Ipsos MORI Scotland

Perceptions of the Trunk Road Network in Scotland

August 2010

Contents

Executive Summary

Ipsos MORI was commissioned by Atkins, on behalf of Transport Scotland, to undertake a survey of trunk road users in Scotland. The findings will be used to inform Transport Scotland's objectives and future priorities for improving the trunk road network. A total of 2,009 Scottish adults were interviewed face-to-face over two survey waves (to avoid seasonal effects). The first wave was conducted between 15 February and 4 April 2010, and the second wave between 14 June and 28 July 2010.

Perceptions of trunk roads

Over a third (37%) of respondents were satisfied with the general condition of trunk road surfaces, while around half (52%) were dissatisfied. The proportion expressing satisfaction is significantly lower than the 2007 survey (from 52%), while the proportion expressing dissatisfaction has increased (from 32%).

Of those expressing dissatisfaction, two-fifths (40%) said that they "always" or "usually" experience surface defects which make them feel unsafe. The most commonly experienced defect by far was potholes, followed by uneven or bumpy surfaces.

Around three in five (58%) respondents were satisfied with the management of vegetation on verges and central reserves, and a similar proportion (52%) were satisfied with the amount of litter and debris on the road surface. However, fewer than half were satisfied with the drainage of water from road surfaces (45%), the quality of repairs (36%) and the amount of traffic congestion (33%). Only 21% were satisfied with the speed with which road defects are repaired.

The features of trunk roads which respondents would most like to see improved were the speed with which road defects are repaired (52% selected this from a list of options), followed by the general condition of road surfaces (50%) and the quality of repairs (44%). Since 2009, the proportion mentioning the first of these aspects has increased by 10 percentage points (from 42% to 52%).

Perceptions of road works and winter maintenance

Opinions on road works were fairly negative overall. Fewer than half of respondents were satisfied with the planning and co-ordination of diversions when road works take place (49%), and with the planning and co-ordination of lane closures and restrictions (44%). Fewer than a third (31%) were satisfied with the frequency with which they encounter road works.

Views on winter maintenance were more divided. Forty-four per cent of respondents expressed satisfaction with the promptness with which roads are gritted in winter, while a similar proportion (46%) expressed dissatisfaction. Similarly, whereas 44% were satisfied with the promptness with which roads are cleared in winter, 45% were dissatisfied.

The aspects of road works and winter maintenance respondents were most keen to see improved were the speed with which roads are gritted (49%) and cleared (45%) in winter, followed by the frequency of road works (37%).

Lighting, markings and signage on trunk roads

These aspects of the network were relatively well regarded by trunk road users. Seven in ten (71%) respondents were satisfied with the visibility of road signage, and around two-thirds were satisfied with the provision of lighting (67%) and signs giving directions at decision-making points (65%). Over half also expressed satisfaction with the visibility of road markings (61%) and the provision of electronic message boards (59%).

Asked which of these aspects they would most like to see improved, a third (33%) said the visibility of road markings, while a quarter said the provision of directional signs, the visibility of road signage and the provision of lighting. Twenty per cent said electronic messages boards.

Perceptions of cycle lands and footways

Questions about cycle lanes and footways were put only to respondents who said they had used these facilities – 2% (46 respondents) in the case of cycle lanes and 6% (113 respondents) for footways.

Views on these aspects of provision were divided. Thus, whereas just over a third (34%) of those asked expressed satisfaction with the condition of cycle lanes, a similar proportion (39%) expressed dissatisfaction. Similarly, while 34% of pedestrians were satisfied with the condition of footways, 57% said they were dissatisfied.

Levels of satisfaction with some other aspects of cycle lanes were fairly negative overall. For example, only around a third (35%) of users were satisfied with the quality of cycle lane repairs and only around a quarter (29%) with the provision of lighting, the availability of cycle crossing points (26%), the speed with which defects are repaired (24%) and the general availability of cycle lanes (21%).

The results for footways were a little more positive with at least half of those asked saying they were satisfied with the availability of footways (59%), the amount of guard railing and other physical barriers (59%), and the availability of pedestrian crossing points (57%). Still, smaller proportions were satisfied with the availability of dropped kerbs (49%), the general condition of footway surfaces (32%), the quality of footway repairs (25%) and the speed with which defects are repaired (19%).

The aspect of cycle lanes and footways respondents would most like to see improved was the general condition of footway surfaces (mentioned by 45%), followed by the quality of footway repairs (38%) and the speed with which footway defects are repaired (32%).

Overall priorities for improving the trunk road network

As in the 2009 survey, the improvements that respondents would most like to see made to the trunk road network all related to road surfaces and included: the general condition of road surfaces (36%), the speed with which defects are repaired (32%) and the quality of repairs (27%).

Traffic information

Asked from which source they received most of their information about road conditions during winter 2009-10, around half (48%) of all respondents said the television and 40% said the radio. No other single source was mentioned by more than one in ten respondents.

Just under a quarter (23%) of respondents had ever used the Traffic Scotland website. Among this group, perceptions of the site were generally positive: three-quarters rated it as good or very good, while just 6% rated it as poor or very poor. Again all of these results are in line with the comparable figures from 2009.

Asked, which of the information provided on the website they found particularly useful, around half (51%) of users said information on road works while a similar proportion said information on incidents (49%) and on trunk roads affected by weather (45%). Meanwhile around a third (35%) mentioned weather forecasts and a quarter mentioned live CCTV footage.

Awareness of Transport Scotland

Asked who they think has responsibility for managing the trunk road network in Scotland, around a third (36%) of respondents said local government, while 20% said private contractors and 15% said the Scottish Government. Only 5% mentioned Transport Scotland.

Asked who they think *should* have responsibility for managing the network, respondents again most commonly said local government (45%), the Scottish Government (21%) or private contractors (7%). Just 5% said Transport Scotland.

Respondents who did not mention Transport Scotland in either question were asked whether they had heard of the agency before taking part in the survey. Just under two in five (39%) said that they had, while 60% said they had not. These figures show a slight improvement on the comparable findings recorded in 2007, when 32% said they had heard of Transport Scotland and 66% said they had not.

1 Introduction

This report presents the findings of a survey among trunk road users across Scotland. Ipsos MORI was commissioned by Atkins, on behalf of Transport Scotland, to undertake the survey, building on similar research conducted in 2007 and 2009.

The main objective of the survey was to measure levels of satisfaction with different aspects of the trunk road network, such as the condition of road surfaces, and with services provided on the network, such as repairs and winter maintenance. The findings from the survey will be used to inform Transport Scotland's decisions on future priorities for improving the trunk road network.

1.1 Survey questionnaire

The survey questionnaire was largely the same as that used in 2009. It was designed by Ipsos MORI in consultation with Atkins and Transport Scotland. The main themes covered in the questionnaire were:

- road conditions and defects
- road works and winter maintenance
- road lighting, markings and signage
- cycle lanes and footways
- traffic information
- awareness of Transport Scotland

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

1.2 Methodology

Ipsos MORI interviewed a representative sample of 2,009 adults in randomly selected MORI Double Output Areas[1] (MDOA). Within each selected MDOA, interviewer quotas were set by gender, age and working status using the 2008 ONS mid-year census estimates.

[1] Each MDOA has an average of 250 households.

Fieldwork was conducted in two waves to minimise the potential impact of seasonal effects – the tendency for respondents to give different answers depending on the time of the year. The first wave was conducted between 15 February and 4 April 2010, and the second wave between 14 June and 28 July 2010.

All interviews were conducted face to face in respondents' homes, using CAPI (Computer Assisted Personal Interviewing). Only individuals who had travelled on the trunk road network in the last 12 months were eligible to take part in the survey. To establish eligibility, interviewers showed prospective respondents a map of the trunk road network in Scotland (see Appendix B) and asked them how often they had travelled on a trunk road in the last 12 months, either as a passenger or driver. People who answered "never" were screened out. Throughout the interviews, respondents were reminded to base their answers on their experiences of using trunk roads only, as opposed to roads in general, when answering questions.

The survey data have been weighted by age, gender and working status using the 2008 ONS mid-year census estimates again.

All fieldwork and project management was carried out to ISO20252 standards.

1.3 Presentation and interpretation of findings

The survey findings represent the views of a sample of Scottish adults, and not the entire population of Scotland, as such they are subject to sampling tolerances meaning that differences between sub-groups or over time may not always be statistically significant. Throughout the report, we have only commented upon differences which are statistically significant (at the 0.05 level) – i.e. where we can be reasonably certain that they are unlikely to have occurred by chance. A guide to statistical reliability is provided in Appendix C.

1.4 Structure of the report

Chapter 1 examines respondents' perceptions of the trunk road network in terms of their satisfaction with the condition of trunk roads, their experiences of road defects and their priorities for improvement. Chapter 2 focuses on levels of satisfaction with road works and winter maintenance on the network and Chapter 3 looks at opinions of trunk road lighting, markings and signage. Chapter 4 examines respondents' views on cycle lanes and footways provided on the network, including the defects they encounter as well as features they would most like to see improved in these areas of provision.

Chapter 5 draws together the findings from previous chapters to identify respondents' overall priorities for future improvements to the network. Chapter 6 focuses on views on traffic information provided by Transport Scotland through the Traffic Scotland website and, finally, Chapter 7 considers public awareness of Transport Scotland.

Throughout the report comparisons with the 2007 and 2009 survey findings are made where appropriate[2].

[2] The 2007 survey included only a few of the questions covered in the 2009 and 2010 surveys.

2 Perceptions of trunk roads

This chapter provides a detailed picture of trunk road users' perceptions of roads on the network. It begins by examining their levels of satisfaction with road surfaces, the frequency with which they encounter road defects and the types of defects they most commonly experience. It then moves on to examine users' satisfaction with some other features of trunk roads, including the level of traffic congestion and the quality of repairs. The chapter concludes by looking at respondents' priorities for improving the network.

2.1 Satisfaction with trunk road surfaces

As can be seen from table 2.1, over a third of respondents (37%) were satisfied with the general condition of trunk road surfaces while over half (52%) were dissatisfied. Over time, the proportion expressing satisfaction has fallen, from 52% in 2007 to 46% in 2009 and to 37% in 2010. In line with this trend, there has been a significant increase in the proportion of respondents expressing *dis*satisfaction with road surfaces.

Table 2.1: Satisfaction with the general condition of trunk road surfaces – 2007, 2009 and 2010

	2007	2009	2010
	%	%	%
Very satisfied	4	6	3
Fairly satisfied	48	40	34
Neither satisfied nor dissatisfied	16	11	11
Fairly dissatisfied	22	23	30
Very dissatisfied	10	18	22
Base: All who have travelled on a trunk road in Scotland in the last 12 months	*1,843*	*1,861*	*2,009*

As in previous waves of the survey, frequent users[3] of trunk roads were more likely than infrequent users to say that they were dissatisfied with road surfaces (59% versus 36% respectively).

[3] Throughout this report, respondents who reported having used trunk roads at least four days a week are referred to as 'frequent users' while those who reported having used trunk roads once a month or less are as referred to as 'infrequent users'.

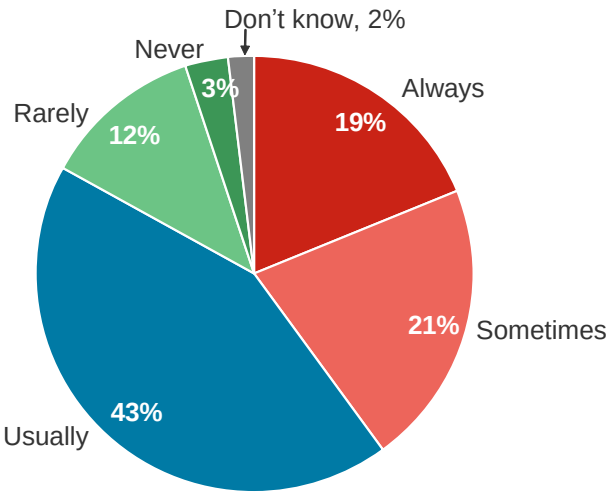
There were also some regional differences in the results: a higher than average proportion of those who use trunk roads in the South West expressed dissatisfaction with road surfaces (63% versus 52% overall). In contrast, a higher than average proportion of respondents who use trunk roads in the South East expressed *satisfaction* (48% versus 37% overall).

2.2 Experience of defects

All respondents who expressed dissatisfaction with road surfaces were asked how often they encounter road defects which they feel are unsafe. As can be seen from figure 2.1, two-fifths (40%) said 'always' or 'usually' and a similar proportion (43%) said 'sometimes'. Around one in 10 (12%) said 'rarely' and 3% said they 'never' encounter unsafe defects. These results are consistent with those from the 2009 survey.

Figure 2.1: Experience of defects on the trunk road network

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



Base: All who were dissatisfied with the general condition of road surfaces (1,050) Source: Ipsos MORI

Reflecting their higher levels of dissatisfaction with road surfaces, frequent users of trunk roads were more likely than infrequent users to say that they 'always' experience unsafe road defects when using the network (23% versus 12% respectively).

All respondents who said they encountered defects at least 'sometimes' were asked what the specific defect was in most cases. As table 2.2 shows, the most common response by far was potholes (mentioned by 73%) followed by uneven or bumpy surfaces (12%). No other defect was mentioned by more than one in 20 respondents.

The proportion mentioning potholes has increased significantly since the 2009 survey – by 11 percentage points.

Table 2.2: Types of defects experienced most often – 2007, 2009 and 2010

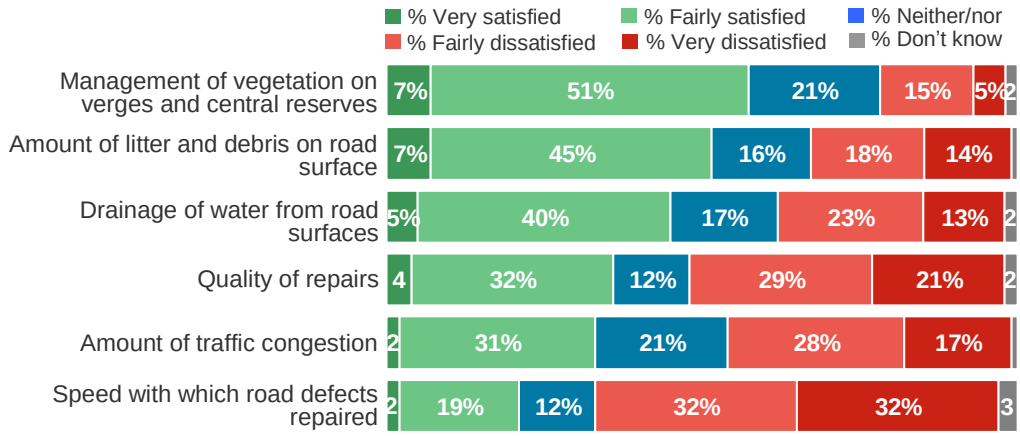
	2007	2009	2010
	%	%	%
Potholes	45	62	73
Uneven or bumpy surfaces	21	14	12
Poor repairs	9	9	5
Slippery roads caused by ice or snow	5	2	3
Water on roads	6	3	2
Cracking	1	2	2
Ironwork in need of repair	1	1	1
Deterioration of road edge	2	2	1
Poor skid resistance	1	1	1
Base: All who have travelled on a trunk road in Scotland in the last 12 months	*1,843*	*1,861*	*2,009*

2.3 Satisfaction with features of trunk roads

The survey also measured levels of satisfaction with some other features of the trunk road network. As figure 2.2 shows, the results were fairly mixed. In terms of the more positive findings, around three in five respondents (58%) were satisfied with the management of vegetation on verges and central reserves, and over half (52%) were satisfied with the amount of litter and debris on the road surface. At the same time, however, less than half were satisfied with: the drainage of water from road surfaces (45%), the quality of repairs (36%) and the amount of traffic congestion (33%). Moreover, only 21% said they were satisfied with the speed with which road defects are repaired; a majority (64%) expressed dissatisfaction with this aspect of provision.

Figure 2.2 Satisfaction with features of trunk roads

Q. Thinking about the general state and condition of trunk roads, overall how satisfied or dissatisfied you are with…?



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

For the most part, levels of satisfaction with these trunk road features have remained largely static since 2009, although there has been a decrease in the proportions expressing satisfaction with the speed with which road defects are repaired (from 28% to 21%) and with the quality of repairs (from 42% to 36%).

Again, frequent users held more negative views than infrequent users. In fact, they were more likely than infrequent users to say that they were dissatisfied with *all* of the features of trunk roads shown in figure 2.2. For example, 35% of frequent users were dissatisfied with the amount of litter and debris on the road surface while among infrequent users the figure was 24% (table 2.3). For the quality of repairs, the comparable figures were 57% and 33% respectively. However, these differences may partly be attributable to a higher proportion of 'don't know' responses among infrequent users.

Table 2.3: Satisfaction with features of trunk roads, by frequency of trunk road usage

	Frequent users *(1,329)*		**Infrequent users** *(292)*	
	Satisfied	**Dissatisfied**	**Satisfied**	**Dissatisfied**
	%	%	%	%
The speed with which road defects are repaired	17	72	29	43
The quality of repairs	31	57	44	33
The management of vegetation on verges and central reserves	57	21	60	12
The drainage of water from road surfaces	43	40	48	26
The amount of traffic congestion	30	49	39	39
The amount of litter and debris on the road surface	50	35	60	24

Levels of satisfaction also varied by region. Respondents who use trunk roads in the South West were among the least likely to express satisfaction with all the features shown in table 2.4. Conversely, trunk road users in the South East were among the *most* likely to express satisfaction with: the management of vegetation on verges and central reserves, the speed with which road defects are repaired, the quality of repairs and the drainage of water from road surfaces.

Table 2.4: % expressing satisfaction with features of trunk roads, by region

	All users	**North West**	**North East**	**South West**	**South East**
	%	%	%	%	%
The speed with which road defects are repaired	21	22	22	17	29
The quality of repairs	36	39	37	30	46
The amount of traffic congestion	33	33	41	27	35
The drainage of water from road surfaces	45	41	49	38	56
The amount of litter and debris on the road surface	52	53	59	45	56
The management of vegetation on verges and central reserves	58	53	60	55	63
Base: All who have travelled on a trunk road in the last 12 months	*2,009*	*152*	*588*	*830*	*430*

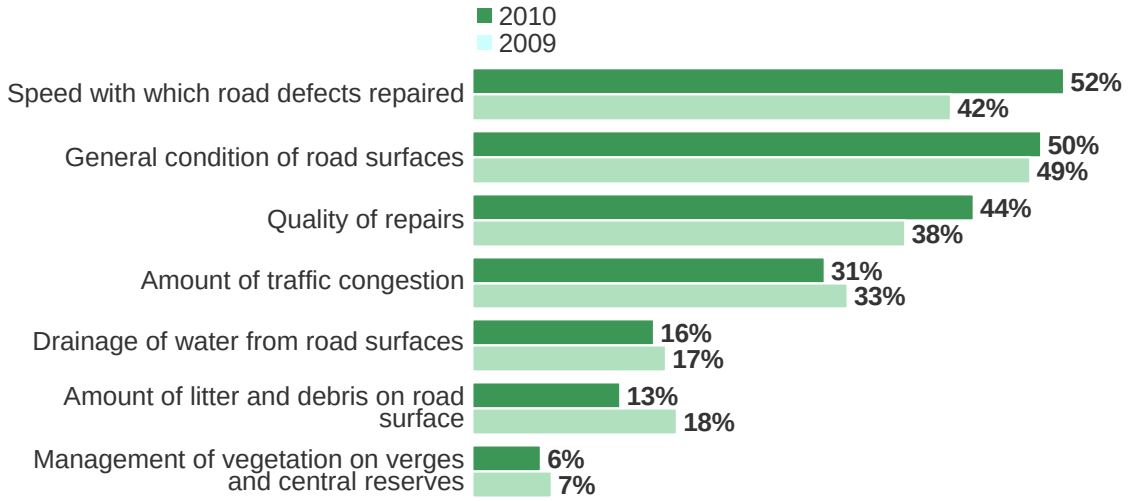
2.4 Improving trunk roads

As in 2009, a question was included in the survey to identify trunk road users' priorities for improving trunk roads. Respondents were shown a list of all the features of trunk roads covered in this chapter and asked to select the two or three that they would most like to see improved. The top priority was the speed with which road defects are repaired, mentioned by 52% of respondents. This was followed by the general condition of road surfaces (50%), the quality of repairs (44%) and the amount of traffic congestion (31%). Smaller proportions mentioned other features (figure 2.3).

Since 2009, the proportion mentioning the speed with which road defects are repaired has increased by 10 percentage points (from 42% to 52%). The other results have remained stable.

Figure 2.3: Priorities for improving trunk roads

Q. From this list, which two or three things would you most like to see improved?



Base: All who have travelled on a trunk road in the last 12 months (2010: 2,009; 2009: 1,861) Source: Ipsos MORI

Once again, the results varied depending on the frequency with which respondents used trunk roads. Frequent users were more likely than infrequent users to mention improvements to the speed with which road defects are repaired, the condition of road surfaces and the quality of repairs (56%, 55% and 49% versus 41%, 38% and 35% respectively).

The only notable regional difference was that those who use trunk roads in the South West were more likely than the sample as a whole to mention improvements to the

condition of road surfaces and to the quality of repairs as priorities (55% and 49% versus 50% and 44% overall).

3 Perceptions of road works and winter maintenance

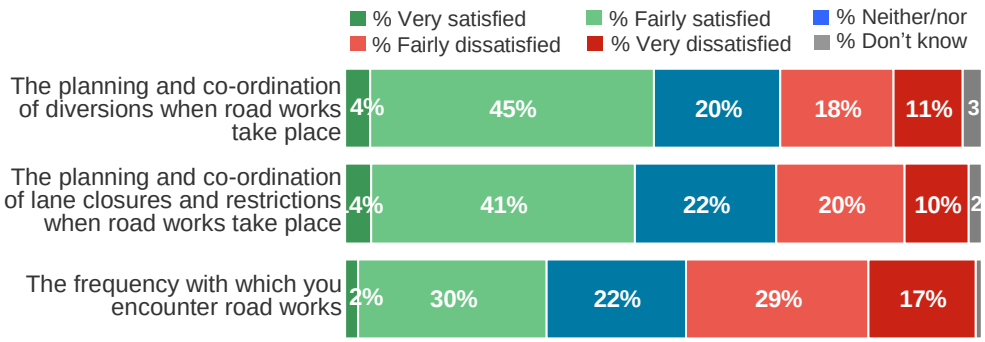
Building on the findings relating to trunk road repairs discussed previously, this chapter looks at perceptions of road works and winter maintenance on the network. The chapter also considers users' priorities for improving these services in the future.

3.1 Satisfaction with road works

As shown in figure 3.1, opinions regarding road works on the trunk road network were fairly negative overall. Fewer than half of respondents were satisfied with the planning and co-ordination of diversions when road works take place (49%) and with the planning and co-ordination of lane closures and restrictions (44%). Moreover, fewer than a third (31%) were satisfied with the frequency with which they encounter road works; around half (45%) expressed dissatisfaction with this aspect of provision.

Figure 3.1 Satisfaction with road works

Q. Still thinking about the trunk roads that you use most often, how satisfied or dissatisfied are you with….



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

Since the 2009 survey, there has been a slight increase in the proportion expressing satisfaction with the planning and co-ordination of diversions when road works take place (from 45% to 49%).

As table 3.1 shows, frequent users held consistently more negative opinions on road works than infrequent users. However, these differences may partly be attributable to a higher proportion of 'don't know' responses among infrequent users.

Table 3.1: Satisfaction with aspects of road works, by frequency of trunk road usage

	Frequent users *(1,339)*		**Infrequent users** *(292)*	
	Satisfied	**Dissatisfied**	**Satisfied**	**Dissatisfied**
	%	%	%	%
Frequency with which you encounter road works	29	49	33	36
The planning and co-ordination of lane closures and restrictions when road works take place	44	33	44	25
The planning and co-ordination of diversions when road works take pace	48	32	46	22

Regional analysis also shows that trunk road users in the South West were more likely than the sample as a whole to express dissatisfaction with all the different aspects of road works reported in this chapter (table 3.2).

Table 3.2: Satisfaction with aspects of road works – views of trunk road users in the South West versus views of all users

	All users *(2,009)*		**Users in the South West** *(830)*	
	Satisfied	**Dissatisfied**	**Satisfied**	**Dissatisfied**
	%	%	%	%
Frequency with which you encounter road works	31	45	26	55
The planning and co-ordination of lane closures and restrictions when road works take place	44	30	39	37
The planning and co-ordination of diversions when road works take pace	49	28	44	35

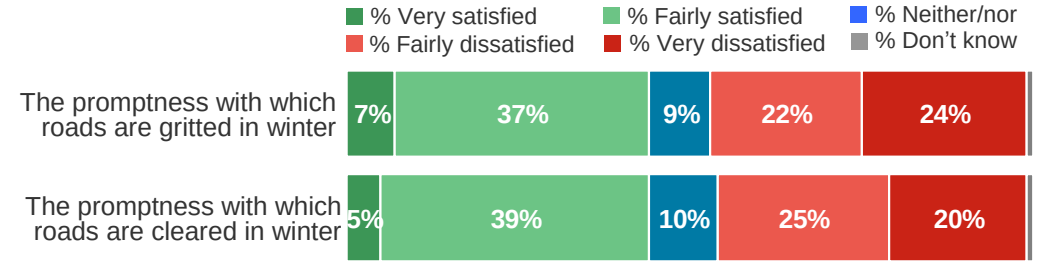
3.2 Satisfaction with winter maintenance

Views on winter maintenance were split. As figure 3.2 shows, 44% of respondents expressed satisfaction with the promptness with which roads are gritted in winter while a similar proportion (46%) expressed dissatisfaction. Similarly, for the promptness with

which roads are cleared in winter, 44% expressed satisfaction while 45% expressed dissatisfaction.

Figure 3.2: Satisfaction with winter maintenance

Q. Still thinking about the trunk roads that you use most often, how satisfied or dissatisfied are you with….



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

Satisfaction with these aspects of winter maintenance has decreased significantly since 2009 – by 13 percentage points in the case of gritting (from 57% to 44%) and by 12 percentage points in the case of road clearing (from 56% to 44%). This may in part be a reflection of the fact that weather conditions were unusually severe during winter 2009-10 and caused considerable disruption to transport. There was widespread reporting in the media of local authorities running out of grit or otherwise being ill-prepared for the conditions with which they were faced. This coverage is likely to have influenced perceptions of winter maintenance practices on Scotland's roads generally.

Once again, the results varied by the frequency with which respondents used the trunk road network and by region. As table 3.3 shows, frequent trunk road users were more likely than infrequent users to express dissatisfaction with winter maintenance practices.

Table 3.3: Satisfaction with winter maintenance, by frequency of trunk road usage

	Frequent users *(1,339)*		**Infrequent users** *(292)*	
	Satisfied	**Dissatisfied**	**Satisfied**	**Dissatisfied**
	%	%	%	%
The promptness with which roads are cleared in winter	42	49	44	39
The promptness with which roads are gritted in winter	43	49	44	39

Meanwhile, trunk road users in the South West were more likely than those who use trunk roads in the rest of the regions to express dissatisfaction with winter maintenance practices (table 3.4).

Table 3.4: % expressing dissatisfaction with winter maintenance, by region

	North West	North East	South West	South East
	%	%	%	%
The promptness with which roads are cleared in winter	43	40	53	38
The promptness with which roads are gritted in winter	44	41	53	41
Base: All who have travelled on a trunk road in the last 12 months	*152*	*588*	*830*	*430*

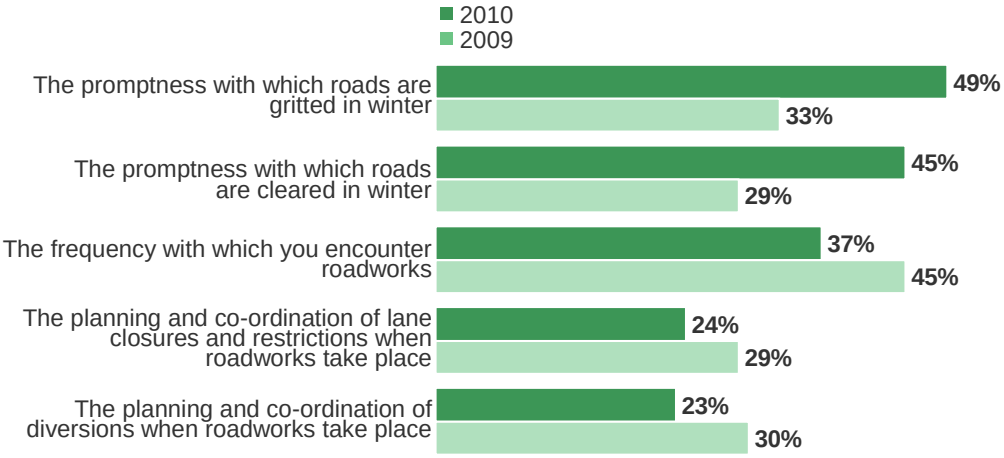
3.3 Improving road works and winter maintenance

When asked to identify (from a list) the two or three elements of road works and winter maintenance they would most like to see improved, just under half of respondents said the promptness with which roads are gritted (49%) and cleared (45%) in winter (figure 3.3). Meanwhile, thirty-seven percent mentioned the frequency with which they encounter road works, and around a quarter mentioned the planning and co-ordination of lane closures and restrictions (24%) and diversions (23%).

As can be seen from figure 3.3, the rank ordering of these priorities has changed slightly from 2009. The top priority by far in 2009 was the frequency with which road works take place. That this aspect now ranks third, behind road clearing and gritting, reinforces respondents' higher levels of dissatisfaction with winter maintenance practices this year.

Figure 3.3: Improving road works and winter maintenance

Q. From this list, which two or three things would you most like to see improved?



Base: All who have travelled on a trunk road in the last 12 months (2010: 2,009; 2009: 1,861) Source: Ipsos MORI

Trunk road users in the South West were more likely than the sample as a whole to mention improving the promptness with which roads are gritted in winter (54% versus 49% overall) and the frequency with which road works take place (44% versus 37% overall).

4 Perceptions of lighting, markings and signage on trunk roads

This chapter begins by exploring trunk road users' satisfaction with lighting, markings and signage on the network, before identifying their priorities for improving these areas of provision.

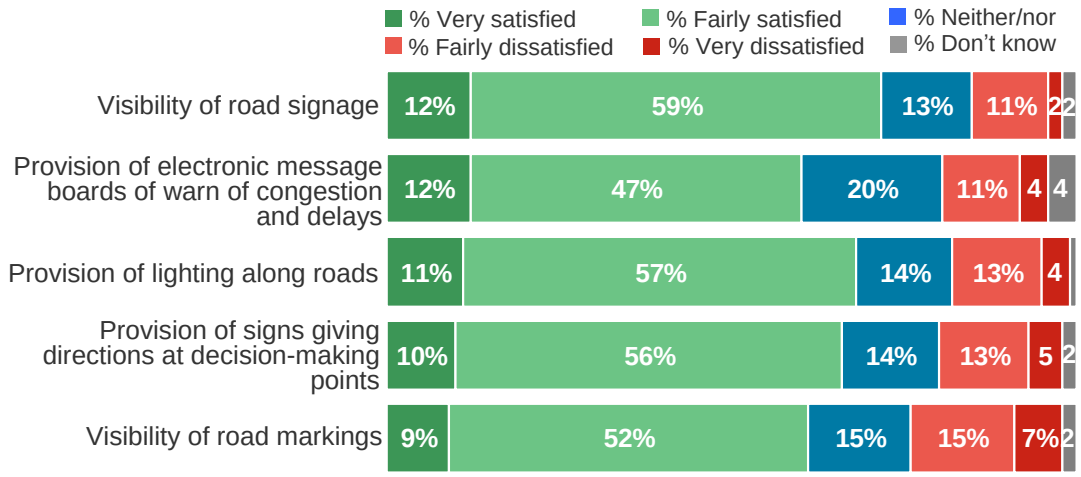
4.1 Satisfaction with trunk road lighting, markings and signage

As in 2009, lighting, markings and signage on the network were well-regarded by trunk road users. Specifically, 71% of respondents were satisfied with the visibility of road signage and around two-thirds were satisfied with the provision of lighting (67%) and signs giving directions at decision-making points (65%). Over half also expressed satisfaction with the visibility of road markings (61%) and the provision of electronic message boards (59%).

The proportions of respondents saying they were *very* satisfied with these features are again relatively small and so there is clearly significant scope for improvements (figure 4.1).

4.1: Satisfaction with trunk road lighting, markings and signage

Q. Again, thinking about the trunk roads you use most often, how satisfied or dissatisfied you are with…?



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

While these findings are broadly consistent with the comparable results in 2009, satisfaction with the visibility of road markings has declined slightly (from 64% to 61%).

Sub-group analysis of the results shows that levels of satisfaction with each of the areas of provision shown in figure 4.1 were consistently high among both frequent and infrequent trunk road users. Despite these positive findings, frequent users were more likely than infrequent users to express *dis*satisfaction with trunk road markings and signage (table 4.1).

Table 4.1: Satisfaction with trunk road markings and signage, by frequency of trunk road usage

	Frequent users *(1,329)*		**Infrequent users** *(292)*	
	Satisfied	**Dissatisfied**	**Satisfied**	**Dissatisfied**
	%	%	%	%
Visibility of road markings	60	26	61	16
Provision of signs giving directions at decision making points	65	20	64	13
Provision of electronic message boards to warn of congestion and delays	60	17	57	11
Visibility of road signage	72	15	65	11

A number of regional differences were also apparent in the sub-group analysis. Specifically, respondents who use trunk roads in the North West and South East were among the most likely to express satisfaction with the visibility of road markings. Trunk road users in the South East were also more likely than the sample as a whole to express satisfaction with the visibility of road signage, and with the provision of directional signs and electronic message boards on the network. In contrast, trunk road users in the South West were among the *least* likely to express satisfaction with all the areas of provision shown in table 4.2.

Table 4.2: % expressing satisfaction with trunk road markings and signage, by region

	All users	North West	North East	South West	South East
	%	%	%	%	%
The visibility of road signage	71	70	74	67	76
The provision of signs giving directions at decision-making points	65	68	67	61	71
The visibility of road markings	61	61	65	54	69
The provision of electronic message boards to warn of congestion and delays	59	62	55	57	66
Base: All who have travelled on a trunk road in the last 12 months	*2,009*	*152*	*588*	*830*	*430*

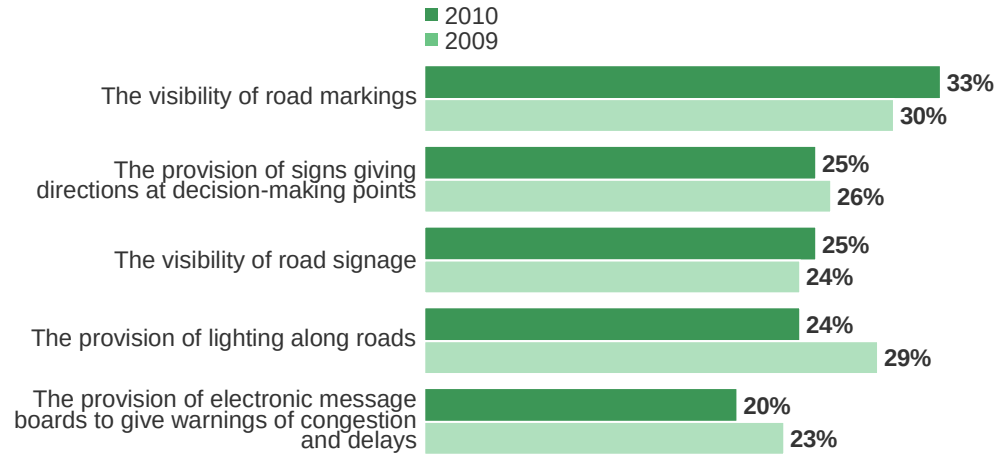
4.2 Improving trunk road lighting, markings and signage

As in 2009, respondents were asked which two or three of the features discussed in this chapter they would most like to see improved. Overall, views were divided and no single feature was mentioned by a majority of respondents. The visibility of road markings emerged as the top response (mentioned by 33%) followed by the provision of directional signs and the visibility of road signage (each mentioned by 25%). Smaller proportions mentioned the provision of lighting (24%) and electronic message boards (20%).

As figure 4.2 shows, the findings are largely unchanged from 2009, although there has been a slight decrease in the proportion of respondents prioritising improvements to the provision of lighting (from 29% to 24%).

4.2: Improving trunk road lighting, markings and signage

Q. From this list, which two or three things would you most like to see improved?



Base: All who have travelled on a trunk road in the last 12 months (2010: 2,009; 2009: 1,861) Source: Ipsos MORI

A higher than average proportion of respondents who use trunk roads in the South West mentioned improvements to the visibility of road markings and the provision of directional signs (38% and 28% versus 33% and 25% overall).

5 Perceptions of cycle lanes and footways

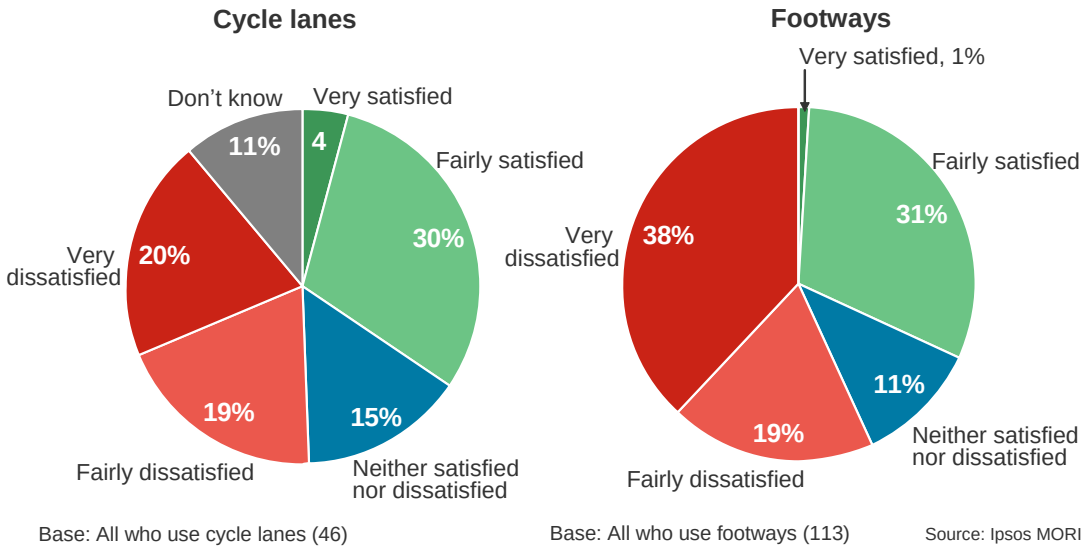
As in 2009, the survey included a series of questions about cycle lanes and footways on the trunk road network. These questions were put only to those respondents who had *used* cycle lanes or footways – 2% (46 people) and 6% (113 people) of all respondents respectively. Because these base sizes are small, the results should be treated as indicative rather than representative, and comparisons with the 2009 results should be avoided.

5.1 Satisfaction with cycle lane and footway surfaces

Views on the general condition of cycle lanes and footway surfaces on the trunk road network were divided: thus, whereas just over a third (34%) of those asked expressed satisfaction with the condition of cycle lanes, a similar proportion (39%) expressed dissatisfaction (figure 5.1). And, whereas 32% of pedestrians said they were satisfied with the condition of footways, 57% said they were dissatisfied.

Figure 5.1: Satisfaction with the general condition of cycle lanes and footway surfaces

Q. How satisfied or dissatisfied are you with the general condition of surfaces?



Base: All who use cycle lanes (46)

Base: All who use footways (113)

Source: Ipsos MORI

Those who expressed dissatisfaction with cycle lanes and/or footways were asked how often they encounter any defects which make them feel unsafe. In respect of cycle lanes, nine respondents said they “sometimes” encounter such defects, while 5 said they “usually” do and 3 said they “always” do. Just one respondent said they “rarely” or “never” encounter defects on cycle lanes. For footways, the comparable figures were: “sometimes” – 23 respondents; “usually” – 17; “always” – 18; and “rarely” or “never” – 7.

The specific types of cycle lane defect most commonly experienced were: uneven or bumpy surfaces (mentioned by nine respondents); potholes (mentioned by seven respondents); ironwork in need of repair and slippery surfaces caused by ice or snow (each mentioned by one respondent).

In terms of specific footways defects, the two most common responses were again uneven or bumpy surfaces (mentioned by 38 people) and potholes (mentioned by 14 people), followed by poor repairs (mentioned by 4 people), wobbly paving slabs (mentioned by 2 people) and loose, damaged or missing kerbs (mentioned by 2 people).

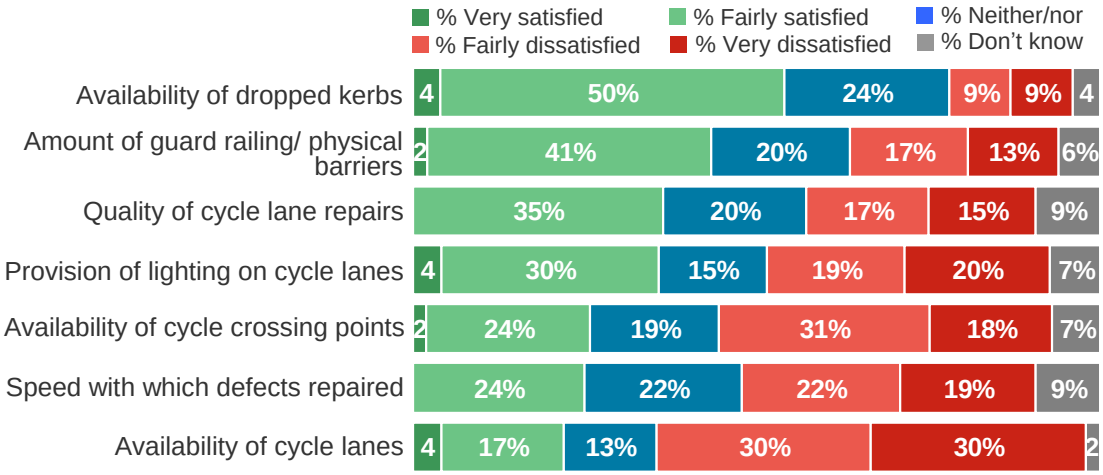
5.2 Satisfaction with other features of cycle lanes and footways

Figure 5.2 and 5.3 shows levels of satisfaction with some other features of cycle lanes and footways respectively. The results for cycle lanes are fairly negative overall: Thus while a majority of users were satisfied with the availability of dropped kerbs, only around a third (35%) were satisfied with the quality of cycle lane repairs, and only around a quarter with the provision of lighting (26%), the availability of cycle crossing points (26%), the speed with which defects are repaired (24%) and the general availability of cycle lanes (21%).

The results for footways were a little more positive, with at least half of those asked saying they were satisfied with the availability of footways (59%), the amount of guard railing and other physical barriers (59%) and the availability of pedestrian crossing points (57%). Still, smaller proportions were satisfied with the availability of dropped kerbs (49%), the general condition of footway surfaces (32%), the quality of footway repairs (25%) and the speed with which defects are repaired (19%).

Figure 5.2: Satisfaction with aspects of cycle lane provision

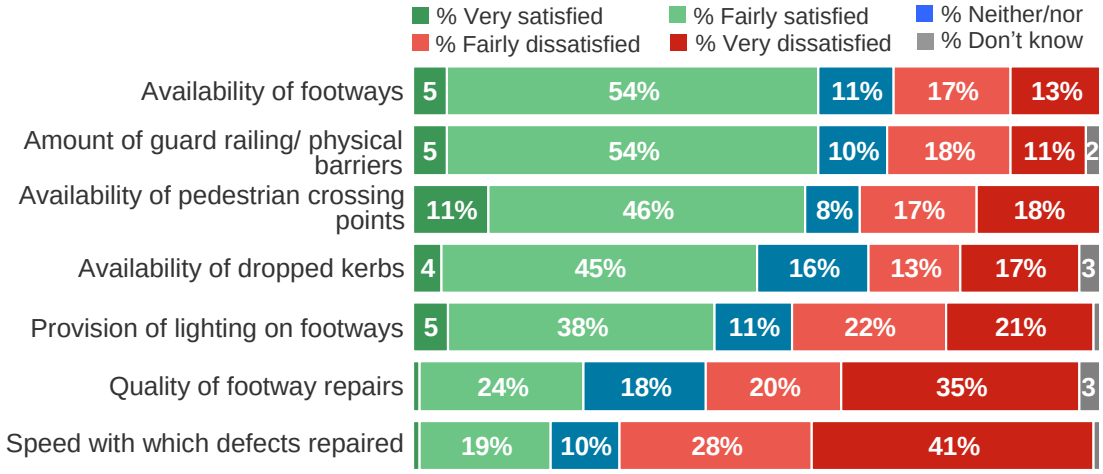
Q. Thinking about the cycle lanes on trunk roads you use most often, overall how satisfied or dissatisfied you are with…?



Base: All who use cycleways (46) Source: Ipsos MORI

Figure 5.3: Satisfaction with aspects of footways provision

Q. Thinking about the footways on trunk roads you use most often, overall how satisfied or dissatisfied you are with…?



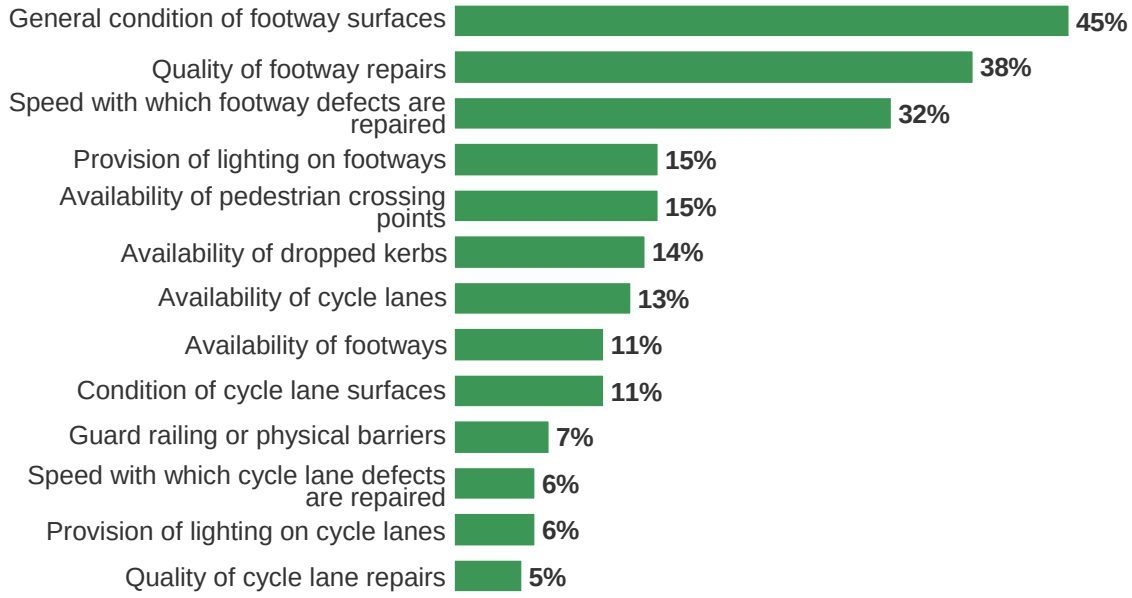
Base: All who use footways (113) Source: Ipsos MORI

5.3 Priorities for improving cycle lanes and footways

Users of cycle lanes and/or footways were also asked to identify, from a pre-defined list[4], the two or three aspects of provision they would most like to see improved. As figure 5.4 shows, the most common response was the general condition of footway surfaces, mentioned by almost half (45%), followed by the quality of footway repairs (38%) and the speed with which footway defects are repaired, each of which were mentioned by around a third of respondents (32%). Next came the provision of lighting on footways (15%), the availability of pedestrian crossing points (15%), the availability of dropped kerbs (14%) and the availability of cycle lanes (13%).

Figure 5.4: priorities for improving cycle lanes and footways – top 10 responses

Q. From this list, which two or three things would you most like to see improved?



Base: All who had used cycle lanes or footways, or both (148) Source: Ipsos MORI

[4] The list varied depending on whether the respondent had used cycle lanes or footways or both. Those who had used only cycle lanes were presented with a list comprising cycle lane improvements only, while those who had used only footways were presented with a list comprising exclusively footway improvements. Those who used both were presented with a merged version of these two lists.

6 Improving the trunk road network

Chapters 1 to 4 highlighted respondents' priorities for improving different aspects of the trunk road network. This chapter aims to synthesise these findings by identifying people's *overall* priorities for improving the network. First, it considers whether different aspects of the network are seen to have improved or deteriorated over the past two years.

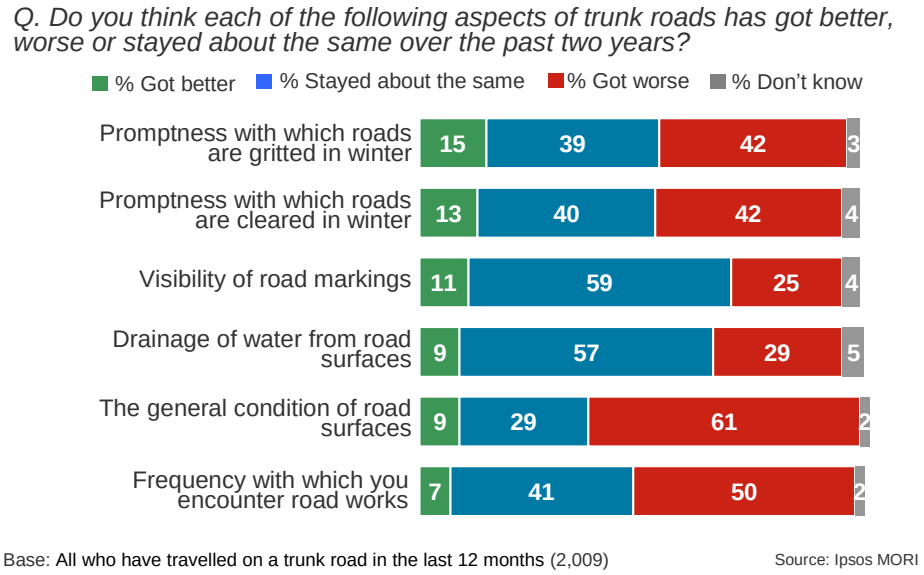
6.1 Changes to the trunk road network over last two years

Respondents were presented with a list comprising various aspects of service provision on the trunk road network and asked to indicate whether they felt each aspect had got better, worse or stayed about the same over the past two years.

As figure 6.1 shows, relatively few respondents felt any of the aspects had got better over the last two years; rather, the majority took the view that each had either stayed the same or worsened.

For two aspects – the visibility of road markings and the drainage of water from road surfaces – the dominant view was that provision had stayed the same over the last two years. For two other aspects – the general condition of roads and the prevalence of road works – most respondents felt things had *worsened*. In respect of the promptness with which roads are gritted and cleared in winter, views were more divided, with around two in five respondents saying provision had stayed same with a similar proportion saying it had worsened.

Figure: 6.1: Changes to aspects of trunk road network over last two years



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

For all of the aspects in figure 6.1, the proportion of respondents saying that provision had worsened is higher than in 2009. As table 6.1 shows, the increase is particularly marked in respect of the promptness with which roads are cleared and gritted in winter (the proportion saying these aspects have worsened has almost doubled over the last year). Again, this may in part be a reflection of the unusually severe weather conditions of winter 2009-10 and the associated disruption to transport.

Table 6.1: % saying each aspect has "got worse" in the last two years

	2009	2010
	%	%
The general condition of road surfaces	43	61
Frequency with which you encounter road works	46	50
Promptness with which roads are gritted in winter	24	42
Promptness with which roads are cleared in winter	22	42
Visibility of road markings	19	25
Drainage of water from road surfaces	24	29
Base: All who have travelled on a trunk road in the last 12 months	*1,861*	*2,009*

Consistent with findings presented elsewhere in this report, frequent users of trunk roads were more likely than infrequent users to say each aspect of provision has worsened over the last two years (table 6.2).

Table 6.2: % saying each aspect has "got worse" in the last two years, by frequency of trunk road usage

	Frequent users	Infrequent users
	%	%
The general condition of road surfaces	67	42
Frequency with which you encounter road works	53	39
Promptness with which roads are gritted in winter	44	38
Promptness with which roads are cleared in winter	44	36
Visibility of road markings	28	16
Drainage of water from road surfaces	32	22
Base: All who have travelled on a trunk road in the last 12 months	*1,329*	*292*

As in 2009, there were also significant regional differences, with respondents in the South West consistently responding more negatively than those in other areas (table 6.3).

Table 6.3: % saying each aspect has "got worse" in the last two years, by region

	North West	North East	South West	South East
	%	%	%	%
The general condition of road surfaces	65	58	67	51
Frequency with which you encounter road works	45	41	57	49
Promptness with which roads are gritted in winter	38	41	47	36
Promptness with which roads are cleared in winter	35	41	47	36
Visibility of road markings	30	22	31	17
Drainage of water from road surfaces	29	31	32	22
Base: All who have travelled on a trunk road in the last 12 months	*152*	*588*	*830*	*430*

6.2 Future improvements to the trunk road network

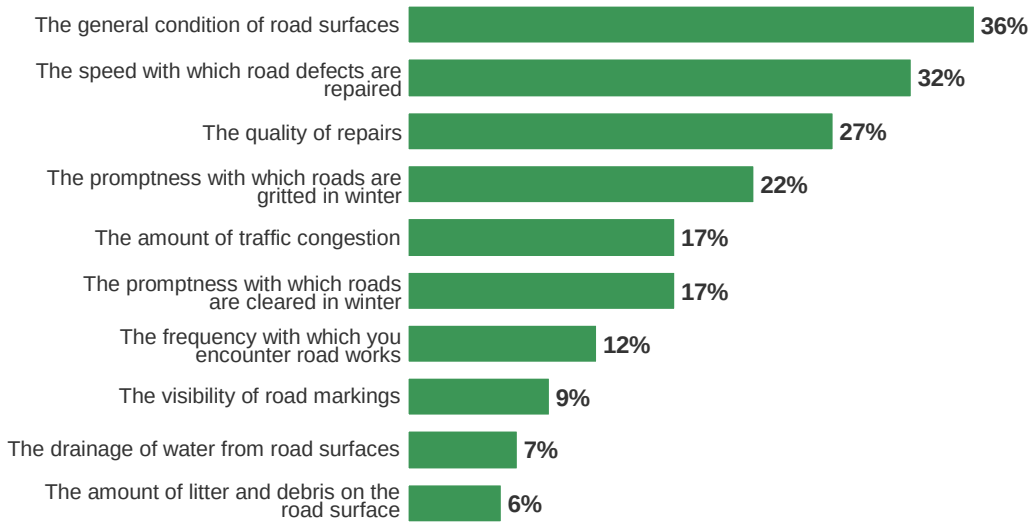
In order to identify respondents' *overall* priorities for improvements across the trunk road network, they were presented with a merged list of all the priorities they had identified over the course of the survey (in respect of: features of trunk roads; road

works and winter maintenance; lighting, markings and signage; and, where applicable, cycle lanes and footways) and asked to select from these the two or three improvements they would *most* like to see made. The top 10 responses are set out in figure 6.2 below.

As in the 2009 survey, the three most frequently mentioned improvements all related to road surfaces and included: the general condition of road surfaces (36%), the speed with which defects are repaired (32%) and the quality of repairs (27%). The next most frequently mentioned improvements were the promptness with which roads are gritted (22%) and cleared (17%) in winter, the amount of congestion (17%) and the frequency of road works (12%). No other single improvement was mentioned by more than one in ten respondents.

Figure 6.2: overall priorities for improving the trunk road network – top 10 mentions

Q. Here is a list of all the improvements you said you would like to see over the last few questions. From this list, which are the two or three most important ones?



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

Again there was some regional variation in the findings. As table 6.4 shows:

- respondents in the South West were more likely than those in all other areas to feel that the quality of repairs should be a priority for improvement
- those in the North West and North East were more likely than average to prioritise the promptness with which roads are cleared and gritted in winter

- those in the South East were more likely than average to prioritise the amount of traffic congestion, but less likely than those in other regions to mention any of the other top five responses.

Table 6.4: Overall priorities for improving the trunk road network, by region

	North West	North East	South West	South East
	%	%	%	%
The general condition of road surfaces	39	38	38	28
The speed with which road defects such as potholes are repaired	37	33	34	27
The quality of repairs	24	24	33	21
The promptness with which roads are gritted in winter	23	29	21	16
The amount of traffic congestion	17	14	18	21
The promptness with which roads are cleared in winter	23	22	13	15
Base: All who have travelled on a trunk road in the last 12 months	*152*	*588*	*830*	*430*

7 Traffic information

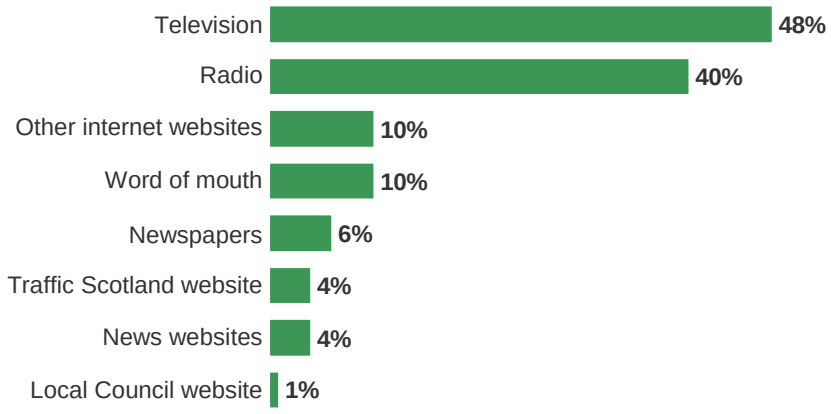
This section looks at views of traffic information. It begins by considering the main sources of traffic information used by respondents, before exploring their awareness and perceptions of information provided on the Traffic Scotland website specifically.

7.1 Sources of information on the status and condition of roads

Respondents where asked from which sources they received the majority of their information about the state and condition of roads during winter 2009-10. As figure 7.1 shows, around half (48%) said they received most of their information from television and 40% said from the radio. No other single source was mentioned by more than one in ten respondents.

Figure 7.1: Sources of information on the status and condition of roads

Q. During the cold spells we had over last winter, from which sources, if any, did you receive the majority of your information about the status and condition of trunk roads?



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

7.2 The Traffic Scotland website

Respondents with internet access were asked whether they had ever used the Traffic Scotland website. In line with the figure recorded in 2009, Just under a quarter (23%) said they had done so.

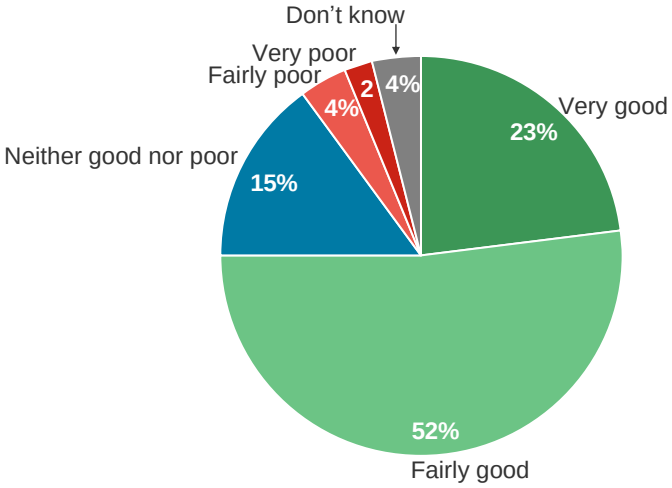
Certain groups of respondents were more likely than others to have used the website, namely:

- men (26% had used the site compared with 20% of women)
- people belonging to social grades ABC1 (28% compared with 17% of C2DEs)[5]
- frequent uses of trunk roads (25% compared with only 12% of infrequent users)
- people living in the North West (30% compared with 20% in the North East)

Perceptions of the website among those who had used it were generally positive: three-quarters rated it as good or very good, while just 6% rated it as poor or very poor (figure 7.2). Again, these results are in line with the comparable findings from 2009.

Figure 7.2: Rating of the Traffic Scotland website

Q. Thinking about your experiences of using the Traffic Scotland website, how would you rate it?



Base: All who had used the Traffic Scotland website (387)

Source: Ipsos MORI

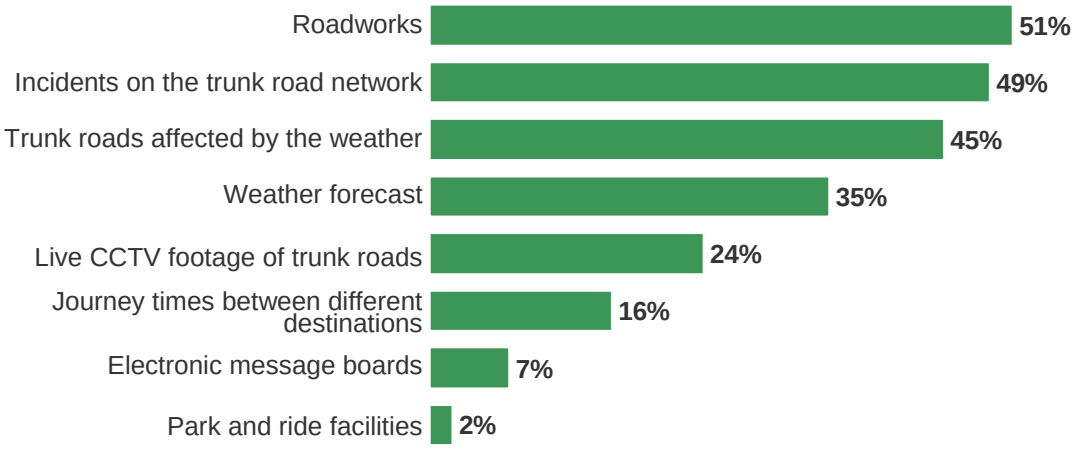
To explore perceptions of the website in more detail, those who had used it were presented with a list of different types of information available on the site and asked which of these they find particularly useful.

[5] Social grades ABC1 includes: people in supervisory or clerical and junior managerial, administrative or professional positions (C1); intermediate managerial, administrative or professional positions (B); and higher managerial, administrative or professional positions (A). Social grades C2DE includes: skilled manual workers (C2); semi and unskilled manual workers (D); and casual or lowest grade workers, pensioners and others who depend on the state for their income (E).

As figure 7.3 shows, around half (51%) said information on road works while a similar proportion said information on incidents (49%) and on trunk roads affected by weather (45%). Meanwhile, around a third mentioned weather forecasts (35%), and a quarter (24%) mentioned live CCTCV footage. Other types of information available on the website, including journey times between destinations, electronic message board content and details of park and ride facilities, were mentioned comparatively less frequently (by 16%, 7% and 2% respectively).

Figure 7.3: Perceptions of information available on Traffic Scotland website

Q. Based on your experiences of using the Traffic Scotland website, which of these types of information, if any, would you say are particularly useful? Information on…



Base: All who have used the Traffic Scotland website (387)

Source: Ipsos MORI

There were some notable regional differences in the results: a higher than average proportion of people in the South West mentioned information on road works (64%) and incidents (55%). Meanwhile a higher than average proportion of those in the North East mentioned weather forecasts (50%) and live CCTV footage (31%).

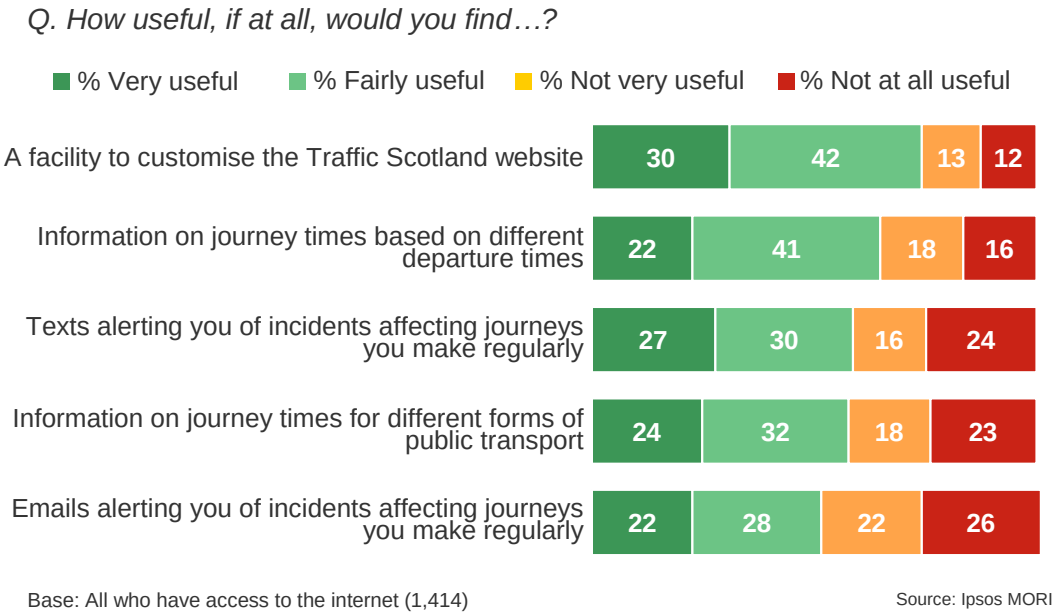
All respondents with access to the internet, whether or not they had used the Traffic Scotland website, were presented with a list of new services that could be provided through the site and asked how useful they would find each. The services were:

- emails alerting them of incidents that affect the journeys they make regularly
- text messages alerting them of incidents that affect the journeys they make regularly
- information on journey times based on different departure times
- information on journey times for different forms of public transport

- a facility to customise the website so that it only shows information relevant to them

The services which the highest proportion of respondents said they would find useful were a facility to customise the website (72% said this would be very or fairly useful) and information on journey times based on different departure times (63%). There was slightly less interest in the other potential new services but, still, at least half of respondents said they would find each of these useful, as can be seen in figure 7.4.

Figure 7.4: Views on new services that could be provided on Traffic Scotland website



Base: All who have access to the internet (1,414) Source: Ipsos MORI

The proportions of respondents showing an interest in three of the services – the text messages, emails and facility to customise the website – have all increased since the 2009 survey (table 7.1).

Table 7.1: Views on new services that could be provided on Traffic Scotland website – 2009 and 2010

	% saying each feature would be useful	
	2009	**2010**
	%	%
A facility to customise the website	65	72
Information on journey times based on different departure times	61	63
Text messages alerting you of incidents that affect journeys you make regularly	50	57
Information on journey times for different forms of public transport	58	56
Emails alerting you of incidents that affect journeys you make regularly	45	50
Base: All with access to the internet	*1,414*	*1,323*

There were few sub-group differences in the findings but younger people aged 18 to 34 years were more likely than older people to favour text messages (71% of people aged 18 to 24 years, compared with 31% of people aged 65 and over), information on journey times based on different departure times (76% compared with 54%), information on journey times for different forms of public transport (70% compared with 50%) and a facility to customise the website (78% compared with 56%).

8 Awareness of Transport Scotland

Awareness of Transport Scotland among trunk road users is generally low. When respondents were asked (unprompted) to name the organisation which has the responsibility of managing the trunk road network in Scotland, around a third (36%) said local government while 20% said private contractors and 15% said the Scottish Government. Only five percent mentioned Transport Scotland and a similar proportion (4%) mentioned the Highways Agency (figure 8.1).

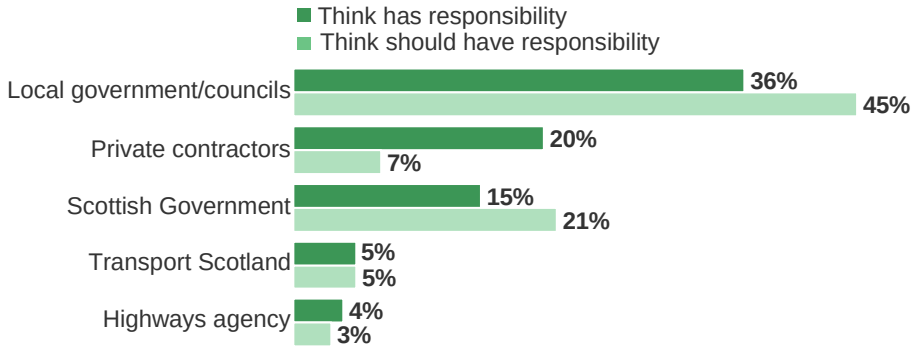
In terms of which organisation trunk road users think *should* have the responsibility for managing the trunk road network, the most common response was again local government (mentioned by 45%) followed by the Scottish Government (21%) and private contractors (7%). Only a very small proportion – five percent – said Transport Scotland.

While these questions were also included in the 2007 survey, changes made to the questionnaire since then mean that it is not possible to make direct comparisons between the two sets of results. That said, it does appear that trunk road users' perceptions of which organisation manages the network have remained broadly consistent over the last few years.

8.1: Responsibility for managing the trunk road network in Scotland - top five responses

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



Base: All who have travelled on a trunk road in the last 12 months (2,009) Source: Ipsos MORI

Respondents who did not mention Transport Scotland in the preceding questions, were also asked whether they had heard of the agency before taking part in the survey. Just

under two in five (39%) said that they had, while 60% said they had not. These figures show a slight improvement on the comparable findings recorded in 2007, when 32% said they had heard of Transport Scotland and 66% said they had not[6].

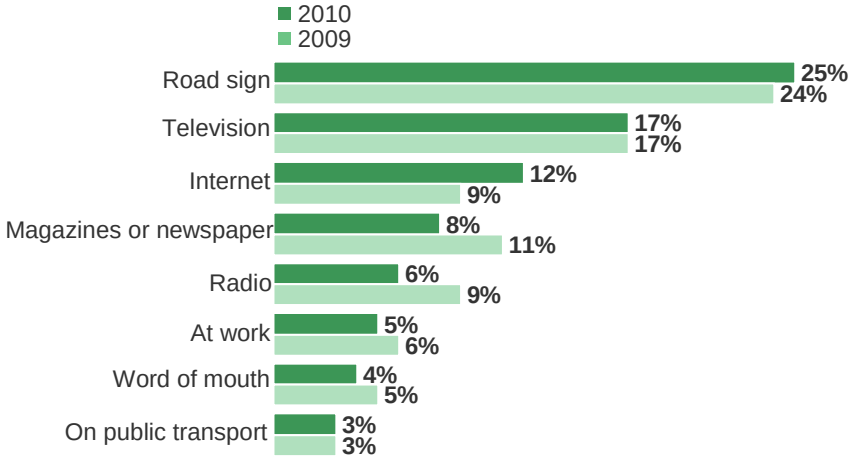
Awareness of the agency was highest among:

- men (44% compared to 35% of women)
- respondents in social grades ABC1 (44% compared to 35% of those in social grades C2DE)
- frequent trunk road users (43% compared to 28% of infrequent users)
- those who use trunk roads in the North West (52% versus 39% overall)

All respondents who had heard of Transport Scotland, or mentioned the agency when asked who they think manages the network, were asked *where* they had seen, read or heard anything about the agency. A quarter said on road signs while a slightly smaller proportion (17%) said on television (figure 8.2). The next most common responses were on the internet (mentioned by 12%), in a magazine or newspaper (8%) and on the radio (6%). These findings were broadly consistent with the 2009 results.

8.2: Sources of information on Transport Scotland

Q. Where have you seen or heard anything about Transport Scotland?



Base: All who had heard of Transport Scotland (2010:874; 2009:876) Source: Ipsos MORI

[6] It is not possible to draw any comparisons with the equivalent findings from 2009 due to changes made to the questionnaire in 2010. As noted, in 2010 this question was only asked of individuals who did not mention Transport Scotland in the preceding questions whereas in 2009, this question was asked of all. respondents to the survey and the questions on awareness of who has responsibility for the network were not included.

The only notable sub-group difference in the results was that a higher than average proportion of trunk road users in the South West said that they had seen a Transport Scotland road sign (30% versus 25% overall).

Appendix A: Survey questionnaire

Good morning/afternoon/evening. My name is …… from Ipsos MORI, the research organisation, and we are carrying out a survey about aspects of life in Scotland. The interview will take about 15 minutes.

I would like to assure you that all the information we collect will be kept in the strictest confidence, and used for research purposes only. It will not be possible to identify any particular individual or address in the results.

PRESENT RESPONDENT WITH MAP OF TRUNK ROAD NETWORK

This is a map of Scotland's trunk road network. Trunk roads include motorways and A roads.

ASK ALL

QTS 1. **How often have you travelled on a trunk road in Scotland in the last 12 months, either as a passenger or a driver?**
SINGLE CODE

5 or more days a week	1
2-4 days a week	2
Once a week	3
Less than once a week but more than once a month	4
Once a month	5
Less than once a month	6
Never	7
Don't know	8

ASK ALL WHO USE TRUNK ROADS AT SOME POINT (CODES 1-6) AT QTS1
OTHERS GO TO SCREEN SHOWING:
In that case, you are not eligible to take part in the survey. However, thank you for your time.
THEN CLOSE SURVEY

QTS2. SHOWCARD A **In which of these ways do you travel on the trunk roads? Please read out the letters that apply.**
MULTICODE OK

A	As a driver of a car/van	1
B	As a passenger in a car/van	2
C	As a driver of a goods vehicle, bus or coach	3
D	As a passenger in a bus or coach	4
E	As a motorcyclist	5
F	As a cyclist	6
G	Walking on footways alongside trunk roads	7
	Other (PLEASE WRITE IN AND CODE '8 ')	8
	Don't know	9

ASK ALL WHO SAY THEY DRIVE ON THE TRUNK ROAD NETWORK AT QTS2 (CODES 1 OR 3) AND WHO SAY THEY USE THE TRUNK ROAD NETWORK AT LEAST ONCE A WEEK AT QTS1 (CODES 1, 2 OR 3)

OTHERS GO TO QTS3

QTS2B **You mentioned that you drove on the trunk road network. In an average week, how many miles do you cover by driving on the trunk road network?**
READ OUT a) – c)
SINGLE CODE

a)	**Less than 25 miles**	1
b)	**Between 25 and 100 miles**	2
c)	**Over 100 miles**	3
	Don't know	4

QTS3. SHOW MAP AGAIN **Within which of these regions do you use trunk roads most often?** SINGLE CODE

North West	1
North East	2
South West	3
South East	4
Don't know	5

ASK ALLWHO MENTION A REGION (CODES 1-4) AT QTS3
OTHERS GO TO PREABLE BEFORE QTS5

QTS4. SHOW MAP AGAIN **And on which of the specific trunk roads within this region do you most frequently travel?** PROBE FULLY AND WRITE IN.
ANY ANSWER (WRITE IN AND CODE '1)

None/no answer

Don't know

ASK ALL

FOR THOSE WHO CODE DON'T KNOW (CODE 5) AT QTS3, OR WHO CODE DON'T KNOW (CODE 3) AT QTS4 READ OUT: **For the remaining questions, I'd like you to focus on the trunk roads in Scotland you use most often.**

FOR ALL OTHERS READ OUT: **For the remaining questions, I'd like you to focus on these trunk roads in Scotland you use most often.**

QTS5. **Do you mainly travel on these roads..**
READ OUT a) – c)
SINGLE CODE

a)	**During rush hours (7am-9am and/or 4pm to 7pm)**	1
b)	**During off peak hours (9am to 4pm and/or 7pm to 7am)**	2
c)	**During both periods**	3
	Other	4
	Don't know	5

QTS6. SHOWCARD B **I'm now going to read out a number of aspects of the general state and condition of trunk roads and I'd like you to tell me how satisfied or dissatisfied you are with each.**
READ OUT a) – g)
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Very Satisfied	Fairly Satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a)	**The general condition of road surfaces**	1	2	3	4	5	6	7
b)	**The management of vegetation on verges and central reserve**	1	2	3	4	5	6	7
c)	**The amount of litter and debris on the road surface**	1	2	3	4	5	6	7
d)	**The speed with which road defects such as potholes are repaired**	1	2	3	4	5	6	7
e)	**The quality of repairs**	1	2	3	4	5	6	7
f)	**The drainage of water from road surfaces**	1	2	3	4	5	6	7
g)	**The amount of traffic congestion**	1	2	3	4	5	6	7

QTS7. SHOWCARD C **Here is a list of the things we just talked about. From this list, which 2 or 3 would you most like to see improved?**
MULTICODE UP TO 3 ONLY

The general condition of road surfaces	1
The management of vegetation on verges and central reserve	2
The amount of litter and debris on the road surface	3
The speed with which road defects such as potholes are repaired	4
The quality of repairs	5
The drainage of water from road surfaces	6
The amount of traffic congestion	7
Other write in	8
None of these	9
Don't know	10

QTS8. SHOWCARD D **For the next few questions I'd like you to think about road works and the maintenance of trunk roads. Still thinking about the trunk roads that you use most often, how satisfied or dissatisfied are you with the….**
READ OUT a) – e)
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Very Satisfied	Fairly Satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a)	**frequency with which you encounter road works**	1	2	3	4	5	6	7
b)	**planning and coordination of diversions when road works take place**	1	2	3	4	5	6	7
c)	**planning and coordination of lane closures and restrictions when road works take place**	1	2	3	4	5	6	7
d)	**Promptness with which roads are cleared in the winter**	1	2	3	4	5	6	7
e)	**Promptness with which roads are gritted in winter**	1	2	3	4	5	6	7

QTS9. SHOWCARD E **Here is a list of the things we just talked about. From this list, which 2 or 3 would you most like to see improved?**
MULTICODE UP TO 3 ONLY

The frequency with which you encounter road works	1
The planning and coordination of diversions when road works take place	2
The planning and coordination of lane closures and restrictions when road works take place	3
The promptness with which roads are cleared in the winter	4
The promptness with which roads are gritted in winter	5
Other write in	6
None of these	7
Don't know	8

QTS10. SHOWCARD F **We are also interested in your opinions of some other aspects of trunk roads. Again, thinking about the trunk roads you use most often how satisfied or dissatisfied are you with the…**
READ OUT a) – e)
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Very Satisfied	Fairly Satisfied	Neither satisfied Nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a)	**provision of lighting along roads**	1	2	3	4	5	6	7
b)	**visibility of road markings**	1	2	3	4	5	6	7
c)	**visibility of road signage**	1	2	3	4	5	6	7
d)	**provision of signs giving directions at decision making points**	1	2	3	4	5	6	7
e)	INSERT ON CAPI SCREEN INSTRUCTION FOR INTERVIEWERS : SHOW RESPONDENTS SHOWCARD AA WITH DEFINITION **provision of electronic message boards to give warnings of congestion and delays**	1	2	3	4	5	6	7

QTS11. SHOWCARD G **Here is a list of the things we just talked about. From this list, which 2 or 3 would you most like to see improved?**
MULTICODE UP TO 3 ONLY

The provision of lighting along roads	1
The visibility of road markings	2
The visibility of road signage	3
The provision of signs giving directions at decision making points	4
The provision of electronic message boards to give warnings of congestion and delays	5
Other write in	6
None of these	7
Don't know	8

ASK ALL WHO SAY THEY CYCLE OR USE FOOTWAYS OR BOTH (CODES 6 OR 7 OR 6+7) AT QTS2
OTHERS GO TO QTS14
FOR THOSE WHO CYCLE **AND** USE FOOTWAYS (CODE 6+7) AT QTS2 INSERT <**cycle lanes and footways**> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS A-N
FOR THOSE WHO **ONLY CYCLE** (CODE 6) AT QTS2 INSERT <**cycle lanes**> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS A-H
FOR THOSE WHO **ONLY USE FOOTWAYS** (CODE 7) AT QTS2 INSERT <**footways**> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS I-P

QTS12. SHOWCARD H **For the next few questions, I'd like you to think about the <**INSERT APPROPRIATE TEXT FROM ABOVE**> on trunk roads you use most often. Overall how satisfied or dissatisfied would you say you are with the…**
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Very Satisfied	Fairly Satisfied	Neither satisfied Nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a)	**general condition of cycle lane surfaces**	1	2	3	4	5	6	7
b)	**provision of lighting on cycle lanes**	1	2	3	4	5	6	7
c)	**speed with which cycle lane defects such as potholes are repaired**	1	2	3	4	5	6	7
d)	**quality of cycle lane repairs**	1	2	3	4	5	6	7
e)	**availability of cycle lanes where they are needed**	1	2	3	4	5	6	7
f)	**availability of dropped kerbs (that is when the edge of the pavement is lowered to help with pushing bikes up or down the pavement)**	1	2	3	4	5	6	7
g)	**availability of cycle crossing points where they are needed**	1	2	3	4	5	6	7
h)	**amount of guard railing or other physical barriers on trunk roads**	1	2	3	4	5	6	7
i)	**general condition of footway surfaces**	1	2	3	4	5	6	7
j)	**provision of lighting on footways**	1	2	3	4	5	6	7
k)	**speed with which footway defects are repaired**	1	2	3	4	5	6	7
l)	**quality of footway repairs**	1	2	3	4	5	6	7
m)	**availability of footways where they are needed**	1	2	3	4	5	6	7
n)	**availability of pedestrian crossing points where they are needed**							
o)	**availability of dropped kerbs (that is when the edge of the pavement is lowered to help with crossing the road)**	1	2	3	4	5	6	7
p)	**amount of guard railing or other physical barriers on trunk roads**	1	2	3	4	5	6	7

ASK ALL WHO SAY THEY CYCLE OR USE FOOTWAYS OR BOTH (CODES 6 OR 7, 6+7) AT QTS2
OTHERS GO TO QTS14
FOR THOSE WHO CYCLE **AND** USE FOOTWAYS (CODE 6+7) AT QTS2, CAPI SCREEN SHOULD SHOW OPTIONS A-N AND INTERVIEWER INSTRUCTIONS SHOULD SAY: SHOWCARD I FOR THOSE WHO USE CYCLE AND USE FOOTWAYS
FOR THOSE WHO **ONLY CYCLE** (CODE 6) AT QTS2, CAPI SCREEN SHOULD SHOW OPTIONS A-H AND INTERVIEWER INSTRUCTIONS SHOULD SAY: SHOWCARD J FOR THOSE WHO ONLY CYCLE
FOR THOSE WHO **ONLY USE FOOTWAYS** (CODE 7) AT QTS2, CAPI SCREEN SHOULD SHOW OPTIONS I-P AND INTERVIEWER INSTRUCTIONS SHOULD SAY: SHOWCARD K FOR THOSE WHO ONLY USE FOOTWAYS

QTS13. **Here is a list of the things we just talked about. From this list, which 2 or 3 would you most like to see improved?**
MULTICODE UP TO 3 ONLY
NOTE FOR SCRIPTING: DO NOT SHOW LETTERING A)-P) ON SCRIPT

a)	The general condition of cycle lane surfaces	1
b)	The provision of lighting on cycle lanes	2
c)	The speed with which cycle lane defects such as potholes are repaired	3
d)	The quality of cycle lane repairs	4
e)	The availability of cycle lanes where they are needed	5
f)	availability of dropped kerbs (that is when the edge of the pavement is lowered to help with pushing bikes up or down the pavement)	6
g)	availability of cycle crossing points where they are needed	7
h)	amount of guard railing or other physical barriers on trunk roads	8
i)	The general condition of footway surfaces	9
j)	The provision of lighting on footways	10
k)	The speed with which footway defects are repaired	11
l)	The quality of footway repairs	12
m)	The availability of footways where they are needed	13
n)	availability of pedestrian crossing points where they are needed	14
o)	availability of dropped kerbs (that is when the edge of the pavement is lowered to help with crossing the road)	15
p)	amount of guard railing or other physical barriers on trunk roads	16
	Other write in	17
	None of these	18
	Don’t know	19

ASK ALL

QTS14. **Here is a list of all the improvements you said you would like to see made over the last few questions. From this list, which are the 2 or 3 most important ones?**
TURN CAPI MACHINE TO RESPONDENT
SHOW LIST OF ALL IMPROVEMENTS MENTIONED FROM QTS7, QTS9, QTS11 and QTS13
MULTICODE UP TO 3 ONLY

QTS15. SHOWCARD L **Do you think that each of the following aspects of trunk roads has got better, worse or stayed the same over the past two years?**
READ OUT a) – f)
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Got better	Got worse	Stayed about the same	Don't know
a)	**General condition of road surfaces**	1	2	3	4
b)	**Drainage of water from road surfaces**	1	2	3	4
c)	**Visibility of road markings**	1	2	3	4
d)	**Frequency with which you encounter road works**	1	2	3	4
e)	**Promptness with which roads are cleared in the winter**	1	2	3	4
f)	**Promptness with which roads are gritted in winter**	1	2	3	4

ASK ALL WHO SAY THAT THEY ARE FAIRLY/VERY DISSATIFIED WITH THE GENERAL CONDITION OF ROAD SURFACES (CODES 4 OR 5) AT QTS6A
OTHERS GO TO QTS18

QTS16 SHOWCARD M **You mentioned that you were dissatisfied with the general condition of road surfaces. When using trunk roads how often, if at all, do you encounter road defects which you feel are unsafe?**
SINGLE CODE

Always	1
Usually	2
Sometimes	3
Rarely	4
Never	5
Don't know	6

ASK ALL WHO SAY AT LEAST RARELY (CODES 1-4) AT QTS16, OTHERS GO TO QTS18

QTS17 SHOWCARD N **And what is the specific defect in <u>most</u> of these cases**? **Just read out the letter that applies.**
SINGLE CODE

A	Uneven/bumpy surface	1
B	Potholes	2
C	Poor repairs	3
D	Cracking	4
E	Ironwork in need of repair (i.e. manholes, drain covers etc.)	5
F	Deterioration of road edge	6
G	Slippery roads caused by ice/snow	7
H	Poor skid resistance	8
I	Water on roads	9
J	Poor road makings	10
	Other – write in	11
	Don't know	12

ASK ALL WHO SAY THAT THEY ARE FAIRLY/VERY DISSATIFIED WITH THE GENERAL CONDITION OF CYCLE LANES (CODES 4 OR 5) AT QTS12A
OTHERS GO TO QTS20

QTS18 SHOWCARD O **You mentioned that you were dissatisfied with the general condition of cycle lane surfaces. When using the cycle lanes how often, if at all, do you encounter defects which you feel are unsafe?**
SINGLE CODE

Always	1
Usually	2
Sometimes	3
Rarely	4
Never	5
Don't know	6

ASK ALL WHO SAY AT LEAST RARELY (CODES 1-4) AT QTS18
OTHERS GO TO QTS20

QTS19 SHOWCARD P **And what is the specific defect in <u>most</u> of these cases**? **Just read out the letter that applies.**
SINGLE CODE

A	Uneven/bumpy surface	1
B	Potholes	2
C	Poor repairs	3
D	Cracking	4
E	Ironwork in need of repair (i.e. manholes, drain covers etc.)	5
F	Deterioration of cycle lane edge	6
G	Slippery cycle lanes caused by ice/snow	7
H	Water on cycle lanes	8
I	Poor cycle lane makings	9
J	Loose/damaged/missing kerbs	10
K	Dropped kerb not at the same level as the road surface	11
	Other –write in	12
	Don't know	13

ASK ALL WHO SAY THAT THEY ARE FAIRLY/VERY DISSATIFIED WITH THE GENERAL CONDITION OF FOOTWAYS (CODES 4 OR 5) AT QTS12I
OTHERS GO TO QTS22

QTS20 SHOWCARD Q **You mentioned that you were dissatisfied with the general condition of footway surfaces. When using the footways how often, if at all, do you encounter defects which you feel are unsafe?**
SINGLE CODE

Always	1
Usually	2
Sometimes	3
Rarely	4
Never	5
Don't know	6

ASK ALL WHO SAY ON AT LEAST RARELY (CODES 1-4) AT QTS20
OTHERS GO TO QTS22

QTS21 SHOWCARD R **And what is the specific defect in <u>most</u> of these cases**?
Please just read out the letter that applies.
SINGLE CODE

A	Uneven/bumpy surface	1
B	Potholes	2
C	Poor repairs	3
D	Cracking	4
E	Ironwork in need of repair (i.e. manholes, drain covers etc.)	5
F	Slippery footways caused by ice/snow	6
G	Water on footways	7
H	Wobbly paving slabs	8
I	Loose/damaged/missing kerbs	9
	Other –other write in	10
	Don't know	11

ASK ALL
The next few questions are about different ways people access information about the trunk road network in Scotland.

QTS22 **During the cold spells we've had over last winter, from which sources, if any, did you receive the majority of your information about the status and condition of trunk roads?**
DO NOT PROMPT. CODE 3 MAX

Television	1
Radio	2
News websites	3
Traffic Scotland website	4
Local council website	5
Other internet websites	6
Word of mouth	7
Newspapers	8
Other, please specify	9
Did not receive any information	10
Don't know	11

ASK ALL WHO DO NOT MENTION A WEBSITE AT QTS22 (IE THOSE WHO CODE A COMBINATION OF 1, 2, 7, 8, 9, 10, 11) OTHERS GO TO QTS24

QTS23 **Do you have access to the internet at all?**
SINGLE CODE ONLY.

Yes	1
No	2
Don't know	3

ASK ALL WHO HAVE INTERNET ACCESS (CODE 1) AT QTS24 AND THOSE WHO DO NOT MENTION TRAFFIC SCOTLAND WEBSITE BUT MENTION ANOTHER WEBSITE AT QTS22 (I.E THOSE WHO CODE 3, 5 OR 6 AND DO NOT CODE 4)
OTHERS GO TO QTS25

QTS24 **Have you ever used the Traffic Scotland web site?**
SINGLE CODE ONLY.

Yes	1
No	2
Don't know	3

ASK THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE (CODE 1) AT QTS24 OR MENTION THE TRAFFIC SCOTLAND WEBSITE AT QTS22 (CODE 4)
OTHERS GO TO QTS26

QTS25 SHOWCARD S **Thinking about your experiences of using the Traffic Scotland web site, how would you rate it?**
SINGLE CODE

Very good	1
Fairly good	2
Neither good nor poor	3
Fairly poor	4
Very poor	5
Don't know	6

ASK THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE (CODE 1) AT QTS24 OR MENTION THE TRAFFIC SCOTLAND WEBSITE AT QTS22 (CODE 4)
OTHERS GO TO QTS27

QTS26 SHOWCARD T **Here is a list of some of the different types of information that are available on the Traffic Scotland website. Based on your experiences of using the website, which of these types of information, if any, would you say are <u>particularly</u> useful? Please just read out the letters that apply.**
CODE 3 MAX

A	Incidents on the trunk road network	1
B	Trunk roads that are affected by weather	2
C	Roadworks	3
D	Journey times between different destinations	4
E	Park and ride facilities	5
F	Weather forecast	6
G	Electronic message boards	7
H	Live CCTV footage of trunk roads	8
	Don't know	9

ASK THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE (CODE 1) AT QTS24 OR MENTION THE TRAFFIC SCOTLAND WEBSITE AT QTS22 (CODE 4)
OTHERS GO TO QTS28

QTS27 **Is there any other information which could be provided through the Traffic Scotland website which you would find useful?**
WRITE IN

Don't know	X

ASK ALL WHO HAVE ACCESS TO THE INTERNET AT QTS 23 (CODE 1) AND THOSE WHO MENTION A WEBSITE AT QTS22 (CODE 3, 4, 5 OR 6)
OTHERS GO TO QTS29

FOR THOSE WHO HAVE **NOT** USED THE TRAFFIC SCOTLAND WEBSITE AT QTS24 (CODE 2) OR THOSE WHO DO NOT MENTIONED TRAFFIC SCOTLAND WEBSITE BUT MENTION ANOTHER WEBSITE AT (I.E THOSE WHO CODE 3, 5 OR 6 AND DO NOT CODE 4) READ: **The Traffic Scotland website provides up to date information on traffic conditions on the motorways and main roads of Scotland. We are interested in views on some additional services that could be provided through the Traffic Scotland website.**

FOR THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE AT QTS24 (CODE 1) OR MENTIONED THE TRAFFIC SCOTLAND WEBSITE AT QTS22 (CODE 4) READ:
We are interested in views on some additional services that could be provided through the Traffic Scotland web site.

QTS28 SHOWCARD U **How useful, if at all, would you find…**
READ OUT a) – e)
SINGLE CODE EACH ROW
RANDOMISE ORDER

		Very useful	Fairly useful	Not very useful	Not at all useful	Don't know
a)	**Emails alerting you of incidents that affect the journeys you make on a regular basis**	1	2	3	4	5
b)	**Text messages alerting you of incidents that affect the journeys you make on a regular basis**	1	2	3	4	5
c)	**Information on journey times based on different departure times**	1	2	3	4	5
d)	**Information on journey times for different forms of public transport**	1	2	3	4	5
e)	**A facility to customise the Traffic Scotland website to only show information that is relevant to you**	1	2	3	4	5

ASK ALL

Now some questions about who looks after the trunk road network.

QTS29a **Who do you think has day to day responsibility for the trunk road network in Scotland?**
DO NOT PROMPT. SINGLE CODE

QTS29b **And who do you think should have day to day responsibility for the network?**
DO NOT PROMPT. SINGLE CODE

	29A	29B
Transport Scotland	1	1
The Scottish Executive/ Government	2	2
Local government/councils	3	3
Other locally based authority	4	4
Highways Agency	5	5
The Westminster Government	6	6
Private contractors e.g. Amey, Bear etc	7	7
Other (PLEASE WRITE IN AND CODE '8')	8	8
None of these	9	9
Don't know	10	10

In fact, the trunk road network is the responsibility of Transport Scotland, a public body that reports to the Scottish Government.

ASK ALL THOSE WHO **DO NOT** CODE TRANSPORT SCOTLAND AT QTS29A (CODE 1)
OTHERS GO TO QTS31

QTS30 **Had you heard of Transport Scotland before this interview?**
SINGLE CODE ONLY.

Yes	1
No	2
Don't know	3

ASK ALL THOSE WHO HAVE HEARD OF TRANSPORT SCOTLAND AT QTS30 (CODE 1) OR MENTION TRANSPORT SCOTLAND AT QTS29A (CODE 1)
OTHERS GO TO QA

QTS31 **Where have you seen or heard anything about Transport Scotland?**
DO NOT PROMPT
SINGLE CODE

Road Sign	1
Magazine or Newspaper	2
Radio	3
TV	4
Internet	5
Friend/relative/word of mouth	6
At work	7
On transport/bus/train/tram stations	8
School/college	9
Community council	10
Other – write in	11
None of these	12
Don't know	13

DEMOGRAPHICS SECTION

ASK ALL

QA CODE RESPONDENTS GENDER
SINGLE CODE

Male	1
Female	2

QB WRITE IN & CODE EXACT AGE
SINGLE CODE

Exact age	
18-24	1
25-34	2
35-44	3
45-54	4
55-59	5
60-64	6
65-74	7
75+	8

QC **Working Status of Respondent:**

Working - Full time (30+ hrs)	1
- Part-time (9-29 hrs)	2
Unemployed	3
Not working - retired	4
- looking after house/children	5
- disabled	6
Student	7
Other (PLEASE SPECIFY)	8

QD **Occupation of Chief Income Earner**
Position/rank/grade

Industry/type of company

Quals/degree/apprenticeship

Number of staff responsible for

QE **Class:**
SINGLE CODE

A	1
B	2
C1	3
C2	4
D	5
E	6

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

1 car or light van	1
2 cars/light vans	2
3+ cars/light vans	3
None	4
Refused/don't know	5

QG **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
Refused/don't know	5

QH SHOWCARD V
What is your household's total income from all sources over the last 12 months? Just read out the letter from the card.
SINGLE CODE.

	Per Week	**Per Year**	
A	Less that £100	Less that £5,200	1
B	£100 to £199	£5,200 to £10,399	2
C	£200 to £299	£10,400 to £15,599	3
D	£300 to £499	£15,600 to £25,999	4
E	£500 to 699	£26,000 to 36,399	5
F	£700 to £949	£36,400 to £49,399	6
G	£950 to £1,199	£49,400 to £62,399	7
H	£1,200 to £1,499	£62,400 to £77,999	8
I	£1,500 or more	£78,000 or more	9

QIA WRITE IN NUMBER OF ADULTS IN THE HOUSEHOLD

QIB WRITE IN NUMBER OF CHILDREN IN THE HOUSEHOLD (UP TO 15 YEARS OLD)

ASK IF CHILDREN IN THE HOUSEHOLD AT QIB

QIC **What ages are the children in the household?**
MULTICODE OK

0-4	1
5-7	2
8-10	3
11-15	4
Don't know	5

ASK ALL

QJ SHOWCARD W **Which of these best describes the ownership of your home? Please read out the letter that applies.**
SINGLE CODE ONLY.

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

END OF QUESTIONNAIRE

Appendix B: Guide to statistical reliability

The respondents to the survey are only a sample of the total 'population'. We cannot therefore be certain that the results are exactly those we would have obtained 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. Table B1 below illustrates the predicted ranges for different sample sizes and percentages results at the '95% confidence interval', based on a random sample.

Table B1: Predicted ranges for different sample sizes at the 95% confidence interval

Size of sample on which survey result is based	**Approximate sampling tolerances applicable to percentages at or near these levels**		
Survey result:	10% or 90%	30% or 70%	50%
Sample size:			
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
2,009 interviews	+/-1	+/-2	+/-2

For example, on a question where 50% of the people in a sample of 2,009 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%).

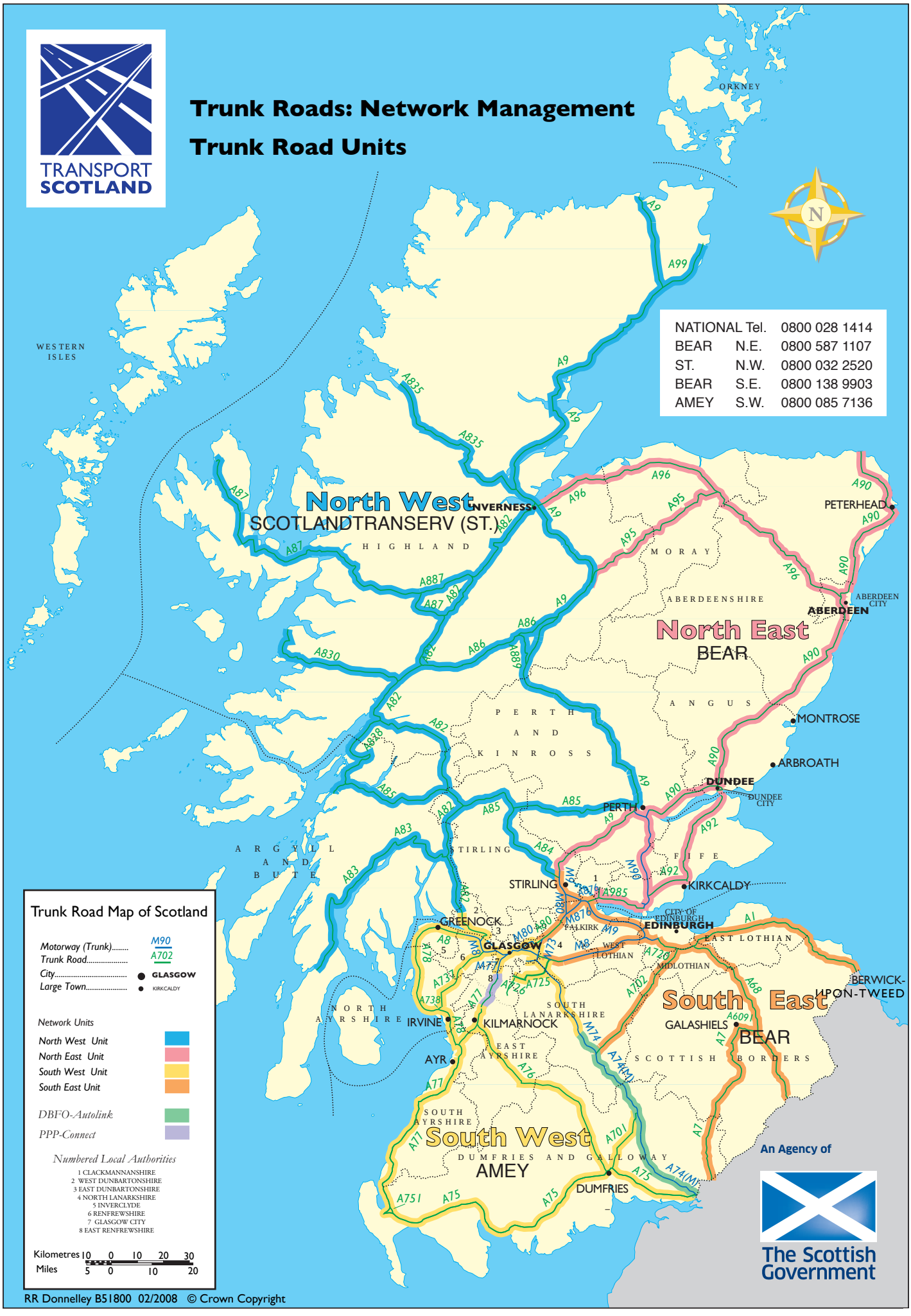
Tolerances are also involved in the comparison of results from different parts of a sample or results from different samples. A difference, in other words, must be of at least a certain size to be considered statistically significant. Table B2 is a guide to the

sampling tolerances applicable to comparisons. It shows, for example, that when comparing data from the 2008 and 2010 surveys for a question were around 10% of people gave a particular answer, a difference of three percentage points is necessary for that difference to be statistically significant.

Table B2: Predicted ranges for different surveys or sub-groups at the 95% confidence interval

	Differences required for significance at or near percentage levels		
Survey result:	**10% or 90%**	**30% or 70%**	**50%**
Size of sample being compared:			
1,861 and 2,009 *(total sample for 2009 vs. total sample for 2010)*	2	3	4
830 and 2,009 *(trunk road users in the South West vs. total sample for 2010)*	2	3	3
976 and 1,033 *(men vs. women)*	3	4	4
292 and 1,329 *(frequent trunk road users vs. infrequent trunk road users)*	4	6	6

Appendix C: Map of the trunk road network in Scotland


TRANSPORT SCOTLAND
Trunk Roads: Network Management
Trunk Road Units
N
NATIONAL Tel. 0800 028 1414
BEAR N.E. 0800 587 1107
ST. N.W. 0800 032 2520
BEAR S.E. 0800 138 9903
AMEY S.W. 0800 085 7136
North West
SCOTLANDTRANSERV (ST.)
North East
BEAR
South East
BEAR
South West
AMEY
INVERNESS
PETERHEAD
ABERDEEN
ABERDEEN CITY
MONTROSE
ARBROATH
DUNDEE
DUNDEE CITY
PERTH
STIRLING
KIRKCALDY
GREENOCK
GLASGOW
FALKIRK
CITY OF EDINBURGH
EDINBURGH
IRVINE
KILMARNOCK
AYR
GALASHIELS
BERWICK-UPON-TWEED
DUMFRIES
ORKNEY
WESTERN ISLES
HIGHLAND
MORAY
ABERDEENSHIRE
ANGUS
PERTH AND KINROSS
ARGYLL AND BUTE
STIRLING
FIFE
NORTH AYRSHIRE
SOUTH LANARKSHIRE
EAST AYRSHIRE
SOUTH AYRSHIRE
DUMFRIES AND GALLOWAY
WEST LOTHIAN
MIDLOTHIAN
EAST LOTHIAN
SCOTTISH BORDERS
Trunk Road Map of Scotland
Motorway (Trunk)..... M90
Trunk Road..... A702
City..... GLASGOW
Large Town..... KIRKCALDY
Network Units
North West Unit
North East Unit
South West Unit
South East Unit
DBFO-Autolink
PPP-Connect
Numbered Local Authorities
1 CLACKMANNANSHIRE
2 WEST DUNBARTONSHIRE
3 EAST DUNBARTONSHIRE
4 NORTH LANARKSHIRE
5 INVERCLYDE
6 RENFREWSHIRE
7 GLASGOW CITY
8 EAST RENFREWSHIRE
Kilometres 10 0 10 20 30
Miles 5 0 10 20
An Agency of
The Scottish Government
RR Donnelley B51800 02/2008 © Crown Copyright