## In-Service Track and Vehicle Monitoring

from Unipart Rail

Predictive maintenance solutions for Track and Vehicle Dynamics



Improve quality and effectiveness of maintenance
Improve performance and reduce failures
Reduce the impacts of poor track quality
Reduce overall cost of maintenance





## MoniRail has a vision to create a disruptive end-to-end service solution that reduces track maintenance costs.

This is achieved through the development of a cost effective measurement system fitted to in-service vehicles, providing regular and frequent data collection and enabling both reactive and planned maintenance to be optimised into preventative maintenance routines.

MoniRail is a spin-out company from Birmingham Centre for Rail Research & Education (BCRRE). Its initial focus is on the commercialisation of an in-service train data analytics platform coupled with an inertial measurement unit (IMU), that enables continuous monitoring of track and train.

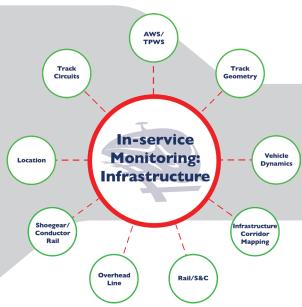
The solution is able to identify track faults, rough rides, provide predictive information and verify the success and quality of maintenance activities.

It also has the advantage of being easy to fit and can scale across a whole fleet of vehicles, providing a pervasive and lowcost approach to geometry monitoring.



## **Benefits of in-service monitoring**

- Improving the performance delivered to the end customer by reducing service affecting failures
- Reduce the impact of poor track quality including derailment
- Enable faster removal of temporary and emergency speed restrictions caused by poor track
- Prevent unexpected service affecting track geometry faults
- Improve quality & effectiveness of maintenance
- Increase measurement frequency
- Provide earlier warnings of potential failures
- Supports the transition to condition-based maintenance



For more information, please contact innovation@unipartrail.com



## **Unipart Rail**

