



RailPulse™ Introduction

April 2024

What is RailPulse?



AN INDUSTRYWIDE NEW TECHNOLOGY PLATFORM

that provides real-time data via GPS and other telematics technology across the North American Railcar fleet

GOAL OF THE NEW PLATFORM:

- Increase adoption of railcar telematics
- Improve overall rail safety
- Provide meaningful insights into rail performance
- Help drive growth for our industry

Represents
32%
of North American
railcar fleet

Expected roll-out by
1st Half
2024

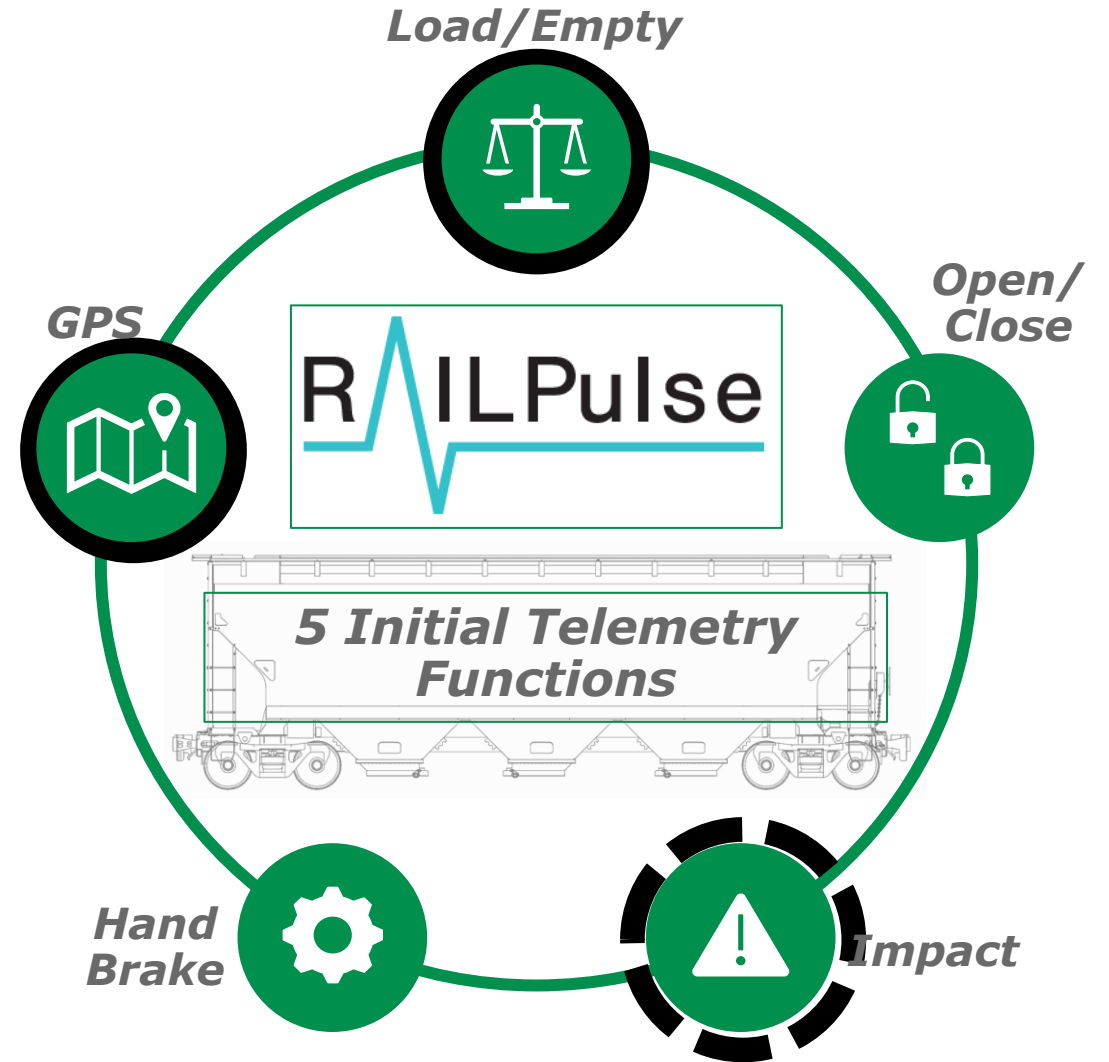
Focused on
SAFETY &
SERVICE

Status

- Pilot phase completing
 - 5 sensor types
 - Gondolas, Boxcars, Tank cars, Hoppers, Autoracks, Centerbeams, Flats
- Software platform in production
- Four active telemetry vendors



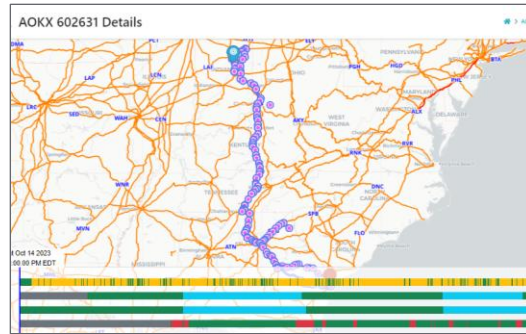
3800+ Railcars



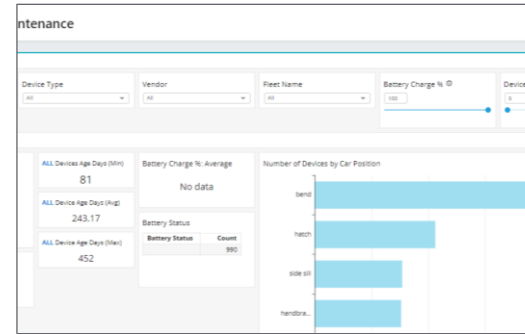
Software “Soft” Opens for New Users Q2



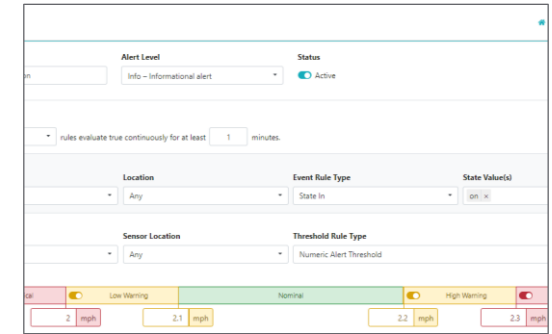
- See entire fleet at once
- Colors provide movement status



- Drill in on one railcar and its movements
- Bars display sensor status



- Access reports on fleet and device statuses
- Check on sensor health



- Manage alerts, geo-fences, LOAs, users, fleet reports
- Create APIs for data flow

Railroad Value Examples



- Provides assurance of sensor data validity
- Allows for access to overlay safety data
- Reduces demurrage and other accessorial charge disputes
- Enhances customer satisfaction through greater car location visibility & improved ETA's

Railroad Value Examples



- Identifies Loaded / Empty status of cars at shippers to better understand service needs
- Creates potential for mutual interchange acceptance (thru shared geofences)
- Mitigates lost cars
- May eventually improve causation of lading damage and accurately assign accountability for damages (theft, impact...)

Car Owner Value Examples

- Provides insight into car usage (impacts, handbrake applications, door state...)
- Mitigates lost cars
- Has potential for preventative maintenance savings
 - Better timed wheel replacements
 - Improved handbrake behavior
- For lessors may provide commercial differentiation

What does it Cost?

- A RailPulse Sensor Bundle includes:
 - Minimum sensor suite of GPS & Impact and Load/Empty sensors
 - Telemetry subscription
 - RailPulse subscription
- Purchasing a 5 year bundle:
 - Allows for a single transaction / contract
 - Includes all the benefits of being in RailPulse

**Minimum Suite
Indicative Pricing**

\$1,000 – \$1,200

Already have telematics on your cars (Grandfathering Cars)?

- Telemetry equipment from RailPulse certified vendor
- Registration and subscription fee waived and then discounted for a period

Why Is the RailPulse Important?



SENSOR VALIDATION

RP's members are proving sensors work

SINGLE TRUTH

Railroads will accept the data for disputes

DATA CURATION

Data from all sensor providers aggregated + Railinc

WARRANTY

RP will manage and replace if needed

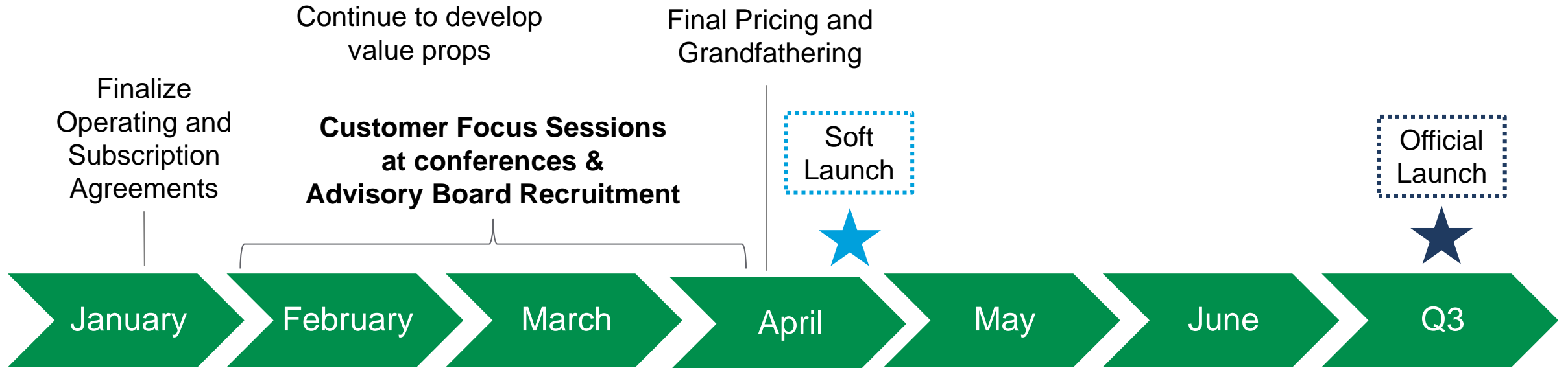
MONITORING

RP is actively looking for device functionality

BEST PRICING

Negotiated price bundles

Launch Preparations Are in High Gear



How Can a Customer Get Started?



What Will Customers Need to Do?



1

CHOOSE A PROVIDER AND A TERM

- Nexxiot, ZTR, or Wabtec/IMTR
- Amsted is a future possibility



2

SELECT ADDITIONAL DEVICES IF DESIRED

- GPS with Impact and Load/Empty are required
- Handbrake and Open/Close are currently optional



3

SIGN A RAILPULSE SUBSCRIBER AGREEMENT



4

SET UP DATA ACCESS