

# Rail

## Solutions for Freight Rail Systems

TransCore's Automatic Equipment Identification (AEI) solutions have improved the operational efficiency of freight transit systems worldwide.

Using seamless equipment tracking, our proven Radio Frequency Identification (RFID) systems offer a reliable, cost-effective way to improve the productivity of freight rail operations. Capabilities are enhanced by increasing equipment utilization and reducing re-handles, dwell time, and overhead.

### Covering 150,000 Miles of Tracks

TransCore's wireless solutions electronically identify and monitor rail and intermodal equipment in real time, eliminating error-prone manual data entry. These tracking and monitoring systems play an important role in managing more than 600 freight railroads across 150,000 miles of track -- all of which generates over \$50 billion in revenue each year.

### How the Solution Works

Freight information is saved onto weather-resistant tags that are attached to locomotives and railcars. This valuable data is then collected as they pass by readers strategically placed along each line and in the yards. The data is then transmitted to your host system, automating and simplifying management functions. The system can also monitor critical operating information, such as fuel and water levels, and oil pressure.



### Commitment to the Industry

TransCore products are specifically-tailored to the rail industry, and ensure compatibility with existing infrastructure.

#### Key AEI Applications:

- ▶ Track railcars and equipment
- ▶ Manage yard and equipment inventory
- ▶ Control gate access
- ▶ Authorize fuel terminals
- ▶ Assess locomotive, generator, or refrigerator fuel levels
- ▶ Ensure load integrity

#### Key Benefits:

- ▶ Allows real-time classification, tracking, status
- ▶ Improves data collection accuracy
- ▶ Streamlines data collection and record management
- ▶ Reduces maintenance
- ▶ Automates wayside detection and railcar weighing
- ▶ Reduces dwell time and labor cost

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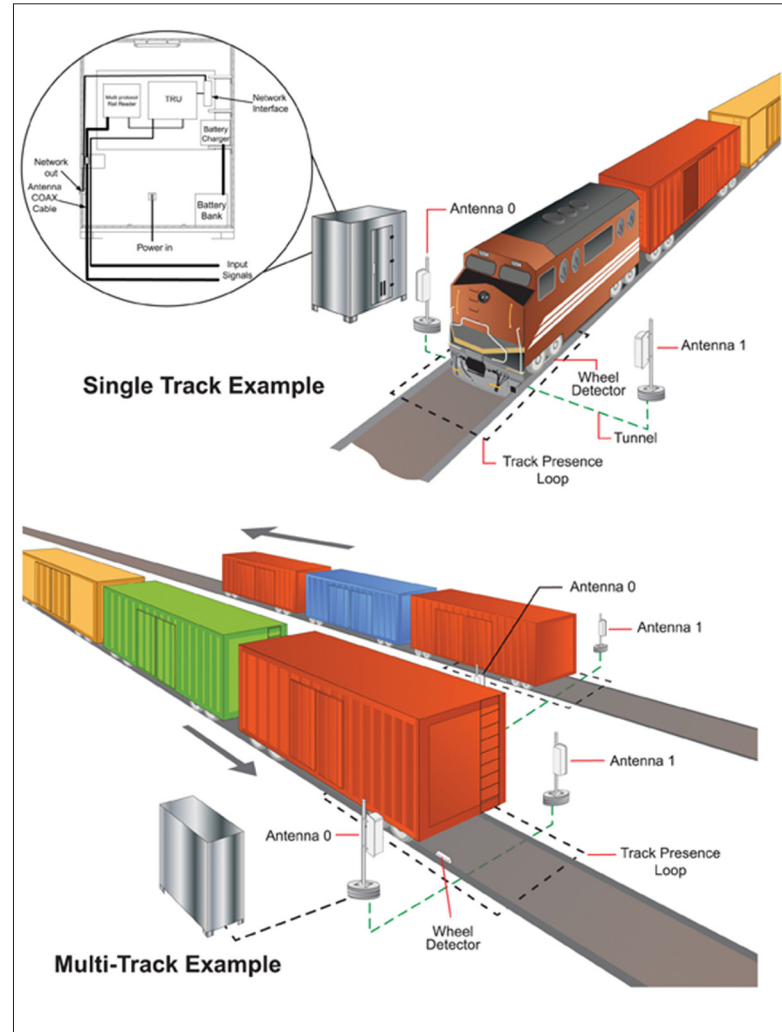


*“AEI boosted the reliability of our data into the upper-90 percentage range.”*

Robert Lease, Director of Transportation, Customer Service and Support  
Burlington Northern Santa Fe (BNSF)

### New Readers:

- ▶ **Multi-Protocol Reader Extreme (MPRX)** - Advanced multiplexing techniques allow this reader to manage up to four antennas, enabling two track operations with a single MPRX -- meaning less hardware to install and maintain. Software managed frequency selection and RF power settings improve flexibility, and a smart design provides a compact, easy-to-install unit in an IP67 sealed case.
- ▶ **Train Recording Unit (TRU™)** - A new powerful processor-based reader system captures tag and other data to generate an accurate railroad standard S-918 consist report, and transmits this data to host computer systems.
- ▶ **Encompass® Readers** - includes new handheld models
- ▶ **AP4118 Rail Tag Programmer** - when used with a new permission tag, this reader increases data content security.



### New Tags:

We've developed a new generation of standard rail tags, complete with read/write capabilities. We also now provide high temperature and end-of-train (EOT) tags. All are compatible with the extensive reader infrastructure now in place and are programmable via RF.



### Proven Technology to Move Freight Forward

Freight Railroads all over the world trust TransCore's RFID-based systems to provide accurate data for their train control and signaling systems. Contact us to improve your train operations and customer satisfaction.

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### For more information:

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