigation strategy

CN Community Outreach and Training



2023 Training Totals

First Responder Training (TRANSCAER Program)

- **4,600 participants / 305 in person events**

Public Events (General Public & Elected Officials)

- **10,300+ participants / 82 events**

Web-based Training (CN DG Website)

- **700+ participants**

In 2023, the CN Dangerous Goods Team received its **14th consecutive National TRANSCAER Award** for our first responder outreach and training programs



CN's Disaster Relief Strategy

When our neighbours are in crisis, CN railroaders come together to help them recover and rebuild. That's why CN committed \$10 million to help the Red Cross and Team Rubicon prepare for natural disasters and support affected communities for the next 10 years.

Objectives:

- Help people and communities in North America and around the world in times of need and support them in strengthening their resilience.
- Establish long-term partnerships to enable organizations to prepare to respond quickly and appropriately in crisis situations.
- Support our Railroaders and our neighbors when a natural disaster or a crisis strikes.
- Volunteer and employee engagement opportunities.



Disaster Responder Program



Disaster Response Alliance



**Official Partner
Canada & US**

CN also pledged a gift of up to \$100,000 annually to the CN Employees' and Pensioners' Community Fund, to be utilized as matching gift funds for internal disaster relief campaigns

Thank you

