

A novel system from Transpo is designed to reduce driver distraction from events on the adjacent roadway

Vehicle protection

Barrier and crash cushion systems can make a great deal of difference to roadway safety, with new technology offering major benefits to road users

In North America and Western Europe, concrete centre line dividers are being used for many major highways as these provide a durable solution for preventing cross-over accidents with large vehicles such as heavy trucks. It is worth noting too that other countries are now adopting concrete barriers for highway centre line dividers also, with this system being used on new or upgraded highways in many Eastern European nations as well as parts of Africa for example. Specialist firm Transpo has developed an innovative system that can be fitted on top of a concrete New Jersey-type barrier to further boost safety. This system fits onto the barrier easily and quickly and reduces the risk of driver distraction and dazzling caused by vehicle headlights on adjacent carriageways. The system also provides a noise attenuation function.

However, other solutions are needed for other roadway safety requirements. Steel barriers are used in many installations, while technologies have also been developed to meet the safety needs of vulnerable road users.

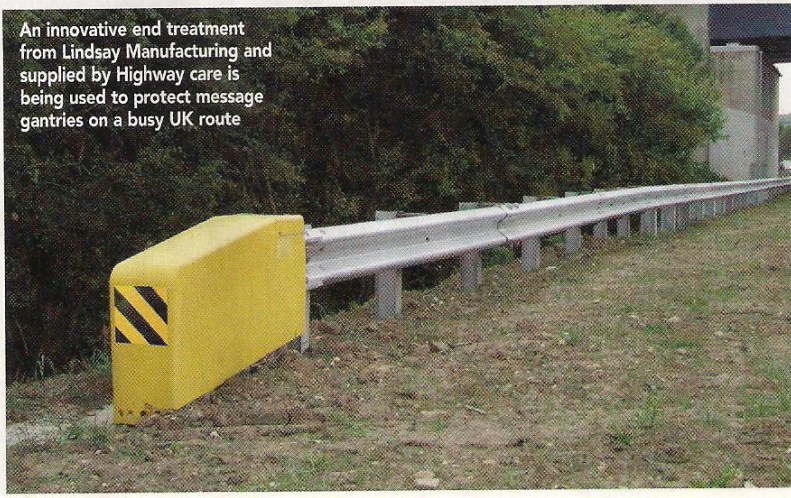
In the UK Highway Care has supplied 74

Xtension 110 P4 terminals for use on the busy A14, a key route that links the port of Felixstowe in East Anglia with industrial centres in the Midlands. Traffic volumes have increased substantially on the A14 and there has been a recognised need to upgrade the route. Over the last six months work has been underway to install fibre optic cables along the A14's length in order to provide real-time traffic information to 72 electronic overhead signs. Birse Civil Engineering awarded the contract to Arbus Civil Engineering to install safety barrier to protect this important infrastructure.

The Xtension 110 P4 terminal is manufactured by Lindsay Transportation Solutions and is still a relatively new product in the UK. This novel system absorbs energy from an impacting vehicle differently from most other barrier products on the market. Under impact a vehicle strikes the head of the system, which forces a friction plate to slide along two heavy-duty cables, dissipating energy of the impact. The system is also said to be fairly easy and quick to install as it features relatively few parts compared with some rival systems. As it requires few parts, this also helps reduce stocks for the contractor and overall costs for the client. Arbus Civil Engineering is now working along the M11 installing a further 30 systems.

Meanwhile, Highway Care has installed safety barriers on the UK's busy A12 at Colchester delete as part of the new Junction 28 bridge construction. In all some 288m of BarrierGuard N2 W2 Minimum Deflection Barrier has been placed on the hard shoulder of both the northbound and southbound carriageways for Carillion Civil Engineering. A further 1.2km of BarrierGuard has also been installed to protect the work areas for the construction of the four slip roads at Junction 28.

The installation was carried out to protect site personnel while work was completed for the bridge to cross the A12 as part of a new junction. The BarrierGuard N2 W2 steel safety barrier has been designed for use at roadworks on high-speed roads and was chosen by Carillion Civil Engineering for its low deflection and fast installation time. BarrierGuard N2 W2 is a low working width temporary steel barrier and protects site personnel while giving them a greater area in which to carry out construction and maintenance work.



An innovative end treatment from Lindsay Manufacturing and supplied by Highway care is being used to protect message gantries on a busy UK route