

Case Study

Enhanced delineation through Safer Roads Funding

SolarLite Active Road Studs help improve road safety on the A161—one of England's 50 most dangerous roads.

Background

In 2016 the Department for Transport (DfT) established the Safer Roads Fund to allow local authorities to improve safety on the 50 most dangerous local 'A' roads in England. These routes have the highest risk of death and serious injury and are identified by the Road Safety Foundation, in conjunction with EuroRAP, each year.

One such route is the A161 Goole in the East Riding of Yorkshire to the junction with the A18 in North Lincolnshire. This was identified as one of the 50 most dangerous roads based on collisions on the route between 2012 and 2014. There were two fatal; nine serious and 36 slight injury collisions during this time.

Further analysis revealed a loss of control at legal speeds as a significant contributory factor and that incidents

were distributed along the route rather than clustered around accident blackspots. A relatively high incidence of motorcyclist KSI collisions was also established.

Safer Roads Funding was granted in 2017 to address these issues through a combination of measures that included improvements to the road surface, signage and road markings.

Solution

In total, 600 white SolarLite Active Road Studs were installed along the A161 to provide enhanced delineation along the centre line along with other improvements to the road markings.

Active road studs store solar energy during the day and illuminate as darkness falls to provide a view of the road ahead 10 times further than that provided by traditional retro-reflective road studs.

The extra visibility means drivers have more time to respond to upcoming bends and changes in topography, helping them stay safely on the road. The studs have a low profile of less than 4mm, so do not present a hazard to motorcyclists.

Previous installations of SolarLite Active Road Studs have reduced night-time accidents by over 70 percent. It is hoped the combined road safety measures on the A161 will reduce the number of collisions by 40 percent in the three years following completion of the scheme.

Key Benefits

- Enhanced driver experience via increased visibility of the oncoming road layout
- Less environmental impact through use of solar power
- 10 times greater visibility for drivers compared with traditional retro-reflective road studs
- Highlight sharp bends and other road hazards