We’re making journeys better in the East Midlands by operating, maintaining and modernising major A roads and motorways – delivering an extensive government investment programme.

We’re committed to ensuring that the region’s roads are fit for now and the future.
A45/A6 Chowns Mill junction improvement

What are we doing and why?

In autumn 2014, the Government announced the first Road Investment Strategy, which included plans to improve the A45/A6 Chowns Mill junction.

The junction suffers from severe congestion at peak travel times, leading to long queues on all of the approaches. This congestion will increase as traffic levels grow.

Improve journey times:
Upgrading the Chowns Mill roundabout will improve journey time reliability through the junction by providing additional lanes.

Improve safety:
The scheme will improve safety by changing the junction layout and introducing traffic signals - managing the flow of traffic through the junction more effectively and reducing conflicts between turning traffic.

Support economic growth:
Current congestion and journey time reliability issues are significant constraints to future investment and economic growth. An improvement to the junction will encourage continued investment in the regional economy and support new corporate, commercial and residential opportunities.

We have developed a scheme to improve the junction which represents a £24m investment, providing economic benefits, including reduced congestion and increased capacity with more reliable and safer journeys. The improved junction will play a key role in unlocking growth in the area.

Improve access for non-motorised users (NMUs):
New signalled crossings will be built for cyclists and pedestrians to make it safer to cross the junction. All crossing points will be designed for users with disabilities.

Environment:
We will work to minimise our impact on the environment and enhance environmental features where possible; such as introducing new planting to enhance the junction and NMU routes.
Prior to developing the current proposal we identified 18 options which were considered against the objectives for the scheme, to ensure that the final option chosen would offer the best value for money based on the benefits it would give against future traffic demands.

We identified 18 options which would meet our objectives for the scheme. An assessment was undertaken and 4 options were taken forward for further consideration.

The 4 options were then assessed in more detail to identify the most viable option to take forward.

Option 1 – half hamburger with enlarged southern roundabout section

- No land take required
- Potential to impact environmentally sensitive areas
- Difficult traffic management phases required

Option 2: Large hamburger roundabout

- Large amount of land take required
- Potential to impact environmentally sensitive areas
- Increased journey times

Option 3: Compact grade separated junction

- Large amount of land take required
- Visually intrusive and impacts local environment
- Long design and construction phase

Option 4: Full grade separated junction

- Large amount of land take required
- Generates noise pollution, visually intrusive and impacts local environment
- Significantly exceeds budget
- Long design and construction phase

Option 1 – half hamburger with enlarged southern roundabout section – was identified as the most suitable and cost-effective option and has been progressed to the detailed design stage.
We are proposing to improve the existing roundabout at Chowns Mill, which will include widening the A45 and A6 approaches to provide additional traffic lanes, creating an additional roundabout section on the south side of the existing roundabout, and introducing traffic signals to manage traffic safely and effectively.

The roundabout will be redesigned as a half hamburger layout with a new link road connecting the A6 North and A5028 with the existing roundabout. This will improve the existing junction to allow better flow of traffic, reducing congestion through the junction.

All approaches to the junction will be widened to provide extra lanes and increase capacity for traffic travelling through the junction. Partial signalisation of the junction will ensure better management of traffic, reducing turning conflicts, improving safety, and increasing capacity.

New signalled crossings will be built to make it safer for cyclists and pedestrians to cross the junction. All crossing points will be designed for users with disabilities.
The proposed scheme: A45 westbound

- Widening from 2 lanes to 4 on approach to increase capacity and queueing space
- Traffic signals to manage traffic safely and efficiently
- High friction surfacing to ensure vehicles can brake safely, reducing potential accidents
- A new gantry to provide clear signage to improve lane discipline on approach to junction
- New signalled crossings will be built to make it safer for cyclists and pedestrians to cross the junction. All crossing points will be designed for users with disabilities
The proposed scheme: A45 eastbound

- Widening from 3 lanes to 4 on approach to increase capacity and queueing space
- Traffic signals to manage traffic safely and efficiently
- High friction surfacing to ensure vehicles can brake safely, reducing potential accidents
- A new gantry to provide clear signage to improve lane discipline on approach to junction
- Removal of unused footway
- New signalled crossings will be built to make it safer for cyclists and pedestrians to cross the junction. All crossing points will be designed for users with disabilities
A45/A6 Chowns Mill junction improvement

The proposed scheme: A6 southbound

- Widening from 2 lanes to 4 on approach to reduce queue lengths and increase capacity
- Traffic signals to manage traffic safely and efficiently
- Separating right and left turning vehicles into independent lanes to remove vehicle conflicts
- Dedicated left turn lane to A45 eastbound
- Dedicated right turn lane for Chowns Mill Business Park
- Widening of the Chowns Mill Business Park access
- Widening the A6 northbound exit from the roundabout
- Formal parking bays outside Chowns Mill Business Park
- High friction surfacing to ensure vehicles can brake safely, reducing potential accidents
- A new gantry to provide clear signage to improve lane discipline on approach to junction
A new link road will connect the A6(N) and A5028 with the existing roundabout and traffic signals will be installed to manage traffic safely and effectively.

- Widening the A6 from 2 lanes to 3 on approach.
- High friction surfacing to ensure vehicles can brake safely, reducing potential accidents.
We attach great importance to the environment and local impacts our scheme may have on the local community. Our environmental and design specialists are working together throughout the design process to look at how the scheme may impact the community and what we can do to minimise this.

**Construction**

We will not need to purchase any additional land and will carry out the improvements to the junction within existing highways boundaries. During construction local residents and the travelling public may experience adverse impacts, such as increased noise and delays to your journey. We will work hard to minimise disruption wherever possible.

**Air quality**

We will identify measures to control and reduce construction dust and emissions, and model and assess the impacts of the scheme on air quality during construction and after the road is open.

**Noise and vibration**

We will assess the noise and vibration impacts of the project throughout construction and will work hard to keep this to a minimum.

**Landscape**

Some existing vegetation will need to be removed during construction which may change the local landscape. We will carry out replanting around the junction, which will be designed to blend the scheme into the wider landscape.

**Environment**

There are ecologically important sites in the area including the Upper Nene Valley Gravel Pits SPA/Ramsar and sites of special scientific interest (SSSI) that may be affected by the works. Where species are identified, we will put in place measures to reduce the impacts of our works, for example we would ensure vegetation clearance would take place outside of the nesting bird season. We will reduce energy emissions by using LED bulbs in all new street lights and traffic signals.

**Waste and materials**

We will take all opportunities to re-use materials and use sustainable construction methods.

**People and communities**

We will consider safety, journey times, congestion and accessibility for everyone using the junction, including residents, road users, pedestrians and cyclists.
Next steps

Detailed design of the chosen option is now being progressed with input from experienced contractors to ensure the scheme can be built with the least impact on local communities and the travelling public.

We will complete the detailed design by autumn 2018 and plan to start construction work in late 2019. We will hold further public information events before the main works start to keep you updated.

If you have any queries about this scheme please email us at: infoA45Chownsmill@highwaysengland.co.uk

or visit our website where you can also sign up for email alerts www.highways.gov.uk/A45chowns-mill

Write to:
A45 Chowns Mill improvement team
Highways England
Stirling House
Lakeside Court
Osier Drive
Sherwood Business Park
Nottingham
NG15 0DS

Telephone:
0300 123 5000