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# Perceptions of the trunk road network in Scotland

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# Executive Summary

## Perceptions of trunk roads

Satisfaction with trunk road surfaces reached its highest level since 2009, at 45%. Indeed, for the first time since 2009, a higher proportion of respondents were satisfied than dissatisfied.

Of all those who were dissatisfied with the condition of trunk road surfaces, 89% said they had encountered road defects that they felt were unsafe. This was four percentage points lower than in 2014 and the lowest proportion recorded since the survey began. A total of two in five said that they always (17%) or usually (25%) encountered defects they felt were unsafe.

Views on other aspects of the general state and condition of trunk roads were mixed. Consistent with previous waves of the survey, the majority of respondents were satisfied with the management of vegetation on verges and central reserves (67%) and the amount of litter and debris on the road surface (63%). Fewer respondents were satisfied with the quality and the speed of repairs – 39% and 26% respectively were satisfied with these aspects, while 43% and 56% were *dissatisfied*.

## Road works and winter maintenance

In line with previous waves of the survey, views on road works and the maintenance of trunk roads were mixed. More than half of respondents were satisfied with the planning and coordination of diversions when road works take place, the planning and coordination of lane closures, and the amount of information on possible delays (55%, 53% and 52%). However, fewer than half were satisfied with the frequency with which they encountered day time road works or lane closures (44% for both).

Reflecting the trend of recent years, satisfaction with winter maintenance was higher than with other aspects of maintenance. Most respondents were satisfied with the promptness with which roads were cleared (60%) and gritted (59%) in the winter.

## Lighting, marking and signage

Views were largely positive in respect of lighting, markings and signage on trunk roads. Most respondents were satisfied with the visibility of road signage (76%), the provision of signs giving directions at decision-making points (71%), the provision of lighting along roads (68%), the provision of electronic message boards (67%), and the visibility of road markings (63%).

## Perceptions of cycle lanes and footways

Among respondents who had used cycle lanes, views on the general condition of cycle lanes were mixed: 39% of users were satisfied compared with 38% dissatisfied. Respondents who had used footways were more likely to be dissatisfied than satisfied with the condition of these (43% dissatisfied compared to 35% satisfied).

Among users of cycle lanes and/or footways, the top priority for improvement was the availability of cycle lanes where they were needed (32%), followed by the general condition of footway surfaces (24%).

## Perceived changes to the trunk road network over past two years

No more than three in ten thought there had been improvements to trunk roads over the last two years. For half of the aspects of trunk roads they were asked about, the majority felt that things had stayed the same. The most notable exceptions to this were the general condition of road surfaces and the frequency of roadworks, with 47% and 39% respectively saying that these aspects had got worse.

## Overall priorities for improving the trunk road network

Respondents were shown a list of all the improvements they said they would like to see on the trunk road network - including those pertaining to roads, footways and cycle lanes - and asked to choose the two or three that were most important to them. Consistent with previous years, the top priorities for improvement were the general condition of road surfaces (41%), the speed with which road defects were repaired (33%) and the quality of repairs (32%).

## Disruption due to weather

In the past 12 months, almost half (47%) of respondents had experienced disruption to their journeys due to snow or ice on the road, and around a third had experienced disruption due to heavy rain or hail (37%), high winds (36%) or floods (31%). Disruption due to landslide had affected 6%. Of those who had experienced disruption, 62% had experienced a delay of some kind, while 27% had had to use an alternative route, 20% had had to cancel their journey and 8% had had to use an alternative form of transport.

The majority of respondents were satisfied with the accuracy of information about the likely condition of trunk roads before severe weather (62%), and with the availability of information on the condition of trunk roads during (60%) and after (55%) severe weather. Around half (53%) of respondents were satisfied with measures taken to deal with disruptions on trunk roads after severe weather and a similar proportion (50%) were satisfied with the availability of alternative routes and diversions.

## Information about the trunk road network

The most common source of information on the status and condition of trunk roads during severe weather was radio (50%), followed by television (36%), the Traffic Scotland website (17%) and news websites (12%).

Usage of Traffic Scotland information sources was broadly in line with previous years. The Traffic Scotland website remained the most used source by some way (38%), followed by the Traveline smartphone app, the mobile website and the Twitter feed and (9%, 7% and 5% respectively).

Views of both the Traffic Scotland website and the mobile website remained positive. More than four in five (84%) of those who had used the Traffic Scotland website rated it as good or very good, with only 4% rating it as poor or very poor. The figures for the mobile site were very similar, at 83% and 5% respectively.

The majority (80%) of respondents had heard of Transport Scotland before taking part in the interview. The places where they had most commonly seen or heard something about the organisation were television (35%), the internet (29%), road signs (28%), and radio (27%).

# 1 Introduction

This report presents the findings from a survey of trunk road users conducted by Ipsos MORI on behalf of Transport Scotland. This is the eighth time the survey has been conducted since 2007. This report presents the findings from the 2015 wave of the survey, with reference to data from previous waves where appropriate.

## 1.1 The survey questionnaire

The questionnaire covered largely the same topics as in previous waves; namely:

- road conditions and defects
- road works and winter maintenance
- road lighting, marking and signage
- cycle lanes and footways
- disruption due to weather
- information about the trunk road network and perceptions of Traffic Scotland information

A copy of the questionnaire is included in Appendix A.

## 1.2 Methodology

Ipsos MORI interviewed a representative quota sample of 2,016 adults (aged 18 and over) across Scotland. All interviews were conducted face-to-face in respondents' homes using Computer Assisted Personal Interviewing (CAPI).

Fieldwork for the survey was carried out 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 7<sup>th</sup> March and 24<sup>th</sup> May 2015; and the second wave between 9<sup>th</sup> July and 31<sup>st</sup> August 2015.

Only individuals who had travelled on the trunk road network over the previous 12 months were eligible to take part in the survey. To establish eligibility, interviewers showed 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 (including as a passenger). 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 data have been weighted by age, gender and working status using the latest Office for National Statistics mid-year estimates.

**All aspects of the study were carried out to the international quality standard for market research, ISO20252.**

### 1.3 Presentation and interpretation of the 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.

Where percentages do not sum to 100%, this may be due to computer rounding, the exclusion of 'don't know' categories or multiple answers. An asterisk (\*) denotes any value of less than half a per cent but more than zero, while a dash (-) denotes zero.



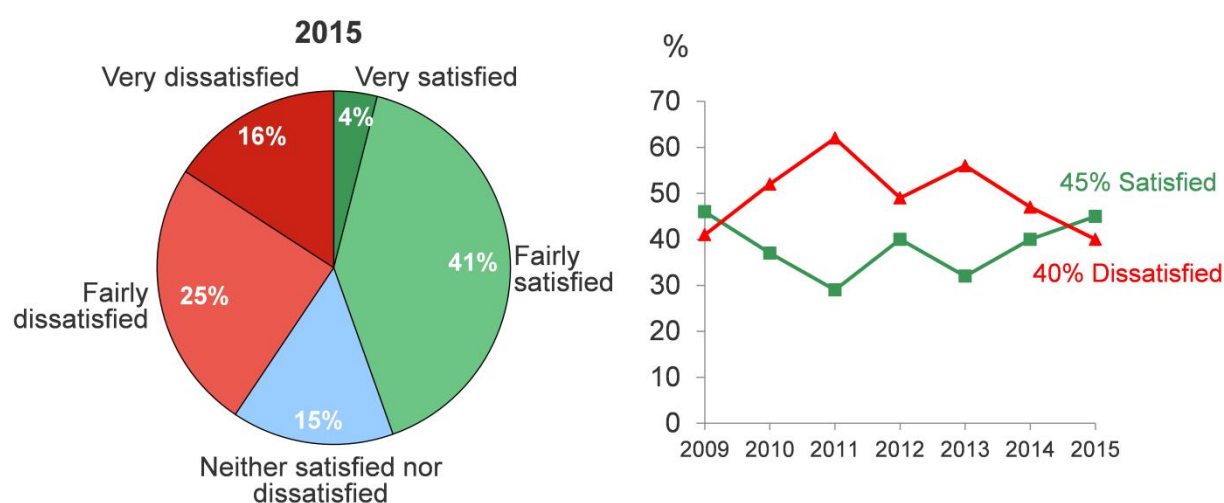
## 2 Perceptions of trunk roads

### 2.1 Satisfaction with trunk road surfaces

Satisfaction with trunk road surfaces reached its highest level since 2009, at 45%. Indeed, for the first time since 2009, a higher proportion of respondents were satisfied than dissatisfied (see Figure 2.1).

Figure 2.1 – Satisfaction with trunk road surfaces

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



Base: All who used trunk roads in the past year (2015:2,016; 2014: 2,005; 2013: 1,999; 2012: 2,006; 2011: 2,017; 2010: 2,009; 2009: 1,861)

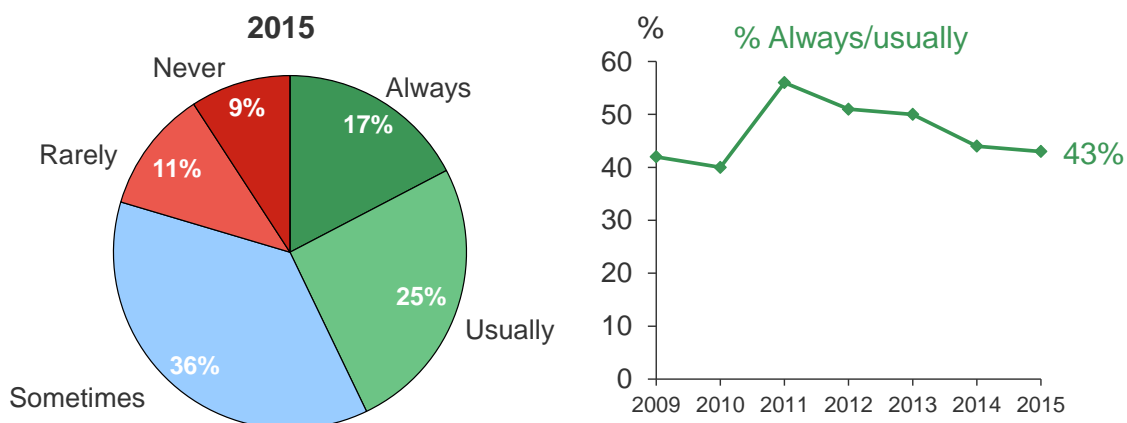
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Trunk roads users in the South East and North East were more likely than those in the South West and North West to be satisfied with road surfaces (54% and 49%, compared to 38% and 36%).

Of all those who were dissatisfied with the condition of trunk road surfaces, 89% said they had encountered road defects that they felt were unsafe (Figure 2.2). This was four percentage points lower than in 2014 and the lowest proportion recorded since the survey began. A total of two in five said that they always (17%) or usually (25%) encountered defects they felt were unsafe.

Figure 2.2 – Experience of road defects

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 (2015: 812, 2014: 946; 2013: 1,123; 2012: 989; 2011: 1,253; 2010: 1,050; 2009: 758)

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As shown in Table 2.1, potholes were, once again, the most commonly encountered road defect (71%).

Table 2.1 – Specific road defects experienced, 2009-2015

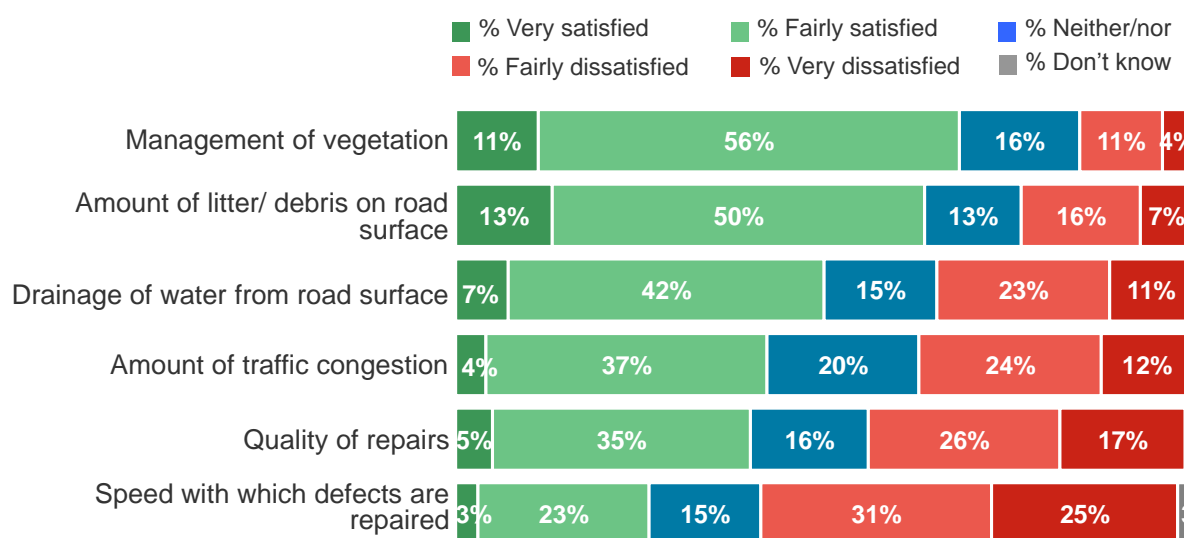
	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
Potholes	62	73	77	75	76	72	71
Uneven/bumpy surfaces	14	12	8	8	7	9	9
Poor repairs	9	5	8	8	8	8	8
Water on roads	3	2	1	1	2	2	3
Slippery roads caused by ice/snow	2	3	2	1	2	2	2
Deterioration of road edge	2	1	1	1	1	1	2
Ironwork in need of repair	1	1	1	1	1	1	1
Poor road markings	1	*	*	1	1	1	1
Cracking	2	2	1	2	1	1	1
Poor skid resistance	1	*	*	*	1	*	1
Base: All dissatisfied with trunk road surfaces and who had experienced defects	729	998	1,221	947	1,061	885	723

## 2.2 Satisfaction with other aspects of the trunk road network

Views on other aspects of the general state and condition of trunk roads were mixed (Figure 2.3). Consistent with previous waves of the survey, the majority of respondents were satisfied with the management of vegetation on verges and central reserves (67%) and the amount of litter and debris on the road surface (63%). Fewer respondents were satisfied with the quality and the speed of repairs – 39% and 26% respectively were satisfied with these aspects, while 43% and 56% were *dissatisfied*.

Figure 2.3 – Satisfaction with other aspects of the trunk road network

*Q. How satisfied or dissatisfied are you with the following aspects of the general state and condition of trunk roads?*



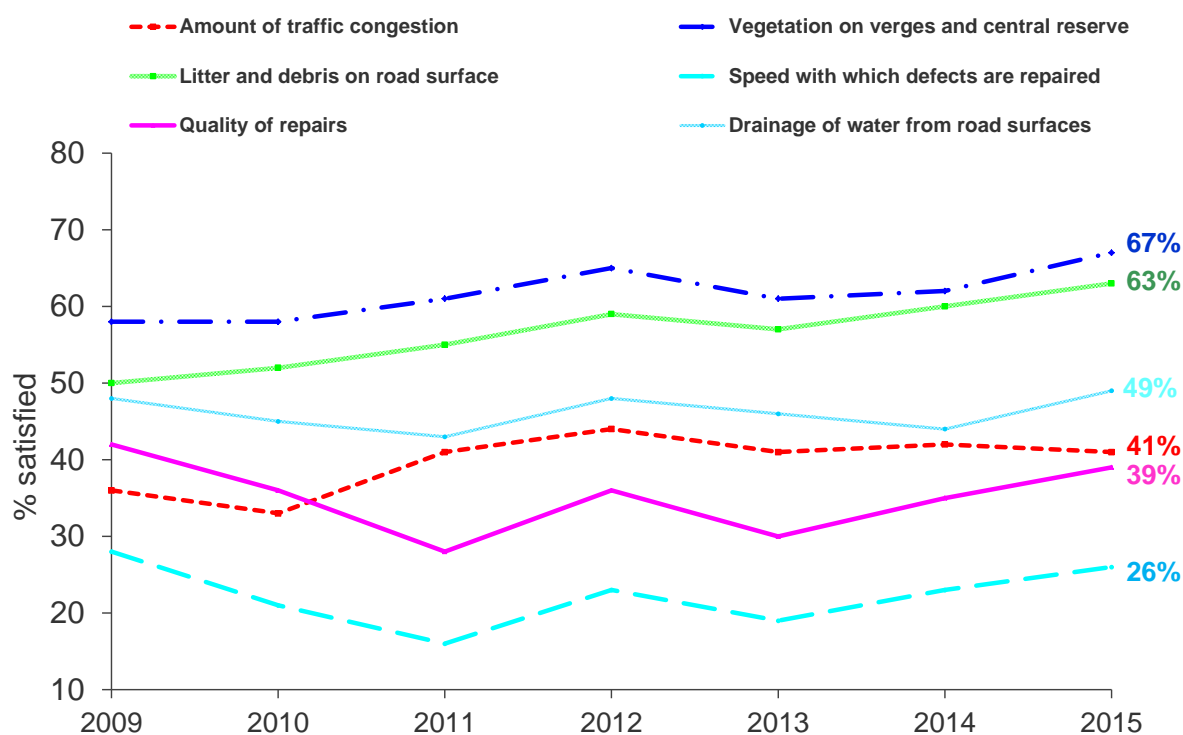
Base: All who had used trunk roads in the past year (2,016)

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Despite these mixed views, most results represented an improvement over those from 2014 (Figure 2.4). Satisfaction was higher with:

- the management of vegetation on verges (67%, compared to 62% in 2014)
- the amount of litter and debris on road surfaces (63%, compared to 60% in 2014)
- the drainage of water and flooding (49%, compared to 44% in 2014)
- the quality of repairs (39%, compared to 35% in 2014)
- the speed with which defects are repaired (26%, compared to 23% in 2014).

Figure 2.4 – Trends in satisfaction with aspects of the trunk road network



Base: All who used trunk roads in the past year (2015: 2,016, 2014: 2,005; 2013: 1,999; 2012: 2,001; 2011: 2,017; 2010: 2,009; 2009: 1,861)

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As Table 2.2 shows, respondents in the North East and South East were, in general, more likely than those in the North West and South West to be satisfied with the different aspects of the trunk road network.

Table 2.2 – Trends in satisfaction with aspects of the trunk road network by region

	Overall	North West	North East	South West	South East
	%	%	%	%	%
Management of vegetation	69	67	70	62	71
Amount of litter and debris on road surface	63	61	66	58	68
Drainage of water from road surface	49	37	51	44	60
Amount of traffic congestion	41	40	45	36	45
Quality of repairs	39	40	43	31	47
Speed with which defects are repaired	26	23	32	19	32
Base: All who had used trunk roads at some point last year	2,016	222	575	725	488

## 2.3 Priorities for improvement

In line with previous waves of the survey, respondents' priorities for improving the state and condition of road surfaces reflected the levels of satisfaction shown above. The top priorities were: the general condition of road surfaces (54%), the speed with which road defects were repaired (49%) and the quality of repairs (44%) (Table 2.3). In terms of other priorities, the most notable difference was in the proportion mentioning traffic congestion, an increase of nine percentage points since 2014 (31%, compared to 22%).

Table 2.3 – Priorities for improvement, 2009-2015

	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
General condition of road surfaces	49	50	58	55	59	52	54
Speed with which defects are repaired	42	52	57	51	54	50	49
Quality of repairs	38	44	52	47	53	48	44
Amount of traffic congestion	33	31	23	25	24	22	31
Drainage of water from road surfaces	17	16	19	19	17	22	23
Amount of litter and debris on road surface	18	13	10	13	11	11	11
Management of vegetation	7	6	6	6	7	8	7
<i>Base: All who had used trunk roads at some point last year</i>	<i>1,861</i>	<i>2,009</i>	<i>2,017</i>	<i>2,001</i>	<i>1,999</i>	<i>2,005</i>	<i>2,016</i>

As shown in Table 2.4, respondents in the North West and South West were more likely than average to prioritise the speed with which defects were repaired. Respondents in the South West were also more likely than average to prioritise the general condition of road surfaces and the quality of repairs, while those in the North West were more likely to prioritise the drainage of water from roads surfaces.

Table 2.4 – Priorities for improvement by region

	Overall	North West	North East	South West	South East
	%	%	%	%	%
The general condition of road surfaces	54	55	44	62	51
Speed with which defects are repaired	49	56	45	53	46
Quality of repairs	44	42	43	48	40
Amount of traffic congestion	31	30	32	28	35
Drainage of water from road surface	23	33	23	22	19
Amount of litter and debris on road surface	11	8	12	13	11
Management of vegetation	7	7	9	6	6
<i>Base: All who had used trunk roads at some point last year</i>	<i>2,016</i>	<i>222</i>	<i>575</i>	<i>725</i>	<i>488</i>



## 2.4 Addressing trunk road defects

Respondents were shown images of different types of road defect (flooding; rutting; fretting; cracking; subsidence; and ironworks) and asked at what stage they thought Transport Scotland must take action to address these. Four images were shown for each defect, ranging from level one to level four, where level one was the defect at an early, less severe stage and level four was the defect at a later, more severe stage. (The images can be found at Q31A, Appendix A.)

For each type of defect respondents said that action must be taken at an early stage. For example, more than four in five said that subsidence (depth), fretting and ironworks must be addressed at level one or level two (88%, 87% and 84%). In respect of subsidence (64%) and fretting (59%), most respondents felt action should be taken at the earliest stage.

**Table 2.5 – When to take action to address defects**

	Level 1 (least severe)	Level 2	Level 3	Level 4 (most severe)
	%	%	%	%
Subsidence (depth)	64	24	6	4
Fretting	59	28	7	6
Ironworks	49	35	11	5
Cracking	42	31	15	10
Rutting	29	40	18	10
Flooding	22	37	23	16
<i>Base: All who had used trunk roads at some point last year: 2,016</i>				

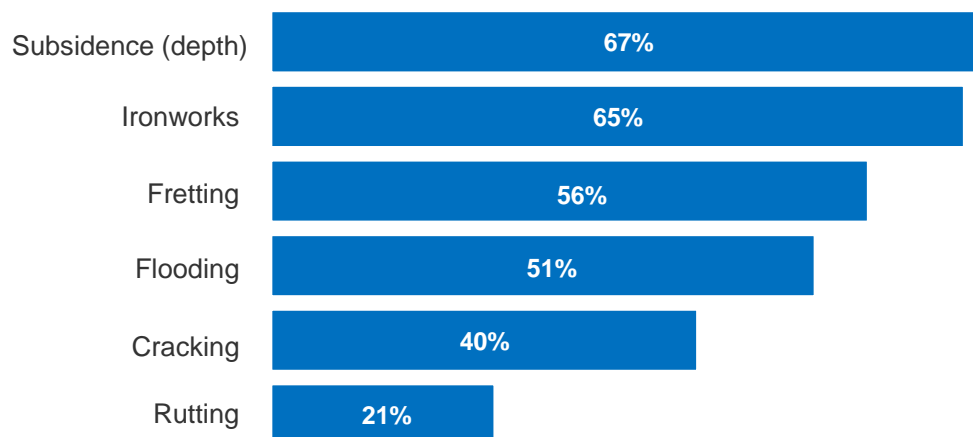
## 2.5 Priorities to take action on

From the defects above, respondents were asked to select three priorities for Transport Scotland to take action on<sup>1</sup>. Subsidence and ironworks were identified as the most important defects to address, with 67% and 65% prioritising these respectively (Figure 2.5). Around half prioritised fretting and flooding (56% and 51%), while cracking and rutting were prioritised by 40% and 21% respectively.

<sup>1</sup> This question was only asked of those who took part in the second wave of the survey (1,012 respondents).

Figure 2.5 – Most important defects to address

*Q. Which images do you think are the most important for Transport Scotland to take action on?*



Base: All Wave Two respondents who had used trunk roads in the past year (1,012)

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Flooding was a higher priority among those in the South West than in other regions (55%, compared to 51% overall).

## 3 Road works and winter maintenance

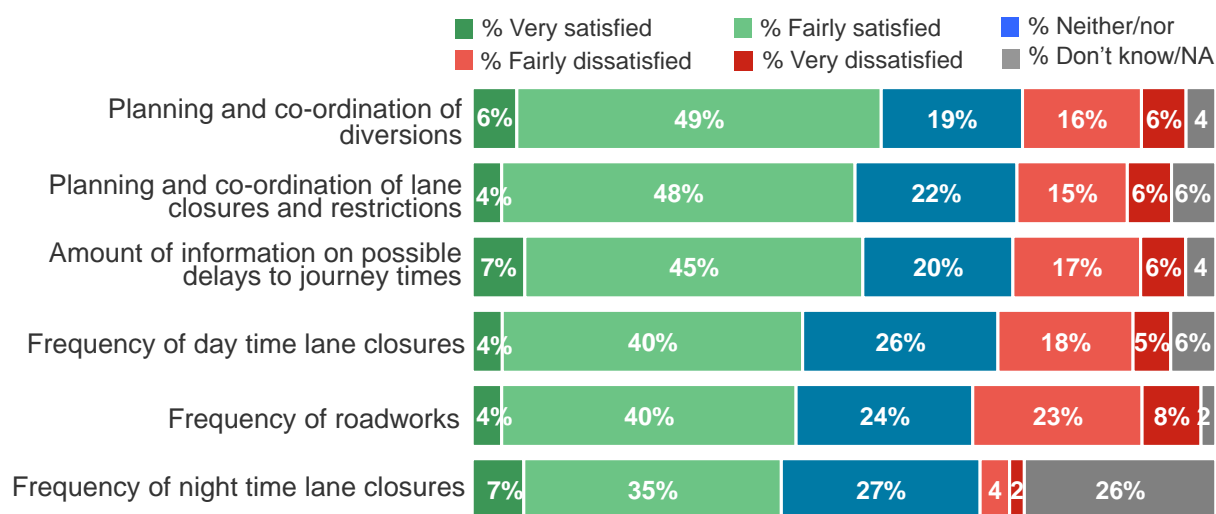
### 3.1 Road works

In line with previous waves of the survey, views on road works and the maintenance of trunk roads were mixed (Figure 3.1). More than half of respondents were satisfied with the planning and coordination of diversions when road works take place, the planning and coordination of lane closures, and the amount of information on possible delays (55%, 53% and 52%). However, fewer than half were satisfied with the frequency of road works, and of day and night time lane closures (44%, 44% and 42%).

As shown in Figure 3.2, views have generally improved since 2014. For example, satisfaction with the planning and coordination of diversions increased by seven percentage points (55%, compared to 48% in 2014) and satisfaction with the planning and coordination of lane closures increased by six percentage points (53%, compared to 47% in 2014).

Figure 3.1 – Satisfaction with road works and related issues

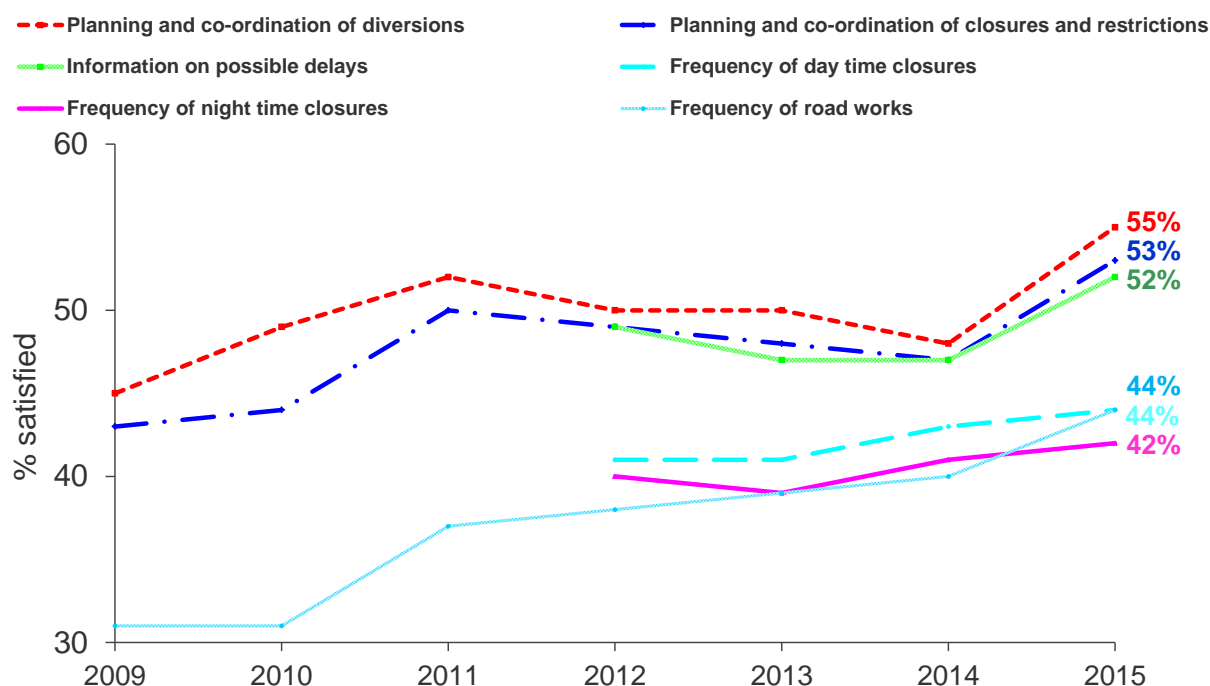
*Q. How satisfied or dissatisfied are you with the following aspects of road works and the maintenance of trunk roads?*



Base: All who had used trunk roads in the past year (2,016)

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Figure 3.2 – Trends in satisfaction with road works and related issues



Base: All who used trunk roads in the past year (2015: 2,016, 2014: 2,005; 2013: 1,999; 2012: 2,001; 2011: 2,017; 2010: 2,009; 2009: 1,861)

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As Table 3.1 shows, levels of satisfaction in the South West were lower than average in relation to: the frequency of road works; the planning and coordination of diversions; and the planning and coordination lane closures.

Table 3.1 – Satisfaction with road works and related issues by region

	Overall	North West	North East	South West	South East
	%	%	%	%	%
Planning and coordination of diversions	55	63	57	52	55
Planning and coordination of lane closures and restrictions	53	60	55	48	53
Frequency of road works	44	49	49	39	43
Frequency of day time lane closures	44	47	49	39	46
Frequency of night time lane closures	42	47	40	41	42
<i>Base: All who had used trunk roads at some point last year</i>	2,016	222	575	725	488

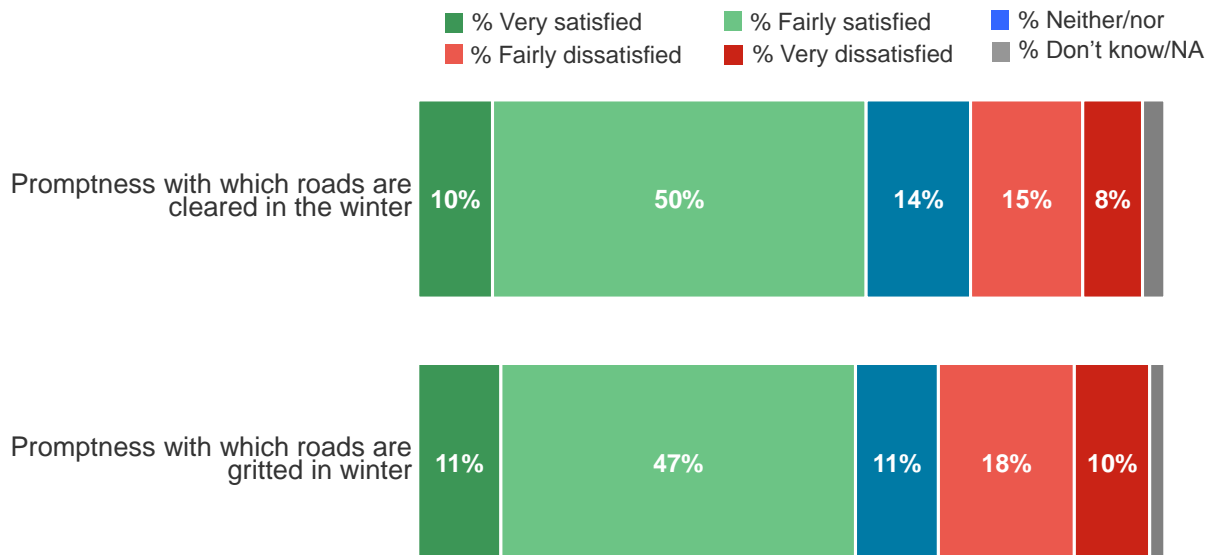
### 3.2 Winter maintenance

Reflecting the trend of recent years, satisfaction with winter maintenance was higher than with other aspects of maintenance. Most respondents were satisfied with the promptness with which roads were cleared (60%) and gritted (59%) in the winter (Figure 3.3). Satisfaction with the promptness of road

clearing was four percentage points higher than in 2014, and indeed at its highest since the survey began. Satisfaction with gritting remained stable (Figure 3.4).

Figure 3.3 – Satisfaction with winter maintenance

Q. How satisfied or dissatisfied are you with the...?

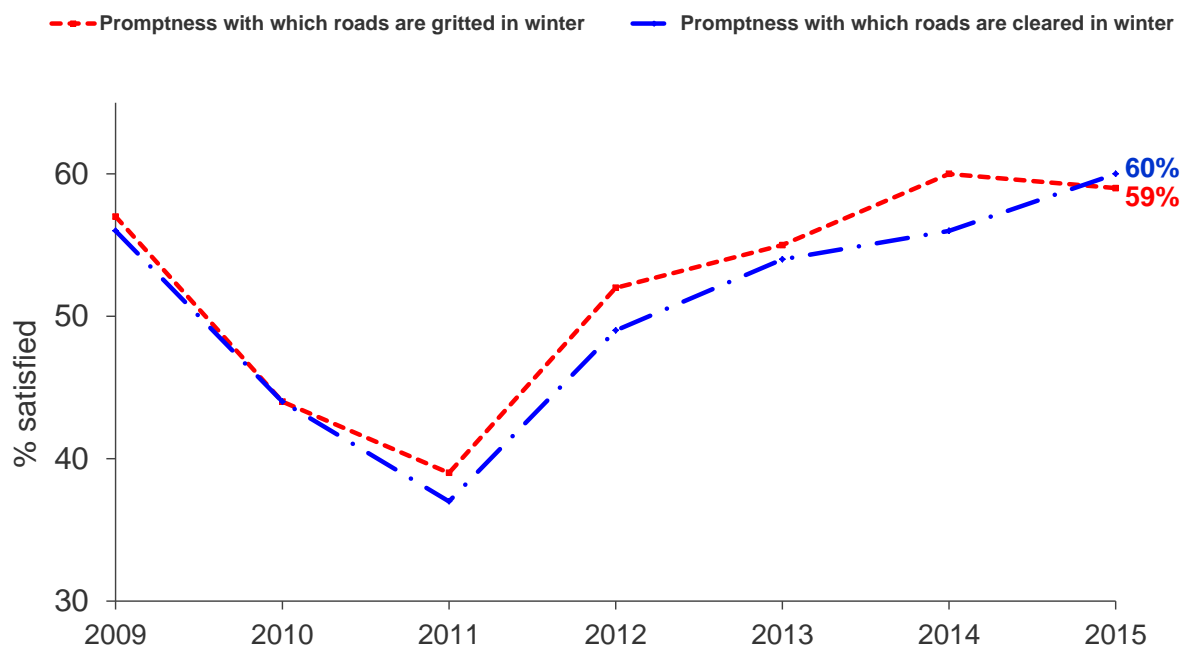


Base: All who had used trunk roads in the past year (2,016)

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Figure 3.4 – Trends in satisfaction with winter maintenance



Base: All who used trunk roads in the past year (2015: 2,016; 2014: 2,005; 1,999; 2012: 2,001; 2011: 2,017; 2010: 2,009; 2009: 1,861)

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### 3.3 Priorities for improvement

Respondents' top three priorities for improving road works and winter maintenance remained the same as in previous years. As Table 3.2 shows, these priorities were: the promptness with which roads were gritted in winter (32%); the promptness with which roads were cleared (29%); and the frequency of road works (28%).

Table 3.2 – Priorities for improving road works and winter maintenance

	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
Promptness with which roads gritted in winter	33	49	56	31	36	28	32
Promptness with which roads cleared in winter	29	45	58	39	33	26	29
Frequency of road works	45	37	34	32	29	30	28
Frequency of day time lane closures	-	-	-	21	19	21	24
Amount of information on possible delays	-	-	-	19	21	19	21
Planning & co-ordination of diversions	30	23	17	17	18	19	19
Planning & co-ordination of lane closures/restrictions	29	24	18	16	15	15	17
Frequency of night time closures	-	-	-	7	6	7	7
Base: All who had used trunk roads at some point last year	1,861	2,009	2,017	2,001	1,999	2,005	2,016

Consistent with the findings from previous years, respondents in the South West and South East were more likely than those in the North West and North East to prioritise the frequency of road works (both 33%, compared to 24% and 21%).

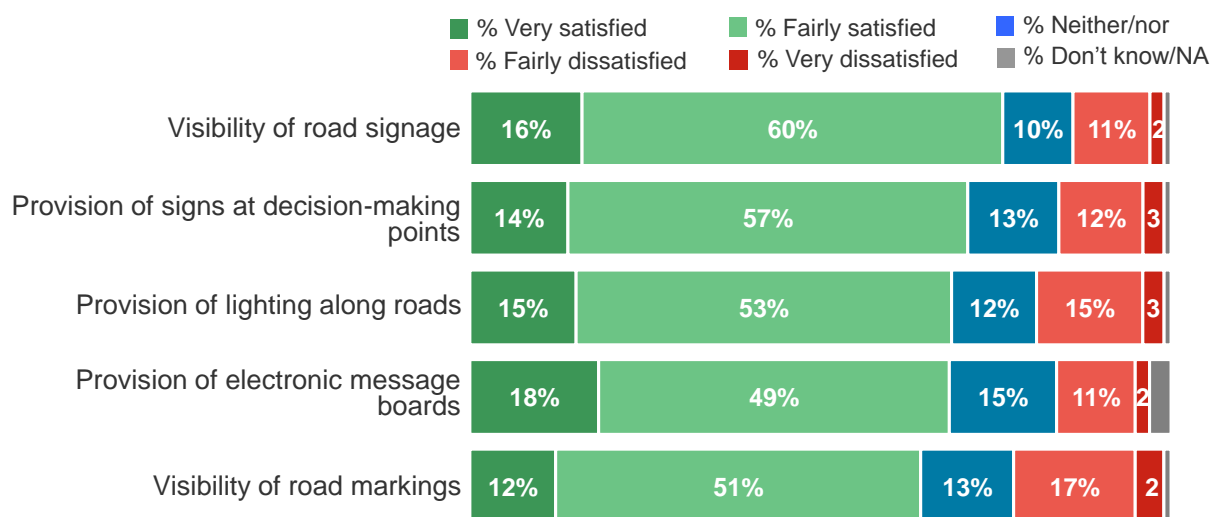
## 4 Lighting, marking and signage

### 4.1 Satisfaction with lighting, markings and signage

Once again, views were largely positive in respect of lighting, markings and signage on trunk roads. As shown in Figure 4.1, most respondents were satisfied with the visibility of road signage (76%), the provision of signs giving directions at decision-making points (71%), the provision of lighting along roads (68%), the provision of electronic message boards (67%) and the visibility of road markings (63%).

Figure 4.1 – Satisfaction with lighting, markings and signage

*Q. How satisfied or dissatisfied are you with the following aspects of trunk roads?*

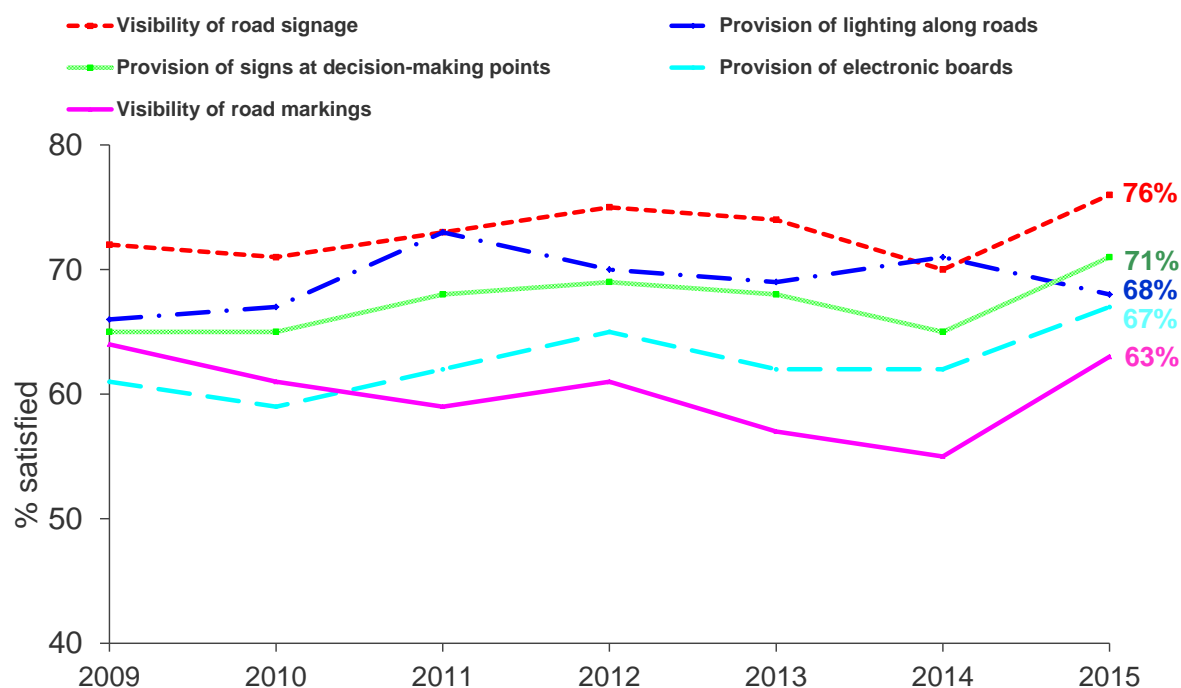


Base: All who had used trunk roads in the past year (2,016)

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With the exception of the provision of lighting, levels of satisfaction were higher than in 2014 (Figure 4.2). Most notably, satisfaction with the visibility of road markings was eight percentage points higher (63%, compared to 55%) and satisfaction with the visibility of road signage and the provision of electronic message boards was six and five percentage points higher respectively (76% and 67%, compared to 70% and 62%).

Figure 4.2 – Trends in satisfaction with lighting, markings and signage



Base: All who used trunk roads in the past year (2015: 2,016, 2014: 2,005, 2013: 1,999, 2012: 2,001, 2011: 2,017, 2010: 2,009, 2009: 1,861)

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As shown in Table 4.1, respondents in the South East were more likely than those in other areas to be satisfied with the provision of lighting, the provision of signs giving directions at decision-making points and the visibility of road markings.

Table 4.1 – Satisfaction with lighting, markings and signage by region

	Overall	North West	North East	South West	South East
	%	%	%	%	%
Visibility of road signage	76	72	75	75	80
Provision of signs at decision-making points	71	65	73	67	76
Provision of lighting along roads	68	60	66	70	71
Provision of electronic message boards	67	68	67	63	71
Visibility of road markings	63	59	61	62	70
<i>Base: All who had used trunk roads at some point last year</i>	2,016	222	575	725	488

## 4.2 Priorities for improvement

Respondents were asked to select the two or three aspects of lighting, markings and signage that they would most like to see improved. As Table 4.2 shows, their priorities were largely in line with those from previous waves. The visibility of road markings was again the top priority (34%), followed by the provision of lighting along roads (28%) and the provision of signs giving directions at decision-making points (26%).

Table 4.2 – Priorities for improving lighting, markings and signage

	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
Visibility of road markings	30	33	38	38	38	36	34
Provision of lighting along roads	29	24	22	28	25	23	28
Provision of signs at decision-making points	26	25	23	28	22	25	26
Visibility of road signage	24	25	25	25	22	22	24
Provision of electronic message boards	23	20	18	21	19	18	19
<i>Base: All who had used trunk roads at some point in the last year</i>	<i>1,861</i>	<i>2,009</i>	<i>2,017</i>	<i>2,001</i>	<i>1,999</i>	<i>2,005</i>	<i>2,016</i>

Respondents in the North West were more likely than average to prioritise the provision of signs at decision-making points and the provision of electronic message boards (34% and 24%, compared to 26% and 19% overall).



## 5 Cycle lanes and footways

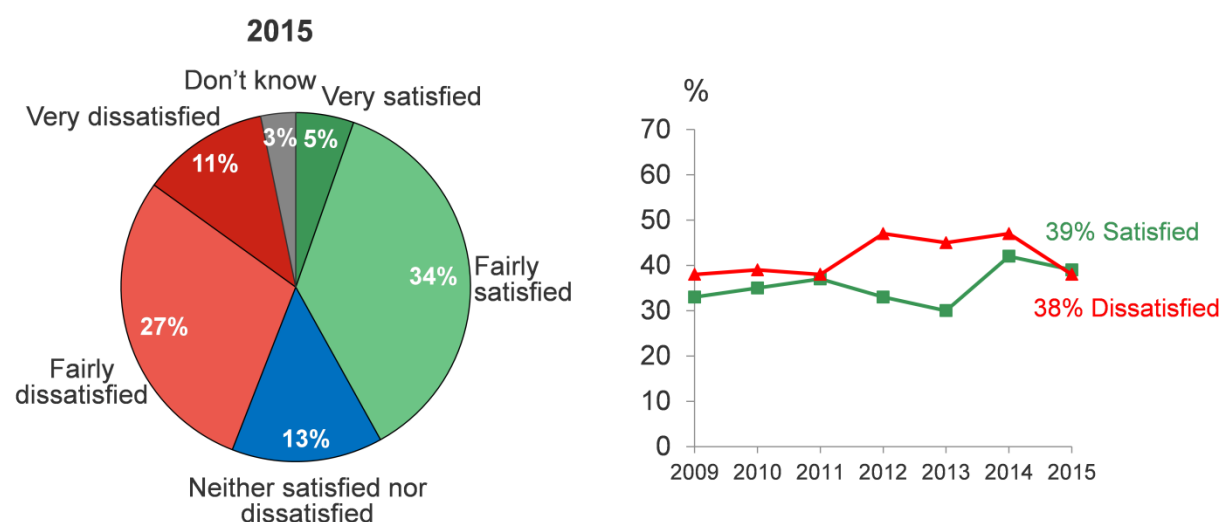
This section examines views of cycle lanes and footways on the trunk road network among those who had used these facilities over the past 12 months. Due to the small base sizes (just 62 respondents had used cycle lanes and 64 had used footways), the results should be considered indicative rather than representative.

### 5.1 Satisfaction with cycle lane and footway surfaces

Views on the general condition of cycle lanes were mixed: 39% of users were satisfied and 38% were dissatisfied (Figure 5.1). Levels of satisfaction and dissatisfaction this year were broadly in line with those recorded in 2014 (42% and 47% respectively).

Figure 5.1 – Satisfaction with the general condition of cycle lane surfaces

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



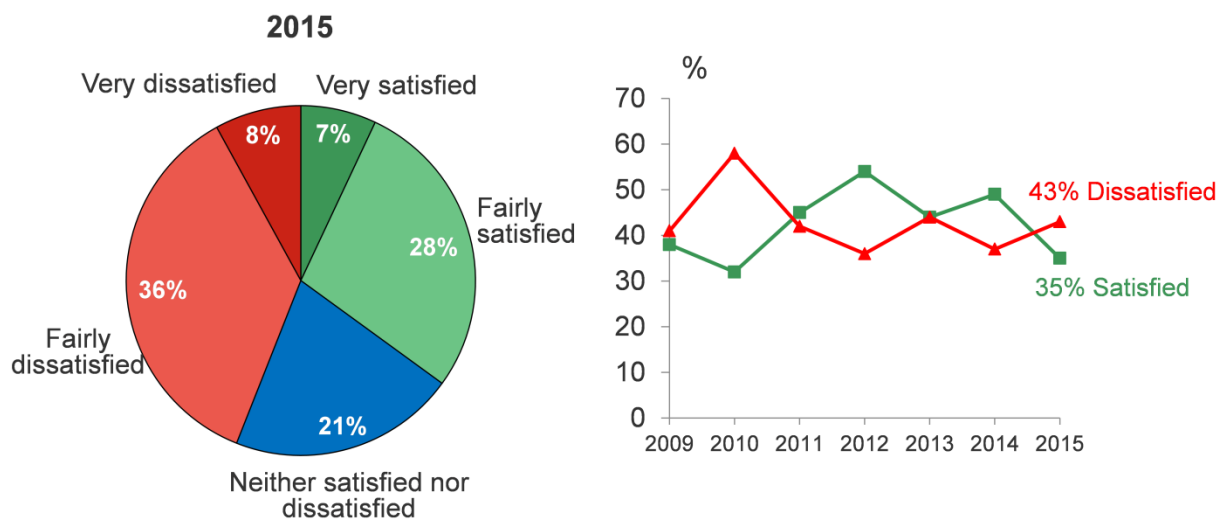
Base: All who had used a cycle lane on trunk roads in the last 12 months  
(2015:63; 2014:76; 2013:44; 2012:64; 2011:53; 2010:46; 2009:48)

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Respondents who had used footways were more likely to be dissatisfied than satisfied with the condition of these (43% dissatisfied compared to 35% satisfied). This contrasts with 2014 results, when respondents were more likely to be satisfied than dissatisfied (49% satisfied compared to 37% dissatisfied) (Figure 5.2).

Figure 5.2 – Satisfaction with the general condition of footway surfaces

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



Base: All who had used a footway on trunk roads in the last 12 months  
(2015: 64; 2014:130; 2013:173; 2012:148; 2011:163; 2010:113; 2009:69)

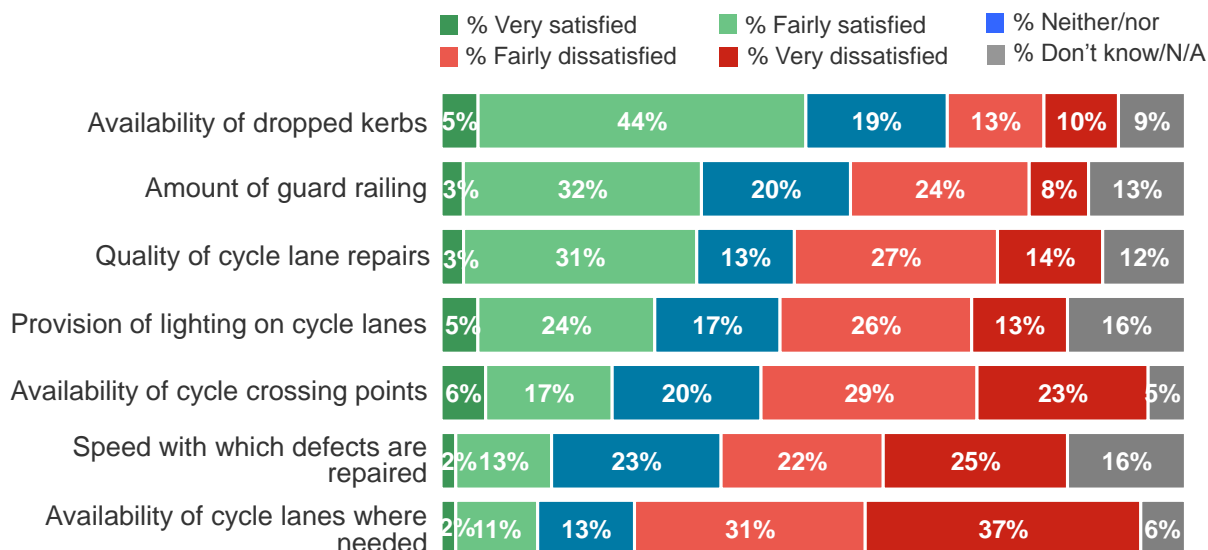
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## 5.2 Satisfaction with features of cycle lanes and footways

In terms of other features of cycle lanes, users were generally more likely to be dissatisfied than satisfied (Figure 5.3). Around two thirds (68%) were dissatisfied with the availability of cycle lanes and around half (52%) were dissatisfied with the availability of cycle crossing points. Just under half (47%) were dissatisfied with the speed with which cycle lane defects such as potholes were repaired.

Figure 5.3 – Satisfaction with features of cycle lanes

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



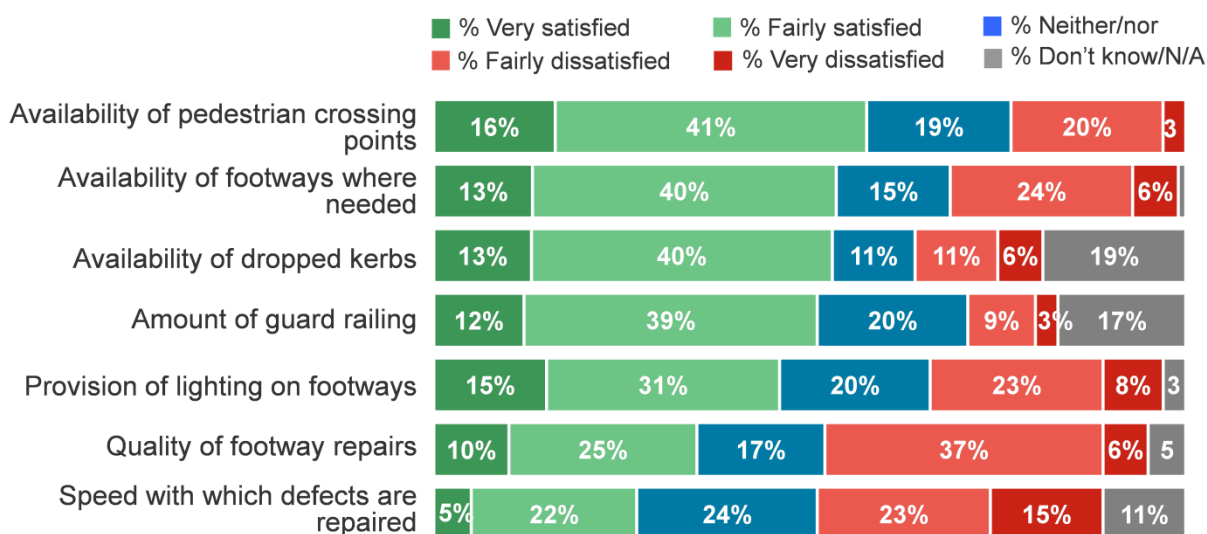
Base: All who had used cycle lanes (63)

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The comparable results for footways were a little more positive. As shown in Figure 5.4, over half of respondents were satisfied with the availability of pedestrian crossing points, footways, and dropped kerbs (57%, 53% and 53% respectively). That said, fewer than half were satisfied with the speed with which defects were repaired (27% satisfied, 39% dissatisfied) and the quality of footway repairs (35% satisfied, 44% dissatisfied).

Figure 5.4 – Satisfaction with features of footways

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



Base: All who had used footways (64)

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### 5.3 Priorities for improving cycle lanes and footways

Users of cycle lanes and/or footways were asked to choose, from a predefined list, the two or three features of these facilities they would most like to see improved. As shown in Table 5.1, the top priority for improvement was the availability of cycle lanes where they were needed (32%), followed by the general condition of footway surfaces (24%).

Table 5.1 – Priorities for improving cycle lanes and footways – top ten responses

	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
Availability of cycle lanes where needed	30	13	8	18	12	22	32
General condition of footway surfaces	25	45	32	30	27	25	24
Quality of footway repairs	17	38	19	20	28	17	17
Speed with which footway defects repaired	24	32	18	15	14	17	15
Availability of dropped kerbs	-	14	11	15	17	16	15
Provision of lighting on footways	25	15	12	15	16	14	15
General condition of cycle lane surfaces	14	11	12	12	10	12	13
Provision of lighting on cycle lanes	9	6	4	4	5	6	11
Amount of guard railing/physical barriers	-	7	8	11	13	11	10
Availability of pedestrian crossing points	-	15	14	17	16	13	9
<i>Base: All respondents who had used cycle lanes and/or footways in the last year</i>	<i>101</i>	<i>148</i>	<i>203</i>	<i>200</i>	<i>205</i>	<i>190</i>	<i>119</i>

Among cycle lane users specifically, the top priorities for improvement were: the availability of cycle lanes (61%), the availability of cycle crossing points (29%), the general condition of cycle lane surfaces (24%) and the provision of lighting on cycle lanes (20%).

The top priorities for footway users were: the general condition of footway surfaces (44%), the quality of footway repairs (31%), the provision of lighting on footways (28%) and the speed with which defects were repaired (27%).



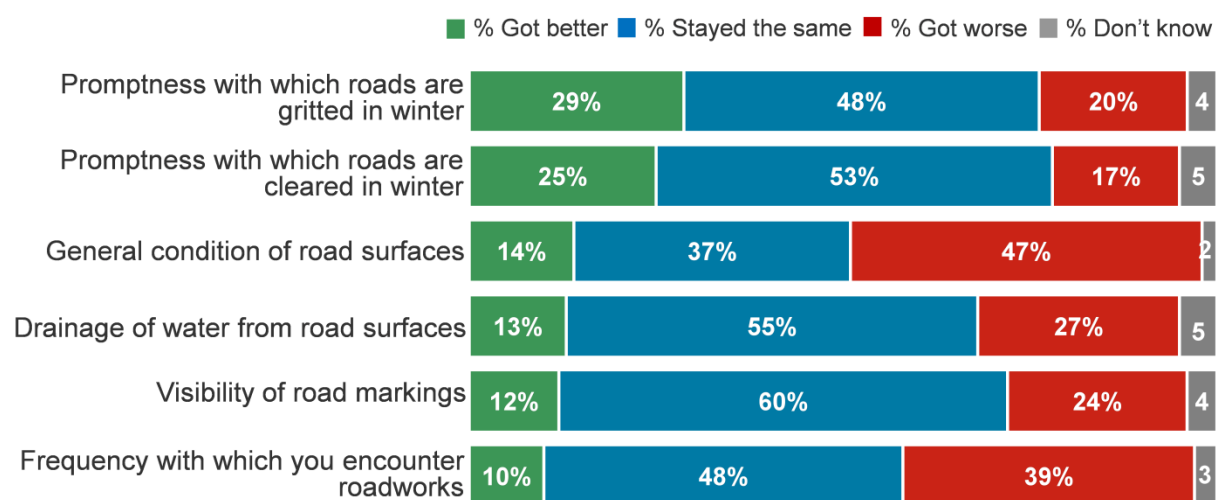
## 6 Improving the trunk road network

### 6.1 Perceived changes to the trunk road network over past two years

Respondents were asked whether they felt particular aspects of trunk roads had got better, got worse or stayed the same over the past two years. As shown in Figure 6.1, opinion was mixed. Consistent with the 2014 survey, no more than three in ten felt that any aspect had improved. For half of the aspects the majority felt that things had stayed the same. Views were more negative in relation to the general condition of road surfaces and the frequency of road works, with 47% and 39% respectively saying that these aspects had got worse.

Figure 6.1 – Changes to features of trunk road network over past two years

*Q. Do you think that each of the following aspects of trunk roads have got better, worse, or stayed the same over the past two years?*

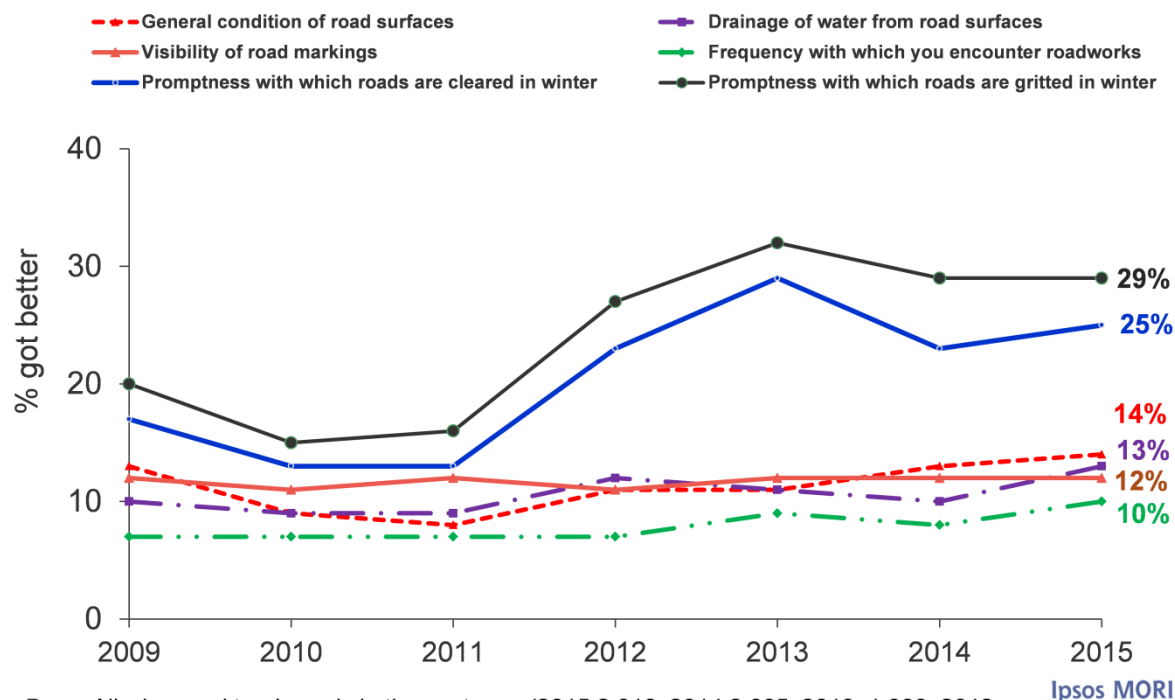


Base: All who had used trunk roads in the past year (2,016)

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These findings were largely consistent with those from last year; notwithstanding a slight increase in the proportion of respondents who felt that drainage had got better (13% compared to 10% in 2014) (Figure 6.2).

Figure 6.2 – % saying each aspect had “got better” over past two years, 2009-2015



As shown in Table 6.1, respondents in the North West and South West were once again more likely than those in other areas to think the general condition of road surfaces had worsened over the past two years (54% and 51% respectively compared with 43% in both the North East and South East). Those in the North West were also more likely than average to think that aspects of winter maintenance had got worse; namely the promptness with which roads were gritted in winter (32% compared to 20% overall) and the promptness with which roads were cleared in winter (26% compared to 17% overall).

Table 6.1 – % saying each aspect had “got worse” over past two years by region

	All regions	North West	North East	South West	South East
	%	%	%	%	%
General condition of road surfaces	47	54	43	51	43
Frequency of roadworks	39	35	33	44	41
Drainage of water/flooding from surfaces	27	35	29	29	19
Visibility of road markings	24	26	27	27	17
Promptness of road gritting in winter	20	32	22	19	13
Promptness of road clearing in winter	17	26	18	18	11
Base:	2,016	222	575	725	488

## 6.2 Future improvements to the trunk road network

Respondents were shown a list of all the improvements they said they would like to see on the trunk road network - including those pertaining to roads, footways and cycle lanes - and asked to choose the two or three that were most important to them. Consistent with previous years, the top priorities for improvement were the general condition of road surfaces (41%), the speed with which road defects were repaired (33%) and the quality of repairs (32%) (Table 6.2).

**Table 6.2 – Overall priorities for improving the trunk road network – top 10 mentions, 2009-2015**

	2009	2010	2011	2012	2013	2014	2015
	%	%	%	%	%	%	%
General condition of road surfaces	32	36	45	43	44	40	41
Speed with which road defects are repaired	21	32	38	34	37	35	33
Quality of repairs	20	27	35	33	37	35	32
Amount of traffic congestion	17	17	12	13	13	13	18
Promptness of road gritting in winter	13	22	23	15	16	11	15
Drainage of water/flooding from surfaces <sup>2</sup>	9	7	11	10	10	13	14
Visibility of road markings	8	9	8	10	11	11	12
Promptness of road clearing in winter	8	17	25	14	12	9	12
Frequency of road works	12	12	9	7	7	8	7
Provision of lighting along roads	10	6	5	8	7	7	9
<i>Base: All respondents who used trunk roads at some point in the past year</i>	<i>2,043</i>	<i>2,009</i>	<i>2,017</i>	<i>2,001</i>	<i>1,999</i>	<i>2,005</i>	<i>2,016</i>

Respondents in the South West were more likely than average to prioritise the general condition of road surfaces (48% compared to 41% overall), the speed with which defects were repaired (38% compared to 33%) and the quality of repairs (36% compared to 32%). Respondents in the North West, meanwhile, were more likely than average to prioritise the drainage of water and flooding from road surfaces (21% compared to 14% overall).

<sup>2</sup> The wording of this aspect was changed in 2015. Between 2009 and 2014 the wording used was "the drainage of water from road surfaces"

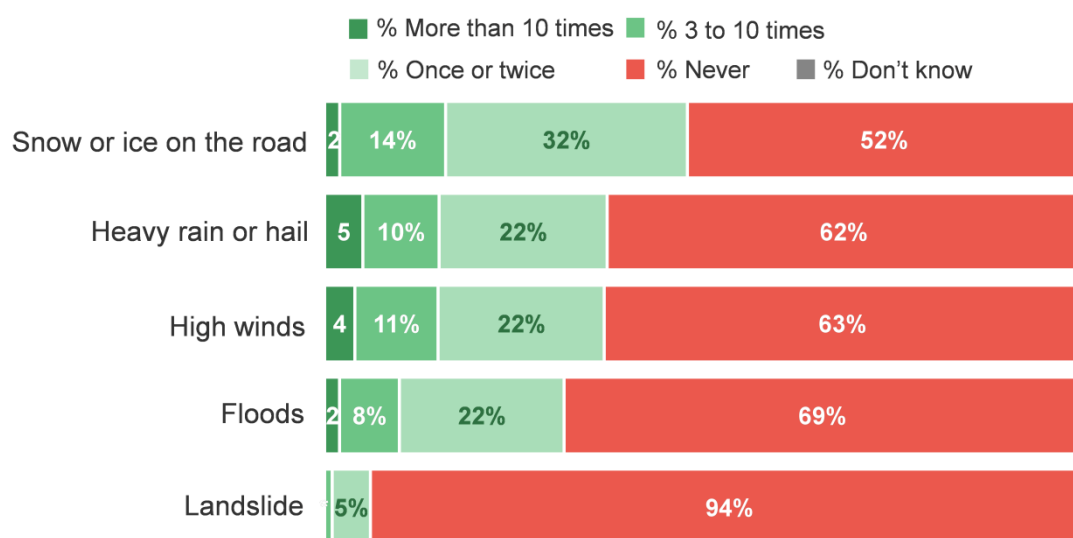
## 7 Disruption due to weather

### 7.1 Experience of severe weather disruption

In the past 12 months, almost half (47%) of respondents had experienced disruption to their journeys due to snow or ice on the road, and around a third had experienced disruption due to heavy rain or hail (37%), high winds (36%) or floods (31%). Disruption due to landslide had affected 6% (Figure 7.1).

Figure 7.1 – Experience of severe weather disruption

*Q: In the last 12 months or so, how often would you say that journeys that you make on trunks roads have been disrupted by the following... ?*



Base: All respondents who used trunk roads at some point in the last year (2,016)

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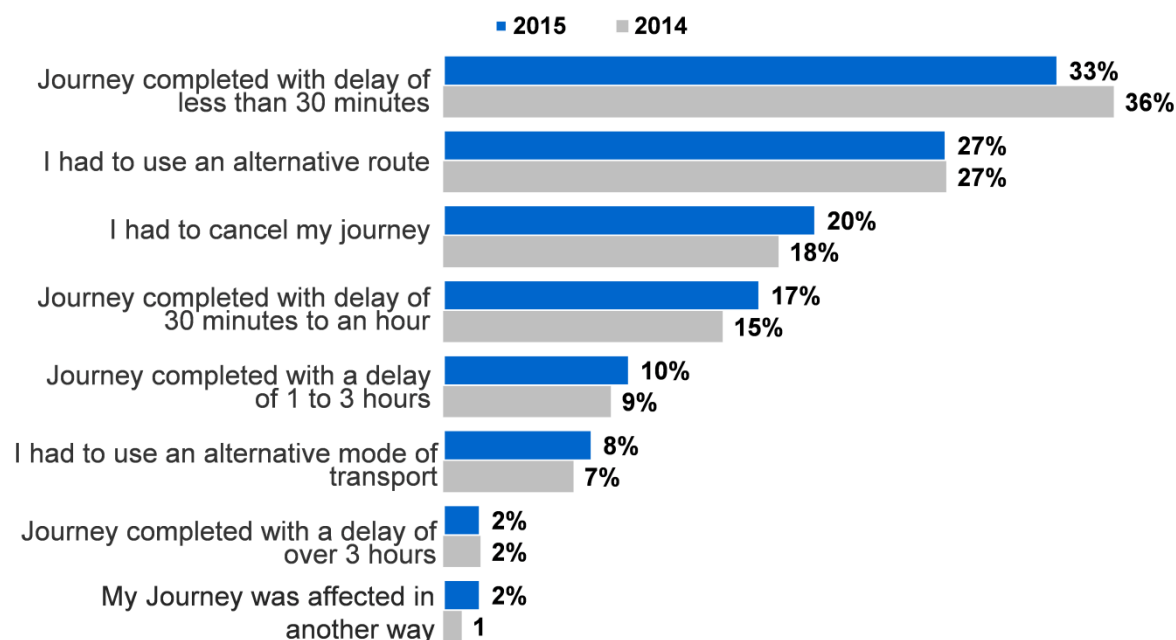
The proportion who had experienced disruption due to snow or ice was higher than last year (by 8 percentage points), while the proportions who had experienced disruption due to heavy rain or hail, high winds, or floods were lower than last year (by 10, 8 and 7 percentage points respectively).

In terms of regional variation, respondents in the North West were more likely than those in other areas to have experienced disruption due to snow or ice on the road (57% compared to 47% overall), floods (35% compared to 31%) or landslides (10% compared to 6%).

Of all those respondents who had experienced disruption due to severe weather, 62% had experienced a delay of some kind, while 27% had had to use an alternative route, 20% had had to cancel their journey and 8% had had to use an alternative form of transport. These results were consistent with those from 2014.

Figure 7.2 – Impact of severe weather disruptions on journeys

*Q. Thinking back to the last time your journey was disrupted as a result of [severe weather conditions], in which of these ways were you affected?*



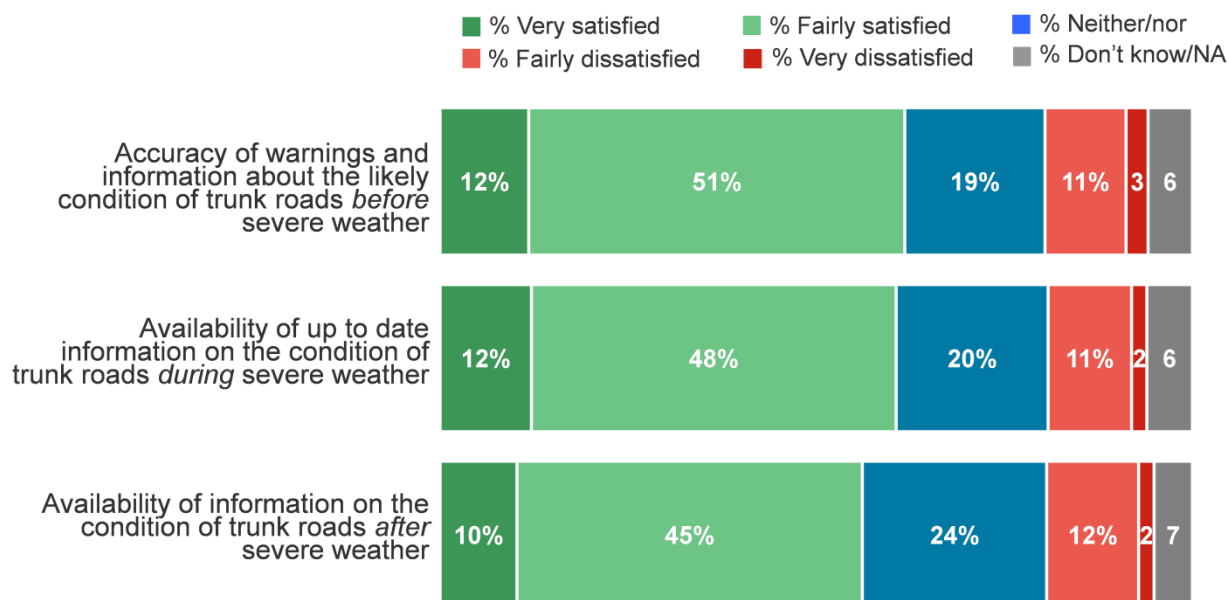
Base: All who had experienced disruption to at least one journey in the past year as a result of severe weather (1,314)

## 7.2 Satisfaction with information about the condition of trunk roads before, during and after severe weather

As shown in Figure 7.3, the majority of respondents were satisfied with the accuracy of information about the likely condition of trunk roads before severe weather (62%), and with the availability of information on the condition of trunk roads during (60%) and after (55%) severe weather. Again, these findings were in line with those from 2014.

Figure 7.3 – Satisfaction with information before, during and after severe weather

Q. How satisfied or dissatisfied are you with the...?



Base: All who had used trunk roads in the past year (2,016)

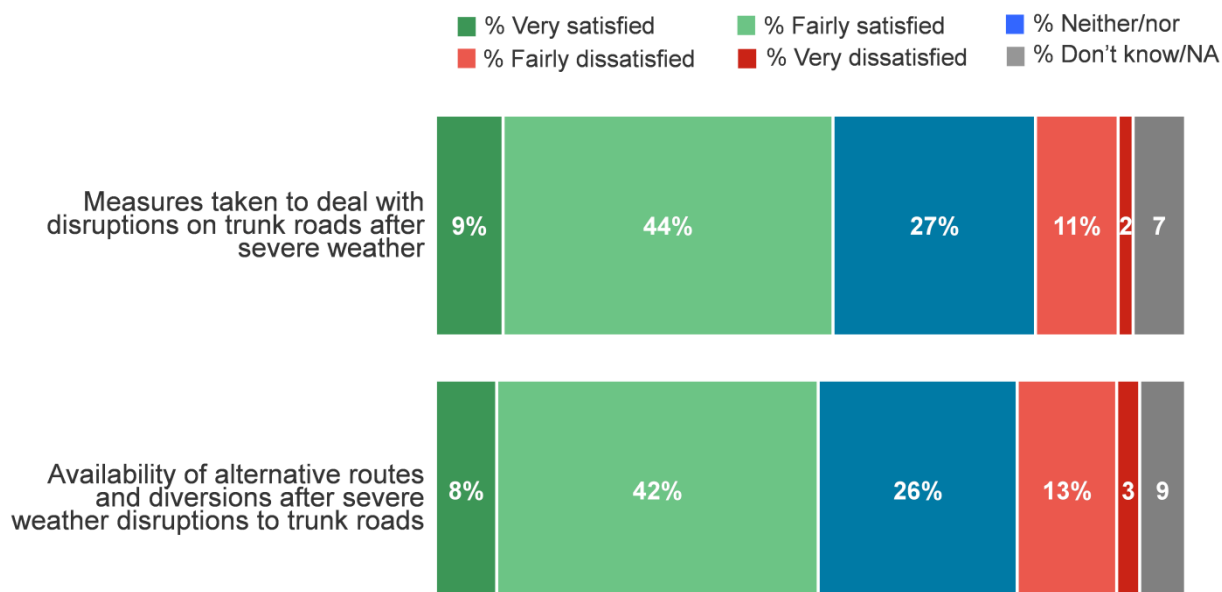
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### 7.3 Satisfaction with measures to deal with severe weather disruption

Around half (53%) of respondents were satisfied with measures taken to deal with disruptions on trunk roads after severe weather, and a similar proportion (50%) were satisfied with the availability of alternative routes and diversions (Figure 7.4). The latter figure represented an increase of four percentage points on the level recorded in 2014.

Figure 7.4 – Satisfaction with measures to deal with severe weather disruption

Q. How satisfied or dissatisfied are you with the...?



Base: All who had used trunk roads in the past year (2,016)

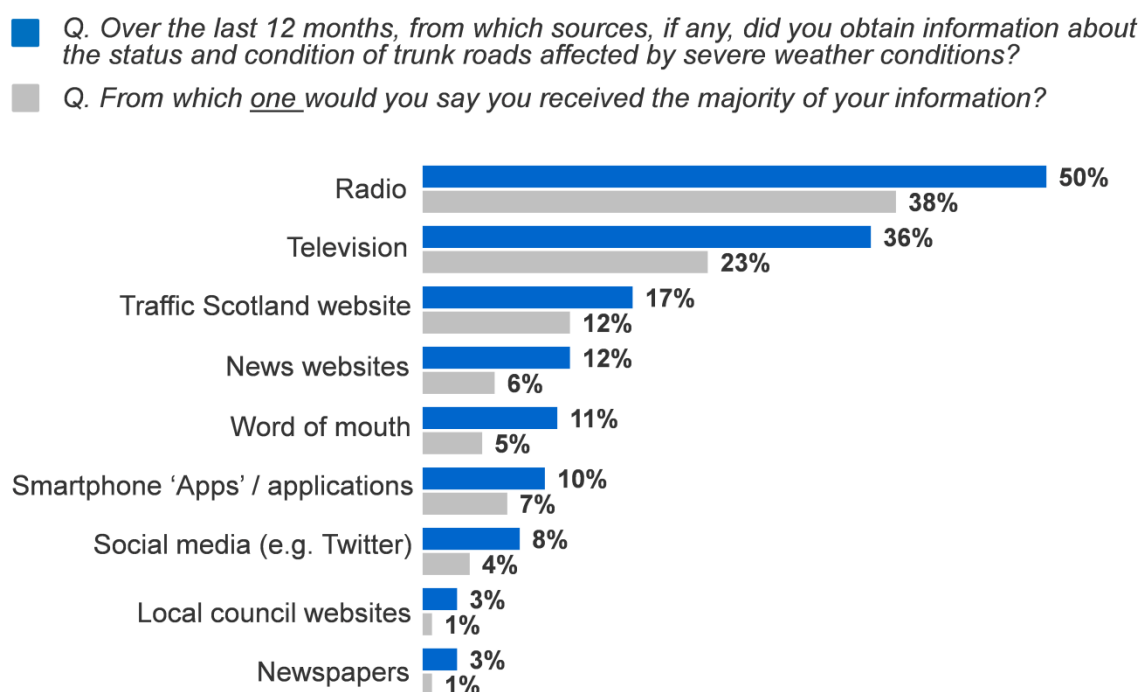
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## 8 Information about the trunk road network

### 8.1 Sources of information on the status and condition of trunk roads during severe weather

The most common source of information on the status and condition of trunk roads during severe weather was radio (50%), followed by television (36%), the Traffic Scotland website (17%) and news websites (12%) (Figure 8.1). This ranking of information sources was largely unchanged on last year.

Figure 8.1 – Sources of information on the status and condition of trunk roads during severe weather



Base: All who had used trunk roads in the past year (2,016)

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As Table 8.1 shows, respondents in the North West were more likely than those in other regions to have obtained information from the Traffic Scotland website or from social media. Respondents in the North East and South East, meanwhile, were more likely than those in the North West and South West to have obtained information from smartphone apps.



Table 8.1 – Sources of information on the status and condition of trunk roads during severe weather by region

	All regions	North West	North East	South West	South East
	%	%	%	%	%
Radio	50	52	50	48	51
Television	36	37	32	39	37
Traffic Scotland website	17	26	18	13	16
News websites	12	12	10	12	15
Word of mouth	11	10	10	13	10
Smartphone Apps	10	8	14	6	13
Social media	8	14	8	7	7
Local council website	3	5	2	3	3
Newspapers	3	2	5	2	2
Base:	2,016	222	575	725	488

There was further variation by age. Those aged over 55 were more likely than younger age groups to have obtained information from television (52% of those aged over 65 and 45% of those aged 55-64 compared to, for example, 24% of those aged 25-34). In contrast, younger respondents were more likely than those in older age groups to have obtained information from smartphone apps (17% of those age 18-24 compared to, for example, 7% of those aged 55-64) and from social media (14% of those aged 18-34 compared to 2% over those aged over 55).

ABC1s were more likely than C2DEs to have obtained information from radio (52% versus 47%), the Traffic Scotland website (23% versus 8%) and news websites (15% versus 9%), while C2DEs were more likely to have obtained it from the television (42% versus 32%).

## 8.2 Information provided by Traffic Scotland

Usage of Traffic Scotland information sources was broadly in line with previous years (Table 8.2). The Traffic Scotland website remained the most used source by some way (38%), followed by the TraveLine smartphone app, the mobile website and the Twitter feed and (9%, 7% and 5% respectively).

Table 8.2 – Use of Traffic Scotland information sources

	2012	2013	2014	2015
	%	%	%	%
Main website	31	35	34	38
Smartphone App	4	7	5	9
Twitter feed	2	3	2	5
Mobile website	4	5	5	7
Internet radio	3	3	2	3
RSS feed	2	1	2	2
<i>Base (all who have access to the internet)</i>	<i>1,558</i>	<i>1,617</i>	<i>1,735</i>	<i>1,797</i>

Use of the main Traffic Scotland website was highest among:

- respondents in the North West (51% compared to 41% in the North East, 38% in the South East and 32% in the South West)
- those aged 35 to 54 (43% compared to 27% of 18-24 year olds and 31% of those over 65)
- ABC1s (44% compared to 30% of C2DEs).

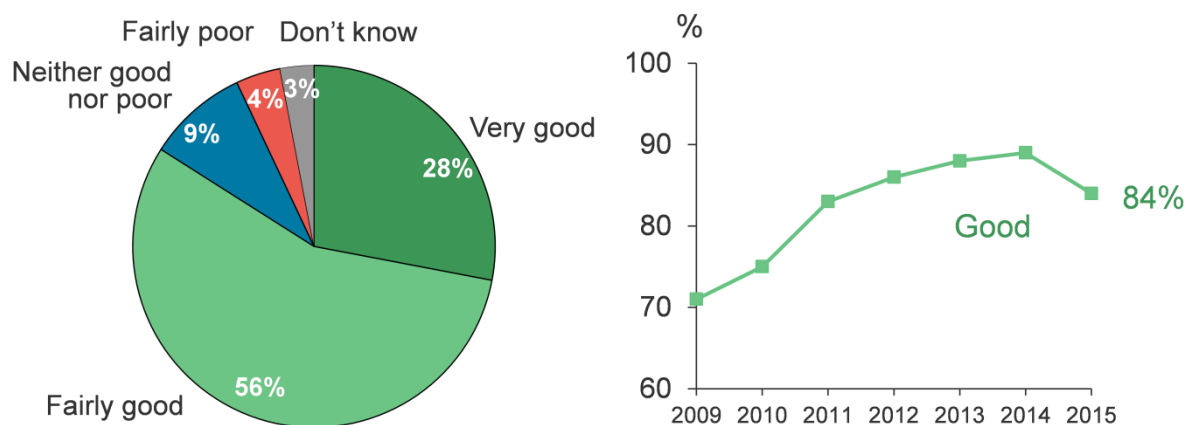
Use of the Traveline smartphone app and the Traffic Scotland Twitter feed were highest among those aged 18 to 24 (15% and 14% respectively, compared with 9% and 5% overall).

### 8.3 Perceptions of the Traffic Scotland website

Views of both the Traffic Scotland website and the mobile website remained positive. More than four in five (84%) of those who had had used the Traffic Scotland website rated it as good or very good, with only 4% rating it as poor or very poor (Figure 8.2). The figures for the mobile site were very similar, at 83% and 5% respectively (Figure 8.3).

Figure 8.2 – Ratings of the Traffic Scotland website

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

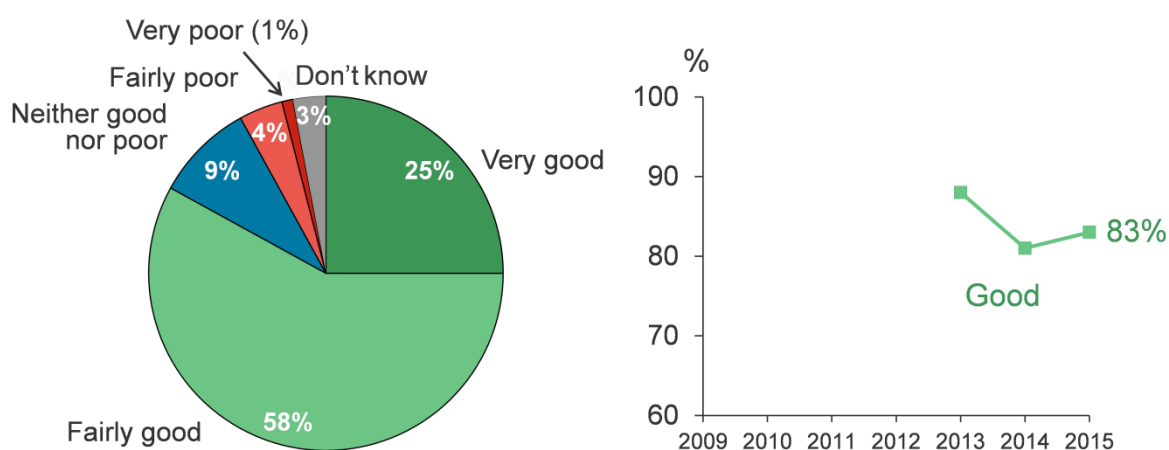


Base: All who used or mentioned the Traffic Scotland website (2015: 695; 2014: 591; 2013: 573; 2012: 583; 2011: 517; 2010: 387; 2009: 319)

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Figure 8.3 – Ratings of the Traffic Scotland mobile website

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



Base: All who used or mentioned the Traffic Scotland website (2015:132, 2014:86; 2013:85)

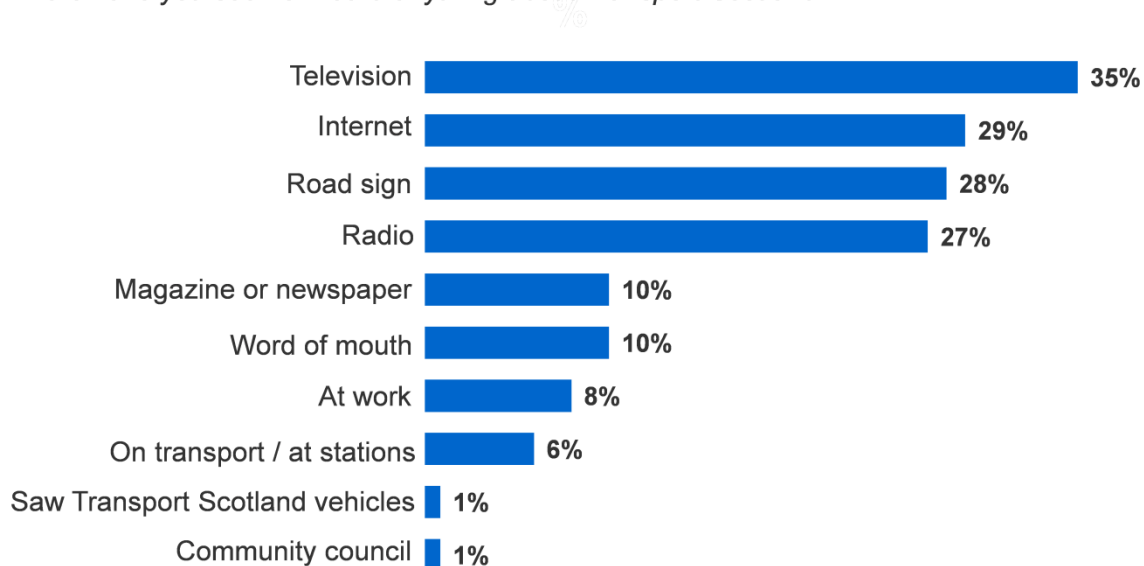
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## 8.4 Sources of information about Transport Scotland

The majority (80%) of respondents had heard of Transport Scotland before taking part in the interview. The places where they had most commonly seen or heard something about the organisation were television (35%), the internet (29%), road signs (28%), and radio (27%).

Figure 8.4 – 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 (1,625)

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# Appendix A: Survey questionnaire

## INTRODUCTION

**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 20 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

**Q1. 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 Q1**

**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**

**SHOWCARD A Q2. 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 Q2 (CODES 1 OR 3) AND WHO SAY THEY USE THE TRUNK ROAD NETWORK AT LEAST ONCE A WEEK AT Q1 (CODES 1, 2 OR 3)

OTHERS GO TO Q4

**Q3. 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) | <b>Less than 25 miles</b>       | 1 |
| b) | <b>Between 25 and 100 miles</b> | 2 |
| c) | <b>Over 100 miles</b>           | 3 |
|    | Don't know                      | 4 |

ASK ALL

SHOW MAP AGAIN **Q4. 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 ALL WHO MENTION A REGION (CODES 1-4) AT Q4

OTHERS GO TO PREABLE BEFORE QTS5

SHOW MAP AGAIN **Q5. 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)

1

Don't know

X

ASK ALL

FOR THOSE WHO CODE DON'T KNOW (CODE 5) AT QTS3, OR WHO CODE DON'T KNOW (CODE 3) AT Q5 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.**

**Q6. Do you mainly travel on these roads..**

READ OUT a) – c)

SINGLE CODE

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

**SHOWCARD B Q7. 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) <b>The general condition of road surfaces</b>	1	2	3	4	5	6	7
b) <b>The management of vegetation on verges and central reserves</b>	1	2	3	4	5	6	7
c) <b>The amount of litter and debris on the road surface</b>	1	2	3	4	5	6	7
d) <b>The speed with which road defects such as potholes are repaired</b>	1	2	3	4	5	6	7
e) <b>The quality of repairs</b>	1	2	3	4	5	6	7
f) <b>The drainage of water and flooding from road surfaces</b>	1	2	3	4	5	6	7
g) <b>The amount of traffic congestion</b>	1	2	3	4	5	6	7

**SHOWCARD C Q8. 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

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

**SHOWCARD D Q9. 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) – h)

SINGLE CODE EACH ROW

RANDOMISE ORDER

		Very Satisfied	Fairly Satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a)	<b>Frequency with which you encounter road works</b>	1	2	3	4	5	6	7
b)	<b>Planning and coordination of diversions when road works take place</b>	1	2	3	4	5	6	7
c)	<b>Planning and coordination of lane closures and restrictions when road works take place</b>	1	2	3	4	5	6	7
d)	<b>Frequency of day time lane closures for road works</b>	1	2	3	4	5	6	7
e)	<b>Frequency of night time lane closures for road works</b>	1	2	3	4	5	6	7
f)	<b>Amount of information available on possible delays to journey times because of road works that are taking place</b>	1	2	3	4	5	6	7
g)	<b>Promptness with which roads are cleared in the winter</b>	1	2	3	4	5	6	7
h)	<b>Promptness with which roads are gritted in winter</b>	1	2	3	4	5	6	7



**SHOWCARD E Q10. 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

A	The frequency with which you encounter road works	1
B	The planning and coordination of diversions when road works take place	2
C	The planning and coordination of lane closures and restrictions when road works take place	3
D	Frequency of day time lane closures for road works	4
E	Frequency of night time lane closures for road works	5
F	Amount of information available on possible delays to journey times because of road works that are taking place	6
G	The promptness with which roads are cleared in the winter	7
H	The promptness with which roads are gritted in winter	8
	Other write in	9
	None of these	10
	Don't know	11

**SHOWCARD F Q11. 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) <b>Provision of lighting along roads</b>	1	2	3	4	5	6	7
b) <b>Visibility of road markings</b>	1	2	3	4	5	6	7
c) <b>Visibility of road signage</b>	1	2	3	4	5	6	7
d) <b>Provision of signs giving directions at decision making points</b>	1	2	3	4	5	6	7
e) <b>INSERT ON CAPI SCREEN</b>							
<b>INSTRUCTION FOR INTERVIEWERS : SHOW RESPONDENTS SHOWCARD BB WITH DEFINITION</b>	1	2	3	4	5	6	7
<b>Provision of electronic message boards to give warnings of congestion and delays</b>							

SHOWCARD G Q12. 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

A	The provision of lighting along roads	1
B	The visibility of road markings	2
C	The visibility of road signage	3
D	The provision of signs giving directions at decision making points	4
E	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 Q2  
OTHERS GO TO Q15

FOR THOSE WHO CYCLE **AND** USE FOOTWAYS (CODE 6+7) AT Q2 INSERT <cycle lanes and footways> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS A-N

FOR THOSE WHO **ONLY CYCLE** (CODE 6) AT Q2 INSERT <cycle lanes> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS A-H

FOR THOSE WHO **ONLY USE FOOTWAYS** (CODE 7) AT Q2 INSERT <footways> INTO QUESTION WORDING, THEY SHOULD BE ASKED OPTIONS I-P

SHOWCARD H Q13. 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)	<b>general condition of footway surfaces</b>	1	2	3	4	5	6	7
j)	<b>provision of lighting on footways</b>	1	2	3	4	5	6	7
k)	<b>speed with which footway defects are repaired</b>	1	2	3	4	5	6	7
l)	<b>quality of footway repairs</b>	1	2	3	4	5	6	7
m)	<b>availability of footways where they are needed</b>	1	2	3	4	5	6	7
n)	<b>availability of pedestrian crossing points where they are needed</b>							
o)	<b>availability of dropped kerbs (that is when the edge of the pavement is lowered to help with crossing the road)</b>	1	2	3	4	5	6	7
p)	<b>amount of guard railing or other physical barriers on trunk roads</b>	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 Q2  
OTHERS GO TO Q15

FOR THOSE WHO CYCLE **AND** USE FOOTWAYS (CODE 6+7) AT Q2, 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 Q2, 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 Q2, CAPI SCREEN SHOULD SHOW OPTIONS I-P AND INTERVIEWER INSTRUCTIONS SHOULD SAY: SHOWCARD K FOR THOSE WHO ONLY USE FOOTWAYS

**Q14. 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)	The 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)	The availability of cycle crossing points where they are needed	7
h)	The 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	13

n)	The availability of pedestrian crossing points where they are needed	14
o)	The availability of dropped kerbs (that is when the edge of the pavement is lowered to help with crossing the road)	15
p)	The 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

**Q15. 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 Q8, Q10, Q12 and Q14 (if applicable) MULTICODE UP TO 3 ONLY

**SHOWCARD L Q16. 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)	<b>General condition of road surfaces</b>	1	2	3	4
b)	<b>Drainage of water and flooding from road surfaces</b>	1	2	3	4
c)	<b>Visibility of road markings</b>	1	2	3	4
d)	<b>Frequency with which you encounter road works</b>	1	2	3	4
e)	<b>Promptness with which roads are cleared in the winter</b>	1	2	3	4
f)	<b>Promptness with which roads are gritted in winter</b>	1	2	3	4

ASK ALL WHO SAY THAT THEY ARE FAIRLY/VERY DISSATISFIED WITH THE GENERAL CONDITION OF ROAD SURFACES (CODES 4 OR 5) AT Q7  
OTHERS GO TO Q20

SHOWCARD N **Q18. 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 Q18, OTHERS GO TO Q20

SHOWCARD O **Q19A. And what is the specific defect in most 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 or flooding on roads	9
J	Poor road makings	10
	Other – write in	11
	Don't know	12

ASK ALL WHO SAY AT LEAST RARELY (CODES 1-4) AT Q18, OTHERS GO TO Q20

SHOW MAP AGAIN **Q19B. And on which specific trunk road do you encounter these defects? PROBE FULLY AND WRITE IN.**

ANY ANSWER (WRITE IN AND CODE '1)

1

Don't know

X

ASK ALL

SHOWCARD P Q20. The next few questions focus on disruptions to trunk roads caused by severe weather. How satisfied or dissatisfied are you with the....

READ OUT a) – e)

SINGLE CODE EACH ROW

	Very Satisfied	Fairly Satisfied	Neither satisfied nor dissatisfied	Fairly dissatisfied	Very dissatisfied	Don't know	N/A
a) Accuracy of warnings and information about the likely condition of trunk roads <u>before</u> severe weather	1	2	3	4	5	6	7
b) Availability of up to date information on the condition of trunk roads <u>during</u> severe weather	1	2	3	4	5	6	7
c) Availability of information on the condition of trunk roads <u>after</u> severe weather	1	2	3	4	5	6	7
d) Measures taken to deal with disruptions on trunk roads <u>after</u> severe weather	1	2	3	4	5	6	7
e) Availability of alternative routes and diversions <u>after</u> severe weather disruptions to trunk roads	1	2	3	4	5	6	7

SHOWCARD Q Q21. In the last 12 months or so, how often would you say journeys that you make on trunk roads have been disrupted by the following...? By disruption, I mean anything from having to use an alternative mode of transport to being delayed or having to cancel a journey.

READ OUT

SINGLE CODE EACH ROW

RANDOMISE ORDER

	Once or twice	3 to 10 times	More than 10 times	Never	Don't know/ Can't remember
a) Floods	1	2	3	4	5
b) Landslide	1	2	3	4	5
c) Snow or ice on the road	1	2	3	4	5
d) Heavy rain or hail	1	2	3	4	5
e) High winds	1	2	3	4	5

ALL WHO HAVE EXPERIENCED DISRUPTION TO AT LEAST ONE JOURNEY IN THE PAST YEAR AT Q21 (CODES 1 THROUGH TO 3 AT ANY OF THE ITEMS) OTHERS GO TO Q23

FOR THOSE WHO HAVE EXPERIENCED DISRUPTION AS A RESULT OF MORE THAN ONE TYPE OF WEATHER INCIDENT AT Q21 (IE CODES 1 THROUGH TO 3 AT MORE THAN 1 OF THE ITEMS), CAPI SCRIPT RANDOMLY SELECT ONE INCIDENT TO ASK Q22 IN RELATION TO

SHOWCARD R **Q22. And thinking back to the last time your journey was disrupted as a result of [INSERT SEVERE WEATHER INCIDENT EXPERIENCED AT Q21], in which of these ways were you affected? Please just read out the letters that apply.**  
MULTICODE OK

- |   |  |   |
|---|--|---|
| A | I had to cancel my journey   | 1 |
| B | I had to use an alternative mode of transport                                  | 2 |
| C | I had to use an alternative route  | 3 |
| D | I completed my journey with a delay of less than 30 minutes                    | 4 |
| E | I completed my journey with a delay of more than 30 minutes but less than hour | 5 |
| F | I completed my journey with a delay of 1 to 3 hours                            | 6 |
| G | I completed my journey with a delay of more than 3 hours                       | 7 |
| H | My journey was affected in another way (PLEASE WRITE IN)                       | 8 |
|   | Don't know   | 9 |

ASK ALL

**Q23. Over the last 12 months, from which sources, if any, did you obtain information about the status and condition of trunk roads affected by severe weather conditions?**

SHOW RESPONDENT TRUNK ROAD MAP AGAIN AND SAY:

**Just a reminder that I'm talking about these A roads and motorways, not other local roads.**

**IF NECESSARY: By severe weather conditions, I mean things like strong winds or snow on roads which can affect your journeys on the network.**

MULTICODE OK

ASK ALL WHO CODE MORE THAN ONE RESPONSE AT Q23 AND ONLY SHOW OPTIONS THAT HAVE BEEN CODED AT Q23. OTHERS GO TO Q27

**Q24. And of the sources you just mentioned, from which one would you say you received the majority of your information about the status and condition of trunk roads during severe weather conditions?**

SINGLE CODE

	QTS23	QTS24
Television	1	1
Radio	2	2
News websites	3	3
Traffic Scotland website	4	4
Local council website	5	5
Other internet websites, please write in	6	6
Smartphone 'Apps'/applications	7	7
Word of mouth	8	8
Newspapers	9	9
Social media (e.g. twitter)	10	10
Other, please write in	11	11
Did not receive any information	12	12
Don't know	13	13

**Q27. Moving on slightly, can I just check whether you have access to the internet at all?**

SINGLE CODE ONLY.

Yes 1

No	2
Don't know	3

ASK ALL WHO HAVE ACCESS TO THE INTERNET AT Q27 (CODE 1) OTHERS GO TO Q31A  
 SHOWCARD S **Q28. I'd like to get your views on other types of information about trunk roads available to the public. Which of these sources of information, if any, have you used?**  
 MULTICODE

Traffic Scotland website	1
Traffic Scotland mobile website	2
The Traveline smartphone app	3
Traffic Scotland internet radio station	4
Traffic Scotland twitter feed	5
Traffic Scotland RSS feed	6
None of these	7
Don't know	8

ASK THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE (CODE 1 OR CODE 2) AT Q28  
 OTHERS GO TO Q31A

FOR THOSE WHO HAVE USED BOTH THE TRAFFIC SCOTLAND WEBSITE AND THE MOBILE WEBSITE AT Q28 (CODES 1 + 2) PLEASE SHOW:

SHOWCARD T **Q29. Thinking about your experiences of using the Traffic Scotland web site, how would you rate it? By that I mean the website that you access mainly through a PC or laptop, as opposed to through your mobile phone.**

SINGLE CODE

FOR THOSE WHO HAVE USED THE TRAFFIC SCOTLAND WEBSITE BUT NOT THE TRAFFIC SCOTLAND MOBILE WEBSITE AT Q28 (I.E. CODE 1 AND ANY OTHER CODES APART FROM CODE 2) SHOW:

SHOWCARD T **Q29. Thinking about your experiences of using the Traffic Scotland web site, how would you rate it?**

THOSE WHO HAVE USED THE TRAFFIC SCOTLAND MOBILE WEBSITE BUT NOT THE TRAFFIC SCOTLAND MAIN WEBSITE AT Q28 (IE CODE 2 AND ANY OTHER CODES APART FROM CODE 1) GO TO Q30.

ONLY ASK THOSE WHO SAID THAT THEY HAD ACCESSED THE TRAFFIC SCOTLAND MOBILE WEBSITE AT Q28 (CODE 2 ANY COMBINATION) OTHERS GO TO Q31A

SHOWCARD T AGAIN **Q30. Thinking about your experiences of using the Traffic Scotland mobile website, how would you rate it?**

SINGLE CODE

	Q29	Q30
Very good	1	1
Fairly good	2	2
Neither good nor poor	3	3
Fairly poor	4	4
Very poor	5	5
Don't know	6	6

ASK ALL

As there are limited funds available for maintenance of the Trunk Road network, it is not possible to maintain the whole network in perfect condition. Transport Scotland therefore needs to prioritise which road defects to address at any one time.

I am now going to show you photos of different types of road defect and I'd like you to tell me at which stage you think Transport Scotland **must** take action to address each defect.



**Q31A. Flooding**

The first type of defect is flooding. Flooding is where parts of the road remain under water after rain.

Please look at these four images and say at which level of **flooding** you think Transport Scotland **must** take action?

TURN CAPI MACHINE TO RESPONDENT

**SINGLE CODE**

- |   |   |   |
|---|---|---|
| A | Image 1   | 1 |
| B | Image 2   | 2 |
| C | Image 3   | 3 |
| D | Image 4   | 4 |
| E | They don't need to take action at any of these levels | 5 |
| F | Don't know  | 6 |

**1****2****3****4**

**Q31B. Rutting**

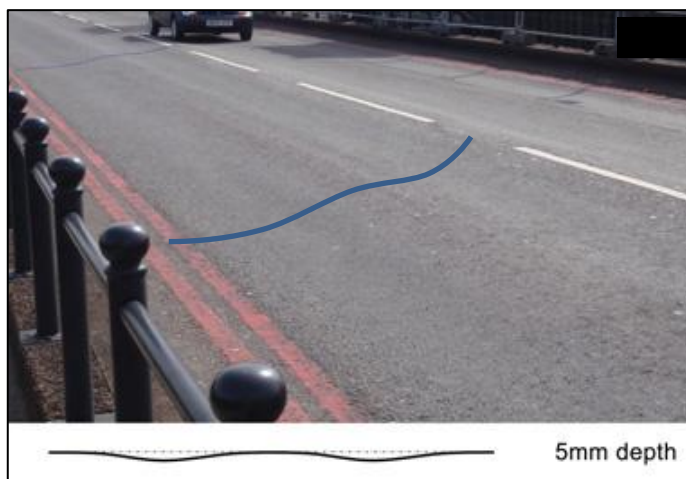
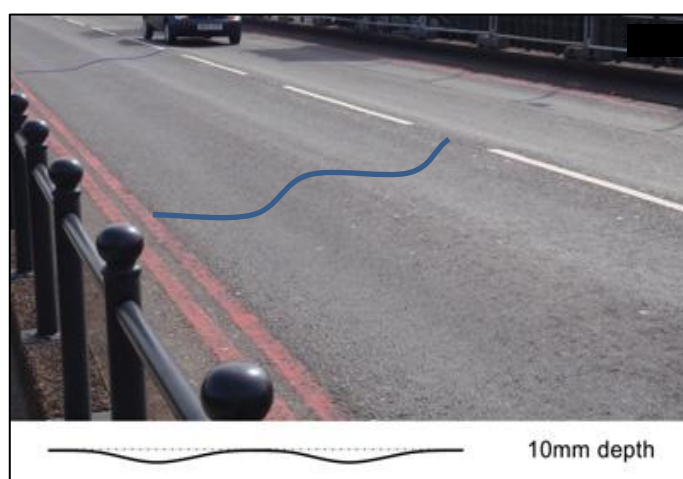
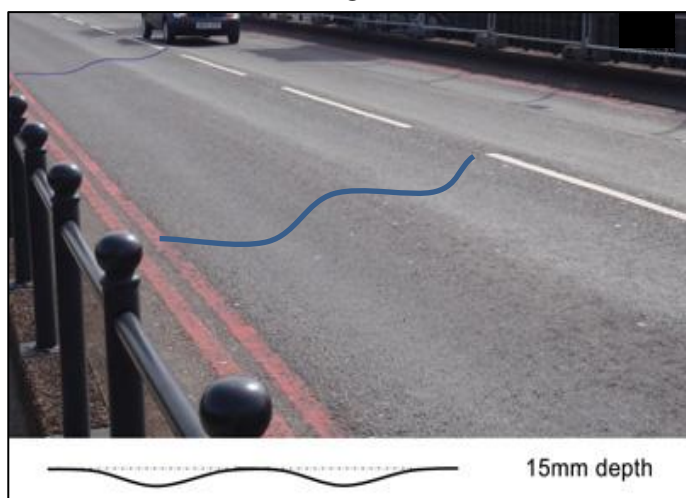
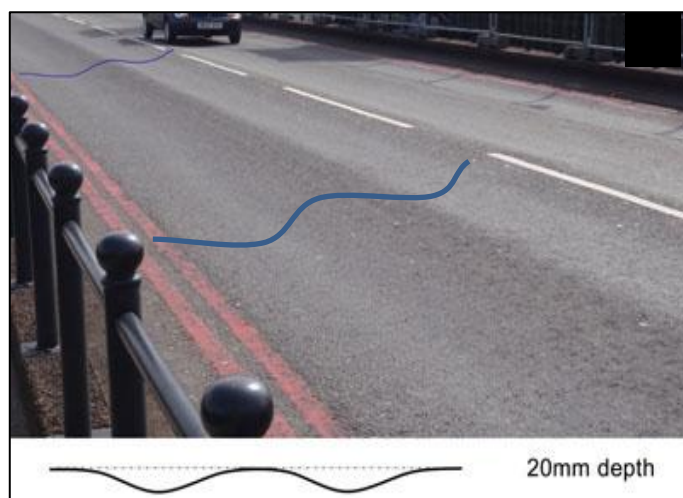
The next type of defect is rutting. Rutting is depression of the road surface in the vehicle wheel path.

Please look at these four images and say at which level of **rutting** you think Transport Scotland **must** take action?

TURN CAPI MACHINE TO RESPONDENT

**SINGLE CODE**

- |   |   |   |
|---|---|---|
| A | Image 1   | 1 |
| B | Image 2   | 2 |
| C | Image 3   | 3 |
| D | Image 4   | 4 |
| E | They don't need to take action at any of these levels | 5 |
| F | Don't know  | 6 |

**1****2****3****4**

**Q31C. Fretting**

The next type of defect is fretting. Fretting is where the road surface breaks up.

Please look at these four images and say at which level of **fretting** you think Transport Scotland **must** take action?

TURN CAPI MACHINE TO RESPONDENT

**SINGLE CODE**

- |   |   |   |
|---|---|---|
| A | Image 1   | 1 |
| B | Image 2   | 2 |
| C | Image 3   | 3 |
| D | Image 4   | 4 |
| E | They don't need to take action at any of these levels | 5 |
| F | Don't know  | 6 |

**1****2****3****4**



**Q31D. Cracking**

The next type of defect is cracking. Cracking refers to cracks on the road surface.

Please look at these four images and say at which level of **cracking** you think Transport Scotland must take action?

TURN CAPI MACHINE TO RESPONDENT

**SINGLE CODE**

A	Image 1	1
B	Image 2	2
C	Image 3	3
D	Image 4	4
E	They don't need to take action at any of these levels	5
F	Don't know	6

**1****2****3****4**

**Q31E. Subsidence - Depth**

The next type of defect is subsistence. Subsidence is where part of the road subsides to a lower level.

Please look at these four images and say at which level of **subsidence** you think Transport Scotland **must** take action?

TURN CAPI MACHINE TO RESPONDENT

## SINGLE CODE

- |   |   |   |
|---|---|---|
| A | Image 1   | 1 |
| B | Image 2   | 2 |
| C | Image 3   | 3 |
| D | Image 4   | 4 |
| E | They don't need to take action at any of these levels | 5 |
| F | Don't know  | 6 |

**1****2****3****4**

**Q31F. Ironworks**

The final type of defect is ironworks. Ironworks is where ironwork is raised or sunken.

Please look at these four images and say at which level of **ironworks** you think Transport Scotland **must** take action?

TURN CAPI MACHINE TO RESPONDENT

**SINGLE CODE**

- |   |   |   |
|---|---|---|
| A | Image 1   | 1 |
| B | Image 2   | 2 |
| C | Image 3   | 3 |
| D | Image 4   | 4 |
| E | They don't need to take action at any of these levels | 5 |
| F | Don't know  | 6 |

**1****2****3****4**



ASK ALL

**Q32 Here are the images you just selected. Which 3 images, in order of priority, do you think are the most important for Transport Scotland to take action on?**

TURN CAPI MACHINE TO RESPONDENT. SHOW THE SIX IMAGES SELECTED BY RESPONDENT IN Q31 (ONE IMAGE FOR EACH DEFECT). ASK RESPONDENT TO IDENTIFY TOP 3 IMAGES BY ASKING SEPARATE PROMPTS AS FOLLOWS:  
**Which image is your highest priority? Which image is your second highest priority? And which image is your third highest priority?**

MULTICODE UP TO 3 ONLY

ASK ALL

**Q34. Moving on slightly, 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

**Q35A. 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 (CODE 1) AT Q35A

**Q36A. Where have you seen or heard anything about Transport Scotland?**

DO NOT PROMPT

MULTICODE

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

Q37. CODE RESPONDENTS GENDER  
SINGLE CODE

Male	1
Female	2

Q38. AGE  
SINGLE CODE

18	1
19-24	2
25-34	3
35-44	4
45-54	5
55-59	6
60-64	7
65-74	8
75+	9

## Q39. 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
- invalid/disabled	6
Student	7
Other (PLEASE SPECIFY)	8

## Q40. Occupation of Chief Income Earner

Position/rank/grade

Industry/type of company

Quals/degree/apprenticeship

Number of staff responsible for

Q41. Class:  
SINGLE CODE

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

## Q42. 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



SHOWCARD X **Q43. 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 than £100	Less than £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

**Q44. WRITE IN NUMBER OF ADULTS IN THE HOUSEHOLD**

**Q45. WRITE IN NUMBER OF CHILDREN IN THE HOUSEHOLD (UP TO 15 YEARS OLD)**

ASK IF CHILDREN IN THE HOUSEHOLD AT Q45

**Q46. 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

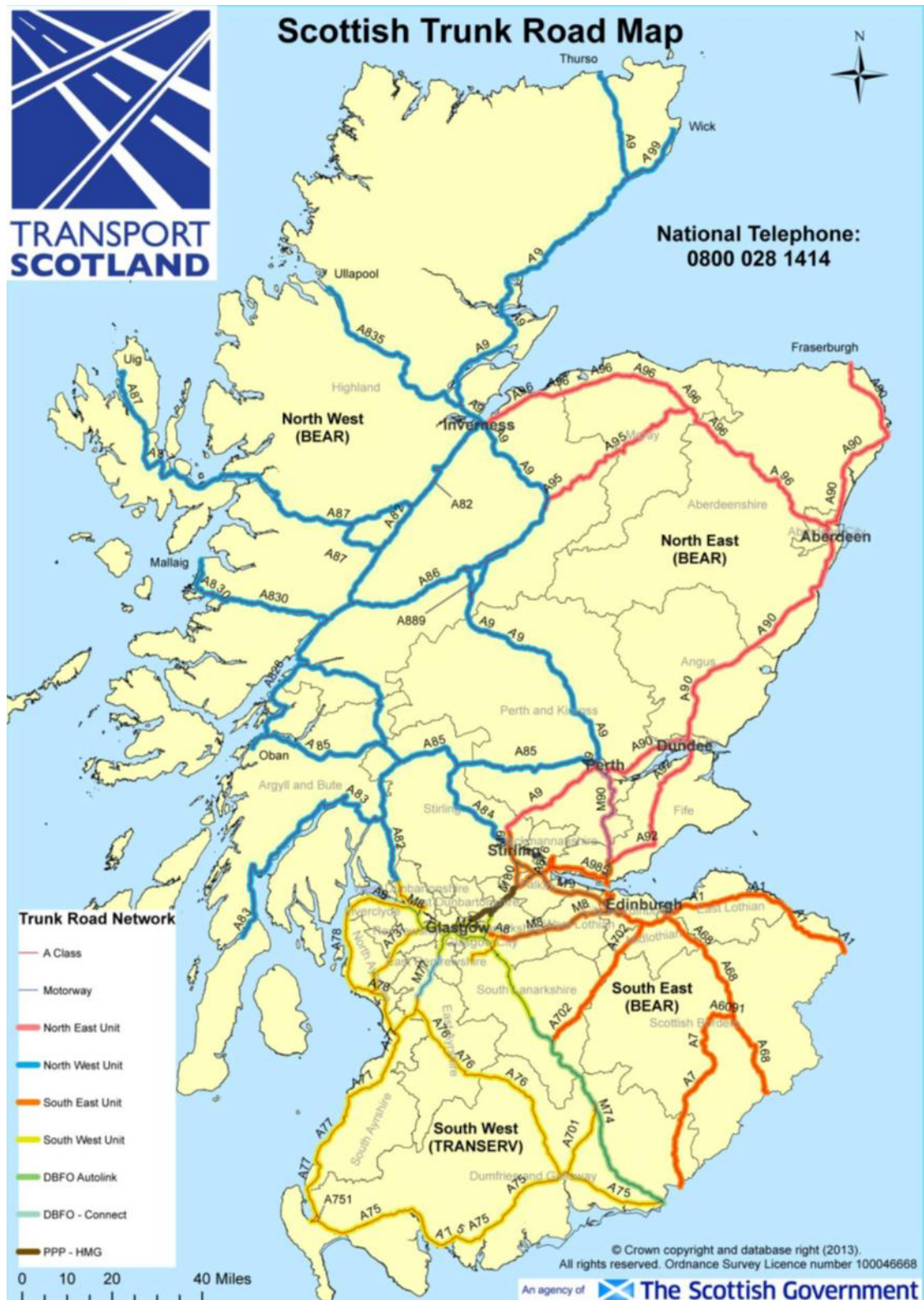
ASK ALL

SHOWCARD Y **Q47. 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

## Appendix B: Map of trunk road network in Scotland



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Ipsos MORI Scotland provides research focused on the distinct needs of policymakers and businesses in Scotland. We offer the full range of qualitative and quantitative research methodologies and have a detailed understanding of specific sectors in Scotland, their policy challenges and their research needs. The variety of research we conduct gives us a unique insight into many aspects of life in Scotland.