AssetWise® Linear Analytics

Linear Asset Decision Support for Rail

AssetWise Linear Analytics for Rail is a railway decision support system that enables proactive management and support for linear railway assets. The application is designed to help you turn railway data into actionable information, enabling better decisions about track and other maintenance-of-way assets. Track managers can confidently determine what work needs to be done, where to focus the work, and when to perform the work. You can collect and maintain data from many sources. By using AssetWise Linear Analytics to consolidate data into a single system, you can eliminate errors and speed up decision-making. The data is easy to interpret and does not require technical expertise.

RAILWAYS USE ASSETWISE TO:

- Improve overall service, safety, and reliability.
- Reduce maintenance and equipment costs.
- Increase profit margins.
- Streamline capital planning and operations.
- Improve field reporting accuracy.

BIG DATA AND THE INTERNET OF THINGS

Data collection systems, such as track geometry vehicles, ground penetrating radar, laser scanners, video recorders, and track walkers, can produce many gigabytes of data in a day. AssetWise Linear Analytics efficiently stores, links to, and correlates this data for rapid access and analysis, enabling you to make timely and accurate maintenance decisions. The application supports managing datasets containing hundreds of thousands of surveys and can be terabytes in size.

DATA ANALYSIS AND RULES ENGINE

AssetWise Linear Analytics has a library of more than 200 linear network-aware data processing rules and commands that can be applied to extract actionable information. These rules can find clusters of defects, trend track degradation to plan surfacing, and filter spikes and flat lines from measurement data. Furthermore, these rules can be combined to perform sophisticated data analysis that extracts more value from existing data.

DATA VISUALIZATION

Data visualization is critical in transforming vast quantities of complex linear data into actionable information that users can readily access, understand, and utilize. Straight line diagram visualization features provide you with instant access to an informative representation of any combination of configured data types at any location on the railroad network.

SOURCE DATA INTEGRATION

AssetWise Linear Analytics brings together linear asset data from any number of sources and correlates the data by location and time. The application includes integration capabilities for importing files and linking to existing databases, as well as web services to communicate with other systems.
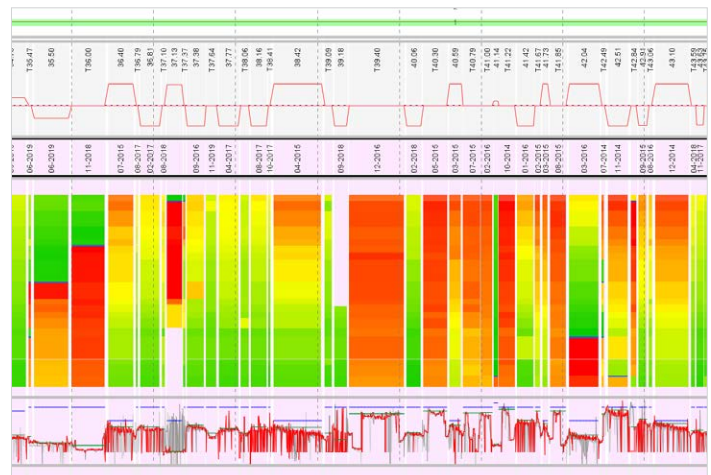
You can extend value to discrete or hierarchical asset data systems like enterprise asset management and other computerized maintenance management systems or asset management systems by combining linear and discrete data analysis, then feeding results back to the non-linear systems.

DATA SECURITY

Keeping your data secure is our top priority. Only your authorized users can access your data and visualizations. Our expert team works around the clock to keep your data secure, allowing you to focus on the results.

CLOUD DEPLOYMENT

You can deploy AssetWise Linear Analytics fast and easily as a cloud-hosted managed service that includes all capabilities installed, configured, and ready to use. No server hardware is required. Start with a few users, then roll out to more users as data is populated. Cloud deployments are available with support plans to help achieve success.
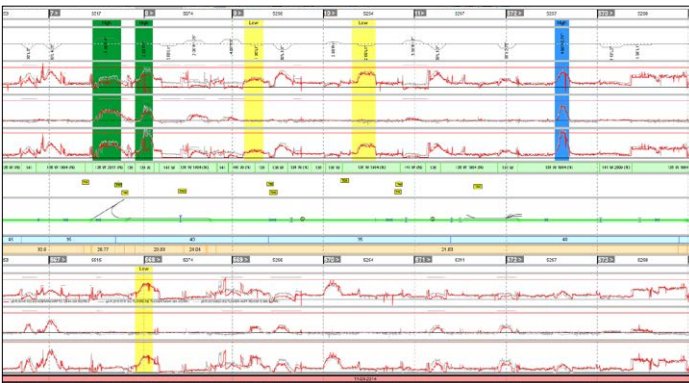

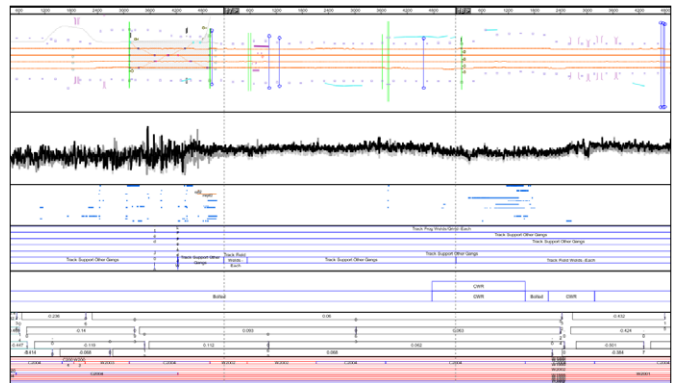*Analyze rail condition history and forecast rail maintenance.*

AssetWise Linear Analytics At-A-Glance

- Plan rail replacement and surfacing work based on historic rail measurements
- Produce PDF track charts for distribution
- Proactively fix issues before they cause slowdowns or outages
- Import track and traction power measurements, assets and events from numerous sources
- Provide users with data-driven interactive electric track charts
- Quantitatively prioritize capital requests
- Publish PDF and paper track charts
- Focus production surfacing to only locations that need it

- Use rail wear history to determine where and when rails will need replacement
- Record information in the field on your tablet
- Produce straight line track schematics from GIS track centerlines
- Maintain a history of track measurements across multiple collection vendors
- Automatically generate incident reports including the latest survey, work, and condition information
- Monitor SGR performance metrics, investment prioritization, and trend analysis

Manage rail asset information.

Visualize rail asset and condition data from multiple sources.

Bentley®
Advancing Infrastructure