



RoadMetrics

Case Study
roadmetrics.ai

Telford & Wrekin Council identify potential cost savings using RoadMetrics AI

About Telford & Wrekin

Telford and Wrekin Council is a local government authority responsible for the administration of the borough of Telford and Wrekin in Shropshire, England, which has a road network of over 1,000 km in length.

Scope of work

Earlier in August of 2022, the council, led by Highways Manager, Nathan Lyttle and Sr. Highways Engineer, Toby Showering, agreed to perform a 50 km trial assessment within Telford & Wrekin's road network.

"AI has a strong future within the highways condition asset industry. A significant number of providers are moving towards utilising AI to reduce the resource burden, provide consistency and increase the speed of highways condition assessments. Further advancements in AI systems, should allow for the inclusion of fringe cases and defects and also allow for a greater spectrum of highways assets to be mapped effectively. "

—Toby Showering, Sr Highways Engineer, Telford & Wrekin Council

Survey data upload

The condition survey data collection effort was led by Senior Highways Asset Management Engineer, Toby Showering at Telford & Wrekin Council.

Using a smartphone installed with the RoadMetrics Data Collection App and a standardised windshield mount, the council uploaded close to 50 km of video survey data. The duration of the data upload was just over two hours of driving time.

The video survey was instantly uploaded on the app and on to RoadMetrics' AWS cloud servers in London.



Condition survey data uploaded by Telford & Wrekin Council using the RoadMetrics Data Collection App.

The challenges

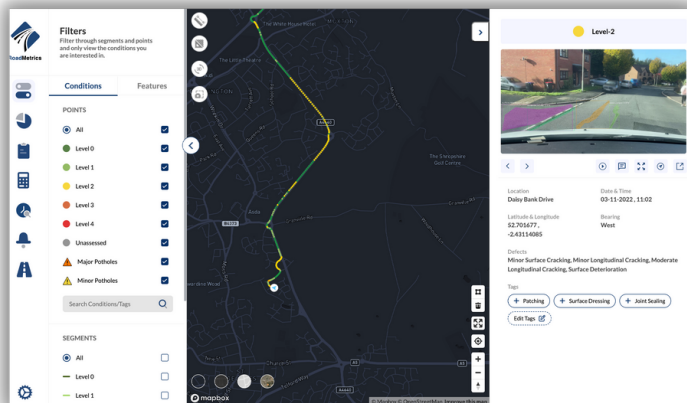
Telford & Wrekin Council currently perform Detailed Visual Inspections (DVI) using expensive scanning equipment under their engineering survey programmes for road treatment.

Only a quarter (25%) of the network is assessed every year due to the higher costs associated with performing condition assessments.

The results

Once the video was uploaded, a condition assessment was made using the AI model built by RoadMetrics in less than 48 hours.

The results were available on RoadMetrics' Enterprise web-based GIS application. Telford & Wrekin Council were able to visualise the road network and identify areas of investigation within their road network.



Assessment results using the RoadMetrics Enterprise web-based GIS platform.

The outcome

The results from the RoadMetrics AI system for automated condition assessments were compared to manual inspections.

The results suggested a substantial improvement in inspector productivity and potential cost savings of up to 30%.

"We found the system extremely intuitive to use, both from a back end, data collection and processing perspective, and also the interaction with the front end, display and analysis SaaS portal. The equipment requirements and therefore costs for the data collection, was also a fraction of competitors, and would allow for an increased frequency for data collection, resulting in more reliable, up to date asset information."

—Toby Showering, Senior Highways Asset Engineer, Telford & Wrekin Council



RoadMetrics with the Highways Team at Telford & Wrekin Council