

Get smart and know your motorways

Frustrated drivers who find themselves stuck in traffic all too often will be pleased to hear about an innovative solution from the Highways Agency to help keep our motorways free from congestion

Smart motorways do just that by adding vital extra capacity on key routes to make for smoother and more reliable journeys for road users.

Motorists in the south east will soon be getting up to speed with the improvements once the M25 smart motorway scheme between junctions 5, near Sevenoaks in

Kent, and junction 7 in Surrey, at its interchange with the M23, is completed in the spring. Here, hard shoulder is being converted to a permanent traffic lane on this busy stretch of motorway to add extra capacity.

The technology-driven improvements mean motorways look different to how they have traditionally, as there are three different types of smart motorway:

- **Controlled motorway** – the use of variable speed limits. The hard shoulder, defined by a solid white line, should only be used in a genuine emergency
- **Hard shoulder running** – the hard shoulder, defined by a solid white line, is opened at busy times and the speed limit is reduced. The hard shoulder must not be used unless the sign over it displays a speed limit of 60mph or lower

“The vital extra capacity that smart motorways give motorists also helps during busy periods on key routes, tackling congestion”



Smart motorways on the M6 with hard shoulder running for exit to M5 (June 2011)



➔ **All lane running** – there is no hard shoulder on these sections of motorway. Road users must obey variable speed limits. If they need to stop in an emergency, they should use an emergency refuge area, motorway service area or leave at the next junction.

Educating drivers

The message from the Highways Agency is 'get smart, know your motorways' as it aims to help drivers understand how to drive on different types of smart motorway and know what to do if they break down.

In 2012, it was reported 175,658 drivers broke down on the hard shoulder, while 8,655 incidents were recorded of drivers stopping on the hard shoulder in a non-emergency situation.

Andrew Page-Dove, of the Highways Agency, explains: *"It is essential customers understand how to use these sections of motorway. Feedback following the launch of a similar section of smart motorway between junctions 25 and 30 of the M62 showed road users – particularly older and younger drivers – were keen to know more about how it works, which is why we're raising awareness and educating drivers about these improvements."*

Drivers will benefit from information about road conditions, speed limits and the hard shoulder, which is displayed on electronic road signs.

Motorists will notice variable mandatory speed limits displayed on overhead and verge-mounted signs in a red ring. Lane closures are displayed by a solid red cross while flashing beacons and

instructions to move out of a lane are displayed with a white arrow.

Smart motorways have the added advantage of providing technology to detect and monitor incidents that are happening on the network, coupled with dedicated systems which are able to communicate advice or instructions to drivers, such as lane availability or mandatory speed limits.

As a result, vehicles can keep moving smoothly instead of continually stopping and starting, as smart motorways can sense traffic flow and set speed limits accordingly. The vital extra capacity that smart motorways give motorists also helps during busy periods on key routes, tackling congestion.

With congestion estimated to cost the economy £2 billion a year and traffic levels forecast to grow by 46 per cent by 2040, this is a smart way to manage traffic and tackle the issue, the Agency said.

Page-Dove added: *"Smart motorways are a technology-led approach to getting the best out of our motorway network and are widely accepted to be a success story. Using technology to introduce variable speed limits and the hard shoulder as extra lanes, they have reduced congestion, smoothed traffic flows and provided more reliable journey times for road users."*

"All lane running is about efficiency and getting the most from the asset we


have, in a safe way, while tackling the most congested parts of our network. This means we can reduce costly delays, providing four lanes instead of three whilst maintaining our excellent safety record."

"We'll be working hard to help drivers understand the layout, signs and signals that will be used when the first all lane running schemes come into use this spring."

Controlling motorways

Smart motorways are managed and operated by the Highways Agency's Regional Control Centres. As any incidents are detected and reported, extensive CCTV coverage means the Agency can quickly verify any issue and deploy traffic officers as needed. They will also set signs needed to slow traffic down, close lanes or inform other road users of an incident ahead.

The Highways Agency is urging road users to follow the overhead signs and reminding them that the hard shoulder can only be legally used by motorists as a running lane when a speed limit is displayed above it – otherwise it is for emergency purposes only.

A range of information is available on the Highways Agency website and on social media, including the Agency's Facebook page, so drivers can get smart and know their motorways. Advice about how to plan journeys and prevent breakdowns is also available online. 

M42 smart motorways with 60mph limit and hard shoulder running at junction 5 (March 2012)

