

Maximizing drive time:

How Northumberland County Council gets the most out of RoadAI to conduct road condition surveys, safety inspections and much more



Northumberland County Council operates a wide variety of public services, including highway and road maintenance, in North East England. With 12 highway inspectors on staff, the organization maintains 5,200km of roads spread across 4 regions. The council focuses on providing high-quality services through strong community relationships.

Northumberland's inspectors cover a lot of ground — from remote country highways to coastal routes and everywhere in between. Traditionally working in teams of two, the inspectors conduct driven and walked processes and complete regular pavement and other requested inspections.

The challenge: Eliminate commuting downtime

With such a wide area to cover, inspectors often travel long distances to complete their tasks. Long distances led to long periods of downtime — up to 45 minutes one way — and lost productivity.

This lost productivity prompted Northumberland to find new ways of using driving time to increase staff and department efficiency.

The solution: Information gathering and automated condition surveys

The council launched a pilot test of Vaisala RoadAI, which began with four inspectors using the RoadAI handsets to conduct safety inspections and gather road condition data. The solution's easy integration features allowed them to quickly begin testing by connecting the mobile app to their existing database system.

The client:

Northumberland
County Council

Vaisala provided:

RoadAI

The solution generated data and annotations about road sign conditions automatically as inspectors simply drove from one location to another. At the end of their shifts, inspectors uploaded the data to their system.

The mobile data collection system also generates a video of the road network which can be used for multiple purposes. This feature saved inspectors from driving to some sites where road damage had been reported; they could just view the high-resolution video.

The benefit: Zero downtime, greater efficiency

Since RoadAI allows inspectors to gather sign and pavement condition data while driving, Northumberland quickly eliminated their inspectors' commuting downtime and rolled out the solution to all 12 inspectors.

Inspectors can accomplish more in less time with very little extra effort. Traditional road inspections require two inspectors: one to drive, the other to carry out

"We immediately saw a lot of potential in RoadAI and have expanded RoadAI usage to all of our inspectors. The system has helped us tremendously with efficiency, accuracy and maintaining a record of our road conditions."

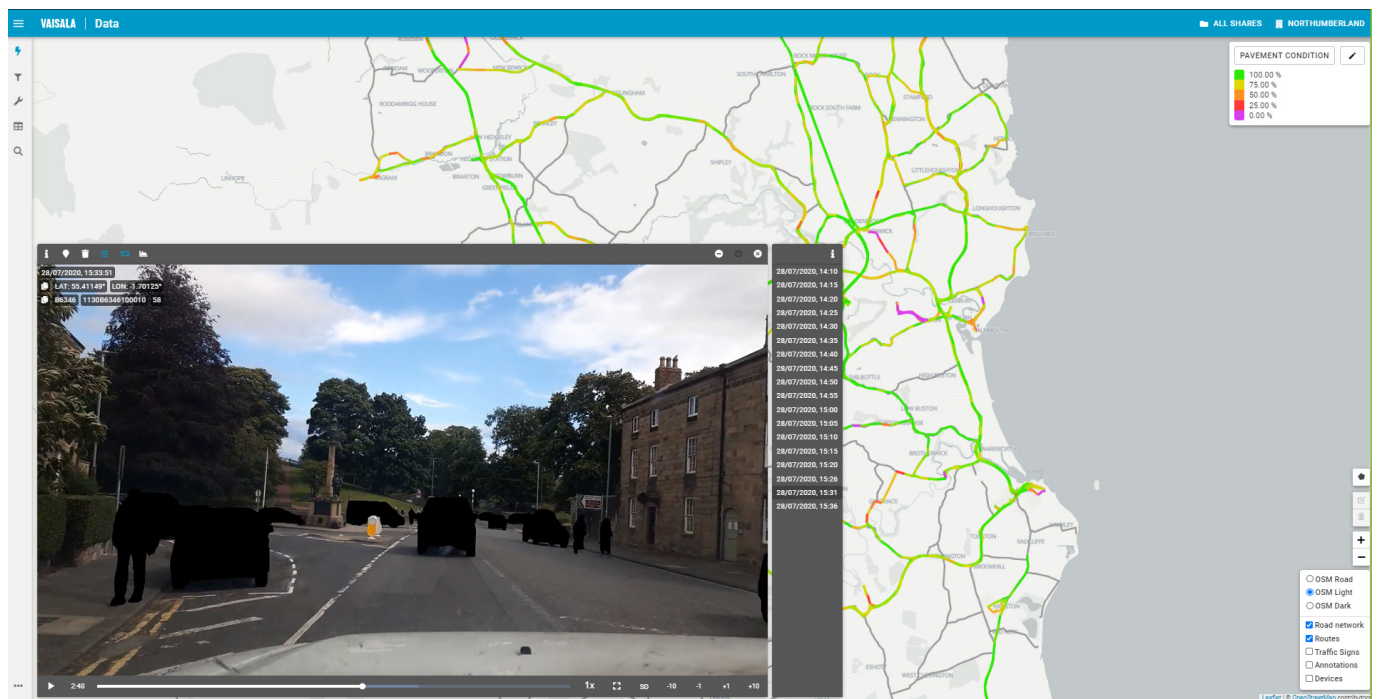
- Kris Westerby, Highways Delivery Manager

observations. RoadAI only requires one driver in the vehicle, freeing staff time to focus on other tasks.

The solution has enabled Northumberland to significantly increase the efficiency of their inspectors as well as the rest of the department, and speed up the process of analyzing and maintaining roads. With tens of millions of video frames already available for use, identifying and responding to road damage is much faster and easier for the organization.

RoadAI is enabling Northumberland to do far more than safety inspections. They are also using it to:

- Collect and update road sign inventory and condition
- Increase overall network knowledge including road conditions
- Identify road defects
- Prioritize local transport plans
- Review driven inspections when instructing defect repairs
- Cross-reference CVI inspections
- Assess repair quality



VAISALA

vaisala.com



Scan the code for more information

Ref. BB212183EN-A ©Vaisala 2020
 This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications — technical included — are subject to change without notice.