

Case Study

MOVA Signals Aid

M25/A13 Traffic Flow

Wireless vehicle detection in MOVA installation aids traffic flow at Junction 30 of the M25

Background

The M25 Junction 30 / A13 interchange directly services the Port of Tilbury and Lakeside Shopping Centre and experiences heavy traffic throughout most of the day. As the area is under further development, traffic is forecast to grow by 25% by 2032 and Highways England have recognised the need for a major upgrade to help relieve congestion.

The upgrade included a widening of the M25 in both directions between junction 30 and the A126. In addition, the A13 through the junction has been widened to four lanes in each direction with new dedicated link roads and improvements to existing slip roads.

As part of the traffic flow around the junction, there are four sets of traffic lights in operation. These needed to be upgraded to enable general detection and MOVA control. As part of the upgrade there had to be a strong consideration on how to keep traffic disruption to a minimum.

Solution

Clearview Intelligence worked with the design consultants, Jacobs and then Balfour Beatty Skanska over the course of 18 months to help specify the best solution for the Junction 30 traffic signals.

One of the main considerations was the amount of cabling that would be required to connect the signals to the in-road detection units.

Clearview's M100 Vehicle Detection units use wireless technology to 'talk' to the traffic signals and inform them of traffic density, which means no ducting or trenching work, or loop cutting across lanes is required. This significantly reduces the cost of installation through less materials and installation time, and as only temporary single lane closures are needed, it removes the challenge of full slip road closures and associated costs of road management teams.

As part of the improvements Telent were asked to upgrade the existing traffic lights to their 'plug and play' installation system. Having worked with Clearview over several years Telent were aware of the benefits of the M100 Wireless Vehicle Detection technology as an alternative to traditional in-road loops and so were able to easily integrate the technology into their system. Each of the four sets of traffic signals were upgraded to MOVA using M100 technology. This involved 62 M100 units being installed with associated access points and repeaters across the junction.

The new junction design and traffic controls are now fully up and running, ready to take on the challenge of the next 15 years of growth.

Key Benefits

- Reduced installation costs versus traditional loop technology
- Rapid installation and deployment reduces road closures, worker exposure and traffic disruption
- Superior reliability and longer operational life than your average loop