

## [Shaping the future of England's strategic roads \(RIS2\)](#)

Proposals for the Strategic Road Network (SRN) and its current and future needs.

The Transport Planning Society is an independent institutional body based in England, established to facilitate, develop and promote best practice in transport planning and to provide a focus for dialogue between practitioners and others interested in the field. It is supported by four long established professional institutions – ICE, CIHT, CILT and RTPI - all of whom have an interest in transport planning within their own core activities.

The Transport Planning Society administers its own Professional Development Scheme for transport planners, leading to award of the Transport Planning Professional qualification which is the only professional qualification uniquely aimed at transport planners. The Society has 1300 professional members in the UK and elsewhere. Many of our members are active in highway planning and management, including extensive experience of working with or within Highways England.

Our response has been drafted by the Policy Group within the Transport Planning Society Board, all of whom were elected by the membership as a whole. The Policy Group is in constant dialogue with other members of the Society and the views expressed here may be taken as representative of those held generally by our membership.

### **Question 1**

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

Through input from Transport Focus, Highways England has obtained a good understanding of users' priorities and has taken these fully into account in developing proposals for RP2. However, we note that the priorities are generally unquantified (eg improved ....., better .... etc.) and Highways England acknowledges that their interventions will be tempered by VfM considerations. Inevitably, not all of the SRN will be subject to the same level of improvement as interventions will be at selected locations only.

Our view is that over RP2, many users will see an improvement in their SRN experience but it is unlikely that all will see "what they want", although the precise scale of improvement desired by users has not been defined. In fact, given projected traffic growth, it is inevitable that some of the RP2 investment will effectively be used to prevent user satisfaction declining as opposed to significantly improving it.

In addition, many users will suffer disruption during the various works and that will detract from their overall experience of using the network. And longer-distance traffic induced by improvements made during RP2 (including new trips generated by unlocked development sites) may degrade performance of other parts of the SRN not improved during RP2.

We do not suggest at this stage that different actions should be taken (although we suggest some additional actions later). Suffice it to say, that the outcomes of RIS2 are not yet sufficiently defined to determine the likely scale of improvement in user satisfaction, but it would be unwise to think that the proposed interventions will provide a utopian network. User expectations need to be managed accordingly.

### **Question 2**

*Do you think Highways England's proposals will deliver what businesses want?*

*If not, what could be done differently?*

There has been significant input to the RP2 proposals from the business community, through the LEPs and other fora. The proposals therefore acknowledge the constraints imposed on businesses by the existing SRN.

However, as with network users, the scale of improvement requested by businesses is not defined and once again, it is inevitable that they will see some improvement but problems and issues will remain.

### **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?*

Highways England has shown itself to be sensitive to the needs of people affected by the presence of the SRN. Indeed, we are impressed by the scale of stakeholder consultation undertaken, and that is a refreshing approach to formulating proposals for RIS2.

There will undoubtedly be local environmental improvements which will be appreciated by the communities affected but other issues will remain.

The Initial Report refers to consultation with local authorities, but we feel that the SRN will continue to have a major impact on local roads. Virtually all of its traffic starts and finishes its journeys on local roads and the impacts of large flows of traffic on local road networks accessing the SRN is bound to remain.

RIS2 will offer certain benefits to people affected by the presence of the SRN, but they will be selective and dispersed and it is unlikely that all the needs of people affected by the presence of the SRN will be met.

Once again, we do not suggest that different things could be done. It is stated that one fifth of the population lives within 1 mile of the SRN. Most are bound to be affected in some way by the SRN, whether through poor air quality, noise impacts, severance, effects on the local habitat or the effects of SRN traffic passing through their neighbourhood. The fact is that so many people

are affected by the presence of the SRN that the problem is too great to be solved within any 5-year period, if ever!

#### **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)*

In principle, yes. Many SRN users make long journeys on the network and it is important that they find layouts and methods of road operation which are familiar to them. As incremental improvements are made to the network, there is a risk of departing from this principle unless a common standard is imposed.

For example, there are several different types of “smart motorway”. Some have all lane running 24/7, some have it at peak times only, and there are a variety of VMS in use. On a long journey, drivers may have to switch between several different types of signing and smart motorways, which is an additional challenge. Many clever types of junction layout have been provided to maximise capacity, often involving complex signalling and lane layouts. The thinking underlying this approach is clear but for the driver away from home territory, dealing with one different junction type after another requires extreme concentration and a rapid understanding of new circumstances.

We are content with having four categories of road but we recommend that each category be standardised within itself as far as possible, and it should be made very clear to the driver on maps, SATNAV and on the ground, which category of road they will be using.

- *Operational priorities (Initial Report section 5.1)*

There are many laudable operational priorities proposed and we limit our comments to diversions, incident management, smart motorway management and driver education.

#### **Diversions**

We note the proposal to investigate improvements to diversion routes. The most useful immediate improvement would be to implement emergency traffic signal plans on such routes at times of diversion, designed to accommodate as best as possible diverting SRN traffic. Too often, diverting SRN traffic forms long queues at junctions where the signals are on unchanged timings.

That said, flow levels on the SRN far outweigh the capacity of most diversion routes at busy times, so that the diversion route is overwhelmed and near gridlock occurs over a wide local area. We see no solution to this except to take every possible step to quickly alert drivers to the SRN closure and to

dissuade them from travelling, and to warn local drivers of same and dissuade them also from travelling.

### **Incident management**

Much improved information is needed as part of incident management. Every time a major incident occurs, a Highways England officer should be designated whose sole function is to find out what is happening and communicate advice to drivers. We note a desire to work with Google etc.. In the interim, we recommend a Highways England radio channel to provide information which should be vastly superior to that provided by traffic broadcasts on local radio. Like traffic reports from local radio, the HE radio would be designed to cut into vehicle radios within a prescribed area. That would be more accessible to drivers, particularly those travelling alone, than being transmitted via devices.

For example, the information would be more timely. Information could be given about the cause of the incident and the steps being taken to clear it. In addition to advising of a road closure or delay, HE's own radio could give advice to motorists on what action to take. For example, persuading drivers to stop at upstream service areas and wait for the incident to be cleared could be useful.

### **Smart motorway management**

We recommend improvement in the way that VMS on smart motorways is used. Often, the signing is too risk averse. A 40mph speed limit is signed when there is a clear road ahead, which presents a safety issue for a driver travelling at 70mph in lane 4 – to quickly slow down to 40 mph with fast vehicles behind, or to ignore the sign and gradually change lanes and reduce speed beyond the start of the speed limit. Speed limits are unnecessarily imposed at times of light traffic – for example a reduction in carriageway width from 4 lanes to 3 does not require a speed restriction when there is little traffic present. Closed lanes are sometimes signed too far in advance, causing drivers to make an immediate lane change when it could be safely done later. Smart motorway management needs to be reviewed.

We also recommend provision of more frequent VMS so that two signs are visible at all times, as a means of reinforcing the message.

### **Driver education**

Highways England has taken considerable steps to understand user needs but not to tell users how to make best use of the network. For example, users need to be more aware of the benefits of using the most nearside lane available, of avoiding unnecessary changes in speed, of keeping to the speed limits, of treating lane closed signs with the same importance as they would red traffic signals, and of not throwing litter onto the network. We note trials of automated litter picking but a strong education campaign to dissuade users from throwing litter onto the network in the first place would seem preferable

- *Infrastructure priorities (Initial Report section 5.2)*

The proposed approach to asset management is logical and sensible. Highways England's approach to asset monitoring and management represents a considerable improvement on the historic approach, which tended to be reactive to asset failure or near failure.

To minimise long-term user disruption, when any major renewal or improvement scheme is taking place, it will be prudent to review the state of all assets within the worksite and if necessary, undertake additional asset renewal or replacement works where these would otherwise require further carriageway or lane closures in the short- to medium-term.

We note an incipient debate about the choices between building new roads or extending the life of existing roads. It is a weakness of the SRN that it operates too close to capacity and is too sparse (generally) to permit diversion to other parts of the Network to permit closures for improvement works, or indeed permanent closures of any life-expired links. Other countries (eg Netherlands, Germany, France) tend to have denser strategic road networks (at least, in key areas) and, partly as a result, operate further below capacity most of the time. Diversionary routes can then be provided within the strategic network without significantly impacting on local roads.

In purely operational terms, there is a strong argument for building new roads to provide a denser SRN. However, the consequences in terms of environmental impact, including landtake, in our crowded country, make that approach socially and politically unacceptable, and financially challenging. The occasional opportunity to enhance the network may be identified, particularly in relation to development opportunities, but such schemes will have a long gestation period as they pass through the democratic planning process and they will be the exception rather than the rule.

We feel that given where the SRN is now, the emphasis has to be on maximising use of the existing network rather than constructing new roads. However, it should be noted that this approach also has potential unintended consequences which we discuss below.

- *Enhancement priorities (Initial Report section 5.3)*

We do not comment on the specific schemes and studies but on the general principle of significantly increasing network capacity.

### **Induced traffic growth**

The various graphs presented in the Initial Report on pp. 36, 40 and 42 appear to indicate a degree of correlation between traffic growth and spend on/capacity increase of the SRN or motorway network. We appreciate that there are many other factors involved but given that the SRN carries around one third of all traffic, the availability and capacity of the SRN must be a strong supply-side determinant of traffic growth.

Our concern is therefore that a significant increase in the capacity of the SRN will generate traffic growth as a result of users travelling further and making more trips on the Network, with adverse consequences. The issue of induced traffic is recognised in the consultation documents. (Equally, we accept that other factors generating demand mean that doing nothing will result in a degradation of network performance.)

The adverse consequences of encouraging traffic growth through network improvement will mainly occur off the SRN, on the local roads connecting to it (which under current arrangements, will not be subject to comparable improvement) and on communities living close to the SRN and to these local roads.

### **Unsustainable land-use development**

There are also questions about the impact of network enhancement on land-use patterns and the risk of encouraging more dispersed and less sustainable (in travel terms) land-use patterns. If capacity increases on the SRN are used to unlock new housing areas directly connected to it, the development of such housing exemplifies the point.

This is a very important issue. The historic effect of improving highway networks has been to disperse land-use development as more remote sites become connected to the SRN (or other improved networks) and users find it easy to travel longer distances. The more dispersed housing and economic activity become, the more reliant people become on using the private car to access it.

This is evidenced by the huge numbers of housing developments on the fringes of or outside established settlements, which are not well served (if at all) by public transport. Similarly, business parks and out-of-town retail centres end up being served almost entirely by the car.

There is a complex relationship between expansion of the highway network (including capacity increases), the planning system and the world of property development, but it is evident that expanding the highway network or increasing its capacity is often a catalyst to encouraging a more dispersed land-use pattern, with sustainability downsides.

This can be a vicious circle. The car traffic thus generated then soaks up spare capacity on the improved SRN leading to a recurrence of congestion and degraded operation. On the other hand, if sites are developed where alternative access is offered by public transport or infrastructure designed to encourage active travel, then traffic growth can at least be restrained.

Highways England and the planning authorities need to be alert to this issue and be wary of it.

### **Growth management**

Our view is that if additional network capacity is provided, then it should be accompanied by measures to manage the ensuing traffic growth, so as to avoid the worst consequences. The highway network (SRN and local) is unique in that its use is uncontrolled except due to capacity constraint. The use of railways, ports and airports, for example, is strictly controlled and in general, use of any new capacity will be fully managed.

We are not suggesting that the freedom to use the highway network at will should be stopped – that would be too draconian – but consideration should be given to managing the additional traffic growth generated by capacity increases on the SRN so as to maximise the sustainability of our transport systems as a whole.

We recommend that serious consideration should be given to :

- identifying and funding public transport improvements where these might cater for demand for use of the SRN
- potentially restricting increased peak period use of the SRN through access restrictions
- imposing peak period speed limits on improved parts of the network so as to reduce its attractiveness to additional trips. (Operating speeds would still be higher than in the previously, congested situation.)
- possibly introducing peak period tolls on new infrastructure. While not intended for that purpose, tolls on the M6 Toll and the Dartford Crossing effectively regulate use of the facilities concerned
- seeking to avoid allowing the development of sites which cannot also be viably served by public transport and avoiding dispersed land-use developments which are largely reliant on the car for access

Network wide road pricing remains the ultimate option for network management but we appreciate that such a proposal lies beyond RP2.

- *A local priorities fund (Initial Report section 5.3.8)*

We agree that smaller schemes can often offer a disproportionate benefit and agree that these should not be overlooked, subject to our general comments above about generally enhancing network capacity.

- *Future studies (Initial Report section 5.3.11)*

Again, subject to our general comments about enhancing network capacity, we agree that these are areas worthy of further study. We comment on public transport integration.

### **Park-and-Ride**

To relieve pressure on local roads, we support the provision of park-and-ride sites adjacent to the SRN, where SRN journeys can be terminated and users

transfer to local public transport. There are many good examples of this already (eg at Cambridge, Chiltern Railways park-and-ride sites off the M40) but more effort should be made to market and present them as a feature of the SRN.

### **Park-and-Share**

Another aspect of park-and-ride should be the creation of park-and-share safe car parks where users going to the same destination (especially those going to work) can arrange to meet, park and continue in a single vehicle (eg a group of users all working in the same city centre or business park). This already happens informally but should be encouraged as a means of taking vehicles off the SRN. Such sites would be further from destinations than the conventional park-and-ride sites referred to above.

While highways England should provide the park-and-share sites and market the facility, sharing arrangements might need to be generated at employment sites or through local authority websites.

- • *Designated funds (Initial Report section 5.4)*

All these funds serve useful purposes and provided there is a long-term commitment to maintaining them (albeit with periodic reviews about the size of the fund), they should encourage stable and long-term improvement programmes. We endorse the role of stakeholders and other external parties in assisting to direct the best use of the funds.

- • *Performance measures and targets (Initial Report section 6.3)*

Performance measures and targets have a useful role to play provided they incentivise good behaviours and good decision making. Achievement of targets is also a source of satisfaction and encouragement to the people involved.

However, we also think it is important not only to achieve targets, but to investigate what effect these targets are having on behaviour and decision making. It is important to avoid a situation where achievement of targets “at all costs” becomes paramount to the detriment of wider strategic objectives and perhaps to internal relationships (where funding is biased towards activities that serve to meet targets).

We are not convinced that Highways England should be financially penalised if a target is not met. That simply reduces the funds for investment (unless it should be deducted from the bonuses of those responsible!) It would be more productive, in the long-term, to investigate why the target was missed and then review whether the target was appropriate, whether the systems to deliver it were appropriate, and whether the right skills and resources were available.

*If you disagree with any of these, what could be done differently?*



See our various comments above.

### **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 have already made all our key points.

### **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?*

We think this is a reasonable assessment of the future needs of the SRN in isolation but we are concerned that solutions for the SRN will increasingly need to be integrated with all other aspects of our economy, environment and society. As thinking develops, we would look to a convergence between the future shape and function of the SRN and all other areas of life.

We have a particular long-term concern over the creation of smart motorways. On a conventional motorway, temporarily dispensing with hard shoulders releases space to relocate traffic flows within the highway boundaries, to create space for new works, renewals or repairs. With smart motorways, this flexibility is lost and the options for further enhancement will be limited, unless possibly the introduction of entirely new technology in vehicle control allows traffic to be confined to a smaller area of roadspace.

We see the creation of smart motorways in some respects as “selling the family silver” in that they push what can be achieved within existing highway boundaries to the limit and thereby leave little scope for further physical improvement. We are concerned that in that respect, they are storing up problems for the future although in light of our earlier remarks about capacity improvements, that may become the trigger for a complete rethink about the function of the SRN.

### **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?*

The proposals will generally support Government aims although we feel that they are weak on Integration. We have alluded to these issues in responses to other questions but while the issue is recognised, we consider that there is

scope for more positive action re. integration with local roads and public transport systems.

### **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?*

Inevitably, there is scope for reviewing the SRN as our economy, trade routes and land use patterns evolve. However, whether any changes should be made depends on what difference such changes might make, and these in turn may depend on funding.

Local authorities will be reluctant to be burdened with the upkeep of roads transferred from the SRN and may not have the funding available. If the SRN is expanded, it is not clear whether Highways England funding would increase accordingly. We are unclear whether all VED is to be transferred to the National Roads Fund or whether more could be provided from that or other sources if required. If an expanded SRN receives no more funding than at present, then the scale of improvement achievable will, on average, be less. If it receives more funding, then some other area of government expenditure will suffer.

### **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.*

We reiterate our concerns about encouraging unmanaged traffic growth and encouraging a more dispersed and less sustainable land-use pattern.

*In addition, in relation to the analytical approach summarised in Chapter 6 and set out in more detail in the strategy document accompanying this consultation:*

### **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?*

We are impressed by the extent to which Highways England's analytical approach has developed over recent years. We commend the holistic

approach to linking all Highways England's inputs to a wide range of strategic outputs, and considering the impacts of RIS packages over the network as a whole.

However, our greatest concern is the ability of the approach to identify unmanaged traffic growth resulting from network enhancements and, in particular, the impacts on local roads in addition to the A-roads and B-roads included in the RTM's.

We are also concerned that the approach does not extend to examining the social and environmental sustainability of potentially more dispersed land-use patterns resulting from the RIS2 proposals, and feed that back into the decision making loop.

The consultation document accepts that there is more model development work to be done. We feel that this is particularly necessary to facilitate a full understanding of the function of the SRN and its impact on all other aspects of society, the economy and the environment.