Mobile SURVAI

SURVAI SYSTEMS
www.survai.com.au

Road assessment for Australia, New Zealand and beyond

Fact Sheet

Hardware

Class leading cinema camera

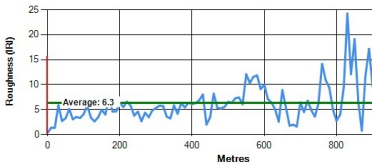
Using a cinema camera, we capture images in FHD (1920x1080).
A carefully selected Leica wide-angle lens ensures no distortion and a 70 degree FOV. This means road furniture can be easily assessed from the imagery as well.

Dual band GPS

Our Swiss made UBLOX receivers use 12 satellites including GPS, GLONASS and BeiDou constellations. Combined with our Canadian hand-built antennas, we can achieve high levels of accuracy, even in cloudy or heavily treed environments.
Horizontal error <1m. Typically 20cm.

Accelerometers and gyroscopes

Vehicle mounted high resolution 3-axis accerlerometers combine with gyroscopes, producing a Class 3 roughness device with excellent repeatability in speeds from 20kmh to 100kmh (repeatability error<2%)



Laser Profilometer

By using the worlds best German built SICK LiDAR, we achieve transverse laser profiling from a 2D system. A single high-speed device lowers the overall cost per km and provides the exact amount of definition for profile analysis. The extended range of 30m also allows for things like table drain shape analysis - making it perfect for regional areas. Highly accurate, the rut depth measurement has been independently verified at +-1mm over 10m sections by ROADSCAN.

Mobile SURVAI

SURVAI SYSTEMS
www.survai.com.au

Road assessment for Australia, New Zealand and beyond

Software

Synchronised

What makes the Mobile Survai system truly powerful is its ability to synchronise and capture sensor data every 10 metres. At each 10m interval, all instruments respond in unison—delivering a high-resolution image from the camera, precise location and speed from the GPS, a surface profile from the LiDAR, and detailed 3-axis spatial data from the accelerometer array.

It's your data

Mobile Survai isn't limited to collecting its own data—it integrates seamlessly with yours. When a segment file is supplied, core fields such as Asset ID, Locality, and Road Class are automatically populated. And if additional attributes like seal width, pavement width, or construction dates are available, up to 10 custom user-defined fields can be included. This powerful integration enhances the reporting capabilities within Desktop Survai.

Data transfer

Your survey data is securely stored in a robust SQL database. To make it accessible in Desktop Survai, Mobile Survai automatically uploads the data to a cloud repository hosted by Australia Cloud. This transfer occurs either upon survey completion or incrementally when within Wi-Fi range, ensuring your data is always up-to-date and ready for analysis.

User Interface

At a glance, the operator is presented with a live video feed, a map displaying the current location on the road network, and a shortlist of upcoming roads to select from. Once a road is chosen, it is highlighted in green on the map—providing immediate visual confirmation. When surveying a spine road, the user can conveniently pause at an intersection, capture data for a side road, and then seamlessly resume surveying the main route.
A breadcrumb trail is automatically created to show where the survey has been completed. Multiple users working on the same survey can share their breadcrumbs, enabling seamless collaboration and full network coverage.