

Airports connect us to each other - and the world.

The National Transport Research Organisation (NTRO) provides innovative research and practical solutions to challenges across our critical modes of transport: road, rail, ports, and airports. We offer government and industry innovative and integrated outcomes across all modes of transport.

Our airports team can provide industry-experienced advisory services to all levels of government and operators of public and private airports and airfields, with advanced research, RAPID pavement assessment, and specialised advisory services in the delivery of research, projects, and new policies. Working across Australia, New Zealand, and the Pacific, our highly skilled teams will support your project, policy and vision for a better future. Whether in a city, region or remote, we will be there for you.

- Pavement / deflection testing using iPAVE, Heavy Weight Deflectometer (HWD) and/or Falling Weight Deflectometer (FWD).
- Oue diligence assessments and reports for asset acquisitions.
- Determination of pavement classification rating (PCR) and/or conversion of PCN to PCR values.

- Technical advisory services for airfield pavements and/or major projects.
- Testing and certifying marginal materials for use in airfield pavements.
- Sustainability/ ESG advisory.
- Pavement management planning and forecasting.

Fast, accurate, minimal runway downtime.



Our unique technology and expert team deliver accurate, fast assessment of the condition of your airport runways, aprons, taxiways, and pavements with very little downtime.

The Intelligent Pavement Assessment Vehicle (iPAVE) has been accurately measuring road and pavement condition in Australia and New Zealand for more than a decade. iPAVE allows for accurate, in-depth assessment of airport runways, aprons, taxiways and all pavement areas - allowing you to determine accurately where and when to spend maintenance dollars. Airports are now using iPAVE with success to generate condition reports and more accurately develop their maintenance plans.

Comprehensive Data:

Samples every 10 metres, 80 times faster than traditional methods.



Faster than the competition:

Survey at 80 km/h, with typical outputs of 200-300km (20,000-30,000 tests) per day.

iPAVE

Complete Data. One Pass:

Simultaneous collection of all surface condition measurements in one pass.





Safety and Peace of Mind:

Reduced risk to general public and equipment operators.





IF YOU DON'T MEASURE IT, YOU CAN'T MANAGE IT.

Understanding the condition of your airport pavements is vital to being able to manage them effectively.



We are proud to have the largest fleet of survey vehicles and expert staff in the Australia, New Zealand, and the Pacific region. Our specialist infrastructure measurement team can perform the testing and has Australia's foremost expertise to perform analysis and provide powerful insights and solutions for smart, targeted and cost-effective pavement investment decisions.

We continuously invest in our people and new technology – so that you have the best information for your maintenance and capital works programs.



Advising Airports with PCN-PCR calculations

For airports throughout Australia, New Zealand and the Pacific, there's an important change coming. Aviation authorities will require all airports to have a new Pavement Classification Rating (PCR) to replace the old PCN (Pavement Classification Number). With aviation authorities requiring all Australian airports to transition to a new Pavement Classification Rating (PCR) from the old PCN (Pavement Classification Number) no later than November 2025, NTRO is in the position to support airport operators of all sizes with this important change.

NTRO has undertaken airport related testing, analysis and reporting on many airports throughout Australia utilising various methods including desktop assessments, Heavy Falling Weight Deflectometer technology, and its flagship infrastructure measurement vehicle, the iPAVE which incorporates TSD technology. The iPAVE (Intelligent Pavement Assessment Vehicle) allows for collection of a full data set, inclusive of deflection and condition data, in just 30 minutes. Note, pavement profile and geotechnical data may also be required.

NTRO prides itself on being innovation driven, with new ideas and concepts to ensure your airport gets maximum pavement measurement information accurately, with minimum possible downtime. NTRO encourages airports to discuss the status of their airport pavements and recognises that undertaking thorough strength measurements and assessments is not always required as part of any new PCR assessment. However, NTRO can provide this additional service, if and as required.



For more information

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