

# AUTOMATE YARD OPERATIONS

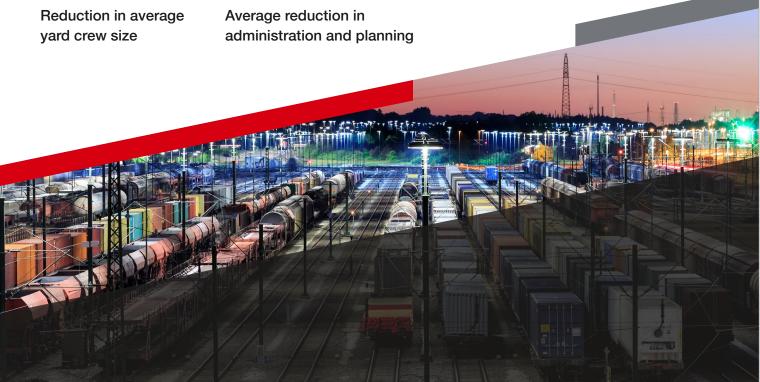
#### TRANSFORM OPERATIONS AT YARDS & TERMINALS

Yards play an important role in the rail network. Separating and sorting freight wagons and building new outbound trains are central to delivery performance. With over 50% of wagon volume passing through yards, these transportation nodes impact departure performance, cycle time, and operational efficiency. Yet, today, much of the work being done in yard operations is manual and inefficient.

Wabtec's four-step framework for yard automation provides a phased approach to optimizing yard operations. Spanning decision support, inventory management, asset movement, and condition monitoring, it enables railroads to jump in at any step and drive immediate transformational improvements in yard operations.

33%

44%+



#### **AUTOMATING YARD OPERATIONS**

# Planning & Decision Support

## Yard Planner:

Make the best decisions around asset use and resource allocation with powerful dynamic planning.

# Wagon / Container Inventory Management

Asset Inventory Management:

Track and trace wagons /containers in the yard and execute plans aligned to real time conditions.

# Efficient Asset Movement

# LOCOTROL® Remote Control Locomotive:

Empower yard crews and enable safer, more efficient operations through remote control.

# Condition Monitoring of Rail Assets

Wayside Condition Monitoring:

→ Automatically capture and analyze rolling stock condition data; identify

issues; mitigate incidents.

#### **SOLUTIONS & CAPABILITIES**

#### **Yard Planner**

- Generates optimized wagon processing plan
- · Dynamically re-plans tasks every 2 minutes
- · Considers all inbound traffic for the next 12 hours

# **Asset Inventory Management**

- Tracks and traces wagons in the yard
- · Integrates wagon ID detection without AEI
- Combines high performance edge devices with scalable cloud analytics

# **LOCOTROL®** Remote Control Locomotive

- Provides remote control of heavy haul locomotives in rail yard or main line
- Integrates with hump control
- Supports both conventional and DP trains

# **Automated Inspection Analytics**

- Condition monitoring of train components
- Combines machine vision with remote sensing technology and Al-driven analytics
- Algorithms tailored to inspection requirements

#### **BENEFITS & OUTCOMES**



## **Increase Productivity**

Reduce rework. Automate administrative and planning tasks. Enable a single operator to remotely control a locomotive. Reduce manpower for switching operations. Streamline inspections.



#### **Expand Visibility**

Enable real time wagon and container status.



### Increase Yard Velocity

Eliminate information flow bottlenecks for improved asset cycle time.



#### **Increase Service Performance**

Reduce wagon dwell. Improve on-time departure and trip plan compliance.



# Improve Asset Reliability & Availability

Identify defects sooner and preempt component failure issues.

#### CONTACT

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