

# Active Traffic Management M42 Junction 3A to 7

## What is Active Traffic Management?

Active Traffic Management is a new pilot motorway scheme that has been put in place on the M42, junction 3A to 7, to the South-East of Birmingham. The scheme combines a number of new technologies and existing motorway features to provide:

- Reliable journey times
- Reduced congestion
- Enhanced information to drivers
- Quicker response times to incidents

## How will M42 Active Traffic Management be different?

You will see a number of changes such as the addition of:

- Driver information signs (1)
- Speed limit signals (2)
- Emergency refuge areas (3)
- New emergency roadside telephones (4)
- Hard shoulder running between junctions if necessary (5)
- New congestion and incident management systems (6)

## Key Features



(1)



(2)



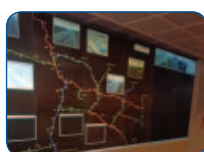
(3)



(4)



(5)



(6)

## Better Information

Signs and signals on the M42 Active Traffic Management scheme inform drivers of traffic conditions ahead, speed limits and the availability of lanes.

The position and sequence of the signals ensures that drivers have time to see and understand the signal and to make a manoeuvre.

During high volumes of traffic, speed limit signals show a mandatory speed limit across the carriageway.



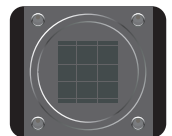
The speed and availability of lanes is controlled so that the traffic is able to flow more smoothly, reducing congestion. In the unlikely event of an incident, the signals can also be used to control traffic around the incident.

To help protect incident scenes and queuing traffic, when in use, all signals are mandatory and will be enforced.

On the M42 Active Traffic Management scheme the following signals and meanings apply; below

### Blank Signal

Applicable to all lanes (including hard shoulder). Normal motorway rules apply.



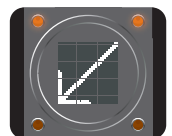
### Mandatory Speed Limit

Applicable to all lanes (including hard shoulder). This is the maximum permitted speed.



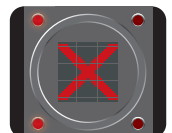
### White Arrow with flashing beacons

Applicable all lanes (including hard shoulder). Move into lane directed.



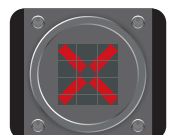
### Red Cross with flashing beacons

Applicable to all lanes (including hard shoulder). Do not proceed further in this lane.



### Red Cross without flashing beacons

Applicable to hard shoulder only. Do not use this lane, except in emergency or breakdown.



### National Speed Limit

Applicable to all lanes except hard shoulder. National speed limits apply



## Smarter Roads

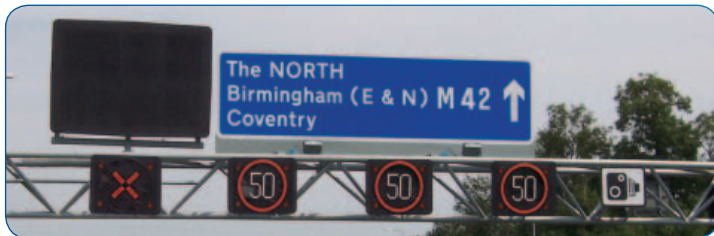
When this stretch of the M42 is not congested and there are no incidents, all normal motorway rules apply.



### Normal motorway conditions:

- No congestion or incident
- No speed limits shown on signals
- National speed limits apply
- Hard shoulder only for emergency and breakdown
- Use emergency refuge areas in an emergency or breakdown for added safety

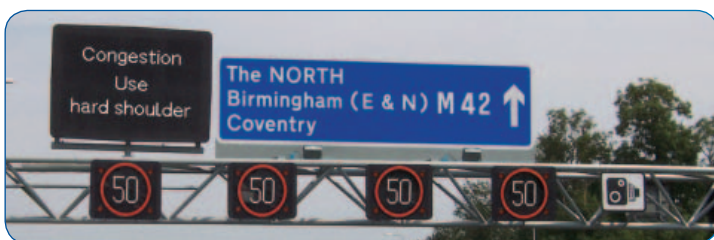
If there is congestion or an incident Active Traffic Management will manage the traffic to ease congestion:



### Active Traffic Management without hard shoulder running:

- Incident or congestion ahead
- Speed limit signals are set and must be obeyed
- Driver information signs provide necessary information for road users
- Red cross over hard shoulder means do not use this lane, except in an emergency or breakdown
- Use emergency refuge areas in an emergency or breakdown for added safety

In the case of severe congestion, or incident the hard shoulder may be opened to traffic under controlled conditions:



### Active Traffic Management with hard shoulder running:

- Incident or congestion ahead
- Speed limit signals are set and must be obeyed
- Driver information signs provide necessary information for road users
- Hard shoulder used as a lane for all vehicles between junctions
- Use emergency refuge areas in an emergency or breakdown for added safety
- Do not stop on the hard shoulder

Active Traffic Management  
M42 Junction 3A to 7

## Congestion Management

As part of Active Traffic Management on the M42, new features to manage congestion have been introduced:

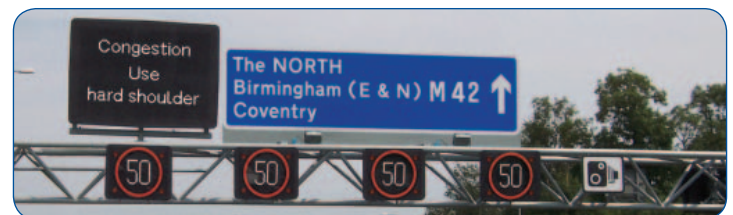
- Control centre operators and equipment monitoring the M42 Active Traffic Management scheme 24 hours a day, 365 days a year
- A comprehensive CCTV camera system so the operators in our control centre can easily view this section of the M42
- Full motorway lighting so the control centre can see the motorway easily using the CCTV. This also provides a safer driving environment at night
- Sensors in the road detect traffic and congestion
- A built-in system alerting the control centre operator to increases in traffic, allowing them to immediately manage the situation

These features allow improved responses to increases in traffic, with the aim of reducing congestion. They also allow quicker reactions in the event of an incident.

When congestion is expected on the M42 Active Traffic Management scheme the control centre operator and automatic system will change the signs and signals to alert road users to the conditions ahead.

The system automatically calculates the best speed to keep the traffic flowing and this is then displayed on the speed limit signals overhead.

The control centre can also open the hard shoulder, under controlled conditions, as an extra running lane between junctions to reduce the impact of congestion by providing extra space for the traffic. This will help to keep the traffic flowing and minimise delays.

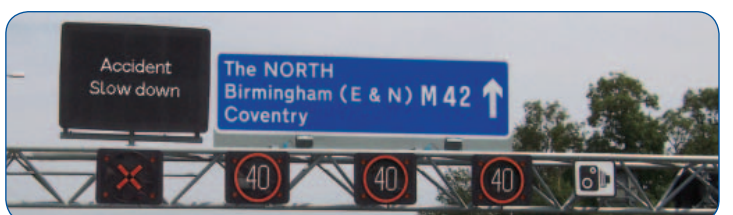


## Incident Management

If an incident occurs on the M42 Active Traffic Management scheme the control centre operator and automatic system will change the signs and signals to alert road users to the conditions ahead. The signals can also be used to open and close lanes, where necessary.

This means the control centre can provide access to the incident for on-road help, in the form of emergency services and Highways Agency Traffic Officers, who will help to manage the incident.

The control centre can also open the hard shoulder, under controlled conditions, as an extra running lane between junctions to reduce the impact of incidents by providing extra space for the traffic. This will help to keep the traffic flowing and minimise delays.



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## What Happens if I Break Down?

If you break down you should:

- Stop in an emergency refuge area
- Use the emergency roadside telephone to contact the control centre

The emergency roadside telephone automatically pin points your location for the control centre.

Depending on your situation the control centre operator can send a Highways Agency Traffic Officer or recovery vehicle, or advise your recovery service.

## Emergency Refuge Areas

Emergency refuge areas, for use in emergency or breakdown, are located approximately every 500 metres.

Features include:

- New emergency roadside telephones
- Additional distance from the main carriageway

By the time hard shoulder running is introduced, emergency refuge areas will also have:

- Sensors to alert the control centre that a vehicle has entered
- CCTV so the control centre can monitor vehicle and send assistance as necessary

## Emergency Roadside Telephones

If you need help, you should always contact the control centre using an emergency roadside telephone located in each emergency refuge area.

Features include:

- High visibility design
- Text-messaging facility for the hard of hearing
- Text-messaging facility for non-English speakers featuring 8 different languages (from April 2005)
- Back-lit display for user prompts, volume control and text facility
- Improved audio performance
- Easily accessible for wheelchair users
- Behind safety fencing



## Leaving an Emergency Refuge Area

For your safety, you should always contact the control centre using the emergency roadside telephone for advice on how to leave the emergency refuge area safely.

How you exit an emergency refuge area depends on how Active Traffic Management is running, and the type of vehicle you are driving.

The following offers information on how to drive out of an emergency refuge area:

### Normal motorway conditions:

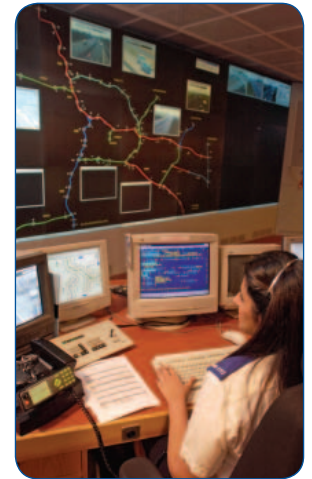
- No congestion or incidents
- No speed limits shown on signals; national speed limits apply
- You can drive out of the emergency refuge area onto the hard shoulder
- Use the hard shoulder to build up speed to join the main carriageway
- Check overhead signals for current speed limit and availability of lanes

### Active Traffic Management without hard shoulder running:

- Incident or congestion ahead
- Signals are set and must be obeyed
- Red cross over hard shoulder means it is for emergency or breakdown use only
- Check overhead signals for current speed limit and availability of lanes
- Use the hard shoulder to build up speed to join the main carriageway

### Active Traffic Management with hard shoulder running:

- Incident or congestion ahead
- Signals are set and must be obeyed
- Use an emergency roadside telephone to contact the control centre and for advice on leaving the emergency refuge area
- DO NOT use the hard shoulder to build up speed
- A control centre operator can control traffic to enable you to exit safely
- Check overhead signals for current speed limit and availability of lanes



## Highways Agency Traffic Officers



New highly trained, uniformed Traffic Officers have already been introduced across the West Midlands and will soon be patrolling motorways across the whole of England. They will help keep traffic moving and make your journey safer and more reliable.

Traffic Officers assist broken down motorists and help the police to manage incidents. They also clear the motorway of debris. In Active Traffic Management, Traffic Officers can clear the hard shoulder of debris

before opening the hard shoulder as a running lane.

After the Traffic Management Act was introduced in 2004 Traffic Officers now have the power to stop traffic, close roads, lanes and carriageways, direct and divert traffic and place and operate traffic signs.

 **Its an offence not to obey the instructions of a Highways Agency Traffic Officer**

### Why the M42?

- Importance to the Midlands area, and national motorway network
- Currently often congested at peak times
- Higher than national average accident rates
- Problems where traffic joins the M42, particularly at J6 and 7 northbound
- Link between the M40 and M6 motorways
- Serves the National Exhibition Centre (NEC), Birmingham International Airport, business parks and residential areas

### Facts about Active Traffic Management and the M42 J3A-7

- This section of motorway is 17km long
- Over 120,000 vehicles use this section of motorway every day
- There will be over 50 gantries
- There will be 41 emergency refuge areas

### When will it be introduced?

Active Traffic Management on the M42 is being introduced in phases. Construction began in 2003 and mandatory variable speed limit signals are expected to be in use by early 2006. The final stage to be introduced is hard shoulder running, which will be when it is safe and appropriate to do so, by 2007.

### Contact Us

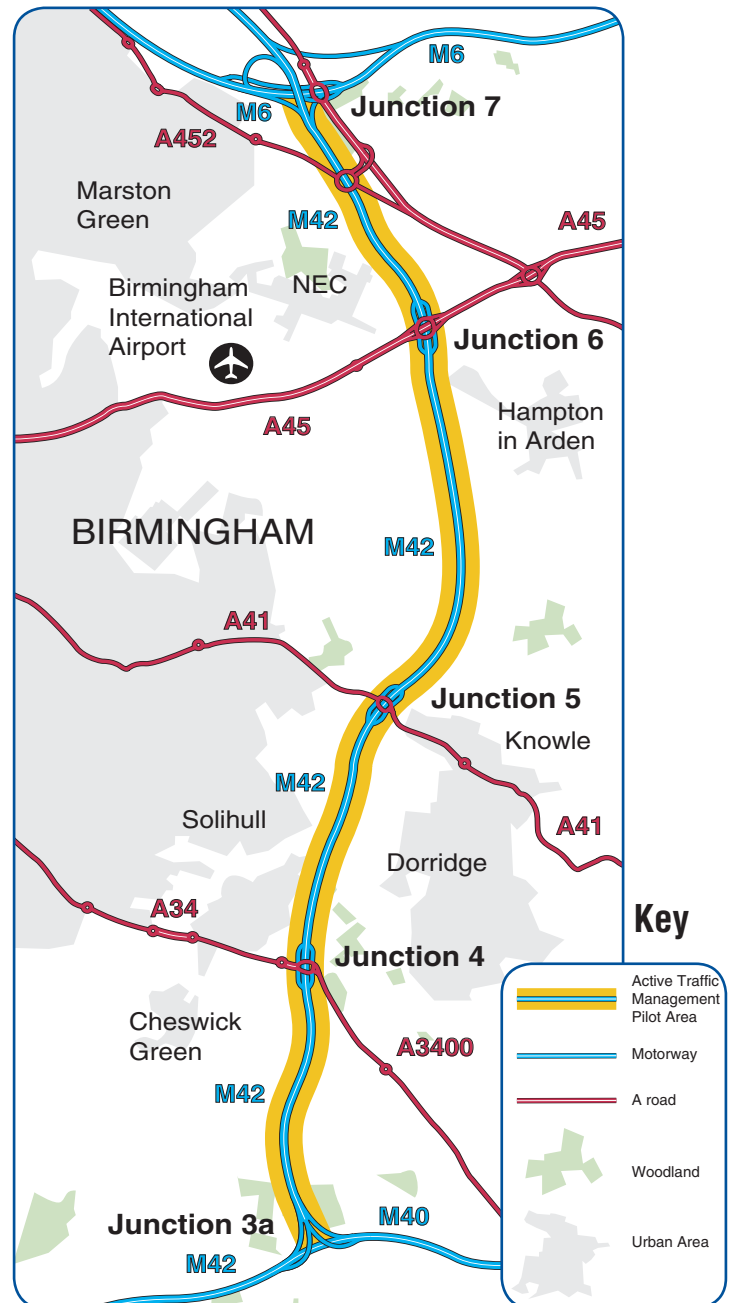
Highways Agency Information Line: **08457 50 40 30**

Highways Agency website: **[www.highways.gov.uk](http://www.highways.gov.uk)**

Active Traffic Management website: **[www.highways.gov.uk/atm](http://www.highways.gov.uk/atm)**

Email: **[m42atmproject@highways.gsi.gov.uk](mailto:m42atmproject@highways.gsi.gov.uk)**

## Active Traffic Management Route



### Driving through roadworks



If you do have to drive through roadworks, please take extra care.

- Keep to the speed limit – it's there for your safety
- Get into the correct lane in good time – don't keep switching
- Concentrate on the road ahead, not on the roadworks
- Be alert for works traffic leaving or entering roadworks
- Keep a safe distance – there could be queues in front
- Observe all signs – they're there to help you

Remember that tiredness can kill. Take regular breaks from driving.

**For further information on the Highways Agency call our information line: 08457 50 40 30**