

A417

The Missing Link

Preferred Route Announcement





Introduction

Investing in your roads

At Highways England, we believe in a connected country and our network makes these connections Link, a critical route that connects the Midlands happen. We strive to improve our major roads and motorways—engineering the future to keep people moving today and moving better tomorrow. In this brochure, we explain the preferred route We want to make sure all our major roads are more dependable, durable and, most importantly, safe. That's why we're delivering billions of pounds of investment on our network. As part of this the government made money available for us to

investigate options for improving the A417 Missing and the north of England to the south.

for the A417 Missing Link and how we assessed potential options for the road and carried out public consultation. You'll also find information about what will happen next.

About the A417 Missing Link

The A417/A419 provides an important route between Gloucester, Cheltenham and Swindon that helps connect the West Midlands and the north to the south of England via the M5 and M4 motorways. While most of the route is dual carriageway, there's one section that isn't. Known as the Missing Link, this three-mile stretch of single carriageway between the Brockworth bypass and Cowley roundabout severely restricts the flow of traffic.

Traffic congestion can be frequent and unpredictable, driving motorists, including HGVs, to divert onto smaller local roads to avoid long delays. This causes difficulties for neighbouring communities, whose local roads were not built to accommodate such a high level of traffic.

The sensitive nature of the Cotswold escarpment, the shape of the landscape and the area being part of the Cotswolds Area of Outstanding Natural Beauty means that there isn't an easy answer for improving this section of road.

Over the years, there have been numerous attempts to find a solution, but for various reasons, including affordability and changes in investment priorities, these have never become a reality.

However, in recent years, the case for improvement has become far more compelling – to improve safety, support the economy, ease congestion and reduce pollution. This was recognised in the government's first *Road Investment Strategy 2015 - 2020* with funding being made available to investigate possible route options. Delivery of the project will be subject to confirmation of funding within the second road investment strategy, which will cover the period between 2020 - 2025 and is due to be published towards the end of 2019.





The scheme's vision: a landscape-led highways improvement scheme

As part of this improvement, we want to create a landscape-led highways improvement scheme that will deliver a safe and resilient free-flowing road while conserving and enhancing the special character of the Cotswolds Area of Outstanding Natural Beauty; reconnecting landscape and ecology; bringing about landscape, wildlife and heritage benefits, including enhanced visitors' enjoyment of the area; improving local communities' quality of life; and contributing to the health of the economy and local businesses.

Objectives for the scheme

- Transport and safety: to reduce delays, create a free-flowing road network and improve safety along this stretch of the A417
- Environment and heritage: to reduce the impact on the landscape, natural and historic environment of the Cotswolds and, where possible, enhance the surrounding environment
- Community and access: to reduce queuing traffic and pollution, improve access for local people to the strategic road network, and support residents' and visitors' enjoyment of the countryside
- **Economic growth:** to help boost growth and prosperity by making journeys more reliable and improving connectivity.

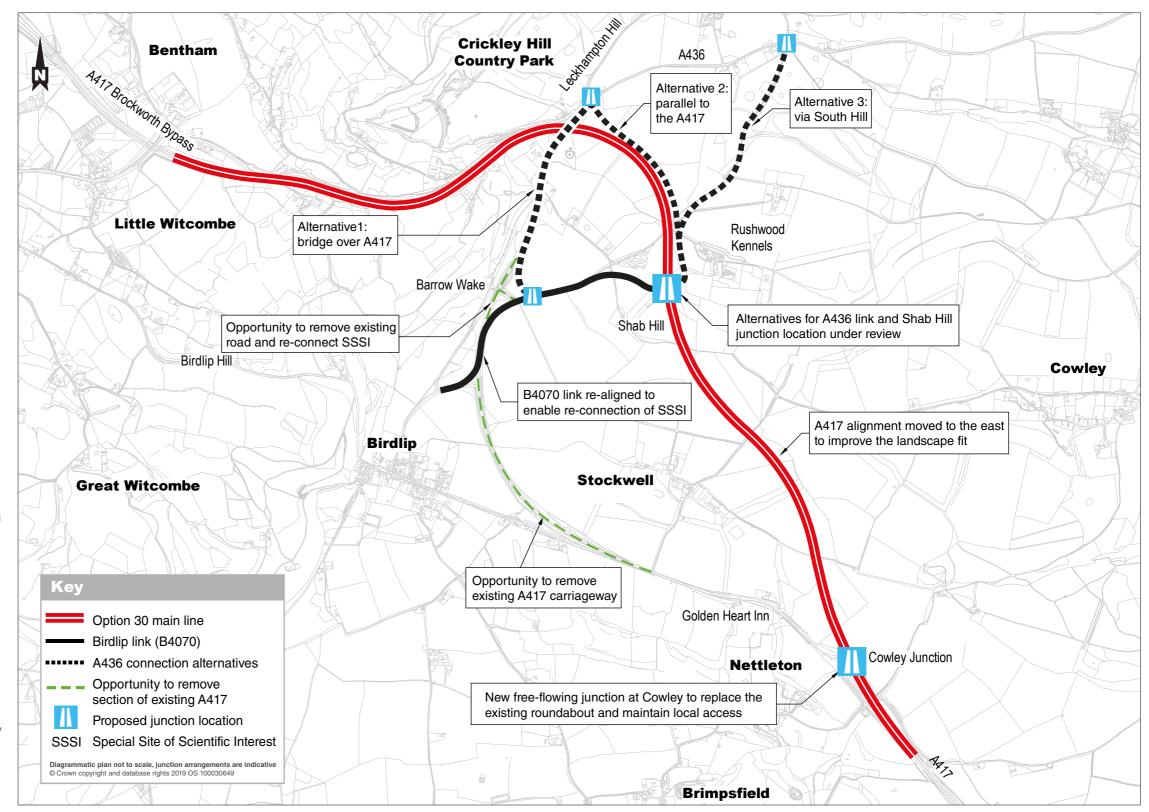
The preferred route

We've chosen Option 30 as our preferred route for improving the A417 Missing Link. We've modified and improved the route as a result of your feedback during our route options consultation held last year. There will be a future consultation which you can participate in on the different junction proposals shown on the plan.

Overall the consultation demonstrated huge support for improving the Missing Link and in particular for route Option 30. We believe that Option 30 presents the best opportunity to deliver a landscape-led highways improvement scheme which meets all of our key objectives and delivers a return on investment.

Option 30 will:

- improve safety compared with the existing route and contribute to our target of reducing the number of people killed or seriously injured on our network
- make journey times more predictable, reducing the cost and inconvenience of unexpected delays on businesses and other people who use the road and enabling goods and services to be moved around more easily
- reduce rat-running through neighbouring communities, improving the lives of people who live close to the route and making it easier for drivers, walkers and other local road users to get around
- improve landscape and ecological connectivity through landscape and habitat restoration and provision of a green bridge
- improve air quality and reduce pollution caused by idling vehicles
- improve access to public footpaths, including the Cotswold Way National Trail and the Gloucestershire Way, helping more people to enjoy the area safely
- support the predicted growth in jobs and housing in the Gloucestershire area by improving this key road connection.



Our preferred route consists of:

- a 3.4 mile dual carriageway surface route, following the alignment of the existing A417 at Crickley Hill with a reduced gradient
- a third lane ascending Crickley Hill, to provide one lane for slow moving traffic and two for general traffic

- a new section of road built through Shab Hill to the east of the existing A417, re-joining the road near Cowley roundabout
- a new junction at Shab Hill with links to Birdlip and the A436
- the removal of the Air Balloon and Cowley roundabouts
- a downgraded road between Air Balloon roundabout and a new junction at Cowley.

The consultation

Consultation proposals

The proposals that we put forward as part of the consultation, held in February and March 2018, followed extensive investigation of possible route options. This involved assessing route options against the scheme's vision and objectives, as well as a range of engineering, economic and financial criteria.

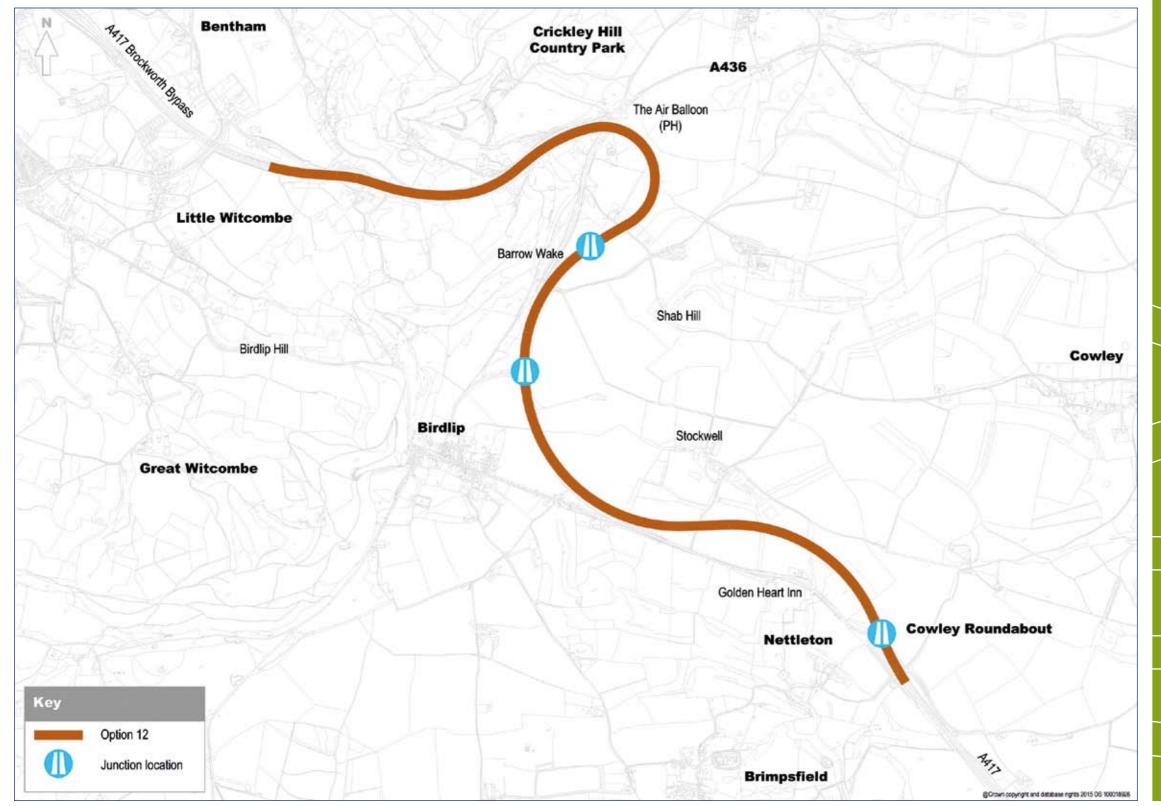
As a result of this assessment two route options were proposed at consultation: Option 12 and Option 30.

Option 12

a four mile stretch reusing sections of the existing A417 on Crickley Hill and Birdlip. New sections of road would be built at Nettleton and Emma's Grove. For further information on how we identified route options, please see our route options consultation booklet which is available online:

https://highwaysengland.citizenspace.com/he/a417-missing-link/

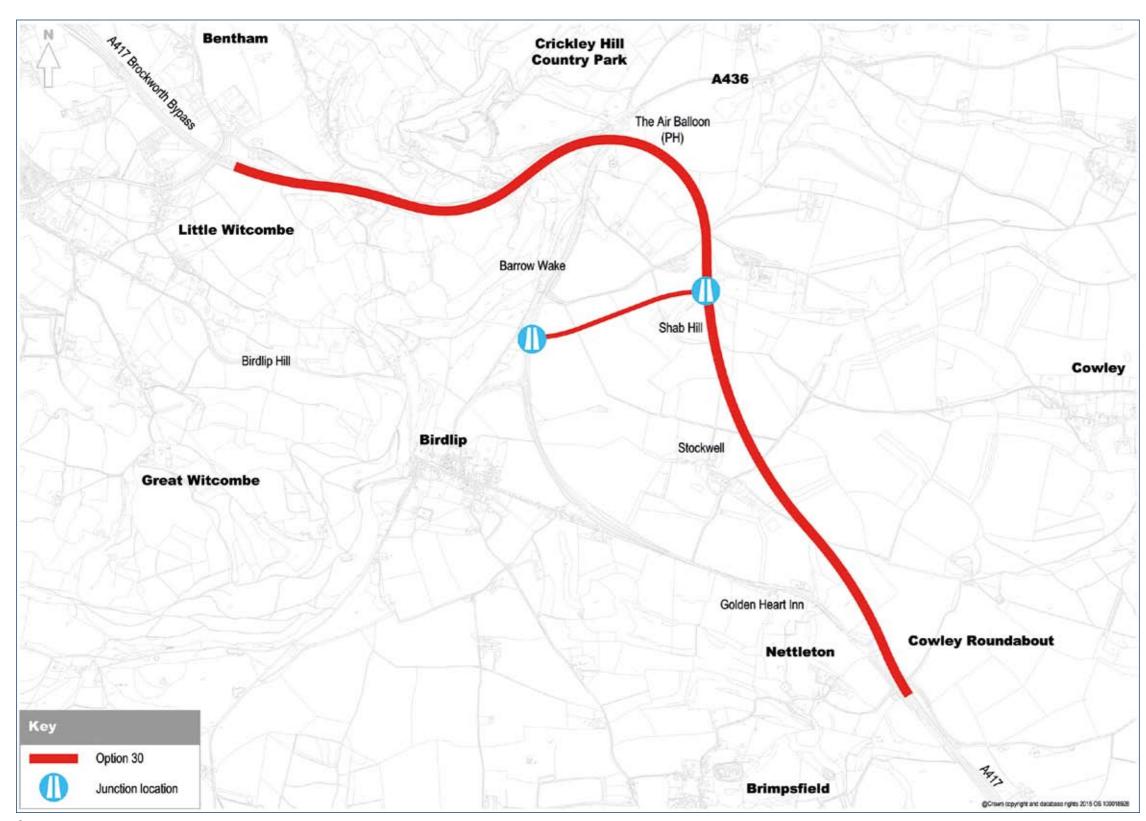




The consultation

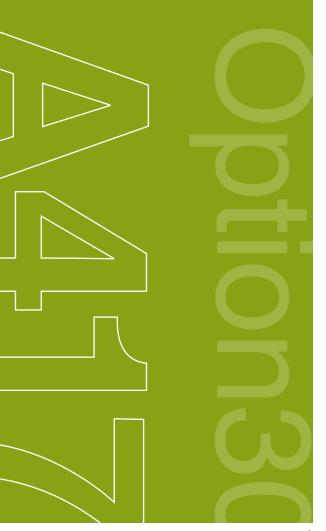
Option 30

a 3.4 mile surface route following the alignment of the existing A417 at Crickley Hill with less of a slope. The new section of road would be built through Shab Hill to the east of the existing A417, re-joining the road near the existing location of Cowley roundabout.



For further information on how we identified route options, please see our route options consultation booklet which is available online:

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How we carried out the consultation

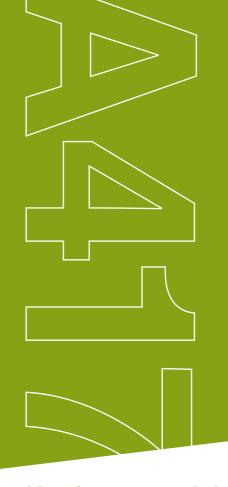
We held our public consultation on route options over a six week period between 15 February and 29 March 2018. We asked you to comment on the scheme proposals and for any important information you felt we should take into account as part of its development.

We promoted the consultation using a range of methods, including letters to interested parties, leaflets, posters, press releases to local and regional newspapers, Facebook advertising and social media. We developed a dedicated consultation website (https://highwaysengland.citizenspace.com/he/a417-missing-link/) where you could view consultation documents, get updates and submit feedback online. You could also submit feedback by email and freepost. Almost 2,000 people and organisations responded to the consultation.

We held public events at six locations where you could view information about the scheme and speak to members of the project team, as well as provide comments on the scheme proposals. These were attended by approximately 800 people. We also placed information in local libraries.

For further information on how we carried out the consultation, please read our A417 Report on Public Consultation, available online: https://highwaysengland.citizenspace.com/he/a417-missing-link/





Key issues and themes raised during consultation

Thank you to everyone who shared their comments with us during consultation. We've taken your suggestions and feedback into account in the selection of the preferred route. Where appropriate, we've logged some comments, particularly those related to specific scheme design details, and these will feed in to the ongoing development of the scheme.

In this section, you'll find an overview of the main areas of feedback we received on the proposals. Responses are grouped in the same order as the feedback form from the consultation and include comments we received from letters and emails too.

Overall, the majority of respondents agreed that the A417 Missing Link is in need of improvement to address the problems experienced by all road users. Almost three quarters of respondents also agreed that Option 30 presented the best opportunity for meeting the scheme's objectives. You can find more information on specific alternative proposals and our response in the A417 Report on Public Consultation and the A417 Scheme Assessment Report, published alongside this booklet.

Consultation questions

As part of the consultation feedback form, we asked you to respond to six questions:

- To what extent do you agree with our proposed Option 30?
- Do you have any comments to make in relation to Option 12?
- As part of identifying any route options, Highways England assessed over 30 options, including six as part of the further appraisal work. Do you have any comments on any of the other options included in the assessment?
- Is there anything further you would like us to consider in relation to improving the A417 Missing Link?
- How did you hear about this consultation?
- Do you have any feedback on this consultationevents, information provided, advertising?

Option 30

We asked you to tell us the extent to which you agreed with our proposed Option 30. This agreement was rated on a scale of strongly agree to strongly disagree and don't know, with a space for you to provide reasons for your answer. The graph (Figure 1) at the bottom of this page shows the response to this question.

You told us that:

- The majority of you (72%) agreed with our proposal to take Option 30 forward for further design and assessment work
- There were a significant number of comments indicating support for Option 30 over Option 12. Most of you felt Option 30 would deliver a free-flowing road network, particularly as it would have a 70mph speed limit along the entire route
- Some of you raised concerns about the potential effects of Option 30 on the Cotswolds Area of Outstanding Natural Beauty, the surrounding environment, cultural heritage and sites of special scientific interest
- Some comments supported the proposal to divert the road further away from Birdlip, while others disliked the road running closer to Stockwell, Cowley and Shab Hill
- You also raised the importance of good access for walkers, cyclists and horse riders
- The land take associated with Option 30 was raised by some people, with the removal of the Air Balloon pub being a common concern.

We note the high level of support for Option 30 and that many of you broadly recognise the route's potential for delivering a scheme that balances all of the objectives, is affordable and demonstrates value for money.

We also appreciate concerns relating to the impact of Option 30 on the surrounding environment and Cotswolds Area of Outstanding Natural Beauty. We considered these comments as part of selecting the preferred route. We will use these detailed comments to inform the scheme's continuing development. We'll present further information on environmental mitigation and enhancement at the next stage of public consultation.

Maintaining connectivity to and between existing rights-of-way is a priority in the continuing development of the scheme. Option 30 presents a number of opportunities to improve access to public rights of way, including the Cotswolds and Gloucestershire Ways – we will present more detailed proposals as part of the next stage of public consultation.

We also want to maintain connectivity to other local roads, for example access for A436 users and local access to the road from Cowley and Brimpsfield. These issues will be considered in future stages of the scheme's design and the feasibility of alternative junction arrangements and connections to the local road network will be assessed as part of more detailed design work.

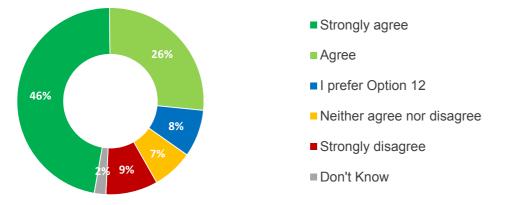


Figure 1: Preferences on scheme proposals from questionnaire responses

Option 12

We then asked you to share any comments you had regarding Option 12.

You told us that:

- Some of you preferred Option 12 over Option 30 on the basis that it follows the existing A417 and would therefore have less of an impact on the environment and the Cotswolds Area of Outstanding Natural Beauty
- A large number of you raised concerns about Option 12 in relation to the bend in the road north of Barrow Wake that would require a mandatory speed limit of 50mph
- Some people also raised the visual and noise impact of Option 12 as a common issue. The majority of comments related to Option 12's proximity to Birdlip, with particular concerns that upgrading the road to a dual carriageway would increase the noise experienced in the village. In contrast, some support for Option 12 was noted on the basis that the route would run further away from Cowley, Stockwell and Shab Hill
- You were also concerned that rat running would continue if Option 12 was taken forward, particularly in Cowley, Brimpsfield and Birdlip
- There was also concern that the construction of Option 12 would have a significantly greater impact on traffic than Option 30, and that it could cause greater disruption to the local community
- The land take associated with Option 12 was raised by some people, with the removal of the Air Balloon pub being a common concern.

We chose Option 30 as the preferred route because overall it performs better than Option 12 in meeting the objectives for the scheme. Option 30 will deliver a safe, reliable and landscape led route, resulting in more reliable journeys for residents, commuters and business owners.

Other options

We also asked you to share your views on any other options included in our initial assessment. We assessed 30 options as part of identifying route options, including six which were reviewed in more detail.

You told us that:

- Most responses to this question provided views on discounted tunnel options
- Some of you felt tunnel options should have been included in the route options consultation
- Those of you who expressed a preference for a tunnel option felt it would have less impact on the environment and the Cotswolds Area of Outstanding Natural Beauty than a surface route
- Some of you agreed that with our assessment that tunnel options were costly and would not provide value for money for taxpayers
- There were some concerns about length of construction period and potential geological impacts of tunnel options.

As we set out in the A417 Technical Appraisal Report, we considered a range of options for the A417 Missing Link. Our assessments concluded that tunnel options provided better opportunities to reduce the impact on the landscape than surface route options. However, tunnel options would still have a large adverse environmental impact due to the need to build tunnel portals and maintain the existing A417 throughout, across the sensitive Cotswold escarpment.

The government also set a cost allocation for this scheme of £250 - £500 million in the context of competing demands for investment in other transport schemes and public services. All tunnel options exceeded that cost allocation and they also did not represent value for money as the return on investment was very poor. As a result, tunnel options were not taken to consultation. We've considered all factors in our decision and this informed our choice of Option 30 as the preferred route which we will now take forward for further design.

Further comments

We analysed all of the comments we received and grouped them into key themes. Below you'll find an overview of the most prominent and frequent comments by theme and our responses to them. Where comments relate to matters that are still being developed, such as the layout and detailed design, we'll use these to inform the ongoing development of the scheme.

Landscape considerations

What you told us:

- Some of you raised concerns that Option 30 would have a negative impact on the Cotswolds landscape and the rural feel of the area. In particular, some expressed opposition to the scheme in general due to the potential effect on the Area of Outstanding Natural Beauty of the surrounding landscape.
- Specifically, there were concerns that the proposals did not recognise the government's aim to protect Natural Parks and Areas of Outstanding Natural Beauty under the 25-year Environment Plan, or the Cotswolds Conservation Board's ambition for the Cotswolds to become a National Park.

How we've considered your comments

We fully recognise the importance of the sensitive Cotswolds landscape. We have carried out a range of assessments to understand how the landscape could accommodate the proposed route options, and consider that Option 30 presents greater opportunities to be accommodated into the existing landscape compared with Option 12.

The Department for Environment, Food and Rural Affairs' *A Green Future: Our 25 Year Plan to Improve the Environment* sets out the government's ambition to be the first generation to leave the environment in a better state than it was found. It is intended to be read as a statement of intent, setting the direction of travel for future government policy. Highways England works within the government's policy framework and will take the 25 Year Plan and any subsequent new legislation or policies that arise from this plan into consideration during the development of our proposal.

We regularly meet with representatives from environmental groups, statutory agencies and local councils, including the Cotswolds Conservation Board, National Trust and Gloucestershire County Council, to deliver a landscape-led highways scheme which balances all of the project's key objectives and seeks to bring about an improvement to the existing environment. We'll share more details on environmental mitigation and enhancement at the next stage of consultation.

Environmental issues

What you told us:

- Some of you fed back on the effect of both the routes on wildlife and biodiversity around Crickley Hill Country Park, Shab Hill and Ullen Wood, as well as generally across the scheme.
- There were also some concerns raised around Barrow Wake, particularly in relation to Option 12, and that the proposals would not allow it to be restored to a tranquil beauty spot. The area is a Site of Special Scientific Interest and a number of important archaeological discoveries have been made there.

How we've considered your comments

One of our key objectives for this scheme is to improve the existing environment and incorporate the scheme into the landscape and surrounding areas. Option 30 is further away from Barrow Wake, providing opportunities to remove the existing road from the edge of the escarpment, which will benefit the viewpoint, the Cotswold Way and the Barrow Wake Site of Special Scientific Interest.

We will take into account the concerns you raised about effects on woodlands, habitats and wildlife in the development of the design for Option 30 and will present more details at the next consultation.

For further information on matters raised during the consultation and our response, please read our A417 Report on Public Consultation and A417 Scheme Assessment Report available online: https://highwaysengland.citizenspace.

com/he/a417-missing-link/

Consideration of alternative solutions

What you told us:

Apart from overall expressions of support for Option 30, some of you said that we should:

- Pursue one of the shortlisted tunnel options
- Modify one of the proposed options by extending the proposed cuttings or creating cut and cover tunnels in various locations
- Widen the existing road to a dual carriageway with changes to Air Balloon roundabout
- Implement other transport solutions that do not involve building new roads.

How we've considered your comments

We set out the reasons for not taking tunnel options to consultation on page 13.

With regard to widening the existing road, this would not address the problems of congestion and pollution, particularly at Air Balloon roundabout—it would continue to restrict traffic flow and would not address the problems caused by the steepest sections of the road and the sharp bends.

We also considered alternative modes of transport to solve the identified capacity problem on the existing A417 Missing Link. This showed that a road scheme is the most suitable solution for easing congestion around Air Balloon roundabout. Option 30 provides the best balance of the key objectives for the scheme. It combines a variety of transport, safety, environment and community benefits, and delivers a return on investment for taxpayers.

Legacy and cultural heritage

What you told us:

- Many of you were keen to see existing public rights of way maintained as part of any improvement to the A417 Missing Link. Specifically, this included the routes of the Cotswold Way National Trail, the Gloucestershire Way and the Gustav Holst Way.
- You were also interested in opportunities for providing new crossing points for walkers, cyclists and horse riders as part of the scheme.

How we've considered your comments

Maintaining connectivity to and between rights of way and overcoming severance issues for pedestrians, cyclists and horse riders is a major opportunity for the scheme and will continue to be a key consideration in the further development of the preferred route.

We're working closely with Gloucestershire County Council, which is responsible for the improvement of local rights of way, to assess and agree how footpaths, cycle paths and bridleways can be maintained and improved as part of the scheme. We will present more details during future consultation stages.

Traffic disruption during construction

What you told us:

Many of you expressed concerns about traffic disruption during construction. This included an increase in rat running through Elkstone, Brimpsfield and Birdlip; the lack of alternate routes across the region; the diversion of traffic along the A46 through Cheltenham; and maintaining access between Gloucester and the M4. You also said that you wanted to be kept informed of the progress of construction works and the impact on traffic while the scheme is built.

How we've considered your comments

We'll look at how we'll build the route as we develop our design further, working to ensure that construction is as efficient as possible while minimising any disruption. We'll carefully plan and manage our roadworks to ensure we maintain safety at all times.

Rat running through local roads during construction is an important consideration. We'll look at potential mitigation measures and discuss options with the Gloucestershire County Council during the ongoing development of the scheme.

We'll continue to share information with you at every stage of the scheme's development. This includes sharing information about our construction work and how this might impact you.

Impact on local communities

What you told us:

There were some concerns that the scheme would negatively affect local communities, including those in Birdlip, Stockwell, Brimpsfield and Cowley. Some of you were worried that the proposals would adversely affect your standard of living as a result of noise, pollution and visual impact. A number of you made particular reference to increased noise pollution along the concrete surfaced section of the A417-A419 between Daglingworth and Latton as a result of the scheme.

How we've considered your comments

We have carefully considered the effects of all proposed routes on the local community.

Current levels of traffic are expected to increase

regardless of whether the scheme is constructed. The scheme will increase the amount of traffic along the route, but journeys along the road will be quicker and more dependable. One of our key aims for the scheme is to create a route that benefits local communities as well as regular road users. This includes reducing rat-running through neighbouring communities whose roads were not designed to accommodate the level of traffic they experience, reduce pollution caused by idling vehicles on the A417 and improve air quality.

While the A417 route is likely to become busier, noise assessments do not suggest there would be a significant increase in noise along the corridor, including along the concrete surfaced sections of the route. We'll provide more information on our noise assessment at the next stage of consultation, including any measures we propose to keep noise levels to a minimum for local communities.

Access to the new road from the local network

What you told us:

There were concerns raised that the proposals, including Option 30, would make it harder for local people to access the A417, especially from the A436, the B4070, and various local roads.
There was also some concern that local roads would continue to be used as ratruns after the scheme's construction.
As such, many of you asked for more information to help understand the proposed junction arrangements.

For further information on matters raised during the consultation and our response, please read our A417 Report on Public Consultation and A417 Scheme Assessment Report available online: https://highwaysengland.citizenspace.com/he/a417-missing-link/

How we've considered your comments

Local access to the route will be critical, and we'll aim to ensure that local communities will still be able to safely access the A417 and that pressure from rat-running is reduced. Our assessments suggest that Option 30 would reduce rat-running through neighbouring villages, including Elkstone and Birdlip, by encouraging traffic to use the new free-flowing and safer A417.

We'll consider the detailed design of junction arrangements as part of the next stage of the scheme's development and are working closely with Gloucestershire County Council to develop a plan for local access. As part of this work, we're reviewing the Leckhampton Hill junction, access for traffic from the A436 to the A417 and are also including a junction at Cowley in Option 30. We'll share more details as part of the next stage of consultation for the scheme.

Cost and value for money

What you told us:

- The expenditure and value for money of the scheme in general was a key issue for many of you, but opinions on the best way of tackling the problem were mixed.
- Some people stated that the budget for the scheme should be increased to accommodate tunnel options, which they felt would protect the environment and local wildlife. They pointed to other areas of the country where higher budgets had been allocated for road improvement schemes. In contrast, others stated that building a tunnel would cost too much money and would be a waste of money.
- Some of you expressed support for spending the budget on other road and transport schemes, including: additional public transport, improving the local rail network, building other new road routes and the maintenance of the existing road network.

How we've considered your comments

The A417 Missing Link is part of the government's Road Investment Strategy, which identifies parts of the strategic road network which need upgrading to improve safety, connectivity, and reliability for its users. The government has set a cost allocation for this scheme of £250 - £500 million in the context of competing demands for investment in other transport schemes and public services. As such, we are aware that the scheme needs to represent value for money to taxpayers and deliver a return on investment.

Our assessment work for the scheme covers the first 60 years of its lifecycle. During this period, Option 30 will provide the best opportunity to both meet the scheme's objectives and be delivered within this cost allocation, while providing a positive return on investment for taxpayers and recognising the unique landscape of the Cotswolds Area of Outstanding Natural Beauty.

For further information on matters raised during the consultation and our response, please read our A417 Report on Public Consultation and A417 Scheme Assessment Report available online: https://highwaysengland.citizenspace.com/he/a417-missing-link/

Developments following consultation

We've improved the route as a result of your feedback during our route options consultation, as well as the additional surveys and assessment work that we've carried out. We will develop the design of the route to provide more detail at the next stage of consultation. This section highlights the key changes to Option 30 that came out of the consultation.

Landscape considerations

Following a landscape study that we carried out as part of the route options identification process and comments made during the consultation, we have made several amendments to Option 30, particularly to improve its fit within the landscape.

Stockwell

To improve the fit within the landscape, we've moved the road approximately 230m further east of Stockwell compared with the previous design. This will also reduce the noise impact for Stockwell and help protect the tree line and dry-stone walls to the east.

Barrow Wake

We've realigned and simplified the link road between the existing A417 at Barrow Wake and the new proposed junction at Shab Hill. This will enable us to reconnect the Site of Special Scientific Interest of Crickley Hill and Barrow Wake that is currently severed by the existing road.

Cowley junction

We've updated our proposal to include a junction at Cowley in Option 30 to provide direct access to Brimpsfield and Cowley. This will allow us to explore opportunities to remove the existing A417 carriageway from the access point to Stockwell to the Birdlip junction and help us strike a balance between building new infrastructure and preserving the special character of the Cotswolds Area of Outstanding Natural Beauty. Essentially, we would be able to remove more than 1.2 miles of the existing road or reuse it for another purpose, such as a new walking or cycling route and enhance the Cotswold escarpment.

Safety considerations

A key objective for upgrading the A417 Missing Link is to improve the safety and reliability of the road. This objective is shared by local communities and we've undertaken further assessment to improve our designs.

Crickley Hill

The current road climbs steeply up Crickley Hill at a gradient of 10%, causing some vehicles to slow down significantly. At the route options consultation we presented Option 30 as

reducing this to 7.5%. Having undertaken further assessment and design work, we're now able to reduce the incline for Option 30 to 7%, a 3% reduction compared with what is there now.

We expect Option 30 to improve road safety and contribute to our target of reducing the number of people killed or seriously injured on our network.



What happens next?

Now that we've announced our preferred route, we'll carry out some more surveys and assessment work to help us refine and design the scheme in more detail.

You'll have another opportunity to share your views on our proposals before we submit our planning application, which is known as a Development Consent Order. We're planning to hold our next public consultation this summer and will ask you for feedback on our detailed proposals. This consultation is a legal requirement of the Planning Act 2008.

Delivery of the project will be subject to confirmation of funding within the second road investment strategy, which will cover the period 2020 to 2025 and is due to be published towards the end of 2019.

How to find out more

To find out more about the route options consultation, please visit our website: https://highwaysengland.co.uk/projects/a417-missing-link/

The website also contains further information, documents, images and the latest newsletters to explain the need to upgrade the A417 Missing Link, the work we've carried out so far and what is left to come.

Visit our website for more information about the scheme or contact us below.

@ By email: A417MissingLink@ highwaysengland.co.uk

By phone: 0300 123 5000



On Twitter: @HighwaysSWEST



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