

Whether your road network is sealed or unsealed or you need to perform a structural assessment or a dilapidation survey, the Australian Road Research Board (ARRB) offers quality data collection services to meet your needs.

ARRB has collaborated with local and state road agencies to assess the condition of their road networks for almost 30 years. This experience translates into the provision of accurate, reliable and timely data, in accordance with national and international standards.

ARRB maintains a fleet of dedicated survey vehicles, with various data collection capabilities to meet industry, road agency and local government requirements. The fleet can be mobilised anywhere in Australia and with trained survey operators located across the country, ARRB has the resources and know how on hand to provide quality data for your next project.

### **SURVEY CAPABILITIES:**

- automated pavement surface assessments
- automatic crack detection
- traffic speed assessment of structural condition
- friction measurement surveys
- geometry and mapping surveys
- roadside inventory and asset management
- road safety assessment
- airport runway condition
- speed and travel time surveys
- road construction quality testing
- dilapidation surveys



## **PAVEMENT CONDITION TESTING**

ARRB's fleet of survey vehicles can assess the condition of the road network/pavement above and below the surface allowing road network managers to make better informed maintenance decisions.

The ARRB Network Survey Vehicle (NSV) is a fully integrated mobile data collection system that can measure multiple pavement condition parameters such as roughness (longitudinal profile), rutting (transverse profile) and macro-texture, simultaneously in a single pass. The data is collected and reported in accord with current Austroads data collection test methods. At the same time, the NSV also collects digital video imaging from multiple cameras which can be used to identify pavement surface defects, monitor the condition of roadside assets and undertake road safety audits in the safety of the office.

ARRB's pavement strength testing services are carried out using a Falling Weight Deflectometer (FWD/HWD), a non-destructive testing device that provides data on the bearing capacity of road and airport pavements.

Suitable for highways, local roads and airport runways, FWD testing allows for accurate and rapid measurement of pavement deflection under loads. The data can assist in applications such as pavement overlay design, pavement condition surveys and in the development and operation of a pavement management system.

The Intelligent Pavement Assessment Vehicle (iPAVe) is best suited for highways, regional roads, tollways and larger collector and arterial roads. It's safety advantages and high collection speed enable entire road networks to be covered economically within a short time frame. Additionally, it collects the same parameters as our NSV fleet to provide road managers with additional data for making road maintenance decisions.

#### **APPLICATIONS:**

- Structural capacity health check
- Remaining pavement life
- Pavement design overlay
- Airport runway condition
- Airport PCN determination

#### CONTACT

Email us at info@arrb.com.au or for more information visit arrb.com.au/data-collection-services

#### About ARRB

Australian Road Research Board (ARRB) provides research, consulting and information services to the road and transport industry. ARRB is the source of independent expert transport knowledge, advising key decision makers on our nation's most important challenges.

VIC | 80a Turner St, Port Melbourne, VIC 3207 P: +61 3 9881 1555

NSW | 36-42 Chippen Street, Chippendale, NSW 2008 P: +61 2 9282 4444

QLD | 21 McLachlan St, Fortitude Valley, QLD 4006 P: +61 7 3260 3500

SA | Level 1, Featherstone Place, Adelaide, SA 5000 P: +61 8 8235 3300

WA | Suite 4B, Level 2, 1 Hood St, Subiaco, WA 6008 P: +61 8 9227 3000

arrb.com.au | ABN 68 004 620 651



# DILAPIDATION SURVEYS AND ROAD CONSTRUCTION QUALITY TESTING

ARRB offers an independent assessment of a pavement's ride quality both during and post construction. Our testing is undertaken in accordance with the prevailing jurisdiction's test method.

ARRB also routinely undertakes pre and post construction dilapidation surveys for major infrastructure projects to assess their impact on the public road network.

#### **APPLICATIONS**

- post maintenance / construction ride quality testing
- independent laser and imaging surveys for baseline data for infrastructure projects

#### **ACCURATE AND INTEGRATED INFORMATION**

ARRB can provide the technology to rapidly capture data and information that can be applied to effectively manage your road network to ensure that optimum performance can be achieved from your road and bridge assets.

We deliver quality data and information including:

- pavement profile and roughness
- rutting and surface texture
- pavement strength characteristics
- digital imaging of the road and surrounds
- visual assessment of condition using given standards
- road geometry
- bridge condition
- footpath condition assessment
- GPS location details.

For integration we also provide:

- heavy vehicle volumes and axle weights
- high speed weigh-in-motion
- vertical and horizontal alignment
- maintenance cost information.