

M4 Junction 18a Link Study

Frequently Asked Questions

August 2017

This document provides answers to some frequently asked questions (FAQs) about the M4 Junction 18a Link Study.

Further information regarding the study and consultation can be found at the following address <http://www.southglos.gov.uk/m4j18a>

Study background

1. When were the proposals for this study announced?

In March 2016 the Government's Budget included the following statement:

New junction on the M4 – The government will provide £500,000 to South Gloucestershire Council to fund a study into a new junction 18a on the M4 to link with the Avon ring road A4174.

2. What is South Gloucestershire Council looking at?

South Gloucestershire Council, in partnership with Highways England (responsible for the M4 motorway), is now seeking to undertake this study into the need for and options for the M4 (Junction 18a) and a link to A4174 ring road. The study will appraise the impact of the scheme options in accordance with Department for Transport guidance.

3. Why is this happening?

The M4, M32, A4174 Ring road and other routes in the North and East Fringe of Bristol are well known for congestion, delays and incidents. Completed at least two decades ago, these strategic highways are unable to cope with the volume of traffic that now uses them, particularly during peak periods.

The South Gloucestershire Core Strategy (adopted December 2013) supports the addition of a new M4 Junction 18a and link to the ring road, as does the emerging Joint Transport Study for the West of England.

4. Where has the funding for this study come from?

Department for Transport (DfT).

5. What are the objectives of this study?

The scheme objectives are:

- Relieve congestion to M4 Junction 19 and M32 Junction 1, and on the A4174
- Improve safety by reducing congestion related collisions on M4 Junction 19 and M32 Junction 1, and on the A4174
- Unlock the economic potential in the North and East Bristol Fringe, particularly within Science, Technology and Innovation sectors
- Minimise the impact of traffic/infrastructure on the environment and, where possible, deliver opportunities for environmental enhancement
- Improve transport network resilience and journey time reliability
- Protect and enhance access for non-car modes

6. What is the process for this study?

The study is following the approach outlined by Department for Transport for developing major transport schemes, which is also used by Highways England.

This approach requires the preliminary consideration of potential route options, their likely impacts, costs and whether they would meet the scheme objectives. Further stages would follow to examine the scheme and its impacts in more detail.

Please also see 'Next Steps' in the consultation leaflet.

7. How long will this study take?

17 months, from November 2016 to March 2018.

8. Is Highways England involved in this study?

Yes, Highways England is a partner.

9. Why weren't we told about the options sooner?

CH2M began working on options in February 2017; draft proposals were shared with the project board in April and with elected representatives in May and June. There was some delay in sharing emerging proposals because of the Purdah period for the General Election; during this time period ahead of an election, central and local governments are prevented from making announcements about any new or controversial government initiatives (such as new major road schemes) which could be seen to be advantageous to any candidates or parties in the forthcoming election.

Overview of the study

10. What is a 'feasibility study'?

This is the first stage in the development of a major transport scheme; it asks

- what are the problems that need to be solved?
- what are the objectives?
- what are the options to meet these objectives?
- which options could be delivered in terms of
 - cost and value for money?
 - environmental impact?
 - public support?

11. Why are you looking at different options?

Firstly, DfT guidance requires that promoters of major schemes spend public funding on the best option (which will not necessarily be the cheapest). Second, when securing statutory powers and acquiring land, the public authorities must demonstrate they have looked at the alternatives and that the scheme they are promoting is the best for the wider public benefit.

12. Have you already decided which scheme you are going to construct?

No.

13. Who is responsible for this scheme?

Currently, South Gloucestershire Council.

14. Who would be responsible for taking the scheme forward?

Because the scheme involves a new motorway junction, it is proposed Highways England would lead subsequent stages of project development.

15. How will the scheme options be assessed?

The scheme options will be assessed in terms of:

- The strategic need for the scheme - do the scheme options meet the objectives and local and national policies (e.g. the South Gloucestershire Core Strategy)?
- Value for money - are the scheme option costs and impacts justified by the predicted improvements?
Impacts to consider include:
 - Traffic volumes and capacity
 - Air quality
 - Noise
 - Water Resources
 - Flood Risk
 - Landscape
 - Ecology
 - Visual Impacts
 - People and Communities
 - Cultural Heritage
 - Greenhouse gas effects
- Financial and commercial affordability – could the options be afforded?
- Deliverability – are the scheme options deliverable in terms of political and public acceptability and the statutory powers available to promoting authorities?

16. How will you choose the preferred option?

The feasibility study will assess the scheme options' performance against the scheme objectives and against Department for Transport criteria.

The study will then be considered by the South Gloucestershire Cabinet, who will decide on the next steps.

17. What will the scheme cost?

The scheme options are predicted to cost the following in 2017 prices.

- Western option - £446 million
- Eastern option a - £348 million
- Eastern option b – £328 million

18. Do you need planning consent for the scheme?

Yes, by way of a Development Consent Order.

19. When could the scheme be built?

Construction of the scheme could commence in 2024 with completion in 2027.

20. When could the scheme open?

The scheme could open in 2027.

21. What is a RIS?

RIS means Route Investment Strategy. It is Highways England's programme of works for the strategic highway network in England. It is proposed that the M4 J18a is delivered through this process.

22. What is a traffic model?

It is a computer programme that forecasts traffic flows. It uses traffic survey data to build a picture of current traffic movements, adds forecasts of traffic demand, and applies them to a representation of the highway network.

23. Do the traffic forecasts take account of background traffic growth and new journeys from planned development?

Yes, the assessment of route options allows for all planned development and general traffic growth across the region. Each scheme is compared against the future year traffic scenario with the same development included.

24. What is a business case and what is in it?

A business case is a formal way of assessing and comparing options for schemes to ensure that they are a sensible use of public money. For this scheme we are using the DfT WebTAG <https://www.gov.uk/guidance/transport-analysis-guidance-webtag> processes to assess the scheme.

25. How is the Benefit Cost Ratio (BCR) calculated?

The Benefit Cost Ratio (BCR) is an indicator that is used to summarise the overall value for money of a proposal.

It is calculated using the proposed scheme costs derived from the option cost estimates and the scheme benefits from the Transport User Benefits Analysis (TUBA) package. This package takes the change in traffic delay from the traffic model and calculates the effective monetarised value using DfT determined values of time. The BCR is then estimated from the benefits over a 60 year period being compared with the cost of the scheme including maintenance for 60 years.

How does the scheme fit with other schemes in the West of England?

26. How does this scheme fit into the West of England's transport priorities?

The M4 Link is identified as an aspiration in the 3rd Joint Local Transport Plan [JLTP]; the JLTP provides the statutory basis for South Gloucestershire Council's transport policies and runs until March 2026.

In addition, paragraph 7.12 of the South Gloucestershire Core Strategy states:

The Council is committed to the long-term realisation (beyond 2027) of a new link road from the A4174 Ring road to the M4 (between Junction 18 and 19) to relieve congestion to the M4 Junction 19, M32 Junction 1, the A4174 eastbound and within the communities of the north east Bristol fringe area. The Council will continue to make the case to the Highways Agency and central government during the plan period.

The emerging Joint Transport Study recommends an M4 J18a and link to the ring road.

27. What are the development assumptions?

We assume only those developments identified in the Core Strategies and emerging Joint Spatial Plan.

28. Will you look at how the scheme fits with other proposed schemes in the Joint Transport Strategy?

Yes, we will run tests with the addition of other proposals in the emerging Joint Transport Study, such as the link to Yate.

29. What is the status of the Joint Transport Study and Joint Spatial Plan?

The Joint Transport Study is a technical study and will be considered by the West of England Joint Committee in October 2017.

The Joint Spatial Plan (JSP) is being prepared as a statutory development plan document (DPD). When completed and adopted the JSP will form part of each councils Local Plan and will attract full weight as the starting point for determining planning applications and appeals, in accordance with the plan led system as set out in the planning legislation and the National Planning Policy Framework (NPPF).

However before this, the Plan needs to go through a number of further stages of preparation. This will involve public consultation on the draft plan which is expected to take place later this year. Comments made during this stage will be taken forward and provided to the independent inspector who will be appointed by the Secretary of State to examine the draft Plan. The purpose of the examination is to ensure it conforms with legal and technical requirements which are termed 'tests of soundness' as set out in legislation and the NPPF. Given these remaining stages are still to be completed, limited weight is currently attached to the JSP at this stage.

The development of the JSP will continue throughout 2017 and the submission of the document to Secretary of State will be in 2018. For more information on progress please go to www.jointplanningwofe.org.uk

30. Why is the scale of improvement so large?

The scheme includes all measures required to achieve the defined objectives. This includes providing an enhanced capacity A4174 ring road to cater for the additional traffic that is expected as a consequence of the J18a Link, as well as some mitigation measures on local roads. This would provide capacity for the forecast growth in traffic and safeguard the provision of other schemes proposed in the Joint Transport Study.

What is included in the study?

31. What options are being considered?

There are two options being considered:

- A western option that moves/realigns the M4 north to provide space to build a new junction; it then uses an improved Westerleigh Road to the A4174 ring road adjacent to Lyde Green. Improvements are also made to the ring road junctions as far as the Hicks Gate junction with the A4 Bath Road.
- An eastern option. This option has two sub-options that propose building a link road and junction to the north and west of Pucklechurch. This would require the creation of a new highway, but a new motorway junction could be accommodated without the need to move/realign the M4.

The eastern option sub options are:

- *Eastern Option A* – a new link is routed through the open countryside to the west of Pucklechurch.
- *Eastern Option B* – a new link is routed immediately adjacent to the outskirts of Pucklechurch.

32. Have other options been rejected/ discounted?

Two broad options outlined below were initially considered:

- A motorway junction would now need to avoid the inland fuel distribution centre, national grid infrastructure, listed buildings and environmental features along the disused railway. This has been rejected because it would need extensive slip-roads and would require land from the Green Belt and from the Lyde Green development site. The removal of land from the development site (Lyde Green) would mean an alternative development site could need to be found elsewhere in South Gloucestershire. This route was originally proposed by Avon County Council.
- A route running direct between the Dramway roundabout and a new motorway junction north of Pucklechurch. This has been rejected because of its adverse impacts on the environment where it would cross the Pucklechurch Ridge.

Both of these options have been have been rejected/discounted in this consultation.

33. Why does the potential western M4 junction require moving the motorway?

Realigning or moving the M4 would reduce adverse impacts on adjacent properties at Lyde Green and allows the new motorway junction to be constructed 'off line' thus reducing traffic delays on the M4 during construction.

34. Why are you looking at improvements to the A4174 ring road junctions?

To cater for the future traffic flows that are expected, in part as a consequence of the J18a Link.

35. Is a Park & Ride included?

Park & Ride is not part of the M4 J18a scheme. However there are Park & Ride proposals within the emerging Joint Transport Study.

36. What happens to Public Rights of Way, tracks etc.?

All Public Rights of Way and other tracks and paths would be maintained or diverted, and where possible enhanced. Where a route option crosses a right of way then a convenient safe crossing would be provided that conforms with Equalities Act requirements.

37. What happens where the Eastern Options cross Parkfield Road?

It is likely that for option A, there would only be left-turns for vehicles to/from Parkfield Road and the new road. For option B, connections to the local network would be provided.

For both options, there would be pedestrian, cycle and equestrian crossings.

38. What facilities for cyclists and other non-motorised road users will be included?

Cycling and walking routes along the schemes and connecting to nearby neighbourhoods, will be maintained and, where possible, enhanced.

39. What is proposed on the local minor road network?

There could be locations on the minor road network where changes in traffic flows, as a consequence of the scheme, would require modifications or improvements; this would be confirmed in subsequent stages of scheme development.

40. Will the scheme include a link to Yate?

No, this is a separate scheme, but future design stages for the M4 Junction 18a would make provision for a future link to Yate.

41. Are there detailed design plans of the scheme options? Does the plan show the exact scale and location of the scheme?

No, it provides an indication of where the route options could go. This level of detail is the norm of a feasibility study of this nature.

What effects will there be on the road network and users?

42. How will this scheme affect my road journey?

In general, the scheme reduces congestion both in the local area and across much of the North and East Fringe area. The traffic predictions show that on average the 400,000 journeys will take around two percent less time.

Trips between the Science Park and the M4 would typically be much easier for both options.

43. What is the forecast year?

The forecast year is 2036 and has been selected to match that used in the emerging Joint Transport Study and Joint Spatial Plan.

44. What is background traffic growth?

This is the Government's forecast for the increase in traffic levels over the years; it excludes traffic generated by new developments.

What effects will there be on local communities

45. What happens to people or businesses directly affected by the scheme options, including impacts on the value of my property?

'Blight' is the legal term for the detrimental impact, particularly in terms of 'value,' that proposals for major public works (such as a new road) can have on a private property. A proposed route has to have reached some degree of certainty before blight is triggered. This study is the very start of project development, there are only route options and no preferred route, so blight is not triggered.

46. Will there be a requirement for compulsory purchase of land, required by the scheme?

It is much too soon to say. Compulsory purchase is always a last resort for a public authority and can only be pursued when all reasonable negotiations have failed.

47. I am concerned I am directly affected by the scheme – when will I know the impacts to my business/property?

Broad impacts will be discussed in the study report, published March 2018.

48. Is it intended that there will be access from the Link Road to adjacent agricultural land?

A suitable form of access will be provided to appropriate surrounding land parcels. It is not likely that many of these will be direct connections with the Link Road; more suitable connections would be made in other ways.

What effects will there be on the environment?

49. What surveys are being done to identify things such as the pipelines adjacent to the underground reservoir?

Initial searches of all public utilities and other statutory undertaker apparatus have been undertaken and the impacts of these on the scheme has been allowed for in the designs and the costing of the schemes.

50. How much Green Belt does each option require?

The schemes are estimated to take the following areas of Green Belt land:

- Western Option – 23 Hectares
- Eastern Option A – 35 Hectares
- Eastern Option B – 31 Hectares

51. Will land be safeguarded for the scheme?

Not at this stage. The study report in March 2018 will recommend which option or options could be taken forward. This report will be considered by the South Gloucestershire Council Cabinet.

52. How can use of Green Belt land be justified?

National planning policy outlines that a scheme in the Green Belt should not be approved except in “*very special circumstances*”. The test for a “*very special circumstance*” is that we must demonstrate that any harm caused “...*is clearly outweighed by other considerations*”. The proposed scheme will deliver a number of significant benefits which must be considered, including improved safety and reduced congestion in the local area.

The fundamental aim of Green Belts according to national planning policy is to “...*prevent urban sprawl*...”. The permanence of the Green Belt will not be compromised as part of the scheme; only Green Belt land needed for this scheme will

be impacted. The fundamental aim of the Green Belt will not be compromised by the scheme.

53. Do you know the ecological impact of the scheme?

A desk-top study has been undertaken along with a walkover of some areas of publicly accessible land. No specialist environmental surveys have been undertaken at this stage of options development. With this information, the project team's environmental specialists have contributed to the option development and selection.

The public consultation will provide further information on the environmental impacts of the scheme options. The probable environmental impacts of each option will then be assessed and reported in the final study report in March 2018.

More detailed environmental surveys and assessment would be undertaken in subsequent stages of scheme development.

54. Will the scheme impact on surrounding green spaces and habitats?

All options have the potential to impact on green spaces and habitats. Future scheme development would be subject to a full Environmental Impact Assessment.

55. Eastern Option B severs the existing Pucklechurch conservation area from the proposed conservation area extension – what consideration has been given to this?

This is acknowledged and accounted for in the impact assessment of the Eastern Option B.

56. Is it intended to light any part of the Link Road?

The Western option would be lit. It is possible that parts or all of the Eastern option could be lit.

57. By what means will the Link Road be drained, and will, any part interface with the existing parish drainage system?

Appropriate highway drainage would be provided for all carriageway areas to local outfalls. Details of these would be determined later in the design development process. It is not intended that this will impact on the current drainage system with the parish.

58. What will be done to minimise the noise impacts of the Link Road and harmonise it with the surrounding land?

Appropriate tree and shrub planting would be provided to screen the Link Road. The planting would be designed to be sympathetic to the current landscape.

Where necessary, noise impacts would be managed by appropriate mitigation. This could include earthwork bunds, noise fencing, low level noise surfacing and other measures. Future assessment work would determine what is appropriate.

59. What land or property would have to be acquired for the route of each of the options?

This has to be determined in later stages of the project. It is currently anticipated that none of the options would require the acquisition of buildings, although some third-party land would need to be acquired.

60. How wide would the new road be?

Typical widths of new roads designed in accordance with the government's Design Manual for Roads and Bridges (DMRB) are:

- Dual carriageway – approximately 50m (assuming 40mph and allowance for cycle and footways, landscaped areas and harmonisation with adjacent ground levels)
- Single carriageway – approximately 30m (assuming 40mph and allowance for cycle and footways, landscaped areas and harmonisation with adjacent ground levels)

Public consultation programme

61. Have discussions been held with Parish Councils and other local organisations?

Yes, we have involved local elected representatives in developing scheme objectives and discussing the emerging options.

62. How will local residents and businesses be consulted?

This consultation runs from 21st August to 16th October 2017.

The study consultation webpage is <http://www.southglos.gov.uk/m4j18a>

There will be reference copies of the consultation material at local libraries and council one-stop shops.

There will be a series of drop-in events for the public:

- Tuesday 5 September, 1.00pm-7.30pm, Pucklechurch Community Centre Hall.
- Wednesday 6 September, 6.00pm-9.00pm, Syston St Anne's Church Hall.
- Monday 11 September, 4.00pm-6.45pm, Westerleigh Village Hall.
- Thursday 14 September, 1.00pm-7.30pm, Emersons Green Village Hall.
- Tuesday 19 September, 4.00pm-7.00pm, Shire Way Community Centre, Yate.
- Wednesday 20 September, 12.00pm-2.00pm, Bristol and Bath Science Park.
- Thursday 21 September, 4.00pm-7.00pm, Warmley Community Centre.

63. Will consultation feedback be made available to the public?

Yes, the outcome of the consultation will be summarised in a report, which will quantify and tabulate responses to the questionnaire and summarise the main themes that emerge from the consultation. The consultation report will be published with the study report in March 2018. Individual replies are not normally published; however, if they are requested, individual's names and address would be redacted (or removed) in accordance with Data Protection requirements.

64. How can members of the local community and road users provide consultation feedback?

Anyone is free to respond to the consultation via the questionnaire (online or written using the Freepost address below), by email to transport.policy@southglos.gov.uk or letter to:

Freepost RTXL-YHGY-GSYS
South Gloucestershire Council
ECS M4J18a consultation
Council Offices
Badminton Road
Yate
BRISTOL
BS37 5AF

Responses should be received by 16th October 2017.

65. What happens when the consultation is finished?

The project team will collate the results and prepare a report of consultation. The outcome of the consultation will feed into the appraisal of the scheme options, which will be reported in a consultation report with the final study report. Both reports will be published in March 2018.

What is the best way to stay updated on scheme progress?

Please follow the project webpage www.southglos.gov.uk/junction18a

What are the timescales for this study?

66. When is a decision made on the preferred option, and by who?

The outcome of the feasibility study will be considered by the South Gloucestershire Cabinet in March 2018.

67. When will the study report be published?

March 2018.