
Report to Communities, Highways and Environment Scrutiny Committee

March 2023

National Highways A27 Worthing & Lancing Consultation

Report by Assistant Director of Highways, Transport and Planning

Electoral division(s): Durrington & Salvington, Cissbury, Broadwater, Sompting & North Lancing

Summary

The West Sussex Transport Plan 2022-36 (WSTP) identifies improvements to the A27 at Worthing and Lancing as a priority for investment. The Government has included the A27 Worthing and Lancing Scheme in its Roads Investment Strategy for the 2020-25 period (RIS2) and National Highways are consulting on three options for small scale improvements.

The County Council is reviewing the options and intends to submit a Consultation Response before the consultation closes on 19 March.

Focus for Scrutiny

The Committee is invited to consider how well the emerging views in paragraphs 2.29-2.39:

- 1) Align with the plans, policies, and strategic priorities of the County Council;
 - 2) Address the likely significant impacts of the scheme on the County Council's duties, responsibilities, and services;
 - 3) Address the likely significant impacts of the scheme, both local and wider, on the economy, environment, and communities of West Sussex; and
 - 4) The extent to which the options meet the strategic objectives for the scheme in paragraph 1.8.
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Proposal

1 Background and context

- 1.1 The West Sussex Transport Plan 2022-36 (WSTP) identifies improvements to the A27 at Worthing and Lancing as a priority for investment. The Area Transport Strategies for Worthing and Adur say that small scale tactical improvements should be used in the short term to keep traffic moving and mitigate development impacts.

- 1.2 The Government has included the A27 Worthing and Lancing Scheme in its Roads Investment Strategy for the 2020-25 period (RIS2). National Highways are undertaking non-statutory consultation on three options for the Scheme between 6 February and 19 March 2023.
- 1.3 The County Council's Consultation Response will be approved by the Cabinet Member for Highways and Transport and submitted to National Highways on or near 19 March 2023.
- 1.4 The County Council is only a consultee in the decision-making process. Feedback from local stakeholders will inform decisions by National Highways and the Secretary of State about how to proceed with the scheme. Once all consultation responses have been analysed by National Highways, a Preferred Route/Option could be announced in late 2023.
- 1.5 The Scheme has a published budget of £20m and there is no indication that this is index linked which limits the opportunities for infrastructure changes to small scale improvements. Due to the scale of the scheme, it is expected to be progressed using powers under the Highways Act rather than through the Development Consent Order process.
- 1.6 In March 2015, the Government published its first Roads Investment Strategy for the 2015-2020 period (RIS1) which included a commitment to improve the A27 at Worthing and Lancing. In response to the 2016 single option consultation, the County Council said the improvements should be delivered, as they were in the best interest of the community, on the proviso that they would not preclude a larger scale improvement in the future. The RIS1 scheme was opposed by 76% of consultation respondents and did not have the support of local MPs so was paused. However, there continues to be a need (which is reflected in the WSTP) for an improvement to address congestion, safety, rat-running and community severance issues that are expected to worsen due to forecast traffic growth.
- 1.7 Local stakeholders, including the County Council, continue to have ambitions for larger scale improvements to A27 at Worthing and Lancing, and this is part of Transport for the South East's emerging Strategic Investment Plan. National Highways have published a report that explains why larger scale options, including bypasses and tunnels, have previously been rejected. This explains that environmental constraints (i.e. National Park and water source protections), poor value for money and insufficient funding were the principal determining factors in previous decisions. For any larger scale option to come forward, it would need to overcome these issues, which could only happen in the long term.

Strategic Objectives

- 1.8 The strategic objectives of the scheme are:
 - A. Improve road safety for everyone on the A27 and the local road network;
 - B. Reduce delays and improve journey reliability;
 - C. Create facilities for other travel modes such as walking and cycling alongside and crossing the A27;

- D. Make sure potential future improvements to transport in the Worthing and Lancing area can still happen; and
 - E. Wherever possible, seek to enhance the local environment and biodiversity.
- 1.9 Schemes in the RIS are not intended to mitigate the impacts of development as mitigation for development is expected to come forward through the land use planning system.

2 Proposal details

- 2.1 The proposed options have been derived from a longlist of 69 potential improvements, including suggestions from the County Council and other stakeholders. The potential improvements were sifted resulting in three options that have been developed for consultation.
- 2.2 National Highways are proposing options that include improvements at Offington Corner and Grove Lodge junctions plus two of the options also include changes to Upper Brighton Road (a local road in Sompting) and improvements to either Lyons Farm or Busticle Lane junctions. The options are summarised in Table 1 and schematic plans of the options are shown in Appendix A.

Table 1: Summary of Options

Option	Proposal
1	Widen approaches to Offington Corner roundabout and add signal controls including pedestrian and cycle crossings; widen selected approaches and circulating carriageway at Grove Lodge signalised roundabout.
2	Widen approaches to Offington Corner roundabout and add signal controls including pedestrian and cycle crossings; minor amendments to optimise operation of existing Grove Lodge signalised roundabout; widen selected A27 arms at Lyons Farm junctions; one way eastbound only on Upper Brighton Road.
3	Widen approaches to Offington Corner roundabout and add signal controls including pedestrian and cycle crossings; minor amendments to optimise operation of existing Grove Lodge signalised roundabout; one way eastbound only on Upper Brighton Road; widen selected approaches to Busticle Lane junction.

- 2.3 A number of opportunities have also been identified to make better use of existing technology or introduce new systems such as variable message signing, CCTV and speed enforcement to provide more proactively managed traffic flows in the area.
- 2.4 National Highways are also seeking views on potential active travel infrastructure improvements which are separate from the A27 Worthing and Lancing Scheme and could be funded through other funding streams such as

Designated Funds. The proposals have potential to address some of the objectives of the scheme but are not affordable within the published scheme budget and have potential to access other funding streams that are intended for this purpose. The proposals include a shared use (i.e. cycle / pedestrian) line-segregated path between Durrington Hill and Grove Lodge junctions linking existing shared use unsegregated paths east of Offington Corner and Grove Lodge junctions.

Technical Assessment

- 2.5 County Council officers have reviewed the Staged Overview of Assessment Report (SOAR) which summarises the current and future conditions; the need for intervention; policy context; the options; and technical assessments. The review is ongoing due to the timing of the Committee meeting. However, it has been possible to present the emerging issues, and conclusions are set out in the following sections.

Transport

- 2.6 The A27 Transport Model has been used to undertake some of the assessments in the SOAR and the County Council has provided information to support development of the model. The Transport Model covers Worthing, Lancing and surrounding area and forecast years cover 2027 (opening year), 2042 (design year) and 2051 (forecast year) for the AM, PM and Inter-Peak (IP) periods. However, the traffic modelling reports have not been published so it has not yet been possible to consider the suitability of the Transport Model and the model outputs can be expected to change as the scheme and modelling tools develop.
- 2.7 Each option is expected to deliver a reduction in delay along the A27 corridor and attract traffic from local roads such as the A2032 and the A259 with reduced journey times forecast for several local roads. Overall, the level of journey time savings on A27 in 2042 are relatively modest but worthwhile. There is very little difference between the impact of the options on delay. The journey time savings vary by time period and direction of travel as shown in Table 2. In all options the greatest journey time savings are expected for eastbound trips and in the AM peak period. There are also some increases in journey time for westbound trips but these are outweighed by the journey time savings for eastbound trips leading to an overall benefit.

Table 2: Summary of Journey Time Savings

Time Period	Direction	Option 1 (mins)	Option 2 (mins)	Option 3 (mins)
AM (7-10am)	Eastbound	04:17	04:12	03:55
AM (7-10am)	Westbound	00:15	00:13	00:21
IP (10am-4pm)	Eastbound	02:00	02:02	01:50
IP (10am-4pm)	Westbound	-0:12	-0:03	-0:07
PM (4-7pm)	Eastbound	01:47	02:41	01:48
PM (4-7pm)	Westbound	-1:05	-1:28	-1:28
Total	Combined	08:19	09:08	07:54

- 2.8 The information presented in the SOAR on traffic impacts is quite limited and does not provide sufficient information to understand the impacts of the scheme on local road approaches to the A27 and junctions away from A27.
- 2.9 The SOAR provides information about the baseline road safety conditions which indicate that between 2017-2020 there was an average of 308 Personal Injury Collisions per year on this section of A27. The options are all expected to have a similar impact on collisions. As a result of attracting traffic that currently uses local roads, there is expected to be an increase in collisions on this section of A27 as a result of the scheme. In monetary terms the accident impact of Option 1 is -£3,981,000, Option 2 is -£4,666,000 and Option 3 is -£4,266,000. However, there is a lack of detail in the SOAR about the impact of the options on the number of collisions and it is unclear whether there is expected to be a reduction in accidents on local roads.

Environment

- 2.10 The SOAR provides a summary of the environmental assessments that are more fully addressed in an Environmental Assessment Report, which is in the process of being reviewed.
- 2.11 The air quality assessment concludes that all three options will have similar negative impacts on air quality. This is due to the effects of construction arising from construction activities and vehicles and operational impacts on oxides of nitrogen (NO_x) and particulate matter from vehicles using the corridor. The predicted concentrations of pollutants are close to the National Air Quality Standards and Option 1 has the potential to exceed one of the standards (annual mean NO_x). This is based on a worst case assessment in 2027 as air quality is expected to improve in future years as a result of changes to the vehicle fleet and background air quality.
- 2.12 The noise and vibration assessment concludes that all three options will have temporary noise and vibration effects during construction but these will not be significant. The operational effects of Option 1 are not expected to be significant but it is reported that Options 2 and 3 are expected to have a slight adverse effect on residential receptors on Offington Lane. From the level of information available in the SOAR it is unclear why the effects on residential receptors on Offington Lane have been highlighted as the reason for differences in the assessment, because the Offington Corner Junction improvements are common to all the options.
- 2.13 No significant effects are anticipated on biodiversity, geology and soils or the historic environment from any of the options. This is because the works will largely take place within the existing highway boundary, so any effects on are likely to have already taken place.
- 2.14 There are likely to be moderate adverse visual effects on residents in the vicinity of the junctions during construction of the scheme. The location of the effects will depend on the final package of improvements but the effects will be temporary. During operation of the scheme, the landscape and visual effects will largely be from permanent loss of vegetation as road widening will remove some grass verges resulting in a slight adverse (not significant) effect. Option 3 also has a slight adverse (not significant) effect on South

Downs National Park as a small area of land on the edge of a farmed field is required for the Busticle Lane Junction improvement.

- 2.15 All the options are expected to have similar effects on drainage and the water environment, and these are not considered to be significant.
- 2.16 Construction of the scheme will result in carbon emissions embodied within materials and those associated with construction activities. The carbon emissions as a result of each option during construction vary between Option 3 (406tCO_{2e}), Option 1 (430tCO_{2e}) and Option 2 (546tCO_{2e}). The operational effects of the scheme from changes to traffic flows are not expected to be significant. The assessment concludes that the emissions are not likely to affect the ability for the Government to achieve its carbon budgets.
- 2.17 There will be temporary slight adverse effects during construction due to increased traffic and construction that may affect access to some properties, as well as access for businesses. During operation of the scheme there is the potential for decreased congestion on the local road network, improving access for properties. There is also potential for temporary diversions to non-motorised user facilities during construction. A slight adverse effect is anticipated as a result of Options 2 and 3, whilst a neutral effect is anticipated for Option 1, but no significant effects are anticipated.

Economy

- 2.18 The economic assessment has assessed the quantifiable impacts on noise, local air quality, greenhouse gases, accidents, construction and user benefits. The economic assessment largely uses information from the Transport Model and appraises this against the scheme costs shown in Table 3. However, some adjustments have also been made to take account of wider economic impacts.

Table 3: Summary of Economic Assessment

Option	Cost	Present Value of Costs (£000's)	Present Value of Benefits (£000's)	Net Present Value (£000's)	Benefit Cost Ratio (BCR)	Adjusted BCR
1	£27.4m	13,775	46,351	32,577	3.36	3.74
2	£31.1m	15,209	37,102	21,894	2.44	2.76
3	£28.7m	14,092	-1,193	-15,285	-0.08	0.03

- 2.19 The economic assessments of Options 1 and 2 show the scheme benefits are largely due to user benefits associated with journey time savings which outweigh the slight disbenefits to local air quality, greenhouse gases and accidents. When appraised against the costs, this results in an Initial Benefit Cost Ratio (BCR) of 3.36 and 2.44. The BCR has then been adjusted to take account of wider economic and reliability impacts resulting in an adjusted BCR of 3.74 and 2.76 respectively.

- 2.20 The economic assessments of Options 1 and 2 demonstrate that both options would be beneficial overall. The most significant difference between these options is that Option 2 has a higher cost but does not generate a commensurate increase in benefits.
- 2.21 The economic assessment of Option 3 has produced quite different results as the user benefits of this option are substantially lower than options 1 and 2. This is because the improvements at Offington Corner and Busticle Lane junctions provide additional capacity and attract traffic to the A27 but the benefits are eroded by delays at the Grove Lodge and Lyons Farm junctions which cannot cater for the volume of traffic. When appraised against the costs, this results in an Initial BCR of -0.08 and an Adjusted BCR to take account of wider economic and reliability benefits of 0.03. As it is currently configured, Option 3 would represent poor value for money.
- 2.22 The economic assessments demonstrate that the combination of improvements can have a significant impact on the ability to demonstrate value for money because improvements in parts of the corridor can be cancelled out by the absence of improvements elsewhere on the corridor. Therefore, there is a need to ensure all the improvements in the package are compatible with each other.

Assessment Against Objectives

- 2.23 The options have been considered against the scheme objectives in paragraph 1.8.
- 2.24 Each of the options appears to have a negative impact on strategic objective A due to an increase in traffic flow using the A27, leading to an increase in accidents. Further work should take place to understand whether this is likely to be offset by a reduction in accidents on local roads away from A27.
- 2.25 Each of the options is expected to have a beneficial impact on strategic objective B due to additional highway capacity reducing journey times and delay. The options all appear to perform well against this objective with options 1 and 2 performing best.
- 2.26 The options are expected to have a neutral impact on strategic objective C because although additional traffic will increase community severance, additional crossing facilities are proposed to offset this. The proposed non-motorised user facilities that could come forward through an application for Designated Funds have the potential to offer a beneficial impact on strategic objective C.
- 2.27 All options would achieve strategic objective D as none of the options would preclude larger scale improvements from coming forward in the future.
- 2.28 The impacts on the environment are unlikely to achieve strategic objective E as the scheme will result in loss of vegetation. However, there is potential to improve performance of the scheme through the Biodiversity Net Gain Strategy at later stages of the scheme.

Emerging Consultation Response

- 2.29 Due to the timing of the Committee meeting, it has only been possible in the time available to provide the following emerging views that will inform the County Council's Consultation Response.
- 2.30 The scheme objectives have been developed in liaison with the County Council and other key stakeholders and broadly reflect the objectives of the WSTP.
- 2.31 The scheme appraisal indicates that the options would provide journey times savings, largely in the eastbound direction. The greatest journey time savings would be in the AM peak whilst additional delays are forecast for the westbound direction in the PM peak due to the addition of traffic signal controls at Offington Corner, and increased traffic flow. These effects are expected to be beneficial to the local road network but further transport modelling information is needed to confirm that the effects on local roads are acceptable.
- 2.32 There is a lack of information in the published material about the impacts of the options on road safety on A27 and nearby local roads. National Highways should be encouraged to provide additional information to demonstrate that the scheme will address strategic objective A.
- 2.23 Although the environmental impacts of the scheme are generally not significant and there is little to differentiate between the options, the impacts do appear to be adverse. Therefore, National Highways should identify suitable mitigation for adverse impacts (e.g. use of zero emission construction equipment) and opportunities to improve the performance of the scheme against environmental objectives. Whichever option is taken forward, there is an opportunity to do this through the Biodiversity Net Gain Strategy at the next stage of the project. The WSTP seeks to achieve at least 10% biodiversity net gain on major transport schemes and consider that National Highways should aim to achieve this as a minimum.
- 2.24 Given the options are beneficial in terms of reducing delay and have the potential to align with the WSTP objectives, the County Council should support their implementation. However, National Highways should be encouraged to address concerns about the impacts on road safety, non-motorised users and the environment through further development of the scheme.
- 2.25 The cost of all options exceeds the available budget. In practise, the funding is part of a national investment programme so there may be opportunities to access additional funding if it can be justified, and if other schemes in the programme spend less than their published budgets. National Highways should explore whether there is potential to secure additional funding before selecting a Preferred Route/Option.
- 2.26 The options with best value for money is Option 1 which does not include improvements at Lyons Farm, Busticle Lane or Upper Brighton Road. However, the appraisal for Options 2 and 3 appears to indicate that improvements at these locations would also be beneficial. Therefore, National Highways should explore whether there are opportunities to secure

additional funding, potentially in RIS3 to deliver elements of Options 2 and 3 as well as Option 1 on the proviso that this would offer good value for money.

- 2.27 Further work is needed to understand the feasibility of the Upper Brighton Road proposals, particularly given the impact on bus routes. This work should also seek to better integrate these proposals with the County Council's own plans for active travel infrastructure in Sompting and Lancing which would connect with these proposals at the eastern end. Consideration should be given to alternative ways of achieving the same or similar goals that would have less impact on non-motorised users and bus services, e.g. a bus gate on Upper Brighton Road.
- 2.28 The proposals outlined in paragraphs 2.3 and 2.4 are generally welcome as they align with the WSTP and Area Transport Strategies for Adur and Worthing. They would also assist in achieving the strategic objectives (particularly strategic objective C) of the scheme, so National Highways should integrate them within the Scheme. However, further development of these proposals is needed following the consultation to ensure they integrate with the wider network of existing and planned facilities. Consideration should be given to extending the proposed shared use path alongside A27 to Lyons Farm to provide a continuous east-west cycle route as envisaged in the Worthing and Adur Local Cycling and Walking Infrastructure Plan.
- 2.29 The County Council has not allocated funding for any of the proposals outlined in paragraphs 2.3 and 2.4 that would seek Designated Funds. Although the County Council is generally supportive of the proposals, a County Council financial contribution cannot be guaranteed as funding is not currently allocated for this purpose and would need to be subject of a separate decision. There may be potential to use developer contributions in the area, if the proposals would mitigate the impacts of development, which should be discussed with the Local Planning Authorities.

3 Other options considered (and reasons for not proposing)

- 3.1 The other option considered was to not provide a response to the consultation. However, the delivery of improvements to the A27 at Worthing and Lancing is one of the County Council's strategic priorities and, therefore, it is important that the authority continues to engage positively in the process and that it responds to the consultation.

4 Consultation, engagement and advice

- 4.1 Consultation has taken place as necessary with specialists in Highways, Transport and Planning.
- 4.2 Informal discussions about the options has also taken place with key partners including Adur and Worthing Councils.

5 Finance

- 5.1 There are no financial implications in making this response other than officer time in preparing the response, which has been identified within existing service plans.

5.2 The County Council is not expected to make a financial contribution towards the cost of implementing the A27 Worthing and Lancing Scheme. As outlined in paragraph 2.39, if a financial contribution is required towards associated improvements in the vicinity of the Scheme, then this would need to be the subject of a separate decision.

6 Risk implications and mitigations

6.1 There are no identifiable risks to the County Council in making this response.

7 Policy alignment and compliance

7.1 **Our Council Plan** – responding to the consultation will support delivery of improved infrastructure and help to deliver a sustainable and prosperous economy.

7.2 **Legal implications** – there are no legal implications for the County Council in making this response.

7.3 **Equality duty and human rights assessment** – there are no equality and human rights implications in making this response as it is a response to a consultation by an external organisation.

7.4 **Climate change** – responding to the consultation is not expected to impact on climate change. The climate change impacts of the options are outlined in paragraph 2.16 and are not expected to affect the Government’s ability to achieve its carbon budgets.

7.5 **Crime and disorder** – there are no identifiable Crime and Disorder Act implications in making this response.

7.6 **Public health** – responding to the consultation is not expected to impact on public health.

7.7 **Social value** – responding to the consultation is not expected to impact on social value.

Matt Davey

Assistant Director Highways, Transport and Planning

Contact Officer:

Darryl Hemmings, Transport Planning & Policy Manager,
Tel: 03302226437, Darryl.hemmings@westsussex.gov.uk

Appendices

Appendix A: A27 Worthing and Lancing Consultation Brochure

Background papers

None.