HAWKEYE

The first fully integrated road surface and sub-surface condition assessment system, providing functional and structural data at highway speeds.

iPAVe

The **i**ntelligent **P**avement **A**ssessment **Ve**hicle (iPAVe) utilises innovative traffic speed deflectometer technology, integrated with the Hawkeye operating system, enabling comprehensive road surface and sub-surface condition assessment.

Doppler lasers monitor the response of a pavement to the application of a rolling load, providing data that includes continuous pavement deflection profiles, from which bearing capacity indices can be derived and pavement fatigue estimated.

The high accuracy and resolution of the iPAVe enables engineers to pin-point areas where the pavement has structural deficiencies and could be subject to failure. Roughness, rutting, texture, geometry, and automated cracking are measured along with several high definition cameras to collect asset and 3D pavement imagery, with the Hawkeye Platform fully synchronising all data streams.
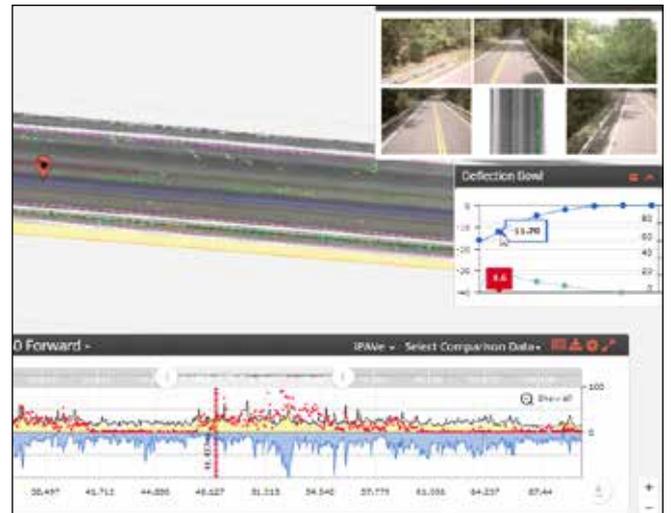
Applications

- Collects all pavement surface and structural parameters in one pass
- Ability to operate at traffic speeds, improving production, safety and efficiency
- Cost efficient with rapid collection and no traffic control is required
- Continuous measurements at higher resolution than traditional means (i.e FWD)

PAVEMENT MANAGEMENT INTELLIGENCE

arrbsystems.com

FUNCTIONAL AND STRUCTURAL PAVEMENT ASSESSMENT AT PROJECT AND NETWORK LEVEL

Features

- Powerful tool in managing the condition, maintenance and life-cycle of road networks
- High resolution detail and accuracy enables both project and network level analysis
- Fully synchronised structural and surface condition and imagery measurements enable comprehensive forensic analysis of pavement failures
- Assists in identifying the cause of the pavement failure, and what treatment is (or is not) required

- Ability to determine the structural properties of the pavement including sub-grade modulus, pavement modulus, and effective structural number
- Capable of collecting structural capacity of entire networks in just weeks, that would take decades via traditional means
- Interchangeable, scalable and identical Hawkeye outputs enables flexibility and optimization in network survey coverage
- Safety is significantly increased for operator and the road user

PAVEMENT MANAGEMENT INTELLIGENCE