

A46 Newark Bypass **Public consultation**

9 December 2020 to 2 February 2021

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A46 Newark Bypass

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Investing in your roads

At Highways England we believe in a connected country and our network makes these connections happen. We strive to improve our major roads and motorways - engineering the future to keep people moving today and moving better tomorrow. We want to make sure all our major roads are more dependable, durable and, most importantly, safe. That's why the Government's second Road Investment Strategy committed to spending £27.4 billion on our network. The A46 Newark Bypass is a critical part of this investment, filling the gap in the A46 route to create a high-quality corridor that connects the Midlands, which is great news for the local and regional economy. In this brochure we explain our proposed improvements for the A46 Newark Bypass scheme. We also give details of how you can give us your feedback during our public consultation.

Our options consultation

We're holding a consultation on our options to improve the A46 Newark bypass. We'd like to hear your views and for you to share your local knowledge with us.

The consultation will run for 8 weeks, from Wednesday 9 December 2020 to Tuesday 2 February 2021.

The coronavirus situation is constantly developing and changing, and it is essential that we observe and comply with the UK Government's restrictions. For Highways England, this means that we are not holding face-to-face public consultation events.

We are providing alternative ways for you to access scheme information, ask questions and ultimately make an informed response to the public consultation.

Your views are important to help us better understand the local area and any potential impacts our scheme may have on you and the community. We will listen to everyones feedback and we'll consider this before we select a preferred option.

Where to get more information

- Visit our scheme webpage and watch a video of the options at highwaysengland.co.uk/a46-newark-bypass
- Request a call back from a member of the project team by calling 0300 123 5000
- Email us on: a46newarkbypass@highwaysengland.co.uk

How to respond

You can respond to our consultation using one of the following methods:

- Online: complete the response form online at highwaysengland.co.uk/a46-newark-bypass
- Post: complete a paper copy of the response form, put it in an envelope, write our freepost address on the front and put it in a post box. There is no need for a stamp. The freepost address is:

Freepost A46 NEWARK BYPASS

Please note: All responses must be received by Highways England by **11:59pm on Tuesday 2 February 2021.** Responses received after this date may not be considered. Paper consultation brochures and response forms are available on request.

The need for the scheme

In March 2020, the Government's second Road Investment Strategy included a commitment for Highways England to improve the A46 'Trans-Midlands Trade Corridor' between the M5 and the Humber Ports, to create a continuous dual carriageway from Lincoln to Warwick.

Improving the A46 between Farndon and Winthorpe will:

Support economic growth: The A46 is a nationally significant trade and export route, with ports at either end of the corridor and East Midlands and Birmingham Airports close by. The single greatest gap in this route is the A46 at Newark; an upgraded dual carriageway opened in 2012 but stopped three miles short of the A1. This scheme will fill this gap, creating a consistently good connection from the M1 at Leicester to Lincoln, enabling UK, regional and local government's transport and economic growth plans.

Improve journey times: Congestion on this single carriageway section of the A46 means that journeys are unreliable and take longer than they should. This will only get worse as more people are expected to use the road in the future. Our improvement scheme will remove the bottleneck, meaning road users will have quicker and more reliable journeys.

Make journeys safer: From January 2014 to December 2018, accidents on this section of the A46 resulted in 197 casualties. Accidents have a direct impact on those involved and also often lead to lane closures and associated reliability issues. Widening the A46 to a dual carriageway will provide opportunities for safer overtaking, and junction improvements will reduce congestion and frustration.

Help cyclists and pedestrians: We will divert existing uncontrolled crossings of the A46 to provide a safer route to cross. As we develop the scheme, we'll ensure the needs of pedestrians, cyclists and horse riders are considered. **Improve the environment:** The scheme aims to improve noise levels in Noise Important Areas (noise 'hotspots'). We will work with key stakeholders, including the local planning authority, Natural England, Historic England and the Environment Agency to develop proposals that protect and enhance the local environment.

The local area: The location and setting of the A46 to the north of Newark-on-Trent presents a significant number of constraints and challenges, which are shown on the environmental map on page 3. These include floodplain, residential areas, scheduled monuments and listed buildings, archaeology and two river and three rail crossings. We attach great importance to the environment and will work to minimise our impact and enhance environmental features wherever possible.

The options

The two options outlined in this brochure have been shortlisted following a thorough option identification process. We started by considering alternative routes for the A46 and concluded that widening the existing road was the solution that performed best against the project objectives and could be delivered within the budget available. The two best performing options are described in detail on the following pages, and the options we have discounted are described later in this brochure. We've also produced a summary video about our options which is available to view on our scheme webpage.

For the two options we would widen the A46 to a dual carriageway to provide two lanes in each direction between the Farndon and Winthorpe Junctions. Both options would include a new link and a new bridge over the A1 to the north of the existing bridge. We will improve access to the A1 by removing A46 through-traffic from the Brownhills and Friendly Farmer roundabouts, allowing them to operate better.

Environmental constraints map



Map for Option 1



Map for Option 2





Option 1 and Option 2 comparison for Cattle Market junction

Option 1

As shown in the drawing above, in Option 1, traffic lights would be added to Cattle Market junction and the layout changed for the A46 to pass through the centre of the roundabout. This would prioritise A46 through-traffic and reduce delays at this junction. The A617 Kelham Road would be diverted to a new roundabout with the A616 Great North Road to the north of the junction, in order to reduce delays at Cattle Market junction. Between the new roundabout and Cattle Market junction, the Great North Road would be widened to provide two lanes in each direction. In this option, all roads and the junction would remain at ground level.



Option 2

As shown in the drawing above, in Option 2 Cattle Market junction would be a flyover, with the A46 elevated to pass over the roundabout. In this option, Kelham Road and Great North Road would be retained as they are currently.

Option 2 would also add traffic lights to Farndon junction to improve flows on this roundabout during peak hours. The general layout of Farndon junction would not be changed.



Option 1 and Option 2 comparison for Winthorpe junction

Option 1

As shown in the drawing above, in Option 1 the new section of A46 would cross over the A1 to the south of Winthorpe and join back with the existing A46 to the west of Winthorpe junction. This junction would be enlarged, retaining the four-arms it currently has, with traffic lights also added to improve traffic flow. A new flyover across the A46 would provide access from Friendly Farmer roundabout and the A1 to the A46 eastbound.



Option 2

As shown in the drawing above, in Option 2 the new section of A46 would cross over the A1 and run slightly to the north of the existing road, joining back into Winthorpe junction. The junction would be enlarged to a five-arm roundabout, with traffic lights added to improve traffic flow. This option would move the A46 slightly closer to Winthorpe, but would remove the need for the flyover crossing over the A46 (as required in Option 1).

Benefits and impacts of the proposed options

In assessing the benefits and impacts of the two proposed options, we look at a variety of features, including those listed below. As this consultation is taking place at an early stage in the overall project, this information is still being developed as we carry out detailed surveys and assessments. Environmental impacts are assessed based on national guidance.

Journey times and traffic congestion

Our experts have built a traffic model, validated using observed traffic flows and journey times. This has allowed us to understand the current issues and predict how they will change in the future if we do not build the scheme.

We have used this model to test the impact of building the various options that we have developed.

As the scheme would increase capacity, our model predicts that both options would reduce congestion and improve the reliability of journeys. Journey times on the A46 between Farndon and Winthorpe would reduce by an average of one quarter across the day.

The two options propose a new flyover across the A1 which will significantly reduce the level of traffic and congestion experienced at the Brownhills and Friendly Farmer roundabouts.

Option 1	The diversion of Kelham Road (A617) into a new roundabout with the Great North Road (A616) would increase the distance for journeys from Kelham Road to Cattle Market Junction.There would, however, be improved access onto Cattle Market Junction by reducing the number of arms of the roundabout and adding traffic lights.
Option 2	The journey time savings for Option 2 are greater than Option 1 for routes through Cattle Market Junction due to the proposed flyover removing the A46 through-traffic from the junction. Adding traffic lights to Farndon Junction will improve traffic flows on this roundabout during the peak periods.

Air quality

To understand the effect the two options will have on air quality, our experts have developed an air quality dispersion model to predict the impact of each option when it is open for traffic.

The model forecasts potential changes in air quality at key sensitive locations. We have used data from existing monitoring locations to build up a picture of air quality within the study area and to verify the model. This will be further refined as the scheme develops.

The work done so far suggests that there would not be any significant adverse effects on human health receptors once the scheme is open to traffic.

The two options have the potential to effect habitats within locally designated sites. Detailed surveys will be undertaken in the next stage of the scheme's development to assess the impact on biodiversity from the chosen option. We will publish more details about how we will manage air quality impacts during construction before we start work on the scheme.

Noise

We have developed a three-dimensional noise model of the existing route, and both of the options, for when the scheme is open to traffic. This noise model was used to predict the difference in noise between the options, and the potential for a noise impact in the surrounding area.

The scheme study area includes Noise Important Areas, or noise 'hotspots' as recognised by Defra, the government Department for Environment, Food and Rural Affairs.

Without mitigation measures we predict increases in noise from the A46. These are as a result of changes to the layout and increases in traffic speed, due to a better flow of traffic on the road. We predict a decrease in noise from some of the roads in the centre of Newark as traffic would reroute back onto the A46 when the existing congestion is removed.

In the next stage of the scheme's development we will undertake further assessment and consider if mitigation measures are needed.

Option 1	The predicted changes in noise for Option 1 and Option 2 are broadly similar. In the vicinity of Cattle Market roundabout, the noise impact is predicted to be greater for Option 1 due to the proposed changes to Kelham Road and the Great North Road, which would bring these roads closer to some properties.
Option 2	The predicted changes in noise for Option 1 and Option 2 are broadly similar. In the vicinity of Winthorpe, the noise impact is predicted to be greater for Option 2 as the A46 would be closer to some properties.

Cultural heritage

We have assessed the potential impacts on cultural heritage within the vicinity of the scheme, accounting for possible impacts on historic buildings, archaeological remains or landscape.

The two options would have some effect on the setting of the Grade II listed causeway arches and culverts 'Smeaton's Arches' associated with the Great North Road to the north of Cattle Market Junction.

The local prevalence of archaeological sites means there is a high likelihood of encountering as-yet unknown buried archaeological remains.



Landscape

Using our landscape and visual field surveys, we have assessed how the landscape, views from homes, public rights of way, open space and viewpoints would be affected by the scheme and how these effects can be mitigated.

A number of residents on the north and north western edge of Newark-on-Trent, and in Winthorpe and Farndon villages, would experience an increase in visual impacts as a result of the scheme.

Option 1	On the southern edge of Winthorpe, Option 1 would result in the loss of semi mature highway planting along the existing A46.
	Option 1 would be further from properties in Winthorpe, resulting in less adverse impact than Option 2 on the adjacent landscape and existing views from properties, with greater scope for mitigation.
Option 2	The visual impact would be greater for Option 2 for residents on the north edge of Newark due to the flyover junction at Cattle Market. On the southern edge of Winthorpe, Option 2 would result in the loss of mature trees that characterise the landscape.
	Option 2 would be closer to properties in Winthorpe and would have a greater adverse impact on views than Option 1, with less scope to provide mitigation.

Nature conservation

We have assessed the potential impacts to biodiversity within the vicinity of the scheme, taking into account designated wildlife sites, habitats and species.

The two options will affect locally designated sites and habitats and could affect protected species. Detailed surveys will be undertaken in the next stage of the scheme's development to assess the impact to biodiversity from the chosen option and to design the mitigation required.

Option 1Option 1 would at Cattle Market Kelham Road.	have a greater impact to locally designated sites and habitats Junction, through the land-take required for the diversion of
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Road drainage and the water environment

We have assessed the potential impacts on the water environment within the vicinity of the scheme, which has included potential impacts on surface and groundwater quality, groundwater levels and flows and flowd risk. We have also assessed compliance with the Water Framework Directive.

The two options involve construction within the floodplain and additional land would be required to compensate for the loss of this floodplain area.

Both options could have an impact on water quality (potentially surface and groundwater), however, there is potential to mitigate these impacts and options for this will be identified and included in the design for the scheme as it progresses.

Option 1Option 1 has slightly greater impacts due to the diversion of Kelham Road.Option 1These potential impacts can be mitigated but more mitigation would be required compared to Option 2.



Contaminated land

The two options encroach on potentially contaminated land from the railway land, services, farms and the airfield which may be impacted by former pollution incidents and a sewage works.

Climate

The construction of Option 1 and Option 2 would give rise to emissions from the production of materials to be used in construction, their transportation to site, and onsite through construction activities, for example from emissions from diesel-fuelled construction plant.

Once opened for traffic, the two options would result in an increase in greenhouse gas emissions generated by vehicles in use. Government policy is helping change the fleet mix to improve those emissions, such as no petrol/diesel cars sold after 2030. So, we would expect the impact to reduce over time in line with the UK's ambition to be Net Zero Carbon by 2030.

Road safety

The two options would be expected to have a positive impact upon road safety by widening the existing road to a high-quality dual carriageway, improving the flow of traffic and reducing queuing at junctions.

Option 2We would expect that the addition of a flyover junction at Cattle Market,
separating local traffic from through-traffic, would further reduce collisions for
Option 2.

Construction duration and impacts

We currently expect to start construction of the scheme in early 2025. The two options involve substantial engineering work at a very busy location and would take two to three years to build.

We are committed to delivering the scheme safely, minimising disruption to road users and residents. We will publish our construction strategy with more details before we start work on the scheme.

Pedestrians, cyclists and horse riders

We have assessed the existing routes for pedestrian, cyclists and horse riders both during daytime and night-time and have undertaken counts to understand their usage.

The two options would divert the existing uncontrolled crossing of the A46 to the west of Cattle Market Junction to provide a safer route to cross. As the scheme is developed further, we'll ensure the needs of pedestrians, cyclists and horse riders are considered.

Land take

The two options widen the existing road, which will minimise the amount of new land required for this scheme. However, we'll need to acquire some land, and this will affect some properties and businesses.

Through this consultation we want to hear from everyone who could be affected, to better understand these impacts, before deciding on a preferred option.

At Cattle Market, the two options would need to acquire land from two businesses immediately south of this junction.

At Farndon roundabout, both options are the same, with a small amount of land needed to the north of this junction.

As the scheme would be built on floodplain, additional land would also be required to compensate the loss of this floodplain area.

Potential locations for these are being investigated and we'd like to start talking to landowners to help identify these. Once identified, we'll include these in our next stage of consultation for this scheme.

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Option 1	Option 1 would require approximately 31 hectares of land outside of the existing highway boundary that includes a range of soils for arable and grassland use.
	At Cattle Market, Option 1 would impact more landowners than Option 2 due to the land needed to divert Kelham Road into Great North Road.
	At Winthorpe, Option 1 would require less land than Option 2, but we'd need to acquire two businesses situated on the A46 eastbound carriageway, between Friendly Farmer and Winthorpe roundabouts.
Option 2	Option 2 would require approximately 32 hectares of land outside of the existing highway boundary that includes a range of soils for arable and grassland use.
	Option 2 would require less land at Cattle Market than Option 1, as Kelham Road and Great North Road would remain as they are.
	At Winthorpe, Option 2 requires more land than Option 1, it avoids the acquisition of two businesses but could impact upon two residential properties on Hargon Lane.



Discounted options

In developing this scheme, we considered several different options before shortlisting these down to the two presented in this brochure. The table below summarises options that we considered, but discounted.

Rejected option	Reasons for rejection
No scheme	Without the improvement scheme, there would be significant delays and increasingly unreliable journeys in the future. This is likely to result in 'rat-running' through Newark and other less suitable routes.
Junction improvements only, with no widening of A46	Traffic modelling indicated that without widening the existing single carriageway to a dual carriageway there would still be delays at all junctions and on the A46 mainline. This option would not provide the journey time savings or safety benefits that are objectives of the scheme and would not meet the strategic aims for the A46 corridor.
Option with all grade separated junctions between Farndon and Winthorpe	Whilst investigating options to include widening of the existing A46, we developed an option to create flyover junctions at Farndon, Cattle Market, the A1/ A46 and Winthorpe. This option was significantly more expensive than Option 1 or Option 2 due to the additional construction but didn't provide enough additional benefits to justify the increased cost.
	 This option also had greater environmental impacts of: Increased construction within the floodplain which would require compensating. Significant impacts within an area of known archaeology of international significance at Farndon. Increased visual impacts associated with the additional grade separated junctions. Greater number of properties would experience increases in noise.
Route to the north of Winthorpe	We developed a route to divert the A46 to the north of Winthorpe in order to remove the constraints of fitting the A46 link in between Newark-on-Trent and Winthorpe.
	This option would require more land take and new construction, but would not provide any additional savings in journey time due to it being a longer. This route was less preferable for cultural heritage, noise, landscape and visual receptors.
Route to the south of Newark- on-Trent	A longer route, crossing the A1 south of Fernwood and re-joining the existing A46 near Brough, and a shorter route joining the A1 South of Fernwood, were considered.
	It would not be possible to use or widen the partially constructed Newark Southern Link road as the road layout and frequent junctions required for access to the various developments would not be suitable for strategic through-traffic. As this route would be longer it would not improve journey times. The existing A46 to the north of Newark-on-Trent would remain a shorter route for many journeys and, as this would not be improved, it would remain congested.
Route further north of Newark- on-Trent	A longer route, crossing the A1 near North Muskham and re-joining the existing A46 near Brough, and a shorter route joining the A1 near North Muskham, were considered in order to minimise the impact on the flood zone. As this route would be longer it would not improve journey times. The existing A46 to the north of Newark-on-Trent would remain a shorter route for many journeys and, as this would not be improved, it would remain congested.

Next steps

Once the consultation has closed on Tuesday 2 February, we will;

- Make sure potential impacts on the community and environment have been fully considered
- Refine the option designs, incorporating the comments received where possible and complete our assessment work
- Analyse all responses and consider feedback and compile them into a consultation report

We will announce the preferred route option for the scheme in summer 2021.

Our preferred route will be taken through to the next stage of design development. This is when we'll develop more detail on the highway structures and overall design. It is also when the next stages of environmental assessments are completed, and we look at steps we can take to reduce any environmental impacts. During this stage, we will also hold another public consultation, giving you the opportunity to comment on more developed proposals.

For the two proposed options, it is likely that we will be required to submit an application for a Development Consent Order (DCO) to the Planning Inspectorate. The process for this is explained in the table below.

As you may know, a DCO is a special type of planning application which is needed for a Nationally Significant Infrastructure Project (NSIP). Further information on the DCO process can be found on the Planning Inspectorate's website: infrastructure.planninginspectorate.gov.uk/application-process/the-process.

It will be possible to participate in the Planning Inspectorate's examination of our application, when our final proposal will be considered in detail.



For more information please visit our website: highwaysengland.co.uk/a46-newark-bypass

You can also sign up for email alerts whenever the webpage is updated.

If you have any queries about this scheme please contact us by calling the Customer Contact Centre on **0300 123 5000** and requesting a call back from a member of the project team or emailing **a46newarkbypass@highwaysengland.co.uk**



If you need help accessing this or any other Highways England information, please call 0300 123 5000 and we will help you.



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This document is also available on our website at www.highwaysengland.co.uk

For an accessible version of this publication please call 0300 123 5000 and we

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