

Case Study

Delineation Scheme

Background

The A1 is the longest numbered road in the UK, at 410 miles (660 km), connecting London, the capital of England, with Edinburgh, the capital of Scotland.

The A1 Action Group is made up of elected members from Scottish Borders and East Lothian Council, transportation groups and community councils and is campaigning for single carriageway sections to be dualled. They also seek other ways to improve the safety performance on the road.

Transport Scotland attended meetings in which measures were discussed to ensure that the improving road safety record of the route could be further developed, by concentrating on more local improvements. Representations were made from local communities along the route which mainly focussed on the junctions of the A1.

Transport Scotland, together with their operating company for the route, Amey, worked with the local communities to take on board the issues highlighted and design measures which would help reduce concerns. To get an appreciation of the concerns, this included a drive through of each of the junctions during the day and hours of darkness. Entering or exiting the A1 during the hours of darkness was highlighted as a major area of concern.

"The installation of the studs has, in my view, revolutionised the driving experience on the A1 after dark. Concerns about safety on the largely un-dualled sections of the road between Dunbar and Berwick are well known, therefore any measures to improve the driving experience must be welcome. The studs have improved night-time visibility beyond all recognition along certain parts of the route, and I very much hope they can be extended to all the undualled sections east of Innerwick Junction, where the dualling presently ends."

**Councillor Michael Veitch, Dunbar & East Linton Ward;
Chair of Scottish A1 Action Group**

The proposals for improvements targeted three main concerns;

- General visibility to and from the junctions
- Lack of consistency of signing and road markings
- The lack of definition at and around the junctions

Solution

Transport Scotland and Amey proposed the installation of an innovative solution with the use of solar powered LED road studs at nine junctions on the route. This gave a visual consistency to the route by ensuring all major junctions were treated similarly.

The studs allow the junctions to be defined to approaching drivers and to operate in darkness without the need for external power. Clearview Intelligence's solution included using white and red SolarLite Flush Road Studs as road edge and centre delineation; and using amber and green studs to highlight junctions and other egress areas.

In total, there were over 4,100 studs installed along various sections and junctions covering 14 miles of the A1 from the Scottish border to the Granthouse Junction.

The works were completed in early 2016 including a full refreshment of road marking. The effectiveness of the measures will continue to be assessed as part of the annual review of accidents on the trunk road network.

Key Benefits

-  **Improved safety** through greater awareness of oncoming junctions
-  **Enhanced driver experience** via increased visibility of the oncoming road layout
-  **Less environmental impact** through use of solar power
-  **Local community** are engaged and feel safer