



Street lighting switch off and Safer Greener Roads

Sean Simmons
Business Development Manager

Clearview Traffic - the guiding force behind two great brands



The award winning market innovator for intelligent road studs



A comprehensive range of intuitive, cost effective and sustainable traffic data management solutions





Astucia - 21 years of making roads safer

Traffic Safety Systems

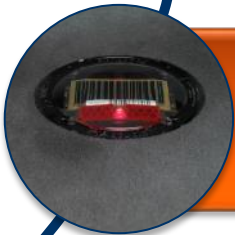
Innovative, smart, safe & sustainable casualty reduction solutions



Over 100,000 Astucia Solarlite flush studs installed worldwide
SolarLite LED road studs offer up to 10 times greater visibility



Proven to reduce night time accidents by more than 70%
TRL study demonstrated LED studs improve driver behaviour

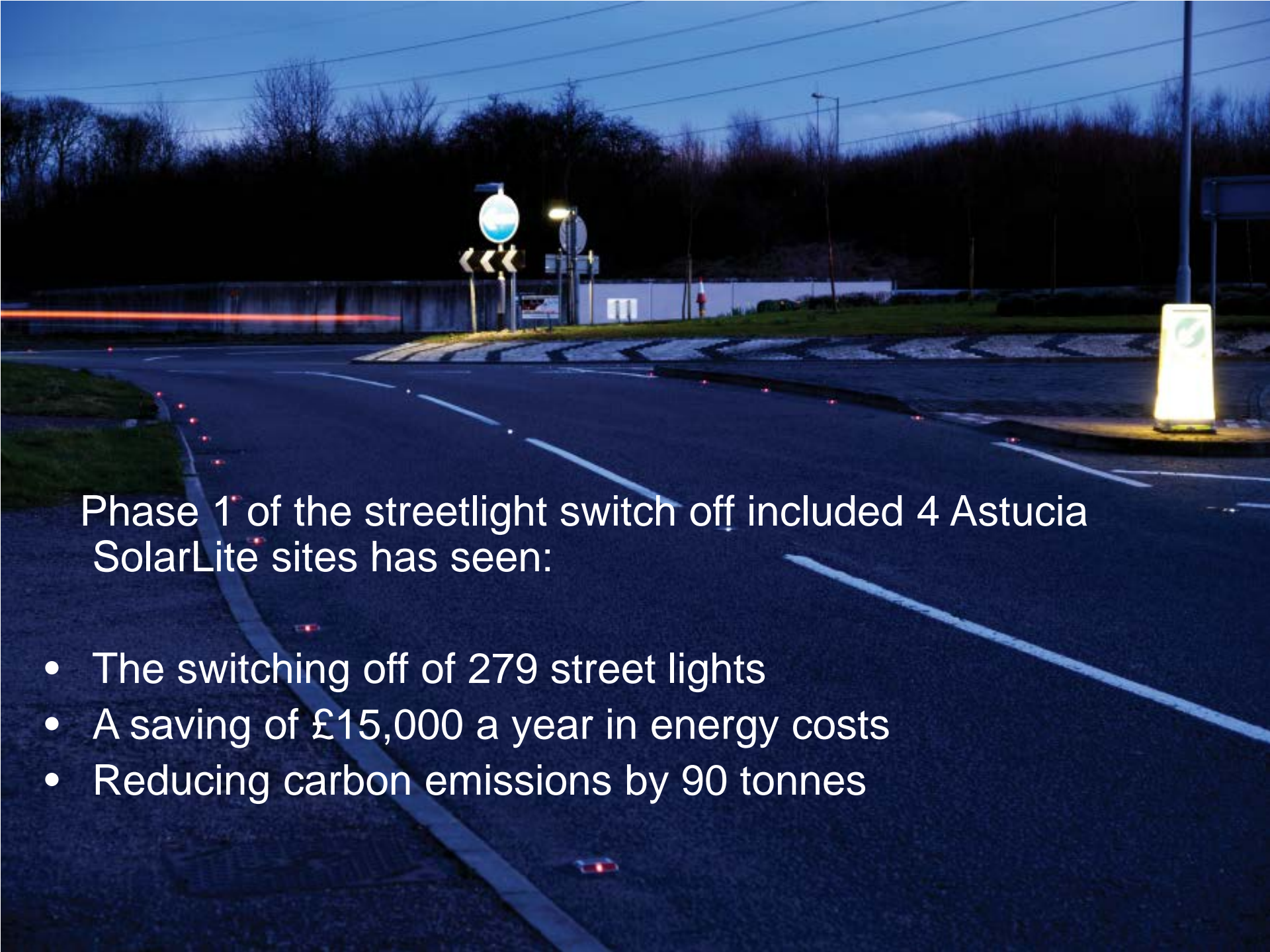


Inventors of the solar road stud
Only solar powered road stud with UK DfT type approval and meeting the new European standards

STREETLIGHT SWITCH OFF – BUCKINGHAMSHIRE CC


Buckinghamshire Street Light Switch off

- Targeted rural street lighting
- Benefits of urban street lighting are unaffected; pedestrian safety, crime rates etc
- Putting other safety measures in place such as better signage, improved road studs and the use of Astucia intelligent road studs.



Phase 1 of the streetlight switch off included 4 Astucia SolarLite sites has seen:

- The switching off of 279 street lights
- A saving of £15,000 a year in energy costs
- Reducing carbon emissions by 90 tonnes



A second phase trial is now underway comprising of 39 sites, including 11 where Astucia studs are being used. This has/will achieve:

- The switching off of nearly 3000 street lights
- An expected saving of £85,000 a year in energy costs
- An expected reduction of 500 tonnes of carbon emissions

A4128 High Wycombe



- Original road safety scheme and now a street light switch off location
- The most “improved road” in Britain in 2011 EuroRap report of road safety in the UK.
- Winner of “Road Marking project of the Year Award” at 2011 Highways Excellence Awards.

Monitoring Criteria

Incident Data

- Collision records – for injury collisions
- Other police records – e.g. Crime & Disorder issues

Inspections

- Inspections of signing, lining, road studs and foliage by Local Area Technicians
- Stage 3 (completion of scheme) safety audit

Feedback

- Community, equality and other feedback – positive and negative
- Change in people's perception in the dark / night at each site

Results – Buckinghamshire CC

- Generally no increase in night time accidents / incidents recorded
- Coincidentally daytime accident rate also fell as site – some additional safety measures have daytime benefits too
- Only six sites have had the lights switched back on after trial period due to local feedback
- All other sites now permanently switch off
- Buckinghamshire County Council are yet to report on the actual energy usage comparisons

ASTUCIA SOLARLITE ROAD SCHEMES

5 Compelling advantages

Smart

- Highlights road hazards without relying on headlight illumination
- Automatically illuminate between dusk and dawn

Safe

- 10x better visibility for drivers than traditional reflective studs
- Visible even in adverse weather

Sustainable

- Rechargeable using free solar energy
- Low carbon footprint

Cost Effective

- 3 to 4 times longer lifetime than traditional passive studs
- Lower whole life cost and rapid ROI

Proven

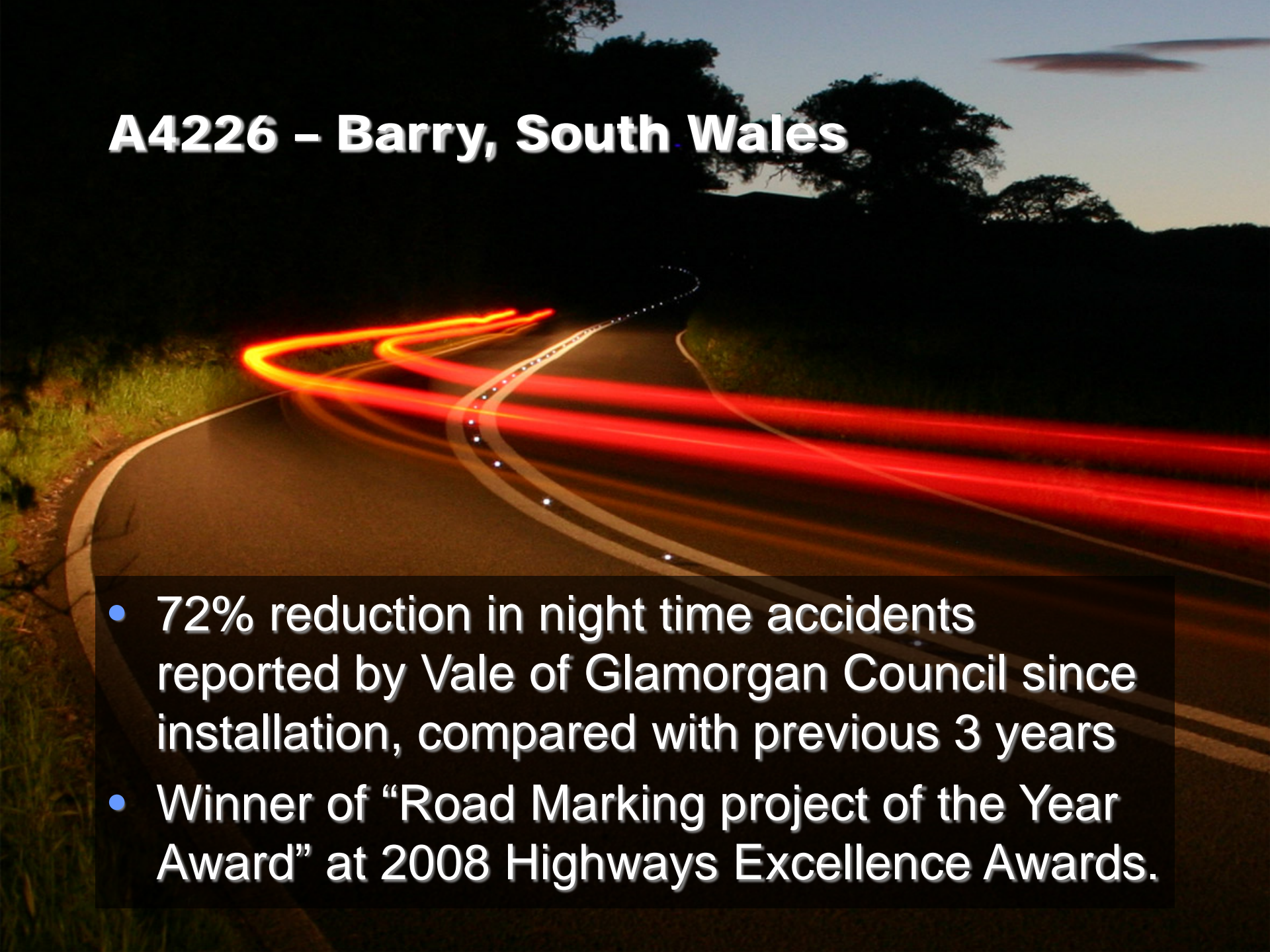
- Demonstrable reduction in night-time accidents of up to 72%
- Award winning road safety schemes

A41 Chetwynd



- A combination of Hardwired and Solar Road studs with VAS signs
- Hardwired studs & VAS trigger on speeding motorist
- Winner of "Road Safety Project of the Year Award" at 2012 Highways Excellence Awards.

A4226 – Barry, South Wales



- 72% reduction in night time accidents reported by Vale of Glamorgan Council since installation, compared with previous 3 years
- Winner of “Road Marking project of the Year Award” at 2008 Highways Excellence Awards.

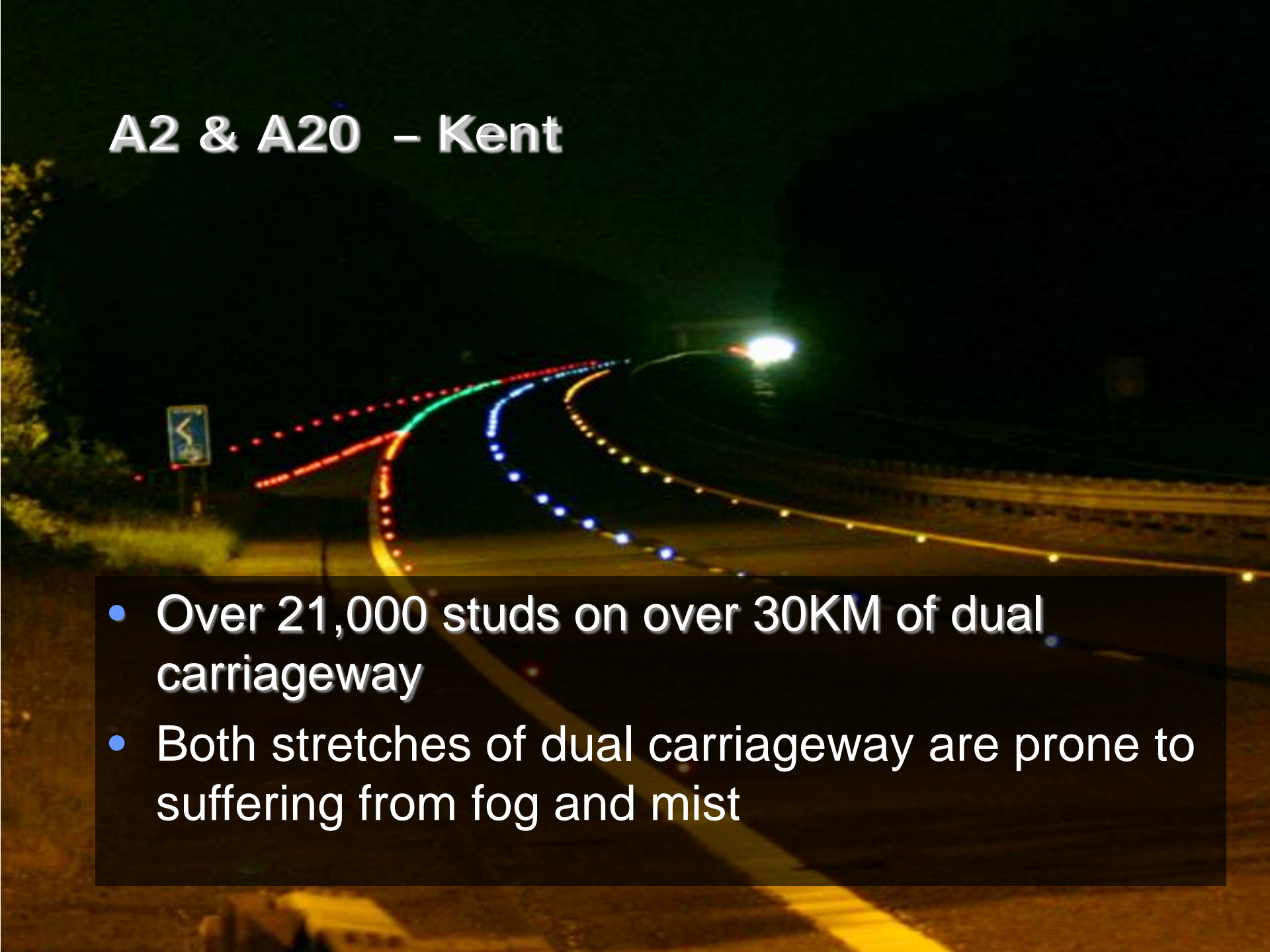
A143 – Haddiscoe, Norfolk

A long-exposure photograph of a road at night. The road curves to the left, and the background is dark. There are several bright, horizontal light trails in shades of orange and red, likely from vehicles. A speed limit sign is visible in the distance, showing a red circle with '50' and a white rectangle below it with a black silhouette of a person. The road surface is dark, and there are white dashed lines. The grass on the left side of the road is illuminated by a light source, possibly a street lamp.

- Norfolk CC advised: the overall accident frequency has reduced from 7.3 per year to 2.3 whilst the severity ratio has reduced from 36% to zero.

A2 & A20 – Kent

- Over 21,000 studs on over 30KM of dual carriageway
- Both stretches of dual carriageway are prone to suffering from fog and mist



M25 Clacket Lane



- Part of a project by Mouchel to help improve visibility and safety on a section of the motorway that lacks street lighting

M40 J3-4 & J5-6



- M40 between Junctions 3-4 and 5-6 suffered from high incident rate. No Street lighting for these sections
- passes through Area of Outstanding Natural Beauty therefore no street lighting

A70 Edinburgh

- A 3 mile Stretch of Rural single carriageway
- 'A' road to the SW of Edinburgh
- A mix of tight S bends, bends and hidden dips

Oldham Bus Station, Manchester

A nighttime photograph of the Oldham Bus Station in Manchester. The scene is illuminated by streetlights and the station's own lighting. In the background, a building with a 'COSTA' sign is visible. The foreground shows a paved area with several small, red, circular lights (IRS1) installed in a grid pattern, likely for pedestrian crossings. A metal railing is visible in the lower right corner.

New IRS1 Hard Wired installation at Oldham Bus Station to highlight Pedestrian crossings

These are also deployed at the following : Bury, Shudehill & Altrincham Bus Stations

Other Northern Schemes

North West, we have flush stud installations at the following:

Wigan CC - Meadow Pit Lane (Poor visibility made good with flush studs) 4 x schemes in total with accident stats issues bi-annually showing radical reduction

Manchester City Council – Wilmslow Road – Flush stud delineation between bus lane and cycle lane to aid cyclists (850 studs employed)

Kirklees MBC – 4 x major schemes on A'roads. Major scheme near National Mining Museum to Sandal reducing speeds, with dramatic results

Hindhead Tunnel – A3



- 863 hardwired studs switchable between normal running (9m uni) and contraflow (4.5m Bi) conditions.

Summary

- Meeting accident reduction targets
 - 70% reduction in night time KSI's
- A visible and newsworthy part of an overall casualty reduction program for a local or regional authority.
- A sustainable alternative safety measure for street light reduction in relevant situations.
- Provide a very much lower environmental audit score with less CO2 being produced as well as being less costly than traditional streetlights.

Award winning pedigree



2004

Prince Michael International Road Safety Award



2008

Highways Excellence Award for Road Marking Project of the Year



2010

The Sunday Times Green Award



2010

Carmen's Royal Logistics Corp Safety Award



2011

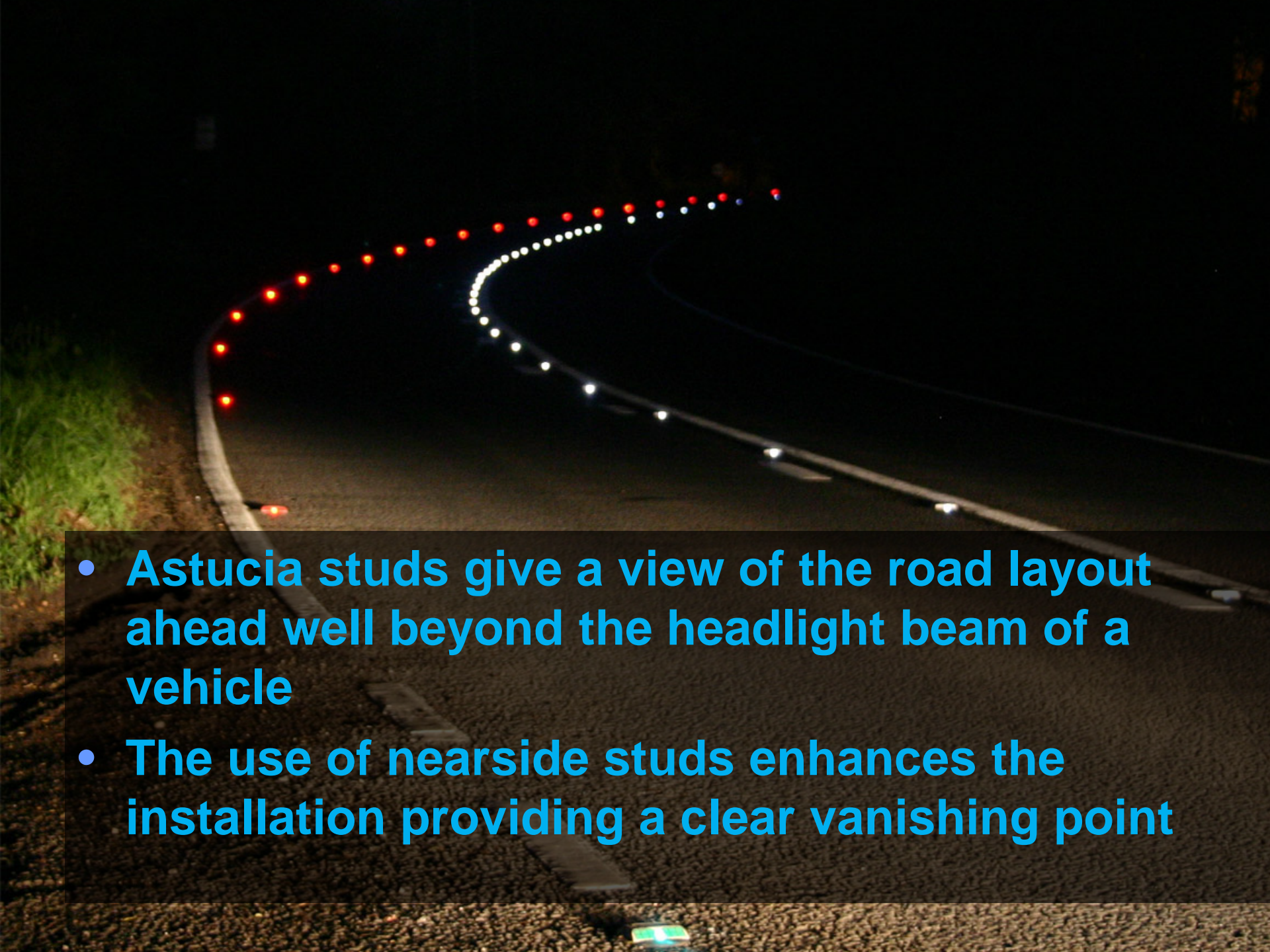
Highways Excellence Award for Road Marking Project of the Year



2012

Highways Excellence Award for Road Safety Scheme/Project of the Year



- 
- **Astucia studs give a view of the road layout ahead well beyond the headlight beam of a vehicle**
 - **The use of nearside studs enhances the installation providing a clear vanishing point**



Smart, safe and sustainable road studs increasing road safety by providing superior information about the road ahead, directly in the drivers vision.



Thank you and any questions?