Submission by the Chartered Institute of Logistics and Transport to the Department for Transport Consultation: Shaping the future of England's strategic roads (RIS2)

The Chartered Institute of Logistics and Transport is a professional institution embracing all transport modes whose members are engaged in the provision of transport services for both passengers and freight, the management of logistics and the supply chain, transport planning, government and administration. Our principal concern is that transport policies and procedures should be effective and efficient, based on objective analysis of the issues and practical experience, and that good practice should be widely disseminated and adopted. The Institute has a number of specialist forums, a nationwide structure of locally based groups and a Public Policies Committee which considers the broad canvass of transport policy. This has been developed by CILT's Roads and Traffic Policy Group.

In preparing our response to the Department's invitation, we have studied four documents:

- The Department's Shaping the Future of England's Strategic Roads: Consultation on Highways England's Initial Report
- The Department's analysis to inform RIS2 - DFT's Strategy
- Highways England: Strategic Road Network Initial Report
- Highways England's analytical methods to inform proposals for the second Road Period (2020-2025).

Question 1
Do you think Highways England's proposals will deliver what users of the SRN want?
If not, what could be done differently?

Proposals for the second period (RP2) carry forward progress on the first and are a step in the right direction. See our comments on the longer term below. [NB: what users want is not necessarily what is good for the economy or society as a whole]

Question 2
Do you think Highways England's proposals will deliver what businesses want?
If not, what could be done differently?

There is a crucial need to reduce the costs to all sectors of business of road congestion and unreliability, of which historic underinvestment is a major contributor. While the planned increase in investment should alleviate growth in congestion, and unreliability, there is no evidence in either the DfT or Highways England documents that there will be a reduction in either.

Question 3
Do you think Highways England's proposals meet the needs of people affected by the presence of the SRN?

If not, what could be done differently?

It is evident that Highways England are properly aware of their statutory responsibilities and duties to minimise the negative environmental impacts of the SRN and work undertaken in developing and maintaining it, and thus the impact of the SRN on surrounding communities and the countryside through which it passes.

We welcome the principle of the creation by the Department of a 'designated fund' for the environment (section 2.4), on which we have further comments although para 5.4 suggests it also includes a broader remit including 'wellbeing' and community impacts.

Question 4
Do you agree with Highways England's proposals for:

Four categories of road and the development of Expressways (Initial Report sections 4.4.3 and 5.3.6)
This seems a sensible categorisation. We agree that, where economically beneficial, major non motorway roads within the SRN should be upgraded to expressways so long as proper provision is made for local bus services and local traffic and to avoid (or at least minimise) damaging impacts on local communities. Further, conversion to full motorway rules must depend on the availability of alternative routes for non motorway and local traffic (including buses) and access to fronting properties.

Operational priorities (Initial Report section 5.1)
While the Institute recognises the importance of the seven Operational Priorities, it does not agree with the implied ranking.

Ensuring reliability of journey times should be Highways England's top operational priority. To achieve improved reliability, Highways England, working with the Police, must reduce the duration of road closures, and rapidly restore traffic flow following any incident. A 2010 RAC Foundation report (*Delays Due to Serious Road Accidents*) stated:
Roads are often still closed long after an accident has taken place because of police investigations, but very little data is collected to show how many of these investigations translate into successful prosecutions.

The Institute understands that with modern technology it is possible to rapidly record the information likely to be of relevance to subsequent research. Experienced investigators should in most cases be able to assess quickly whether it is necessary to keep a road closed so that further forensic investigations can take place or whether sufficient conclusions (including those needed for court action) can be drawn from the evidence already available.

Related to improved reliability is the need for better roadworks (priority 2 for the Institute) and better information (priority 3) A related issue is covered by the 'seamless journeys' priority, which is to ensure that when planned roadworks are in progress on the SRN Highways England ensures that diversion routes are clear. Ensuring diversion routes are kept clear of roadworks requires Highways England to liaise very closely and effectively with the statutory undertakings as well as the local highway authority.

The management of smart motorways and expressways is also related to improved reliability, not only through flow control when traffic is moving but also to highly effective and responsive incident management.

Effective and responsive incident management of smart motorways and expressways requires the rapid detection of incidents and the provision of up to date, accurate information to all road users. While extended use of automatic detection systems will help inform operators of incidents and their consequences, it is essential that messages displayed to road users are valid. That requires Highways England's traffic controllers to pay careful attention to all their information and rapidly update the information/instructions provided to road users. The display of inappropriate – out of date – information/instructions is all too common, with the result that road users tend to ignore it/them, including speed restrictions, until they become aware that there really is a problem; the old maxim of crying wolf appears to be unknown to too many Highways England control centre staff, but it should be at the heart of all their actions.

In terms of operating priorities within RIS2, as opposed to investment, supporting electric vehicles must have priority over preparing for connected and driverless vehicles, but be secondary to all the others identified, which relate to all road users, not a minority, as electric, connected and driverless vehicles will remain during the five year period.

Thus the Institute's operating priorities during RIS2 are:

1 more reliable journeys, including the rapid clearance of incidents
2 better roadworks, including the management of off-SRN diversions
3 better information
4 managing more smart motorways and expressways
6 seamless journeys
7 supporting electric vehicles
8 preparing for connected and driverless vehicle

Infrastructure priorities (Initial Report section 5.2)

The Institute considers that the 10 asset classes identified by Highways England cover their estate, but within limited resources there must be some priorities. To a great extent these should be identified through economic assessment, but as they also have direct operational consequences, none can be ignored or ranked very low.

As a general principle the Institute considers the following ranking to be relevant:

1 **Drainage**, which is fundamental to the good maintenance of the rest of the highway, and to safe, reliable traffic operations
2 **Traffic signals and roadside technology**, ensuring that systems are in place and fully operational to enable operators to correctly identify and understand changes in traffic flow and incidents, and then take the most appropriate actions in a timely manner
3 **Tunnels**, although there are few of them on the SRN, the consequences of closure or limitations on the use of those at Dartford during most of the day have an immediate and far reaching effect
4 Road surface
5 **Road signs and Markings**, for user safety
6 **Vehicle restraint systems**, again for user safety
7 **Lighting,** also for user safety
8 Structures
9 Geotechnical
10 Soft estate

Enhancement priorities (Initial Report section 5.3)

We strongly agree with the strategy of developing a programme, or portfolio, of projects and a pipeline of improvements to be brought forward.

However, we are concerned that the potential of RIS2 is so heavily constrained in the .early years of RP2 by the funding of a significant proportion of RIS1 announced schemes which will continue into RP2. We assume that a similar situation will occur at the end of RP2, as Highways England progresses to RIS3. This suggests that funding is insufficient to sustain a rolling programme on this scale and that new starts are likely to have to be deferred to the latter years of the period.

We also have some concerns about the objective of working 'for our supply chain'. Although it is essential to ensure that the plans are deliverable on schedule and within budget, it is important that the supply chain develops its skills and capacities to meet the evolving requirements of Highways England; Highways England's plans and priorities should not be constrained by elements of the supply chain that fail to advance.

A local priorities fund (Initial Report section 5.3.8)
Smaller schemes can give high returns and we support having this element in the programme. Longer term studies should identify the need for such projects and what the total requirement is likely to be over a future period.
It is likely that many of these schemes will include sections of local highway authority roads. It is therefore essential that the available funds can be combined with those of other highway authorities to deliver 'best' outcomes.

Future studies (Initial Report section 5.3.11)
We fully agree that Highways England needs to carry out studies to inform their longer-term programme. All of these studies should incorporate proper cost-benefit analyses and take account of the potential impact of economically efficient road user charges.

We think the various categories of improvement identified in 5.3.11 (free flow junctions, access to ports and airports, multi-modal hubs, key route upgrades and urban orbital roads) are a sensible approach. They should not exclude the possible need for roads on new alignments (as have been proposed for river crossings to the East of London and better cross-Pennine connections.) Integration hubs should include strategic rail freight interchanges and intermodal freight terminals.

Designated funds (Initial Report section 5.4)
While we see merit in the establishment of funds dedicated to specific sets of objectives and measures, it is not clear how

- the size of these funds is to be determined
- how, and by whom, decisions on their use are to be made

Given the local nature of the projects that would appear to be eligible, we consider that the allocation of the funds over projects should be determined regionally. While retaining the distinct streams, management might be best incorporated with the Local Priorities Fund.

Performance measures and targets (Initial Report section 6.3)
Performance measures and targets provide a useful means of incentivising management and demonstrating performance to Parliament, ministers and the public. They should be considered as supplementary to the cost benefit analysis which serves to inform decision makers about the value for money of options and of the programme.

While user satisfaction is a useful guide, hard-nosed analysis of congestion levels, reliability and journey times are more important. There should be additional targets to reduce congestion levels below the current position and improve reliability.

We are in agreement with Highways England's proposals to work with ORR to develop a new set of performance measures, in two parts, one about the network and a second about the company as a corporation, covering its management, the use of resources (human and funds) and the management of its assets. The latter should draw on experience in the private corporate sector. We also support the suggestion that management failing, but successes also, should be complemented by penalties and rewards. But those should apply to key individuals and not reduce the funds for management and extension of the SRN.

Question 5
Are there any other proposals in the Initial Report that you do not agree with?
If so, which ones and what could be done differently?

We realise that governments might wish to maintain the distinction that funds raised by borrowing should be available only for capital investment, but within this constraint the distinction between capital and revenue should be eased to allow Highways England greater freedom in the use of the funds available to them, not least in balancing initial capital investment and life time operating costs.

Indeed, an element of the case made in favour of Private Public Partnerships, PF2, is that the contractor is able to make a balanced trade-off between higher initial, capital, costs and lower maintenance and operating costs, or vice-versa. If that benefit is available to those undertaking DBFM schemes for Highways England, it seems irrational to prevent Highways England being able to adopt a similar approach to the management of its network, particularly the publically funded extensions and improvements.

Question 6
Do you agree with Highways England's assessment of the future needs of the SRN (Initial Report section 4.4)?
If not, how would you change the assessment?

The Institute fully agrees with Highways England's assessment in section 4.4.2 of their Initial Report that increased traffic is likely to lead to more delays and longer journey times unless steps are taken to deal with it. We are not surprised that the biggest increases are likely to occur in and around large cities.

The report does not break down these forecasts by time of day or vehicle type; so it is not possible to see what the overall proportion of journeys delayed by congestion will be. Also, neither this report nor the accompanying Report on "Connecting the Country" discusses the effect of falling costs on demand as vehicles become more fuel efficient and electric vehicles, which pay no fuel duty, become a larger proportion of total traffic If fuel duty is not replaced the increase in traffic will be excessive and investment to meet it in full would be wasteful and could harm rather than boost the economy[1] We hope that in future traffic forecasts will at least include sensitivity analyses of scenarios including various levels of road charge. (These modified forecasts might show increases in travel in rural areas as well as falls in hotspots)

[1] *Transport demand to 2025 and the economic case for road pricing and investment Dec 2005 Department for Transport SACTRA Transport and the Economy Research Annexes Volume 3 Government Archive*

Transport investment and economic performance (TIEP) report (2014) available from: https://www.gov.uk/government/publications/transport-investment-and-economic-performance-tiep-report

The range of responses to increased demand at peak times should include not only measures to increase capacity and reliability but also options for different forms of efficient road user charging, including differentials between the peak and the off-peak to encourage some vehicles to change the time of their journey or in the case of car users to switch to alternative forms of transport or join in car-sharing schemes.

In the vicinity of cities policies will need to be co-ordinated with those being adopted within the cities to cope with growing road congestion. The Institute notes that Highways England have in mind measures such as park and ride car parks on appropriate parts of their network.

Question 7
How far does the Initial Report meet the Government's aims for RIS2 (economy, network capability, safety, integration and environment – described in paragraph 2.3)?
Which aims could Highways England do more to meet and how?

Investment will not improve economic performance if the cost of the additional road capacity needed to deliver increased productivity or economic output is excessive. All Highways England investments should be subject to cost-benefit analysis. Within the overall programme priorities should also be determined largely by the cost: benefit returns, though other issues such as regional distribution of benefits will also need to be taken into account.

Question 8
Do you think there should be any change in the roads included in the SRN (described in paragraph 1.3)?
If so, which roads would you propose are added to or removed from the SRN, and why?

We are replying to this point in our response to the separate consultation on the MRN

Question 9
Is there anything else we need to consider when making decisions about investment in the SRN?
If so, what other factors do you want considered? Please provide links to any published information that you consider relevant.

The future studies should be looking at the performance of the network over the next 30 years This will involve

- forecasts of traffic growth and distribution;
- where capacity will be inadequate; and
- what measures will be needed to keep congestion at economically efficient levels

How much different options will cost in total (In our comments on question 6 above we have mentioned the need for traffic forecasts to take account of the price paid by users for the use of the network)

If a scheme is to result in wider impacts on the economy, then many of these impacts will be realised through people and firms responding to better roads by changing their location to take advantage of the increases in accessibility. In most cases this leads to more traffic, although it could lead to less where it allowed for distribution networks to be rationalised. While induced traffic does in many cases reduce the estimate of benefits that would have been made in absence of such an impact, the road should be designed to have the capacity to cope with induced flows.

Decisions about investment in the Highways England network will also need to be taken in the context of most journeys beginning and ending on local roads. Highways England will need to co-

ordinate its plans with those of each of the bodies responsible for local and regional transport about transport investment, transport policies and land-use planning. For example, options for managing traffic on Highways England roads accessing London will need to take account of the Mayor's ambition to reduce car use in both Inner and Outer London.

Question 10
Does the analytical approach taken have the right balance between ambition, robustness, and proportionality?
If not, what do you suggest we do differently?

As the information provided in

- *The Department's Shaping the Future of England's Strategic Roads: Consultation on Highways England's Initial Report; and*
- *Highways England: Strategic Road Network Initial Report*

is insufficient to permit a reasoned response to this question, we turned to

- *The Department's analysis to inform RIS2 - DFT's Strategy; and*
- *Highways England's analytical methods to inform proposals for the second Road Period (2020-2025*).

We have also found two presentations which provide an overview of the traffic modelling approach being developed to inform the development and assessment of projects for inclusion in RIS2

We consider the principles set out in the two 'analysis' documents sound and balanced, But while we have found the documents on the analysis methods relatively informative, they are both at a high level, lacking the detail we consider necessary to the preparation of a meaningful response.

A central element of the analyses is the traffic demand forecasts. While we can appreciate the decision to use mobile phone data as the prime source of travel information for the development of the Regional Traffic Models, given the scale of the model requirements, that decision was, in our judgement, a major extension to established practice, at (or beyond) current practice and knowledge frontiers. We would have expected the work to have been trialled in a single region and then subject to thorough peer review before being applied more widely. That may well have been done, but we have not been able to find any evidence of such work.

Further research is needed on the reasons for unreliability It is still not clear that HE understands the causes of day to day (actually the data on every quarter of an hour to quarter of an hour) variability in traffic speeds on each link in the network. And the measures that might be used to reduce this variability are rather limited, so that even some of the most obvious ones such as not allowing HGVs to overtake in certain circumstances such as on hilly and busy roads are not a policy option.

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