

M4 Junction 3-12 Smart Motorway (TR 010019) – Further submission on Highways England’s position

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1. Suppressed demand and forecasting

1.1 Suppressed demand

Highways England states that:

Highways England notes that CBT offers no evidence or data to support its claims and no adequate reasons (and again no evidence) explaining why the work done by Highways England is unsatisfactory. The expectation of suppressed demand is no more than supposition.¹

And

This Examination provides this opportunity for that public scrutiny to take place. However, it is not appropriate for unsubstantiated critiques of a model to be made without any supporting evidence, analysis or modelling to counter the detailed modelling work that has been undertaken as part of the assessment of the Scheme.²

Campaign for Better Transport accepts that it has not to date been able to fund a detailed critique of Highways England's modelling. As a small charity, we are not in a position to match Highways England's resources from the public purse.

However, we do not accept that we have not provided any evidence on this issue as we have submitted a number of references in previous submissions highlighting that modelling is often not accurate and historically (as this is only how things can be accurately assessed) there is often an underestimate of induced traffic in modelling.

In response to the statement that the expectation of suppressed demand is no more than supposition, while this technically might be correct, it is our professional judgement that given the geography, the economic buoyancy of the area and the pressure on that road network, that there will be suppressed demand for many transport movements. This would apply to various modes and not just to car travel.

1.2 Air Pollution

Highways England states:

Highways England has already made allowance for higher emissions than the prescribed standards through the use of LTTE6 as set in IAN 170/12 v3.³

And

Even considering if Euro 6/VI does not achieve their emission standards they will still be lower than Euro 4/IV and 5/V vehicle emissions. Consequently therefore it is reasonable to assume some level of reduction in emissions in the future and not an almost static trend as described by LTTE6. In adopting the LTTE6 approach, Highways England has still allowed for a greater level of uncertainty in future performance to enable the management of risk.⁴

What Highways England has not said in these statements is that IAN 170/12 v3 allows for a choice of long term trend to be used and that Highways England has chosen the more optimistic of these trends. It is worth noting that IAN 170/21 v3 states:

The annual projection factors are provided by the HA between 2008 and 2030. The long term trend is assumed to be linear as there is no observed long term impact of emissions from Euro VI vehicles on air quality monitoring trends available at this time. As such the precautionary principal is applied to future projections. Beyond 2017 the projections are expected to be conservative, but as more

¹ Paragraph 1.21, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

² Paragraph 1.41, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

³ Paragraph 2.61, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

⁴ Paragraph 2.10.2, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

*information becomes available the long term trend projections will be reviewed and this IAN updated accordingly.*⁵

It is clear from this statement that there is a level of uncertainty about future projections, particularly beyond 2017. While it states that these are addressed in a conservative way, this was written before the recent exposure of emissions cheating by Volkswagon (VW) and the revelation that many diesels are emitting more pollution than they are supposed to.

Therefore, Highways England has still not explained why the more conservative Long Term Trend (LTT) line from IAN 170/12 v3 was not used. It has attempted to claim that the LTT line is an almost static trend, which makes it sound as though it does not allow for any improvement in air quality when it does.

The line actually falls in a linear way allowing for a steady improvement year on year and the gradient of this line is the same as the gradient of LTT_{E6} after 2026. What Highways England has failed to do is justify how the rapid improvement seen in LTT_{E6} after 2014 is justified given everything that we now know and the evidence presented by expert witnesses to this Examination.

It is also worth noting that IAN 170/21 v3 is uncertain about future trends beyond 2017, when LTT_{E6} is still showing a fairly rapid improvement in pollution levels. At the risk of repetition, given all we now know, this must raise questions as to how sound these projections are and we would urge the Examination Authority to have the air pollution data rerun using the more conservative LTT line.

2. Active Travel

2.1 Severance and amenity

Highways England acknowledges that subways are not a preferred type of crossing⁶ and that extending them would have a slight negative impact⁷. However, it fails to acknowledge that increasing traffic on the surrounding road network will increase severance and reduce local amenity and attractiveness of walking and cycling⁸. It hides behind a threshold for reappraising severance as opposed to the fact that increasing traffic levels will increase severance and reduce amenity, even if this is considered only slight.

Given that the capacity of the M4 is being expanded by 25-33%, depending on which section is examined, this is going to lead to additional traffic on the surrounding road network, regardless of the disagreement of how great that will be. It will therefore have a negative impact on severance and amenity.

Highways England states:

*No historical severance issues in connection with the section of the M4 affected by the Scheme have been identified.*⁹

Yet, exactly what studies did Highways England commission to review this issue? It would appear that most of the analysis carried out was examining the impact of the changes, not whether there were any historical issues. Indeed the Environmental Statement wouldn't be expected to highlight the original and ongoing impacts of the existing road. That is not its purpose.

Highways England describes what we are asking for as 'nice to haves'¹⁰ without providing any proof for this claim. The environmental and other funds established within the Roads Investment Strategy (RIS) were not done as 'nice to haves' but out of recognition that historically, the construction of the strategic roads network

⁵ Section 3.1, page 6, [IAN 170/12 v3](#)

⁶ Paragraph 3.3.2, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

⁷ Paragraph 3.3.3, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

⁸ Chapter 4 of Volume 11, Section 3, Part 8 of the Design Manual for Roads and Bridges (Pedestrians and other Community Effects) states that amenity is the relative pleasantness of a journey

⁹ Paragraph 3.7.1, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

¹⁰ Paragraph 3.3.4, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

had had quite a few unnecessary negative impacts on the environment and people's quality of life. As such, significant funds were allocated to addressing these issues.

The executive summary of the RIS states that:

We want to see the company delivering better environmental outcomes and helping cyclists, walkers, and other vulnerable users of the network at the same as time as achieving real efficiency and keeping the network in good condition.¹¹

The key words here are 'at the same time as', indicating that the Government expects Highways England to deliver improvements for pedestrians and cyclists in schemes like this, not just ignore them or describe them as 'nice to haves'.

Further to this, Highways England's own Cycling Strategy makes a number of positive statements about Highways England's approach to cycling which does not appear to be mirrored in this scheme. For example it its vision it states that:

In particular, we want to contribute to a connected, comfortable, attractive and high quality cycling network, suitable and safe for use by people of all ages and abilities.¹²

While it also describes the benefits:

Cycling has many advantages over other types of transport, especially its environmental benefits; it causes negligible climate change, air pollution and noise. Increased levels of cycling can deliver a wide range of benefits to society, the economy and the environment.

Despite the benefits of cycling, many barriers, both real and perceived exist, including a lack of facilities, incoherent networks and a lack of information on where facilities do exist.

Cycling can play an important role in achieving our overall ambitions for the road network...¹³

It also states that Highways England will:

Update our design standards to raise the level of provision for cycling on our network...

Improve engagement and communication with our road users, in particular cyclists, to ensure our plans meet their needs.

Ensure that wider network investments incorporate cycling facilities...¹⁴

There is obviously more, but these quotes help to give a sense that what we have asked for are in line with both Government and Highways England policies. They are really the minimum required of Highways England to fulfil its responsibilities and to conform to its own policies.

2.2 Cycling

Examining what Highways England claims are improvements for cycling (and other active travel) shows that in reality, Highways England has taken a do minimum, if not a do nothing, approach and focussed on managing its risk, rather than creating a better and more attractive infrastructure for cyclists and others. It is

¹¹ Page 9, Executive Summary, Roads Investment Strategy: Strategic Vision, December 2014

¹² Page 2, [Highways England Cycling Strategy](#)

¹³ Page 2, [Highways England Cycling Strategy](#)

¹⁴ Page 3, [Highways England Cycling Strategy](#)

predominantly increasing the height of the bridge parapets from 1m high to 1.4m or 1.8m high¹⁵. However, this offers little benefit to cyclists who use these facilities anyway. They are unlikely to notice much difference and it certainly isn't going to encourage more cycling.

The only other mention of cycle infrastructure is the mention of cycle / footways alongside Wood Lane and Datchet Road, which appear no more than replacing like with like, i.e. no improvement over the existing facilities.

Taking a number of the mentioned bridges in turn, our comments are as follows:

- Monkey Island Lane – the plans¹⁶ show a 2 metre shared path but if this is like the existing path with bollards placed within it, it is far too narrow (a 2 metre path is narrow in any case). If there are upstanding obstacles on a path, a minimum of 2.5 metre width should be sought, to allow cyclists to pass each other safely. The existing bollards are presumably there to stop parking on the path and will therefore need to be installed on the new bridge. Unless this has already been allowed for when planning the width of the new path, it will end up compromised and too narrow. Equally, if bollards are not planned and then have to be retro-fitted, the path will end up compromised and too narrow. Signage also needs improving.
- Oldway Lane – this appears to be purely raising the parapets on an existing bridge already used as part of a bridleway network. It will not change the usage of the route.
- Wood Lane – apart from concern that a 2m shared path is quite narrow, this road has a 20mph speed limit with speed bumps. The raising of the parapets will have no impact on its use and if a segregated facility is being provided for pedestrians and cyclists it should be wide enough so that they can pass each other without fear of snagging on the parapet or wobbling into the traffic.
- Datchet Road – seems to be replacing like with like as above for Wood Lane, except that here a 3 metre wide path is being provided, which begs the question: why is this not being done for other shared paths?
- Recreation ground – purely raising the parapet height will not impact on use.
- Old Slade Hill – purely raising the parapet height will not impact on use.
- Marsh Lane – the plans¹⁷ say that the new path is a cycle/ footway but this appears an error as the existing route does not appear to have shared use here and Highways England does not mention that it is raising the parapet height on this route, which is surprising given it has listed this route¹⁸ as being important for non-motorised users (NMUs).
- Lake End Road – this is not a crossing mentioned by Highways England but is the type of instance where it should be taking action and future proofing its design. There are already a number of important cycle links to the south of this bridge, with a shared path coming up from them alongside Lake End Road up to Ashford Road, just short of the order limits. If this shared path was extended over the M4 to Huntercombe Lane South, it then offers the opportunity of linking up to Cippenham to the east with a proper tarmacked surface. Again improving the footbridge over the M4 spur would aid this, but this is also just outside the order limits. Another issue with the plans are that the existing junctions onto Lake End Road are already quite large with large splays. The new design appears to create even bigger junctions, particularly for Hunterscombe Lane South, which will encourage cars to

¹⁵ Paragraphs 3.7.2 – 3.11.1, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

¹⁶ [Side Road Plan & Profile Drawings](#), Sheet 2 Of 13 Monkey Island Lane

¹⁷ [Side Road Plan & Profile Drawings](#), Sheet 3 Of 13 Monkey Island Lane

¹⁸ Paragraph 3.7.2, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

travel faster around the junctions where often the greatest risk for pedestrians and cyclists is. This appears unnecessary given that the road sign at the Hunterscombe Lane South junction says the road is unsuitable for HGVs. Therefore there seems no reason not to take the opportunity to tighten the junction dimensions and improve road safety.

Overall, Highways England might have provided a long response, but there is no evidence within it to show that they have enhanced active travel and nothing to show how they are following Government and their own policies to enhance the level of cycle provision.

3. Traffic Safety

3.1 Safety claims

Highways England makes a bold claim that All Lane Running (ALR) 'reduces the risk of technology failure'¹⁹ but provides no evidence to back this up. From what we have been told by Highways England, the safety of ALR is wholly dependent on technology and continuous monitoring of the road network. If there is an incident on an ALR motorway, it is just as dependent on camera and signal reliability, if not more so, than Hard Shoulder Running (HSR).

If the camera fails on an HSR road, the hard shoulder is not opened, leaving a safe space for vehicles. If a camera fails on an ALR road, there is the potential to miss an incident with the consequential safety implications. Equally, if a signal develops a fault on ALR this must also have safety implications and in terms of repairing broken equipment, the risks can be no greater for HSR than ALR.

Overall, we believe that it is premature to make claims about ALR safety when there is very little documented evidence on this and we are still awaiting the results of the M25 first year study. Recent submissions to the House of Commons Transport Committee's All Lane Running Inquiry from the RAC and Transport Planning Society, for example, expressed reservations on safety and it is clear that for many the case is far from proven.

¹⁹ Paragraph 6.4.2.3, Highways England response to Campaign for Better Transport's Written Representation (Deadline V)

1 February 2016

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Campaign for Better Transport

Campaign for Better Transport's vision is a country where communities have affordable transport that improves quality of life and protects the environment. Achieving our vision requires substantial changes to UK transport policy which we aim to achieve by providing well-researched, practical solutions that gain support from both decision-makers and the public.

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