

M4

Upgrade to smart motorway

Junctions 3 to 12



About smart motorways

Smart motorways are a technology driven approach to the use of our motorways, increasing capacity and relieving congestion while maintaining safety.

Smart Motorways help make journey times more reliable, at less cost than traditional widening schemes, meaning better value for the tax payer.

Key features of a smart motorway include:

Variable mandatory speed limits

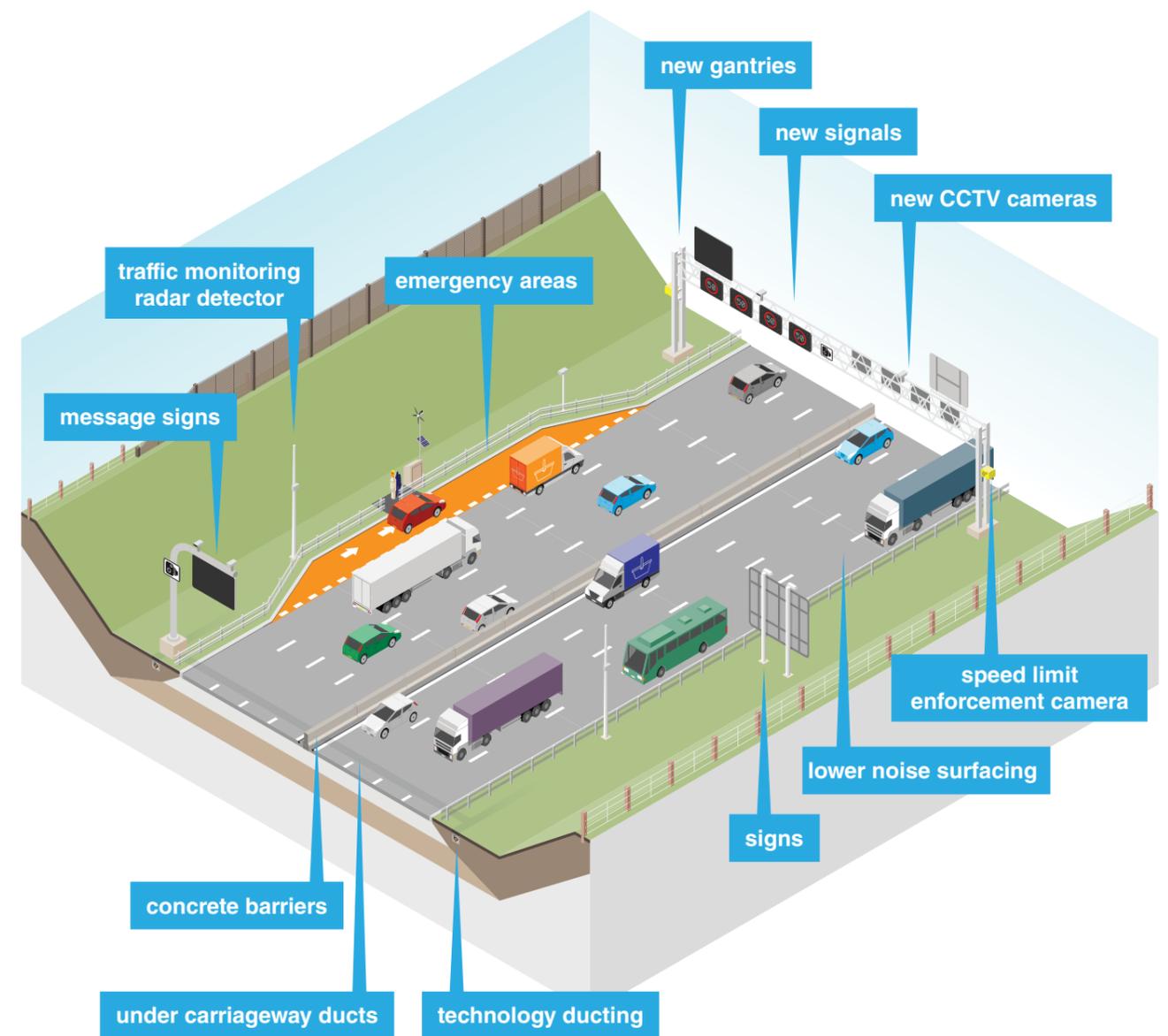
- Speed limits will be set to smooth traffic flows.
- The limits will be clearly displayed on overhead gantries and roadside signs.
- Signs will be used to inform drivers of conditions on the network and when variable speed limits are in place.

All lane running

- The hard shoulder will be permanently converted into a traffic lane.
- Drivers should obey all signs, including speed limits and lane closure instructions and should not stop on the motorway except in an emergency.

Emergency areas

- There will be highly visible emergency areas.
- There will be an emergency telephone in each emergency area.
- This will connect you to Highways England's Regional Control Centres and will pinpoint your location.



It is important for drivers to understand the different types of technology and features used on smart motorways

M4 junctions 3 to 12

The M4 is the main strategic route between London, the West of England and Wales. It connects people, communities and businesses, carrying on average 130,000 vehicles per day and is prone to congestion.

Highways England will be improving the M4 between junction 3 at Hayes and junction 12 at Theale by upgrading it to a smart motorway.

This means there will be:

- An additional lane for traffic increasing capacity to reduce congestion.
- More technology on the road to smooth flows and manage incidents.
- More reliable journeys.

The M4 J3-12 project has received



planning permission through the Development Consent Order (DCO) process. Following a statutory consultation, it was granted consent in September 2016. Since then we have been working on detailed design and planning construction. Work on the motorway will start in summer 2018 and is expected to be completed in spring 2022.

Key changes to the motorway

All Lane Running

Between junctions 3 and 12 the hard shoulder will be converted to a traffic lane, so that there are four lanes available for use by road users. Between junctions 4 and 4b, there will be five lanes. Where a hard shoulder does not currently exist, the motorway will be adapted to create a minimum of four lanes. The barrier in the central reservation will be replaced by a new concrete barrier.

Through junction running

This enables a consistent number of lanes to pass through the junction, reducing the need to change lane for vehicles staying on the motorway. Through-junction running will be in place at junctions 4, 5, 6, 7, 8/9 and 11 and at the Reading motorway service area.

Bridge works

To accommodate the new smart motorway:

- 11 bridges carrying local traffic over the motorway will need demolition and replacement.
- 4 bridges that carry the motorway over roads, railways and rivers will need widening.
- 2 subways under the motorway will also need lengthening.

Emergency areas (EAs)

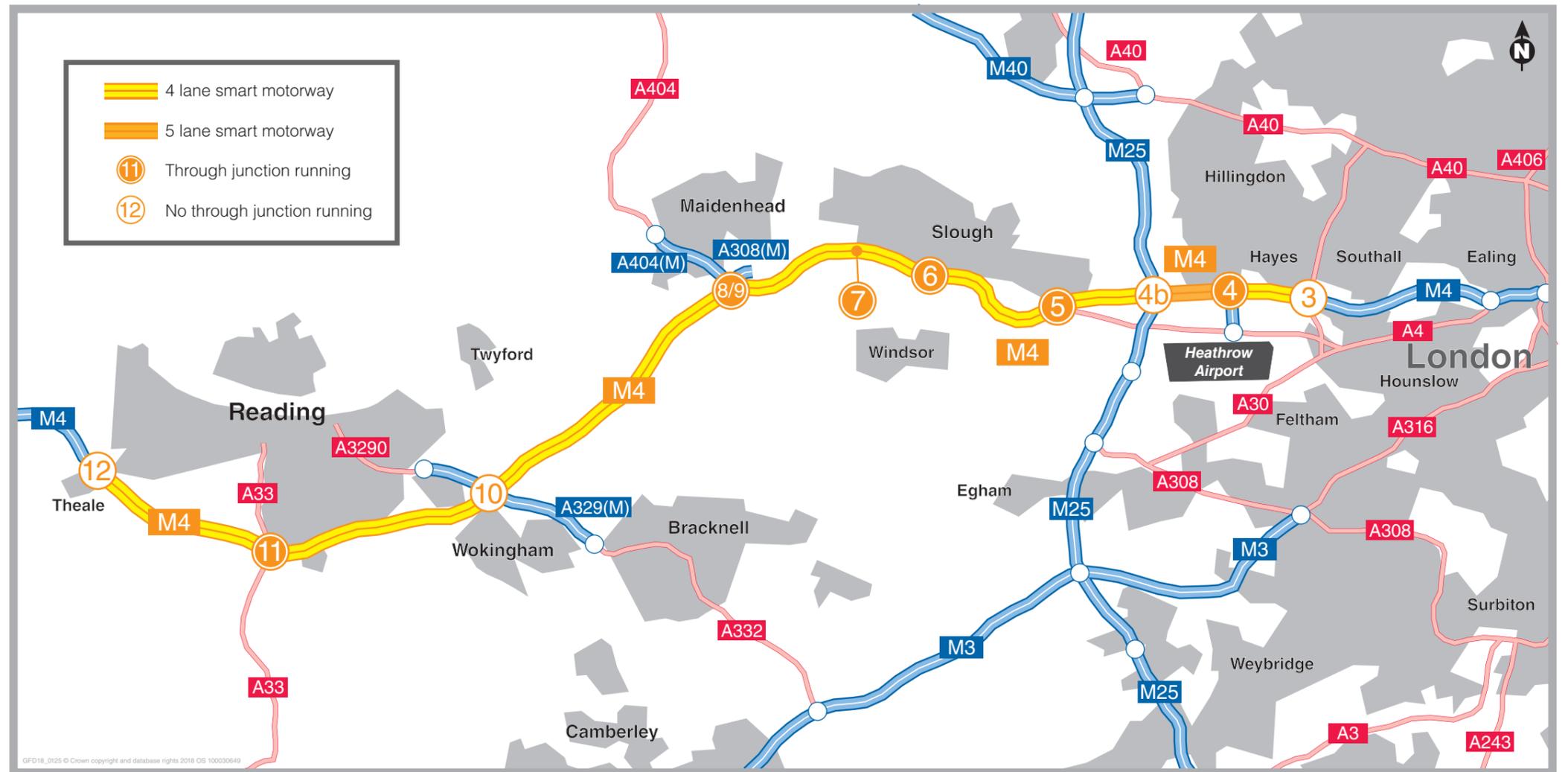
There will be new high visibility Emergency Areas between junctions 3 and 12. Places of relative safety will be every 1.12 miles on average and no more than 1.6 miles apart. If you are driving at 60mph you will pass one approximately once a minute.



When will the work start?

This is the longest smart motorway project in England to date (51km, 32 miles). To minimise disruption to our customers we will need to work on different stages at different times.

Our current intention for the phasing of construction, is to start at J8/9 and progress west towards J10. In tandem we will start work on four bridges between J8/9 and J7. The more complex section of the scheme, progressing east from J8/9 towards J3, will be started in May 2019.



Motorway Link	J12 - 11	J11 - 10	J10 - 8/9	J8/9 - 6	J6 - 5	J5 - 4b	J4b - 3
Start	May 20	May 20	Sept 18	May 19 ¹	Dec 19	Oct 19	Jan 20
Finish	Feb 22	Jan 22	May 20	Dec 21	Mar 22	Mar 22	Mar 22

Notes:

1. Mobilisation work to 4 structures in J8/9-7 link will also start in late autumn 2018.

■ Timetable subject to governance, funding approval and discharge of the DCO.

■ Progress updates will be provided on the Highways England website throughout the delivery.

What to do if you break down

If you need to stop in an emergency on a smart motorway:

- Use an emergency area and the emergency telephone.
- If you can, leave the motorway at a motorway service area, or the next junction.



If you have to stop in a live lane:

- Put your hazard warning lights on to help other drivers see you and help our control room staff spot you on CCTV.
- If you are in the left hand lane and it is safe to do so, exit the vehicle via the left hand door. Wait behind the barrier if possible.
- If you cannot exit the vehicle, do not feel it is safe to do so or there is no other place of relative safety, remain in the vehicle. Keep your seat belt on and dial 999.



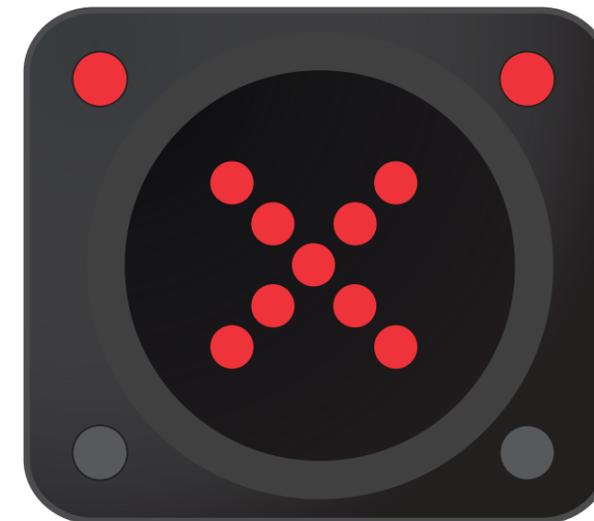
Safety, red sign and incidents

We use a red  symbol to show that a lane is closed because of an incident or people working on the road:

- This provides access for emergency services.
- You will see red  symbols on a gantry sign over the motorway or on a gantry sign at the side of the motorway.
- Driving in a lane with a red  symbol is dangerous and drivers must **not** use it.

Incident management is controlled by teams in our control centres:

- Incidents will be detected by traffic sensors, CCTV or calls from the public.
- The control centre will set signs to protect incidents and clear an access route for emergency vehicles.
- Control centre staff will monitor traffic conditions throughout each incident, ensure signs are set to manage traffic, and will reopen lanes as soon as it is safe to do so.



As soon as Highways England is alerted, our Regional Control Centre will close lanes to protect you and your vehicle until help arrives.

Considerate construction

We will need to set up a number of construction compounds along the M4.

During construction, narrow lanes and reduced speed restrictions will be put in place to create a smooth and safe flow of traffic through the works and to protect workers. Additionally, traffic management barriers will be needed. Three narrow lanes will be available for road users during peak hours.

Wherever possible, noisier works will be undertaken during daytime hours to reduce disturbance. Core working hours will be from 08:00 to 19:00 on weekdays (excluding bank holidays) and from 07:00 to 16:00 on Saturdays.

There will be temporary closures of the carriageway and slip roads at night on some occasions. In these instances the closure will be advertised, and advance warning signs and clearly signed diversions will be put in place.

Bridge works

Much of the M4 was originally built as a two-lane dual carriageway, and has been upgraded over the years. Eleven bridges over the motorway need to be replaced to make room for a new lane where there is no existing hard shoulder.

To limit local disruption, new bridges will be built next to the existing ones, before the old one is demolished. However, where there is not enough space for this, some bridges will be demolished first, then a new bridge built in the same place.

Where the motorway passes over, for example, the River Thames at Bray and the railway line to Windsor, we will need to widen structures to support the new smart motorway.

Some weekend closures will be required for bridge works. Full details will be communicated and posted on our web page well in advance.

Find out more

You can find out more about the plans for junctions 3 to 12 at these exhibitions. Highways England and the design and construction teams will be available to discuss the scheme and answer your questions.

Drop by to meet the team*

Venue	Date	Exhibition Time
Holyport War Memorial Hall, Holyport, Maidenhead. SL6 2NA	Sat 07/07/2018	10:00 to 13:00
Sindlesham Court, Sindlesham, Wokingham. RG41 5EA	Wed 11/07/2018	15:00 to 20:00
Dorney Village Hall, Dorney Reach, Maidenhead. SL6 0DS	Thur 12/07/2018	14:00 to 19:00
Theale Village Hall, Theale, Reading. RG7 5AS	Fri 13/07/2018	15:00 to 20:00
The Nicholsons Centre, Nicholsons Lane, Maidenhead. SL6 1LB	Mon 16/07/2018	14:00 to 19:00
The Oracle Shopping Centre, Reading. RG1 2AG	Thu 19/07/2018	09:00 to 20:00

*July 2018 exhibitions are taking place around M4 J7-12 where construction on this scheme will start. Further engagement will take place around J3-7 in due course.

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Project web page:

www.highwaysengland.co.uk/m4j3to12

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Please quote the Highways England publications code **PR30/18**.

Highways England creative job number GFD18_0125.

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Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Highways England Company Limited registered in England and
Wales number 09346363



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