



Smart Motorways

– What are they and how do you use them?

A smart motorway is a section of motorway in Great Britain that uses active traffic management (ATM) techniques to increase capacity by use of variable speed limits and hard shoulder running at busy times. Read our guide to find out more about driving on these roads.

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What is a smart motorway?

Many parts of Highways England's motorway network use technology to monitor and manage the flow of traffic. The technology is controlled from regional control centres which can activate and change signs and variable speed limits. This helps keep the traffic flowing more smoothly.

On some busier sections of motorways we temporarily open the hard shoulder or have converted it to a permanent extra lane so that more vehicles can travel, avoiding the expense and disruption of widening the road.

These technology-enabled sections of motorways have enhancements such as:

- Electronic message signs that display Red X signs and variable speed limits
- Sensors to monitor traffic volumes
- CCTV cameras
- Emergency areas, with emergency roadside telephones

What different types of smart motorway are there?

The three different types of smart motorway currently include:

- Controlled motorways
- Dynamic hard shoulder running schemes
- All lane running schemes.

Are smart motorways dangerous?

Many people are of the opinion that smart motorways are more dangerous than conventional motorways, because of the lack of a hard shoulder.

But Highways England has published statistics from data gathered since the first smart motorway opened in 2006 to say:

- Journey reliability has improved by 22 per cent
- Personal injury accidents have been reduced by more than half
- Where accidents did occur, severity was much lower overall with zero fatalities and fewer seriously injured

What fines can I get driving on a smart motorway?

Speeding

The same laws and sentencing applies for speeding on a smart motorway, but with more cameras on smart motorways and variable speed limits, motorists typically have a much higher chance of getting caught and fined for speeding.

This is further fuelled by the fact that many drivers do not realise cameras on smart motorways that enforce variable speed limits can still catch you travelling over the national speed limit even when a variable limit isn't in place.

“If no special speed limit is displayed then the national speed limit applies. Speed cameras are in operation on smart motorways. If you don’t keep to the speed limit, you may receive a fine.”

Highways England

Given the new speeding sentencing structures that could lead to as much as a £2,500 fine for offenders, motorists who flout the rules leave themselves wide open to a more severe punishment.

Red X

A Red X sign indicates that a lane is closed to traffic. You must stay out of that lane as there may be an incident or people working ahead, and we may need to keep the lane clear to provide access for maintenance or emergency services.

Ignoring the ‘red X’ sign is extremely dangerous

A Red X can be displayed on gantry signs above each lane or on large signs above the nearside (left hand) of the carriageway.

It’s illegal to drive in a lane closed by a Red X sign and with new Home Office legislation, offenders can automatically be handed a £100 fine and three penalty points.

For your own safety and the safety of others, never drive in a lane closed by a Red X sign (unless instructed to do so by the police or those instructed by the police, such as our traffic officers).

Tips for driving on smart motorways

- Never drive in a lane closed by a red “X”
- Keep to the speed limit shown on the gantries
- A solid white line indicates the hard shoulder - don’t drive in it unless directed.
- A broken white line indicates a normal running lane
- If your vehicle experiences difficulties, eg warning light, exit the smart motorway immediately if possible
- Use the refuge areas for emergencies if there’s no hard shoulder
- Put your hazard lights on if you break down

I've broken down on a smart motorway - what do I do?

If you are unlucky enough to break down or be involved in an accident while on a smart motorway, you should follow these steps:

- Use an emergency refuge area (ERA) if you are able to reach one safely. These are marked with blue signs featuring an orange SOS telephone symbol on them. Different types of smart motorways have different ERA spacing, but the furthest you will be away from one is around 1.5 miles. In December 2017, following discussions with the RAC and others, Highways England said: "On all lane running schemes in the future we will be reducing the spacing from the current maximum of 1.5 miles (2.5km) to no more than 1 mile (1.6km) spacing."
- If you cannot get to an emergency refuge area, you should try to move on to the verge if there is no safety barrier and it is safe to do so.
- In all cases, switch on your hazard warning lights.
- If you stop in the nearside lane, leave your vehicle via the nearside (left hand) door if it is safe to do so and wait behind the safety barrier, if there is one. If you are unable to move over to the nearside lane, remain in the vehicle with your seat belt on.
- If you can leave your vehicle safely, contact Highways England via the roadside emergency telephone provided in all emergency refuge areas. If it is not possible to get out of your vehicle safely, then you should stay in your vehicle with your seat belt on and dial '999' if you have access to a working mobile phone.

Hard shoulder use and emergency areas

- A hard shoulder is always clearly identified with a solid white unbroken line.
- On some busier sections of our motorways, the hard shoulder is open to traffic temporarily. If the hard shoulder is open for use, you'll see a speed limit displayed above it.
- If there's nothing displayed above it, or a Red X is displayed, then you should only use the hard shoulder in an emergency. A hard shoulder is only opened when it's safe to do so. Remember to be vigilant and be aware of breakdowns or stationary vehicles ahead.
- On sections of the motorway where the hard shoulder has been converted into a permanent extra lane, this is marked with a broken white line.
- Emergency areas are spaced regularly and are clearly marked with blue signs featuring an orange SOS telephone symbol.