Perceptions of the Trunk Road Network in Scotland

Research Study Conducted for Transport Scotland

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Introduction

This report contains findings from research conducted among Scottish adults on behalf of Transport Scotland. The research explored perceptions of the trunk road network in Scotland and the findings will be used to inform Transport Scotland's service level targets for the network.

Methodology

The research comprised two main components: exploratory qualitative research followed by two waves of a nationally representative survey.

Qualitative research

The qualitative research was conducted to identify and set the issues that are important to the public in terms of the service delivered on the trunk road network by Transport Scotland. The research comprised 4 focus groups among private motorists and 15 depth interviews with HGV drivers.

The focus groups were conducted between 15th and 22nd November 2006 in 4 different locations across Scotland, namely, Edinburgh, Stirling, Dumfries and Aviemore. The groups were recruited face to face from the general public by experienced Ipsos MORI interviewers. To ensure a cross-section of road users were represented, quotas were set on gender, age and frequency of road use. Additionally each group included at least one motorcyclist.

The interviews with HGV drivers were conducted between 15th November and 8th December 2006 in service stations across Scotland.

A topic guide was used to facilitate the focus groups and interviews. The guide was designed by Ipsos MORI, in consultation with Atkins (A copy of the guide is provided in Appendix A).

As the qualitative research was exploratory and intended to inform the design and content of the nationally representative survey, the findings are not discussed in detail in the present report. However, where appropriate, selected findings from the research are cited to illustrate or add depth to the survey results.

Nationally representative survey

The nationally representative survey covered various aspects of the trunk road network including:

- road conditions and defects
- road works
- congestion

- safety
- winter maintenance
- cycle lanes and footways
- priorities for improvements

A full copy of the survey questionnaire is provided in Appendix B.

Ipsos MORI interviewed a representative sample of adults in randomly selected Census Output Areas across Scotland. Fieldwork was conducted in two waves to reduce the potential impact of seasonal effects - the tendency for respondents to give different answers depending on the time of year. The first wave was conducted between 19th February and 19th March 2007, and the second between 2nd June and 9th July 2007. The sample sizes were 1,030 and 1,009 respectively giving an aggregate sample of 2,039. All interviews were conducted face-to-face in respondents' homes.

The data have been weighted by age, gender, working status and social class using 2001 ONS census data.

Presentation and interpretation of the data

The survey findings represent the views of a sample of Scottish adults, and not the entire population of Scotland, so they are subject to sampling tolerances, meaning that not all differences will be statistically significant. Throughout the report, differences between sub-groups are commented upon only where these are statistically significant i.e. where we can be 95% certain that they have not occurred by chance. A guide to statistical reliability is provided in the appendices.

Where percentages do not sum to 100%, this may be due to computer rounding, the exclusion of 'don't know' categories or multiple answers. Throughout the volume, an asterisk (*) denotes any value of less than half a percent.

Summary of Findings

Road conditions

- Just over half of respondents are satisfied with the general condition of trunk road surfaces, while around a third are dissatisfied.
- Asked how often they experience defects on trunk roads which make them feel unsafe, around half of respondents say 'on the odd journey', while around a quarter say 'on most journeys' and 17% say 'on around half of journeys'. Thirteen per cent say they never experience defects.
- Potholes are by far the most commonly experienced road defect, followed by uneven/bumpy surfaces.
- A majority of respondents say they never avoid using trunk roads because
 of defects. However, a quarter say they do so occasionally and 10% say
 they often or usually do.

Road works

- A majority of respondents agree that they come across road works too
 often and that road works cause a significant increase in journey time.
 Similarly, almost half agree that, 'road works are poorly planned in that
 when I divert onto alternative routes, I often encounter more road
 works'.
- However, almost as many respondents agree as disagree that 'lane restrictions and lane closures are kept to a minimum' and 'the length of time it takes for road works to be completed is reasonable'.
- Just under half of respondents feel that 'most road works should be done
 at night', while 39% feel that 'road works should be done at night in
 special circumstances'. Nine per cent feel that 'no road works should be
 done at night'.

Congestion

- Around two-thirds of respondents agree that their journeys on trunk roads are often delayed because of congestion and a similar proportion agree that most of the delays they experience occur during peak hours.
- A majority also say that they tend to adapt their travel plans if they know about congestion in advance 59% say they change their route and 60% say they change their travel time.

Safety

- Features of trunk roads that most make people feel unsafe include, potholes, uneven road surfaces, slippery roads, inadequate lighting and poor road markings.
- Signs informing drivers of the speed they are doing and speed cameras are regarded as the most effective measures for encouraging motorists to drive safely on trunk roads.

Winter maintenance

- Fifty-five per cent of respondents agree that roads are usually salted before ice and snow begins to form but around a third disagree.
- Similarly, whereas half agree that the time between snow falling and removal by ploughing is acceptable, 30% think otherwise.
- Just over half of respondents feel that current levels of winter maintenance are adequate, while 40% feel that improvements are required.

Footways and cycle lanes

- Fewer than three in ten respondents agree that footways are free from defects and that vegetation beside footways is well maintained.
- Similarly, only around four in ten agree that footways are of adequate width and provided in all the areas they are required.
- Significant proportions of respondents declined to offer their views on cycle lanes on trunk roads, perhaps indicating low awareness of this area of provision.
- Among those who did comment a quarter agree that 'All stretches of trunk roads have cycle lanes where they are needed', while 38% disagree. Meanwhile, roughly equal proportions of people agree and disagree that 'cycle lanes on trunk roads are wide enough' and 'cycle lanes on trunk roads are maintained with safe, undamaged surfaces'.

Priority areas for improvement

- Respondents were presented with a number of service standards on trunk
 roads and asked to a) indicate how important they perceived these to be
 and b) rate current provision. The results indicate that the smoothness of
 road surfaces and the amount of water on roads are top concerns for
 respondents but among the most poorly rated area of provision.
- The provision of lighting along roads and the quietness of roads also receive relatively poor ratings but lower levels of importance are attached to these areas of provision.

- Signage at decision making points stands out as an area that both received a high importance rating and is relatively well-regarded.
- Respondents were invited to select from a list, priorities for increased spending on the trunk road network. Improving the condition of road surfaces and improving safety emerge as the top responses, followed by reducing congestion, improving winter maintenance and improving drainage respectively.

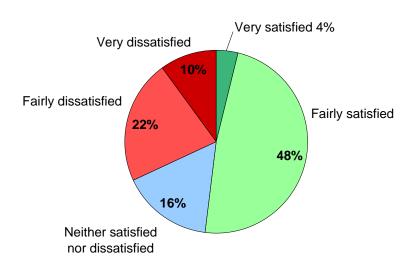
1. Road conditions

Overall satisfaction with trunk road surfaces

Just over half of respondents say they are satisfied with the general condition of trunk road surfaces, while around a third are dissatisfied and 16% are neither satisfied nor dissatisfied (figure 1.1).

Figure 1.1: Overall satisfaction with trunk road surfaces

Q How satisfied or dissatisfied would you say you are with the general condition of trunk road surfaces?



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1,843)

Source: Ipsos MORI

These findings compare favourably with results from other recent research by Ipsos MORI. For example, in a survey of Glasgow residents, conducted in spring 2007, only 27% of respondents were satisfied with road maintenance while 52% were dissatisfied. In a similar survey of Edinburgh residents, conducted in spring 2006, the comparable results were 31% and 47% respectively.

People who use trunk roads at least four days a week (hereafter referred to as 'frequent users') report lower levels of satisfaction with road surfaces than those who use them less often (46% versus 55% of those who use trunk roads once a month or less often – hereafter, 'infrequent users').

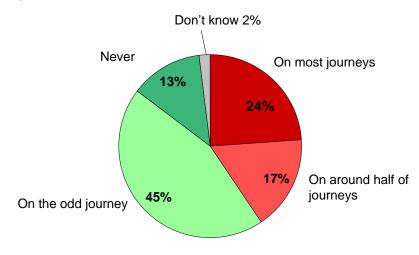
There is also some variation by region, with people in the South West and South East of Scotland expressing lower levels of satisfaction than those in the North West and North East (46% and 49% versus 54% and 59% respectively).

Road defects

Respondents were asked how often they experience defects on trunk roads which they feel are unsafe. As figure 1.2 shows, almost half say 'on the odd journey', while around a quarter say 'on most journeys' and 17% say 'on around half of journeys'. Just thirteen per cent say they never experience defects which make them feel unsafe.

Figure 1.2: Experience of defects on trunk roads

Q When using trunk roads how often, if at all, do you encounter road defects which you feel are unsafe?



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1,843)

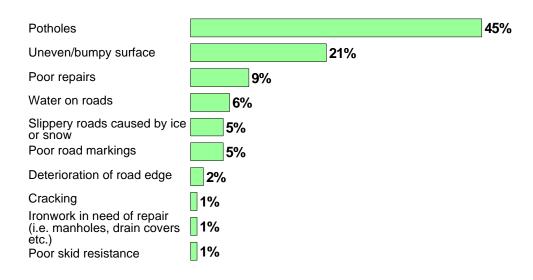
Source: Ipsos MORI

Consistent with their lower levels of satisfaction with road surfaces, frequent road users are among those most likely to say they experience defects 'on most journeys' (30% versus 15% of infrequent users) as are people in the South West and South East (28% and 26% respectively versus 20% in the North West and 18% in the North East).

As figure 1.3 (below) shows, potholes are by far the most commonly experienced road defect (mentioned by 45%), followed by uneven/bumpy surfaces (17%). No other specific defect is mentioned by more than one in ten respondents.

Figure 1.3: Types of defect experienced

Q What is the specific defect in most of these cases?



Base: All who have encountered road defects on trunk roads (1,584)

Findings from the focus group research suggest that experience of defects varies in different parts of the country. The Edinburgh group felt that conditions were good overall, although a few participants mentioned the problems of water on roads and inadequate drainage. In the Stirling group, perceptions were considerably more negative, with participants repeatedly referring to poor quality maintenance work and, again, drainage problems. The Aviemore and Dumfries groups were similarly dissatisfied with road conditions, although their complaints tended to focus more on the problem of potholes.

Source: Ipsos MORI

The survey respondents were asked how often, if at all, they avoid using trunk roads because of defects. The majority – 66% – say never. However, around a quarter (23%) say occasionally, and 10% say often (6%) or usually (4%). There was no sub-group variation in the results.

2. Road works

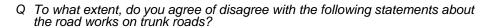
Attitudes towards road works

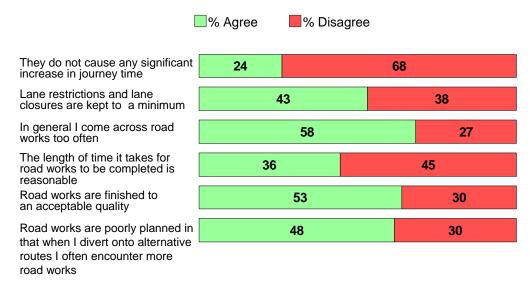
Respondents were presented with a battery of statements about road works on trunk roads, then asked to what extent they agree or disagree with each.

In some respects the results paint a fairly negative picture. Thus, a majority of respondents agree that they come across road works too often and that road works cause a significant increase in their journey time. Similarly, almost half agree with the statement 'road works are poorly planned in that when I divert onto alternative routes I often encounter more road works' (figure 2.1).

However, opinion is more divided in respect to the remaining statements. Thus, roughly as many respondents agree as disagree that, 'lane restrictions and lane closures are kept to a minimum' and 'the length of time it takes for road works to be completed is reasonable'.

Figure 2.1: Attitudes towards road works on trunk roads





Base: All who have travelled on a trunk road in Scotland in the last 12 months (1843)

Source: Ipsos MORI

The proportion of respondents agreeing that lane restrictions and lane closures are kept to a minimum is considerably lower than the comparable result (55%) from the 2004 Road Users' Satisfaction Survey, conducted on behalf of the Highways Agency. This may suggest that there are lessons to be learned from south of the Border concerning effective traffic management on trunk roads.

As can be seen from table 2.1 (below), frequent users of trunk roads tend to hold more negative attitudes towards road works than other respondents. In particular, they are much more likely to: agree that they come across road works too often and that road works are poorly planned; and *dis*agree that road works are finished to an acceptable quality.

Table 2.1: Attitudes towards road works on trunk roads, by frequency of use

To what extent do you agree or disagree with the following statements about road works on trunk roads?

	Freque	ent users	Infrequ	ent users
	% Agree	% Disagree	% Agree	% Disagree
Base: All who have travelled on a trunk road in the last 12 months (1843)				
They do not cause any significant increase in journey time	21	74	27	61
Lane restrictions and lane closures are kept to a minimum	41	42	43	33
In general I come across road works too often	64	22	51	31
The length of time it takes for road works to be completed is reasonable	35	50	34	39
Road works are finished to an acceptable quality	47	35	60	22
Road works are poorly planned in that when I divert onto alternative routes I often encounter more road works	54	27	37	36
		Į		

Source: Ipsos MORI

There is also notable variation by region. As table 2.2 shows, respondents in the South West and South East give consistently more negative responses that those in the North West and North East. Again, the differences are greatest in respect to the statements: 'I come across road works too often', 'road works are finished to an acceptable quality' and 'road works are poorly planned'.

Table 2.2: Attitudes towards road works on trunk roads, by region

To what extent do you agree or disagree with the following statements about road works on trunk roads?

	North West	North East	South West	South East
Base:	(223) %	(522) %	(676) %	(422) %
They do not cause any significant increase in journey time	30	30	19	20
Lane restrictions and lane closures are kept to a minimum	48	47	40	41
In general I come across road works too often	48	52	63	62
The length of time it takes for road works to be completed is reasonable	42	43	35	29
Road works are finished to an acceptable quality	56	62	48	48
Road works are poorly planned in that when I divert onto an alternative route I often encounter more road works	41	38	54	55
			C	T. 1401

Source: Ipsos MORI

Comments made in the focus group help to shed additional light on perceptions of road works. With regard to the planning of works, it was commonly suggested that there is consistently too much maintenance taking place on the network *at any one time*, with "little thought" appearing to go into this. Participants described specific occasions on which both their main and their alternative routes had been affected by road works, resulting in significant increases to their journey times:

At the moment, on the M8, there's road works at junction 2 that hold you back, so if you come off at Bathgate, but then there's road works just past junction 10 if you're heading towards Glasgow, which is a pain.

In discussing the length of time it takes for road works to be completed, participants commonly referred to instances when sections of road have been shut off for maintenance but very little work appears to have taken place. This was a source of considerable frustration for several people.

One thing that I don't understand is when they have these signs saying 'road works ahead, 30nph'. You'll drive there and there's traffic lights there then, all of a sudden, after 2 or 3 days, the traffic lights are put to the side. The sign

stays up but there's nobody actually working there. It could be for a fortnight and nobody's done nothing!

Following on from such comments, there was some suggestion that more road works should be done at night to reduce the burden on motorists. The issue of night working is considered more fully below.

With regard to the *quality* of road works, the focus group participants repeatedly commented that repairs are often completed to such a poor standard that they have to be redone, resulting in further inconvenience for drivers.

They're always doing it but its only 'cos they're patching up a [bad] job they've done a couple of months before. So they're patching it up instead of one decent job with money spent on it.

Wee fiesta vans with pots of chips: Road maintenance?! They'll do a pothole with that: pour in the tar, pour in the chips and when the first car goes through it, it scatters. And that's the end of the road works!

Support for night working

Respondents in the survey were informed that the cost of road works is paid for through taxation and that it costs more to do road works at night than during the day. They were then asked to what extent they support road works being done at night. Just under half (49%) feel that 'most road works should be done at night', while 39% feel that 'road works should be done at night in special circumstances'. Only 9% feel that 'no road works should be done at night'.

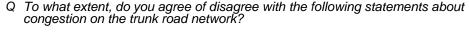
C2DE ('working class') respondents are more likely than their ABC1 ('middle class') counterparts to feel that *most* road works should be done at night (52% versus 47%). Support for this option was also disproportionately high among frequent road users (55% compared with 46% of infrequent users) and people in the South West of the country (56% compared with 49% in the South East, 41% in the North West and 43% in the North East).

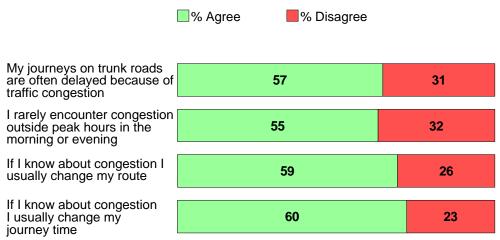
3. Congestion

As in the case of road works, respondents were presented with a series of statements about congestion on trunk roads and asked to what extent they agree or disagree with each¹.

As figure 3.1 shows, around two thirds of respondents agree that their journeys on trunk roads are often delayed because of traffic congestion, and a similar proportion agree that most of the delays they experience occur during peak hours. A majority also say that they tend to adapt their travel plans if they know about congestion in advance. Specifically, 59% say that they change their route and 60% say that they change their travel time.

Figure 3.1: Attitudes towards congestion





Base: All who have travelled on a trunk road in Scotland in the last 12 months (wave 2 only) (959)

Source: Ipsos MORI

As might be expected, frequent road users and those who travel during peak time are much more likely than other respondents to say their journeys are often delayed because of congestion. Frequent users are also among those most likely to say that they change their route if they have advance warning of congestion (table 3.1).

¹ These questions were put to respondents in the second wave of the survey only

Table 3.1: Attitudes towards congestion, by frequency of road use and travel time

To what extent do you agree or disagree with the following statements
about congestion on the trunk road network?

	My journeys on trunk roads are often delayed because of traffic congestion	I rarely encounter congestion outside peak hours	If I know about congestion I usually change my route	If I know about congestion I usually change my journey time
Base:		% agr	reeing	
Frequent users (571)	63	53	64	60
Infrequent users (171)	47	55	47	56
Travel during rush hour (130)	74	51	60	64
Travel off peak (454)	48	59	62	64
Travel both periods (343)	62	52	53	53
			Source: I	psos MORI

Looking at differences by region, people in the South East are more likely than those in other regions to say their journeys are often delayed because of congestion (66% versus 54% in the South West, 57% in the North West and 51% in the North East) and that if they know about congestion they usually change their route (66% versus 52% in the North West, 55% in the North East and 60% in the South East).

Congestion was a recurring theme in the focus group discussions, with participants in broad agreement that trunk roads are not a reliable means of "getting from A to B". The perceived main cause of congestion was that roads are simply not wide enough to accommodate the volume of traffic they carry. The number of heavy goods vehicles using the roads was highlighted as particularly problematic in this respect:

It seems to be a fragile system. One lorry breaking down can cause mayhem.

Most loaded trucks nowadays can stop quite quickly if they are doing 50 mph but on the A9 it says these artics are only supposed to be doing 40. If they are caught going faster they are reprimanded for it. That's causing huge hold ups on the road. This is causing accidents.

The focus group participants also made a number of suggestions as to how congestion might be better tackled in the future. These included, increasing the number of lanes on the road – the HGV drivers favoured dedicated HGV lanes – making more use of CCTV to tackle congestion *before* it turns to gridlock, and introducing variable speeds.

Variable Message Signs were also mentioned, although there was a perception that these are not always employed as effectively as they might be.

When you are travelling south, it says "Orkney Ferry not running due to high winds!"

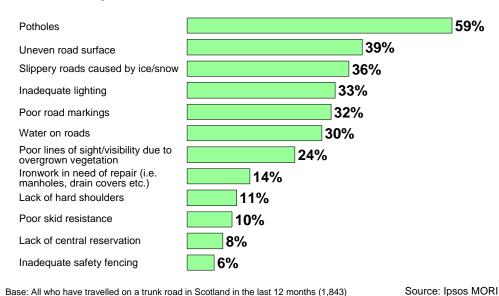
4. Safety

What makes drivers feel unsafe?

Respondents were asked to select from a list, any features of trunk roads that make them feel unsafe. Reinforcing findings reported above, the most common response was potholes, mentioned by around three in five respondents. This was followed by uneven road surfaces (39%), slippery roads (36%), inadequate lighting (33%) and poor road markings (32%) (figure 4.1). In the focus groups, respondents emphasised that some road markings are particularly difficult to see which it is raining.

Figure 4.1: Features of trunk roads which make road users feel unsafe

Q Which one of the following related to the road itself make you feel unsafe when travelling on the trunk roads?



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1,843)

Female road users are more likely than their male counterparts to mention slippery roads (40% versus 31%) and inadequate lighting (38% versus 27%).

Predictably, mention of most of the problems is also higher among frequent users than among infrequent users. For example, 65% of frequent users mention potholes, compared with 47% of infrequent users.

Analysis by region reveals that people in the North East are more likely than those in the South West and South East to mention slippery roads caused by ice/snow, but less likely to mention potholes, uneven road surfaces and poor road markings (table 4.1).

Table 4.1 Features of trunk roads which make roads users feel unsafe, by region Which of the following, related to the road itself, make you feel unsafe when travelling on trunk roads?

	North West	North East	South West	South East
Base:	(223) %	(522) %	(676) %	(422) %
Inadequate lighting	30	31	35	33
Lack of central reservations	8	7	9	8
Lack of hard shoulders	10	10	10	14
Inadequate safety fencing	6	5	7	6
Uneven road surface	41	31	41	43
Potholes	59	54	62	58
Ironwork in need of repair	15	13	15	14
Poor visibility due to overgrown vegetation	27	20	24	26
Poor road markings	31	26	34	38
Slippery roads caused by ice/snow	37	38	32	37
Poor skid resistance	12	10	10	11
Water on roads	33	31	28	31
			Source:	Ipsos MOI

When the issues of safety on trunk roads was discussed in the focus groups, specific roads were singled out for criticism. The A9 was widely regarded as "an accident waiting to happen". The road was felt to be too narrow in places for the volume of traffic it carries, as well as badly lit, and there was repeated suggestion that it should be made into a dual carriageway.

Strangers to the area come up the A9. They are on single carriage way then dual carriageway, and numerous accidents have happened because people are overtaking and the dual carriageway is finished before they realise it.

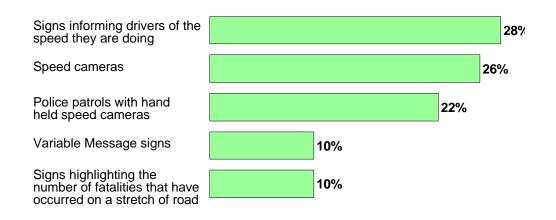
In the Stirling group, participants was particularly vocal about the Dumbarton Road which, they pointed out, is often water logged and slippery. And in the Dumfries group there was repeated mention of the A75 which was seen as having a lot of "inconsistencies" – it was noted that whereas some parts of the road have been improved and made safer over the years, other sections remain precarious.

Perceived effectiveness of safety measures

Respondents in the survey presented with a list of measures aimed at encouraging motorists to drive safely on trunk roads, then asked which one of these they believe to be most effective. As figure 4.2 shows, around three in ten mention signs informing drivers of the speed they are doing, and a similar proportion mention speed cameras. Then next most common response is police patrols with hand-held speed cameras, mentioned by 22%.

Figure 4.2: Perceived effectiveness of different safety measures

Q Which one of the following, if any, would you say is the most effective in encouraging motorists to drive safely on Scotland's trunk roads?



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1,843)

Source: Ipsos MORI

Findings from the focus groups help to elucidate considerations underpinning these results. In particular, participants repeatedly suggested that signs informing drivers of the speed they are doing are particularly effective because they have a more *enduring* impact on behaviour than speed cameras.

You tend to register it and it lasts for longer. The effectiveness of a speed camera is about 100 yards

In the survey, the perceived effectiveness of the different safety measures varies among different sub-groups of respondents. Most notably, young people aged 18 to 34 years are more likely than older groups to mention police patrols with hand-held cameras (31% of people aged 18 to 24 years and 29% of people aged 25 to 34 years versus, for example, 18% of people aged 35-54 years).

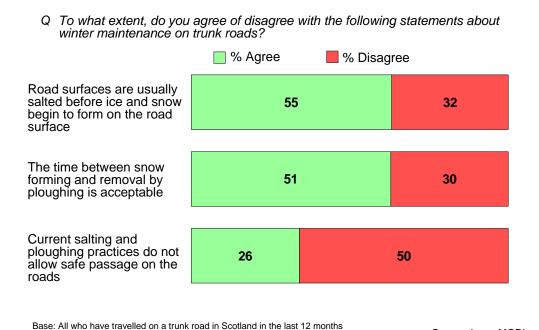
People in the South West and South East are more likely than those in the North West and North East to mention speed cameras (32% and 27% versus 19% and 22% respectively), whereas those in the North West and North East are more likely to mention signs informing drivers of the speed they are doing (33% in each case compared with 25% in the South West and 27% in the South East). Variable Message Signs are mentioned by twice as many people in the North West as in the South East (14% versus 7%).

5. Winter maintenance

Perceived effectiveness of winter maintenance practices

Views are somewhat divided about the effectiveness of winter maintenance practices on trunk roads. Thus, whereas 55% agree that roads are usually salted before ice and snow begins to form on the road surface, around a third disagree. Similarly, half agree that the time between snow falling and removal by ploughing is acceptable but 30% think otherwise (figure 5.1).

Figure 5.1: Perceptions of winter maintenance practices on trunk roads



Males are more likely than females to agree that roads are usually salted before ice and snow being to form (60% versus 51%) and that the time between snow forming and removal by ploughing is acceptable (55% versus 46%). Similarly, they are more likely to *dis*agree that current salting and ploughing practices do not allow safe passage on the roads (54% versus 46%).

Source: Ipsos MORI

People in the South West are more likely than those in the North East and South East to disagree that the time between snow forming and removal by ploughing is acceptable (34% versus 29% in the North West, 27% in the North East and 27% in the South East).

In the focus group research, the Aviemore participants discussed the issue of winter maintenance at some length. They felt that practices such as gritting and ploughing have been cut back in recent years and that this is compromising drivers' safety. A few people cited specific occasion on which they or someone they knew had been involved in accidents caused by ice or snow on the road.

[When the Council used to control the roads] they used to start at 5 in the morning and they'd work according to the weather. If it was heavy snow, they'd work late at night or start early in the morning. They're not allowed to do it now. Whip up the snow gates, cut the cost!

My brother was working through in Aviemore and because he'd [stopped work] at a certain time, after 11pm, he came off the road and he was off work for months.

More winter maintenance?

The survey respondents were informed that the cost of winter maintenance is paid for through taxation, before being asked whether they felt the service should be increased or remain at its existing level. Just over half (52%) say that current winter maintenance practices are sufficient, while 40% say increases are required.

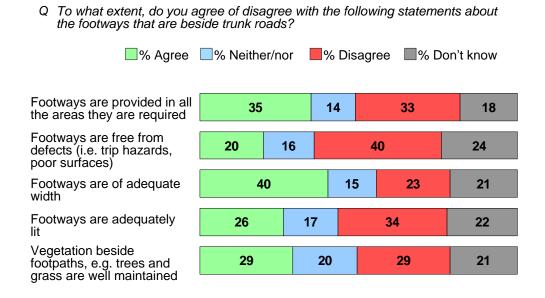
Consistent with other findings, women are more likely than men to favour an increase in winter maintenance practices (43% versus 37%) and frequent users are more likely to do so than infrequent users (44% versus 38%). Views also differ by region, with people in the South East being significantly less in favour of increases than those in other regions (33% versus 42% in the North West, 41% in the North East and 44% in the South West).

6. Footways and cycle lanes

Footways

In general footway provision on the trunk road network is poorly regarded. As figure 6.1 shows, fewer than three in ten respondents agree that footways are free from defects and that vegetation beside footways is well maintained. Similarly, only around four in ten agree that footways are of adequate width and provided in all the areas they are required.

Figure 6.1: Perceptions of footway provision on the trunk road network



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1843)

Source: Ipsos MORI

Table 6.1 presents the results by region. It shows that:

- people in the South West and South East are more likely than those in the North West to agree that footways are provided in all the areas they are required;
- those in the South West are more likely than those in all other regions to disagree that footways are free from defects;
- the perception that footways are adequately lit is more widely held in the South West and South East than in the North West; and
- people in the North West and South West are more likely than those in the North East and South East to disagree that vegetation beside footways is well maintained.

Table 6.1: Perceptions of footways, by region

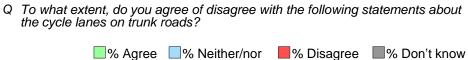
To what extent do you agree or disagree with the following statements about the footways that are beside trunk roads?

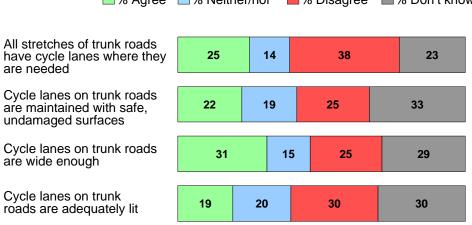
	North West	North East	South West	South East
Base:	(223) %	(522) %	(676) %	(422)
Footways are provided in all the areas they are required	25	32	39	37
Footways are free from defects	20	21	21	19
Footways are of adequate width	34	40	45	37
Footways are adequately lit	20	24	29	27
Vegetation beside footways is well maintained	26	29	30	28
			Source:	Ipsos MOR

Cycle lanes

Respondents were presented with a number of statements about the standard of cycle lane provision on trunk roads and asked to what extent they agreed or disagreed with each. A steady quarter to a third of respondents declined to offer an opinion either way, perhaps indicating low awareness of this area of provision. Among those who did provide views, a quarter agree that 'All stretches of trunk roads have cycle lanes where they are needed, while 38% disagree. Similarly, 19% agreed that cycle lanes on trunk roads are adequately lit while 30% disagree. For the remaining statements, views are even more divided, with roughly as many respondents agreeing as disagreeing that 'cycle lanes on trunk roads are wide enough' and 'cycle lanes on trunk roads are maintained with safe, undamaged surfaces' (figure 6.1 below).

Figure 6.1: Perception of cycle lane provision on trunk roads





Base: All who have travelled on a trunk road in Scotland in the last 12 months (Wave 2 only) (959) Source: Ipsos MORI

7. Priority areas for improvement

Respondents were presented with a list of service standards on trunk roads then asked to indicate how important they perceive these to be, by giving each a score of 1 to 10. A score of 1 indicates 'not at all important' and a score of 10 indicates 'absolutely essential'. The mean scores for each of the service standards are compared in the first column of table 7.1 (below).

Clearly, *all* of the service standards are perceived to be important, with the lowest mean score standing at 6.69. However, in relative terms the *greatest* importance is attached to 3 of the standards, namely: 'Road surface should be smooth and clear of defects', 'Road marking should be clearly visible at all times' and 'There should be signs giving clear directions at all decision making points'. In comparison, a relatively low level of importance is attached to, 'The road surface should be quiet to travel on' and 'Lighting should be provided along all trunk roads' (table 7.1).

For each service standard, respondents were also asked to *rate* current provision, again using a scale of 1 to 10, with 1 indicating extremely poor and 10 indicating extremely good. Mean ratings are provided in the second column of table 7.1. Signage at decision making points and the visibility of road markings receive the highest ratings with mean scores of 7.30 and 7.07 respectively. Meanwhile, the lowest ratings are for the smoothness of road surfaces (5.88) and the availability/reliability of Variable Message Signs (6.20).

Table 7.1: Service standards on trunk roads – importance and ratings

	Importance	Rating
Base: All respondents who have travelled on a trunk road in the last 12 months (1843)	Mean S	core
There should be signs giving clear directions at all decision making points	9.11	7.30
Variable Message Signs should be available at regular intervals to give warning of congestion and delays	8.01	6.20
Road markings should be clearly visible at all times	9.36	7.07
The road surface should be free from litter and debris	8.68	6.87
The road surface should be quiet to travel on	6.69	6.52
Lighting should be provided along all trunk roads	7.46	6.55
Road surface should be free of standing water	8.57	6.22
Road surface should be smooth and clear of defects	9.28	5.88
Vegetation in verges and central reserve should be	8.38	6.65

6.78

managed to assist visibility

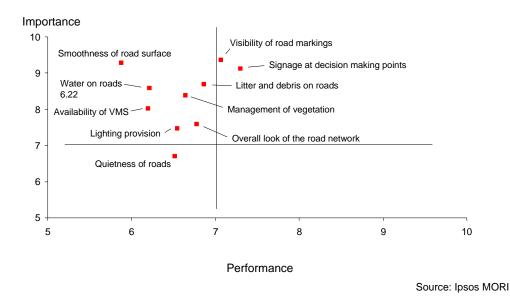
The overall road network should look good 7.58

We can summarise the above findings, by plotting the perceived importance of the different service standards against the mean ratings given to each. The resulting scatter-chart enables us to identify, at a glance, priority areas for improvement (figure 7.1 below). The higher up the chart a service standard is, the more important it is perceived to be. And, the further to the right an item is, the more highly it is rated. Thus, services which are viewed as most important and which are rated highly appear towards the top right quarter of the chart, while services which are deemed to be less important and which receive a poor rating appear towards the bottom left of the chart, and so on.

The chart clearly shows that the smoothness of road surfaces and the amount of water on roads are key concerns for respondents but among the most poorly rated areas of provision. The availability of Variable Message Signs similarly appears towards the top right quarter of the chart and thus might also be considered a priority area for improvement.

The provision of lighting along roads and the quietness of road surfaces also receive relatively poor ratings but a lower level of importance is attached to these areas of provision. Meanwhile, signage at decision making points stands out as an area that both receives a high importance score and is relatively well regarded.

Figure 7.1: Service standards on trunk roads – importance versus ratings



Beyond these aggregate level findings, there was some sub-group variation in ratings of the various service standards. As table 7.2 (below) shows, people in the South West and South East give higher ratings than those in the North East on almost all of the service standards, including those relating to the amount of litter and debris on road surfaces, the quietness of the road surface, the presence of water on roads, the presence of defects, the management of vegetation and the

overall look of the road. Meanwhile, the provision of lighting along trunk roads receives lower ratings in the North West than in all other areas.

Table 7.2: Ratings of service standards, by region

North West	North East	South West	South East
(223) %	(522) %	(676) %	(422)
7.46	7.51	7.16	7.16
6.57	6.21	6.18	6.02
7.17	7.26	7.09	6.75
6.92	7.10	6.84	6.62
6.48	6.74	6.40	6.44
6.00	6.64	6.60	6.64
6.27	6.45	6.13	6.06
6.28	6.18	5.63	5.71
6.51	6.87	6.57	6.59
6.62	7.06	6.65	6.75
	(223) % 7.46 6.57 7.17 6.92 6.48 6.00 6.27 6.28 6.51	(223) (522) % % 7.46 7.51 6.57 6.21 7.17 7.26 6.92 7.10 6.48 6.74 6.00 6.64 6.27 6.45 6.28 6.18 6.51 6.87	(223) (522) (676) % % % 7.46 7.51 7.16 6.57 6.21 6.18 7.17 7.26 7.09 6.92 7.10 6.84 6.48 6.74 6.40 6.00 6.64 6.60 6.27 6.45 6.13 6.28 6.18 5.63 6.51 6.87 6.57

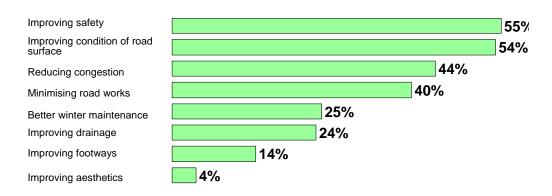
Source: Ipsos MORI

In addition to being asked to rate different service standards, respondents were invited to select, from a list, priorities for increased spending on the trunk road network. Consistent with the scatter chart analysis, improving the condition of road surfaces, and improving safety, emerge as the top responses. These are followed by reducing congestion, minimising disruption, improving winter maintenance and improving drainage respectively. Improving footways and improving the aesthetics of the network emerge as relatively low priorities (figure 7.1).

Source: Ipsos MORI

Figure 7.1: Priorities for increased spending on trunk roads

Q Which two or three, if any, of the following should be priorities for increased spending on the trunk road network?



Base: All who have travelled on a trunk road in Scotland in the last 12 months (1,843)

Respondents in the North East and North West are more likely than those in other regions to prioritise improvements to winter maintenance (31% in both regions versus 22% in the South West and 19% in the South East). Meanwhile, those in the North West are also more likely to mention improving drainage (32% versus for example 20% in the North East).

8. Transport Scotland

Asked who they think has responsibility for the trunk road network in Scotland, only 2% of respondents² mention Transport Scotland. As figure 8.1 shows, the most common responses are local councils, followed by the Scottish Executive and private contractors.

Notwithstanding these findings, a third (32%) of respondents say they had heard of Transport Scotland before taking part in the survey.

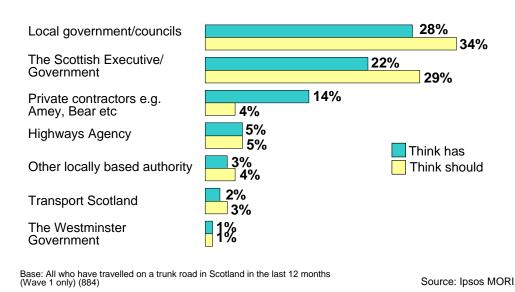
In terms of who they think *should* have responsibility for the trunk road network, around a third of respondents say local councils and 29% say the Scottish Executive. No other body is mentioned by more than 1 in 10 respondents – Transport Scotland is mentioned by only 3% (figure 8.1). The emphasis on local control echos findings from the focus groups where participants suggested that local authorities are better placed than national agencies to ensure that local needs and priorities are identified and acted upon:

Would it not be sensible to have individual organisations for set areas that can highlight particular problems?

What's the point in someone down there deciding in a little office what can be done? We're the one's that's driving on [the roads], not them.

Figure 8.1: Responsibility for the trunk road network

- Q Who do you think has day to day responsibility for the trunk road network in Scotland?
- Q And who do you think should have day to day responsibility for the network?



² These questions were put to respondents in the first wave of the survey only



Appendices

Appendix A: Topic guide

Customer Expectation Research for Transport Scotland Final topic guide – General public

Introduction

- Thank participants for agreeing to take part, session should last 90 minutes.
- Explain purpose of research to explore perceptions and aspirations with regard to roads in Scotland
- Introduce self, Ipsos MORI, Atkins/Scottish Executive
- Anonymity of respondents and Market Research Society code of conduct and Data Protection Act
- Permission to audio record all confidential
- Informal discussion, feel free to change opinion, provide examples from real life

Participant introductions (5mins)

- Give first name, where live, how long lived in area and what is their main mode of transport (for work/leisure)
- What other modes of transport used? PROBE FOR car, van, HGV, coach, motorbike, bicycle, walking, horse
- How often do they use these modes of transport

Journeys around Scotland (10mins)

MODERATOR EXPLAIN: I'D LIKE TO START OFF BY ASKING YOU TO THINK ABOUT JOURNEYS YOU HAVE TAKEN AROUND SCOTLAND.

- What makes a good journey?
- And what makes a bad journey?
- IF MENTION ROADS PROBE FOR:
 - o Any differences between local roads and other main routes
 - Are roads better/worse in different parts of the country?

MODERATOR EXPLAIN: I'D NOW LIKE TO FOCUS THE DISCUSSION ON ROADS IN PARTICULAR

Awareness and general perceptions of trunk roads (15 mins)

• Do you know what trunk roads are? PROBE FOR specific examples

SHOW PARTICIPANTS MAP OF TRUNK ROAD NETWORK AND EXPLAIN THAT TRUNK ROADS ARE STRATEGIC ROUTES OF NATIONAL IMPORTANCE THAT CATER FOR THE THROUGH MOVEMENT OF ALL LONG DISTANCE TRAFFIC. THE NETWORK INCLUDES ALL MOTORWAYS (M ROADS) AND ALL PURPOSE ROADS (A ROADS).

- what do you understand by the term 'trunk road network? What features do you think this includes. PROBE FOR: roads, structures, lighting, safety fences, embankments etc.
- How often do you use these roads and why?
- What would be the features of an ideal journey on a trunk road? MODERATOR PROBE FOR HOW FAR FROM THIS IDEAL THE REALITY IS
- TRUNK ROAD PRIORITIES EXERCISE: SPLIT GROUP INTO TWO SMALLER GROUPS AND HAND OUT CARDS WITH POTENTIAL AREAS OF INVESTMENT ON. MODERATOR NB: GIVE RESPONDENTS THE OPTION OF WRITING OTHER INVESTMENT AREAS ON CARDS IF THEY FEEL THERE ARE GAPS.

Better road surfaces

Better quality road maintenance

More warning about maintenance

Better co-ordination of maintenance works in different areas

Better signage

Better information for motorists on congestion or possible delays

Widen roads where there is a lot of congestion

Wider reaching trunk road network/more motorways

Build more bypasses

More roadside amenities

More attention to environmental issues such as noise, air quality, litter and debris

Better road lighting

Better junction layout

Dedicated HGV lanes

Better breakdown facilities

More features of interest on the routes

Other

PROVIDE EACH PARTICIPANT WITH 5 STICKY LABELS. ASK RESPONDENTS TO IMAGINE THEY HAVE A POT OF MONEY (SYMBOLISED BY THE STICKY LABELS) WHICH THEY NEED TO ALLOCATE TO AREAS OF INVESTMENT WHICH THEY FEEL SHOULD BE PRORITISED. ASK THEM TO ATTACH LABELS TO THE CARDS TO INDICATE THE AMOUNT OF SPENDING THEY THINK SHOULD BE ALLOCATED TO EACH AREA.

Road conditions (10 mins)

MODERATOR EXPLAIN: I'D NOW LIKE TO FOCUS ON SOME SPECIFIC ASPECTS OF THE TRUNK ROAD NETWORK. FIRST THE CONDITION OF ROADS

- What do you think about the condition of trunk roads i.e the road surfaces?
- Does the condition of trunk roads vary in different part of the country?



 MODERATOR: GIVE RESPONDENT CARDS FEATURING DIFFERENT ROAD DEFECTS AND ASK THEM TO RANK FROM THOSE CAUSING THEM MOST CONCERN TO THOSE CAUSING THEM LEAST CONCERN

Cracking

Potholes

Slipperiness

Roughness,

Unevenness (bumpy),

Patches

Ponding

Noise,

Appearance

Litter, debris

- o Why have you ranked them in this way?
- o Do these conditions occur on the roads we have been discussing?
- Do you avoid using certain trunk roads because of road conditions? Which?

Road maintenance (10 mins)

MODERATOR: NEXT, I'D LIKE TO FOCUS ON ROAD MAINTENANCE ON TRUNK ROADS

Road works are done to maintain the overall condition of the road surface and also to service utility services such as water, electricity and gas pipes.

- How do you feel about the amount of road works on the trunk road network? It is too little, too much or about right? Why?
- And what about the quality of the work that is carried out? Do you feel this is generally good or bad? Why?
- Do you think drivers receive sufficient forewarning of maintenance works? Why/not? What type of warning should they get?
- Do you think maintenance works on different parts of the trunk road network are sufficiently well co-ordinated. Why/not?

Customer care (2 mins)

- Have you ever reported a maintenance problem on trunk roads? IF YES: How did you go about doing this?
 - o If YES: Do you feel it was dealt with in a reasonable time?
 - o IF NO: What do you feel would have been a reasonable timeframe?

Safety issues (10 mins)

- How safe would you say you feel when travelling on Scotland's trunk roads? Why is that? What makes you feel safe/unsafe PROBE FOR: perceived risk of accidents, perceived danger of waiting at the roadside for emergency assistance etc.
- Does it vary on different parts on the network?
- Does this vary at different times of the day/week/year?
- Have you ever avoided using trunk roads because of issues of safety
- There are a number of measures in place to promote safely on Scotland's trunk road networks:
 - o Lighting
 - Signage standard signage, variable signs
 - Speed cameras

FOR EACH ASK:

- o How effective or ineffective do you think this is in promoting safety? Why?
- How could it be improved
- Apart from these things we have just discussed, what, if anything would you like to see done to make the trunk road network safer?

Travel time and reliability (10 mins)

MODERATOR: NOW I'D LIKE TO ASK YOU ABOUT RELIABILITY AND TRAVEL TIME

- How reliable would you say Scotland's trunk roads are as a means of getting from A to B?
 - o Why do you say that? What are the main factors making them reliable/unreliable?
- To what extent would you say your travel times on the same trunk road route varies? Does this depend on the different times of the day/week year?
- To what extend has variation in your journey time impacted upon your day to day lives e.g. PROBE FOR lateness for work etc
- To what extent, if at all, have you adapted your behaviour because of unpredictability in your journey time eg taken alternative routes, left earlier, used public transport instead
- What changes to the trunk road network would have the biggest impact on improving reliability?
- Recently variable signs have been introduced on Scotland's trunk road networks to give drivers advance warning of hold ups eg lane closures, road works etc
 - Have you noticed these
 - o How useful do you find them?

Connectivity (5 mins)

• In terms of the reach of the trunk road network do you feel it enables you to make the journeys you want to make or do you feel it should be extended to other areas? Where/Why?



- And do you feel the trunk road network allows for easy connection with other modes of transport, including airports, rail, ferries?
- How good is signage, junction layout how easy is it to miss your exit

Amenities (5 mins)

- Do you feel amenities on Scotland's trunk road network are adequate? In particular:
 - Services stations
 - Stand alone toilets
 - o Lay-bys
 - o Breakdown phones

Are there any other amenities that you think should be provided?

Environmental issues (5 mins)

- To what extent do you think each of the following environmental issues are a problem on Scotland's trunk road network?
 - Roadside litter and debris
 - o Noise
 - o Air quality
- Are there any other environmental problems associated with Scotland's trunk road network?

Role and responsibility of Transport Scotland (5 mins)

- Do you know who is responsible for the trunk-road network?
- IF SAY CENTRAL GOVERNMENT PROBE FOR Which part of government/knowledge of Transport Scotland

MODERATOR: IF NECESSARY, EXPLAIN: TRUNK ROADS ARE THE RESPONSIBILITY OF TRANSPORT SCOTLAND WHICH IS THE NATIONAL TRASPORT AGENCY FOR SCOTLAND

- To what extend would you say Transport Scotland provides value for money on Scotland's trunk road network? Why?
- Do you think the trunk road network should be controlled by Transport Scotland? Why/why not?

Concluding comments

Are there any other issues regarding trunk roads that we have not discussed but that you feel are important?

Thank respondents and close

Appendix B: Questionnaire

Ipsos MORI/J26728	Questionnaire No:	Serial No OUO (6-9)
		CARD 1 10
	Final que	cottish Issues estionnaire 02/07
Sample Point Number: (11) (12) Sample point name:		
Gender Mal Femal	e 2 (13)	Class A 1 B 2 C1 3
WRITE IN & CODE EXACT A Exact Age (14) (15)	GE (14-15)	C2 4 D 5 E 6 (18)
16-2 25-3 35-4 45-5 55-5 60-6 65-7	4 2 4 3 4 4 9 5 4 6 4 7	Interviewer Declaration I confirm that I have carried out this Interview face-to-face with the named person of the address attached and that I asked all the relevant questions fully and recorded the answers in conformance with the survey specification and within the MRS Code of Conduct and the Data Protection Act 1998.
Working Status of Responden Working - Full time (30+ hrs - Part-time (9-29 hrs Unemploye Not working - retire - looking after house/childre - invalid/disable Studen Othe Occupation of Chief Income E Position/rank/grade	s) 1 s) 2 d 3 d 4 n 5 d 6 nt 7 er 8	Signature:
Industry/type of company		Length of Interview: (minutes) (30-31)
Quals/degree/apprenticeship		
Number of staff responsible for		This form is the property of Ipsos MORI Scotland 4 Wemyss Place, Edinburgh, EH3 6DH



How many cars or light vans are there in your household? SINGLE CODE ONLY

1 car or light van	1	_
2 cars/light vans	2	_
3+ cars/light vans	3	-
None	4	-
Refused/don't know	5	(32)

Do you have any long-term illness, health problem or disability which limits your daily activities or the work you can do? SINGLE CODE ONLY

Yes	1	_
No	2	(33)

SHOWCARD N (R) In which would you place your <u>total</u> <u>household income</u> from all sources <u>before</u> tax and other <u>deductions?</u> SINGLE CODE ONLY

	Per Week	Per Year	(34)
Α	Up to £86	Under £4,500	1
В	£87-£125	£,4,500-£,6,499	2
С	£,126-£,144	£,6,500 - £,7,499	3
D	£,145-£,182	£,7,500 - £,9,499	4
Ε_	£,183-£,221	£9,500-£11,499	5
F_	£,222-£,259	£,11,500-£,13,499	6
G	£260-£298	£,13,500-£,15,499	7
Н	£299-£336	£,15,500 - £,17,499	8
Ι	£337-£480	£17,500 - £24,999	9
J	£,481-£,576	£25,000 - £29,999	0
K	£,577-£,769	£30,000 - £39,999	X
L	£,770-£,961	£40,000 - £49,999	Y
			(35)
Μ	£962-£1,441	£50,000 - £74,999	1
N	£1,442-£1,922	£75,000 - £99,999	2
Ο	f,1,923 or over	£,100,000 +	3

No of adults	1	2	3	4	5+	(36)	_
No of children up to 15 0	1	2	3	4	5+	(37)	
ASK IF CHILDREN IN What ages are the chousehold? MULTICOD	hild	ren					
		0-4		1			
		5-7		2			
	8	3-10		3			
	11	l-15		4			
Dor	't kr	10W	. [5		(38)	

SHOWCARD O (R) Which of these best describes the ownership of your home? SINGLE CODE ONLY.

A	Owned outright (including leasehold)	1	
В	Buying on mortgage	2	
C	Rented from Council	3	_
D	Rented from housing association	4	
Е	Rented from private landlord	5	
	Other	6	(39)

INTERVIEWER	RECORD	END	TIME	AFTER					
DEMOGRAPHICS									
					Н	ours	-	Mi	ns



INTERVIEW	VER RECORD START TIME	Hours N	Mins		
Good morning, afternoon, evening. My name is from Ipsos MORI, the research organisation, and we are carrying out a survey on a variety of important issues affecting Scotland today. This includes the environment and your opinion on the condition of roads in Scotland. The interview will take about 25 minutes.					
strictest con	to assure you that all the informati fidence, and used for research purp ny particular individual or address in	oses only. It w			
PRESENT R	ESPONDENT WITH MAP OF TRU	NK ROAD NE'	TWORK		
This is a ma	up of Scotland's trunk road network	. Trunk roads i	nclude motorways		
eith	w regularly have you travelled on a ner as a passenger or a driver? IGLE CODE	a trunk road ir	Scotland in the last 12 months,		
		(63)			
	5 or more days a week	1	_		
	2-4 days a week	2	<u> </u>		
	Once a week Less than once a week but more	<u>3</u>	ASK OTS2		
	than once a month	4	ASK QTS2		
	Once a month	5	_		
	-				
	Less than once a month	6			
	Less than once a month Never	<u>6</u> 7	- CLOSE		
	Less than once a month Never Don't know	6 7 8	_ CLOSE		
(CODES 1-6) QTS2. SHO	Never	7 8 N ONCE A M	IONTH AT QTS1		
(CODES 1-6) QTS2. SHO	Never Don't know WHO SAY AT LEAST LESS THAT OTHERS CLOSE INTERVIEW OWCARD F (R) Which of these state ally travel on trunk roads? SINGLE As a driver of a car/van As a passenger in a car/van As a driver of a goods vehicle, bus or coach As a passenger in a bus or coach As a motorcyclist As a cyclist Other (PLEASE WRITE IN AND CODE '7 ')	7 8 N ONCE A Mements on this CODE (64) 1 2 3	IONTH AT QTS1		
QTS3. SHO	Never Don't know WHO SAY AT LEAST LESS THAT OTHERS CLOSE INTERVIEW OWCARD F (R) Which of these state ally travel on trunk roads? SINGLE As a driver of a car/van As a passenger in a car/van As a driver of a goods vehicle, bus or coach As a passenger in a bus or coach As a motorcyclist As a cyclist Other (PLEASE WRITE IN	7 8 N ONCE A Mements on this CODE (64) 1 2 3 4 5 6 7	IONTH AT QTS1 card best describes how you		
QTS3. SHO	Never Don't know WHO SAY AT LEAST LESS THAN), OTHERS CLOSE INTERVIEW OWCARD F (R) Which of these state ally travel on trunk roads? SINGLE As a driver of a car/van As a passenger in a car/van As a driver of a goods vehicle, bus or coach As a passenger in a bus or coach As a motorcyclist As a cyclist Other (PLEASE WRITE IN AND CODE '7 ') Don't know OW MAP AGAIN Within which of the	7 8 N ONCE A Mements on this CODE (64) 1 2 3 4 5 6 7	IONTH AT QTS1 card best describes how you		
QTS3. SHO	Never Don't know WHO SAY AT LEAST LESS THAN), OTHERS CLOSE INTERVIEW OWCARD F (R) Which of these state ally travel on trunk roads? SINGLE As a driver of a car/van As a passenger in a car/van As a driver of a goods vehicle, bus or coach As a passenger in a bus or coach As a motorcyclist As a cyclist Other (PLEASE WRITE IN AND CODE '7 ') Don't know OW MAP AGAIN Within which of the IGLE CODE North West	7 8 N ONCE A Mements on this CODE (64) 1 2 3 4 5 6 7	IONTH AT QTS1 card best describes how you		
QTS3. SHO	Never Don't know WHO SAY AT LEAST LESS THAN), OTHERS CLOSE INTERVIEW OWCARD F (R) Which of these state ally travel on trunk roads? SINGLE As a driver of a car/van As a passenger in a car/van As a driver of a goods vehicle, bus or coach As a passenger in a bus or coach As a motorcyclist As a cyclist Other (PLEASE WRITE IN AND CODE '7 ') Don't know OW MAP AGAIN Within which of the	7 8 N ONCE A Mements on this CODE (64) 1 2 3 4 5 6 7	IONTH AT QTS1 card best describes how you		

	South East	4		
	Don't know	5	CLOSE	(6
ASK AL QTS4.	L WHO ANSWER QTS3 (CODES 1-4), C SHOW MAP And on which of the spec frequently travel? PROBE FULLY AND	c <mark>ific trunk roa</mark> D WRITE IN.		
	ANY ANSWER (WRITE IN AND COL) E '1)		1
	-			
	None/no answer			X
	Don't know			Y
	remaining questions, I'd like you to I you use most often.	focus on th	nese trunk roads in	
QTS5.	Do you mainly travel on these roads:	READ OUT. S	SINGLE CODE	
		(71)		
	During rush hours (7am-9am			
	and/or 4m to 7pm) During off peak hours (9am to			
	4pm and/or 7pm to 7am)			
	During both periods			
	Other			
	Don't know	5		

End Card 1

Now some questions about roadworks

QTS6. SHOWCARD G (R) To what extent, do you agree or disagree with the following statements about roadworks on trunk roads? CODE ONE IN EACH ROW

	Stron gly agree	Tend to agree	Neith er agree nor disagr ee	Tend to disagr ee	Stron gly disagr ee	Don't know
They do not cause any	1	2	3	4	5	6
significant increase in journey						
time						
Lane restrictions and lane	1	2	3	4	5	6
closures are kept to a minimum						
In general I come across road	1	2	3	4	5	6
works too often						
The length of time it takes for	1	2	3	4	5	6
roadworks to be completed is						
reasonable						
Roadworks are finished to an	1	2	3	4	5	6
acceptable quality						
Roadworks are poorly planned	1	2	3	4	5	6
in that when I divert onto						
alternative routes I often						
encounter more roadworks						

QTS7. The cost of roadworks is paid for through taxation. It costs more to do roadworks at night. Which of these statements best reflects your view? READ OUT. SINGLE CODE

	(17)
Most roadworks should be	1
done at night	
Road works should be done at	2
night in special circumstances	
No roadworks should be done	3
at night	
Don't know	4

Now some questions about safety on trunk roads

QTS8. SHOWCARD H (R) Which one of the following, if any, would you say is most effective in encouraging motorists to drive safely on Scotland's trunk roads? SINGLE CODE

	(10)	
Speed cameras	1	
Police patrols with hand held	2	
speed cameras		
Variable Message Signs	3	
(SHOWCARD)		
Signs highlighting the number of	4	
fatalities that have occurred on a		
stretch of road		
Signs informing drivers of the	5	
speed they are doing		
Other (PLEASE WRITE IN	6	WRITE IN BELOW:
AND CODE '6')		
None of these	7	
	8	
Don't know	0	

QTS9. SHOWCARD I (R) Which of the following related to the road itself make you feel unsafe when travelling on the trunk roads? Just read out the letters that apply. MULTICODE OK

		(19)	
A	Inadequate lighting	1	_
В	Lack of central reservations	2	-
C	Lack of hard shoulders	3	-
D	Inadequate safety fencing	4	
E	Uneven road surface	5	_
F	Potholes	6	
G	Ironwork in need of repair (i.e.	7	_
	manholes, drain covers etc.)		_
Н	Poor lines of sight/visibility due	8	
	to overgrown vegetation		_
I	Poor road markings	9	_
J	Slippery roads caused by ice/snow	0	_
K	Poor skid resistance	X	_
L	Water on roads	Y	_
		(20)	
	Other (PLEASE WRITE IN AND	1	WRITE IN BELOW:
	CODE Y)		
	None of these	2	_
	Don't know	3	_
	Don't know	<i>y</i>	

Now some questions about road conditions on trunk roads

 ${
m QTS}$ When using trunk roads how often, if at all, do you encounter road defects which you feel are unsafe? READ OUT. SINGLE CODE

	(21)	
On most journeys	1	_
On around half of journeys	2	ASK QTS11
On the odd journey	3	
Never	4	GO TO QTS13
Don't know	5	

ASK ALL WHO SAY ON AT LEAST THE ODD JOURNEY (CODES 1-3) AT QTS10, OTHERS GO TO QTS13

QTS SHOWCARD J (R) And what is the specific defect in <u>most</u> of these cases? Just read out the letter that applies. SINGLE CODE

	• •	(22)	
Α	Uneven/bumpy surface	1	
В	Potholes	2	-
С	Poor repairs	3	-
D	Cracking	4	-
Е	Ironwork in need of repair (i.e.	5	_
	manholes, drain covers etc.)		<u>-</u>
F	Deterioration of road edge	6	_
G	Slippery roads cause by ice/snow	7	_
Н	Poor skid resistance	8	_
Ι	Water on roads	9	_
J	Poor road makings	0	_
	Other (PLEASE WRITE IN	X	WRITE IN BELOW:
	AND CODE 'X')		
•	Don't know	Y	
_			_

QTS And how often, if at all, do you avoid using trunk roads because of this type of defect? READ OUT. SINGLE CODE

	(23)		
Usually	1		
Often	2		
Occasionally	3		
Never avoid	4		
Don't know	5		

ASK ALL

QTS SHOWCARD K (R) How satisfied or dissatisfied would you say you are with the general condition of trunk road surfaces? SINGLE CODE

	(24)			
Very satisfied	1			
Fairly satisfied	2			
Neither satisfied nor dissatisfied	3			
Fairly dissatisfied	4			
Very dissatisfied	5			

QTS I would now like to ask you some questions about your expectations and perceptions of road travel. I am going to read out a list of work that you might expect to be carried out on trunk roads. Please say how essential you feel it is for these to be achieved by giving a score of 1 out of 10, where 1 is not at all essential and 10 is absolutely essential

There should be signs giving clear directions at all decision making points
Variable Message Signs (SHOWCARD) should be available at regular intervals to give warning of congestion and delays
Road markings should be clearly visible at all times
The road surface should be free from litter and debris
The road surface should be quiet to travel on
Lighting should be provided along all trunk roads
Road surface should be free of standing water
Road surface should be smooth and clear of defects (potholes, cracking etc.)
Vegetation in verges and central reserve should be managed to assist visibility
The overall road network should look good, i.e. verges, roads, bridges, signs etc.

QTS	Thinking specifically about the trunk roads you use most often, I'd like you to give me
15.	your opinion of various aspects of those roads by giving me a score out of 10 for each
	item I read out, where a score of 1 would be extremely poor and 10 would be extremely
	good.

Adequacy of signage at decision making points
Availability/reliability of VMS
Visibility of road markings
Amount of litter and debris on road surface
Quietness of road surface
Provision of lighting along trunk roads
Presence of water on roads
Presence of defects and uneven roads
The management of vegetation in verges and central reserve to assist visibility
The overall look of the road network i.e. verges, roads, bridges,

Now some questions on winter maintenance on the trunk road network

QTS SHOWCARD L (R) To what extent, do you agree or disagree with the following statements about winter maintenance on trunk roads. CODE ONE ON EACH ROW

	Stron gly agree	Tend to agree	Neith er agree nor disagr ee	Tend to disagr ee	Stron gly disagr ee	Don't know
Road surfaces are usually	1	2	3	4	5	6
salted before ice and snow						
begins to form on the road						
surface						
The time between snow	1	2	3	4	5	6
forming and removal by						
ploughing is acceptable						
Current salting and ploughing	1	2	3	4	5	6
practices do not allow safe						
passage on the roads						

QTS The cost of winter maintenance is paid for through taxation. It will cost more to increase winter maintenance practices (salting and ploughing). Which of these statements best reflects your view? READ OUT. SINGLE CODE

	(48)
Increases are required to winter	1
maintenance practices	
Current winter maintenance	2
practices are sufficient	
Don't know	3

Now some questions about the condition of footpaths on the trunk road network

QTS SHOWCARD L (R) AGAIN To what extent, do you agree or disagree with the following statements about the footways that are beside the trunk roads. CODE ONE ON EACH ROW

	Stron gly agree	Tend to agree	Neith er agree nor disagr ee	Tend to disagr ee	Stron gly disagr ee	Don't know
Footways are provided in all the areas they are required	1	2	3	4	5	6
Footways are free from defects (i.e. trip hazards, poor surfaces)	1	2	3	4	5	6
Footways are of adequate width	1	2	3	4	5	6
Footpaths are adequately lit	1	2	3	4	5	6
Vegetation beside footpaths,	1	2	3	4	5	6
e.g. trees and grass are well maintained						

QTS SHOWCARD M (R) Which two or three, if any, of the following should be priorities for increase spending on the trunk road network? Just read out the letters that apply. CODE UP TO 3 ONLY

		(54)	
A	Reducing congestion	1	•
В	Minimising roadworks/disruption	2	
C	Improving safety	3	
D	Improving drainage	4	
E	Improving aesthetics ie the general	5	
	look of the road and landscaping		
F	Improving condition of road surface	6	_
G	Improving footways	7	
Н	Better gritting and snow clearing in	8	
	winter		
	Other (PLEASE WRITE IN AND	9	WRITE IN BELOW:

CODE '9')		
None of these	0	
Don't know	X	(

[NB: QUESTIONS QTS20a-QTS22 were asked in the first wave of the survey only]

Now some questions about who looks after the trunk road network

 $\begin{array}{ll} QTS20a & \text{Who do you think has day to day responsibility for the trunk road network in Scotland?} & \text{Scotland?} & \text{DO NOT PROMPT. SINGLE CODE} \end{array}$

And who do you think should have day to day responsibility for the network? DO NOT PROMPT. SINGLE CODE

	Is responsible		Should be responsible	
	(55)		(56)	
Highways Agency	1	_	1	
Local government/councils	2	_	2	
Other locally based authority	3	-	3	
Private contractors e.g.	4	-	4	
Amey, Bear etc	<u> </u>	_		
The Scottish Executive/	5	-	5	
Government	ı			
Transport Scotland	6	-	6	
The Westminster	7	-	7	
Government	ı			
Other (PLEASE WRITE IN	8	WRITE IN BELOW:	8	WRITE IN BELOW:
` AND CODE '8')	l]	
·	l			
	İ			
None of these	9	4	9	
Don't know	0	-	0	(55-56

In fact the trunk road network is the responsibility of Transport Scotland – a public body which reports to the Scottish Executive.

$\mathrm{QTS}-$ Had you heard of Transport Scotland before this interview? SINGLE CODE 21

	(57)
Yes	1
No	2
Don't know/can't remember	3

QTS Where have you seen or heard anything about Transport Scotland? SINGLE CODE 22

	(58)	
Road Sign	1	
Magazine or Newspaper	2	_
Radio	3	
TV	4	_
Other (PLEASE WRITE IN	5	PLEASE WRITE IN BELOW:

	AND CODE '5')		
·	None of these	6	
·	Don't know	7	

[NB QTS23 and QTS24 replaced QTS20a-QTS22 in the second wave of the survey and were not asked in the first wave]

QTS SHOWCARD I (R) To what extent, do you agree or disagree with the following statements about congestion on the trunk road network. CODE ONE ON EACH ROW. READ OUT a-d.

		Stron gly agree	Tend to agree	Neith er agree nor disagr ee	Tend to disagr ee	Stron gly disagr ee	Don't know
a)	My journeys on trunk roads are	1	2	3	4	5	6
	often delayed because of traffic						
	congestion						
b)	I rarely encounter congestion	1	2	3	4	5	6
	outside peak hours in the						
	morning or evening						
c)	If I know about congestion I	1	2	3	4	5	6
	usually change my route						
d)	If I know about congestion I	1	2	3	4	5	6
	usually change my journey						
	time						

QTS SHOWCARD I (R) AGAIN **To what extent, do you agree or disagree with the following statements about the cycle lanes on the trunk roads.** CODE ONE ON EACH ROW. READ OUT a-d.

		Stron gly agree	Tend to agree	Neith er agree nor disagr ee	Tend to disagr ee	Stron gly disagr ee	Don't know
a)	All stretches of trunk roads have cycle lanes where they are	1	2	3	4	5	6
	needed						
b)	Cycle lanes on trunk roads are maintained with safe, undamaged surfaces	1	2	3	4	5	6
c)	Cycle lanes on trunk roads are wide enough	1	2	3	4	5	6
d)	Cycle lanes on trunk roads are adequately lit	1	2	3	4	5	6

QREC1.	Thank you for giving your time today to answer our questions. Can I please ask if you are willing to take part in future Ipsos MORI surveys about similar topics? Your contact details will only be held by Ipsos MORI and will not be passed on to anyone else without your permission.
	PLEASE WRITE IN ANY RESPONDENT COMMENTS (EG 'YES CAN RECONTACT, BUT NOT WITHIN THE NEXT SIX MONTHS') Yes 1

		(59)
	Yes	1
	No	2 (59)
Comments		

Appendix C: Guide to statistical reliability

The respondents to the questionnaire are only a sample of the total 'population'. We cannot therefore be certain that the figures obtained are exactly those we would have if everybody had been interviewed (the 'true' values). However, we can predict the variation between the sample results and the 'true' values from a knowledge of the size of the samples on which the results are based and the number of times that a particular answer is given.

The confidence with which we can make this prediction is usually chosen to be 95% - that is, the chances are 19 in 20 that the 'true' value will fall within a specified range. The table below illustrates the predicted ranges for different sample sizes and percentages results at the '95% confidence interval', based on a random sample.

Size of sample on which survey result is based	Approximate sampling tolerances applicable to percentages at or near these levels			
	10% or 90%	30% or 70%	50%	
	<u>+</u>	<u>+</u>	<u>+</u>	
100 interviews	6	9	10	
200 interviews	4	6	7	
300 interviews	3	5	6	
500 interviews	3	4	4	
1,000 interviews	2	3	3	
2,039 interviews	1	2	2	
			Source: Ipsos MOF	

For example, on a question where 50% of the people in a sample of 2,039 respond with a particular answer, the chances are 95 in 100 that this result would not vary by more than two percentage points, plus or minus from a complete coverage of the entire population using the same procedures. However, while it is true to conclude that the "actual" result (95 times out of 100) lies anywhere between 48% and 52%, it is proportionately more likely to be closer to the centre of this band (i.e. at 50%).

Tolerances are also involved in the comparison of results from different parts of a sample. A difference, in other words, must be of at least a certain size to be considered statistically significant. The following table is a guide to the sampling tolerances applicable to comparisons.

Size of samples compared		quired for signif percentage leve	icance at or near els
	10% or 90%	30% or 70%	50%
	<u>+</u>	<u>+</u>	<u>+</u>
100 and 100	8	13	14
200 and 200	6	9	10
200 and 400	5	8	9
200 and 500	5	8	8
500 and 500	4	6	6
700 and 300	4	6	7
700 and 400	4	6	6
1,000 and 100	6	9	10
			Source: Ipsos MOR