Welcome

The Highways Agency is working to improve the M1 between junction 28 (near Alfreton) and junction 35a (the A616 Stocksbridge bypass).

The M1 is a vital part of the strategic road network, connecting people, communities and businesses throughout the East Midlands and South Yorkshire.

We are improving these roads as they currently suffer from high levels of congestion and unpredictable journey times.

We plan to do this by introducing a smart motorway scheme, using a range of technologies which have been used successfully in other parts of the country.

This scheme will relieve congestion and smooth the flow of traffic, improving journey time reliability. These benefits will support and improve economic development in the region.
M1 smart motorways

Why is this work needed?

The M1 between junction 28 and junction 35a is one of the busiest sections of road in the UK. It is used by over 110,000 vehicles per day and suffers from heavy congestion and unpredictable journey times, especially during peak periods. Congestion on this stretch of motorway also impacts on local roads.

Reducing congestion, removing major bottlenecks and improving journey time reliability will help businesses in the area to be more efficient.

Smart motorways deliver significant benefits for the investment and have many advantages over conventional widening:

- No need for additional land
- Less disruption from construction
- Fewer environmental impacts
- Better value for money
- Maintains the excellent safety record of England's motorways
Features of this smart motorway

All lane running:
This scheme will have no hard shoulder between junctions 28 and 31 and between junctions 32 and 35a of the M1. There will be four lanes permanently open for use by road users. Emergency refuge areas will be available.

Controlled motorway:
This scheme will have a section of controlled motorway between junctions 31 and 32 of the M1. Controlled motorways usually have hard shoulders, variable mandatory speed limits and lane closure signs.

Signs:
Signs will advise you of any lane closures and will provide information on the road conditions such as severe weather.

Lane closure sign:
When lanes are closed signs in the verge or above the carriageway will display a red X to indicate which lanes cannot be used.

Speed limit sign:
Speed limits will vary and will be applied at times of congestion. To prevent stop start conditions signs in the verge or above the carriageway will advise the current speed limit. If no speed limit is shown the national speed limit applies.

An executive agency of the Department for Transport
Features of this smart motorway

- Low noise surfacing
- Signs
- Superspan gantries
- Signals
- New CCTV cameras
- Concrete barriers
- Emergency refuge areas
- New and refurbished message signs
- Under carriageway ducts
- Technology ducting
Building a smart motorway

Work has been taking place which involved the removal of the old steel barrier, hardening the central reservation, installing a new concrete barrier and resurfacing the central reserve. Concrete is far safer than existing metal barriers and is less likely to require repair if damaged. It also stops vehicles crossing on to the other side of the carriageway in the event of an incident.

The main civil engineering works then commence. This involves:-
- New ducting network.
- Installation of portal and cantilever gantries.
- Full resurfacing and new road markings.
- New drainage and repairs to the existing drainage.
- New safety barriers.

Whilst this is going on we will also be working hard behind the scenes, away from the motorway. This work involves the testing of the new signs and fitting out of the new gantries before they are installed on the motorway.

We will then install the new gantries on the motorway. These will be put in place at night under motorway closures.
Building a smart motorway

Once the main construction work is complete, we then start to connect and commission the new technology. This involves the installation of fibre optic cable to connect the new technology with our Regional Control Centres at Wakefield and Nottingham.

The new signs and cameras are all tested in this phase to ensure they are working properly and ready to be brought into operation.

Once all the works are finished the new smart motorway will be switched on. Four running lanes will be operational in each direction and the speed limit will be able to vary when congestion builds to keep people moving and ensure smoother, reliable journeys. This will help improve journey times and safety on one of the most congested sections of motorway in the country.
Safety at roadworks

You may have already seen roadworks or traffic management on sections of the motorway. This includes hard shoulder closures, temporary safety barriers, narrow lanes and 50 mph speed limits enforced with average speed safety cameras.

The traffic management has been designed to provide a safe working area in which to construct the scheme and at the same time maintaining the existing motorway capacity. For your safety and that of roadworkers, when travelling through roadworks, you should follow the signs and keep within the speed limit. Driving through half a mile of roadworks at 50 mph takes just ten seconds more than at 70 mph.
Incident management within roadworks

The entire length of our works will be covered by CCTV cameras which will be monitored 24/7 by our dedicated control room.

They will quickly be able to spot breakdowns and dispatch our free, 24/7 vehicle recovery service to recover vehicles quickly and take occupants to a safe location.

You can also do your bit.

A number of delays could be avoided if people regularly maintained their vehicles and ensured they have enough fuel to complete their journey.
Construction – what you will see and what is happening

A smart motorway is not a conventional road widening or construction scheme where works are obvious as the landscape has changed.

Smart motorways take place entirely within the highway boundary, making the best use of what is already there and adding new gantries and technology.

As we are making best use of what we already have you won’t see lots of earth being moved and lots of heavy machinery being used all of the time. We will be working in specific areas, with a mobile workforce working in small groups constantly moving across the entire length of the scheme.

We will also be carrying out a lot of work at night and behind the scenes so you won’t always see what is going on.
Construction at night

We are committed to minimising disruption during the construction of this smart motorway and wherever possible we will undertake the noisier operations during daylight hours.

Due to the high volumes of vehicles that use this route we need to maintain the existing lane capacity during the day. However, there is not enough space to do this and provide a safe working area for our road workers, including machinery, vehicles and other equipment.

This will mean that a large section of work can only be carried out at night when traffic flows are considerably less than during the day and when we will be able to close lanes or even sections of the motorway. By carrying out work 24/7 the overall scheme construction can be accelerated and long term disruption minimised.
Low noise surfacing

Environmental assessments indicate that this smart motorway will not make current noise levels any worse.

Our original scheme design had no plans to resurface the carriageway with low noise surfacing; instead this was to be addressed at a later date as part of our routine maintenance programme.

We have now agreed to bring forward our maintenance programme and incorporate resurfacing the carriageway with low noise surfacing as part of this scheme.

This is great news for taxpayers, road users and residents. Bringing forward this work will be more cost effective, will achieve best value for the taxpayer, will cause less disruption to the travelling public and will help to reduce the level of traffic noise experienced by local residents.
Environmental assessment

We have done an environmental assessment that covers a range of topics, including noise, air quality, ecology, cultural heritage, materials use and impacts on the landscape.

The assessment has found that the scheme will have an overall neutral effect on ecology, cultural heritage, materials use and impacts on the landscape.

We know that a number of areas along the motorway already suffer from poor air quality, which affects the health of local people. If we do nothing, congestion will continue to rise and this situation will get worse.

Earlier this year, we consulted on a proposal to implement a maximum mandatory speed limit of 60mph on the M1 between junctions 28 and 35a which would have applied between 07:00 and 19:00 seven days a week. The Transport Secretary rejected this approach as the Government’s preferred option for managing local air quality on the M1.

The Highways Agency is now rigorously investigating alternatives as work progresses during the next 12-18 months. Any alternatives must provide the same degree of demonstrable and verifiable benefits as the imposition of the 60mph speed limit provides in mitigating poor air quality and so avoiding significant air quality impacts. If any proposals continue to include varying speed limits, they would only apply when absolutely necessary.

Any effects as a result of the schemes have been assessed in accordance with the Highways Agency’s published guidance and best practice.
Contact us

We are committed to keeping residents, businesses and other interested parties informed and up to date as the construction of the smart motorway progresses. We have a number of ways you can contact us and to receive regular updates and alerts.

On the web: www.highways.gov.uk/m1j28-31mm
www.highways.gov.uk/m1j32-35amm
Here you can find latest news, scheme maps and publications about the scheme. You can also sign up to our mailing list to find out about any changes directly to your inbox.

On YouTube: Highways Agency (official channel)

By phone: Highways Agency Information Line – 0300 123 5000*

By post:
Highways Agency,
M1 J28-35a Smart Motorways
The Cube
199 Wharfside Way
Birmingham
B1 1RN
Key parties involved in the scheme

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<td>funding roads through</td>
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<td>Designer</td>
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<td>Delivery partner</td>
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The Highways Agency and its partners are committed to minimising disruption to the public and keeping local residents and businesses fully informed as the project progresses.

We value and prioritise customer service and will work hard to reduce the impact on local residents, motorists and businesses.