

A27 Worthing and Lancing improvements: Design and Development Summary

Introduction

This note describes how we are developing the A27 Worthing and Lancing improvements scheme.

What is the process for developing the bypass scheme?

We follow an established process when developing a major road scheme. We are currently at *Stage 2: Option Selection* of a longer-term process (Table 1). The public consultation will result in a *Preferred Route Announcement* at the end of Stage 2. After this, the preferred route will be designed in more detail and there will be a second phase of public consultation.

Table 1: Development stages

Stage	Title	Timescale
0	Strategy, shaping and prioritisation	2015-2016
1	Option identification	2016-2017
2	Option Selection, including public consultation on the possible routes	2017-2018
3	Preliminary design, including public consultation on the preferred route	2018-2019
4	Statutory procedures and powers to obtain the right to construct the bypass	2019-2020
5	Construction preparation	2019-2020
6	Construction, commissioning and handover	2020-2023
7	Road opening	2023

What work have you done so far?

Stage 0 and Stage 1 of the A27 Worthing and Lancing improvements scheme have focused on the feasibility of possible improvement options and assessing their costs, benefits and impacts. During this stage we have worked with key stakeholders including local authorities, the South Downs National Park Authority, the Environment Agency, Natural England and Historic England, the emergency services, public transport operators and special interest groups. This has helped us understand the wide range of possible issues, risks and constraints to be considered.

Prior to Stage 0, the *A27 Feasibility Corridor Study* considered a long list of options and some of the options were ruled out due to cost and value for money reasons. During Stages 0 and 1 we also rejected several dual carriageway options, principally on cost grounds. Locally an upgrade of the A20, A24 and A283 route has been suggested as a northern bypass route but this is a lengthy route, through the South Downs National Park which would cost considerably more than the economic benefits that would be gained. Tunnelling options have been considered in the past but at a cost of £1.2-£1.4 billion, would not provide good value for the benefits gained.

Our technical work at Stages 0 and 1 helped us identify a long list of options, which were assessed against their ability to meet the objectives of the scheme. This assessment identified **one** possible option for further investigation and consultation.

We are now at Stage 2 and are consulting on the single option that best meets the scheme objectives, budget and value for money requirements. This consultation is taking place at an early stage of scheme development to gather feedback from the public on this option.

What happens next?

As we develop the scheme further during Stage 3 onwards, we will develop a detailed design for the preferred route and consider how best to avoid and mitigate against any possible impacts.

Stage 3 takes the proposed scheme through the necessary approvals process in order to secure permission to build the option developed; this includes a further period of public consultation.

What standards do you have to follow when developing the designs?

A consistent approach is taken to the design standards for new motorways and trunk roads as set out *The Design Manual for Roads and Bridges* (DMRB). It is approved by the Department for Transport (DfT) as the set of requirements to which all designs should conform.

How are costs checked?

Every major road project requires a rigorous check on its cost and value for money. We prepare a business case which considers how the scheme meets its objectives and how the economic benefits compare to the scheme costs. We also employ an independent commercial cost consultant to prepare cost estimates for all major projects on a consistent basis.

The scheme costs are used in the business case to check whether the scheme represents good value for money. As part of the business case, an economic cost-benefit analysis is undertaken in which journey time savings, vehicle operating costs, accident reduction, and maintenance costs over 40 years are compared to the construction costs, and discounted to a base year for comparison.

How and when do we build in ways of reducing the impact of a road scheme?

Before we submit a scheme for development consent we will have thought about ways we can reduce the any negative impacts of the scheme. We have begun to look at ways of improving conditions for pedestrians and cyclists using the A27 through Worthing and Lancing in discussion with the local highway authority, West Sussex County Council.

The reduction, avoidance or compensation of impacts – which we refer to as “mitigation” – will be designed in detail once the preferred route has been announced. The Environmental Assessment Report sets out how potential impacts of the scheme options are identified, and how mitigation measures are developed. The costs of mitigation are also important as too high a cost may cause the scheme to offer a lower value for money and so impact on its business case.