Digital Twin

Precision modeling for precision maintenance budgets and planning.

How much life extension is expected from specific maintenance activities? How much are these going to cost? How much money will the agency save doing preventive maintenance instead of rehabilitating and replacing rail assets? Trapeze's Precision Maintenance module helps to answer these questions.

Ready for Rail

Digital Twin for Rail Precision Maintenance provides track maintenance and advanced analytics tools to quantify the life extension and cost savings impact of rail maintenance strategies to help optimize and secure rail maintenance budgets. It simulates the life extension benefits of rail maintenance based on physics-based modeling of your railroad track, providing upfront visibility of the impact of your maintenance strategies to justify increased funding or protection of your maintenance budget.





Connect with our EAM Experts



Predict the Future

- Create 'what-if' scenarios with adjustable factors (e.g. grinding, traffic levels, wheel profiles) to scope the best maintenance outcome for rail track
- Compare rail life extension costs based on different maintenance strategies using snapshot inspection data for simulation
- Calculate various failure modes creating the greatest cost; quantify savings based on maintenance change



Track Performance Insights

- Identify high-visibility rail breaks, derailments, and defects compromising safety
- Integrate into State-of-Good-Repair/Capital Projects module for easier budgeting and planning; asset and work management portals for seamless creation of work orders and service requests; view asset performance assessment
- Understand the impact of detailed strategies such as reprofiling and friction management enables you to defend preventative maintenance budgets