

## A303 / Stonehenge tunnel proposal – consultation 2017

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### The A303 Expressway proposal

I am a planning academic (earlier practising in planning), with a lifetime of archaeological work and interest. Given this background in the built, natural and historic environments, I have a strong interest in the proposals prepared during the last 4-5 years for the A303. I have read all the headline documentation produced over these years by DfT and consultants, and much of the more technical and background work, and fail to see that any rational case has been made. I oppose the whole project to make an Expressway, given the need to move urgently to a transport system based on long term sustainability, not locking us even deeper into the fossil fuel era. It is to be hoped that the Road Investment Strategy 2 will take a more considered and long term approach to transport planning than RIS 1, though the signs are not hopeful, for example from the content of parts of the Roads funding package of November 2016. These comments do not therefore refer to the merits of one option or another, as I am not in favour of any major investment in the road network in this area.

It is unnecessary to critique in detail each step of the argument, as although, given the initial premises, the conclusion may appear rational, the incorrect starting point (failing to consider alternatives in a *fundamental* way) means that it is very problematic. The fact that there is now a general policy to push Expressways across England (with a remarkable similarity to schemes discussed in the 1970s), whatever the particular situations in different regions, gives a strong hint to the existence of an essentially politically driven agenda, as against one based on an attempt to design genuinely long term solutions. There is little or no research evidence for the rhetorical claims in DfT and Highways England documents that road investments such as this will make a difference to the economic productivity of localities, regions or the UK as a whole. OECD work points to the economic benefits of particularly energy and transport infrastructure investment in low and middle income countries, but no such impacts have been found once a certain threshold of infrastructure provision is reached, as occurred many years ago in rich countries. After that threshold is passed, other factors cause the differences in economic achievement between richer countries. The other claims in the current documents (for transport, community or environmental gains) are equally unsupported by any long term perspective or research on the effect of massive road investment. The improvement to “cultural heritage” claim is particularly doubtful and disturbing, given the failure to consider the landscape impacts across the whole area in the long term.

The absence of the consideration of real long term sustainable alternatives, most likely by moving traffic, both person and freight, to public transport modes (rail and bus, largely), invalidates the post 2013 studies. The arguments against the cost effectiveness of the present approach have been rehearsed many times since the early 1990s and retain all their validity.

With the proposed schemes, and the current failing policy to generate any serious modal shift, for persons or freight, in the great majority of England, we can easily predict that the road capacity will fill up on the A303 within a few years of completion.

Sophisticated transport planning discussion has long argued that it is of no value to focus on individual transport routes and modes. The Campaign for Better Transport does a good job in bringing the fully developed academic arguments in this field into public view. Building more road capacity generates more traffic. Only modal shift can be a long term response. One can point to the successes so evident in a city like London where prevention of large scale road building in the 1970s led logically to modal shift to public transport from then on, with massive but sensible public transport investment from the 1990s – and note the timescales: key decisions in one decade can stimulate the penny to drop politically in a later decade. So the link of the largest population centres in south east England to the south west needs an overall long term strategy, in all modes and across uses (freight as well as passenger, though in this region the passenger element is no doubt critical). This was understood in the mid 1990s to say 2010, with regional planning strategies pointing to some of the measures that were needed, and decisions precisely not to tackle the A303 issue or related pressure areas by road building. The 2013-2014 Department for Transport studies on which the present proposals are based were very clearly too limited in their brief and scope, with almost a built-in order to come up with road expansion schemes, as they did. A new much more open study is needed for the whole region, with a particular focus on the access to the WHS sub-region.

#### The Stonehenge proposal in long term perspective

A long term conception of interests is needed in considering proposals of this kind, understanding the effects on succeeding generations and large ecosystems, particularly the impact of continued massive fossil fuel driven vehicle use across Britain. We should be focussing on the late twenty first and the twenty second centuries, by no means peculiar timescales in this context, particularly when dealing with archaeologically special landscapes. This would be a classic precautionary principle position, given that, whilst we know the direction of climate change and of some other core current forces, we cannot predict many elements in any detail into the mid or further future. Avoidance of any major landscape surgery, aggressions and waste of resources (public or private) takes this precautionary route.

My opposition to the Expressway scheme as a whole naturally affects my judgement on the Stonehenge section. In fact I am especially opposed to the proposal to build a tunnel near Stonehenge. This reckless proposal to spend so much on a scheme that is likely to have a half life of perhaps 20 years may be one of the least economical (in the real sense) uses of societal resources I have seen in a lifetime of involvement and teaching in relation to the built environment. The scheme, in a quite similar form to that proposed, was seen as too expensive in 2007, and the current uncertain estimates suggest that the cost will be more than double the earlier scheme estimate. In at most a couple of decades, such road expansion schemes, whether with tunnels, dual carriageways, “Expressways” or “smart motorways” will look as foolish and failed as many previous policy disasters. In a landscape which should be allowed to endure through the centuries, with minimal extra aggression, there is no case for such heavy handed interventions in the twenty first century.

The whole Stonehenge and Avebury area is one that needs the most careful treatment, seen within a temporal frame of not decades, but centuries (if not millennia). This is by no means

limited to the World Heritage Site designated areas, which are increasingly seen by many experts as an outdated policy framework for any long term action. Almost yearly now archaeological finds and associated historical re-assessments are showing up the limits of the present boundaries. Over coming decades it is likely that more and more people will want to visit these areas, which should be treated as a whole. Sustainable modes of transport need to be designed to allow these visitors to appreciate the whole region. It will take resources and time to make this shift in the way of managing the region. In the meantime, the A303 can continue to function with its current levels of traffic, until effective public policy starts to remove the pressure from this artery. Any visitor to the Stonehenge area since the creation of the new visitor centre is struck by the very high level of experience, which is in fact affected little by the presence of the A303 – even if, were we starting from scratch, it is evident that no one would propose the placing of a road in this position.

### Tunnelling

The present proposal is essentially a panic measure, which will be looked back on by future generations with horror. The massive tunnel portals, wherever they are placed, will affect the whole district to a dramatic extent. The knowledge that a heavily trafficked road is running underground through the Stonehenge district will affect the appreciation of the monument and overall experience, for many visitors, as much as the present road. Undergrounding is increasingly being used in other fields of big infrastructure (I am examining this issue in the electricity transmission field, looking at approaches in France and Germany as well as the UK), but it is far from a straightforward or necessarily preferable solution. The damage to archaeological remains and ecological systems is often as large as or greater than the alternatives (in electricity of course this is building or maintaining pylons, in road systems, building or maintaining surface roads, drainage and related infrastructure). Undergrounding is naturally always much more costly, and creates generally a more durable and difficult to reverse impact. It should in my view be used much more selectively than is now being considered – it is as if the knowledge that tunnelling is technically “easy” (Crossrail experience, expected HS2 experience, various cable tunnels like that from France to Spain through the Pyrenees) is generating a careless approach, as if the cost barriers and the deep seated impacts have gone away, when this is clearly not the case.

### What should be done instead

Costs are quoted in the consultation documents for the Amesbury to Berwick Down section of £1.4 to £1.8 billion pounds (Highways England website May 2016 showed a range of scheme costs of £275-£1321 million, the top being presumably a longer tunnel option, so clearly we are seeing the normal tendency to scheme cost escalation). Whether these top figures in the £1-2 billion range are anywhere near reality or not, we can be sure that the 2007 figure of £540 million would be massively exceeded. When we compare this with the cost of the superb improvements made by the 2013 visitor centre package (£27 million), the difference is so large as to be absurd. A million visitors are apparently being very effectively catered for now, with little sign that their experience is being very greatly damaged by the presence of the A303. Just a miniscule portion of the money saved by not making any major road changes would finance a state of the art set of public transport schemes to make the Stonehenge and Avebury zones non-car access friendly – largely by use of buses and support of train services where practical. Over a period of 10 to 15 years these efforts could create a

showpiece for a more sustainable approach to World Heritage Site management, taking the real wider region as the space of management. The capital investment needed would be relatively small, the revenue investment significant over the years, but once fully established such a model would have great advantages and would very likely need less and less public subsidy. A costing in the terms explored by the Natural Capital Committee (using the methodologies developed in part by Professor Dieter Helm) could easily expose the real economic benefits of such an approach. An analysis (perhaps funded by DEFRA who lead the Natural Capital Committee project) should be undertaken to explore the options properly from this perspective, and the current scheme put on hold.