OVERVIEW
Impact loads caused by tread irregularities on train wheels can increase the deterioration rate of track and rolling stock. In the worst instances, component failure can cause derailment.

The Wheel Impact Monitor (WIM) is a railway installation developed by the Institute of Railway Technology. The technology was subsequently licensed to Teknis. WIM systems are installed at CityRail and Freight Corp in New South Wales, Queensland Rail, National Rail in South Australia and previously BHPB-IO in Western Australia.

BENEFITS
• Reduced risk of wheel failure and potential derailment
• Prevention of impact damage to rail (corrugations, fatigue cracks)
• Reduced track structure damage and ballast degradation
• Reduced potential for exceeding allowable track sub-grade pressure
• Reduced rolling stock axle bearing and structural damage
• Reduced track and rolling stock inspection and maintenance requirements
• Improved maintenance scheduling resulting in operating and capital cost savings