# **M3J9**

# **Written Supporting Submission on** ISH2 and ISH3

**Winchester Action on the Climate Crisis** 

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## Introduction

Following the contributions to ISH3 it has become clear that this application poses major problems.

The applicant has so far failed to provide sufficient information on their climate data or comply with government guidance on climate modelling. Even so the minimal climate modelling data provided demonstrates that this application presents a major risk. The applicant is giving us data that tells us that, as a result of this proposal the equivalent of a quarter of all the transport emissions in South East England would reduce so slowly that the government will find it difficult to achieve its Net Zero Growth Plan for Transport.



#### Either:

- The applicant has provided accurate data, in which case the only option
  will be to abandon the scheme and develop new emission-reduction
  schemes that, instead, focus on developing rail freight and sustainable
  local transport, in line with National Highways policy for the Solent to the
  Midlands transport corridor and the draft NPSNN, or
- The applicant has provided inaccurate data, in which case they should recalculate their data, ensure, if possible, that it demonstrates that the scheme will not pose a risk for the Net Zero Growth Plan for Transport, provide greater data transparency, and comply with guidance (provide a "current" baseline, provide data for periods "at every stage" of the project, and align modelling areas for traffic analysis, economic growth, and greenhouse gas emissions). There is of course the risk that the revised data will still not ensure compatibility with the Net Zero Growth Plan for Transport, and that the scheme will still have to be abandoned,

## **Summary**

- The applicant has so far not provided evidence that they have complied
  with guidance and appraised a scheme for increasing the mode share of
  modes other than road transport. It is policy in the new draft of the
  NPSNN and National Highways policy for the Solent to the Midlands
  Corridor to increase the mode share of rail freight, and the owner of
  Southampton Western Docks is keen to encourage modal transfer to rail.
- The applicant has still not responded to points we made about the traffic modelling: the minimal time reduction on routes across M3J9 on both local and strategic roads; the minimal traffic reduction on local roads; the minimal traffic increase on strategic roads; the excessive cost per average minute saved.
- The applicant has still taken no account of the high levels of PM<sub>2.5</sub> produced by motorways / main roads, has understated the problem and has not considered sufficiently current trends towards exceeding recently introduced national thresholds. The effects of PM<sub>2.5</sub> appear not to have been included as disbenefits in the cost:benefit analysis.
- The combined health effects of the proposal could have an impact on mental health. This has not been recognised as a disbenefit.
- The apparent failure of the applicant to consider sufficiently modes other than road extends beyond rail freight to other sustainable modal options set out in objective H of the Solent to the Midlands route strategy.
- The applicant has not set out how the benefits and disbenefits of the
  application have been aggregated into their cost:benefit analysis, and
  what weightings have been applied. Too many disbenefits appear to have
  been ignored. A vague list of benefits is not sufficient to give credibility to
  the calculation.

- The potential of important new elements in the revised NPSNN
   (encouragement of intermodal rail freight, and logistics rail freight from
   warehouses to multi-modal transhipment centres appear to have been
   ignored by the applicant. The impact of these on the scheme could be
   fundamental in removing the need for it.
- The applicant has produced little information on how they carried out the greenhouse gas modelling. The two sets of data offered for two dates are insufficient and do not comply with the requirements of the guidance in NPSNN and DRNB LA 144. In particular the modelling for traffic, economic benefit, and greenhouse gas emissions do not cover the same geographic areas. We learnt at ISH3 that transport emissions modelling had gone out to "about 40 miles" from Winchester, but only on some roads. The DM and DS emissions figures for 2027 and 2042 show clearly that the applicant calculates that emissions related to this proposal will reduce at only one sixth of the rate required by the Net Zero Growth Plan for transport and that the application poses a serious risk to the whole plan.
- The Design and Access Statement (para 5.6.2) proclaims that "materials will be locally sourced, reclaimed, recycled or [to?] minimise carbon impact." This is at odds with the apparent complete destruction and reconstruction of M3J9. Construction emissions appear very high, and some register and justification of cases where there is failure to comply with para 5.6.2 would seem to be necessary.

# ISH2 Item 3: Traffic and Transportation Rail Freight Modal Shift: Viable rail freight alternatives

Para 4.27 of NPSNN says options appraisals should include 'viable modal alternatives.'

When, in our initial submission, we said National Highways should have considered improving rail freight infrastructure as a way of avoiding this scheme, the applicant responded by saying "with respect to alternative transport options, a range of alternatives were considered and appraised during National Highways Project Control Framework (PCF) Stages 0, 1 and 2, the conclusion of which resulted in the preferred scheme of the M3 Junction 9..."

The applicant has made no reference to this appraisal in the application and we are given no information as to why the possibility of investing in a rail-freight-based scheme was dismissed. We believe the applicant should demonstrate rather than simply say that an adequate appraisal of rail-freight-based alternative schemes was carried out at stage 0.

Indeed, as the applicant points out, guidance requires that details of options considered be set out. Chapter 3, para 3.1.1, draws our attention to the

requirement that the Environmental Statement (ES) should include a description of the reasonable alternatives and para 3.1.2 refers to the Planning Inspectorate's wish to see an explanation of the reasonable alternatives considered and the reasons for the chosen option, taking into account the effects of the Proposed Development on the environment.' Without full information to the contrary it is difficult to accept that a rail freight improvement option was appraised in any meaningful way.

The decision not to opt for a rail freight option appears to be contrary to <u>Solent to Midlands Route (nationalhighways.co.uk)</u> National Highways **policy for the Solent to the Midlands corridor**. Objective D (p 83) encourages

"access to freight-based multimodal interchanges in addition to recognising the importance of lorry parking facilities in strategically important locations for freight and logistics, particularly Southampton, Portsmouth and the wider Solent Freeport [with a view to achieving] improved access to holistic rail freight options at the ports with more freight moved by rail than on the roads."

Contrary to the impression given by the applicant, there are suggestions in the applicant's general publicity describing their PCF that they are not really interested in appraising any schemes other than road schemes, and there is little to reassure us that the applicant has developed the skills or determination to do so. The word 'rail' appears neither in their short guide nor in their handbook. The Project Control Framework Quick Reference Guide (contemporary with the initial appraisal of the scheme) chooses to describe the 'options phase' as:

## The PCF phases

- Options phase identifies the preferred road solution to the transport problem. By the end of the phase there is certainty that, for example, the project will involve widening along a specific route.
- Development phase focuses on the design of the preferred solution taking it through the necessary statutory processes up to the point where a decision to commit to invest in building the road solution can be made.
- Construction phase is where the road solution is built, handed over for operation and the project is closed down.

This drafting assumes that all transport solutions are road-based solutions. While appraisal of non-road schemes at stage 0 is not technically ruled out, such activity is ignored and is clearly marginal, perhaps no more than a notional possibility.

To demonstrate their commitment to multi-mode appraisal at stage 0 we believe the applicant needs to provide evidence that a serious appraisal was carried out on a rail freight option in this case. and provide examples of transport appraisals done on other schemes that have resulted in a rail freight option being preferred.

As we said in our initial submission a modal shift of freight to rail is strongly encouraged in the March 2023 draft national policy statement for national networks. This covers both intermodal freight to and from ports and logistic freight from national distribution centres to intermodal transhipment centres serving main population centres. The emphasis of this application is at odds with the draft NPSNN (paras 3.56 and 3.96 especially). The Solent to the Midlands corridor is heavily used by both types of freight.

Paragraph 5.29 emphasises that emissions reduction should be a major constituent of the initial appraisal process:

A whole-life carbon assessment should be used to measure greenhouse gas emissions at every stage of the proposed development to ensure that emissions are minimised as far as possible as we transition to net zero. This includes the construction, maintenance, operation and use of the asset across its entire lifecycle. This is critical at early stages of project planning, for example, the conception stage, because the ability to reduce whole life carbon emissions is increasingly more limited as the project passes through detailed design and enters construction.

### As para 3.100 points out:

The transfer of freight from road to rail has an important part to play in a low carbon economy and in helping to meet net zero targets.

#### Similarly para 2.28 points out:

Rail freight is estimated to reduce emissions on average by 76% per tonne km travelled when compared to road freight, equating to around 1.4m tonnes of carbon dioxide emissions saved each year. Rail is one of the most carbon efficient ways of moving goods over long distances and can also reduce congestion – depending on its load, each freight train can remove up to 76 Heavy Goods Vehicles from the road. The rail freight industry resulted in 6.35 million fewer lorry journeys in 2019/2029.

The applicant's climate calculations, once we are given access to them, may well confirm their failure to reduce emissions in compliance with the government's Net Zero Growth Plan. There are already clear indications that the necessary reductions will not be achieved (see the section on climate below). A Scheme focussed on rail-freight would be far more likely to reduce GHG emissions than the applicant's scheme and deliver a 76% emissions reduction improvement for all freight that will transfer mode as a result.

DP World, the operator and owner of **Southampton Western Docks** is offering feereduction incentives for shipments that use rail, with a view to increasing the share of rail freight serving the port. We have submitted the DP World publicity for this separately but it is not yet in the documents listing at the time of writing. Since it is a third-party website we have not included a link here, but a browser enquiry "CUSTOMER ADVISORY: Introducing a Modal Shift Programme (MSP) Trial at DP World Southampton" should find it.

If the applicant can show that there was a meaningful appraisal of a rail freight option at stage 0, rejection of the option was inappropriate. It would have been counter to:

- National Highways's policy for the Solent to the Midlands corridor Objective 8
- The March 2023 draft NPSNN's focus on expanding rail freight mode share
- The March 2023 draft NPSNN priority for delivering a 75% reduction in emission by transferring freight tonnage to rail,

and risked creating an underused asset in the light of DP Ports emerging policy of modal transfer of freight to rail.

Diversion of funds allocated to this and other road schemes along the Midlands to South Coast corridor towards rail freight projects would have a substantial impact on the quality of the rail freight infrastructure, and at the same time cut Greenhouse Gas emissions on freight transport by up to 75%.

## **ISH2 Item 3: Traffic Growth Modelling and Journey Times**

In our original written submission we included the following table

2047	AM+IP+PM		
2041	Do Minimum	Do Something	DS/DM%
Andover Road	2,843	2,374	83.50%
Romsey Road	1,077	1,092	101.39%
St Cross Rd	2,028	1,779	87.72%
Chesil Str	2,371	1,873	79.00%
Alresford Rd	2,561	2,501	97.66%
Easton Lane	1,712	2,152	125.70%
Worthy Rd	1,640	1,503	91.65%
Petersfield Road	5,392	5,735	106.36%
Local RoadsTotals	19,624	19,009	97%
A34N	14,810	17,595	118.80%
A33N	1,986	2,183	109.92%
M3N	17,308	17,260	99.72%
M3 Sports Centre	31,704	32,689	103.11%
M3 Twyford Down	37,455	37,670	100.57%
Strategic Roads Totals	103,263	107,397	104.00%
Full total	122,887	126,406	102.86%

We suggested that a **three percent reduction** in traffic flow through Winchester Town and a **2 percent increase in traffic flow along strategic roads** suggested the scheme was of only marginal benefit to anybody.

Similarly we referred to the marginal journey-time savings listed in the traffic modelling. In the <u>Case for the scheme</u> Table 4.3 shows that in 2047 the benefits will be even less. Journey time savings on these journeys across M3J9 will average only **30.3 seconds**, a mere **7.9%** of the DM journey times on the routes in the sample. Worse, the main savings are on those journeys with fewest vehicles, and most of the busiest through journeys (M3S to M3N, M3N to M3S M3S to A34) will actually take longer if the project takes place:

Route	Description	2047			
		Do-Minimum (DM) – Without Scheme	Do- Something (DS) – With Scheme	Difference (DS-DM)	
R1	M3S to M3N	08:00	09:09	01:09	
R2	M3N to M3S	05:58	06:02	00:04	
R3	M3S to A34	10:22	10:45	00:23	
R4	A34 to M3S	08:23	07:44	-00:39	
R5	A33 to Easton Lane	03:43	04:35	00:52	
R6	Easton Lane to A33	06:49	03:07	-03:42	
R7	A31 to M3S	03:57	03:53	-00:04	
R8	M3S to A31	06:10	07:35	01:25	
R9	A31 to Easton Lane	03:46	03:05	-00:41	
R10	Easton Lane to A31	07:09	03:19	-03:50	

The minimal differences are all the more astonishing given that they apply to 24 years in the future.

The applicant has **not challenged our calculations**.

It is difficult to see how even the unusually low BCR of 1.35 quoted in the reply can possibly relate to this seemingly meaningless change in traffic behaviour and journey times. The applicant suggests that economic impacts, journey time reliability, social and distribution impacts will make it all worthwhile. We find it impossible to reconcile this optimistic spin with the minimal change in traffic volume and journey time and fear that this brave defence does little more than undermine the whole B:CR methodology the applicant has used. We should be told how it is possible that even this disappointing level of benefit could result from so little change in traffic distribution. If traffic patterns remain almost the same, what could possibly bring about the benefits claimed. We urge the applicant to admit formally that the traffic modelling proves how pointless this scheme is.

With scheme costs at £105,022,033 (2010 prices) the price works out at £3,466,073.70 per second saved on average cross-M3J9 route journey-time. 2023 prices are about 50% higher.

The transparency of this data is limited by **the lack of a current baseline**, so it is difficult to understand and triangulate on the DS and DM data for 24 years in the future.

## **ISH2 Item 6: Air Quality**

## PM<sub>2.5</sub> pollution already close to proposed thresholds

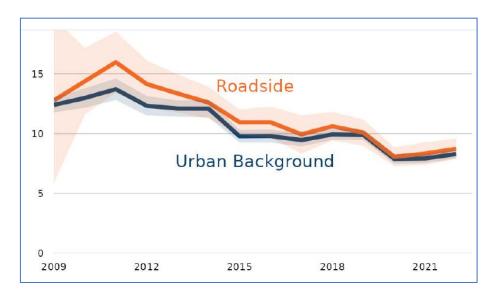
In our initial submission we pointed this out. (The new legally determined target is 10  $\mu$ g/m3 annual mean concentration PM<sub>2.5</sub> nationwide by 2040, with an interim target of 12  $\mu$ g/m3 by January 2028).

The applicant's response at the meeting focussed on referring to DEFRA's responsibility for monitoring, and as such tried to deny the applicant's responsibility for taking action. If it is the applicant that is proposing a scheme that is likely to raise PM<sub>2.5</sub> above the new thresholds, it is surely the applicant's responsibility to demonstrate that emissions will not exceed the new thresholds. As the monitoring authority, DEFRA would surely have to limit its involvement to alerting the bodies responsible for emissions, but would not itself be expected to resolve the problems. In common parlance the applicant was attempting at the hearing to 'pass the buck' on to DEFRA. We hope the examining authority will not allow this to happen.

The map we included in our original submission showed the specific and localised impact of the motorway on PM<sub>2.5</sub> pollution. The applicant referred to

the high level of background PM<sub>2.5</sub> pollution but made no reference to the difficulties of tackling background pollution. By definition, the specific sources of background pollution have not been identified, apart from in the broadest generic terms. We should tackle pollution first in cases where we know the sources. From the map produced in earlier scheme consultations (The Preliminary Environmental Information Report Appendix 5.1 – Air Quality Figures (Part 6 of 6) May 2021) it is clear that it is the motorway that tops up the background level of PM<sub>2.5</sub>. Generally the background level is shown as 8 to 10  $\mu g/m^3$  but over the motorway it increases to 10 to 12  $\mu g/m^3$  taking the level to above the proposed threshold. Without the motorway the pollution would not be above the proposed threshold, and it is incumbent on the applicant to demonstrate that this will be prevented. The applicant should also take responsibility for the share of the background PM<sub>2.5</sub> that is reportedly the result of significant levels of dispersed transport pollution from National Highways roads.

At the hearing the applicant suggested that DEFRA monitoring showed 'things were going in the right direction.' This was not an accurate way of describing DEFRA's most recently published data, despite the positive gloss they put on this. Average roadside  $PM_{2.5}$  pollution in 2022 was reported as 8.73  $\mu$ g/m³ but motorway roadside pollution is higher than this, and very close to the proposed thresholds. The chart published by DEFRA shows that since the Covid lockdown things are clearly going in the wrong direction:



Roadside emissions have risen by  $0.7 \,\mu\text{g/m}^3$  since 2020. Full details are given at Particulate matter (PM10/PM2.5) - GOV.UK (www.gov.uk) There is little prospect of these emissions reducing if traffic levels continue to grow as predicted in the application. Problems will be exacerbated by the continuing increase in vehicle size and weight. Cabin concentrations are likely to be much higher than

roadside emissions, as with other pollution, and National Highways should recognise their duty of care towards people who use their roads.

The extensive health impacts of PM<sub>2.5</sub> pollution should be included as disbenefits in the benefit:cost ratio calculations.

There is clearly a local and specific problem about PM2.5 emissions beside motorways / main roads, and in the cabins of all motorway / main road users. The applicant referred to PM<sub>2.5</sub> pollution in central Manchester and central Winchester as if it was self-evidently more concentrated than it is at the side of M3J9. However the maps produced by Volker Fitzpatrick show roadside emissions, on top of background emissions, can often be the highest in many areas, and certainly near M3J9. It would be responsible for the applicant to employ experts such as King's College or University College to develop updated maps showing forecast PM<sub>2.5</sub> emissions for DM and DS forecasts for the scheme. This should have been an integral part of the application.

At the hearing the applicant agreed that in 2028 emissions will probably be above 10  $\mu$ g/m³. However the applicant needs to demonstrate that pollution will not be above 12  $\mu$ g/m³ in 2028 and that pollution will fall to below 10  $\mu$ g/m³ by 2042. As explained above we cannot assume that emissions from tyres and break blocks will reduce because the increased weight of vehicles is likely to cause an increase in PM<sub>2.5</sub> pollution.

#### **ISH2 Item 7 Mental Health**

We asked whether mental health impacts had been considered, especially in the context of the combined health effects of the project. The response made it clear there had been no consideration of this. It was also clear that the negative impacts of mental health had not been included as disbenefits in the benefit:cost ratio calculations. There is a need to review the B:CR calculations to see how they have allowed for the impact on mental health of multiple combined negative factors.

### ISH3 Item 2 Consideration of Modal Alternatives

Our observations above on appraisal of <u>Rail Freight Modal Shift</u> as a modal alternative apply equally to appraisal of other modal alternatives. The applicant has said that other modes were considered at stage 0 of the Project Control Framework but there has been no demonstration of the nature of this consideration, nor any information provided about why the alternatives were not developed.

Just as the failure to develop the rail freight option ignores objective D of <u>Solent</u> to <u>Midlands Route (nationalhighways.co.uk)</u> the failure to develop the other

modal alternatives we included in our initial submission is a failure to pursue objective H of the route strategy (p 87), namely:

We aim to encourage connectivity to and from Southampton and surrounding cities and towns, including Portsmouth and Winchester, through improved integration with sustainable traffic modes to benefit local residents, with the following intended outcomes:

- Improved integration and connectivity between the SRN and sustainable options
- Reduced traffic on the SRN

It appears that climate calculations for the proposed scheme exceed the transport trajectory in the government's Net Zero Growth Plan, and present a major risk that carbon budgets will be exceeded. An effective way of staying within the government's emissions envelope would have been to adopt the modal alternatives for solving M3J9 congestion that we listed in our initial submission.

We hope the applicant will provide full details of their consideration of modal alternatives and explain why they chose to go against the National Highways Route Strategy and did not choose options developing other transport modes.

### **ISH 3 Item 2 Economic Benefits**

The presentation of the economic benefits of the scheme is disappointing. The applicant listed items uncritically. Without an analysis of how the benefits and disbenefits were set off against each other, and an explanation of the weighting given to each item it is difficult to have any faith in the process.

We have been told that some key factors, such as PM<sub>2.5</sub> pollution have not been taken into account, and the B:CR seems very low.

In particular we would like to know how economic benefits have been calculated, and how time savings, employment rates, and economic outlook have been factored in. We need to know, too, whether the modal alternatives (rail freight, better suburban passenger services to Southampton, better bus services, good transport interchanges) would have provided greater net benefits.

We believe the applicant needs to go beyond stating the results of their calculations; they need to explain how they have carried out their assessment.

## **ISH3 Item2 the March 2023 NPSNN Consultation Draft**

As we said in our original written submission, the NPSNN March 2023 draft heralds a significant shift in policy on the priority to be given to rail freight in transport infrastructure. We have already made detailed further comments in these notes under item <a href="ISH2">ISH2</a> Item 3: Traffic and Transportation Rail Freight Modal Shift. and in our original submission, with full references. In short, the

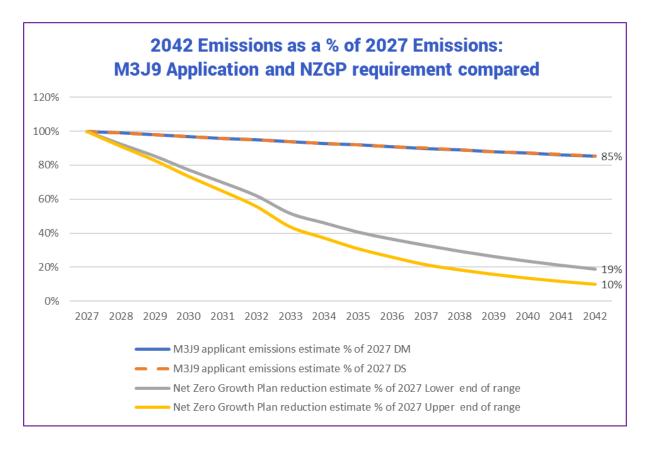
new draft encourages a shift to rail freight for both intermodal freight traffic serving the ports, and for logistics traffic serving local intermodal transhipment centres, the construction of which it promotes. This application is fundamentally at odds with this change in direction and the climate calculations offered with this application demonstrate how crucial it is that this application be withdrawn and rethought along the lines of the NPSNN draft to ensure compatibility with the government's Net Zero Growth Plan for transport.

In any event the applicant has not met the requirements of the current NPSNN. As we pointed out in our initial submission paragraph 5.17 says: , "for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets." The carbon budgets have now been superseded by the greater detail of the Net Zero Carbon Growth Plan road emissions targets

## ISH3 Item 3 Climate Change and GHG Emissions: User emissions

We have frequently referred to the dearth of information in this application about the thinking behind and stages in the calculation of the numbers that are quoted. This is especially true of the user emissions numbers given on greenhouse gas emissions.

However the two sets of numbers given on greenhouse gas emissions are sufficient to demonstrate that this proposal will threaten the government's Net Zero Growth Plan on transport. Put simply, we have been given the projected emissions figures for DM and DS for the modelled area in 2027 and 2042. Both sets of figures show only a 15% reduction in emissions between the two dates. The Net Zero Growth Plan gives targets only up to 2037 and requires a 67 to 78% reduction on 2027 emissions by then. This is already about 5 times the reduction given in the applicant's figures. We have interpolated the Net Zero Growth Plan targets between 2037 and 2050, using log 10 extrapolation methods. This indicates that by 2042 emissions reduction would need to be between 81 and 90 %, or up to six times the reduction calculated by the applicant. The graphical expression of this is:



The difference between the applicant's projections and the requirements of the Net Zero Growth Plan are so great that it is clear the applicant has not addressed the scale of the need for emissions reduction in any serious way. The identical emissions path for both DS and DM reinforce the impression that insufficient thought has been put into the applicant's calculations. It appears that the applicant does not even comprehend what is required.

It feels obvious that this project would fail the risk assessment test posed by the judgement in R (Friends of the Earth) v Secretary of State for Business Energy and Industrial Strategy [2022] EWHC 1841 (Admin). Put simply, on the data supplied, this proposal will certainly undermine the Net Zero Growth Plan and fail to satisfy this judgement.

We are surprised that the applicant has failed to grasp the significance of:

- the reference in our initial submission to NPSNN paragraph 5.29: "A whole
  life carbon assessment should be used to measure greenhouse gas
  emissions at every stage of the proposed development" this must
  require a complete sequence of greenhouse gas assessments, and not just
  two years (2027 and 2042) 15 years apart
- the references in our initial assessment to DRNB LA144:
  - o para 3.1 requiring applicants to "report on the likely additional and avoided GHG emissions at each life cycle stage of the project, in

- comparison with current and future baseline GHG emissions"—there is still no analysis of current emissions in the modelling area
- para 3.2 requiring reports on "the likelihood of significant effects" –
  anticipating the requirement for risk assessments in the case
  referred to above
- o para 3.9 "for operational road user emissions, the study area shall be consistent with the affected road network defined in a project's traffic model" – definitions of the study area have varied at every stage and seem to expand and contract according to the context; generally they are not coterminous with the maps provided by the applicant to illustrate traffic flow in the affected road network.

The guidance above appears to require a single consistent study area applying equally to both traffic modelling, economic modelling, and greenhouse gas calculations, and for all of these, regular calculations on how they are likely to change over the years from the 'current' period (presumably contemporaneous with the period before the project begins) with regular projections.

The applicant has not yet provided a "current" analysis of either traffic flow or greenhouse gas emissions, and has provided unexplained projections for only two years that are fifteen years apart. This falls far short of the requirements of the guidance and makes it impossible to assess fully the quality of the application. The second of the years reported on is not included in the government's Net Zero Growth Plan, which makes it difficult to assess whether it complies with that (although it is so out of kilter it is clear it does not).

In our initial submission we developed an initial calculation of traffic emissions in an area that was coterminous with the maps showing the traffic modelling. We gave full details of our calculations. We calculated the "current" baseline for the area coterminous with the traffic modelling to be 152.72 ktCO<sub>2</sub>e. The closest the application comes to an equivalent figure is the DM figure for 2027 of 4,157.88 ktCO<sub>2</sub>e, revised without explanation since the first draft. The applicant's figure is more than 27 times our figure. We tried in vain to find a meaningful comparison with the applicant's figure. We list below possible comparators, all based on DESNZ data for 2021:

	KtCO₂e
Winchester District Total 2021	400.55
Winchester District Motorways 2021	157.08
Winchester District A Roads	122.28
Winchester District A Roads +	
Motorways	279.36
SE Region Total Transport 2021	16,596.93
SE Region Motorways 2021	4,771.56

Our estimate fits reasonably well with the Winchester District figure but it is difficult to reconcile the applicant's figure with any of the comparators.

We were astonished to hear at ISH3 that the climate modelling covered some routes up to about 40 miles from Winchester. This would include the M3 to just short of the junction with the M25, the A34 to just north of Harwell, and the M3/M27/A338 to the western edge of Bournemouth.

We need to know the rationale for this, and which roads were included in the modelling. The emissions are the equivalent of about a quarter of the emissions for all transport across the whole South East Region. To reach the emissions levels suggested, most or all of the roads in the area would have had to be included. We have to ask what the relevance of these emissions is to this application, and why we were previously misleadingly told that the emissions were for the whole of the South East Region.

It is now clear that the greenhouse gas calculations are not coterminous with the published traffic modelling area, and as such do not comply with the guidance. If there is traffic modelling that has been done across this extended area it has not been included in the application, and it is impossible to understand the relevance of it. Put simply, for example, why do we need to know how this proposal will affect traffic flows and emissions on the Newbury by-pass, and how can we be sure that there are not more immediate influences that will cause change?

We have put in a request for comprehensive information on the greenhouse gas calculations, and hope National Highways will reply soon:

to m3junction9improvements • Dear National Highways,

On Page 26 of Rep2\_028 in table 14.6 you gave the following figures:

	End-user Emissions (tCO <sub>2</sub> e) –			
Operation Year	DM Scenario	DS Scenario	Differe nce	
2027	4,157,875	4,161,194	+ 3,319	
2042	3,549,335	3,554,026	+ 4,691	

Could you please explain how you calculated the figures in the DM and DS scenario columns.

In particular could you please let me know:

• The geographic area these figures refer to, bearing in mind that DRNB LA144 para 3.10.2 requires that "the baseline submissions should be consistent with the study area outlined for the project." It would be especially helpful if you could explain the sentence in 14.7.15, namely:

The modelling includes the total GHG emissions for all existing traffic using the strategic road network (covered by the traffic model) in the vicinity of the Scheme and its surrounding region (south east England)

It would be good if you could explain how two such radically different areas have been treated to produce a single set of figures and why you appear to have adopted a path that appears to have failed to follow DRNB LA144.

#### Could also please let me have:

- Data you have for the emissions for the "current" baseline required by para 3.10 of DRNB LA144
- Traffic volume data you have based the figures in table 14.6 on
- A summary of your methods for ensuring compatibility with the government's Carbon Budget Delivery Plan
- A summary of how you have incorporated assumptions about the timetable and extent of road vehicle electrification, and the nature of those assumptions
- A summary of how you have allowed in these figures for the rate of decarbonisation of the electricity supply in your calculations
- A summary of how the potential health effects of GHG emissions and PM2.5 pollution, and the minimal reduction in journey times have been incorporated into your benefit:cost ratio calculations
- The calculations you have made to identify the level of probability in the accuracy of the results.

#### You will be aware of the recent decision by the Information Commissioner:

"The Commissioner considers that there is a very strong public interest in publication of data that will assist the public in understanding policy decisions – especially those designed to be as farreaching and long-lasting as the transport decarbonisation strategy. Disclosure will help the public to understand where the Government's proposals are too ambitious, not ambitious enough or about right." (ICO, 2022: 3)."

This public interest must include an understanding of how well those policy decisions are implemented.

With many thanks,

Phil Gagg.

## ISH3 Item 3 Climate Change and GHG Emissions: Construction Emissions

We raised in our initial submission the need to resist the temptation to replace existing infrastructure with new infrastructure unless it was absolutely necessary. We gave the example of replacing a large concrete roundabout with a large concrete roundabout, but at the ISH3 the applicant referred us to the Design and Access Statement (APP – 162) where the justification for replacing the roundabout could be found. It is true that there is a brief explanation for the replacement of the roundabout:

6.3.4 The roundabout would be replaced with a geographically smaller unsignallised gyratory roundabout, with two new longer span gyratory bridges replacing the existing bridges to provide the road corridor width required for the new configuration.

However, the Design and Access Statement also contains a very strong statement about retaining as much infrastructure as possible to reduce construction emissions:

5.6.2 Sustainable design is a fundamental consideration of the Scheme. Where appropriate, materials would be locally sourced, reclaimed, recycled, or minimise carbon impact.

It is difficult to see any examples of re-use in the whole scheme, and it seems important to monitor how far this 'fundamental consideration' has been implemented. Given the worrying level of emissions associated with the scheme, we believe there is a need for a carbon-saving review of the design decisions that have been taken.