

COMPANY PROFILE

Engineering the Future of Infrastructure with Data-Driven Precision

- ROAD SURFACE PROFILING
- FRICTION TESTING
- AIRPORT RUNWAY TESTING
- DEFLECTION TESTING

KEY SERVICES

REAT Global is a pioneering provider of advanced road infrastructure intelligence, specialising in road data collection, pavement assessment, and digital asset management. We combine civil engineering excellence with AI-driven analytics to deliver smarter, safer, more sustainable roads for road authorities, airport operators, municipalities, engineering firms and construction companies across Southern Africa.

Falling Weight Deflectometer (FWD) Testing

The REAT Power 11 FWD drops a calibrated weight to imitate a vehicle load, measuring pavement deflection with an 11-geophone array to reveal structural strength, weak points and remaining life — non-destructive, and exported to TMH 18 format.

Road Surface Profiling

The REAT 17 Laser Profiler records IRI roughness and MPD/SMTD texture at traffic speed across paved and unpaved networks and airport runways, with synchronised video and GIS integration for network- and project-level assessments.

Visual Assessment on a Digital Platform

Our RoadSense platform and Visual Assessor app turn geo-located video and photos into standards-aligned condition scoring (TMH 9 distress, COTO workbooks), with map and section dashboards, multi-user roles and a full audit trail.

Roughometer Data Collection for Gravel Roads

The REAT Roughometer delivers simple, portable, highly repeatable roughness measurement on sealed and unsealed roads — real-time IRI from a precision accelerometer, with no calibration required.

ISO 9001:2015 Certified

Quality management system SACC/A-9000/CERT-90, valid to 2028-10-19 — underpinning every survey from field calibration through to the final deliverable.



SURVEY EQUIPMENT



FWD-01

REAT Power 11 FWD

Falling Weight Deflectometer · 11 geophones · non-destructive structural testing to TMH 18.



RSP-01

REAT 17 Laser Profiler

17-laser profiler · IRI, rut, MPD/SMTD at traffic speed · ASTM E950 Class 1.

Supporting Equipment

GPS-01

GNSS receiver

Positioning of test points and survey profile

TOW-01

Tow vehicle

Tows the FWD trailer to and around site

TA-01

Warning vehicle (Ford Ranger)

Amber beacons, chevron board; shadows the FWD at closure

TA-02

Signage & flagman set

Boards, cones, red flags, radios

KEY PROJECTS

- **Limpopo Province Road Asset Management System**
  RSP profiling with digital imaging across the paved network — 1,820 lane-km · 2026 · Provincial roads agency

- **N4 Sections 15–16, Zeerust to Botswana border**
  RSP survey, IRI and texture, national route — 23.8 lane-km · 2026 · Bakwena concession

- **Free State Road Network Data Collection**
  Panel of 3 service providers, paved and unpaved — 6,780 road km · 2025–28 · Provincial department

- **Eastern Cape Automated Road Condition Assessment, Phase 1**
  Rates-based automated condition assessment — 2,105 km · 2026 · Provincial



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REAT × ROADSENSE

ROADSENSE

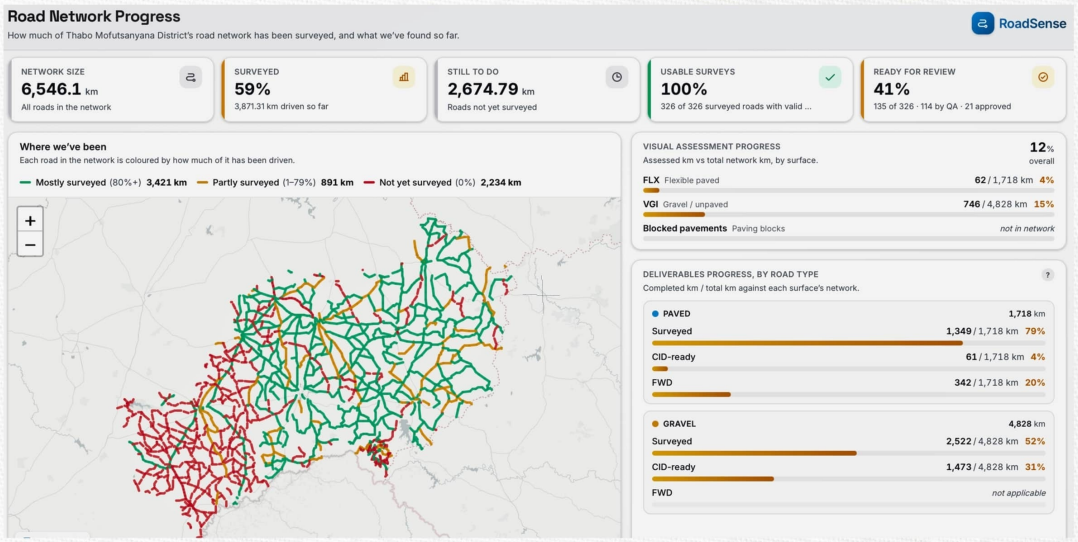
Raw survey data in.

Structured deliverables out.

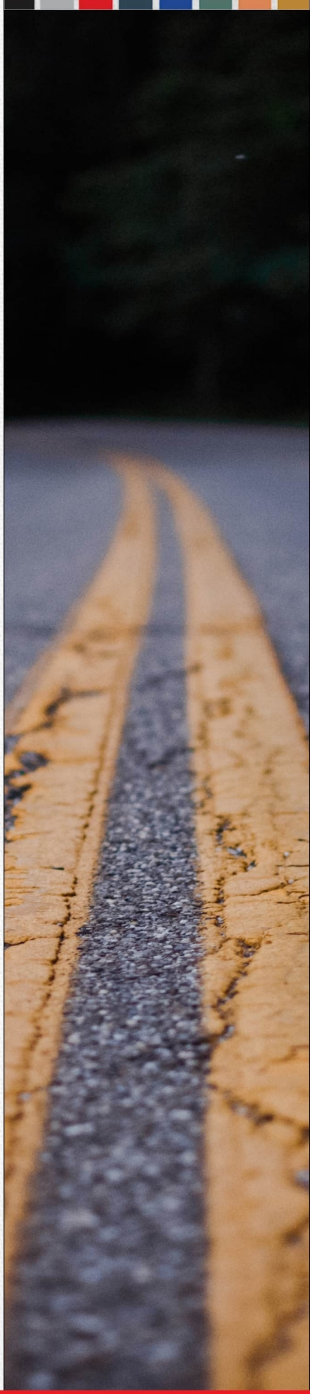
PLATFORM

The control plane for road survey operations.

RoadSense converts video stream data, GPS telemetry, and profiler instrument data into standards-compliant engineering packages. Multi-tenant. Audited.



- Network condition heatmaps over GIS
- Geo-located video logging
- Asset & defect condition scoring
- Multi-user roles · full audit trail
- Multi-Criteria Decision Analysis (MCDA)
- Road Safety Analysis
- Pavement Management System
- Visual Assessments platform (Paved & Unpaved)
- Digital RAMP Report
- TMH18 Data Exports
- Road Infrastructure Maintenance Plan & Masterplanning



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