

Network Restrictions

Track slow zone implementations/clearing in one place.



For most rail organizations, the scheduling of work closures, the tracking of slow zones, the notification of parties, and the reporting of restrictions are manual processes. What if you can manage all these processes in one place, helping ensure your Positive Train Control system runs smoothly, and improving NTD reporting and overall Transit Asset Management outcomes?

Trapeze Network Restrictions manages all track restrictions to support cross-departmental coordination between operations and maintenance. It customizes workflows based on roles and creates an intuitive system to record initiation and clearing of restrictions. This Enterprise Asset Management (EAM) module automates the time-consuming work of calculating and communicating which portions of rail are under operating or speed restrictions.

Overview

Track Slow Zone Implementations

- Displays the current state of the network at any given time as indicated by operations; shows both operating and speed restrictions
- Enables staff to plan work by tracking defects through the restriction lifecycle; can populate data from EAM Service Request
- Shows overlapping restrictions, correct speeds for each restriction, types of implementations needed, and lesser restrictions still in place
- Asks for authorized person imposing the restriction to ensure safety and workflow oversight

Monitor Clearing of Slow Zones

- Indicates which restrictions have been lifted to prevent them from staying longer than necessary
- Shows any variable speed settings needed for cleared sections; shows associated work still left open
- Asks for authorized personnel before restrictions can be cleared

🗠 Visualize Restrictions on a Track Chart

- Shows current speeds and operating restrictions in a track-chart-style view; chart changes in real time as restrictions are set
- Precisely locates wayside assets (switches, signals, stations, crossovers) through Linear Reference System (LRS); shows implementations (e.g., signs) clearly on the track chart
- Shows any other restrictions within the area; indicates both restricted and affected areas
- Shows alerts if restrictions are cleared to the incorrect speed

Maintain Operational Control/Oversight Throughout Restrictions Workflow

- Provides a single source of truth for all data on restrictions
- Tracks the history of the restrictions, including the audit trail of staff who implemented and cleared restrictions
- Tracks all cleared implementations for NTD reporting

Agency Benefits

Safer Rail Operations

Ensure the safety of your crew and customers by specifying the types of protections you have implemented for the restriction. In safety-critical systems, having a single source of truth ensures better coordination between operations and maintenance. It minimizes missed action items from manual processes (e.g., paper-based audit trails, phone/mail communication, and multiple departments involved).

Network Restrictions provides visibility across restrictions and helps ensure that restrictions are set to the appropriate speeds. The module supports Positive Train Control systems by tracking infrastructure variance (e.g., some sections are controlled by circuits, others, not) across the rail system.

Improved Reporting

The Federal Transit Administration (FTA) requires agencies to report all slow zones for Transit Asset Management (TAM). Network Restrictions collects the slow-zone data needed to support the FTA's TAM Final Rule calculation for the percentage of the rail alignment in a 'restricted' state. Having a single place to track all restrictions data streamlines FTA reporting for your agency.

Seamless Information-Sharing

Network Restrictions manages slow zone activities between operations and various Maintenance of Way divisions (tracks, power, signal) to provide visibility for everyone involved and improve coordination and oversight.

Passenger Benefits

Safer Journeys

• A centralized database for restrictions data helps ensure safety-critical items are not missed across the restrictions workflow, improving passenger safety

- Better On-Time Arrivals

- Slow zones create delays and schedule disruptions that frustrate passengers
- Restrictions staying longer than necessary impact the customer experience



