

DfT to embrace artificial intelligence technology in plans for local roads health-check

- Department for Transport (DfT) announces a national examination of road markings to help improve road safety
- assessment will give an insight into the current condition of local road markings, sections of the National Cycle Network and the country's footways

Innovative artificial intelligence (AI) technology will be used to help improve the condition of local roads, thanks to DfT funding announced today (20 July 2019).

As part of a wider £350 million funding package for improving the quality of local roads, the department has awarded £2 million to develop the most thorough understanding ever of Britain's road markings.

By having analysis on the quality of near 100,000 miles of road, the department will have a clearer-than-ever picture of where investment is needed. Through this understanding, the department will be able to advise local councils where they could invest in areas that may need it most, improving road user safety on some of our busiest local roads.

Transport Secretary Chris Grayling said:

Road markings play a vital role in keeping everyone who is using the road safe, so making sure they're up to standard is imperative.

This funding will allow for advanced AI learning technology to assess the condition of the markings to improve the safety of our roads for all users.

DfT will undertake the health-check in close partnership with the Local Condition Roads Innovation Group (LCRIG). LCRIG, will in turn use the services of Gaist, a small SME based in North Yorkshire, to use machine learning AI technology that will review close to 150 million high definition (HD) images of our roads. The analysis will provide a clear assessment of where investment by councils could be utilised.

Poor road markings pose an issue for all road users, from cyclists to motorists. Poor road marking quality can make it difficult for road users to distinguish whether they can park on the side of the road, overtake or know how wide a lane is. This means road user safety can be put at risk due to a lack of clarity. By having a stronger road map of where markings need improvement, these issues can be rectified.

Paula Clayton-Smith, Managing Director, Gaist, said:

We are using over 146 million HD road images from our national databank and cutting-edge AI technology to assess over 96,000 miles of classified roads as part of this project. This is the largest exercise in assessing road marking readiness ever undertaken in England. Gaist are proud to have the AI capability that puts an SME UK business at the forefront of technological advances.

The funding will also go towards a survey of councils around pavement and footway conditions, which will help outline where funding could be targeted.

The department is also planning to assess sections of the [National Cycle Network](#), building on the audit undertaken by cycling and walking charity Sustrans, to better understand the condition of the network. This will help continue our commitment to promote walking and cycling and improve our public spaces. All three stocktakes combined underline the department's commitment to making roads and cycleways safer for their users, and to improve the quality of local roads up and down the country.

The funding announcement comes on the same day that bids open over the next 4 year for £348 million of worth of funding to improve our local roads, through the Challenge Fund and Pinch Point fund.