

Understanding Strategic Road Network users' experiences and needs

Wave 1

November 2013



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Contents

1.	Summary of key findings	1
2.	Introduction	3
3.	Research Findings	9
4.	Appendix	38

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1. Summary of key findings

- In 2011, the Government called for an independent review to assess whether they were taking the right approach to managing, operating and enhancing the Strategic Road Network (SRN), which resulted in the Cook Report 'A Fresh Start for the Strategic Road Network'. Since then, there has been further need to inform the development of policy in this area. This qualitative research, commissioned by the Department for Transport and conducted by TNS BMRB and the Centre for Transport & Society at UWE Bristol, responds to this need by exploring individuals' and businesses' use, experience, perceptions, expectations and understanding of the SRN. This report arises from the first wave of research.
- Drivers' immediate associations with roads and driving are largely negative and relate to physical, practical and functional elements of the driving experience. However, once prompted many positive attributes of driving and roads are recognised, typically related to emotional and aspirational aspects of driving, and these override the negative associations – drivers will still drive regardless of the issues they face on the road.
- Individuals see clear differences between major, main and minor roads. Motorways and dual carriageways are easily identified as major roads; however more confusion existed around whether 'A roads' are major or main, or both. There was limited understanding of 'trunk' roads.
- Preference between road types for particular journeys is dependent on a mix of practical, emotional and cognitive factors. Major roads tend to be used as a preference among businesses because they are in good condition, easy to navigate and efficient to use. Among individuals, major roads are used regularly as part of both local and national travel because they offer the most time effective and obvious routes, and for longer and more unfamiliar trips minimise the cognitive burden of driving. Main roads, though often more problematic than major roads in terms of congestion and condition, are sometimes preferred by individuals because they are more flexible and pleasant to drive on.
- There is a relatively clear distinction made between 'investment in roads' (*what* money is available for spending on immediate or future road *improvements*) and 'management of roads' (*how* money is used to fund activities that maintain or optimise the current status of roads). Users have limited awareness of who manages roads in England, though some assume that a central body like the Highways Agency manages the motorways and county councils manage the remaining roads.
- The 'Strategic Road Network' is itself an unfamiliar and not entirely self-explanatory term for most individuals and businesses, however for the majority the concept of a network of strategic roads is intuitively understood. SRN roads are expected to be free flowing, well maintained and safe, not least because they are

'strategic'. However, experience of some SRN roads suggests that they are included in the network because of where they go, and that they are not of a 'strategic standard'; this creates some uncertainty about the management, purpose and design of the network, and about whether or not users would know when they were on it.

- Experience of the SRN and rational consideration of the importance of the SRN for the UK leads some users to assume that the level of investment in the SRN, especially in comparison to other roads, is adequate and that the network is well managed. Few participants in the research – either individual SRN users or businesses – had a strong pre-existing view that the SRN requires additional investment.
- Most individuals find it hard to view the performance of the SRN beyond a personal context, such as the impact that it has on their own journey times and driving experience. Few spontaneously link the performances of the SRN and the economy; general awareness and knowledge of the economy, and of the factors which help support the economy, is low among individuals and businesses. Through discussion, an appreciation of a link between the SRN and economic growth is often developed, most quickly among those already thinking in a business context, who move more easily into that mindset. The link is often not a direct one however: instead the SRN (and transport infrastructure generally) is perceived more as a 'driver of drivers' than a direct driver of the economy.
- Individuals and businesses recognise that congestion on the SRN is an issue: for individuals it has an impact on their journey times and 'driving experience'; for businesses it has an impact on business costs. Business costs are seen to fall into four broad areas: (1) Productivity; (2) Efficiency; (3) Opportunity; and (4) Business relationships. Most businesses seek to absorb productivity and efficiency costs wherever possible and to avoid opportunity and relationship costs altogether.
- However, for numerous reasons – such as incremental increases, predictability, coping mechanisms and post rationalisation – most do not see congestion on the SRN as a *problem* that requires immediate action. Moreover, they do not see obvious ways to address congestion through additional *investment* (e.g. building new roads was often not seen to be a long-term solution) as opposed to more effective *management*, given their understanding of and assumptions about both terms.
- Efforts to build a publicly acceptable case for greater investment in the SRN are therefore likely to have to recognise the fact that the SRN's current level of performance, in the absence of a clear comparator or vision of what it *could* be like, is itself broadly acceptable to many individuals and businesses.

2. Introduction

2.1 Research background

The motorways and major trunk roads which make up the Strategic Road Network (SRN) form a core part of England's transport infrastructure in providing the critical connections between cities, communities and major ports, airports and rail terminals. In the context of increasing passenger and freight movement and economic growth in its early days, the SRN developed into a high capacity highway network, and its expansion has changed and been changed by the country's spatial development, industry and, in many aspects, society itself. The SRN today carries a third of all national road traffic, as well as two thirds of freight traffic.

As road infrastructure developed and stabilised, SRN policy shifted away from capacity expansion to capacity management, with the view that networks were complete and returns on further infrastructure provision would be relatively low (Eddington, 2006) and due to environmental concerns about local effects of road construction and the global consequences of road transport dependence (e.g. Stern, 2006). More recently this has been compounded by budgetary pressures leading to investment plans for the SRN focussing on resolving pressing issues rather than looking ahead to future needs.

There are, however, a number of challenges looking ahead, and early indicators of their effects. With population growth, and economic recovery, congestion is predicted to increase. Already, since 2001 traffic in England has increased seven times faster on motorways than on other roads. Future traffic trends and road user behaviour are hard to predict and are complicated in light of future fuel costs, technological advancements such as in-vehicle technologies and emerging trends such as peer to peer lift-sharing and sharing of traffic information. Furthermore, with many major highway structures due for major maintenance or renewal, there is growing awareness that the network needs to become more resilient to the effects of climate change and new techniques will be needed for these.

This growing uncertainty about the volume of traffic and travel behaviour and increasing pressure on England's major roads has been noted as a significant challenge by the Government. This has prompted a need for reforms to existing structures to allow for more efficient management of the SRN and greater funding certainty. Alongside this, there is a need to understand road users' attitudes and experiences of the SRN.

In 2011, the Government called for an independent review, to assess whether they were taking the right approach to managing, operating and enhancing the SRN, which resulted in the Cook Report 'A Fresh Start for the Strategic Road Network'. Since then, there has been further need to inform the development of policy in this area. This qualitative research, commissioned by the Department for Transport and conducted by TNS BMRB and the Centre for Transport & Society at UWE Bristol, responds to this need. This report arises from the first wave of research. Since its

completion, the Government has published more concrete plans in 'Action for Roads: A Network for the 21st Century'¹, a Command Paper highlighting the challenges faced on England's roads, reiterating the need for investment and setting out detailed plans to improve management of the network. Whilst this first wave was completed prior to the publication of this report, early interim findings informed its development. Wave one findings will underpin the Roads Reform Social Research Programme as it goes forward.

2.2 Objectives and aims

The objectives of the Wave 1 research for both individual and business users of the SRN were to explore:

- current usage of the SRN
- current perceptions and expectations of the SRN in general and in comparison to other roads
- user needs when travelling on the SRN
- aspects of the SRN that are felt to require improvement and priorities for improvement
- understanding of terminology used to describe issues faced on the SRN
- attitudes towards investment in roads and in the SRN
- perceived relationship (if any) between investment in the SRN and economic growth
- what is understood by the term "economic growth"
- which aspects of the rationale provided for why greater levels of investment in the SRN are needed resonate most and least

2.3 Research approach

Fourteen two-hour group discussions were conducted with individual SRN users and 32 one-hour interviews were conducted with people who held responsibility for decisions about procurement and management of business travel within their company (referred to here as 'business representatives').

Fieldwork was conducted between 20 May and 14 June 2013.

The research sample, location selection, recruitment approach, discussion coverage and analysis approach are detailed as follows.

2.3.1 Sample

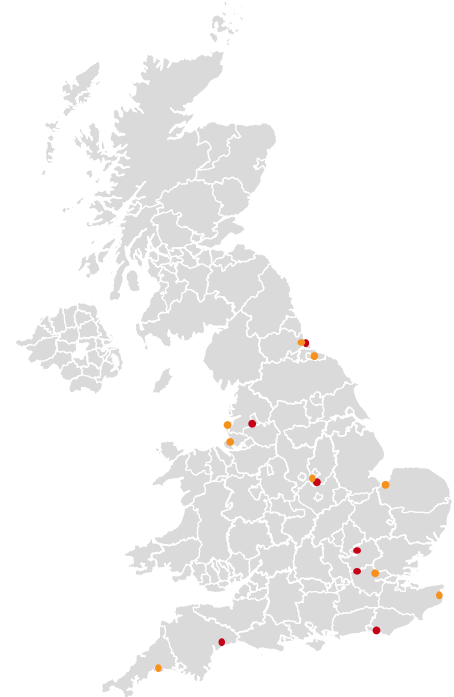
To ensure diversity of coverage across key variables of interest, purposive sampling was undertaken. The aim of this approach is not to create a statistically representative sample but to ensure representation of a range of potential variables of interest.

¹ <https://www.gov.uk/government/publications/action-for-roads-a-network-for-the-21st-century>

Working in conjunction with DfT, key variables were selected, a sampling grid was created and individuals recruited to reflect combinations of the key variables (e.g., SRN usage, age and socio-economic group). The specifics of both samples are detailed below.

Individual SRN users

Focus groups were conducted with individual SRN users in Exeter, Brighton, Watford, Huntingdon, Nottingham, Bolton and Newcastle. These locations are illustrated on the map to the right (in red) and represent each of the 7 Highways Agency regions - South West, South East, East, M25 area, Midlands, North West and North East.



All participants were drivers and had single or joint decision making responsibility for a car. They were recruited to provide a mix of age groups, frequency of SRN usage, mileage and socio-economic group (as detailed in Table 1).

The sample also ensured that participants included a mix of gender, ethnicity, mobility and Vehicle Excise Duty band. The six DfT car owner segments were also identified for all participants during recruitment².

Table 1. Focus groups with individual SRN users

Group	Frequency	Location	SEG ³	Age band	Region
1	Regular	Exeter	Upper	21-35	South West
2	Infrequent	Exeter	Lower	51+	South West
3	Frequent	Brighton	Upper	21-35	South East
4	Regular	Brighton	Lower	51+	South East
5	Regular	Watford	Upper	36-49	M25 area
6	Infrequent	Watford	Lower	21-35	M25 area
7	Frequent	Huntingdon	Upper	36-49	East
8	Regular	Huntingdon	Lower	21-35	East
9	Regular	Nottingham	Upper	51+	Midlands
10	Frequent	Nottingham	Lower	36-49	Midlands
11	Frequent	Bolton	Upper	51+	North West
12	Regular	Bolton	Lower	36-49	North West
13	Infrequent	Newcastle	Upper	36-49	North East
14	Frequent	Newcastle	Lower	51+	North East

²Further details of the segmentation groups can be found at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/11922/climate-change-transport-choices-summary.pdf

³ Upper SEG classified as ABC1; Lower SEG classified as C2DE

Businesses

Thirty-two depth interviews were conducted with representatives of private-sector businesses – that is, people within these companies who have responsibility for decisions about procurement and management of business travel.

As illustrated in the map above (in orange), and detailed in Table 2, these interviews were conducted in 9 locations. In order to achieve a good spread of interviews across this diverse group, quotas on business size, type of use, extent of travel and frequency of SRN use were in place. Table 2 outlines the sample coverage across these key variables. The sample also ensured a good spread of industry type, turnover, dependence on transport, number of business sites and time in business.

Table 2. Business interviews achieved by location, business size, extent of travel and frequency of SRN use.

Primary variables	Subgroup	Interviews achieved
Locations	Southport	3
	Liverpool	3
	Newcastle	3
	Sunderland	3
	Nottingham	3
	King's Lynn	3
	Dover/ Folkestone	3
	Fowey	3
	Greater London	8
Business size	0-4 employees	9
	5-9 employees	6
	10-49 employees	8
	50-249 employees	5
	250+ employees	4
Extent of travel	Primarily local	17
	Primarily national	15
Frequency of SRN usage	Typically frequent	18
	Typically regular	11
	Infrequent	3

2.3.2 Recruitment

Recruitment was managed by TNS BMRB's in-house team of qualitative recruitment specialists. Recruiters for the individual SRN users sample used a combination of free-find (e.g., door knocking, on-street recruitment) and 'snowballing', whereby respondents were asked if they knew anyone who might be eligible for the difficult-to-recruit groups.

To recruit businesses TNS BMRB utilised a combination of database recruitment and free-find. Database recruitment was undertaken from recruiter databases and sample

purchased from D & B Sales and Marketing Solutions (drawn by location, length of time in business, staff levels, turnover and industry type).

Eligibility for participation was determined via a short screening questionnaire and quotas were set to ensure the sample was distributed across key variables. Screening questionnaires were approved by DfT prior to use.

Individual users were offered a £35 incentive and businesses a £50 incentive to facilitate recruitment and as a 'thank you' for their contributions.

2.3.3 Discussion coverage

Semi-structured discussion guides were developed to ensure consistency of topic coverage. The use of semi-structured guides allows participants to dictate the flow of discussions with guidance from the moderator, rather than the questions being administered in the question/response format. Guides were used flexibly and responsively by experienced research moderators.

Separate guides were prepared for individual SRN users and businesses. These are included in Appendix 2.

2.3.4 Analysis Approach

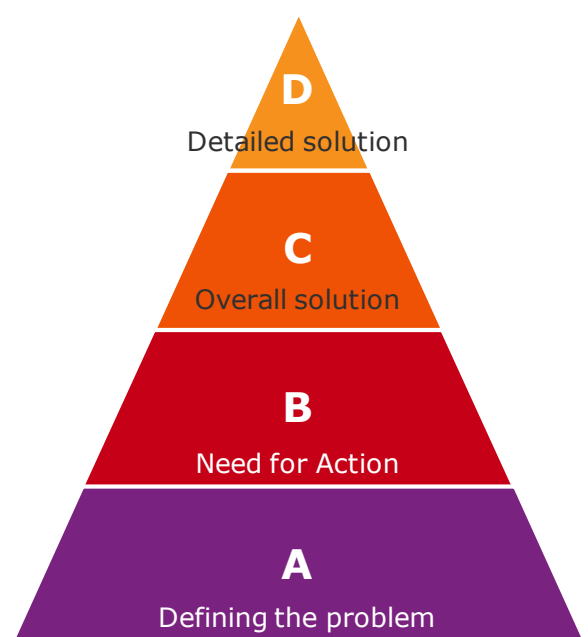
TNS BMRB's qualitative analytical approach is inductive – building upwards from the views of respondents – and drawing on researcher observation, in-session notes, audio recordings of research sessions, and interview transcripts. Interviewers initially reviewed transcripts for key themes and patterns. Ideas and hypotheses were then tabled and debated by the qualitative project team at an internal analysis workshop. The data was then synthesised into a series of thematic charts before content analysis using a framework approach which allows researchers to map the data and draw out key themes and patterns.

2.3.5 Model for building public acceptability

The research programme and analysis has been structured according to a model for describing how public acceptability of the need for investment might develop, based on an acceptability model developed previously by the Centre for Transport and Society at the University of the West of England (UWE Bristol) and referenced in the internal DfT report 'The Strategic Road Network: User Behaviour and Attitudes'.

The model (shown right) is comprised of four elements:

A. Defining the problem: questions whether a problem is perceived to exist, and how it is



defined

B. Need for Action: creates demand for action to solve the problem

C. Overall Solution: presents details of broad solution that will meet the demand

D. Detailed solution: presents details of the specific scheme proposed as a solution

3. Research Findings

Defining the Problem

Within this chapter we explore individual and business users' attitudes and experiences towards the following:

- Roads and driving
- Management, funding and investment
- Traffic and congestion on major roads
- The Strategic Road Network
- The SRN and the economy
- The extent to which individuals and businesses perceive that there are problems with the SRN that need immediate solutions

3.1 Roads and Driving

Individual SRN drivers' top-of mind associations with roads and driving⁴ – those they express most immediately – are largely negative. These negatives tend to be physical, practical and functional, and to relate to the road itself and/or other road users. They include such things as: pot holes; traffic and congestion; other vehicles and their drivers (e.g., lorries, tractors, bicycles, motorbikes); road works; the cost of driving (e.g., fuel, insurance, car maintenance); speed humps and restrictions; and parking restrictions.

"Road works in the city at the moment" (Individual, Frequent, Lower SEG, 36-49, Nottingham)

"It is just too many cars, all the time and no parking" (Individual, Infrequent, Lower SEG, 21-35, Watford)

"Lorry drivers...cutting you off and just pulling out, no indication... and they want to flash their lights to make you go faster" (Individual, Infrequent, Lower SEG, 51+, Exeter)

"The worst thing about driving is just the other drivers. I hate being tooted at or shouted at by someone right at up your back end to get you to move out of the way" (Individual, Infrequent, Upper SEG, 36-49, Newcastle)

"I just think the roads are in a disgusting state after the winter....the potholes" (Individual, Frequent, Upper SEG, 21-35, Brighton)

⁴ Top of mind associations with roads and driving were only explored amongst individual SRN users.

However, once prompted and on consideration many participants articulated positive attributes of driving and roads as well. These positives tended to be personal/emotional, and include: freedom; independence, control and autonomy; convenience; pleasure when unpressured, off the main roads, non-time constrained or for leisure; relaxing (e.g. listening to radio, having some personal space); speed; and a lower cost compared to public transport.

"I find driving really enjoyable... I find it relaxing, you know when you've got the radio on and you're just there with your thoughts? I quite like that."
(Individual, Frequent, Upper SEG, 51+, Bolton)

"You can jump in and jump out at your destination can't you? Unlike having to change trains and stuff like that." (Individual, Frequent, Upper SEG, 51+, Bolton)

"If you get on a new road, you just seem to arrive at Milton Keynes without even being on it, because it's so fast." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

Associations were largely consistent across all types of individual users. Cycle lanes were viewed particularly negatively in the Bolton and Brighton areas, where they are viewed as taking up road space that should be utilised by drivers and cars and emblematic of drivers being de-prioritised on the road. Infrequent SRN users and drivers with young families tended to focus more strongly on danger, safety, fear and stress; and those living in towns and cities were more likely to articulate negatives in strong terms and more likely to need prompting to express positives.

Whatever their complaints, however, driving is clearly an integral part of most people's lives. Indeed, the physical negatives may be most salient because they inhibit (but do not negate) the full experience of the inherent positives that are expressed. Compared to the top of mind negatives, the positives took longer to emerge, but were stronger in the end – drivers still drive, despite the negatives.

"The negatives are realistic things, you know, tax, potholes, parking traffic, but the positives are what you bring from driving...the feelings and emotions."
(Individual, Regular, Lower SEG, 51+, Brighton)

3.1.1 Road types

Individuals were asked to group a pre-prepared list of road types into 'major roads', 'main roads' and an undefined third category. This third category was consistently labelled by participants as 'minor roads' (a response perhaps primed by the given 'major roads' label).

Individuals saw clear differences between major, main and minor roads, albeit with some cross-over in specific cases. Table 3 details the groupings.

Table 3. Road types classified by major, main and minor roads

Major	Main	Minor
Motorways	A roads	C roads
Dual carriageway	B roads	Side roads
A roads		Country roads

(Trunk roads)

Drivers easily classified motorways and dual carriageways as major roads. A roads were also described as major roads, although there was uncertainty about whether these are major or main roads, and whether dual carriageways are A roads, or something else.

"Major roads are dual carriageways... and A roads, sort of... it depends on the area doesn't it?" (Individual, Frequent, Upper SEG, 51+, Bolton)

Trunk roads were also assumed to be major roads, but very few participants knew what they are. The term was familiar to some older drivers, who tended to view it as an 'old-fashioned' label⁵. It was virtually unknown amongst younger age groups – 'trunk roads were assumed to be important (not least because they have a title), but there was very little awareness of what they actually are.

"Trunk road... doesn't fit in logically with A, B and C roads. That's fairly logical. But trunk roads..." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

"Haven't heard for years." (Individual, Frequent, Upper SEG, 51+, Bolton)

"Trunk road is a new thing to me. I didn't know what a trunk road was until now". (Business, Regular, LGV, Local, Folkestone)

Main roads were consistently seen to include B roads and, for some, A roads. Agreement that B roads should be classified as main roads was common across individual SRN users as they provide a 'main' level of service to drivers. As noted above, the classification of A roads was a challenge and involved much discussion and the eventual agreement that they probably sit in both categories – major and main – given that in practice they vary significantly in quality and a range of characteristics.

The minor roads group included C roads, side roads and country roads. However, most drivers were unsure what C roads referred to – 'white roads' on the map?' – and they may have been classified intuitively given in all likelihood they should be one level down from B roads and 2 down from A roads. Country roads were quite loosely defined with the importance of proximity and access putting some country roads in the 'main' category for those living out of town.

"You see A roads and B roads on a map, and then anything else just seems to be a side street or a country lane." (Individual, Frequent, Upper SEG, 51+, Bolton)

These groupings were consistent across the majority of drivers, with frequent SRN users typically quickest to classify and understand road groupings. Many drivers aged

⁵ Public usage originates with the 1936 Trunk Roads Act.

36-49 and/or those who were regular or frequent SRN users indicated main roads and dual carriageways are the most important roads to them because of their role in commuting or business driving.

"It gets me to my place of work. It is quick, it is easy and it enables me to earn a living." (Individual, Frequent, Lower SEG, 36-49, Nottingham)

3.1.2 Journey length

Individuals were also asked to assign distance or time attributes to short, medium and long car journeys. These journeys were mostly characterised in terms of time, then distance, followed by region:

- Short journeys were generally seen as under half an hour, or 30 miles, and tended to be thought of as primarily 'local' travel.
- Medium journeys were between half an hour and two hours, or 30-100 miles, and thought of as travelling within the 'region' (although the term was not consistently used).
- Long journeys were commonly viewed as over two hours, or 100 miles and primarily for travel outside the 'region'.

These classifications were broadly consistent across all drivers, although commuters tended to have longer 'short' journeys – 45-60 minutes depending on length of commute, while infrequent drivers tended to have shorter 'short' journeys overall.

"Two miles at the most. I think that's a short trip." (Individual, Infrequent, Upper SEG, 36-49, Newcastle)

3.1.3 Choosing roads – Individual SRN users

The choice of which road to use on a journey depends on a mix of practical, emotional and cognitive factors. These are described briefly below, followed by discussion of how major and main roads were perceived and experienced in light of these factors, and a description of circumstances in which these types of road will be chosen and the types of trips they will be chosen for.

- Practical factors include where the road goes, the condition of the road, journey time from A to B and the cost of driving on the road;
- Emotional factors include how pleasant the road is to drive on, ease of stopping off en route, and the stress of driving on the road; and
- Cognitive factors include ease of choosing route in advance, ease of navigating route and number of decisions to take en route.

Major roads

Drivers tend to choose and use major roads because they are in good condition and easy to navigate, but these roads were felt to be less pleasant and flexible to use than main roads.

In a practical sense drivers choose and use major roads because they: allow for fast travel; have fewer obstacles⁶; are in good condition; and allow for fuel-efficient driving – less stop/start driving and more consistent speeds. However, major roads can of course only be chosen if they take people in the direction they wish to travel.

"I'd rather just hit the motorway, straight down, I don't want to look around, I am driving, I want to be looking at the road." (Individual, Infrequent, Lower SEG, 21-35, Watford)

"We've built such a network of motorway roads around the area, it's the quickest way to get to most places, in this part of the world." (Individual, Regular, Lower SEG, 36-49, Bolton)

Major roads minimise cognitive burden for drivers. They are generally agreed to be the easiest to navigate because they provide the most obvious routes, clear signage and information, and have fewer junctions which minimises the number of decisions to take en route.

"I think you get reassurance on big roads, because you'll get an update of how many miles before you get where you're looking for." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

However, major roads tend to have less positive emotional attributes. They are seen as being dull to drive on, and simply a means of getting from A to B. They are also seen as inconvenient if there is a need to stop off en route, and some older drivers, less frequent drivers and drivers with young families find the experience of driving on major roads stressful.

"They are what they are – to get people from A to B in the fastest possible time without going through towns traffic, but they're the most boring journeys you can do, aren't they?" (Individual, Regular, Lower SEG, 36-49, Bolton)

Major roads are, therefore, chosen if:

- they go in the right direction (even for part of the journey), and getting from A to B quickly is more important than taking an interesting or pleasant route;
- they are not found to be stressful or inconvenient; and
- the driver is driving alone, a route is planned using sat nav or an online route planner, and/or they are driving to an unfamiliar destination.

Given that major roads maximise practical positives and minimise cognitive burden, many drivers use them wherever they are available – even if this is only as a small part of a local journey, with main and minor roads making up the rest of the route. Major roads tend to comprise a significant part of longer-distance journeys, especially if it is to an unfamiliar destination. However, since local journeys are made much more frequently than long-distance journeys, major roads are used most often in the first of these contexts – as a small part of a short, familiar journey.

⁶ Anything on the road that would slow you down, e.g. roundabouts, town centres, slow vehicles that cannot be overtaken

Main roads

Broadly, main roads tended to be viewed as slower, in worse condition and less easy to navigate than major roads, but conversely were seen by many as more flexible, pleasant and interesting to drive on.

Practically, main roads were thought to be of variable quality, with many poor experiences regarding the surface, lighting and signage cited. They were also said to have slower driving speeds than major roads, and more obstacles, such as roundabouts, town centres and slow moving vehicles. In comparison to major roads, they were seen as less fuel efficient, but likely to offer a shorter route (in distance terms).

"I'm sure there are times where the motorway is slightly more congested than an A road but [on an A road] you still brake more and [there are] more traffic lights...and roundabouts." (Individual, Frequent, Lower SEG, 36-49, Nottingham)

The primary benefits of main roads tend to be emotional. Drivers characterised main roads as having more interesting routes and better views out of the window than major roads, and more options for stopping en route. Ease of stopping off en route was particularly important for older drivers and drivers with families. Views on how stressful main roads are were somewhat divided. Younger and more frequent drivers tended to find main roads more stressful than major roads given the number of obstacles, more stop/start driving and less consistent speeds, while older and less frequent drivers found the experience of driving on main roads less stressful given the slower speeds and ability to stop off if needed.

"[When] you snarl up into a single lane, you then slow down, you then speed up. It would be nice to keep it a bit more constant... it makes it more fuel efficient too." (Individual, Regular, Upper SEG, 21-35, Exeter)

"I'd be looking to say, ooh, we could stop there or, you know, do a little detour to make the trip more enjoyable, I think." (Individual, Infrequent, Lower SEG, 51+, Exeter)

"Now I've got kids in the car, I'm really funny about the speed. It sounds silly, but if you're just going out for the day and just want to sort of have a nice drive somewhere, then I would avoid the motorway." (Individual, Regular, Lower SEG, 51+, Brighton)

Finally, the cognitive burden appears to be higher on main roads (unless they are familiar) with many more decisions to make and options to think about. Many felt that signage and route choice are less clear on main roads than on major roads, and even if sat navs remove the responsibility for choices, the frequency of decision points means there is still more to think about.

Given the above, individuals have conscious reasons for choosing main roads over major roads in certain situations. Main roads are chosen if:

- they provide a much shorter route (in distance terms);

- taking an interesting or pleasant route matters more than getting there as quickly as possible;
- driving on major roads is stressful in itself;
- there is a passenger to give directions, and routes can be planned in advance; or
- the driving is on a familiar route to a familiar destination.

"I go to the Cotswolds quite a bit, so I do the main roads which are the scenic route and all those, but coming back I use the motorway. To get back early."
(Individual, Frequent, Upper SEG, 21-35, Brighton)

Thus, main roads are most often used:

- for leisure trips, where the drive is part of the overall experience;
- on known routes – and especially if the surrounding roads are also known, so alternative routes can be taken if necessary;
- where there are no time constraints;
- for short and medium length journeys; and
- by older and less frequent drivers, and drivers with young families.

"If time isn't necessarily an issue, I would opt for scenic rather than fastest or shortest." (Individual, Regular, Upper SEG, 51+, Nottingham)

3.1.4 Choosing roads – Businesses

Business representatives described their businesses' relationships with and use of major roads in similar terms as individuals, albeit for different reasons. They identified the same physical negatives of main and minor roads, but viewed these through a 'corporate' lens. For example: pot holes damage cars, which costs the business money; and road-related stress becomes a human resources issue.

Preferences between major and main roads were influenced by whether roads were used to deliver goods or to move staff. Businesses that deliver goods – haulage, freight deliveries etc. – use major roads wherever possible, and detour to include them in journeys even if there is a more direct alternative route. These businesses tend to focus on the practical benefits of major roads, such as the surface being in better condition and there being fewer speed and weight restrictions. Some business representatives (particularly those whose companies operated heavy goods vehicles) also indicated feeling less 'guilt' about holding others up on major roads.

Businesses that deliver people – sales staff, employees etc. – tend to use major roads if they fit into a journey and are therefore much less likely to detour to use them. However, the speed and reliability of the journey was still seen as important: staff have deadlines and appointments to meet, and some participants in managerial positions perceived staff travel time as unproductive if it is not used for business-related thinking or sales.

"Time's money, if you're burning fuel sitting in a traffic jam you're not making money are you." (Business, Regular, Car, Local/National, King's Lynn)

Indirect road usage

Indirect usage of major roads was high for all businesses. Indirect usage of roads involves all ancillary usage, for example services used to conduct business (e.g. couriers) or how customers interact with business (e.g. customer travel). Larger businesses (in terms of staff numbers and turnover) and those with more complex operations recognised indirect usage and their dependence on major roads quickly, while smaller businesses and sole traders tended to recognise this only once prompted.

A wide range of indirect uses were indicated, the specific nature of which varied according to industry sector. These included such uses as IT supplies, waste collections, money/banking, delivery and collections, general office supplies and couriers.

"We have deliveries every day from different companies. We have exchanges being returned to us from customers." (Business, Frequent, Car, National, London)

"We have a courier service for our lab samples, pathology or blood samples ... and we also have a company who deals with the bodies - if there's animals put to sleep - and the needles, syringes, they've all got to be incinerated so they pick up all of that sort of stuff for us.... There's another company that comes and they deliver our oxygen and CO₂...a huge lorry comes along and we've got ...our deliveries for our suppliers of course, our food." (Business, Frequent, Car, Local, Dover/Folkestone)

3.2 Management, funding and investment

3.2.1 Understanding of 'management' and 'investment'

Management and investment were widely seen both by businesses and individual users as separate, albeit linked, concepts. For most, investment related primarily to acquiring funds or making them available for spending on improving roads, either immediately or in the future; whereas management was seen as activities that maintain or optimise the current performance of roads (activities that are of course funded by investment).

Ideas about what investment and management comprise were sketchy, and tended to focus on the highest profile or most intuitive examples. Investment was most often related to building new roads, widening existing roads and 'improving' existing roads (often in some undefined sense) – these conceptions were similar in locations where such activities had and had not recently taken place.

"Well, there's new investment, i.e. in completely new roads, new bridges, new tunnels and then I guess there's ...just keeping the roads that we've currently got working properly." (Business, Frequent, LGV, Local, Sunderland)

"Investment in the infrastructure... it's how much money is put into actually repairing or building roads or keeping the roads up to scratch... to improve things." (Individual, Regular, Lower SEG, 36-49, Bolton)

"They need to widen out or build a new road, that's investment to me...investment is more about creating something new or improving...if you're investing in something then presumably the outcome is going to be a net gain." (Individual, Regular, Lower SEG, 51+ Brighton)

"It has to be some kind of investment for the future as well, making roads suitable for the future, it must have trends and that's happening now that is going to happen later as well, so they should be investing now really for the future, not just make do and mend." (Individual, Frequent, Lower SEG, 36-49 Nottingham)

Management was seen as using money to fund activities that maintain or optimise the current performance of roads – i.e. making the current infrastructure work as effectively as possible. These activities included maintaining physical aspects of the roads (surface, signage, lighting etc.); optimising traffic flow (directing traffic, clearing snow and accidents, speed restrictions etc.); and maintaining safety (ideas on how this is achieved in practice were rarely fully formed).

"Managing roads, it's kind of looking at the traffic flow. So if I was managing the roads, I would look at where the need for the traffic improvement is, where the need for lights are, roundabouts, etcetera." (Individual, Regular, Lower SEG, 51+, Brighton)

"[Management] means short routes are safe for pedestrians, cyclists, bikers, making sure traffic lights are in working order." (Business, Frequent, LGV, Local, Liverpool)

Investment and management seemed to be more closely related in areas where roads had recently been built or substantially widened (e.g. Newcastle, Nottingham and Huntingdon). Here, individuals' interpretations of investment tended to focus on the immediate benefits of that work, and these benefits and the works that had realised them were often discussed in terms of management as well as investment. Elsewhere, 'investment' seemed to be more related more readily to funding for longer-term works that would bring future benefits, and was thus further removed from more immediate management activities.

3.2.2 Funding

There was a widespread assumption, among both businesses and individual SRN users, that very large amounts of money need to be spent on managing, maintaining and improving roads, although conceptions of quite how much is needed were vague.

"I think it must be a lot of money. And actually it's millions and billions and billions of pounds. Not only in new roads but probably to maintain the current network that we have, I envisage it is probably a lot of money." (Business, Frequent, Car, Local, Dover/Folkestone)

"I don't know how much goes in, but I think it's immense the amount of money that it needs to maintain these roads...Got to be in the billions and billions." (Individual, Regular, Lower SEG, 51+, Brighton)

Ideas and understanding about how this money is generated, and where it comes from, varied considerably. Among individual users and businesses there was some understanding that local and central government fund roads from general taxation. A subset of these people (especially frequent SRN users, older users and businesses with higher staff numbers and/or turnover) also recognised that finite funds need to be shared between numerous public services, and that money spent on the roads is money that cannot be spent elsewhere.

"It just depends how much the government can spare repairing these. There are so many other things that are taking the government's money, the NHS – we all know that." (Business, Car/LGV, Regular, National, London)

"The fact of the matter is that the country is near bankrupt. We demand the NHS. We demand an education system. And the road network is coming down and down and down the pecking order." (Individual, Regular, Lower SEG, 51+, Brighton)

Most commonly participants assumed and/or believed funds from Vehicle Excise Duty (referred to by participants loosely as 'car tax' or 'road tax') and fuel duty are ring-fenced for spending on roads (hypothecated). Moreover, these participants believed that these taxes generate very large sums of money, which led many to question the management and maintenance of main and minor roads given their condition (see below).

"I don't think it reflects the road fund license that we are actually paying on a yearly basis... we are contributing every year when we buy our road fund license and don't seem to see where the money is going to." (Individual, Regular, Lower SEG, 51+, Nottingham)

"The volume of traffic is going up, and the money has gone down, yet I'm paying more road tax. I don't get it." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

A third type of participant was broadly aware that VED and fuel duty are not hypothecated, but felt that the amount of money raised through taxes which seem so closely linked to roads and driving *ought* to be reflected in the amounts actually spent on the roads. They often expressed resentment at a perceived mismatch between the sums they paid and the condition of main and minor roads, and felt to varying degrees that their money had been collected under false pretences and diverted deceptively.

"I think people get upset about the state of the roads... because of the way that we're swindled out of our money in terms of road tax, in inverted commas, when, I don't know the figures exactly, but for the sake of argument, £8 billion a year goes onto maintaining the roads and they take something like £60 billion in road tax." (Individual, Frequent, Upper SEG, 36-49, Huntingdon)

"It's getting syphoned off...So although you pay road tax, it doesn't pay for the roads." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

"I think the government sees road users just as a means of taxation."
(Business, Regular, Car/LGV, National, Dover/Folkestone)

Individual SRN users tended to change their views as discussion progressed – in particular, those who had believed funds are hypothecated typically had this misunderstanding corrected by other individuals, and moved towards the position held by the third type of participant described above. It was rare for individual SRN users who did not already appreciate that money for roads comes from the same central funds as money for other services to move to this position in the groups, suggesting this would be a difficult message to communicate effectively.

3.2.3 Tolling

Tolls came up spontaneously in most individual SRN user discussions, although participants' opinions were not probed in great detail. Views were based on partial knowledge, assumptions and personal experience – mostly from driving on the continent, but also the M6 toll for some.

Opinions regarding tolling are divided, but most individuals and businesses felt that introducing tolls on *existing* UK roads would be unacceptable as they felt they already contributed enough to roads via VED and fuel duty – and indeed other costs of driving such as services, MOTs, insurance, etc. (The idea that these or other taxes could be reduced to compensate for tolling, or that tolling might replace taxes, was not raised, but drivers' aggregation of taxation and general driving costs is likely to complicate this argument.)

"I couldn't possibly accept toll roads." (Individual, Frequent, Upper SEG, 36-49, Huntingdon)

"It's just principle of putting tax in my car and then asking me again. Taxing my car and then asking me again...You've already taxed your car. You've got tax, car tax, MOT, insurance, wear and tear." (Individual, Frequent, Upper SEG 51+, Bolton)

"I am paying my road tax every year I don't particularly want to be paying road tolls as well." (Business, Regular, Car, Regular, National, Nottingham)

"You know, there's only so much money they can take off everyone to invest in these roads." (Business, Infrequent, Car, Local, London)

There was some support for road tolling in the UK, however, primarily based on comparisons between conditions of British untolled roads and continental tolled roads, as well as the M6 toll road. There was a general sense, particularly amongst those that had travelled abroad, that European toll roads are 'better' roads, and an assumption that this is because tolls *are* hypothecated, and that they have more money available to them as a result. They were therefore seen as "worth" the toll money.

"When I do go to London it is a hell of a lot easier to go down the toll road."
(Business, Regular, Car/LGV, Local, Southport)

"The toll roads, yes, they are lovely, they're a lot quieter so they're quicker. They're so well maintained. Good service stations along them.... I think in general motorways in Europe - the French Autoroutes, Autobahns in Germany - they're all good quality...Easy to drive on" (Individual, Frequent, Upper SEG, 36-49, Huntingdon)

"We think we are paying enough but we are obviously not because if we were paying enough then they would be maintained." (Individual, Infrequent, Lower SEG, 51+, Watford)

Freight businesses noted that an imbalance in driving charges between UK and the continental roads puts UK freight businesses at a disadvantage: British businesses have to currently pay to use continental roads but their overseas competitors don't pay to use English roads.

"As a British haulier we struggle to compete against the continentals".
(Business, Frequent, Car/LGV/HGV, Local/National/International, Liverpool)

However, some participants pointed out that comparing UK and continental costs and experience is like comparing apples to oranges. Some of them noted that charging/tax structures on the continent are likely to be different; others recognised that continental toll roads tend to be used for holiday travel, and that this differs from other types of travel in numerous ways; and others pointed out that continental toll roads are mostly relatively new, and attributed this in part to the greater amount of space those countries have for building new roads.

"I think most of these roads in France, Austria, Germany and Spain are toll roads anyway. Most of the motorways, the new motorways are toll roads, so you can't compare our roads with those because we don't pay...I mean being an island, a small country, we are rather limited on what land we've got around aren't we?" (Individual, Frequent, Upper SEG, 21-35, Brighton)

3.2.4 Management of roads

Confident knowledge of who manages the roads and/or how responsibilities are divided was rare among individual and business users. However if pressed most assumed that the Highways Agency (or some other central authority) manages the motorways and county/local councils manage the remaining roads.

Road management overall in the UK was generally thought to be 'all right' – a position driven by an acceptance that it 'can't be perfect' and a broad sense of inevitability and fatalism – 'it is as it is'.

"We're always quick to criticise and whatever, but I don't think we do too bad. I mean we're a small country with increasing road use, you know. There are going to be problems. You know, you can't expect it to be trouble free all the time. So, yes, we do okay. We could do better, but we do OK." (Business, Frequent, Car, Local, Kings Lynn)

However, despite this acceptance there was a strong expectation that roads *should* be managed more effectively and money *should* be spent more efficiently. This was

especially the case with regard to pro-active planning. There was a deep frustration with 'reactive', 'short-term', 'short-sighted' and 'uncoordinated' road management, which many felt manifests itself in:

- Multiple roadworks by utilities and a lack of co-ordination between organisations;
- The chaos caused by (predictable) weather events and the inability to manage these events;
- Temporary fixing of road surface problems, particularly potholes; and
- Widening roads – for some this was a sign that they had not been wide enough in the first place.

"My experience of roadworks is somebody comes along, digs it up, lays tarmac down to repair what they've done and then 3 weeks later somebody else comes in." (Business, Frequent, Car/LGV, Local, Southport)

"I read ... the products they are using to repair these roads or resurface them is not adequate for our weather... - that is [a] false economy because why are we spending money to repair something that they know is not going to last, why [aren't they] looking at what is the best product to use, even if we end up having to pay a bit more, let's... deal with it properly rather than this patching up all the time." (Individual, Regular, Upper SEG, 51+, Nottingham)

"If they did it properly once, instead of touching it up, then they wouldn't end up doing it next year." (Individual, Infrequent, Lower SEG, 21-35, Watford)

"Well if we followed what the Americans told us to do when we built the M25... they suggested a ten lane, five lanes each way and we said no. We won't need, we'll only need a couple of lanes, don't worry about it. So what we do now is we try and build more lanes because they were right and we were wrong" (Individual, Frequent, Upper SEG, 21-35, Brighton)

This perception of short-termism, and a view that many roads should be in better condition than they are (see below), meant that the relationship between investment and management was often confused. Visible short-termism implied to some that the large amounts of money they assumed were being allocated to roads were not being used effectively. Alternatively, poor road conditions that were not rectified suggested to others that not enough money is available in the first place.

"I think there's just a quite high expectation because of the amount of tax you pay. And you think the roads should be, you know, prestigious, you know, perfect, basically, because you do pay a lot of road tax. You know? Every driver is paying that. Where is all the money going? That's what I think, sometimes. If you weren't paying so much tax, you probably wouldn't pay quite so much attention to the smaller things." (Individual, Regular, Upper SEG, 21-35, Exeter)

Despite this uncertainty, effective and transparent management of current resources, roads and money, was seen by some to be an important first step in ensuring future functioning of roads – and for others was a prerequisite for achieving additional investment.

[If they said] "*are you prepared to pay more in taxes to increase the quality of the roads? I would...but...let's have some formal body,... [that] is very visible and is actually going to take the money and do something about it, because it's all well and good to say... pay more money in but then, it seems like; more money, more problems occur [with bureaucracy].*" (Business, Regular, LGV, National, London)

3.2.5 Perceived levels of investment and management by road type

Views about the amount of investment that different road types need and receive were clear and consistent. These were based both on individuals' and business representatives' experience of driving on each type of road, and on their assumptions about the importance of each type to the UK and the measures that need to be taken given the type and amount of traffic that type of road takes.

Experience and visual cues about levels of investment and management included:

- The extent to which money *has* been spent – e.g. state of repair of the road surface
- The extent to which money *is being* spent – e.g. on-going road works, whether any work seems to be being done, and whether there seems to be a long term 'plan' for these
- The extent to which traffic flows as expected for that type of road

It was overwhelmingly agreed that major roads are the highest priority for investment, and are already managed well and receive enough investment. They were widely seen as 'too big to fail': too vital to the UK to be allowed to deteriorate.

Most felt the major roads they use are well maintained and in good condition, and many pointed to recent improvements to highlight that money is being spent. Road works were taken as a sign that maintenance is carried out on major roads, and were assumed to be efficient, well planned and pro-active (although there was little discussion of how true this is, or how it could be improved). Major roads were also seen to take vehicles traveling at high speed, so need to be safe, well maintained and managed.

Main roads were seen to be a medium priority for investment overall, but to need more investment and better management than they currently receive. They tended to be viewed as less important to the country than major roads, but as having greater variability of road conditions and less well planned maintenance and road works.

Minor roads were seen as the lowest priority for investment overall, but as needing much better management and increased investment. The overall condition of minor roads was thought to be poor: indeed, the majority of physical negatives (discussed in Section 3.1) were linked to minor roads (and to a lesser degree main roads). Minor roads were also characterised as having more obstacles, less consistent traffic flow and repeated road works at the same location. Overall these elements gave most participants the impression that minor roads are poorly planned and managed and have insufficient investment.

"I don't think some of them, like the back roads, are looked after very well. The motorways are good." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

"Motorways are obviously kept up to a good standard. Whenever I've used a motorway I've never hit a pot hole. A roads are a reasonable standard and when they do degrade they tend within a month to six weeks to be sorted. But B roads and minor roads are just a nightmare." (Business, Regular, LGV, Local, King's Lynn)

Views about the amount of investment that different road types need and receive were clear and consistent, but there were some perceptions of differential investment across the country. Participants in some areas felt they received lower levels of road funding compared to the South East, which was assumed to get more investment than the rest of the UK. In particular, drivers located in Newcastle and Nottingham tended to feel their areas receive less investment. In a similar vein, some from Exeter felt that their region receives a lower level of investment than others because of its lower population/ voter density.

"As you go further South the roads down there are totally different from here...It's like a different country." (Individual, Frequent, Lower SEG, 51+, Newcastle)

"I think there is a north/south divide." (Individual, Infrequent, Upper SEG, 36-49, Newcastle)

"Roads in big city centres...they use the taxpayers' money where the majority of people are...Where the voters are." (Individual, Regular, Upper SEG, 21-35, Exeter)

Individuals and business representatives also had slightly different views on investment and management. Individuals tended to feel that the condition of major roads is 'in line with their needs' – few identified roads where improvements are needed. However, they often felt the perceived under-investment and poor management of main and minor roads is 'scandalous', and tended to have more emotional reactions to these issues, based partly on highly personalised views about taxes and funding discussed above.

Meanwhile, businesses were more pragmatic and tended to focus on how road conditions impacted on their business. They tended to report that major roads in general are 'just good enough' and were able to identify particular roads important for their businesses that need improvement (e.g. A47 in Norfolk). They were, however, more likely to acknowledge that funds are finite, and to prefer that enough is spent on major roads even if this comes at the expense of funding for main and minor roads.

"I think it's always going to be insufficient. It's adequate to what is available. We would all love if it was a lot better because they are not very good in a lot of places. I think there is more towards motorways because...that's what businesses tend to use...The A5111 has had a lot of money recently spent on it along with the A50 and A52. They could do with a lot more, but needs must isn't it?" (Business, Infrequent, Car, National, Nottingham)

3.3 Traffic and congestion on major roads

3.3.1 Individuals' coping mechanisms

Individual SRN users recognised that traffic on major roads has increased. However, most found congestion⁷ largely predictable, which allowed them to plan their journeys defensively and to develop coping mechanisms which minimise its impact.

Local congestion hot spots were well known: participants knew where local major roads tend to be busier and slower, when to avoid these spots, and which alternative routes to take.

"You get to know it and then you get to learn how it works...Each road is quite specific in how it moves and what time it starts and what time it stops."
(Individual, Regular, Lower SEG, 21-35, Huntingdon)

"You get used to routine. It's like going to the Beehive, if you want to go Horwich, and that traffic is going to Horwich, get in the lane for Bolton and go around the roundabout. You know the shortcuts if you know the area."
(Individual, Frequent, Upper SEG, 51+, Bolton)

Moving further afield, even if a route is unfamiliar, busy periods were thought to be generally the same everywhere, and those who could plan to avoid travelling longer distances at these times did so. Drivers spoke of avoiding major roads in rush hour, Friday evenings and Bank Holidays if they could (although this is of course not always possible).

"If we were going away for a day out or, like a bank holiday, you'd pick the time that you set off. If we were going to the Lake District, on a bank holiday you set off early doors, or else you're just sitting there – you spend most of your bank holiday sitting in traffic." (Individual, Regular, Lower SEG, 36-49, Bolton)

"You've obviously got general rush-hour is rush-hour, isn't it? It doesn't matter where you are. Between sort of half-four 'til six there's pressure anywhere. So what you'll do is you'll look at these satnavs and they'll give you a time and then you just add on time onto that, probably knowing, depending on what time [you go]. You can guesstimate roughly how bad you think it's going to be."
(Individual, Regular, Upper SEG, 21-35, Exeter)

Some slow and/or stationary traffic was anticipated on most journeys, so individuals reported building in 'buffer time' to journeys, viewing an early arrival if that buffer were not needed as a 'bonus'.

Routine, predictable congestion, particularly locally (which is where the majority of journeys on major roads take place), was therefore tolerated – it was something participants had become conditioned to, and they knew how to minimise its impact.

⁷ It is worth noting that individuals and businesses use 'congestion', 'heavy traffic' and other terms interchangeably. For them, congestion does not necessarily mean stationary traffic it can also mean stop start traffic and heavy but free-flowing traffic. In this report, we follow this flexible usage of 'congestion'.

Congestion which is unexpected and unpredictable to drivers had the potential to be more irritating and problematic. However, many recognised that this type of congestion comes in two forms: that which is caused by an unpredictable event, and that with a cause that had been predicted, but which had not been mitigated effectively.

Truly unpredictable congestion, for example caused by a road traffic accident, was felt to be relatively rare. While irritating at the time, most accepted that it does not happen often, and that there is little that can be done to avoid it; this made it seem acceptable. Congestion caused by apparently predictable events, however, such as snow or road works, was seen as a result of poor management and planning, and was a source of considerable irritation for many individuals and businesses.

Commuters and others with time-critical journeys had less flexibility over their timing and route, and were less tolerant of slow traffic, but even they used the predictability of journey times and traffic speeds to 'work around it' as far as possible in order to arrive on time.

"Well if you've got to be at a football match, you know exactly where you are going but you have to plan what time to leave to be able to be there on time."
(Individual, Frequent, Lower SEG, 36-49, Nottingham)

3.3.2 Journey times

Most of the journeys that participants made on major roads were local and fairly short, and the time these journeys take was said to be broadly consistent and predictable. They therefore knew how long a journey on a local major road normally takes. In this context, judgements about acceptable journey times were relative rather than absolute – times were compared with how long it normally takes, not how long it 'should' take (or even 'could' take if the roads were managed differently).

Journey times for longer distance trips were said to be less predictable, partly because there is more scope for variation. Those who made longer journeys frequently reported having to adapt to uncertainty about how long it would take, especially if they had to arrive by a certain time.

"I know if I leave home at 7.30-8.00 in the morning, I'm going to hit the M25 any time between 8.30 and 10.00." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

However, most did not make longer distance trips frequently enough to establish a norm against which to judge the time taken, and were therefore more likely to accept however long it took (within reason). These journeys were also often not particularly time constrained, as they tended to be for holidays, visiting family/friends and other purposes that do not have a key arrival time. Even if they did take longer than was thought reasonable, the experience tended to be seen as a 'one off', and did not undermine the overall perception (based on the much more frequent local experience) that journey times on major roads are generally acceptable.

For infrequent longer distance journeys which do have a key arrival time (e.g. appointments, or catching ferries or planes), individuals tended to build in additional buffer time to mitigate possible delays due to slow traffic or other factors, such as getting lost.

"A lot of the long trips, the majority of the time you probably haven't been there before, so you're not going to know until you hit a bad route. You're not going to know in advance". (Individual, Frequent, Upper SEG, 51+, Bolton)

"If it's an airport run [you're] not familiar with, you plan it." (Individual, Frequent, Lower SEG, 36-49, Nottingham)

Overall, therefore, individuals used local knowledge and 'rules of thumb' to avoid/anticipate congestion, and saw journey times that are slower than perhaps they 'should' be as normal and thus acceptable. Congestion only causes notable problems if it is unpredictable, and is only blamed on poor management if due to events that it is thought managers should be able to plan for.

3.3.3 Congestion and business

Businesses saw congestion as having cost implications for their businesses in four broad ways:

1. Productivity - time spent travelling is seen as unproductive and 'dead time';
2. Efficiency - reduced fuel efficiency as a result of delays and slow traffic;
3. Opportunities - late arrival for appointments with customers and clients can lead to lost business; and
4. Business relations - relationships with on-going customer/client being impacted by the late delivery of goods and services.

Most businesses sought to absorb productivity and efficiency costs as 'business costs' wherever possible, and to avoid opportunity and relationship costs altogether. Greater productivity and efficiency costs are, however, acceptable in order to avoid opportunity and relationship costs – for example building in extra buffer time, increasing unproductive time, to avoid late arrival for meetings.

As with individuals, predictable congestion tends to be normalised and, up to a point, tolerated. Predictability also means that costs can also be absorbed into the business and/or avoided by planning journeys defensively using rule of thumb knowledge about congestion, for example:

- Small businesses with infrequent travel needs can be flexible, for example some leave the night before or very early in the morning to ensure that they arrive in time;
- Some businesses schedule journeys for less congested times, such as late at night, to speed up travel time, reduce 'dead time' and increase fuel efficiency; and

- Others that have less flexibility over timing and route build 'buffer time' into journey planning.

"It's very important that I don't inflict [these] problems on my clients, so the clients they don't see it and I make sure they don't see it. So we'll travel early and stay overnight somewhere or, you know, make sure that if a client wants us there on a given day at a given time we will be there, but we have to plan our trip defensively." (Business, Frequent, Car, National, Fowey)

"A lot of people... whilst they are in a car, that time is relatively dead time...there's a lot of time wasted with travelling – especially if there's an accident or delays or poorly managed roads." (Business, Regular, Car, Local, Southport)

"We have to compensate, we have to allow for greater delays and time getting from A to B." (Business, Regular, Car/LGV, National, London)

Although these defensive strategies increase the amount of time employees spend engaging in non-productive activities, the associated productivity costs have become increasingly acceptable over time and are now tolerated as a normal operating cost.

Unexpected delays were said to have the potential to create opportunity and relationship costs, as businesses cannot absorb them through forward planning. Again as with individuals, businesses reacted differently to such delays depending on whether the cause of the congestion was seen as predictable or not. Congestion caused by unpredictable events such as accidents was thought relatively rare, and thus largely accepted and considered 'blameless'. However, congestion caused by seemingly predictable events (bad weather, road works etc.) was thought unacceptable and related to poor management.

Thus while the costs and impacts of congestion were felt differently by businesses and individuals, both responded to it in similar ways. Indeed, businesses seemed no more likely than individuals to engage in pro-active forward planning to try to minimise the impacts of congestion. Some might listen to the radio or check online for traffic reports immediately before they left, but few received information (e.g. regular traffic updates or details about forthcoming road works) that would allow them to plan their journey in advance. The great majority operated under the same 'rules of thumb' as individuals.

3.4 The Strategic Road Network

3.4.1 Understanding of the SRN

The 'Strategic Road Network' was itself an unfamiliar and not entirely self-explanatory term for most individuals and business representatives. However, the majority quickly reached an intuitive understanding of the concept of a 'strategic road network'. Spontaneous assumptions about the SRN were based primarily on associations with the word 'strategic': it was typically conceived as an essential network of roads connecting places of importance nationally, and vital to the country, primarily for transporting freight.

"The essential roads in the country that feed all the main cities and join up the country really." (Individual, Regular, Upper SEG, 51+ Nottingham)

"I would imagine that to be motorways and A roads across the country that serve as the main arteries of the country." (Business, Frequent, Car, Local, King's Lynn)

Visual illustrations (a map) and verbal definitions of the SRN were used to inform participants. These made sense and were clear to most, and the density and scope of the network aligned with prior expectations and assumptions (notwithstanding some surprises or observations about 'gaps', for example in Lincolnshire, Norfolk and North Devon).

"I mean, when you look at this map...until you actually see it, you never realise that the two main counties – well, there's Lincolnshire and Norfolk, have got no motorways at all, have they." (Individual, Regular, Lower SEG, 36-49, Bolton)

There were some misunderstandings about the nature of the SRN, most commonly among a minority of lower SEG and younger individuals. These included the SRN being a network of people, a government department or arm's length body, and the belief that it refers to every road in the country. Furthermore, the term 'strategic', whilst helpful in suggesting what the SRN is, could also raise questions about its purpose.

"These are all the roads we feel are strategic, somebody will say well why is [it]... strategic?" (Individual, Regular, Upper SEG, 51+, Nottingham)

Whilst intuitive as a concept for most, in practice some aspects of the SRN were less clearly understood and clear-cut. The network made visual sense 'on paper', but the combination of motorways, dual carriageways, single-carriage A roads, and roads that many knew locally to be of a lower standard than might be expected of a national strategic network (e.g. the A303), was confusing for many. As noted above, the term 'trunk roads' meant little to most participants. As a result, few felt they would know from signage, road quality, route or anything else whether the major road they were driving on was in the SRN or not (unless it is a motorway). There was a view among individuals and business representatives that roads are included in the SRN on the basis of where they go, not because they are of a 'strategic standard', which for some

undermined its sense of being a centrally managed and planned network of national importance.

"I would just say the motorways were in the network...but I wouldn't particularly know [if I was on an SRN road] as a car driver." (Business, Frequent, HGV, Local/National/International, King's Lynn)

"I've never gone on the road and thought, hmm, I'm on the SRN." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

"I'm intrigued as to why certain trunk roads are included and certain ones like the A580 which is the East Lancs Road [are] actually omitted from the strategic road network, so I'm not quite sure as to what the purpose is and what the criteria for entry into the list of trunk roads is...what defines a major A road as opposed to a minor A road?" (Business, Regular, Car, Local, Southport)

3.4.2 Use of and requirements from the SRN

While individuals and business representatives both conceived of the SRN as a national network of roads, their use of SRN roads was largely as described for 'major roads' above. Broadly, the most common use of SRN roads by individuals was as a short section of a local journey; their use on a 'national' scale, as the backbone of a longer journey, was much less common because these types of journey were made much less frequently. That said, SRN roads are fewer in number than major roads in general, so participants' proximity to an SRN road did have an effect on their use of the network in the sense that those living near to one or more (e.g. in Huntingdon and Bolton) were more likely to use it as part of local journeys while those further away from the SRN or in more remote areas (e.g. Exeter and Newcastle) tended to use it less often and predominantly for longer trips out of the local area.

"[The A1M and A14 are] hugely important to our local area." (Individual, Regular, Lower SEG, 21-35, Huntingdon)

Businesses' use of the SRN also depended on their proximity to it, as for individuals, as well as on the nature and scale of their business. Thus those with a national/international client base (e.g. haulage companies) and those in remote locations, and/or with few SRN roads nearby, (e.g. King's Lynn) made greater use of the local SRN roads as the start of long-distance journeys.

"We're using the A47 or A14 to get onto the motorway network, we have to travel an hour and a half to get onto any motorway network...[we] rely on it to get round the whole country." (Business, Frequent, HGV, Local/National/International, King's Lynn)

Spontaneously, almost all individuals and business representatives said it is important that the SRN is free flowing, well maintained and safe. The importance of a free-flowing network was further reinforced in an exercise where participants were asked about how 'hypothetical' extra funds should be spent on the SRN (see Appendix for

the list of options). 'Improve traffic flow/reduce congestion' was usually selected as the top priority.

"[It's important the SRN is] kept flowing and well maintained... Time is money, if you're sitting in a traffic jam you're not making money are you."
(Business, Regular, Car, Local/National, King's Lynn)

Other items which ranked highly included repairing the road surface, speeding up repairs / road works, improving the way accidents and delays are handled, improving road safety and widening the roads; contextual discussions indicate that these were often chosen because they relate to improving traffic flow and easing congestion.

"When something stops the traffic, there's got to be a system that gets it moving as quickly as possible. Repairs it, removes it." (Individual, Regular, Lower SEG, 36-49, Bolton)

Certain other priorities were seen to be more important by particular groups. Parents, especially those aged 36-49, saw safety as a high priority, and younger individuals and those in areas where roads have recently been widened often saw widening roads as important.

However, as with other major roads, individual and business SRN users felt that the SRN roads they know are generally in good condition, and assumed that this is the case across the rest of the country. They recognised that traffic is not always free-flowing, and that congestion is an issue on the SRN, but they planned around this in order to minimise the impact of congestion. Although the Network as a whole was felt sufficient to facilitate business, some business users identified specific roads important to their business requiring improvement.

"The M1 is a nightmare, on a Friday up until about 8 o'clock. So what I try and do is I'll try and either work later on or leave my car at home first and then I will go out and go over to the A1 instead, it's always a bit quieter." (Individual, Infrequent, Lower SEG, 21-35, Watford)

"We just have to take it within our stride, knowing the volumes of traffic on certain roads at certain times of the day we can move the times of our movements to make it beneficial for us and I mean if we can do a night run and get somewhere early in the morning for an early morning delivery and we travel through the night it's beneficial to us because we can save time."
(Business, Frequent, HGV, Local/National/International, King's Lynn)

3.5 The SRN and the economy

3.5.1 Aspects of economic growth

Awareness and knowledge of the economy and the factors that promote economic growth were low among both individuals and business representatives. Views on the impacts of road network quality on economic performance, whilst appreciated and understood when explained, were also limited.

Individuals appreciated that a growing economy is important in principle but most found it difficult to identify factors that influence growth. The ideas that they did have often appeared to have been repeated from the media, without full understanding.

Most understood that the performance of the economy has an impact on individual people, including themselves. Examples of these direct impacts include availability and security of jobs, and implications for real income and spending power. However, the salience of these impacts for individuals depended on their personal experience: they were significant for those who had experienced job loss or pay freezes, for example, but much less so for others. There was also some appreciation and understanding of less direct impacts of the economy, for example on the range of shops on the high street, and on the general 'mood' and 'confidence' of the country. These were less strongly felt, especially by those who had experienced personal impacts as above.

"Well if we haven't got any money we can't go to the shops and spend it, people in the shops get made redundant and all of a sudden you go down a situation where we've whole towns now where eight out of ten people can't get a job." (Individual, Regular, Lower SEG, 51+, Brighton)

Business representatives also tended to have low levels of awareness of influences on the economy, and many seemed to lack confidence in discussing the economy generally. However, most were well aware that the performance of the economy could have a direct impact on their business and its success and profitability. Key impacts identified by business were:

- Consumer spending power / levels of disposable income
- Ability to grow own business and to offer employment
- Competitiveness of the market – availability of projects contracts and sales

Businesses seeking to expand also identify how the national mood and 'confidence' impacts on their ability to access capital. While others noted impacts that include:

- Cash flow - payment terms on invoices
- Value of their business/property
- Access to capital

"If people feel like the economy's growing they can hopefully afford to buy more things, because their bosses will feel like that they are able to invest. We can give them pay rises which means that they can afford more luxury goods." (Business, Regular, Car, National, London)

"[In the recession] we lost a lot...we lost three good clients. Some of our clients have had work cancelled." (Business, Frequent, LGV, Local, Liverpool)

Whilst their focus was primarily on direct business impacts, on reflection business representatives (especially those who were particularly astute, including some very small businesses) were able to describe wider impacts of economic performance more easily than individuals. These wider impacts included, for example, the volume of transactions through the economy having a knock-on effect for jobs and turnover in their own and other business sectors, and thus individuals' income and ability to spend.

3.5.2 Links between the SRN and the economy

The low salience of the economy, and the narrow personal and business contexts within which the SRN was perceived, meant that few individuals or business representatives spontaneously linked the performances of the SRN and economy. Without prompting, 'the economy' was rarely put forward as an argument for improving the SRN and few individuals appreciated the knock-on effects of the performance of the latter on the former.

Most individuals found it hard to assess the performance of the SRN beyond a personal context, such as its implications for journey times or stress. When viewing the SRN in this way, reactions were predominantly emotional, around the experience of driving (e.g. stress, irritation, satisfaction) and the fact that 'we are paying for it'. Many individuals appreciated other implications for themselves, such as the reliability of goods being delivered to them or to shops, and could imagine that the performance of the SRN would have cost implications for businesses that used it. But it was rare for individuals to feel that the performance of the SRN would affect them (and thus anyone else) financially.

"But when we're travelling, at work, we will definitely not arrange any meeting that [means] I hit the M25 before 7 o'clock. But if you had no choice, that would probably be one of the most stressful journeys for me to endure...I feel sorry for those people who don't have control, you know sitting on that M25 every day at that same time. It's just pretty difficult." (Individual, Regular, Lower SEG, 51+, Brighton)

Similarly, business representatives assessed the performance of the SRN primarily in terms of its direct impact on their business, in terms of the costs discussed above - productivity, efficiency, opportunity and business relationships (section 3.3.3). It was rare for business representatives to look more widely than this and see how the performance of the SRN might impact on their business sector as a whole, or even the wider economy.

"[An underperforming SRN] would mean costs go up, level of service goes down and we would need to seriously look at the jobs we're doing and the amount of work we took on." (Business, Frequent, Car, Local, King's Lynn)

A minority of individuals and business representatives did spontaneously link the SRN to the wider context of the economy, recognising that on some level the performance of the SRN has an impact on the health of the economy⁸. However, this generally seemed to be an abstract, conceptual association rather than a real, emotive or technical one - along the lines of 'well of course it affects the economy' without a clear understanding of how or what that might mean. The great majority of participants (both individuals and business representatives) therefore were constrained by a micro rather than macro perspective of the SRN - how it affected them directly - and found it a leap to think in the context of the wider economy.

"If you were to ask this question [about investment in SRN] after sitting on the M25 for 2 hours in an afternoon you wouldn't be worried about the economy you'd be worried about getting home and seeing the kids or whoever"

⁸ Those who saw the economic impact also saw the personal impact.

you were going home to see.” (Individual, Regular, Lower SEG, 51+, Brighton)

When prompted, the link between the SRN and economic growth was understood by some, especially those who already appreciated the financial effect that it could have on businesses. Thus the link was most likely to resonate with business representatives themselves, and those more astute individuals who already recognised the financial impact of the SRN on business and were therefore to some extent financially focussed. These participants saw that business costs can add up to affect the whole economy, and that the ability to move people and goods around is vital to a growing economy – and conversely, the inability to do so can have a negative impact on a wider scale.

“If we haven’t got a fluid network, then it’s like your arteries being blocked, so you can’t get stuff about and businesses would grind to a halt, so it’s really important that we’ve got a strategic road network to be able to, for the country to function efficiently.” (Business, Frequent, HGV, Local/National/International, King’s Lynn)

Other participants (the majority of individuals, cutting across demographics and social grades, and some business representatives) found the link between the SRN and economic growth plausible when it was suggested to them. However, as they were not thinking in a financial context to begin with, the link was less likely to resonate and the economic context remained far less salient for them than the ways in which the performance of the SRN affected them personally and directly.

The argument that the performance of the SRN affects the performance of the economy was therefore rarely recognised spontaneously. It resonated with and was understood by some more perceptive individuals and many business representatives, but while most other participants accepted it when it was suggested to them, they remained relatively unengaged with it.

Further prompting with a wider list of factors that might influence the performance of the economy led to a more nuanced view. Most participants identified two categories of ‘economic driver’:

- primary economic drivers of national importance, such as: creating new jobs; helping businesses through grants, incentives and tax breaks; increasing international and private sector investment; and growing the UK’s export market
- secondary economic drivers of local importance, such as: investing in local high streets; encouraging consumer spending; and boosting tourism to the UK

In this context, transport infrastructure in general, (which included the performance of the road network, rail network and international connections) tended to be seen more as a ‘driver of drivers’ than direct influence on the economy. Participants tended to feel that the SRN (and other transport networks) facilitates and supports primary drivers such as job creation, increased investment and growth in export markets, rather than driving the economy directly.

Business representatives tended to focus on the primary national economic drivers, quickly recognising that these elements are supported by transport infrastructure.

"We've got all these increasing private sector investments and helping businesses. There's going to be more industry, more goods and services, if there is more improvement in the road network... so connectivity is better."
(Business, Regular, LGV, Local/National, King's Lynn)

Among individuals, national economic drivers were more obvious to higher SEGs, older and frequent users. The resonance of local economic drivers often depended on their relevance to participants' regions – for example, boosting tourism resonated most in parts of the country where this is particularly important (e.g. Exeter, Fowey).

"Your tourism could be affected: in some areas of the country... that is the major part of their income. If tourists come from abroad and then get snagged up with traffic jams it's going to put them off. Cornwall has good tourism but some of their roads aren't too brilliant. A lot of this could have a damning effect." (Individual, Infrequent, Lower SEG, 51+, Exeter)

3.6 To what extent do individuals and businesses perceive problems that need solutions?

The discussions with individuals and business representatives showed that the key features that are desired of the SRN are that it is free-flowing, well maintained and safe. Experience of using SRN roads (and other major roads not in the SRN) suggested that these roads are indeed well maintained and pro-actively managed, and receive adequate investment, not least because the maintenance problems they perceive for other types of roads do not apply. This experience-based view is bolstered by the rational belief that roads in the SRN will be well maintained and will receive sufficient investment because of their importance to the UK, and because of the amount and speed of traffic they carry. The question of safety evoked similar responses. There were therefore few participants who felt that maintenance or safety are aspects of the SRN's performance that need to be greatly improved beyond the current standards.

The question of free-flowing traffic on the SRN was more pressing for many. Congestion was widely raised as an issue faced on the SRN, and businesses in particular recognised the real costs they face as a result of it. Moreover, many participants eventually came to appreciate the impact that severe congestion on the SRN could have on the UK economy, even if they were unlikely to see this link spontaneously. But despite this recognition that congestion on the SRN is an *issue*, and desire for a road network of national importance to be free-flowing, there was little feeling that congestion is a *problem* which requires immediate *investment* and *resolution*.

There were numerous reasons for this apparent paradox, but overall it resulted from the fact that individuals and business representatives formed their views from the *local experience* and *narrow perspectives* they had of the SRN, rather than a broader and more informed view of its importance to and potential impact on the UK as a whole. Over time the presence of congestion on the road has become accepted. The associated business costs are regarded as part of normal operating costs and are therefore absorbed by the business.

As discussed above, individuals tended to use the SRN for local, familiar journeys much more frequently than for longer-distance and less familiar journeys. They had developed a range of 'coping strategies' to minimise the impact of congestion on these journeys, largely based on local knowledge, and tended to feel this impact in personal rather than financial or economic terms. As a result, few seemed to feel that congestion on the SRN caused real problems for themselves, and in the absence of significant experience of the SRN elsewhere in the UK, most seemed to 'extrapolate' this view to cover the SRN nationally.

Moreover, increases in congestion had been incremental rather than sudden, and congestion was said to be largely predictable and consistent, which meant that journey times that are longer than they perhaps should be have become normalised and accepted. There was also a large amount of post rationalisation and fatalism in the discussions, suggesting that congestion is accepted as a 'fact of life' because the UK is a busy, densely populated country, so it is unsurprising that roads are becoming busier (views on public transport were similar).

More generally, most individuals appreciated how well most of the SRN roads they knew fulfilled the experiential positives (i.e., independence, convenience, control, autonomy etc.) of driving and avoided many of the more salient physical negatives (i.e. potholes, slow-moving vehicles etc). As such, congestion was 'buried' under appreciation of how good SRN roads are otherwise, and how much they fulfil the experiential positives.

Finally, despite a widespread perception that the SRN facilitates the movement of goods across the country at a conceptual level, few individuals linked the congestion they experienced in practice with impacts on businesses, let alone the wider economy, until this was suggested to them. Their focus was very much on the impact that congestion had on them personally.

Most business representatives had a similarly narrow perspective on congestion. They recognised the direct costs it could have for *their* businesses, but most had developed coping mechanisms that helped them to minimise and internalise these. Despite recognising costs for themselves, and even for their supply chain, few considered the impact of congestion on the wider economy, and most seemed to accept the status quo through a similar mix of fatalism, normalisation and adaptation as individuals.

The idea that congestion can readily be addressed with additional *investment* was not immediately credible to individuals and business representatives. As noted, investment was most strongly linked to spending on physical improvements to roads, and many participants seemed to regard congestion in terms of traffic management rather than upgrades or even maintenance to roads. They therefore queried how more investment could address congestion. Road widening was suggested as a way in which investment might ease congestion in locations where this had brought recent improvements, (e.g. Newcastle), or where there is particular reliance on one road (e.g. Kings Lynn), but the majority of participants did not see road widening and new roads as solutions for the long term. This suggests that the arguments that new roads can generate traffic and that some types of investment can be a short-term fix have been understood and accepted by at least some of the public.

"The actual road network is just so congested... we haven't moved with the times,... making extra lanes and widening motorways to four lanes instead of three and using the hard shoulders and things like this should've happened fifteen, twenty years ago not today because by the time they get the programme finished we'll need to look at another programme" (Business, Frequent, HGV, Local/National/International, King's Lynn)

Moreover, most believed that investment in major roads is already adequate – road works indicate that work is being done, the road surface and signage is generally good, and the SRN was seen as being too important for the government to let it fail – and they questioned the need for more. Very few spontaneously recognised that the SRN is an ageing asset (discussion on this had to be prompted amongst individual SRN users), and might need greater investment or funding just to maintain standards in future – there was widespread 'complacency' that enough is being done at the moment, as the current situation is acceptable, and that this will continue to be the case in the future.

Questions were raised by some about what will happen to revenues as some road users are incentivised to buy new greener vehicles that emit less and attract lower VED, whilst other users without access to these new technologies may drive less due to higher fuel prices/duties and so also pay less tax. These queries were confused by participants' belief that VED and fuel duty is hypothecated, or at least relates in some way to the amounts spent on the roads; the uncertainty and reactions to discussion on this point (as noted above) meant it was difficult to follow up on these questions in any detail.

"I mean these cars they're making now, there is no tax. So what's going to happen if in the future car tax doesn't pay for the road maintenance?"
(Individual, Regular, Lower SEG, 51+, Brighton)

"If they've got these low emissions, if everybody starts on these, they're going to have to get the money from somewhere." (Individual, Frequent, Upper SEG, 51+, Brighton)

Creating acceptance of a need for action

In considering how to define problems with the SRN which will help to create acceptance of a need for action, it is important to start with where people 'are'. Few individuals and business representatives perceived a problem with the SRN that requires an immediate solution. Safety, a key concern, was addressed through effective maintenance, especially in comparison to local roads. Congestion was an issue, but one which people had become used to and adapted to, so that it was not necessarily perceived as a problem. It was unclear to many individuals and business representatives what more investment could do to address SRN congestion, given the pressures facing all forms of transport infrastructure in this country and their assumptions about what investment could achieve. Moreover, most thought they paid enough for road use already, often via taxes they believed are hypothecated. The justification for *more* investment was therefore not clear to many.

If there is a view that this widespread perception of congestion on the SRN is inappropriate, and that it would be desirable for people to recognise that congestion as a problem that needs a solution, attention would need to be paid to these points. Any solutions presented to people would need to be clearly explained and credible to a sceptical and somewhat fatalistic and complacent audience. Since most people accept the current SRN situation, especially in comparison to other types of road in the UK, arguments made on the basis of issues such as past underinvestment, non-hypothecation, and the need for more investment to maintain standards in the future are unfamiliar and could be inflammatory. In thinking about these risks and the need for action, it may be possible to recontextualise issues with the SRN by:

- encouraging individuals and business representatives to think about future scenarios – i.e., what their life/business would be like in years to come if the performance of the SRN improves or deteriorates
- encouraging individuals and business representatives to see how the *economy* will be affected if the performance of the SRN improves or deteriorates, rather than simply themselves or their own businesses.

Though the connection to the economy was not immediately salient within the group discussions, there was evidence that links between the economy and the SRN are understood, if explained, and that focusing on the macro level picture helps move individuals and business representatives away from the contexts in which they accept the current situation. In this sense, the economy therefore has the potential to be leveraged as a rationale for increasing investment in the SRN, but how the argument is articulated needs careful consideration. In particular, the SRN was seen more as a 'driver of drivers' of the economy, with other, more salient factors (e.g. jobs creation, private investment) more directly associated with economic prosperity.

A key element of articulating the need for action will be informing and educating the public about the SRN: what it comprises and is designed to do; how it is managed; the issues and priorities for improvement; as well as the links between the SRN and the economy. The public will need to understand and value these points before discussion of investment options can be credible.

4. Appendix

4.1 Discussion Guide

INDIVIDUAL USERS DISCUSSION GUIDE

Aims are to understand:

- Perceptions and uses of roads in general
- How people interact with and experience the SRN, and the impact it has on them
- Views on the current and future challenges facing the SRN, and the need for improvement and investment
- Links between the SRN and the economy

Note to moderators:

It is very important that discussion gets beyond people's surface-level 'satisfaction' with the status quo regarding the SRN. The guide aims to achieve this by providing numerous ways to approach perceptions and use of the SRN, and views on the need for improvement and investment. It also incorporates numerous references to discussion held earlier, to allow moderators to challenge respondents if appropriate. As a result, there is some overlap between sections, and in later sections some points may already have been covered in previous discussion. Moderators therefore need to use their judgement to decide whether and how far questions in the later sections need to be pursued.

Protocol (participant-facing introduction to the research):

- About the research: TBC
- Length of discussion: 2 hours
- Audio recording
- Confidentiality and anonymity: their participation in and contributions to the research are kept strictly confidential, and they will not be identified to DfT

Introductions (10 minutes)

Researcher introduction

- Introduce self
- About TNS BMRB – independent research agency working on behalf of an organisation working in the travel and transport sector
- Confidentiality / anonymity
- Following MRS guidelines – right to refuse any question or end participation at any time.
- Agreement to record the discussion
- Any questions?

Participant introduction

- Name, age (if willing) and family set up
- Number/type and use of vehicles in household
- Best and worst thing about travelling by car

Perceptions and use of roads (10 minutes)

- Words associated with 'roads' and 'driving' in England – *prompt to elicit positives and negatives; flipchart and explore:*
 - How each word/association compares with the situation in other countries– and what this says about roads in England
 - Probe context of these experiences (e.g. personal vs business/ frequency of use)
 - Change in views/experience over time:
 - how long has it been like this; how was it different 5, 10, 20 years ago; why have things changed (if they have)?
 - how things might change in the future; what will roads be like when your children are your age; when will these changes take place?
 - Views/experience in different parts of England and abroad – how does their locality compare with other regions they know about, why do they think there are differences
- Awareness of different types of roads:

- *introduce list of roads (motorways, dual carriageways, A roads, B roads, C roads, country lanes, side roads, trunk roads)*
- Which of these roads would they call 'major roads' and which 'main roads'?
- What other words could they use to describe these roads?
- Which roads do not come under either of these descriptions – and what would they call these?
- Why would they choose to use each group of roads, as opposed to the others?

Investment in roads (5-10 minutes)

- What is understood by managing a road – *spontaneous, then probe on monitoring traffic, maintenance, clearing obstructions and accidents, managing road works, improvement and development*
- How well do they think England's roads are currently managed. Why?
- What is understood by maintenance of roads – what kinds of activity does this cover?
- What is understood by investment in roads?
- What does investment in roads achieve? Probe: for the individual, for society as a whole?
- What do they think of the current level of investment in England's roads is – e.g. adequate, appropriate, insufficient, the minimum required, over-generous; *discuss this:*
 - With regard to England's roads in general
 - With regard to **three** of the groups of roads identified earlier (always ask about the groups in which SRN roads appear. Rotate other types of road groups across the groups)
 - *Probe on reasons why they feel this way and priorities*

Understanding of the SRN (15 minutes)

Moderator note – look out for differences by DfT segment in speed of understanding and ability to perceive the SRN's wider impacts

- What do they understand by the term 'Strategic Road Network':
 - Which types of road would it include, and why?
 - Apart from road type, what would characterise the roads in the SRN – *if necessary, ask them to complete the sentence 'Roads in the SRN are...'*
 - Why would a road *not* be in the SRN?

- How self-explanatory do they feel the term 'Strategic Road Network' is; how confident are they in their assumptions about it
- In what senses do they imagine the roads in the SRN differ from other roads; *spontaneous, then probe on:*
 - The level of investment they receive
 - The extent to which they receive adequate investment
 - How they are managed and who is responsible for them
 - Their importance to individuals, businesses, England as a whole

Read out a description of the SRN, and hand out a list of roads in the SRN and map to show its extent across England

- How closely does this match what they had imagined
- What differences are there; anything surprising
- Did they expect these roads to be in the SRN – why / why not
- Now that they know these roads are in the SRN, can they think of anything about them that makes them different from other roads in the region
- Explore awareness and understanding of 'trunk road'
- KEY QUESTION: Why do you think some A roads are in the SRN (trunk roads) and some are not
- KEY QUESTION: How would you describe the A roads in the SRN to someone – what words would they use
- Is there a logic to what defines the SRN
- How does it change their thoughts about what the SRN is, investment in it, how it is managed, its importance

Use and experience of the SRN (35-40 minutes)

Explore journey planning activities – keep high level – main objective is to understand journey preferences and influences on decision-making for route choice

- How do they tend to plan their journeys? *Probe on:*
 - Planned vs. unplanned journeys
 - Use of planning aids (sat-navs, maps, online trip planners) vs personal experience
 - What journey preferences do they have?
 - Fastest route vs. shortest route;
 - Types of roads preferred / avoided

- When do they choose to use / avoid the SRN
 - Probe on alternatives vs. necessity

Give respondents a map showing which roads in their region are within the SRN, and a list of the SRN roads that pass through their region. Ask respondents to find roads they use on their regional map or list of roads (whichever is more comfortable for them), and mark each one to show:

- Whether they use it weekly, monthly or other
- Whether they are used for short, medium or long trips
- *Ask respondents to spend no more than **5 minutes** on this. When all have finished, ask:*
- What is understood by short, medium and long trips?
 - *Probe what is used to classify trip length – distance (miles) or time (minutes)*
 - Which trips are done regularly / irregularly
- *Discuss EITHER trip length OR frequency of road use; rotate across groups. Ask 2 or 3 respondents to think about SRN roads they use for short trips, 2 or 3 to think about SRN roads for medium trips, and 2 or 3 to think about SRN roads for long trips (OR weekly, monthly, other). For each type of road, discuss:*
- Reasons for use / whether there are available alternatives
- The experience of driving on them:
 - what is good and bad
 - differences by time and day / week
 - differences by type of trip (commuting, business, personal) and whether they were constrained by time (ie had to be somewhere by a certain time)
- How that experience has changed over the past 5, 10 or more years
- How the experience will change in the future
- How that experience compares with driving on other A/main (non-SRN) roads

Thinking about the SRN, discuss:

- What does the exercise/discussion tell you about the role of the SRN:
 - To you?
 - To your local area?
 - To the nation?
- Whether they underestimated or overestimated how much they use the SRN before the exercise/discussion and how/why the exercise/discussion has changed this
- How would they describe the SRN to someone else? Probe good and bad things.

The need for investment in the SRN (20-25 minutes)

- Bearing in mind everything discussed so far, what would they consider to be the most important aspects of an SRN road. *Ask them to complete the sentence 'It is really important that roads in the SRN are...'*
- To what extent do they believe the SRN roads in their region and nationally live up to those standards – and how, where and why do they fall short
- If they were in charge of the pot of money available to invest in the SRN, and they could decide how to use it, what would they decide that it would be spent on.

Split respondents into two groups, and ask them to rank the following and report back:

- Repair the road surface (potholes, cracks, bumps, patches)
- Speed up the repair process / road works
- Widen the roads
- Prevent deterioration due to bad weather
- Improve road signs and information
- Improve drainage
- Improve lighting
- Improve road safety
- Improve traffic flow / reduce congestion
- Reduce the volume of traffic on the roads
- Build new roads / bypasses
- Improve motorway junctions
- Improving connections between roads
- Speed up journey times
- Make journey times more predictable
- Improve the way accidents / delays are handled
- keeping network free from litter and debris
- making sure grass and foliage is kept at an appropriate length
- investing in information technology (notification of incidents / works and alternate routes)

- Bearing in mind everything discussed so far:
 - how necessary and urgent do they feel this (hypothetical) extra investment is – *challenge them if they seem more complacent than their previous comments would suggest*
 - what impact would this (hypothetical) extra investment have on individuals and England as a whole; how important are these impacts and why – *challenge them if they seem more complacent than their previous comments would suggest*
 - what would be the impact over the next 10 years of not investing more in the SRN, for individuals and England as a whole – *challenge them if they seem more complacent than their previous comments would suggest*
 - *what impact does the age of the SRN have on the need for investment? Probe need for maintenance or upgrading (eg junctions and extra lanes)*
- How much do they imagine it costs to maintain the SRN each year – nationally and in their region. *Probe how much they think a recent local repair/improvement scheme has cost*

Introduce problem of under investment – STIMULUS

- What do they imagine the impact of this to have been on the SRN, on them as individuals, and on England as a whole
- Having looked at the list, can they think of anything else that has changed about the SRN, or anything else that they would want to spend money on
- What do they imagine the impact of this will be in the future (as individuals and England as a whole)

Split respondents into two groups. Ask each group to decide amongst themselves:

- How they would describe the SRN to someone else – what it is, which roads are in it, what it is for, how you would know if you were on it
- How they would explain the underinvestment in the SRN to someone else – what facts and figures they would use as impactful examples/evidence
 - What are the most important aspects would they highlight
- What will happen if investment in the SRN *is not* increased, using local roads as examples if relevant
 - What are the most important aspects would they highlight
- What they expect will happen if investment in the SRN *is* increased, using local roads as examples if relevant
 - What are the most important aspects would they highlight

Ask each group to spend a few minutes discussing the task, then present back.

Economic growth (20 minutes)

- What do they understand by the term 'economic growth' – what it means, how it is measured, why it matters, why it gets talked about so much
- What do they believe drives economic growth – discuss as many factors as possible, and prioritise these
- How does economic growth affect people as individuals – what impact does growth, stagnation, recession etc have on them; what about communities and the nation as a whole

Show stimulus outlining different aspects of economic growth. Add anything else respondents have suggested. Ask respondents to rank these factors according to perceived importance.

Discuss the reasons for this ranking.

- What role do they imagine the SRN plays in supporting the UK economy and driving economic growth How do they think the SRN would support each of these factors – locally and/or nationally. Note: in relation to job creation, probe what this means (ie more jobs for roads construction workers vs wider job creation through improved access to local economies)
- How might the SRN affect the economy and growth, what impact could a better or worse performing SRN have
- Thinking back to the end of the previous section, when they articulated the need to investment in the SRN, what effect does this discussion of the economy have on their views of how best to describe the problem

The case for change, and close (5 minutes)

- Which aspects of the evening's discussion make the best case for additional investment in the SRN
- Is there anything else they would like to say about England's roads?

Thank and close

4.2 Discussion Guide

COMMERCIAL USERS DISCUSSION GUIDE

Aims are to understand:

- How businesses use, interact with and experience the SRN, and the impact it has on them
- Views on the current and future challenges facing the SRN, and the need for improvement and investment
- Links between the SRN and the economy / economic growth

Protocol (participant-facing introduction to the research):

- About the research: TBC
- Length of discussion: 1 hours
- Audio recording
- Confidentiality and anonymity: their participation in and contributions to the research are kept strictly confidential, and they will not be identified to DfT

Introduction (10 minutes)

Researcher introduction

- Introduce self
- About TNS BMRB – independent research agency working on behalf of an organisation working in the travel and transport sector
- Confidentiality / anonymity
- Following MRS guidelines – right to refuse any question or end participation at any time.
- Agreement to record the discussion

Participant introduction

- Name, role in business, nature of business – sector/industry, size (employees/turnover), number of sites, when established etc
- Role in relation to business's transport/travel/distribution activities etc
- Explore where they operate - locally, regionally, nationally and internationally.
- Explore where/how customer interactions take place (e.g. online, post, customer's premises and businesses premises)

- How has their business changed over the last 5 years,
- What are their expectations/ambitions for the business into the future (5, 10 years), and what will help/hinder them in this

Use of roads for business (10 minutes)

- Which types of vehicles are used by their employees for business purposes – cars, LGVs, HGVs, motorcycles, coaches, minibuses etc
- What business purposes are these vehicles used for – *spontaneous, then prompt on sales, distribution, employee travel, any others*
- How much travel do these purposes involve – local, national, international
- Which types of road are used for these purposes – minor roads, A roads, motorways etc
- What other modes of transport do they use to conduct their business. For what purpose
 - How has this changed over time / likely to change in future
- Does their business use roads in any other indirect ways – *spontaneous, then prompt on services they may use to conduct business, how customers interact with their business. If necessary, prompt further on couriers, delivery services, customer travel, any other*
- What impact does information about roads and the road network have on their business planning? *Spontaneous, then probe:*
 - What types of information, and from which sources, do they currently use when making their shorter and longer term business plans
 - How could the impact of this information be increased – what would make it more useful to them
- Explore role of roads in achieving future growth/ambitions for business – refer to those mentioned in previous section? Facilitators/barriers related to roads.
- *For those with international business* – compare using roads in England for business with using roads abroad for business:
 - Why do they think there are differences
 - What does this say about English roads and impact they have on their business
- Explore changes in transport use over last 5 years, and how transport usage might (or is expected to) change in the future – including a shift in the modes of transport they use

Investment in roads (5 minutes)

- Explore what is understood by managing a road. Probe different aspects: monitoring traffic, maintaining, clearing obstructions and accidents, managing road works, improvements
- How well do they think England's roads are currently managed. Why?
- What is understood by investment in roads?
- How does investment in roads benefit businesses – their own business, and businesses in England generally
- What do they think of the current level of investment in England's roads – e.g. adequate, appropriate, insufficient, the minimum required, over-generous; *discuss this*:
 - With regard to England's roads in general – and what suggests this to them
 - With regard to A roads and motorways – and what suggests this to them

Understanding and use of the SRN (10 minutes)

- What do they understand by the term 'Strategic Road Network':
 - Which types of road would it include, and why
 - Why would a road *not* be in the SRN
- How self-explanatory do they feel the term 'Strategic Road Network' is; how confident are they in their assumptions about it

Read out a description of the SRN, and show map to show its extent across England

- How closely does this match what they had imagined. Anything surprising?
- Now that they know these roads are in the SRN, can they think of anything about them that makes them different from other roads in the region; *spontaneous, then probe on*:
 - Quality, connectivity, reliability, size
 - The level of investment they receive
 - How they are managed and who is responsible for them
- Their importance to businesses
- Which of these roads do they think their business makes most use of, and why
- How much does their business rely on the SRN; for which of the business purposes discussed earlier do they imagine it is the most important, and why
- Hypothetical - what would happen if they couldn't use the SRN? Alternatives? Impact on business?
- Explore awareness and understanding of 'trunk road'
- Why do you think some A roads are in the SRN (trunk roads) and some are not

- How would they say SRN roads compare with similar types of roads in other countries – Europe, US, elsewhere; what is better and worse about them. What is the impact of these differences on their business.
- How would they describe the SRN to someone else, from a business perspective? Probe language used to describe which roads are in / out.
- How do they currently know they're on/using an SRN? How would they expect to know?

The need for investment in the SRN (15 minutes)

- Bearing in mind everything discussed so far, what would they consider to be the most important aspects of an SRN road from a business perspective. *Ask them to complete the sentence 'It is really important that roads in the SRN are...'*
- To what extent do they believe the SRN roads in their region and nationally live up to those standards – and how, where and why do they fall short
- If they were in charge of the money available to invest in the SRN, and they could decide how to use it, what would they decide that it would be spent on.
 - Repair the road surface (potholes, cracks, bumps, patches)
 - Speed up the repair process / road works
 - Widen the roads
 - Prevent deterioration due to bad weather
 - Improve road signs and information
 - Improve drainage
 - Improve lighting
 - Improve road safety
 - Improve traffic flow / reduce congestion
 - Reduce the volume of traffic on the roads
 - Build new roads / bypasses
 - Improve motorway junctions
 - Improving connections between roads
 - Speed up journey times
 - Make journey times more predictable
 - Improve the way accidents / delays are handled

- keeping network free from litter and debris
- making sure grass and foliage is kept at an appropriate length
- investing in information technology (notification of incidents / works and alternate routes)
- Anything else?

Bearing in mind everything discussed so far, from a business perspective:

- what level of investment is necessary in the SRN? Probe, less, the same or more. Why? What should be prioritised or cut back? Why?
- how necessary and urgent do they feel this level of investment is

what benefits would their proposed level of investment have; how important are these benefits and why From a business perspective, what would be the impact over the next 10 years of underinvestment in the SRN. Probe:

- their own business
- businesses in England generally
- wider economy

Introduce problem of under investment – STIMULUS

- What do they imagine the impact of this to have been on the SRN, on their business, and on English businesses as a whole
 - Have they ever attempted to quantify the impact on their business?
- What do they imagine the impact of this on business will be in the future, and why

Communications

- How they would explain the underinvestment in the SRN to someone else – what facts and figures they would use as impactful examples/evidence
 - What are the most important aspects would they highlight
- What will happen if investment in the SRN *is not* increased
 - What are the most important aspects would they highlight
- What they expect will happen if investment in the SRN *is* increased
 - What are the most important aspects would they highlight

Economic growth (10 minutes)

- What do they understand by the term 'economic growth' – what it means, how it is measured, why it matters, why it gets talked about so much
- What do they believe drives economic growth – discuss as many factors as possible, and prioritise these
- What do they believe hinders economic growth – discuss as many factors as possible
- How does economic growth affect their business, and business in general – what impact does growth, stagnation, recession etc have
 - Probe importance to own business

Show stimulus outlining different aspects of economic growth. Add anything else that has been suggested. Ask respondent to rank these factors according to perceived importance to business. Discuss the reasons for this ranking.

- What role do they imagine the SRN plays in supporting the UK economy and driving economic growth; what impact could a better or worse performing SRN have
- How do they think the SRN would support each of these factors. *Note: in relation to job creation, probe what this means (ie more jobs for roads construction workers vs wider job creation through improved access to local economies)*
- Thinking back to the end of the previous section, when they described the benefits of investment in the SRN and the impacts of past underinvestment, what effect does this discussion of the economy have on their views of both issues

The case for change, and close (5 minutes)

- Which aspects of the discussion make the best case for additional investment in the SRN, from a business perspective
- Is there anything else they would like to say about England's roads?

Thank and close

B roads

Trunk roads

Dual carriageways

Country lanes

A roads

C roads

Motorways

Side roads

4.4 Stimulus 2 – Descriptions

The Strategic Road Network is a national network comprising of England’s motorways and major ‘A’ roads or “trunk roads”. It provides links within and between cities, and connects England’s major ports, airports and rail terminals.

The following roads are part of the Strategic Road Network:-

Motorways

M1	M25.....	M40	M54.....	M602.....	M69.....
M11	M26.....	M42	M55.....	M606.....	A1(M)
M18	M27.....	M45	M56.....	M61.....	A194(M) ...
M180	M271...	M48	M57.....	M62.....	A3(M)
M181	M275...	M49	M58.....	M621.....	A308(M)....
M2	M3.....	M5	M6	M65.....	A404(M)....
M20	M32.....	M50	M6 Toll..	M66.....	A627(M)....
M23	M4.....	M53	M60.....	M67.....	A66(M).....
					A74(M)

Trunk roads

A1.....	A2070 ...	A36.....	A452.....	A55.....	A696.....
A1033 ...	A21	A38.....	A453	A550.....	A74.....
A1089 ...	A23	A4.....	A458	A556.....	Dartford
A11.....	A24	A40.....	A46	A56.....	Crossing
A12.....	A259	A404....	A47	A585.....	Bridge.....
A120	A26	A405....	A483	A590.....	Dartford
A13.....	A27	A41.....	A49	A595.....	Crossing
A14.....	A282	A414....	A5.....	A6.....	Tunnel.....
A160	A3	A417....	A50	A61.....	
A168	A30	A419....	A500	A616.....	
A174	A303	A42.....	A5036 ...	A628.....	
A180	A31.....	A421....	A5103 ...	A63.....	
A184	A3113 ...	A428....	A5111 ...	A64.....	
A19.....	A316	A43.....	A5117 ...	A66.....	
A2.....	A34	A446....	A5148 ...	A663.....	
A20.....	A35	A45.....	A52	A69.....	

The map shows you which parts of these roads are included in the Strategic Road Network.

Other parts of these roads and all remaining roads in England that do not comprise the Strategic Road Network are managed separately.

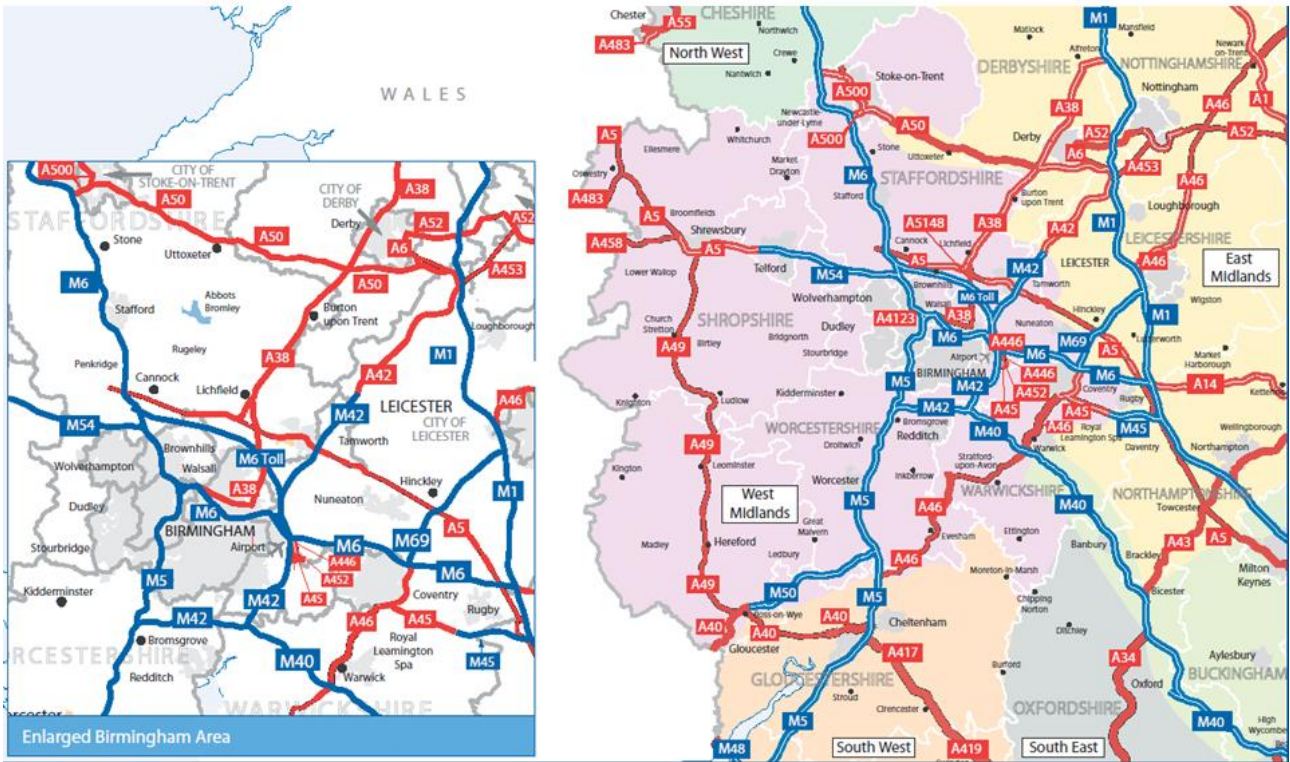
4.5 Stimulus 3 – Network Map



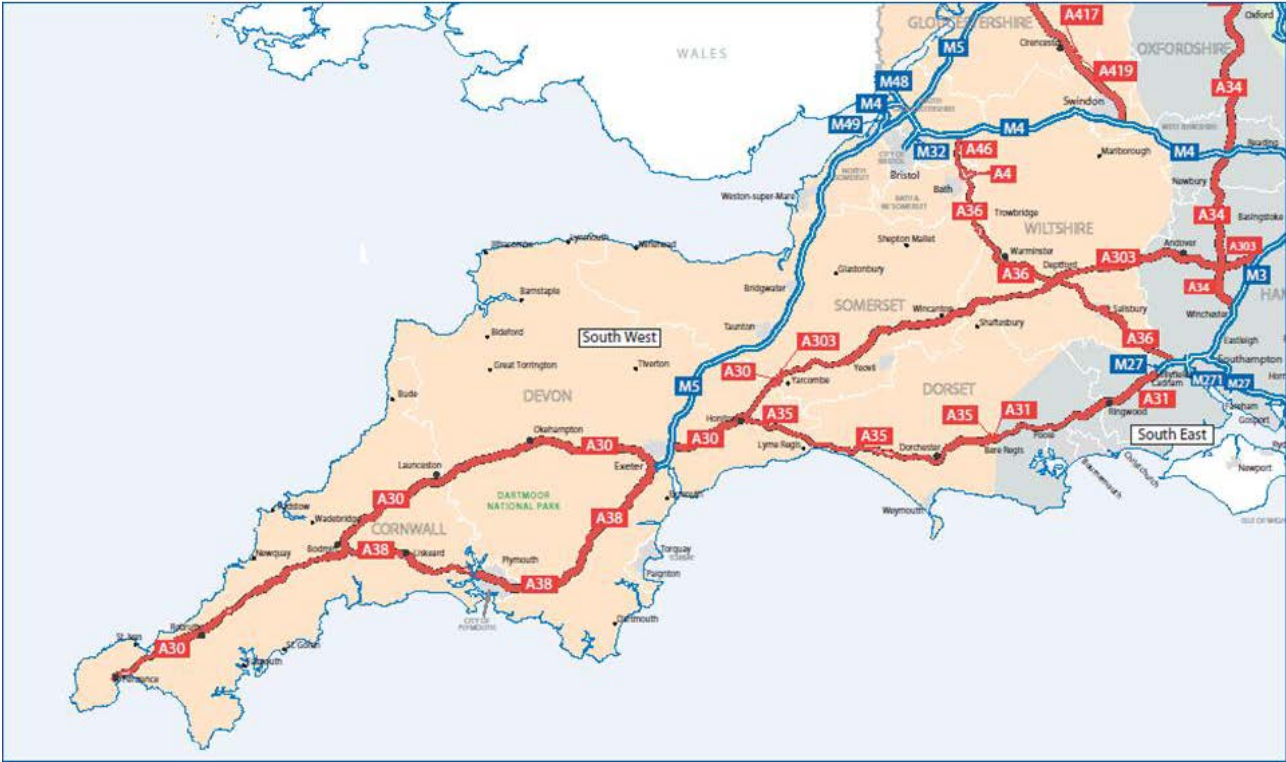
4.6 Stimulus 3 – South East NRUSS map

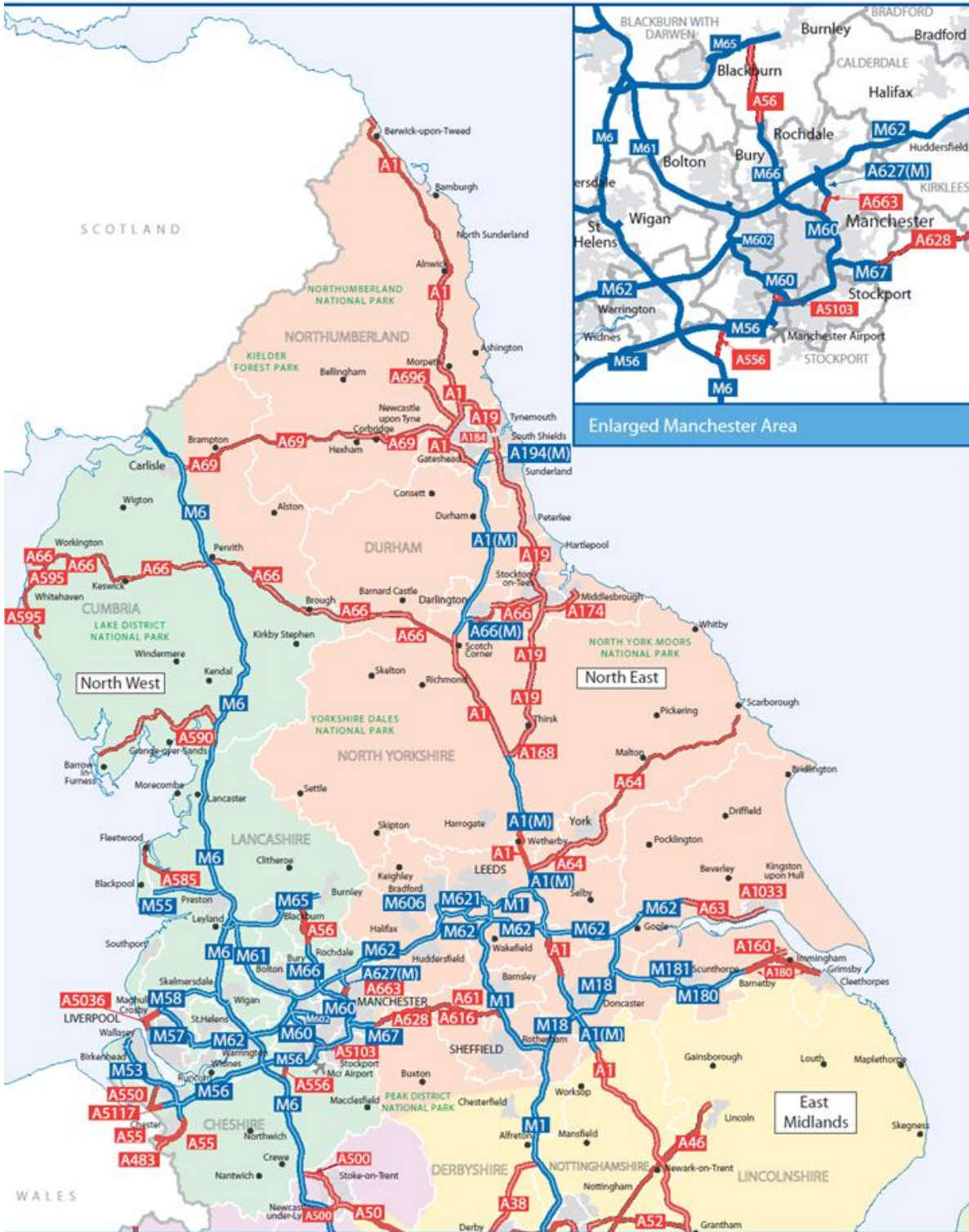


4.7 Stimulus 3 – Midlands NRUSS map



4.8 Stimulus 3 – South West NRUSS map





4.10 Stimulus 4 – Why greater investment is needed - SRN

- Repair the road surface (potholes, cracks, bumps, patches)
- Speed up the repair process / road works
- Widen the roads
- Prevent deterioration due to bad weather
- Improve road signs and information
- Improve drainage
- Improve lighting
- Improve road safety
- Improve traffic flow / reduce congestion
- Reduce the volume of traffic on the roads
- Build new roads / bypasses
- Improve motorway junctions
- Improving connections between roads
- Speed up journey times
- Make journey times more predictable
- Improve the way accidents / delays are handled
- keeping network free from litter and debris
- making sure grass and foliage is kept at an appropriate length
- investing in information technology (notification of incidents / works and alternate routes)

4.11 Stimulus 5 – SRN figures

- **Congestion costs money**

Congestion on the SRN is currently costing the economy more than £2bn a year in terms of lost time. A recent single incident which closed Junction 7 of the M25 at rush hour is estimated to have cost the economy £1.74 million, or £62,000 an hour.

- **Investment in the SRN has fallen in recent years**

Over the past two decades investment in the Strategic Road Network fell significantly. Between 1990 and 2001 spending in real terms on trunk road schemes fell from a peak of over £2bn per annum to less than £400m, although it has started to rise again reaching around £800million in 2012.

- **Britain's road network is behind those of other European countries**

The World Economic Forum's Global Competitiveness Index ranks Britain 24th out of 114 countries in terms of its road network – behind many of our European partners including France, Austria, Germany and Spain.

- **Standards across the SRN vary**

Standards across the network vary, a driver on the A1 can be driving on a four-lane motorway at one point and queuing at a 1960s roundabout less than 10 miles later.

- **Investment isn't keeping up with traffic volumes**

Since the early 1990s, investment has failed to keep pace with the growth in traffic. British motorists drive almost 50 billion miles more than 20 years ago. Since 2001 traffic in England has increased seven times faster on motorways than on other roads.

- **The SRN carries nearly a third off all traffic in England**

The network carries nearly a third of all traffic and two-thirds of freight traffic. In any one year period, approximately 85% of the public use the network as drivers

- **Traffic volumes are forecasted to increase**

It is estimated that traffic on the Strategic Road Network will increase by half over the next twenty years. In 2015 distance travelled by traffic on the SRN is estimated to be 88.4 billion vehicle miles. By 2035 this is forecasted to increase to 122.8 billion vehicle miles.

4.12 Stimulus 6 – Why greater investment is needed – SRN

- Creating new jobs
- Increasing levels of education
- Growing the UK's export market
- Helping businesses through grants, incentives, tax breaks
- Investing in local high streets
- Providing more vocational training
- Improving the road network
- Improving the rail network
- Improving international connections (airports and ports)
- Increasing international investment
- Boosting tourism to the UK
- Lowering or freezing interest rates
- Increasing private sector investment
- Encouraging consumer spending