M3J9

Response to REP5-026 and -027

The applicant's documents 8.17 and 8.17.1 Response to Examining Authority's Second Written Questions and Appendix **Winchester Action on the Climate Crisis**

1 **Summary**

- The applicant has still failed in many places to explain how much of thedata they have quoted has been obtained.
- Too many statements refuse to do more than what is required.
- There are too many conflicts with national policy documents
- The applicant has been reluctant to treat air quality as a major health issue
- Modal alternatives have not been assessed seriously
- Little serious attempt has been made to reuse existing infrastructure
- The estimates for emissions in 2047 are so high that they will threaten the government's NZDP
- Respect for LA 144 is merely nominal
- Rail Freight shift has been underestimated
- On most journeys, especially long distance journeys, time savings will be negligible.

2 Introduction

At this late stage we find it necessary to respond to the applicant's REP5 submission on the same issues we raised earlier in the inquiry. This is not a case of our being repetitive, as the applicant suggests, but is a legitimate result of the applicant's failure to address satisfactorily the issues that we have raised. At every stage we have targeted our comments as closely as possible at the applicant's submissions and we continue to do so here.

We feel the Examining Authority has identified the main issues in a succinct and thorough way in their questions for the applicant, but that the applicant, in their replies, have not only failed to respond directly to the questions, but have failed to justify the snippets of data they have offered in a way that will enable verification.



The applicant relies too heavily merely on pointing out that there is no requirement that they explain their processes, undertake additional research, or carry out the strategic analyses that we have said are necessary. As a result the applicant has failed to develop their case and meet the fundamental requirement that they demonstrate the quality of the scheme. In their replies, despite the length, bluster, repetition of the contents of their application and unsupported presentation of the improbable data coming out of their 'black box' calculations, there is still no clearly articulated case that this application is the best way of relieving congestion at M3J9. The application still fails to demonstrate compliance with key parts of the relevant guidance (which we have referenced before, including in our <u>Deadline 1 Submission</u> Section 6), strategic infrastructure policies, and government plans to reduce emissions

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We believe that if the applicant continues in this way, this project, were it to proceed, would be reckless.

The applicant has 'told' us too much, and 'explained' too little. After their avoidance of responding to the Examining Authority's questions we still have no idea of:

- The area covered by the traffic modelling (unless we construe this from the diagrams provided)
- The area covered by the climate modelling (we are still being told it is an
 indeterminate area in the South-East and yet in an impossible way
 coterminous with the traffic modelling for which there are diagrams only
 for the vicinity of the project close to Winchester)
- The 'current' traffic-flow analysis required by the guidance (2027 cannot be regarded as 'current')
- The detail of the factors included and judgements made in the economic benefit modelling used. (The simple list provided is not accompanied by any description of how it has been used in the analysis so there is no possibility of verifying the results) In that currently UK economic growth is 0.2%, historically low, we cannot see why the 'low growth' unadjusted figure of 0.98 B:CR (negative) has not been selected. What we have been told only seems to discredit the process, e.g. health damage from road pollution has not been included.

This failure by the applicant to provide full verifiable information, means that it has not been possible for the enquiry to explore the applicant's assertions, nor begin any serious discussion on the risks inherent in this project. The thinness of the applicant's replies has prevented thorough scrutiny of their many improbable claims and has left many gaps.

3 The applicant's lack of concordance with national transport policies

We have already referred to policies on the Solent to Midlands Corridor and policies in the NNPSS (both existing and especially the new draft) that appear to be in conflict with this application. Extraordinarily the applicant refers to Future of Freight (publishing.service.gov.uk) (June 2022) as a policy they feel aligns with this application. This appears to us to be a fundamental misunderstanding of this government long-term plan. Para 3.21 explicitly advocates investment in rail freight infrastructure as a crucial approach to decarbonisation and congestion:

"In the UK the area where this crossmodal approach has been most visible has been in work to facilitate modal shift through investment in rail freight interchanges. Strategic rail freight interchanges have been built across the country, an example being investment at Daventry International Rail Freight Terminal (DIRFT) in the "Golden Triangle". DIRFT is a key rail-road intermodal freight terminal with rail connections to the West Coast Mainline and onwards to the channel tunnel and deep seaports, facilitating the flow of goods into the country through the interchange and onto the M1, M6, A14 and A5, allowing the import/export and transport of goods in a strategic multi-modal and low carbon fashion. Interchanges such as these not only meet the needs of the freight sector but also support wider government objectives around decarbonisation and congestion. All helping to deliver a more efficient, resilient, and environmentally sustainable freight sector."

This perspective has been completely ignored in the applicant's reply to Q4.2.15 in the applicant's document 8.17 (REP5-026), and in the applicant's unfortunate pseudo-appraisal in appendix B applicant's document 8.17.1 (REP5-027) (See below).

On p 49 Future of Freight appears to elevate to the status of exemplar groundbreaking policy the commitment (in the Solent to Midlands studies we have referred to) to ensuring greater modal transfer of freight from road to rail. It is good to read that "NR and NH are now committed to building on the strategy for this corridor and exploring similar opportunities for joint working." It is less than functional that the applicant has failed even to acknowledge that this commitment exists, let alone draft this application in accordance with it.



Case study – Solent to the Midlands Multimodal Freight Strategy

In June 2021 Network Rail (NR) and National Highways (NH) released the first phase of the Solent to the Midlands Multimodal Freight Strategy. The strategy represents a landmark step forward in collaboration between the organisations on strategic multimodal planning and a blueprint for government on how to consider key freight corridors from a cross-modal perspective.

The Solent to Midlands corridor was chosen as it represents one of the UK's most important freight corridors, connecting the global freight and logistics hubs of the Solent ports, particularly Southampton, with the 'golden triangle' of freight distribution in the midlands. The A34 linking the two is closely mirrored by equivalent rail routes and so these parallel routes are an ideal candidate for cross-modal analysis.

The strategy demonstrates how both networks could be used more efficiently, in terms of their overall capacity and their carbon footprint, outlining opportunities for new and enhanced freight markets and recommending NH and NR: commit to continued joint working, remove barrier to rail freight growth, unlock new markets for transporting commodities by rail, and drive froward decarbonisation. The study has begun to use data in innovative ways to identify freight flows with a potential to be switched to rail. Altogether, the strategy and continued joint working will support the two organisations to free up road capacity through more efficient utilisation of the rail freight network.

NR and NH are now committed to building on the strategy for this corridor and exploring similar opportunities for joint working.

On p 59 this plan goes on to highlight recommendations from the Transport Decarbonisation Plan (2021), the most specific of which we already have the technology for are:

- Support and encourage modal shift of freight from road to rail, cargo bike and inland waterways
- Build extra capacity on our rail network to meet growing freight demand and support significant shifts from road and air to rail

The National Infrastructure Commission Second National Infrastructure Assessment (October 2023 p 14) follows a similar theme. "Government should plan these enhancements on a strategic basis, aligning schemes with complementary policies that support economic growth. This should be underpinned by a national integrated strategy for interurban transport, including a pipeline of strategic improvements to the road and rail networks over the next 30 years.

It would seem the M3J9 application contradicts national policies. We have been advocating the replacement of this application with one that seeks to solve the congestion problem at M3J9 with a scheme to increase railfreight capacity between the Solent and the Midlands (alongside better public transport between Basingstoke and Southampton); our suggestions are fully aligned with national policies.

4 Air Quality Q3.2.2

We note that the applicant does not respond to our concerns that PM_{2.5} emissions along roads affected by the proposal will be in excess of the proposed thresholds. It would appear that the applicant does not wish to suggest our concerns are unfounded.

We still feel that a map similar to the one shown in the PEIR would have offered greater transparency, and demonstrated more clearly how the roads constructed in the scheme will supplement background levels of PM2.5. We need the applicant to provide more clarity on how excessive levels of PM2.5 will coincide with the location of the roads they propose to construct.

Table 1.4 of **Appendix 5.2** (Human Receptors Backgrounds and Operational Phase Results) of the ES (6.3, APP-086) may be more precise about the levels of PM_{2.5}, but without a key to the location of the receptors it provides no information about the spatial distribution of PM_{2.5}. It is difficult to dismiss the impression that the applicant is wanting to conceal the extent and nature of PM_{2.5} pollution the proposal will cause.

Failure to provide a column for "current" pollution means we cannot directly attribute the scale of any change to the proposed scheme or any increase in the traffic it brings about.

At some receptors, according to appendix 5.2, pollution will be above thresholds and DS will be higher than DM in 2027, but the applicant has not told us how the changes will correspond with proposed changes in road layout and there is no map of this to help us.

The applicant has failed to provide sufficient information to enable the inquiry to assess the harm increased levels of PM_{2.5} will cause because of the increased pollution from tyres and breaking associated with more and heavier vehicles.

5 Modal Alternatives Q4.2.14; assessment undertaken?

The applicant has avoided a clear answer to the Examining Authority's question about whether it was reasonable to assume that a cross-modal appraisal had taken place, and has failed to give a clear description of how alternatives were reported to decision-makers. Disguising this lack of content, the applicant has produced 462 words of inconsequential filler that detail the procedures they have gone through.

The applicant assumes the assessment was undertaken but admits that they are "unable to source documentary evidence that would report on the assessment of modal alternatives undertaken by the Department for Transport prior to the inclusion of the Scheme within RIS." We believe it is wrong of the applicant to suggest that this work was done until they can prove the work was done, and can refer to the work in detail in a way that demonstrates whether the transmodal appraisal at Stage 0 was consistent with this work. We believe this admission undermines the extend to which we can believe this and any of the other unsupported statements in the application and subsequent responses to comments at the examination.

Since the paperwork is missing, or never existed, it is difficult to understand how the work at Stage 0 of the assessment could have benefitted from the work done by the Department for Transport. We assume that the assessment of modal alternatives referred to, or others done in parallel, helped develop <u>Solent to Midlands Route (nationalhighways.co.uk)</u> Objective D. It is not possible to understand how an assessment that resulted in a "policy to achieve improved access to holistic rail freight options at the ports with <u>more freight moved by rail than on the roads"</u> along this corridor could have been considered at Stage 0 by a scheme that fails completely to take advantage of the potential of rail freight to reduce congestion at this junction.

The reference in the applicant's response to 'housing growth' is largely spurious – it appears to have little to do with Objective D, even though it might impinge on Objective H of the same document (about improving sustainable transport connectivity to reduce traffic on the SRN).

The statement "on balance ... a junction improvement was concluded to be necessary to solve the complex congestion and safety issues" adds nothing to

demonstrate that this conclusion was the right one. (A rail freight option would have reduced traffic sufficiently to ensure that most congestion and safety issues would be resolved.) Neither does the reference to ministerial approval. Bland descriptions of bureaucratic processes tell us nothing about the quality of the proposal. It would be shocking if the applicant had not followed the required formal processes. The applicant seems to be suggesting (wrongly) that projects that follow correct procedure are *ipso facto* proposals that deserve approval. This appears to be their only argument for failing to do an assessment. We cannot accept this.

6 Modal Alternatives Q4.2.15; inchoate?

The applicant responds to the Examining Authority's question about Applicant Written Summary of Oral Case for ISH3 [REP4-036] Appendix A by referencing the Applicant Written Summary of Oral Case for ISH3 [REP4-036] Appendix A. This is entirely circular and fails to provide an answer or add any new perspective. We assume the Examining Authority will have already read the document referred to and is seeking to explore the document further.

We believe the Examining Authority is right to seek greater clarity on why the consideration of modal alternatives should not be considered an "obvious material consideration". The applicant's view that 'modal alternatives should not be considered "obvious material considerations" as they are vague, inchoate and have little possibility of coming about' is, in the case of M3J9, preposterous. The circumstances of this scheme appear to be entirely different from the schemes in the cases referred to in the applicant's response. The comparisons drawn by the applicant show an alarming lack of knowledge, understanding or judgement.

The development of rail freight as a modal alternative to heavy goods vehicle transport along the A34 is already well-developed. It is a well-established priority and The Solent to the Midlands freight route is the second most significant intermodal rail freight route in the UK where rail already has a 30% share of port traffic. It is already precisely defined, well-developed, and has every chance of continuing to grow. As if this were not enough considerable investment has already been allocated to increasing capacity on the whole group of routes through the corridor:

- £50bn is being spent on HS2; still under construction from Euston to Handsacre near Lichfield; one of the key benefits of this will be to free up capacity for freight trains along the West Coast Main Line, the Marylebone to Birmingham line and other lines serving a range of inland distribution centres in need of connection with Southampton
- £5bn is being spent on East West Rail whose first phase will provide a direct link from Oxford to Bletchley and enable freight trains from

Southampton to access the capacity freed up on the West Coast Main Line

- £161m is being spent on Oxford Station capacity increase, specifically to remove congestion there, including delays to through freight trains
- £850m was spent on improving Reading Station in a scheme completed in 2014; this included grade-separated junctions used by freight trains between Southampton and the Midlands.

It would be no exaggeration to describe as ludicrous the applicant's characterisation as 'inchoate' of a transmodal solution for congestion at M3J9 for which £56bn of relevant investment has already been committed.

In addition to all this there have been frequent policy documents about making better use of the South Western Main Line and other routes in the area for local services. Solent Connectivity was a recent (May 2020) and ambitious example jointly authored by Network Rail and Solent Transport with a long list of specific recommendations aimed at developing ideas aligned with Objective H of the National Highways Solent to the Midlands Route Strategy which states:

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

More recently discussion on a development framework for Winchester Station has identified the need a transport interchange and proposals will be refined soon. It is just not true to say that trans-modal solutions for the M3J9 congestion are inchoate.

Even though the applicant sees no inconsistency they do not explain why. It is almost as if the applicant has branded two of the National Highways Solent to the Midlands objectives as 'vague, inchoate and having little possibility of coming about.'

The applicant concludes the response with the words:

The Applicant has discharged its duty under the NPS NN to consider viable modal alternatives in an options appraisal, and following the conclusion of that options appraisal it was decided by the Applicant that the existing congestion and reliability issues at M3 Junction 9 required a highway intervention as opposed to any other modal intervention.

This is just a restatement that a decision was made and adds nothing to demonstrate the quality of the thinking behind the decision or explain the total irrelevance of the legal references.

7 Modal Alternatives Q4.2.16; National Highways Solent to the Midlands Route Strategy (2023)

Again the applicant has not answered the Examining Authority's question. We need to know whether the applicant believes this scheme is consistent with Objective D of the Solent to the Midlands Route Strategy. Instead the applicant quotes selectively from the wording of Objective D and raises unfocussed bureaucratic points about the organisational planning framework the applicant works within that defy all accepted practice. It would be surprising if the applicant has the authority to do either of these things, both of which appear to demonstrate bad practice.

The applicant has edited the wording of the objective in a way that strips it of its essential meaning. It is not appropriate that the applicant should behave like a social media opinion former.

It is important to examine how the applicant is trying to manipulate the discussion, so, with some hesitation, We quote below (Figure 1) the full wording of the objective with the applicant's extracts highlighted. The editing by the applicant has changed the whole emphasis of the objective. The objective as printed is firmly focussed on transferring freight to rail. The outcomes are the key part of the objective and explain what it is intended to achieve. The applicant has omitted them from the extracts. Similarly the omitted title lines emphasise that the objective is not mode-specific. An omitted section of the 'Context' section emphasises the 'importance of considering a shift from road to rail freight for future freight movements.' It is a 'network consideration' that 'model comparisons show a relatively large proportion compared with other 'A'-roads ... for the whole length of the corridor.'

There is a clear contradiction between this application and the route strategy Objective 9. Objective 9 is clearly and unequivocally advocating schemes that transfer road freight onto rail; the summary of the focus of the objective given in the reply 'makes specific reference to supporting the Strategic Road Network to better manage the future growth of the ports.' is not accurate, referring to marginal statements, and is not a description used in the route strategy itself.

The applicant tries to suggest that Route Strategies are of lower status than individual local proposals. This goes against all conventional organisational practice and wisdom; it would be interesting to know if strategic managers at National Highways would agree. It is conventional wisdom that high level strategic documents, whether thematic or geographically-based set the parameters for lower-level, or local plans, and that the latter should comply with the former. Where the reverse is the case, e.g. where local plans contradict route

strategies, this will usually be regarded as a textbook case of organisational dysfunction.



D. Enable more efficient freight movements along the corridor, M3 and A27 to and from key gateways

Objective

becourage access to freightbased 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

Context

The Port of Southampton is a key international port, which handles around 14 million tonnes of cargo each year. It is the UK's second largest container terminal, handling more than 1.5 million containers each year. The port contributes around £1 billion to the UK economy. The Union connectivity review identifies both Southampton and Portsmouth as strategic seaports.

Collaboration between National Highways and Network Rail identified the expected growth of Southampton and the wider Solent Freeport, showing the importance of considering a shift from road to rail freight for future freight movements. Interested parties also highlighted the impacts of congestion on freight traffic at Southampton and Portsmouth Ports, while other parties raised that moving freight away from HGVs is a way to reduce congestion.

Our network considerations

The major ports of Southampton and Portsmouth rely on the A34 as the key route for the transfer of freight goods north to the Midlands and along the M3, M4 and M40 and linking with the rest of the UK SRN.

Interested parties said that steep hills along the route can cause congestion. Similarly, interested parties mentioned that there are limited HGV parking and rest facilities along the route, notably between the M4 and M40 Junctions.

The M27 and M271 near the ports show significant HGV use, with interested party comments focusing on capacity constraints at the M27/M3 Junction and freight journey time reliability. Traffic flows suggest there are delays along the M27, along with safety issues for motorcyclists.

The future growth and expansion of the Port of Southampton is outlined in the Port of Southampton master plan and multiple warehousing and freight developments have been planned along the M27. The Solent Freeport will also support future growth in the region by creating tax advantages that allow businesses to pay little or no tax on imported and exported goods. This region is a major economic driver, therefore the M27 and M271 are key links for enabling growth. The SRN will be a key element in supporting sustainable growth.

This is reflected in the National Highways regional traffic model forecasts, which show a relatively large proportion of freight traffic compared to other A-roads. This large proportion is present for the full length of the Solent to Midlands route.

Outcomes

- Regional and national economy supported through enabling safe and efficient access to the key ports of Southampton and Portsmouth
- Improved access to holistic rail freight options at the ports with more freight moved by rail than on the roads





Network performance



Growing the economy



Managing and planning the SRN for the future

Timeframe based on the issues and constraints identified



Figure 1 Solent to Midlands Objective D

When the applicant says "documents form the basis for investment decisions made as part of the Road Investment Strategies their overall weight in the planning balance is limited" it is impossible to draw any meaning from the

statement. It suggests an impossible world where there is some entity referred to as "planning balance" that is not subject to overall investment strategies. Specifically, it cannot be the case that this M3J9 proposal is exempt from compliance with road investment strategies. This is surely pure obfuscation.

8 Modal Alternatives Q4.2.17; was a meaningful rail freight option appraisal carried out at stage 0?

The 845 word response appears to be riddled with obfuscation of the most inaccessible kind, and limps from one random musing on vaguely related matters to another with no clear indication of precisely what these matters have to do with the question.

Again, the applicant has failed to provide a clear answer to the Examining Authority's clear question about:

- whether a meaningful appraisal of a rail freight option at Stage 0 was carried out, and
- whether rejection of the option would have been appropriate in policy terms

The immediate assertion, that there is no conflict between the *Solent to Midlands Route Strategy (2023)* and the scheme, completely bypasses the question and is irrelevant.

The response goes on to make some puzzling observations about forward planning tools and road maintenance, how NH arrived at the same Objective D that the applicant appears to have ignored, what chapter 4 thinks Transport for the South East are trying to do, how popular car travel is, how important connectivity is, and how rail can reduce freight greenhouse gas emissions by 75%.

With some patience it is possible to glimpse an underlying theme, which is that the application is addressing a random selection of the issues covered in the route strategy. However, this is not an answer to the questions posed by the Examining Authority.

The applicant fails to understand the proposal, supported by Objective D, that a massive transfer of freight from the A34 corridor to rail would reduce the level of traffic so much that it would obviate the need to widen the intersection, or do any of the other things in the random list above; all with a massive reduction in greenhouse gas emissions and pollution. The applicant still draws on the incoherent assumption that it is self-evident strategic policy has nothing to do with practical proposals ('This section of the draft NPS NN is focused on the

government's policy for addressing need for strategic rail freight infrastructure' [and therefore does not apply here]).

We take this reply to be a filibuster, probably with the intention of postponing indefinitely the moment when the applicant has to say that no meaningful appraisal of a rail freight option at stage 0 was carried out, and that therefore there were no grounds to reject the option.

9 Construction impact Q6.2.6; minimal reuse of infrastructure

We welcome the directness of this response; that it answers the questions and gives clear reasons for its answers. It mentions avoiding a sharp bend, creating headroom, and difficulties in narrowing the central reserve.

However nothing in this response demonstrates that there was a serious appraisal of what the right balance should be between avoiding excessive construction emissions and maintaining maximum specifications for the design. It appears that the applicant has assumed in every instance that the specification should not be compromised, whatever the carbon cost. It appears, as a result, the applicant has decided to replace all the infrastructure across the whole site. This will cause unnecessary excessive emissions.

We believe it would be appropriate for the applicant to demonstrate, with examples, how, in the words of the Design and Access Statement (APP-162) 5.6.2, 'sustainable design is a fundamental consideration of the Scheme.' Examples of locally sourced materials, reclamation and recycling would help, but the most effective emissions reduction strategy would be to keep existing infrastructure. The applicant should tell us to what extend it is really necessary to have as many lanes as are planned, or to avoid speed restrictions that would allow retention or more of the existing structures.

10 Climate Change Q6.2.7; major adverse impact

Yet again the applicant makes a statement which they fail to support in any way. The statement: 'the Applicant considers that the Scheme, as a single project for works to the strategic highway, would be highly unlikely to undermine securing the CBDP,' is completely without foundation if we refer to the results of the applicant's climate assessment. We would like to talk in more detail about the methodology the applicant used, but the applicant persists in refusing to make their calculations available. We worry that they may be as impossible to locate as the appraisal of rail freight schemes. The applicant has not, to our knowledge, responded to our request for fuller information on how

the client calculated climate emissions, pollution, and health disbenefits which we included on p 16 of our response listed in the document library as <u>REP4-049</u>.

If we compare:

- the NZDP (the latest annotation of the CBDP) indicative amount of UK domestic transport emissions for 2027 with the applicant's climate modelling area estimates for 2027, and
- reasonable extrapolations of the NZDP indicative trajectory of UK domestic transport emissions for 2042 with the applicant's climate modelling area estimates for 2027

we get the following table:

		MTCO ₂ e	
Year		2027	2042
NZGP UK Domestic	Lower end of range	91.50	9.14
Transport Emissions	Upper end of range	103.50	19.49
M3J9 applicant emissions estimates	DM	4.158	3.549
	DS	4.161	3.554
	DS/(Lower end of Range)%	4.55%	38.88%
	DS/(Upper end of Range)%	4.02%	18.24%

Figure 2 NZGP and Climate Modelling Compared

This suggests that if the climate calculations are correct, transport emissions in the climate modelling area by 2042 will be approximately 20 to 40% of all transport emissions in the UK. The level of emissions would be so high that they would threaten the whole NZGP, (and would be classified as 'Major Adverse on the IEMA significance thresholds) and the project should be abandoned now. If there is an error in the applicant's calculations, it would be reckless to proceed with the project unless and until the applicant can resubmit transparent and credible calculations that demonstrate clearly that the project will not threaten the whole NZGP. Either way this anomaly is so serious it cannot be ignored.

We have used the figures behind the following chart for the 2042 NZGP extrapolations in the table above:

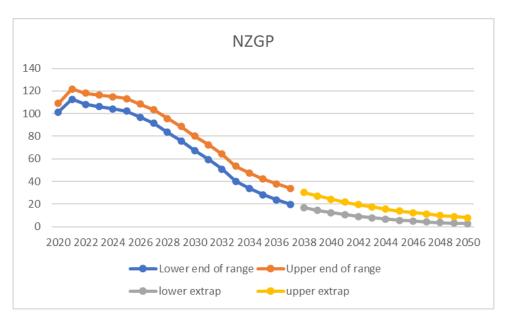


Figure 3 Government's Net Zero Growth Plan on UK Domestic Transport Emissions to 2037 and Our Extrapolation to 2050

11 Q6.2.11 Assessment; traffic flows in the base year

The applicant says these data were not included because 'they were not necessary.' This is not a reply to the Examining Authority's request: "please ... explain why you are unable to do so." This more a statement that the applicant chooses not to do so, and it risks the perception that this is unbridled arrogance. There is no hint that there are any problems for the applicant in doing this, so it would be normal etiquette to do so.

We believe these data are necessary to enable the inquiry and the Secretary of State to understand the impact of this proposal. With only DS and DM data for 2027 and 2042 we cannot distinguish what the applicant is assuming will be the underlying traffic growth in the period between 2015, now, and 2027. The lack of these data will minimise scrutiny of the applicant's calculations and increase the risk of serious error and unintended consequences.

In any event the applicant appears to be failing to comply with DRNB LA 144 with 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." Without an analysis of current emissions and the traffic flows giving rise to such emissions in the modelling area it is impossible to see how this can be done, and no such analysis has yet been offered.

With great regret, we feel we need to repeat here relevant sections of DRNB LA144 with our highlighting of key sections. This should not be necessary but the responses to these questions suggest the applicant is still unaware of them, or is not interpreting them responsibly:

- 3.1 The scoping assessment shall 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.
- 3.2 The scoping assessment shall report on the nature and scale of GHG emissions (positive, neutral or negative) and the likelihood of significant effects.

Study area

- 3.8 For construction and operational maintenance, the study area shall comprise GHG emissions associated with project construction related activities/materials and their associated transport.
- 3.9 For operational road user GHG emissions, the study area shall be consistent with the affected road network defined in a project's traffic model.

Baseline scenario

- 3.10 The GHG emissions without the project shall be identified for the current and future baseline (do-minimum scenarios).
- 3.10.1 The boundary of the baseline GHG emissions should include current operational maintenance GHG emissions and operational user GHG emissions.
- 3.10.2 The baseline GHG emissions should be consistent with the study area outlined for the project.

Paragraph 3.9 means that for each climate calculation there has to be a coterminous and co-temporal traffic model. Published traffic modelling maps and data refer only to the area close to the proposal boundaries. Climate data published is ambiguously described as some undefined area in the south-east.

Even now, the applicant has provided no evidence that they have complied with LA 144 in all its aspects. It is astonishing that the applicant continues to assert that it has done so.

12 Q6.2.14 The Assessment; Lack of Supporting Information

As elsewhere, it is disappointing that the applicant has not, or will not, respond directly and clearly to the Examining Authority's questions. Too much in the response is irrelevant or unsupported.

In response to the Examining Authority's question (i) on the cost benefit analysis and its inclusion of weightings and exclusion of disbenefits the applicant begins by making unfocussed and unanalytical comments about traffic flows.

After attacking our analysis as 'simplistic summation of traffic flows from the different model periods and road links [which] masks the range of predicted scheme impacts as does the averaging of journey times without reference to corresponding traffic flows,' the applicant asserts the Case for the Scheme claims 'other positive impacts,' but does not say what they are. We continue to find it difficult to respond to such incoherence.

We believe mean average of time saved by journeys selected by the applicant is a limited, but perfectly legitimate first step in analysing the benefits of the scheme. Unfortunately the applicant has not provided enough data (e.g. volumes of traffic on each journey selected) for a more thorough analysis to be done. So far, the only commentary the applicant has provided has been the misleading anecdotal example of the one route probably with least traffic (Easton Lane to the A31) where the predicted time saving in the Case for the scheme is 3 min 50 secs. Another route from Easton Lane to the A33, also with low usage, is predicted to save 3 min 45 secs. On the other eight routes selected in the time savings are clustered around 30 secs. Average time savings is a good way of demonstrating this distribution. The PM time savings are greater, but they are still only just over a minute, about 20% of average journey time. Off-peak travel would probably present no savings at all, so time savings will still be only marginal. We await a more sophisticated analysis from the applicant demonstrating a more significant impact.

Eventually the applicant mentions cost benefit. We were aware of table 5.1 in the applicant's document 7.10 REP1-026. As we have previously said it is disappointingly perfunctory; it lists the parameters and tools used, but does not say anything informative about the weightings, nor the exclusion of disbenefits the applicant has mentioned at the hearings (e.g. long-term health effects of $PM_{2.5}$).

Now that we have historically low growth 0.25% it would be appropriate for the applicant to quote the lowest rate of B:CR, namely 0.98

The applicant refers to APP-076 as the map of the study area and suggests the area is appropriate "as the traffic model determines the area where vehicle movements will be affected by the Scheme, which in turn is where greenhouse gas emissions from transport would arise." This appears to be a vast rectangle of land whose edges link Marlborough with Christchurch, Worthing and Chertsey. We have to ask in what meaningful sense this is the area of traffic modelling; for example has the applicant carried out meaningful studies of how vehicle flow

and the transport emissions between Chichester and Godalming will be affected by the proposal. We also have to ask what connection emissions across nearly all of this area will have to the works that will be carried out. It is no surprise that increase in emissions on the road system that will be changed by this proposal will be small compared with emissions across this whole area. There can be no excuse for the strange fiction that this large area has any rigorous relevance to the proposals being made.

When the applicant says "The impacts of greenhouse gases are global rather than affecting one localised area and so the traffic model provides a logical and reasonable way of establishing the scope of assessment" they appear to be using a false logic and writing nonsense. It is true that impacts are global but it is not appropriate that this determine the study of the production of emissions, and this is what we need to understand. There is always a specific geographic location for emissions and this is what we must study. On the logic offered by the applicant it is difficult to see why the study area stops at Worthing. Surely it would be important also to include areas suffering most from GHG emissions, like the Brazilian rainforests and Vanuatu.

In their comments on part iii, clearly the applicant does not understand that the net zero growth plan has set annual targets up to 2037 for domestic transport emissions (see comments in Q6.2.7 above, and what is written is worryingly innocent of the implications of this. The sheer scale of the predicted emissions is significant, and cannot be compensated for by action elsewhere.

The comments on part iv repeat the theme on B;CR earlier in the reply

The comments on part v are merely restating was said before our comments more recently. We have made the case that PM2.5 will become significant during the lifetime of this proposal and we now know there will be threshold that will probably be broken by this scheme. The applicant is wrong not to think they are a significant factor and not to include them as disbenefits in the B:CR.

13 Q6.2.15 Assessment; Net Zero Growth Plan

The applicant has not addressed the extent by which the climate modelling for this scheme will undermine the NZGP. This is one of the individual proposals that will contribute to the NZGP. As such the judgement will be relevant and the data given in the application suggests the NZGP will be undermined by it. See Q6.2.7 above.

14 Q6.2.16 Assessment: Modelling

Although the applicant claims to have the same study area for traffic modelling and climate calculations, there is no meaningful co-terminosity. Intensive traffic modelling has been done in an area close to Winchester, and climate modelling has been done over a much wider area much of which has no, or little meaningful connection with the proposal. The application makes no rational connection between what it predicts on traffic flows and the climate emissions figures it quotes. The application does not demonstrate in any meaningful way how traffic flow modelling affects the transport emissions predicted.

15 Q16.2.3 Rail Freight Shift (REP5-023)

This response by the applicant demonstrates how poor the quality of the applicant's appraisal system is for transport options that are not road-based.

The appraisal looks only at current capacity, and fails to consider:

- Making greater use of diversionary routes already raised for high containers, such as the Laverstock curve
- Recent rail capacity enhancement schemes
- Current rail capacity enhancement schemes
- Possible future rail capacity enhancement schemes.

Please see Modal Alternatives Q4.2.15; inchoate? For details of these schemes.

In addition, some of the detailed calculations are dubious:

- Clearly the current construction of additional capacity will open up the possibility of far more than 20 additional freight trains per day.
- No allowance has been made for the fact that many wagons carry two containers, and one train can often carry 50 or more containers on 39 wagons.
- Transfer of freight to rail will not necessarily be at the same time of day, so it is not relevant to look at capacity on an hour-by-hour basis. Freight for the ports is often subject to peaks and troughs that reflect when ships depart and arrive, not the time of day.
- HGVs are much larger than most other vehicles, and the removal of an HGV will be the equivalent of removing approximately three other vehicles, or more, in terms of space occupied, and headroom required

The refusal to do a model run demonstrates how far this exercise has been prejudged by the applicant.

16 Q16.2.1 Journey Time Savings Table 1.1

Table 1.1 of REP5-027 shows time savings on journeys between the Solent and Midlands. They are minimal and hopefully the B:CR will reflect this. The overall average time saving would be just over one minute.

According to CargoApps, a website for HGV operators a journey from Southampton Western Docks to Daventry would take 2h 43 mins, so 0.66% of the journey time would be saved. A journey from Southampton Wedtern Docks to Trafford Park Euro Terminal would take 4h 58 mins, so 0.36% of the journey time would be saved. Even local journeys would involved only slight time savings. From Southampton to Whitchurch (43 mins at 17:05) would save 2.52% of the journey time.

Year	Direction	Period	DM-DS Difference (mm:ss)	by year	by direction / year	by direction (all periods all years)	overall average all periods / all years
	Northbound	AM	01:05			01:02	
		Inter	00:50				
2027		PM	01:05		01:00		
2021	Southbound	AM	00:36			01:07	
		Inter	01:54				
		PM	02:12	01:17	01:34		
	Northbound	AM	01:02				
		Inter	01:14				
2042		PM	00:47		01:01		
2042	Southbound	AM	00:29				
		Inter	01:09				
		PM	01:32	01:02	01:03		
	Northbound	AM	00:53				
		Inter	01:01				
2047		PM	01:23		01:06		
2041	Southbound	AM	00:20				
		Inter	00:57				
		PM	00:57	00:55	00:45		01:05