

# Optimize Rail Investments with Advanced Analytics



## The Analytics Toolbox



Statistical Analysis and Modeling

- Outlier detection, data cleaning and imputation
- Design of Experiments



AI and Machine Learning

- Predict time to failure and changeouts
- Detect anomalies



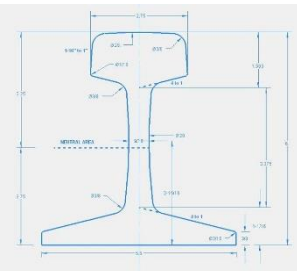
Mathematical Simulation and Optimization

- Create “what if” simulators
- Maximize rail life within investment constraints



## Benefits Delivered

- Know how frequently to grind for maximum rail life
- Optimize your track lubrication assets to extend rail life
- Balance track and energy savings
- Model and reduce wear using data
- Create comprehensive asset maximization tools based on AI
- Use historical data to identify and minimize derailment risk.
- Realize fuel savings
- Reduce wear on rolling stock



## Collaboration

Our “solution” is to build these AI skillsets in your team.