

## Vaisala RoadAI pavement inventory

Comprehensive and objective analysis of pavement conditions for enhanced road management



### Key benefits

#### Better data for better decisions

RoadAI data in 10- or 100m resolution accurately classifies pavement for more than 20 categories of defects and patches to support strategic pavement programming and asset management at the city, regional, and national level.

#### Superior data analysis with AI

AI provides advanced analysis of the video data and removes human error. This results in a comprehensive inventory available less than 24 hours after survey that can be verified by the inspector from the video data of the entire network with just a few clicks.

#### Road condition reports 4x faster and at half the cost

RoadAI enables inspectors to work independently to multitask, resulting in decreased costs associated with data collection for pavement surveys.

#### Long-term condition tracking capabilities

RoadAI supports tracking of pavement condition deterioration over time, providing objective data to evaluate investments and adjust budget priorities from year to year.

Traditional road pavement condition surveys are mostly performed manually, subjecting the process to human errors and delays, and further draining limited resources. With Vaisala RoadAI, part of our Xweather family of subscription based products, pavement assets can be evaluated thoroughly and objectively for efficient management at a fraction of the price of manual evaluations.

Vaisala RoadAI combines a user-friendly Artificial Intelligence (AI) tool with high-quality geospatial video data and reliable methodology to simplify and improve pavement inventory and management. As municipalities and highway authorities seek better methods to assess their network of roads, Vaisala's advanced pavement computer vision analysis enables inspectors to quickly create thorough, accurate reports about pavement conditions using just a mobile smart phone to support strategic decision-making about asset management.

# Vaisala RoadAI at a glance

## Applications

- Provides information and analysis of pavement defects and patches across more than 20 different categories.
- Combines analysis of all defect types, including cracking, potholes, fretting, settlement, deterioration, and bleeding into objective surface condition report on every 10m segment.
- Supports data-driven decisions about pavement management funding and enables faster, more cost-effective maintenance with objective reporting on the success of past pavement management efforts.
- Enables tracking of accelerated road deterioration due to warmer winters, wetter summers, cold weather, and other effects of climate change.

## Key features

**Comprised of live road video and state-of-the-art analytics** for automated and unbiased inspection that can be independently verified.

**Fully automated and able to capture data more frequently**, RoadAI enables better decision making based on near real-time data.

**Easily export data to an asset management system** or Geographic Information System (GIS) for analysis in light of other relevant environmental or asset related factors.

**Flexible and easy procurement and deployment** supported by Vaisala customer care before and during service.

**Additional tools to support inspector processes**, including the ability to set a note pin to maps while driving via geospatial and audio-visual notes that merge voice over to location data. This feature allows inspectors to safely document information from the road for review after the survey.

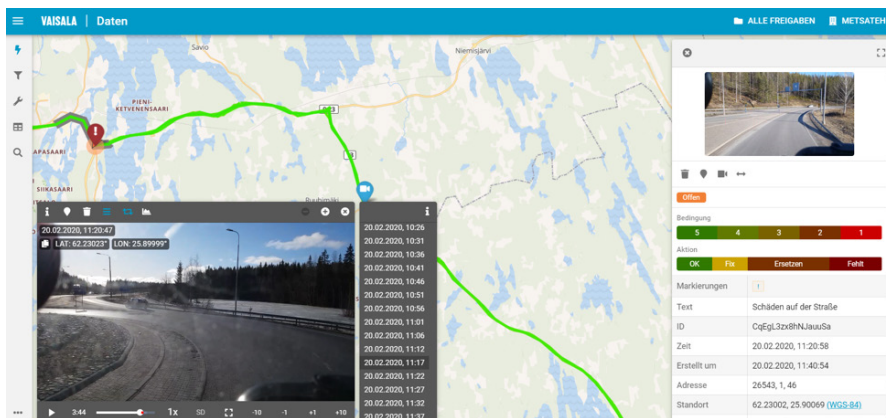
## Why Vaisala?

### Proven technology for superior pavement management

Vaisala RoadAI provides a tested and proven methodology for pavement inventory and management, supporting over 200 active, satisfied clients around the world. With more than 5.5M km of road scanned and nearly 5B images inspected globally, Vaisala equips clients to perform high-quality and usable road surveys no matter their location or experience.

### Support and services you can count on

Look to Vaisala for dependable support, project capabilities, and training so you can get the most from your system. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.



vaisala.com/roadai



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