Welcome

The Highways Agency is working to improve the M1 between Junction 32 (M18) and 35a (Stocksbridge).

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

The M1 helps to connect people, communities and businesses throughout South Yorkshire and northern England, carrying around 110,000 vehicles per day.

We are improving the M1 as the route currently suffers from high levels of congestion and unpredictable journey times.

This project will relieve congestion and smooth the flow of traffic, improving journey time reliability. These benefits will support economic development in the region.

www.highways.gov.uk/m1j32-35amm
An objective of the M1 Junctions 32 to 35a project is to improve journey time reliability. To achieve this we will use variable mandatory speed limits and the hard shoulder as an extra traffic lane to ease congestion.

You will find more information on these features on some of our other exhibition boards today.

We piloted the first managed motorway on the M42 between junctions 3a and 7 in 2006 (see picture).

Since then we have introduced over 22 miles of managed motorways around Birmingham. We have carried out research which shows that journey time reliability has improved between the M40 J16 near Lapworth and the M6 J5, near Birmingham.

Road users say that the implementation of managed motorways has improved these sections of the motorways, known as the “Birmingham Box”. In customer research, fewer people now say they allow extra time for delays as they perceive journey times to be more reliable.
A functioning transport system is important to help the economy to grow. If our roads are congested it impacts on businesses and can discourage investment.

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

Managed motorways deliver significant benefits for the investment made.

We work closely with our supply chain to maximise efficiencies throughout the life of the project.
All the proposed works will be located within the existing highway boundary.

A detailed environmental assessment is being undertaken and the outcome of this work is expected to be available in the near future. This assessment covers a range of environmental issues, including noise, air quality, ecology, cultural heritage, materials use and any impacts on the landscape.

The effects that the scheme may have are being assessed in accordance with the Highways Agency’s published Guidance, specifically the Design Manual for Roads and Bridges Volume 11 and supporting Advice Notes and Best Practice.

No protected species have been found within the highway boundary and we do not expect that there will be any impact on protected species in the area. Further surveys will be conducted prior to construction and works will be monitored as the scheme progresses.

Any change in views will be minimal for most residents, and we will be assessing the impact of the gantries and other equipment carefully.
What the system will include

- Signs mounted at the verge provide enhanced driver information including informing drivers of the motorway speed limit and the availability of lanes.
- CCTV to monitor traffic conditions including during incidents.
- Emergency refuge area.
- Signed cameras monitor traffic speeds for enforcement purposes.
- Loops hidden in the road allow monitoring of traffic flows.
Modernising the operation of our motorways

Managed motorway
Junctions 32 to 35a M1

Features of this managed motorway

• **All lane running**
  This scheme will have no hard shoulder. There will be turn lanes permanently open for use by good users. Emergency refuge areas will be outside.

• **Emergency refuge areas**
  Driver assistance vehicles may be close to the nearest emergency refuge area. A break down on the slip road will not affect and signs and signals on the overhead gantry until assistance can reach the driver.

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

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• **Speed limit signs**
  Speed limits will vary. Speed limits will be applied at times of congestion, to prevent stop start conditions. Signs in the verge, above the carriageway will advise the current speed limit. If no speed limit is shown the national speed limit applies.

• **Emergency refuge areas**
  Drivers who breakdown should try to drive to the nearest emergency refuge area, exit slip road or service area. If a break down occurs in a live lane we will set signs and signals on the overhead gantry until assistance can reach the driver.

• **Lane closure signs**
  When lanes are closed the yellow and red sign will be displayed above the hard shoulder.
Incident management

To relieve congestion on some sections of motorway we use variable speed limits and use the hard shoulder as a traffic lane.

These sections are known as managed motorways. We currently operate managed motorways on sections of the M42 and M4 around Birmingham.

New managed motorways are being constructed in West Yorkshire (M62 J25-J30), Bedfordshire (M1 J10-J13) and on the M4/M5 near Bristol.

Managed motorways enable us to manage lanes in the event of an incident. The ability to set signs and signals means we can use the technology to provide an access route for emergency services.

We can provide this route on any lane. Signs and signals are also used to provide road users with information on conditions on the network. Using the knowledge and experience we have gained from the managed motorway schemes on the M42 and M40, we are further developing the managed motorway concept.

The design of the M1 Juncions 32 to 35a managed motorway will include the following features compared to previous managed motorway schemes:

- Fully converting the hard shoulder
- Power overhead gantries which span the whole motorway
- Full coverage of CCTV cameras along the section of managed motorway, although the dedicated cameras required for opening and closing the hard shoulder are no longer required
- Increased space between emergency refuge areas

Current managed motorway procedures

Incidents will be detected in exactly the same way as on current managed motorway schemes.

Procedures for M1 Juncions 32 to 35a

The scene will be managed in the same way, as current managed motorway sections.
One of the key features of managed motorways is variable mandatory speed limits. The speed limits displayed on the motorway will take account of prevailing traffic conditions with the aim of ensuring the smooth flow of traffic. This will enable us to manage the motorway between junctions 32 and 35a.

Variable mandatory speed limits with an associated enforcement and compliance system

The variable mandatory speed limits will be clearly displayed on gantry mounted advanced motorway indicators above each lane of the main carriageway. They will also be displayed on verge-mounted variable message signs and on post-mounted advanced motorway indicators on the slip roads.

The introduction of the variable mandatory speed limits will require legislation in the form of regulations made under Section 17 of the Road Traffic Regulation Act 1984.

The proposed regulations will restrict drivers from driving within the area of the managed motorway scheme at a speed exceeding that displayed on the speed limit signs, or the national speed limit where no other speed limit sign is displayed.
Modernising the operation of our motorways

Managed motorway
Junctions 32 to 35a M1

Emergency refuge areas

As part of the managed motorway scheme on the M1, we will be constructing emergency refuge areas.

Once work is complete, drivers who break down should try to drive to the nearest emergency refuge area, exit slip road or service area. If a breakdown occurs in a live lane we will set signs and signals on the overhead gantry until assistance can reach the driver.

Once in the emergency refuge area drivers can use the emergency telephone which will automatically pinpoint their location for the control centre.

Depending on the situation the control centre operator can send a Highways Agency traffic officer or recovery vehicle to the driver, or advise their recovery service.
Key Parties involved in the scheme

Designer

Delivery Partner

Working on behalf of the Highways Agency

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.

The Highways Agency and its partners value and prioritise customer service. The project team will work hard to reduce the impact on motorists, local residents and businesses.