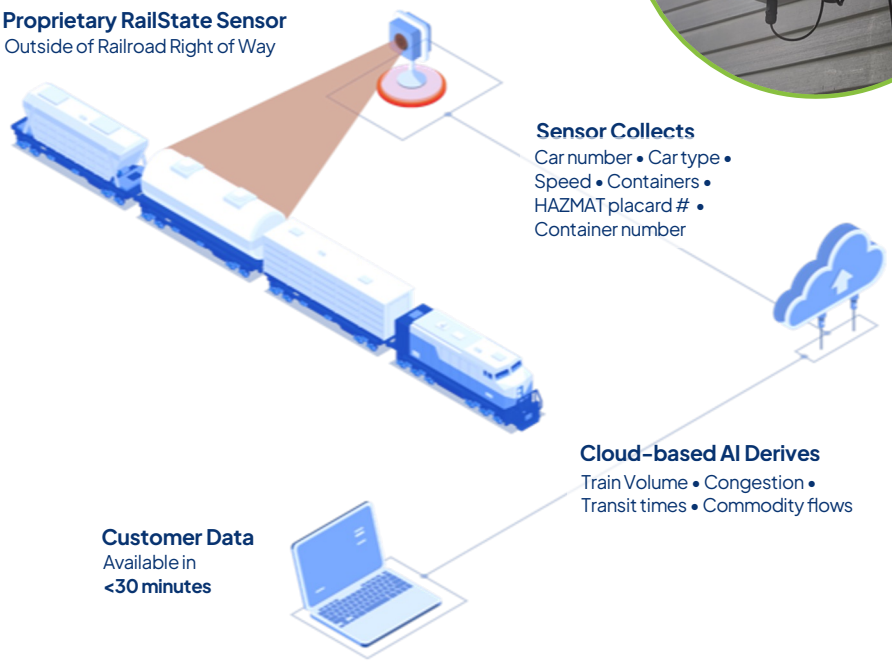
RAILSTATE

AI-Powered Sensors Driving Network Rail Data



Battle-tested network keeps data flowing to customers:

- Continuously Updated
- Low Data Latency
- -45 to +120 degrees
- Web UI and API
- 6 Billion+ Images
- TLS Data Encryption

Image Capture

RailState: Locomotive # & Owner, Car #, UN #, Container #, Car Type

AEI Tag Readers: Car # only

RailState Customers

How they use the RailState data

USDA Agricultural Marketing Service, U.S. Department of Agriculture	California Air Resources Board	Oregon Department of Transportation	Transport Canada	Canadian Transportation Agency
Measure grain volumes and performance on specific corridors and to critical market hubs	Measure emissions from locomotives using emissions tier and distance traveled	Help enhance its passenger and freight rail network	Understand real time traffic flows, capacity, network performance	Service level complaints, network analysis
Environment and Climate Change Canada	Alberta Transportation and Economic Corridors	Prince Rupert Port Authority	BHP	EVR, A Glencore Company
Measure emissions from locomotives using emissions tier and distance traveled	Provincial Government – Enhances supply chain analysis and movements of Ammonia	Monitor all rail flows to port, inform capex and operations improvements	Risk assessment for new rail movements, capacity, performance, negotiation	Independent data to inform discussions with RR – capacity, priority on their lanes
Domtar	WCSC, Western Canadian Shippers' Coalition	Strong Pine	Canadian Propane Association	Class I Railroad
Confirm delivery timing, placement, and car condition in near real-time	Industry group – Enhances supply chain analysis and operational insights for member companies	Evaluate rail movements, capacity, performance, negotiation for a new planned facility	Industry group – Enhances supply chain analysis and economic impact of member companies	Pilot project – visibility into interchanges and operations of other Class Is to improve asset utilization and overall operations

Case Study: Identifying Older Equipment

The Problem

- Large shipper suspected they were receiving older, substandard locomotives from their Class I rail partner
- No hard data to prove it — just a hunch

The AI Application

- RailState's computer vision automatically identifies and logs every locomotive that passes, capturing unit details and timestamps
- Builds an indisputable equipment record over time

The Solution

- Data confirmed the suspicion: locomotives were older than contractually agreed
- Shipper brought documented evidence to the railroad, turning a hunch into a data-backed negotiation that drove corrective action

Case Study: Tracking Commodity Flows

The Problem

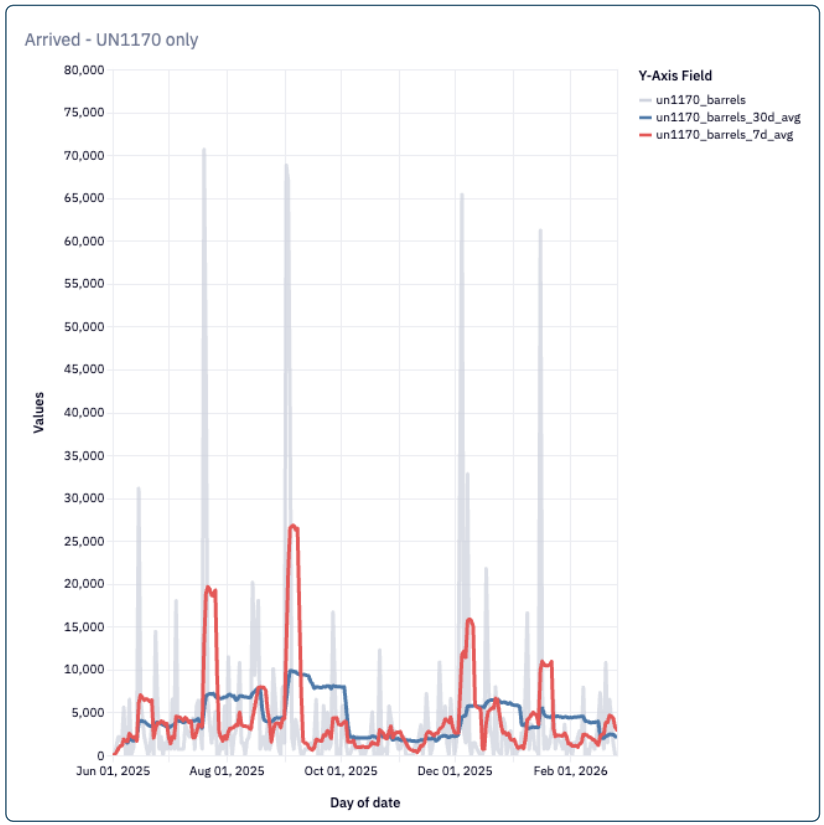
- Commodity traders rely on assumptions about where products move — with no way to verify in realtime
- Blind spots in regional commodity flows create unpriced risk

The AI Application

- Computer vision reads hazmat placards on tank cars automatically, identifying commodity type in real time
- Continuous monitoring builds a living map of commodity movement across the network

The Solution

- Confirmed an energy trader's assumptions about ethanol trade flows with hard data
- Surfaced previously unknown non-denatured ethanol movements in the region
- Provided a verified baseline — ready to act on the moment a market disruption hits



Final Thought…

Anyone can build an application now. How do you fill it with data?

The Shift

- AI tools now let a non-coder build usable software in hours for a modest subscription fee
- What used to require a dev team and months of work is becoming accessible to almost anyone

The Catch

- AI can build the tool — it can't generate the data
- No model can tell you what just rolled through a junction or what's inside a tank car

The Takeaway

- Software is becoming interchangeable; reliable, real-world operational data is not
- RailState's value is the data layer — the numbers you feed into whatever tool you build