

# SCATE

South Coast Alliance on Transport and the Environment

**Issues to be addressed**  
*by the*  
**A27 Corridor Feasibility Study**

**Submitted to the Department of Transport**

**July 2014**

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## **1. The evidence so far**

From the evidence submitted so far, South Coast Alliance on Transport & the Environment (SCATE) cannot see the need for any substantial interventions with the A27 in the form of major new road construction. The great majority of the traffic on all the sections of the A27 under study is local, with very little long-distance traffic for which trunk roads are normally provided. Most of the pressure on the road is during peak hours, when people are travelling to and from work or ferrying children to and from school. Outside these hours and at weekends, traffic generally flows freely.

## **2. Severance caused by the existing road**

The existing A27 causes severance for local communities along its length whether in or out of urban areas. Where the A27 is a single carriageway in the northern part of Worthing and on the existing Arundel bypass, this severance is not so significant as there are crossing points with islands, light-controlled crossings or other facilities. Between Lewes and Polegate, there are some crossing points with a central island, but at other locations crossing on foot can be difficult.

However, where there is a dual carriageway with faster moving traffic, crossing the road at surface level can be quite daunting and unpleasant, if not dangerous. In some places there are footbridges across the A27 and where these are fairly straightforward to cross, then severance is reduced, but such bridges are inconvenient and not generally pleasant to use. They tend to be designed for pedestrians and not cyclists and horse riders, and so they are far from ideal.

Examples include Tangmere: while a footbridge allows for safe crossing of the road, the sheer number of steps, or length of the ramps, required to get over the road, does not actively encourage more sustainable modes of transport.

Some of the worst severance is in Lancing with the six foot fences in the central reservation discouraging pedestrians from crossing the road except at one or two crossing points.

There are also plenty of places where bridges and crossing points are not provided.

Building new roads may well address some of these issues, but they can equally just transfer the problem from one area to another and unless higher quality provision is provided than in the past, severance is likely to get worse. Equally, there do not appear to be any proposals to rectify the inadequate provision for sustainable transport modes to cross the existing A27 in more pleasant, direct and safe ways. All this fuels greater car use as people are deterred from using the low impact methods of travel out onto the South Downs, often choosing to drive instead which then also puts greater pressure on car parking within the National Park.

## **3. Questions to be answered**

SCATE has concerns that the full impact of any roadbuilding proposals will not be properly measured or accounted for during the assessment process. As a result it would like to see the following questions addressed before any proposals are taken forward:

- How do any proposals contribute to the reduction of greenhouse gas emissions<sup>1</sup>?
- How does any road-based proposal deliver growth in natural capital and an improvement in the ecosystem service benefits received by people?
- How does any feasibility study incorporate the value of natural capital in its cost benefit analysis? How does this, and the wider values of the environment, influence decision making at a strategic, as well as a tactical level?
- How does any proposal contribute to targets for health and well-being, such as increases in physical activity and reduction in pollution?
- How would any proposal comply with the statutory purposes of the South Downs National Park and contribute to its objectives<sup>2</sup>?
- What is the current state of walking and cycling facilities in the corridor and what is the capacity for expansion?
- What impact could soft measures like personalised travel planning and green travel plans have on traffic levels on and around the A27? What local business benefits are these measures likely to achieve in terms of workforce health and wellbeing?
- What is the current take-up of workplace travel plans in the coastal towns?
- What is the current use of rail services in the corridor and what is its capacity for expansion, particularly when combined with better walking and cycling facilities, access and improved integration with bus services?
- How much traffic will be generated by any road-based proposal?
- What will the economic impact be of any roadbuilding proposals on public transport services and their viability?
- What proposals are there to deal with the congestion in urban areas, villages and the wider countryside caused by traffic generated resulting from road development?
- How will the added congestion caused by road development affect businesses and what plans are there to ameliorate or compensate the effects?

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<sup>1</sup> The UK's Committee on Climate Change's [Meeting Carbon Budgets – 2014 Progress Report to Parliament](#), July 2014, states: *It is important that the transport business case to be included in the application for development of road and rail networks takes full account of carbon impacts; decisions to proceed with these should be based on an economic assessment that fully values the impact of carbon emissions.*

<sup>2</sup> Letter to Nick Herbert MP for Arundel and South Downs from Trevor Beattie, Chief Executive of the South Downs National Park Authority, June 2014 (see Appendix A)

- Has the potential for public realm improvements to the coastal town centres that would follow investment in walking, cycling and public transport been fully explored?
- As roadbuilding has the effect of drawing people into car travel and away from local business to larger out-of-town facilities will this lead to a decline in the local SME economy?

#### **4. The solutions**

Small on-line junction and road safety improvements combined with investment in more sustainable modes of transport would help alleviate pressure on the A27. Soft measures such as personalised travel planning advice could also have an impact and combined with the above could lead to significant improvements without the need for highly damaging and expensive interventions. These cheaper and less damaging alternatives need to be pursued and properly considered during any appraisal process.

Other options include smart measures to direct traffic to less congested routes when there are problems such as crashes and break-downs. One alternative to a second Arundel Bypass is to make better use of the parallel A259 between Worthing and Chichester, when the Bognor Regis northern relief road is opened later in 2014 (currently under construction by developers to the specification of West Sussex County Council (WSCC)). This would require new electronic signage around Chichester and elsewhere on the route. It would be important when incidents occur on the A27.

#### **5. Specific measures proposed for Arundel**

The following are suggestions to address the problems at Arundel. However, this list is not exhaustive and there may well be other options and ideas to improve sustainable transport in the area and to improve traffic flow on the A27.

##### ***Capital projects***

##### ***Road***

- Remodelling Crossbush A27 junction with the A284 (currently a mess and source of hold-ups as it was a temporary design anticipating a new bypass), for continuous flow and separated access for Burpham and Crossbush, incorporating safe cycle paths and continuous walkways. The Highway Agency (HA) has had some design work done for this including a new bridge over the railway at Arundel station.
- Remodelling the roundabout at Ford Road Arundel to improve flow along existing Arundel bypass (HA have proposals for this).
- Some widening of the existing Arundel bypass and Causeway (A27) to accommodate flow in the event of crashes. The two existing lanes on the Arundel bypass are already relatively wide. The Causeway and rail bridge lanes are narrow.

### ***Rail (and access to it)***

Arundel needs a better south coast rail link eastwards and to pick up additional westbound coastal trains. Ford station is two miles from Arundel High Street and is a junction of the Arun Valley and South Coast lines. However, access to the station apart from by car is awkward and dangerous and it has very little car parking.

- Off-road cycle/footpath to Ford Station along Ford Road, with some lighting, to provide good south coast access for commuting and shopping, especially to Brighton where there is no direct link from the Arun Valley line. Ford provides increased train frequency westbound to Portsmouth and Southampton too. Ford Road is an unclassified, straight, unlit road on which vehicle speeds are quite high, so that people avoid walking or cycling along it, particularly at night.

### ***Walking and cycling***

- Foot / cycle / (possible horse) bridge, off-road paths and road crossings from Torton Hill Road to Mount Pleasant across A27 Hospital Hill and A284 London Road to enable cross-town pedestrian/cycle connectivity. A particularly strong solution for accessing schools by foot. There are two primary schools, one on each side of the A27. The local 'school run' has a significant impact on congestion and many Arundel parents drive children to Arundel schools. A footbridge would also enable those who drive from outlying villages to stop in the town without accessing the A27 to reach their school. Topography and lack of buildings in this location favours a foot/cycle bridge.
- Cycling infrastructure and better walking connectivity across the A27 and through town with crossings and off- and on- road cycle paths via existing bridges and underpasses. Whilst such proposals are not implemented, many residents drive across town although it is a 10-15 minute walk.

NB: A partially off-road cycle / footpath from Arundel station to the Town Centre and along Mill Road, allowing access without road level crossing, is scheduled, through the Local Sustainable Transport Fund (LSTF). Other foot / cycle access has been discussed, but funding has not been allocated.

### ***Soft projects***

- Hoppa bus link to Ford (as above) and Littlehampton, providing further east and westbound train access. Littlehampton station is 5 miles from Arundel High Street. No commercial buses currently use Ford Road.
- Fast, affordable coastal bus service aimed at commuters. The X27 was fast service about 20 years ago, but dropped, just as it became popular, though not for financial reasons.
- Tourism literature prioritising walking, cycling and public transport access (currently this is poor and the default guidance is for car access)
- School travel plans (including walking and cycling, car sharing)
- Business travel plans (commuter targeted) including work practices minimising car commuting
- Car clubs (established elsewhere by WSCC through LSTF)

- Car sharing (shared trips or shared ownership, examples of both exist in Arundel now)

## **6. Issues with an off-line bypass at Arundel**

Any off-line bypass around Arundel is likely to have a significant impact on ancient woodland to the west of the town, through the South Downs National Park. This is a substantial block of ancient woodland which would be likely to be split in two by such a road. Proposals for the previously proposed Pink / Blue route<sup>3</sup> were rejected on environmental grounds by the Secretary of State for Transport in 2003. Routes further west were rejected during the 1990s due to their impact on Binsted Woods.

Noise would also be an issue for the whole of Arundel, not just the residents adjacent to Tortington Common as the road would operate at much higher speeds (70mph as opposed to current speeds on the A27 of about 40mph) which would significantly increase the noise levels. Equally, the new road is likely to induce extra traffic onto the A27, further increasing noise levels.

With the prevailing wind from the south west, it is likely that the noise will be blown across the town and create a noise problem as is suffered in parts of Lewes from its bypass. Indeed, the problem could be even worse because the bypass would be partly on a viaduct across the Arun valley.

## **7. Issues with an off-line bypass at Worthing**

Any new route for the A27 built north of Worthing would have to pass through the National Park for around 6 miles. This would have a very severe impact which it would be impossible to mitigate against with a surface level road. Proposals for such a road were the subject of public consultation in the 1980s and met with massive opposition, and were withdrawn. Now that the landscape affected is in the South Downs National Park, such a road would be impossible to justify against the statutory purposes of the National Park.

A long downland tunnel north of Worthing and off-line of the present Worthing section of the A27 would overcome much of the impact of a surface road, but it would still have a severe landscape impact at the tunnel portals. It would also be very expensive. A proposal for a 1.3 mile tunnel at Stonehenge was turned down in 2007 when the cost was over £500 million. The 1.2 mile A3 tunnel at Hindhead, now in use, cost £330 million. The much greater length needed at Worthing would mean that a tunnel could cost from £1.6 billion upwards and would require the disposal of a substantial amount of chalk. Unless a significant amount of money was also spent making the existing A27 alignment more people friendly with investment in walking, cycling and public transport, it is likely the environmental benefits of removing the through traffic would be short-lived as other traffic would grow to fill its place. This would raise the cost still further.

## **8. Issues with Lewes – Polegate**

The main problem of the A27 between Lewes and Polegate was the section between Southerham and Beddingham and in particular the level crossing with the main London-Eastbourne line at

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<sup>3</sup> See Appendix B for map of ancient woodland around Arundel and line of previously proposed Pink/Blue route

Beddingham. This was successfully handled by an on-line single carriageway improvement and bridge. That scheme, now open for some years, shows that the A27 does not need a dual carriageway east of Lewes.

An A27 on-line dual carriageway between Beddingham and Polegate would cause significant harm to the National Park and increase severance between communities to the south of the road and those to the north. It would require bridges to address this which would have a very severe landscape impact. To avoid Selmeston, which has some properties to the south of the A27 although most of the village lies to the north, the road would either have to cut into the National Park, severing Selmeston from the South Downs, or cross over the railway and back again. Both options would be visually damaging and the latter would be very expensive.

Noise pollution along this route would also increase as the traffic speed would rise from 40-50 mph to 70 mph.

A new single or dual carriageway off-line between Polegate and Glynde, running north of the present A27 would have a very severe impact on landscape, heritage and agriculture. It would lie to the north of the South Downs National Park but be very visible from the top of the Downs between Wilmington Hill (the Long Man) and Firle Beacon. The much higher speeds (70 mph) than are possible on the present road would project noise southwards to the Downs. There would be harmful effects in the Parishes of Long Man, Arlington, Berwick, Selmeston and Firle. The Pevensey-Lewes Roman Road, which is well-studied and much of whose course is clear on the ground between Polegate and Arlington, would be seriously damaged as any new road would have to cut through its route at least once, and its setting would be gravely damaged.

### ***Potential specific measures for A27 Beddingham to Polegate***

A number of local management scheme projects have been studied for the A27 between Beddingham and Polegate, particularly junction improvements. However, so far only the junctions at Glynde crossroads, at the entrance to the historic property of Charleston, and at Gainsborough Road, Polegate have been improved to modern standards. A plan for the Folkington junction, east of Polegate, was consulted on in 2009-10 and locally supported, but withdrawn (the HA stated) because the safety record of the junction was good so it was not prioritised.

The local junction schemes which have not so far been progressed and could be prepared and carried out are at Folkington, Wilmington, Milton Street, Berwick (old village) and Alciston. These would bring safety benefits and remove delays caused by right-turning vehicles. As shown by the successful scheme at Charleston, they would be likely to have little or no environmental impact, and very small landtake.

## **9. Wider solutions and issues**

### ***Public Transport***

The current re-signalling programme on East Coastway lines between Lewes and Hastings will, when operational within the next few months, permit extra train services parallel to the A27. The railway could therefore potentially meet significantly more of the transport needs of population



centres along the coast. Both Eastbourne and Littlehampton featured in the original Thameslink upgrade proposals. To and from Eastbourne and Lewes a Thameslink service would provide an extra train per hour in each direction while also offering longer distance journey opportunities to and through London and giving a boost to sustainable tourism.

Limited stop coach services between Hastings and Brighton have been discussed in the past but never trialled.

Eastbourne travel to work area features major peak hour flows to/from the north, including via the A22 (Uckfield, Heathfield, Hailsham, Polegate) and across the A27. Effectively, there have been few public transport improvements following the opening of the A22 'new route' ten years ago. Measures introduced simultaneously with the road opening would have incentivised take-up of non-car modes. The long promised bus corridor improvements have not happened - and there has been no exploitation of bus/rail integration at Polegate railway station which is effectively 'Hailsham South'.

Public transport journey times between Hailsham and Eastbourne have lengthened over the years as Hailsham has expanded greatly. In 1954, the train journey time was 16 minutes: 60 years on and the public transport option is now 40 minutes or more. These problems require resolution and a proper examination of demand management / smarter choices explored. It remains to be seen whether or not the plans for the Eastbourne area recently announced by the South East Enterprise Partnership will meet fully the need for a step change in sustainable transport access. Within Eastbourne itself, car friendly parking policies exacerbate congestion problems, encourage short car trips and make walking and cycling unpleasant and less safe.

### ***Ignoring a real opportunity for a step change in active travel and economic activity***

From Portsmouth to Brighton, much of the south coast is a coastal plain, fairly flat and ideal for walking and cycling. It is not unreasonable to expect that with the right promotion and infrastructure, levels of cycling in this area could be on a par with Denmark and the Netherlands. This could have a serious impact on local traffic levels, thereby reducing congestion and pollution. Better integration with public transport, would improve the viability and patronage of rail and to some extent bus services.

If this was combined with smart measures, including workplace travel plans, improved broadband to allow greater home working and teleconferencing, etc. then it is likely that a considerable amount of traffic could be removed from local roads, including the A27.

Instead a serious lack of investment has held back any real progress. The irony is that all of the above measures could be achieved far quicker and at less cost economically and environmentally than building large new road infrastructure. Yet many of those concerned about the impact of too much traffic on the A27 have done little to address these issues.

It is worth noting that in the UK Committee on Climate Change's most recent report<sup>4</sup> it is highlighted that The Netherlands, with an expanding population and a growing economy, saw car

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<sup>4</sup> Page 253, The UK's Committee on Climate Change's [Meeting Carbon Budgets – 2014 Progress Report to Parliament](#), July 2014

passenger demand fall by nearly 6%. This is believed to be partly a result of the continued investment in cycling infrastructure and in some areas, financial incentives for commuters to switch to bikes. However, it clearly demonstrates that local sustainable transport has an important role to play in both the overall transport infrastructure and economic growth.

## **July 2014**

Chris Todd  
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SCATE is an alliance of over 20 organisations and businesses promoting sustainable planning and transport policies and solutions

## Appendix A

Letter to Nick Herbert MP for Arundel and South Downs from Trevor Beattie, Chief Executive of the South Downs National Park Authority, June 2014



The Rt Hon Nick Herbert MP  
House of Commons  
London  
SW1A 0AA

25 June 2014

Dear Nick

**Re: A27 Arundel**

A number of your constituents have sent Margaret Parn a copy of a detailed and thoughtful email about the proposals for the A27 addressed to the Minister. I thought you might find it helpful if I set out the SDNPA response to these issues.

The SDNPA is a statutory consultee for major infrastructure projects including Highways Agency trunk road schemes. We are actively engaged with a range of organisations (including the Highways Agency and WSCC) and elected and unelected representatives who have an interest in what happens to the A27. Our starting point is that the National Park is a nationally designated, protected landscape, with twin Purposes laid down by Parliament. Any proposed schemes either inside or bordering the National Park must therefore take into consideration all potential impacts on the special qualities for which it is designated.

We are also keen to see that any proposals brought forward are clearly justified in terms of the problems they aim to solve and are seen in the wider context of a sustainable approach to transport and mobility. The Department for Transport hierarchy sets out a clear approach which we would like to see rigorously applied in this case, ie that consideration should be given to a total package of measures which:

- reduce the need to travel;
- enable switching to more sustainable modes;
- make more effective use of existing networks, and (only as part of this overall approach);
- create extra network capacity.

Past evidence shows that the majority of traffic on the A27 is local, so we are also keen to see that any proposals brought forward should look at how upgrading this route would impact upon the local road network and what effect it would have on the ability of the public to reduce non-essential car journeys, travel at different times, and make more use of train and bus services, cycling and walking.

The SDNPA remain willing to participate in any further studies of possible routes for the A27, to ensure that any solution aims to reduce CO2 emissions and improves air quality, the landscape, biodiversity and the lives of those who live, work and visit the SDNP.

Yours sincerely  
Trevor Beattie

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South Downs National Park Authority

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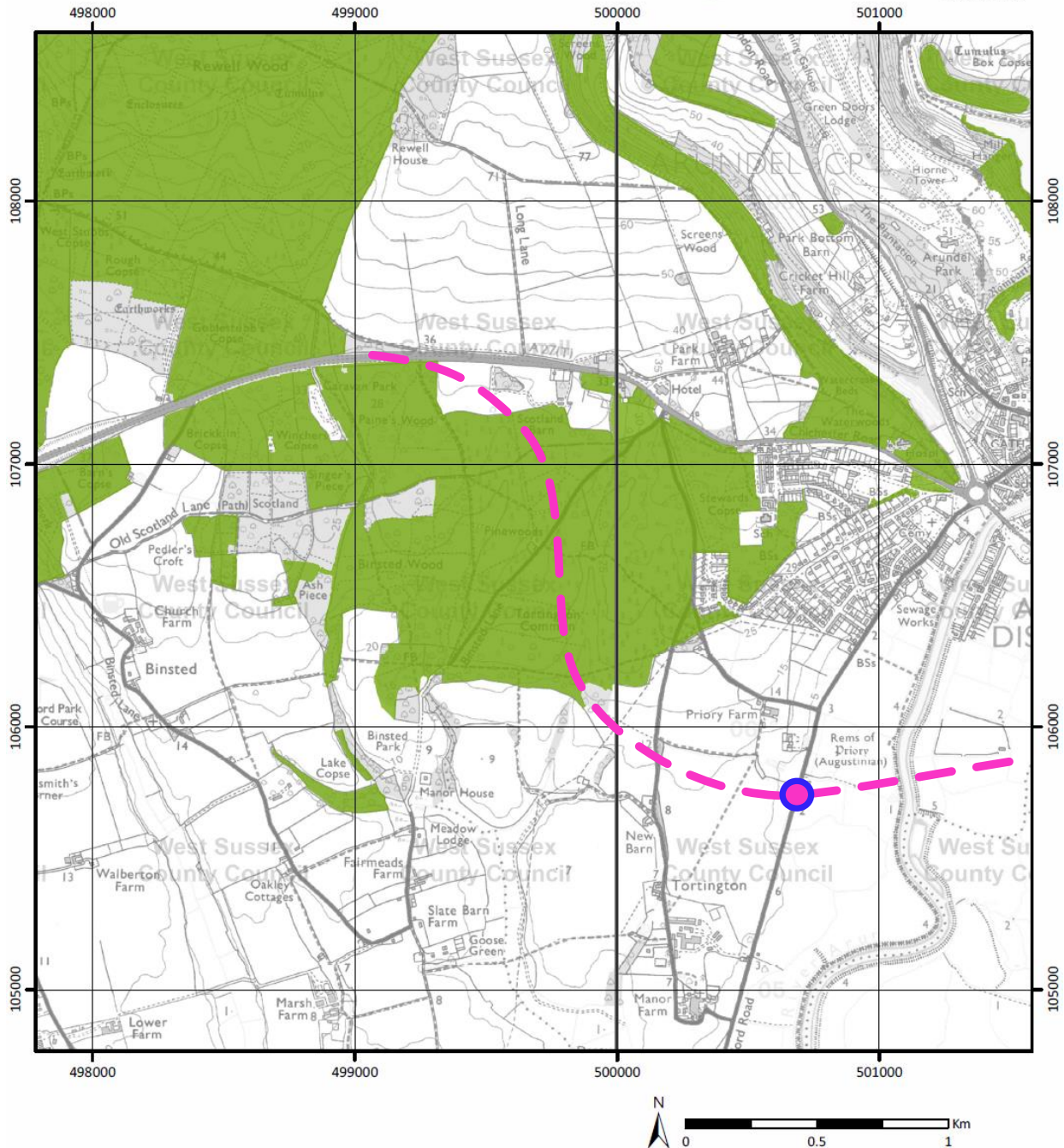
## Appendix B

### Ancient woodland around Arundel



**Sussex  
Biodiversity  
Record Centre**

Woods Mill, Henfield,  
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sxbr@sussexwt.org.uk  
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Key to Map:

Ancient woodland

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- Approximate line of old Pink / Blue Route
- 2 level junction (grade separated junction)