



DATA COLLECTION LIMITED

PAVEMENT CONDITION TESTING:
ROUGHNESS
COMPLIANCE SURVEY
(NAASRA)



PAVEMENT CONDITION TESTING

BENEFITS

- » Innovative, market leading technology
- » Surveying at traffic speed; no traffic management required
- » Vehicle Survey; no need for physical road inspections
- » Rating assets from the office
- » Simultaneously collecting and synchronising all data sets from one survey.
- » All datasets are collected and only the information required will be processed and analysed. Option of acquiring additional datasets at a later date without the need to resurvey.

Pavement condition data is essential to prioritise and manage maintenance activities on pavement surfaces - whether it's main arterials, back country rural roads, runways or ports.

Data Collection Limited specialises in surveying roads, airports, ports, railways, and providing data and information on the assets surface and sub-surface condition.

We operate a fleet of survey vehicles dedicated to collecting accurate, reliable and relevant data used in making sound engineering judgements and network level maintenance decisions.

Our services are ideal for those who require the high accuracy and variety of data needed to manage modern roads.

Applications

- » Annual surveys along sealed and unsealed pavements, forms part of forward works programme
- » Inventory and assets record
- » Budgetary decisions for pavement maintenance and repair

DELIVERABLES

Project and Network level testing

Longitudinal profile and Roughness	Rut data	Macrotexture
Pavement surface rating	Asset Inventory Rating	Road Geometry
Video imagery	Laser based pavement imaging	GIS Information



SURVEY: ROUGHNESS (NAASRA)

BENEFITS

- » Independent surveyor, receive a fair outcome
- » High accuracy data provided at required intervals
- » Skilled operators with sound understanding on good quality data
- » Processing is conducted in the office ensuring accurate, reliable data is delivered

Road Roughness Compliance Testing is required along pavement rehabilitations, new road construction and area wide treatments to ensure a smooth pavement surface. This is to ensure that the pavement surface complies with contract specification providing a smooth ride.

We conduct this test using either our response type roughness meter (ROMDAS Bump Integrator) or laser profilers. The survey is performed at traffic speed eliminating the need for temporary traffic management. Three replica survey runs / passes are undertaken along each lane and the average roughness is provided at the required intervals.

Applications

- » Ride quality, ensure pavement surface is smooth and safe for the public to drive on
- » Project sign-off, a key performance indicator for completion of projects

Standards

- » TNZ TM 7003 v1: Roughness Requirements for Finished Pavement Constructions
- » Laser Equipment:
 - » AUSTRROADS Test Method AG AM/T001: Pavement Roughness Measurement with an Inertial Laser Profilometer
 - » ASTM E950: Standard Test Method for Measuring the Longitudinal Profile for Travelled Surfaced with an Accelerometer Established Inertial Profiling Reference

DELIVERABLES

Average NAASRA (or IRI) reports at 10m, 20m or 100m intervals

Average NAASRA (or IRI) reports at 100m rolling average (based on 10m or 20m interval data)

Provision of all survey data as well as the average



OVERVIEW: SURVEY SERVICES

THE DCL ADVANTAGE

- » Leading-edge technology for accurate and comprehensive data for road maintenance prioritisation
- » Original manufacturers of the road survey technology
- » Unrivalled expertise to maximise capabilities and optimise system configuration
- » One stop shop solution with all required technical and operational experience
- » Pool of resources with offices in New Zealand and India

Data Collection Limited (DCL) is a New Zealand owned and registered company who perform highly technical highway surveys and manufacture ROMDAS equipment.

We have been manufacturing and providing advanced road survey equipment to clients for the past 30 years. From our origins in the early 1990s, we have a proven track record in the collection of highway and asset information, both in New Zealand and internationally.

DCL's Survey services specialises in providing innovative solutions for measuring and managing pavements. We invest in highly technical survey equipment that is designed to meet New Zealand and international standards.

Catering to the satisfaction of our clients, we provide data and information on assets, surface and sub-surface conditions. Our services can be applied to a wide spectrum of industries including roads, airports, ports and railways.

Our team has collective knowledge and technical skills with varied experience. We are dedicated to collect and report accurate, reliable pavement information which is critical to successfully prioritising budgets and maintaining a high standard of service.

Our Expertise

We have a dedicated team offering technical expertise for two types of surveys:

» Pavement Condition Survey

Information on the condition of the pavement surface and assets, visually and automatically

- » Pavement Surface Condition with video imagery
- » High speed survey with automatic pavement surface assessments
- » Automatic crack detection and mapping
- » GIS mapping
- » Roadside inventory and asset management
- » Road construction quality testing

» Structural Testing

Providing sub-surface structural data

- » Falling Weight Deflectometer Testing to determine pavement strength and identify failures
- » Heavy Weight Deflectometer Testing; for thicker pavements, airports and ports

