

'Smart M4' – congestion and pollution to rise.

Safer and cheaper to keep the hard shoulder and reduce traffic.

Summary:

The Secretary of State for Transport - Chris Grayling MP – must rule by 3rd September on proposals to create a 'Smart M4' from J3 to J12. It will cost around £860 million to create a 'controlled motorway' including perhaps £500 million to replace 11 bridges to allow 'all lane running' with no hard shoulder.

Evidence from Highways England to the recent Examination into the proposals, drawing on wide area simulations of traffic, shows that:

- the existing wider road system cannot cope with the expected increase in traffic - **average peak hour journey time rises** from 36 minutes in 2009 to up to 41 minutes by 2037
- **carbon emissions** from road transport rise by 8% between 2013 and 2037 when the Climate Change Committee's fifth carbon budget says that national transport emissions should fall by 48% between 2013 and 2030
- In 2037 over 4,000 properties will have **night noise levels** above the Significant Observed Adverse Effect Level

Since the Examination closed in March the Transport Select Committee has investigated **safety of 'all lane running'** and concluded "The Department should not proceed with a major motorway programme on the basis of cost savings while major safety concerns continue to exist."

The proposals for 'all lane running' should be rejected to keep Berkshire moving, make the motorway safer, and reduce environmental impacts. A 'controlled motorway' will be safer and add some capacity but government investment should also be used to support public transport and other measures to reduce traffic – not to replace existing bridges.

Details and references:

Modelled area:

Highways England traffic and air quality modelling area is shown in

https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010019/TR010019-000298-6-2-ES-Figures_06-Air-Quality_Cover-and-KeyPlan.pdf

Congestion:

Highways England acknowledge that the system as designed and simulated cannot cope with projected traffic growth saying "It follows that increases in journey times across the wider network result from the general growth in traffic. The consequences of this growth will be a matter for the local highway authorities to address".

The modelling results and comments are in Section 2.3 on Page 5 of Highways England response to Reading Friends of the Earth <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010019/TR010019-002436-Highways%20England%20Response%20to%20Deadline%20VII%20Representation%20-%20Reading%20Friends%20of%20the%20Earth.pdf>

Climate Change:

The Environmental Statement 6-1-ES-Chapters_06-Air-Quality

https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010019/TR010019-000268-6-1-ES-Chapters_06-Air-Quality.pdf gives assessments of modelled annual emissions of CO2 at various stages of the scheme in Table 6.19 and Table 6.20. The net effect is an increase of 41 thousand tonnes per annum over the period – despite anticipated adoption of low-carbon vehicles.

Present (2013)	518,361 tonnes
Without Scheme Opening Year (2022)	497,870 tonnes
With Scheme Opening Year (2022)	539,018 tonnes
Without Scheme Design Year (2037)	509,259 tonnes
With Scheme Design Year (2037)	559,424 tonnes

The Climate Change Committee's fifth carbon budget 'Sectoral Scenarios' report <https://documents.theccc.org.uk/wp-content/uploads/2015/11/Sectoral-scenarios-for-the-fifth-carbon-budget-Committee-on-Climate-Change.pdf> shows in 'Fig 1.7 – abatement to 2030' national transport emissions dropping from 130 million tonnes CO2 in 2013 to 68 million tonnes in 2030 - a fall of 48%

Noise:

Table 2 of the Enhanced Noise Mitigation Study (Revised) shows over 4,000 residential properties with noise levels expected to be above the Significant Observed Adverse Effect Level. This is 15 dB above the Lowest Observable Adverse Effect Level ("LOAEL") - the lowest level above which adverse effects on health and quality of life can be detected;

<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010019/TR010019-002451-Highways%20England%20Enhanced%20Noise%20Mitigation%20Study%202029-2-16%20REVISED2.pdf>

Air Quality:

Highways England simulations (locations near M4 only) show air quality marginal +/- to legal requirements in some places in 2022 and show some small adverse changes to 2037 which they claim are 'not significant'.

Counter-argument is that their model assumes Euro 6 standards reduce emissions substantially from 2014 but there is an alternative official model – which they have not used – which would show a worse case.

Safety of All Lane Running:

The Transport Select Committee took evidence from motoring organisations and police and rescue services. Evidence looked at safety implications – including delays in getting emergency services to incidents when there is no hard shoulder and risks of vehicles halting in an active lane.

Their Report <http://www.publications.parliament.uk/pa/cm201617/cmselect/cmtrans/63/63.pdf> , published at end of June 2016, reinforced evidence given to the Examination by Highways England that all lane running, while a little safer than the existing arrangement, was much higher risk than a 3-lane motorway with a hard shoulder and 'Active Traffic Management', and was significantly higher risk than a 3-lane motorway with Dynamic Hard Shoulder Running.

John Booth - 25th July 2016 - www.readingfoe.org.uk/m4