

## **M4 Junction 3-12 Smart Motorway (TR 010019)**

### **Written representation from Reading Friends of the Earth for Deadline V**

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Reading Friends of the Earth is a voluntary group of residents of the 'Greater Reading' area. We campaign on environmental issues. We are a separate body to Friends of the Earth England Wales and Northern Ireland.

### **Observations on responses at Deadline IV and on Average Journey Times**

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#### **1/. Benefits of lower speeds**

The hearings heard claims that lower speeds could improve both safety and air quality, and could reduce noise and CO2 emissions. An additional effect may be that lower speed limits may encourage the use of non-car modes of transport, thereby reducing congestion and further enhancing their primary benefits.

In Section 3 of the HE Deadline IV response on Safety (in response to Question 3 on Safety) HE said

- "The safety of the Scheme has not been assessed on the basis that the national speed limit would not be in force in off peak times."

And they argued that

- "journey times during the off peak would be significantly affected by a reduced speed limit and this would have a negative impact on the business case for the Scheme."

It is important that the option of reduced speeds – either throughout the scheme or in locations and/or at times where noise and/or air quality are critical – is properly assessed – and all of the various benefits set against any increases in journey times.

As outlined in our response for Deadline IV it is important to put an appropriate price on carbon emissions.

#### **2/. Climate Change**

In the first written questions 'Section G – Other Matters – Question 5' it is said that "*DfT has advised that the scheme would not have a material impact on the Government's ability to meet its carbon reduction target.*"

The estimated emissions in future years should not be considered solely on the increase from 'without scheme' values – undesirable though this is - but as absolute levels of emissions that have scope for reduction – by policies both to reduce vehicle-km travelled and to use lower-carbon vehicles.

The scale of emissions from this section of the M4 in 2037 will certainly be significant on a regional level and reducing them would be helpful to the government's efforts to meet its carbon reduction targets.

The Environmental Statement 6-1-ES-Chapter2\_06-Air-Quality gives assessments of 'Regional' annual emissions of CO2 at various stages in Table 6.19 and Table 6.20.

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

Taking data for 2013 from <https://www.gov.uk/government/collections/uk-greenhouse-gas-emissions-statistics>:

- Transport emissions in the South East were 18.9 million tonnes or 2.2 tonnes per capita.
- Total emissions in the South East were 55.8 million tonnes or 6.3 tonnes per capita.

If average daily traffic in 2037 is 160,000 vehicles then emissions amount to 3.49 tonnes per vehicle.year with the scheme which is 58% more than the average per-capita figure for the South East in 2013.

Total emissions 'With Scheme Design Year (2037)' are about 1% of the total emissions for the South East in 2013 and almost 3% of the South-East's transport emissions in 2013.

However by 2037 total emissions should be about 50% of 2013 levels to meet the targets in the Climate Change Act so if this is achieved by 2037 the M4 may account for around 2% of the South East's total emissions and 6% of its transport emissions.

Halving the emissions from the M4 in 2037 would make a useful contribution to the South East's regional emissions reduction.

(See discussion in Section 3 of the Deadline IV input from Friends of the Earth)

### **3/. Impact on Journey Times**

We have not been able to find estimates of future average journey times (door-to-door, not merely along the M4) in peak hours in the design year. The issue is whether the proposed infrastructure can cope with maximum projected traffic growth both on and off the motorway, or whether a different strategy would be better.

In a previous examination into the Reading Cross Town Route in the 1990s we demonstrated by analysis of the outputs of traffic modelling that because of predicted traffic growth average peak-hour journey times would increase despite the introduction of a major new road link.

We hope the developers will produce modelling results to compare average peak-hour journey times in 2013 and with maximum-case traffic growth in 2037.