

# A9 Average Speed Cameras – “After” Market Research

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# Executive Summary

## Introduction

Average Speed Cameras (ASCs) were introduced along the A9 between Perth and Inverness in October 2014, in advance of the dualling programme. Alongside this, the speed limit of HGVs above 7.5 tonnes was increased from 40mph to 50mph on single carriageway sections of the route between Perth and Inverness, as a pilot project.

This research is the second part of a two-stage research approach with the aim of measuring any changes in attitudes and behaviour of drivers on the A9 between Perth and Inverness. It follows the Before research undertaken in April / May 2014 which recorded driver behaviour and perceptions prior to the introduction of the speed cameras from a sample of drivers.

## Methodology

Following the Before survey in April/May 2014, in February 2015, AECOM conducted 302 face-to-face quantitative interviews with respondents at towns and villages along the A9 between Perth and Inverness as well as the two cities themselves, to inform the "After survey". As in the Before survey, respondents were screened to ensure they fit the following core criteria:

*Driven on the A9 between Perth and Inverness for at least 15 minutes within the last 24 hours*

Although similar to the Before survey, the After data was weighted by age and gender to allow for comparison. When the results for general driving behaviour in the Before and After surveys was compared there were some significant differences in the proportions *speeding frequently* and *not speeding frequently on dual and rural single carriageway roads*. As a result analysis has been done by subgroup where necessary and appropriate.

## Main Findings

### ***Propensity to speed on the A9***

Three quarters (75%) of respondents to the After survey said they 'never' *exceeded the speed limit by 15mph* when travelling along the A9, a significant increase compared to just 43% in the Before survey. This is also the case for respondents 'never' exceeding by 10mph (37% in the Before survey increased to 56%) and by 3mph (27% in the Before survey increased to 36%).

When asked what the reason was for, speeding, respondents suggesting it was down to platooning decreased between the Before and After surveys:

- from 83% to 47% for *feeling pressured by following traffic; and*
- from 85% to 61% for *to make up for time stuck behind a slow moving vehicle.*

The majority of respondents sped because they felt it was safe to do so, similar to in the Before research (94% Before compared to 90% After)

### ***Own driving behaviour along the A9***

When asked about their driving behaviour along the A9, in the After survey, there was an increase in respondents 'never' *overtaking on dual and single carriageways* and a subsequent decrease in respondents *abandoning overtaking manoeuvres* and *feeling frustrated by the lack of opportunity to overtake*. This all suggested the desire to overtake had reduced.

### ***Witness of different types of risky driving behaviour***

Respondents were asked about how often they had witnessed a selection of risky driving behaviours during their last journey on the A9 on a six point scale from 'nearly all the time' to 'never'. Compared to the Before survey, statistically significantly more respondents in the After survey had 'never' seen the following on their most recent journey along the A9:

- *Vehicles travelling at excessive speeds* (3% saying 'never' in the Before survey increasing to 11% After)
- *Overtaking when risky* (4% to 13%)
- *Other drivers being cut up* (2% to 19%)
- *A vehicle being tailgated* (4% to 14%)
- *Road rage or aggressive behaviour* (6% to 19%)
- *Vehicles failing to complete an overtaking manoeuvre* (4% to 14%)

### ***Enjoyment, satisfaction and safety when travelling along the A9***

Respondents enjoyment, satisfaction with journey time and feeling of safety all increased between the Before and After survey. On a five point scale the mean enjoyment score had increased from 3.17 to 3.76, satisfaction with journey time from 3.20 to 3.75 and feeling of safety from 3.23 to 3.79 between the two surveys.

### ***Effect of ASCs on the A9***

Respondents were given information about ASCs on the A9 and asked to say how far they agreed with a number of statements. Agreement was highest for the following:

- *Made you less likely to exceed the speed limit* (70% strongly agreeing or agreeing)
- *Made you feel safer than if average speed cameras were not there* (70% strongly agreeing or agreeing); and
- *Meant you felt less likely to be involved in an accident* (70% strongly agreeing or agreeing).

### **Conclusion**

Taken as a whole, the results from the survey suggest there has been a reduction in unsafe and undesirable driving, including users travelling at excessive speeds particularly 15mph above the limit. Perceived enjoyment, satisfaction and safety have also all increased. It would be difficult to argue that since the introduction of ASCs there has not been a positive change in the behaviour of drivers and how safe they feel whilst travelling along the A9 even if it is difficult to ascertain whether this is down to the presence of ASCs, other factors or a mixture of both.

## **Introduction**

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# 1 Introduction

## 1.1 Background

Average speed cameras (hereafter ASC) were implemented along the A9 between Perth and Inverness in October 2014. As described on the A9 Safety Group’s website<sup>1</sup>, the purpose of ASC systems is to improve road safety by encouraging road users to travel at speeds in line with posted speed limits.

Alongside the introduction of ASCs on the A9, the speed limit of HGVs above 7.5 tonnes was increased from 40mph to 50mph on single carriageway sections of the route between Perth and Inverness, as a pilot project. This trial will initially extend over three years.

The introduction of these measures was followed by significant media coverage and the presentation of various views from regular users of the road. There is a need to understand the impact of the cameras and increased HGV speed limit pilot on the operational performance of the A9 and how this relates to perceptions of using the A9. Transport Scotland will be assessing the impact of the HGV 50mph Pilot through consultation with hauliers and other groups, and this Market Research has not been designed to assess specifically the impact of this particular intervention.

Evidence from the A77, where Scotland’s only permanently deployed ASC site to date is located, suggests that the system has “*delivered a 46 per cent reduction in fatal accidents and 35 per cent reduction in serious accidents*”<sup>2</sup>. Similarly, The A9 Safety Group’s review of the performance of other ASC systems, has shown that wherever permanently deployed in the UK, ASCs have contributed to a reduction in accidents<sup>3</sup>. Whilst the primary impact of ASCs is on road safety, there are other impacts that are of relevance to the particular characteristics of the A9 route, such as journey times and levels of driver frustration.

It was important to gather evidence on the impact of the ASCs before any work proceeded on the dualling of the A9, as the A9 dualling and roadworks associated with it will vary the driver’s use and experience of the route and the journey times on various sections.

Motorists will hold attitudes and opinions related to all aspects of their experience of using the A9. Some of this experience will be influenced by their interaction with significant others (e.g. friends and family) and the media. Understanding these attitudes and perceptions can assist Transport Scotland and The A9 Safety Group to determine how the installation of ASCs has affected drivers’ experience of using the A9. As a result of understanding drivers’ perceptions, information and education campaigns can be designed to target areas where mis-perception or lack of understanding is evident. For example, it has been demonstrated that drivers are poor at calculating time savings and losses from travelling at different speeds<sup>4</sup>. As a result, drivers’ perceptions of time lost or gained due to changes to the road system (like the installation of ASCs) are likely to be inaccurate and may provide a useful basis for campaign design and material.

Evaluation of drivers’ attitudes and perceptions following the installation of ASCs complements the network performance evaluation, a separate but related workstream, by identifying whether any change in network performance is aligned with changes in perception. Equally, the network performance evaluation will aid interpretation of any changes in attitudes and perceptions.

Monitoring and evaluation are important tools for decision makers, as they can improve understanding of the impacts of policies and schemes, leading to improved interventions in the future. Transport Scotland has published the Scottish Trunk Road Infrastructure Project Evaluation (STRIFE) guidance, which is aimed at projects within the Motorway and Trunk Road Project. Furthermore, Transport Scotland updated STAG guidance in December 2013 with additional guidance on evaluation.

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<sup>1</sup> <http://a9road.info/frequently-asked-questions>

<sup>2</sup> <http://www.transportscotland.gov.uk/news/Average-Speed-Cameras-To-Be-Introduced-On-A9>

<sup>3</sup> <http://a9road.info/safety-statistics/safety-cameras>

<sup>4</sup> Fuller, R., Gormley, M., Stradling, S., Broughton, P., Kinnear, N., O’Dolan, C. & Hannigan, B. (2009). Impact of speed change on estimated journey: Failure of drivers to appreciate relevance of initial speed. *Accident Analysis & Prevention*, 41(1), 10-14.

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For clarity, this research focuses on car drivers' Before and After attitudes to the ASC scheme. It should be noted that the results will naturally incorporate any attitudinal or self-reported behavioural effects resulting from the concurrent change to the HGV speed limit on the A9; there is no way of separating out the effects of either intervention. **This report presents the findings from the After survey** following activation of the ASCs on 28<sup>th</sup> October 2014; the HGV speed limit was increased from 40mph to 50mph on the same day as the ASCs went live. The report aims to evaluate changes in attitudes and behaviour of drivers on the A9 between Perth and Inverness, when compared to the baseline “Before” research which was undertaken in April / May 2014. To aid the reader, this report presents the Before survey results alongside the After survey results.

## 1.2 Aims and Objectives

This research project is part of a wider programme of work looking at the impact of ASCs and a change in the HGV speed limit. The objectives of the research are as follows:

1. To understand in greater detail how the installation of ASCs has impacted on the operational performance of the route;
2. To understand how the installation of ASCs has impacted on the perception of drivers of the A9;
3. To understand whether changes in network performance are aligned with drivers' perceptions of the impact of the installation of ASCs; and
4. To establish a platform / template to facilitate and report the outcomes of future monitoring and evaluation.

The primary aim of this research is to meet the second of these objectives, while providing context to the wider programme.

Delivery of these objectives will enable Transport Scotland and The A9 Safety Group to:

- Identify any areas of concern (particularly around safety) to allow action to be taken;
- Develop targeted information and road safety education campaigns;
- Confirm the suitability of operational and safety forecasts of the ASCs;
- Develop an understanding of the impacts of these types of measures and share lessons learned with partners within Scotland and elsewhere; and
- Monitor and publically report on operational statistics every quarter and produce a review report annually, to be published on The A9 Safety Group website (most recently update 26<sup>th</sup> January 2015).

## 1.3 Methodology

AECOM aimed to conduct 300 face-to-face quantitative interviews with car drivers who had driven along the A9 between Perth and Inverness for a journey of at least 15 minutes within the last 24 hours from time of interview.

Respondents were selected using a judgmental quota sampling technique. With this technique interviewers approach people who they think would fit the scope of the survey, i.e. drivers, and also fit towards any quotas they are required to achieve, such as age and gender.

In the Before survey a quota was used to ensure views were gathered from a variety of types of A9 users including business travellers, commuters and leisure travellers. The non-mutually exclusive minimum quotas are shown in **Table 1.1**. To ensure a similar spread of user types, in the After survey the quotas used were based on the spread of users obtained in the Before survey.

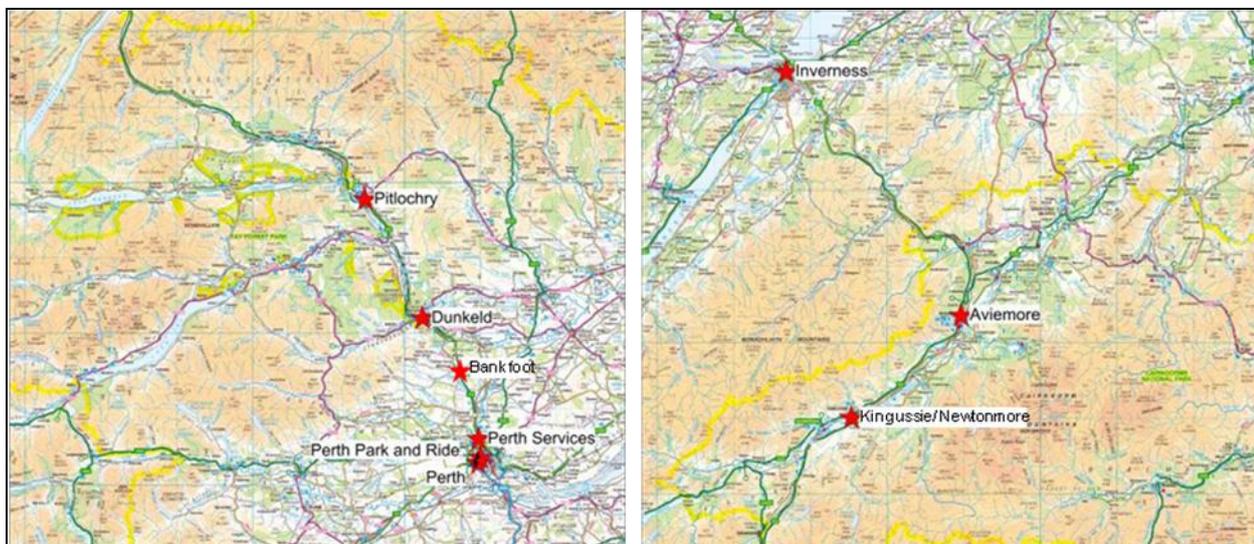
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**Table 1.1 Quotas for data collection**

	Type	Minimum % of respondents
Journey purpose	Car driving commuters	33%
	Car drivers on leisure/recreation trips	20%
	Business travellers	20%
Frequency of use	First time travellers	20%

The fieldwork for the Before survey ran from 26<sup>th</sup> April to 9<sup>th</sup> May 2014 and the fieldwork for the After survey ran from 9<sup>th</sup> February to 24<sup>th</sup> February 2015. Interviews were undertaken at the locations shown in **Figure 1.1** for both the Before and After surveys. These locations were chosen as they were assumed to give the greatest chance of achieving the set required quotas and provided an appropriate geographical spread of survey locations across the route. Although the same locations were used at both time points, the surveys were conducted at a different time of year and this has been considered when drawing conclusions.

**Figure 1.1 Location of surveys**



Contains Ordnance Survey data © Crown copyright and database right 2014

Aside from seasonality, the fieldwork methodology adopted for the After surveys mirrored that of the Before surveys, such that fair comparisons between the two datasets could be made.

A questionnaire was developed in conjunction with Transport Scotland and the project peer reviewer<sup>5</sup>. The majority of the questionnaire was the same for both the Before and After surveys. A copy of the questionnaire can be found in **Appendix A** with the topics covered as follows:

- Screening (Frequency of use, purpose of trip, age group, gender);
- General Driving Behaviour (Knowledge of speed limits, driving confidence, behaviour when driving, perceptions of measures at improving road safety);
- Driving on A9 (Frequency of poor driving behaviour (own and witnessed), frequency of excessive speeding, effectiveness of current provisions on A9 at reducing speed, views on effectiveness of ASCs on A9); and
- Demographics (working status, socio economic grouping, postcode).

<sup>5</sup> The role of the peer-reviewer in this project was to provide independent comment and assessment of the methodology, materials and reports. The project team were not bound by the reviewer's comments and had the final say such that they could consider the reviewer's recommendations within the context of any practical constraints.

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Some items from the Driver Behaviour Questionnaire (DBQ<sup>6</sup>), a scale measuring self-reported frequency of committing various driving violations, errors and lapses, were used within the questionnaire. The DBQ is an internationally recognised survey instrument for measuring self-reported driver behaviour, although the full question set was not utilised here. Some wording of existing items was edited and new items were constructed to make it more relevant to the A9.

In order to enable comparisons to be made between the Before and After surveys, it was important that the questionnaire did not change significantly for the After study. Only minor changes to the wording of some questions and introductions (such as tense and context) were made. Changes were based on necessity (i.e. to represent current conditions on the road rather than future conditions) and on feedback following the Before surveys. These changes were agreed by Transport Scotland and the peer reviewer, and included:

- Extra clarification throughout that the survey related to journeys on the A9 *between Perth and Inverness*.
- Update to wording of Q15 to reflect status of ASCs (i.e. implemented).
- Re-wording of Q16 to seek views on what, if anything, Transport Scotland could do to improve safety for vehicle drivers and passengers on the A9 between Perth and Inverness (the Before survey asked, in more generic terms, if there was anything additional the respondent would like to say in relation to their views on safety on the A9).
- New Q17 which asked if respondent had used any part of the A9 between Perth and Inverness before the introduction of ASCs in October 2014.

As with the Before study, a control survey was not conducted<sup>7</sup>. Questions on general driving behaviour on other roads were used instead, as there were issues in finding a comparable section of road. Whilst the A82 was considered as an option, this in itself is the subject of potential improvement works over the coming years.

#### 1.4 Report Outline

Following this introduction the report contains the following Chapters:

<b>Chapter 2</b>	Demographics and driver types;
<b>Chapter 3</b>	General driving behaviour;
<b>Chapter 4</b>	Driving behaviour on most recent journey along A9;
<b>Chapter 5</b>	Summary and conclusions; and
<b>Appendices</b>	Questionnaire and verbatim responses.

Please note, in tables and charts shown in this report, percentages may not equal 100%; this is either due to rounding or because respondents were able to give more than one answer to the question. The base for all questions is the number of respondents that were asked the question but in some cases excludes ‘not applicable’ responses; where this is the case it is clearly stated.

Throughout the analysis, an asterisk (\*) is used if a proportion is more than zero but less than 1%. Where significance is referred to this is statistically significant to a 5% level i.e. the probability that a difference has not happened by chance alone. This is indicative as the sampling method was non-random, but it allows the results to be put into context. If differences between subgroups are not mentioned then the differences were either not found to be significant or respondents within the subgroup were too small for conclusions to be drawn.

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<sup>6</sup> Reason, J. T., Manstead, A. S. R., Stradling, S. G., Baxter, J. S., & Campbell, K. A. (1990). Errors and violations on the road: A real distinction? *Ergonomics*, 33, 1315–1332.

<sup>7</sup> It should be noted that the peer reviewer made a preference and recommendation for a control group as part of the original methodology.

## **Demographics and Driver Types**

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## 2 Demographics and Driver Types

This chapter of the report includes the demographics of the respondents, where they were interviewed and the types of driver taking part in the survey. In total, 302 interviews were conducted with drivers along the A9 following implementation of the ASCs.

### 2.1 Demographics

Quotas were set on age and with the aim of matching the demographics of the After survey with that of the Before. There was some difference in these and so weights were applied to ensure fair comparisons as shown in **Table 2.1a**. Once weighted the spread for both surveys included 57% males, 43% females, 18% aged between 17 and 34 or 60+ and 65% 35-59 as shown in **Table 2.1b**.

**Table 1.2 Weights applied**

		Weight applied
Male	17-34	0.6
	35-59	1.1
	60+	1.0
Female	17-34	0.9
	35-59	1.0
	60+	2.2

**Table 2.1b Age and Gender (both surveys)**

	%
Male	57%
Female	43%
17-34	18%
35-59	65%
60+	18%

### 2.2 Driver types

Other information was collected about respondents' driving experience and how many miles they had driven over the last 12 months, as shown in **Table 2.2**. The vast majority in both the Before and After survey had more than 10 years' driving experience. In **Table 2.2** the percentages are compared against figures from the Department for Transport's (DfT) Road Safety Research, 2011<sup>8</sup>. Figures for driving experience are similar to this, however, for miles driven the differences are larger. Given the quotas set on commuters and business drivers and the fact this research was conducted in Scotland rather than across the United Kingdom, as the DfT figures are, this is to be expected and is not a cause for concern.

<sup>8</sup> The figures from this report were sourced from the NatCen Omnibus survey with the questions commissioned by the DfT. This is a stratified random probability survey of adults aged 16 or over living in private households in Great Britain. The survey is designed to carry questions on a range of social data for government and other non-profit organisations. Fieldwork was undertaken between February and April 2010 and a total of 1,538 face-to-face interviews were conducted representing a response rate of 55%.

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**Table 2.2 Driving experience and miles driven in last 12 months**

	A9 ASC Research				DfT
	Before Survey		After Survey		
	Frequency	%	Frequency	%	
Less than 2 years	8	3%	6	2%	6%
2 to 5 years	7	2%	18	6%	7%
6 to 10 years	21	7%	22	7%	8%
More than 10 years	258	88%	255	85%	78%
<b>Respondents</b>	<b>294*</b>		<b>302*</b>		
Less than 5,000 miles	13	5%	9	3%	37%
5,000 to 9,999 miles	70	24%	81	28%	35%
10,000 to 19,999 miles	152	52%	154	52%	28%
20,000 miles or more	55	19%	51	17%	
<b>Respondents</b>	<b>290*</b>		<b>295*</b>		

\*Some respondents did not answer this question hence bases are lower than overall sample

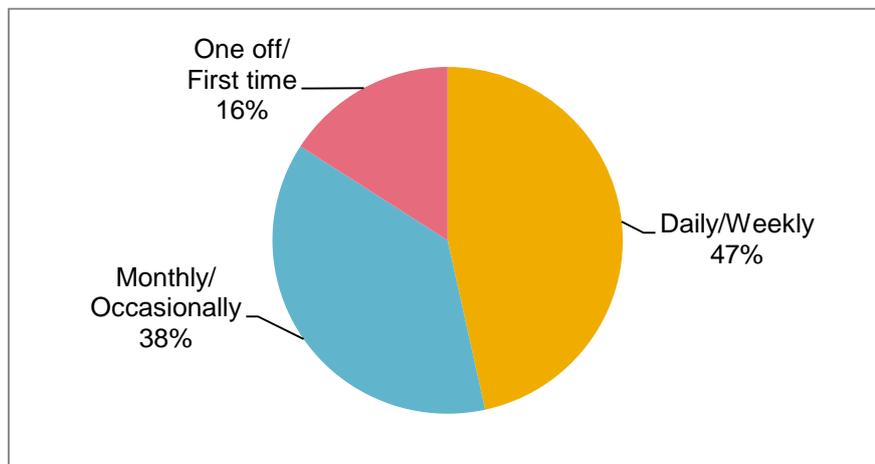
A mix of driver types in terms of the reason they had travelled along the A9 in the last 24 hours was ensured through a quota. The proportions were similar between the Before and After survey as shown in **Table 2.3**.

**Table 2.3 Journey purpose**

	Before Survey		After Survey	
	Frequency	%	Frequency	%
Commuting	105	36%	101	33%
Business	62	21%	68	23%
Leisure	129	44%	133	44%
<b>Total</b>	<b>296</b>		<b>302</b>	

Frequency of use is shown in **Figure 2.1a** and **Figure 2.1b**, for Before and After surveys respectively. Amongst respondents interviewed in the After survey, nearly half (44%) said they used the A9 between Perth and Inverness on a daily/weekly basis, a figure that would be expected with 33% recorded as using the road for commuting. This is comparable with the Before survey whereby 47% said they used the A9 between Perth and Inverness on a daily/weekly basis, with 35% recorded as using the road for commuting.

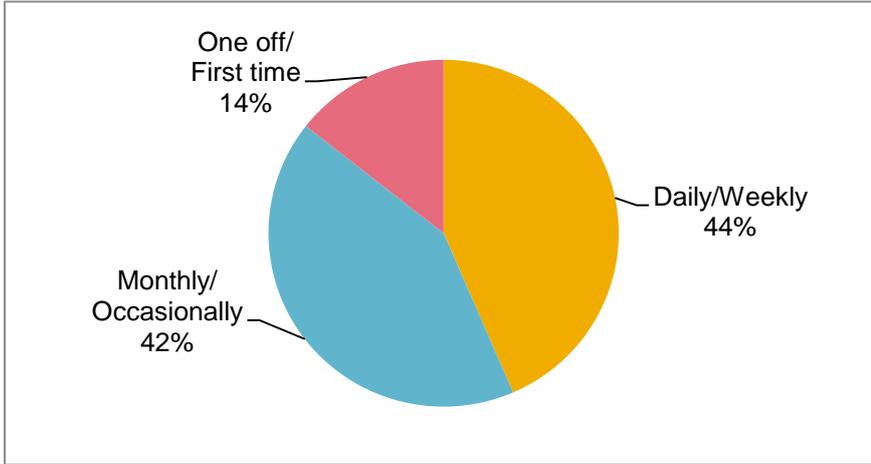
**Figure 2.1a Frequency of making journey along A9 (Before Survey)**



Base: 290

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**Figure 2.1b Frequency of making journey along A9 (After Survey)**



Base: 296

Only 2% of respondents had not driven on the A9 before the introduction of the ASCs. This question was included as a check to ensure we had not interviewed large number of respondents who has not driven on the A9 before speed cameras. With just 2% having not done so, these respondents were included in all analysis especially given questions do not require respondents to have necessarily driven on the A9 before.

## **General Driving Behaviour**

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### 3 General Driving Behaviour

This section outlines the results to questions asked on general driving behaviour, not specifically related to the A9.

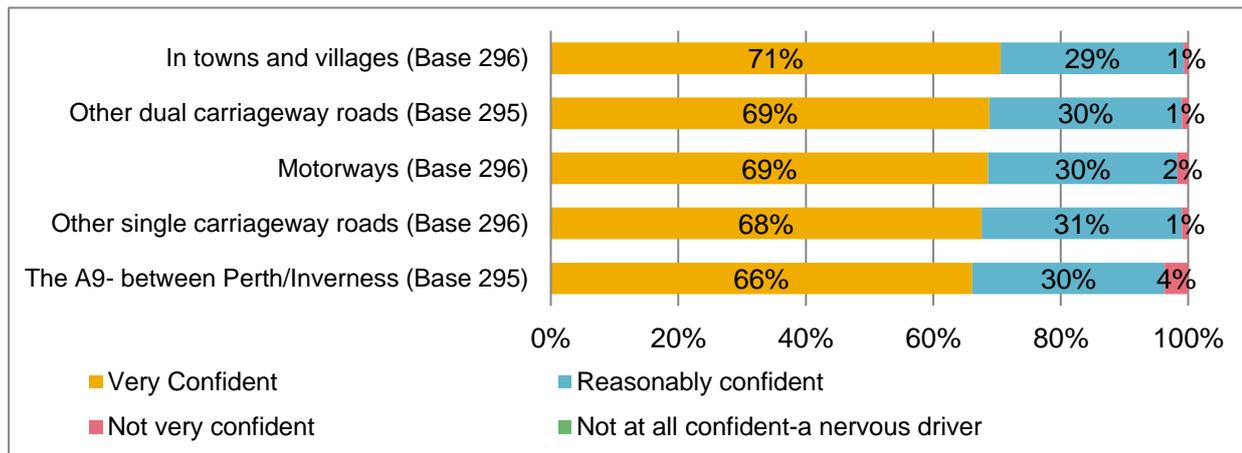
#### 3.1 Driving confidence

The first topic dealt with driving confidence on particular types of road, shown in **Figure 3.1a** and **Figure 3.1b**, for the Before and After surveys respectively. Within the After survey, 92% of drivers said they felt either ‘very confident’ (64%) or ‘reasonably confident’ (28%) whilst travelling on the A9. This is comparable to the Before survey whereby 96% of drivers said they felt either ‘very confident’ (66%) or ‘reasonably confident’ (30%) whilst travelling on the A9. Overall there were no statistically significant differences between the Before sample and the After sample with regard to drivers’ confidence when using each road type, including the A9.

The levels of confidence reported here may be influenced by the high proportion of respondents with over 10 years’ driving experience (85% in the After survey and 88% in the Before survey) who are more likely to be ‘confident’ drivers than less experienced drivers.

At both time points drivers’ confidence on the A9 is similar to that of other single or dual carriageways. The changes made on the A9 do not therefore appear to have affected drivers’ confidence of driving on the road, nor changed its profile in relation to driving on other single or dual carriageway roads.

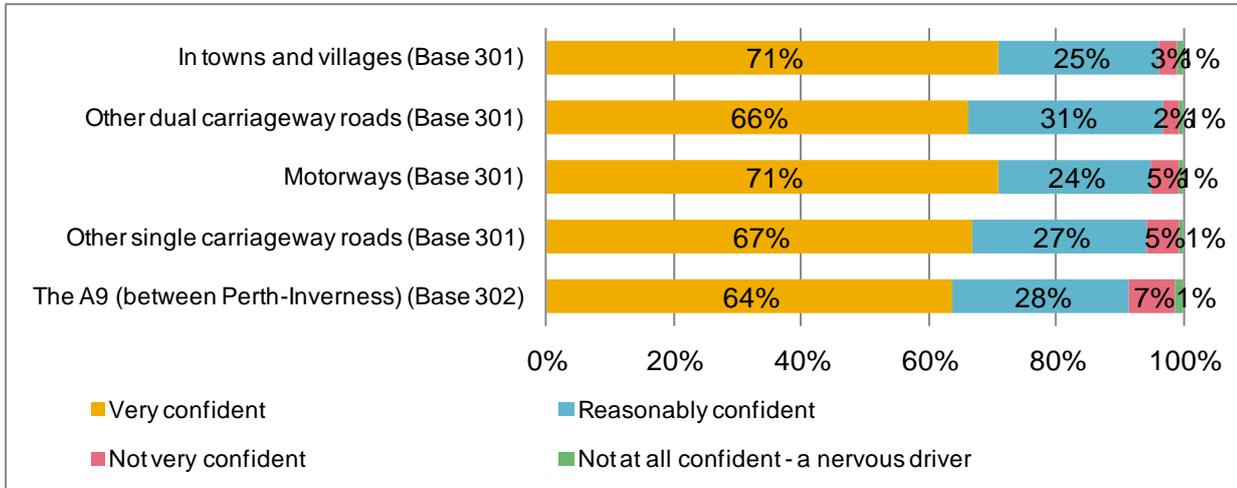
**Figure 3.1a Driving Confidence (Before Survey)**



*How confident would you say you are, as a driver, on the following types of road?*

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**Figure 3.1b Driving Confidence (After Survey)**



How confident would you say you are, as a driver, on the following types of road?

Males were significantly more likely to say they felt ‘very confident’ when driving on the A9 compared to females (76% compared to 54% in the Before survey, and 73% compared to 52% in the After survey). Analysis of the data has shown that, for all the road types, males were significantly more likely to say ‘very confident’ than females, in both the Before and After surveys. The results for the A9 for this split are shown in **Table 3.1**.

**Table 3.1 Driving confidence by gender**

		Before Survey			After Survey		
		Male	Female	Overall	Male	Female	Overall
The A9 - between Perth/Inverness	Very confident	76%	54%	66%	73%	52%	64%
	Reasonably confident	23%	40%	30%	24%	32%	28%
	Not very confident / Not at all confident	2%	6%	4%	3%	16%	8%
<b>Respondents</b>		<b>168</b>	<b>127</b>	<b>295</b>	<b>171</b>	<b>131</b>	<b>302</b>

There are no statistically significant differences between males or females responses when comparing the Before and After surveys for all road types.

**3.2 General driving behaviour**

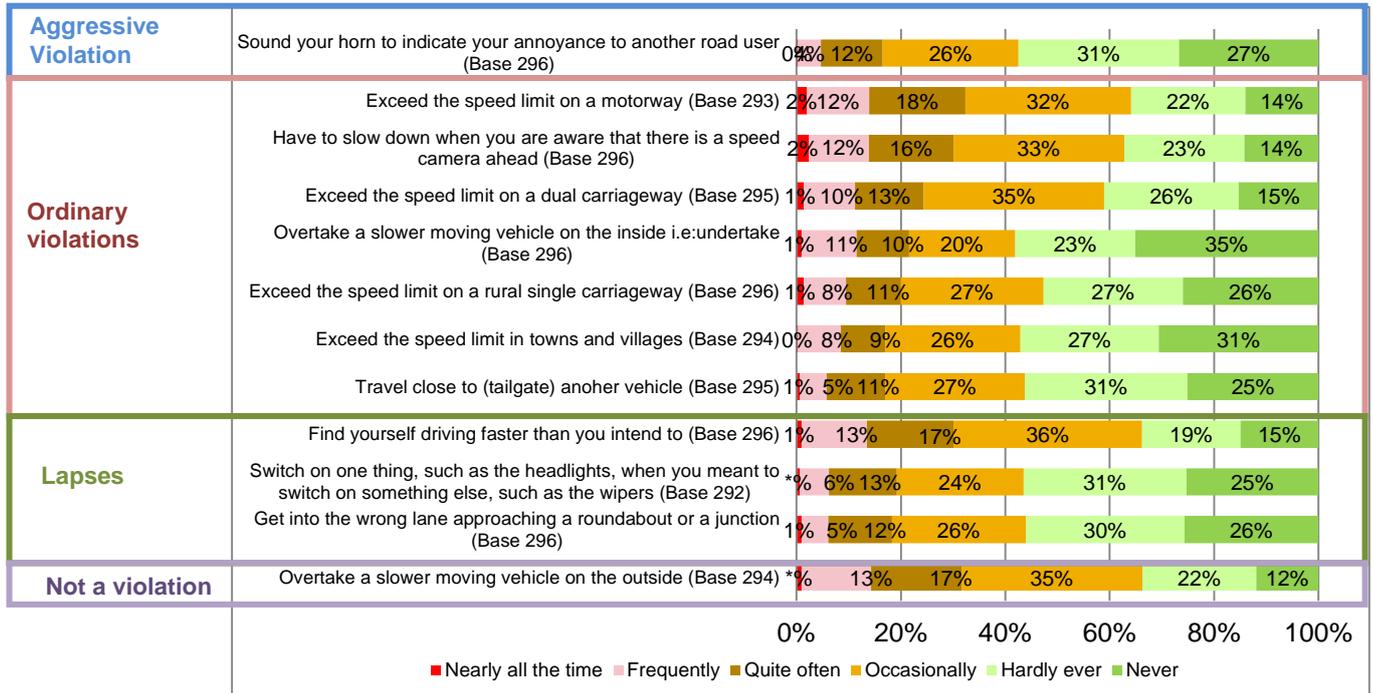
Respondents were asked about a set of common driving behaviours, and how often they exhibited these, with the results shown in **Figure 3.2a** and **Figure 3.2b**, for the Before and After surveys respectively. The behaviours are ranked in decreasing order of seriousness of violation as broadly indicated by the Driver Behaviour Questionnaire<sup>9</sup>.

For both the Before and the After survey, the most common violation out of those listed was to *exceed the speed limit on a motorway* (32% ‘quite often’ or more regularly in the Before study, and 27% in the After survey). This was followed by *overtook a slower moving vehicle on the outside* ‘quite often’ or more regularly (31% Before survey, 26% After survey) or *found themselves driving faster than they intended to* ‘quite often’ or more regularly. (31% Before survey, 26% After survey).

<sup>9</sup> Not all behaviours listed here originate from the DBQ.

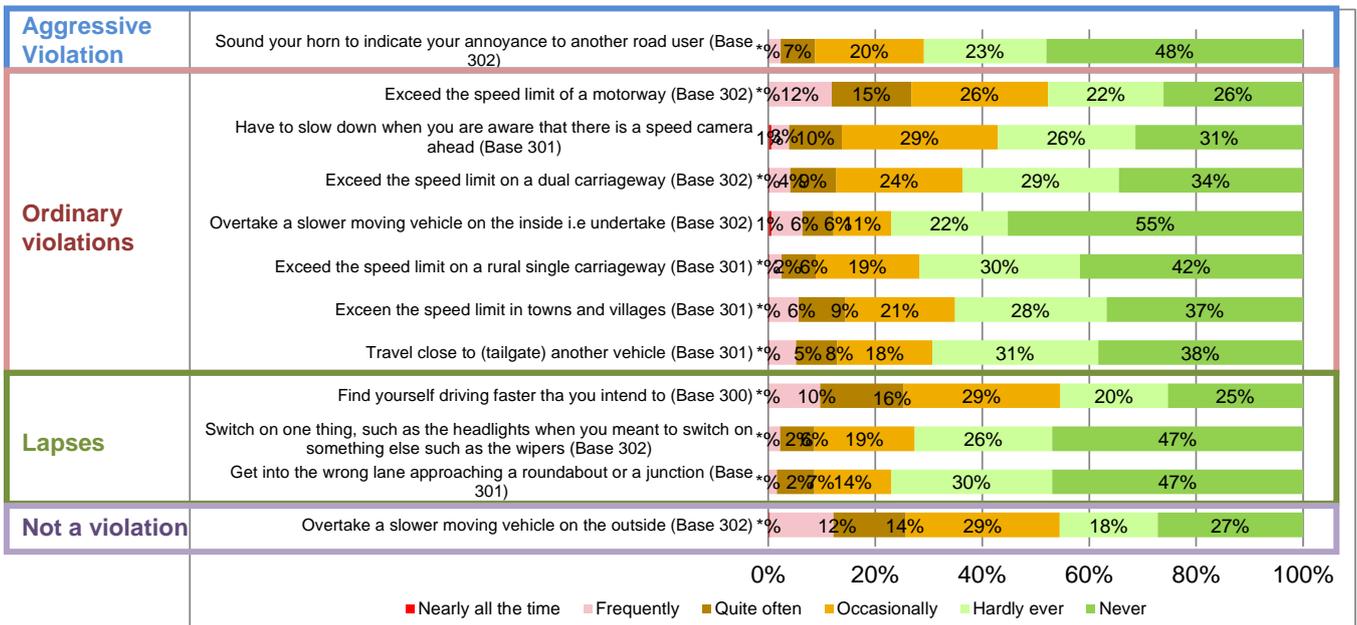
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Figure 3.2a General driving behaviour frequency (Before Survey)



In general how often do you...?

Figure 3.2b General driving behaviour frequency (After Survey)



In general how often do you...?

There were statistically significant differences between the self-reported driving behaviour of the Before sample and that of the After sample in terms of ‘exceeding the speed limit on a dual carriageway’ (25% in the Before compared to 13% in the After) and ‘exceeding the speed limit on a rural single carriageway’ (20% in the Before compared to 9% in the After). Drivers in the After survey report exceeding the speed limit less frequently on both road types than drivers in the Before survey. It cannot be determined if this result is representative of a general background trend across Scotland, if it is specific to the A9 or due to some other variable such as seasonality or individual differences

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between the groups. To avoid this skewing any results in subsequent chapters, where necessary and appropriate, results have been analysed using these behaviours as subgroups, the sizes of which are shown in **Table 3.2**. For example, splitting the dataset by those quite often or more frequently speeding on dual carriageways and those doing so less often.

**Table 3.2** Sizes of subsample

	Do not regularly speed on dual carriageways (general)		Regularly speeds on dual carriageways (general)		Do not regularly speed on rural single carriageway (general)		Regularly speeds on rural single carriageway (general)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
<b>Before</b>	<b>223</b>	<b>76%</b>	<b>72</b>	<b>24%</b>	<b>237</b>	<b>80%</b>	<b>59</b>	<b>20%</b>
<b>After</b>	<b>263</b>	<b>86%</b>	<b>39</b>	<b>13%</b>	<b>274</b>	<b>91%</b>	<b>27</b>	<b>9%</b>

Respondents were asked how effective they perceived ASCs to be in general. They were also asked about how effective they felt other enforcement measures were in improving road safety, with results shown in **Figure 3.3a** and **Figure 3.3b**, for Before and After surveys respectively.

Amongst respondents to both the Before and After surveys, *Police presence* was deemed to be the most effective with 89% saying ‘very effective’ (59%) or ‘quite effective’ (30%) in the Before survey, and 87% saying ‘very effective’ (57%) or ‘quite effective’ (30%) in the After survey. *Average speed cameras* were said to be the most effective out of the three speed camera types shown in both surveys, with 78% saying ‘very’ (34%) or ‘quite effective’ (44%) in the Before survey, and 83% saying ‘very’ (55%) or ‘quite effective’ (28%) in the After survey.

Broadly, in terms of whether measures were effective or not, responses to the Before and After surveys were similar although statistically significantly more respondents stated certain measures were very effective, these being:

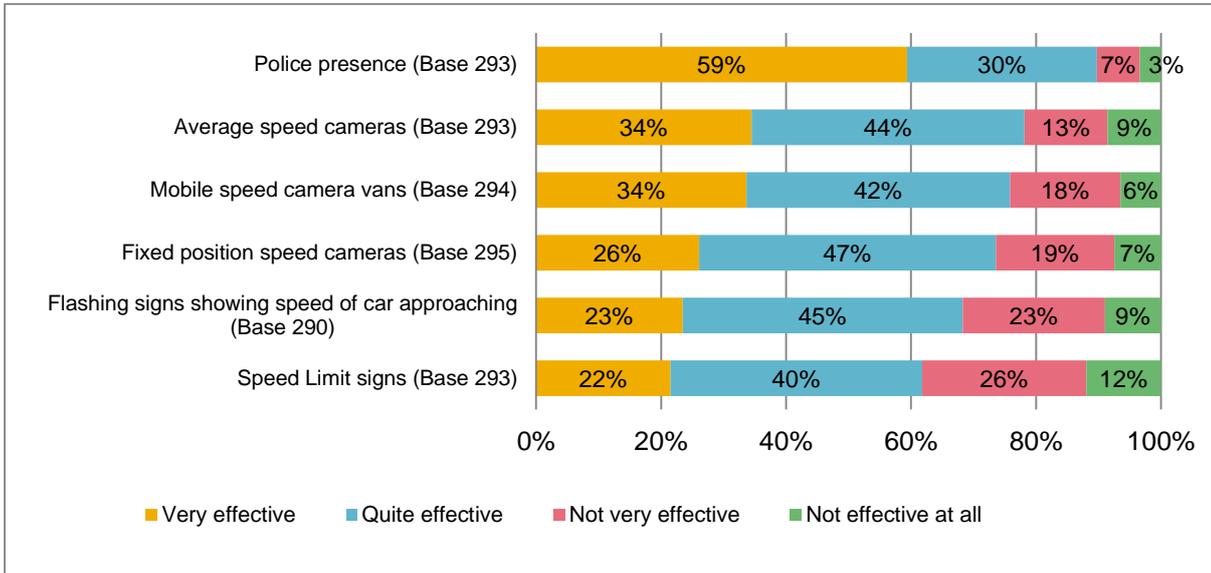
- ASCs (55% compared to 34%),
- *Mobile speed camera vans* (45% compared with 34%); and
- *Fixed position speed cameras* (47% compared to 26%).

There is the possibility ASCs may be having an effect on the perception of speed enforcement in general i.e. using ASCs has an impact on perceived enforcement beyond simply the route scheme although this is difficult to prove based on these results.

There was no significant change in the proportion of respondents saying ASCs were ‘Not effective at all’, falling from 9% to 7%. These core anti-ASC respondents only contained people who had been driving for more than 5 years (8% of those driving over 5 years compared to no respondents driving for 5 years or less)

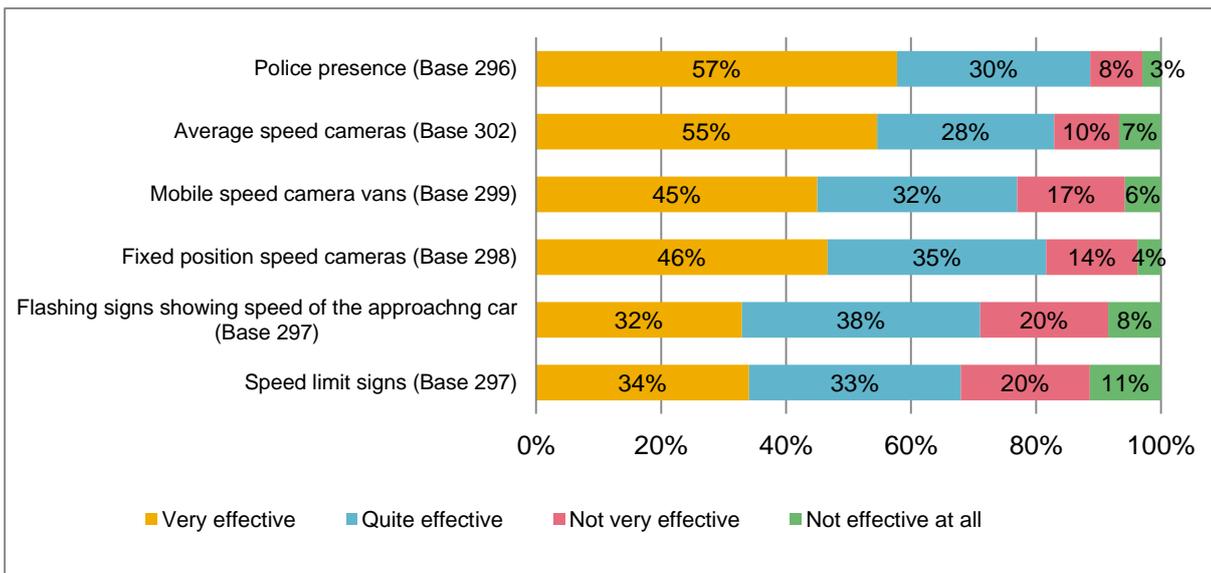
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**Figure 3.3a Perceived effectiveness of safety measures (Before Survey)**



*In general how effective would you say the following are in improving road safety...? Excludes 'don't know' and 'unaware of measure' hence bases are less than 'all respondents' (n=296)*

**Figure 3.3b Perceived effectiveness of safety measures (After Survey)**

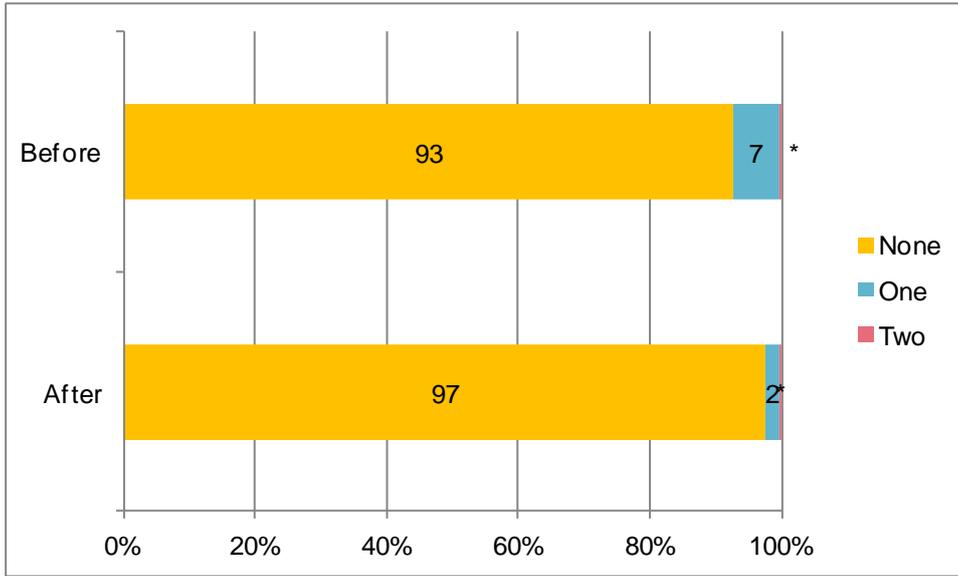


*In general how effective would you say the following are in improving road safety...? Excludes 'don't know' and 'unaware of measure' hence bases are less than 'all respondents' (n=302)*

Finally, respondents were asked how many accidents they had been involved in over the past three years regardless of blame, as shown in **Figure 3.4**. Respondents were also asked how many points for speeding they had received, and results are shown within **Figure 3.5**.

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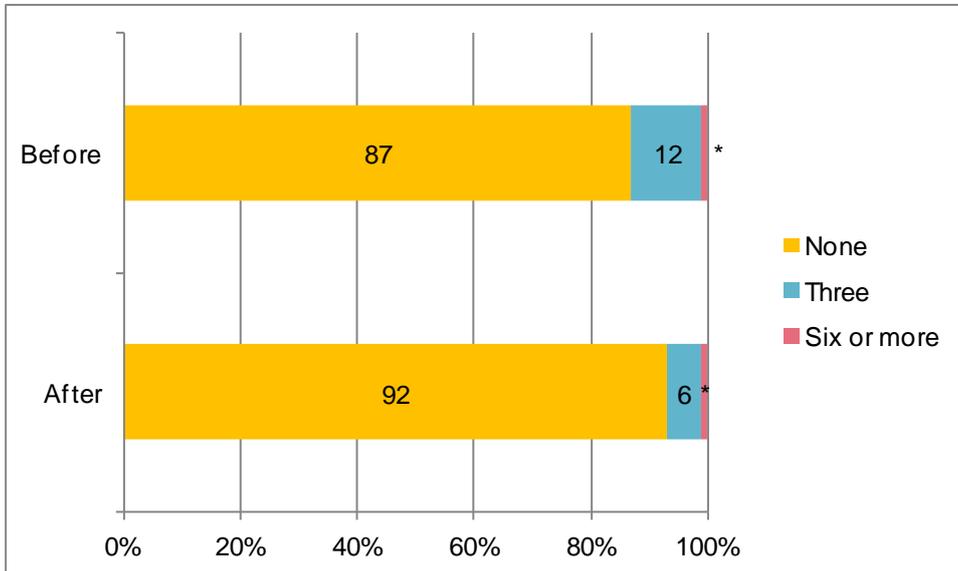
**Figure 3.4 Number of accidents in last three years (Before and After survey)**



*How many accidents have you been involved in, in the past three years when you were driving, regardless of blame?*

There were statistically significantly more respondents with three points on their licence in the Before survey which may go some way to explaining why respondents were more likely to speed in the Before survey than in the After. Like with speeding, this was taken into account during analysis. As would be expected, those respondents who said they speed on rural single carriageways or dual carriageways in the **Figure 3.2a** and **3.2b** were significantly more likely to have three or more points than those who do not speed (in the After survey: 25% compared to just 5% for dual carriageways and 28% compared to just 5% on rural single carriageways).

**Figure 3.5 Number of points on licence (Before and After survey)**



*How many penalty points have you received for speeding the past three years?*

## **Driving Behaviour on the A9**

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## 4 Driving Behaviour on the A9

Following on from questions on general driving behaviour, respondents were asked questions specifically about their most recent journey along the A9 between Perth and Inverness, i.e. within the last 24 hours. This section outlines the results from these questions.

### 4.1 Awareness of the speed limit

Respondents were asked what they thought the speed limit was on single and dual carriageway sections of the A9, the results are shown within **Figure 4.1a and Figure 4.1b** for the Before and After surveys respectively. The majority of respondents knew the correct speed limit on both dual (70mph) and single carriageway (60mph) sections of the road. Within the Before survey there were 31% who were unaware on dualled sections and 8% on single carriageway sections. This compares to 28% who were unaware on dualled sections and 14% on single carriageway sections in the After survey. For the sample as a whole, awareness of the speed limits on dual carriageways has not changed significantly between the two surveys.

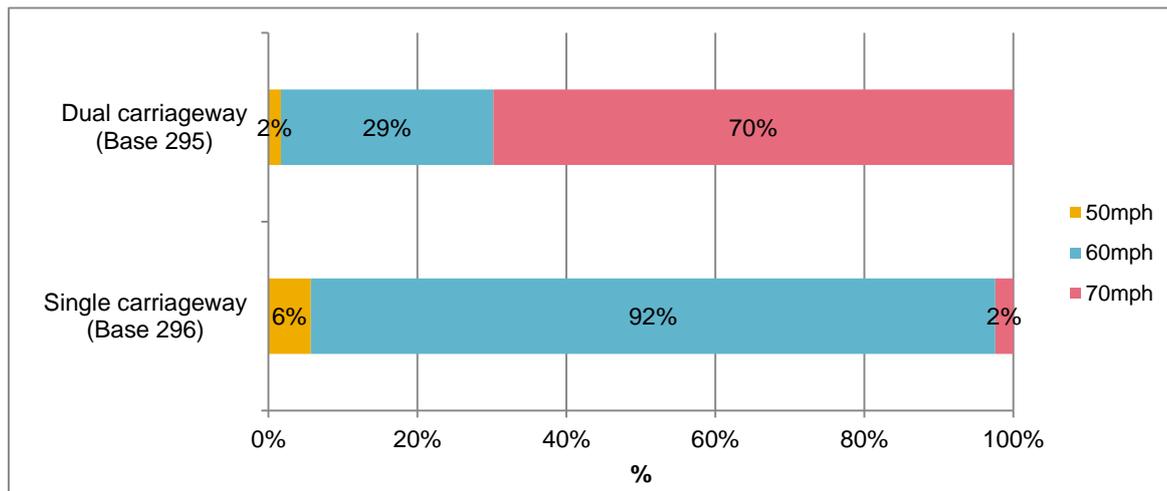
A smaller proportion of respondents were aware that the speed limit on single carriageway sections was 60mph in the After survey when compared with the Before survey (92% compared to 86%), a statistically significant difference.

Nevertheless, awareness of speed limits on the A9 reported in both surveys is higher than results from 2013 National AA Poll which found only 61% could identify the correct speed on single carriageways and 60% on dual carriageways<sup>10</sup>.

Breaking down further by subsample shows:

- Women were statistically significantly less likely to know the correct speed limit on single carriageway sections of the A9 in the After survey compared to the Before (15% compared to 7%); and
- Leisure users were also statistically significantly less likely to know the correct speed limit on single carriageway sections of the A9 in the After survey compared to the Before (23% compared to 13%).

**Figure 4.1a Speed limits on the A9 (Before Survey)**

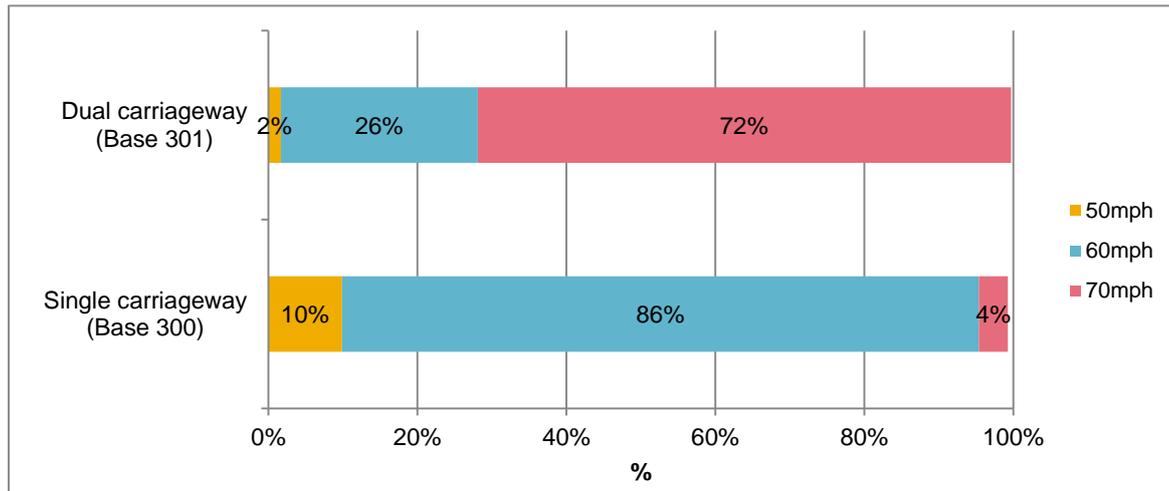


What do you think the speed limit is for cars along the A9 where it is...a) single carriageway b) dual carriageway?

**Figure 4.1b Speed limits on the A9 (After Survey)**

<sup>10</sup>Source: <http://www.theaa.com/newsroom/news-2013/national-speed-limits-aa-populus.html>

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What do you think the speed limit is for cars along the A9 between Perth and Inverness where it is...a) single carriageway b) dual carriageway?

#### 4.2 Frequency of types of driving behaviour

Respondents were asked about the frequency of specific events that may have occurred on their most recent journey on the A9 between Perth and Inverness. The results of these are shown in **Figure 4.2a** and **Figure 4.2b**. Behaviours ranged from minor breaches of the speed limit to more extreme breaches - for example, a minor breach was considered to be *exceeding the speed limit by 3mph* and a more extreme breach was *by 15mph*. Those respondents who had answered the question on the speed limit on the A9 incorrectly for both road types had their responses removed from the questions about speed (within box in **Figure 4.2a** and **Figure 4.2b**), hence the lower response base for these questions.

When looking at the samples overall from the Before and After surveys there were significant differences by all of the driving behaviours asked about except *feeling the journey is/was taking longer than it should*. There were key differences relating to exceeding speed limits included:

- A statistically significant increase in the proportion of respondent 'never' *exceeding speed limits by 15mph* (43% to 75%), *10mph* (37% to 54%) and *3mph* (27% to 36%); and
- A statistically significant fall in respondents *exceeding speed limits by 15mph* 'frequently' from 4% to 0.4%.

Other statistically significant findings included significantly more respondents saying they:

- 'Never' *felt unsafe due to the actions of other road users* (20% to 32%);
- 'Never' *felt frustrated by respondents travelling slower than you would like to* (23% to 34%);
- \*'Never' *overtake on a dual carriageway section of road* (22% to 36%);
- \*\*'Never' *felt frustrated at the lack of opportunity to overtake* (25% to 49%)
- \*\*'Never' *start to overtake but have to abandon the manoeuvre* (37% to 50%);
- \*\*'Never' *overtake on a single carriageway section of road* (42% to 52%), linked to the above; and
- 'Never' *check your phone or make/take call* (46% to 62%) possibly down to the necessity to concentrate on keeping to within the speed limit.

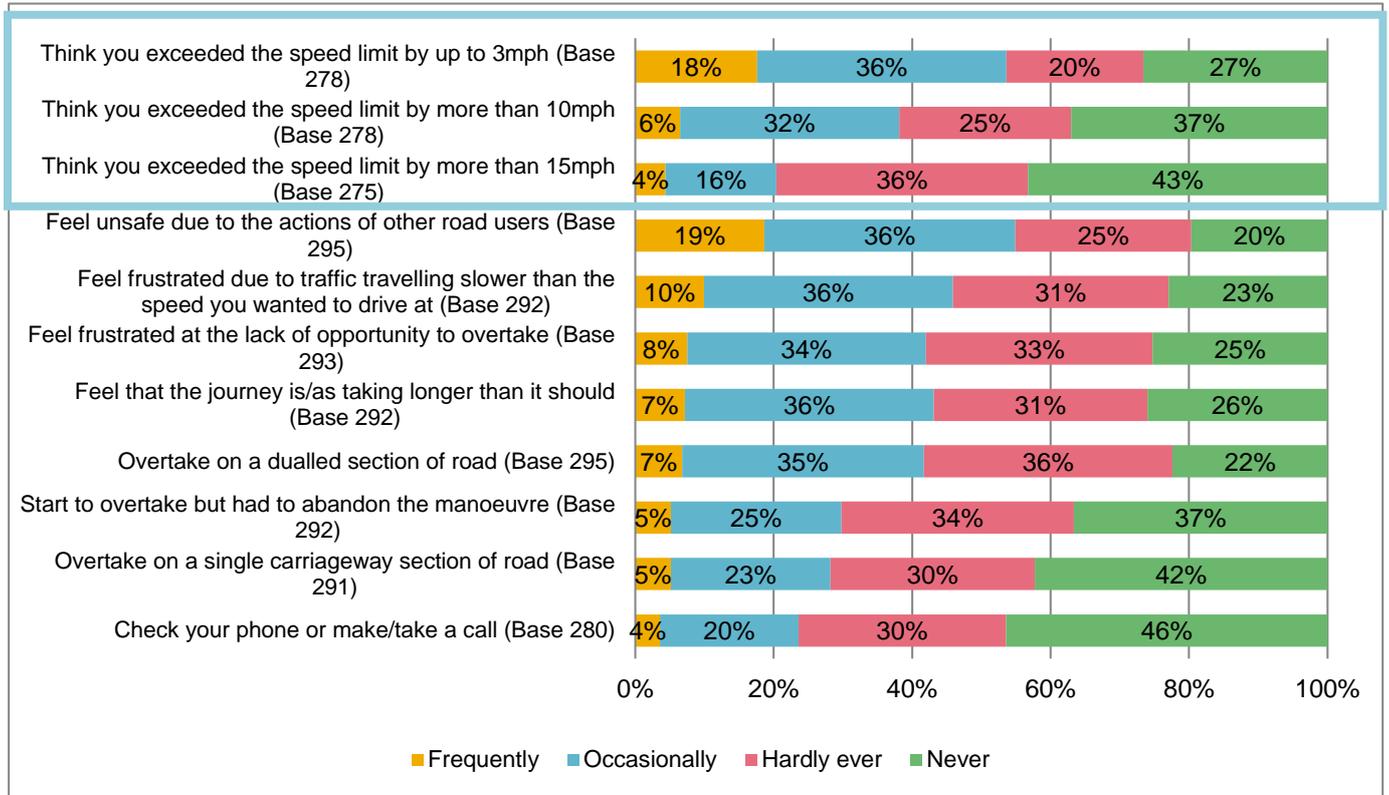
The points starred above (\*) all relate to overtaking and there has been a reduction in all four. This reduction in overtaking or feeling a need to overtake is understandable given the reductions in respondents exceeding the speed limit. This also could be related to the 50mph HGV limit.

The fact there has not been a statistically significant change in proportions *feeling the journey is/was taking longer than it should*, regardless of propensity to speed or not, this is still numerically higher and thus is positive as there was the possibility those who generally speed would feel their journey was taking longer because of the ASCs.

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**Figure 4.2a Frequency in types of behaviour (Before Survey)**

**How often did you...**

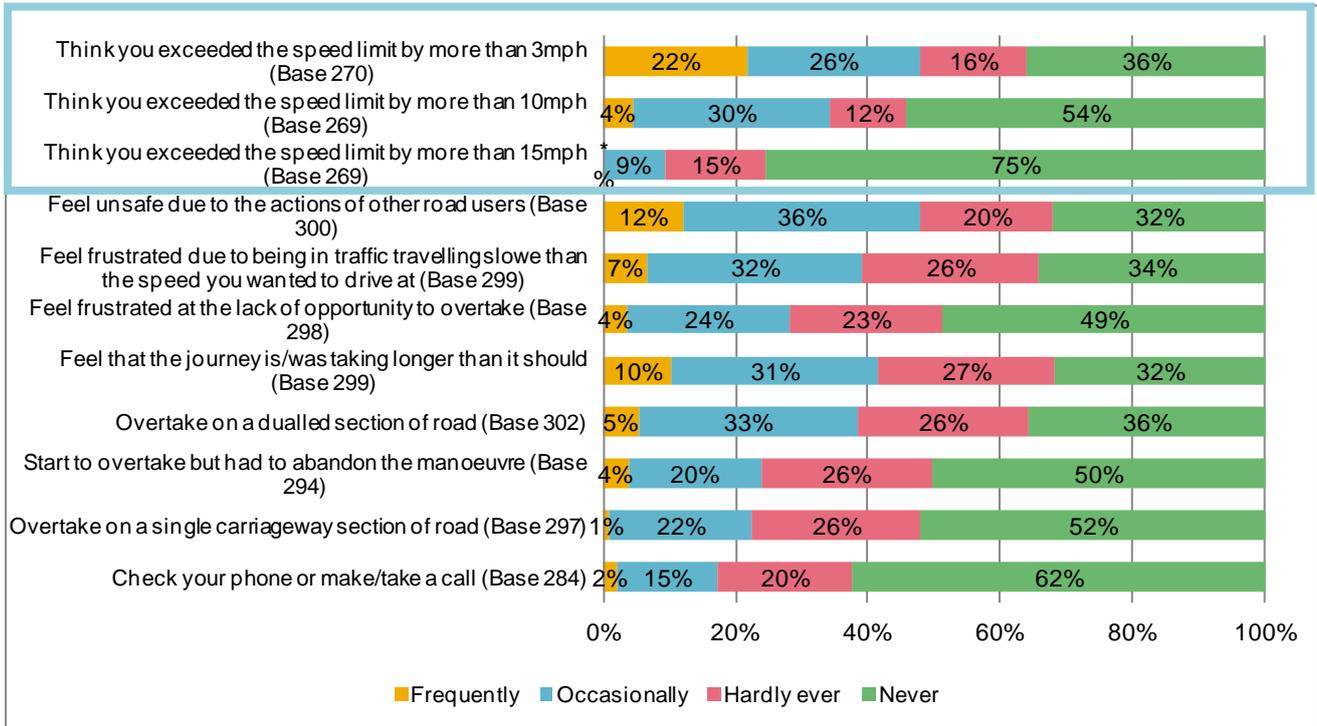


*Now thinking about the most recent time you drove on the A9, i.e. in the last 24 hours, how often did you...? Excludes not applicable*

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**Figure 4.2b Frequency in types of behaviour (After Survey)**

**How often did you...**



Now thinking about the most recent time you drove on the A9 between Perth and Inverness, i.e. in the last 24 hours, how often did you...?  
Excludes not applicable

Due to slight differences in the Before and After sample in relation to general driving behaviours (i.e. exceeding the speed limit on single and dual carriageway roads), it is important to also analyse by subsample.

Even when the effect of the After sample containing fewer speeders is taken into account this is still the case, as shown in **Table 4.1**. The five orange cells denote a statistically significant increase in the proportion of respondents ‘never’ exceeding the speed limit on their most recent journey on the A9 by different speeds.

The pink cell shows a non- significant increase between the Before and After surveys. However, when ‘Never’ and ‘Hardly ever’ responses are merged there is a statistically significant increase between the Before and After survey (48% compared to 81%).

These figures suggest ASCs have been particularly effective at reducing excessive speeding (15mph), albeit less so for those who report regularly exceeding the speed limit on single and dual carriageway roads.

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**Table 4.1 Frequency in types of behaviour on the A9 by general type of driver (Before and After Survey)**

	Do not regularly speed on dual carriageways (general)		Regularly speed on dual carriageways (general)		Do not regularly speed on rural single carriageway (general)		Regularly speed on rural single carriageway (general)	
	Before	After	Before	After	Before	After	Before	After
Think you <b>NEVER</b> exceeded the speed limit by more than 15mph	53%	80%	21%	42%	51%	80%	11%	26%
Think you <b>NEVER</b> exceeded the speed limit by more than 10mph	48%	61%	13%	12%	44%	59%	9%	3%
Think you <b>NEVER</b> exceeded the speed limit by more than 3mph	33%	41%	12%	3%	31%	40%	7%	3%
<b>Bases (n)</b>	<b>223</b>	<b>263</b>	<b>72</b>	<b>39</b>	<b>237</b>	<b>274</b>	<b>59</b>	<b>27</b>

For those with and without points on their licence the picture is similar. Respondents saying they ‘never’ exceeded the speed limit by:

- 15mph has increased for both those with no points (46% to 78%) and those with three or more points (30% to 44%); and
- 10mph has increased for both those with no points (40 to 56%) and those with three or more points (19% to 25%).

### 4.3 Reasons for speeding on the A9

Those respondents who had exceeded the speed limit ‘frequently’ or ‘occasionally’ by *3mph* or more (Before survey: n=150, After survey n=129), on their most recent journey on the A9, were asked the extent to which a series of factors were a reason for this; the results are shown in **Figure 4.3a** and **Figure 4.3b**, for Before and After surveys respectively. In the Before survey, the vast majority of respondents (94%) said they sped because they *felt it was safe to do so*, whilst 83% said they did so because they *felt pressurised by following traffic*. In the After survey, the majority of respondents (90%) also said they sped because they *felt it was safe to do so*, whilst 62% said they did so because they *generally exceed speed limits [when I drive]*. The results suggest that the dynamic of the reasons used to justify breaking the speed limit by those who report speeding has changed, which might indicate a change in the type of speeder, or a change in the social acceptance of those reasons for speeding that have changed.

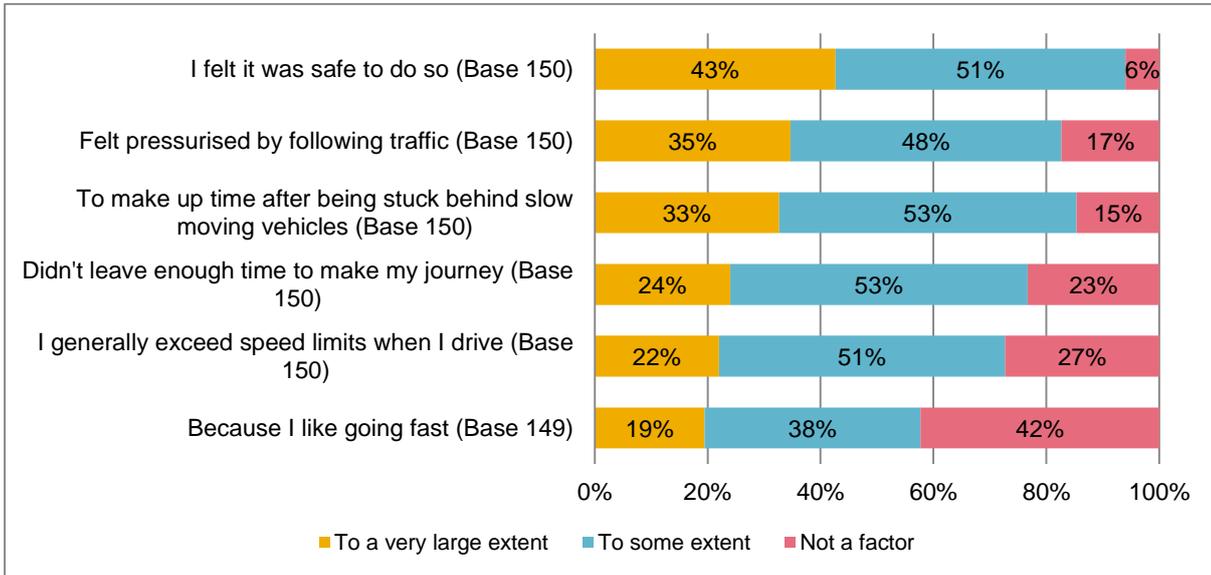
Overall, respondents saying statements were ‘a factor’ has reduced significantly on four of the six statements between the Before and After survey. These being:

- *\*Felt pressurised by following traffic* (83% to 47%);
- *\*To make up time after being stuck behind slow moving vehicles* (85% to 61%);
- *Because I like going fast* (58% to 19%); and
- *Didn't leave enough time to make a journey* (76% to 52%).

Two of these (\* above) relate to platooning and given these are related the statistically significant change in one might be expected to mirror a change in the other.

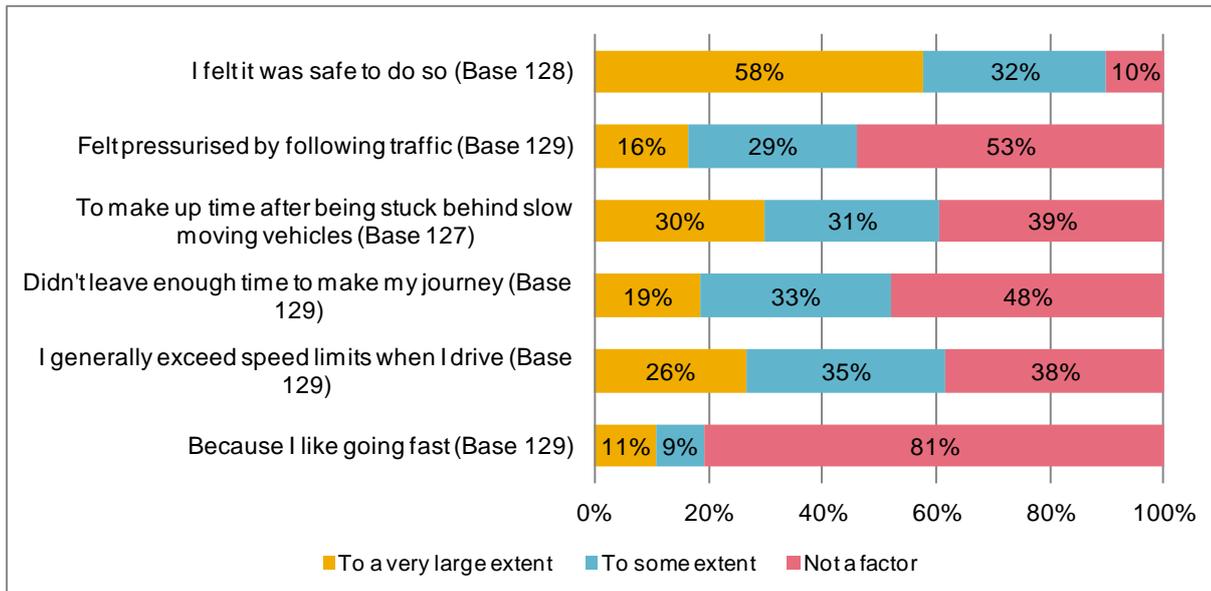
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**Figure 4.3a Reasons for exceeding the speed limit on A9 (Before survey)**



To what extent were any of the following reasons for you exceeding the speed limit on your most recent trip made on the A9 between Perth and Inverness (Bases do not include respondents saying 'Did not know')

**Figure 4.3b Reasons for exceeding the speed limit on A9 (After survey)**



To what extent were any of the following reasons for you exceeding the speed limit on your most recent trip made on the A9 between Perth and Inverness (Bases do not include respondents saying 'Did not know')

**4.4 Effectiveness in enforcing respondents' speed on the A9**

Respondents were asked to indicate how effective certain measures were for enforcing their speed when last driving on the A9; the results are shown in **Figure 4.4a** and **Figure 4.4b**, for the Before survey and After survey respectively. In the After survey, the most effective method was deemed to be *own safety*, with 96% of respondents saying this was either 'very' (60%) or 'quite effective' (36%).

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When comparing the Before and After results there have been statistically significant increases in proportions of respondents saying each measure was effective except *police presence* and *towing a caravan*<sup>11</sup>. While some factors might be expected to change following the activation of ASCs, there appears to be a migration effect of perceived effectiveness, for example:

- *Generally observing speed limits when driving* – Evidence from earlier in the report suggests less respondents are excessively exceeding the speed limit. This measure saw the greatest change between the Before and After survey;
- *Speed limit signs* – There is now increased speed related signage specifically ASC related signage;
- *Desire to conform to the law* – The presence of speed cameras has made the law and the risk of non-conformity to it more obvious for drivers;
- *Risk of points on your licence* – Perceived increase in risk of getting caught due to presence of speed cameras thus effectiveness is improved;
- *(Average) speed cameras* – There were fewer speed cameras in place in the Before survey so it is understandable that their perceived effectiveness will have increased

When taking all respondents from both surveys, those not regularly speeding generally on rural single carriageways were statistically significantly more likely than those speeding to say the following were effective in enforcing their speed:

- *Your own safety* (91% compared to 77%);
- *Presence of/consideration for my passengers* (86% compared to 78%);
- *Desire to conform to the law* (88% compared to 74%);
- *I just generally observe speed limits when I drive* (86% compared to 67%); and
- *Risk of points on your licence* (88% compared to 77%).

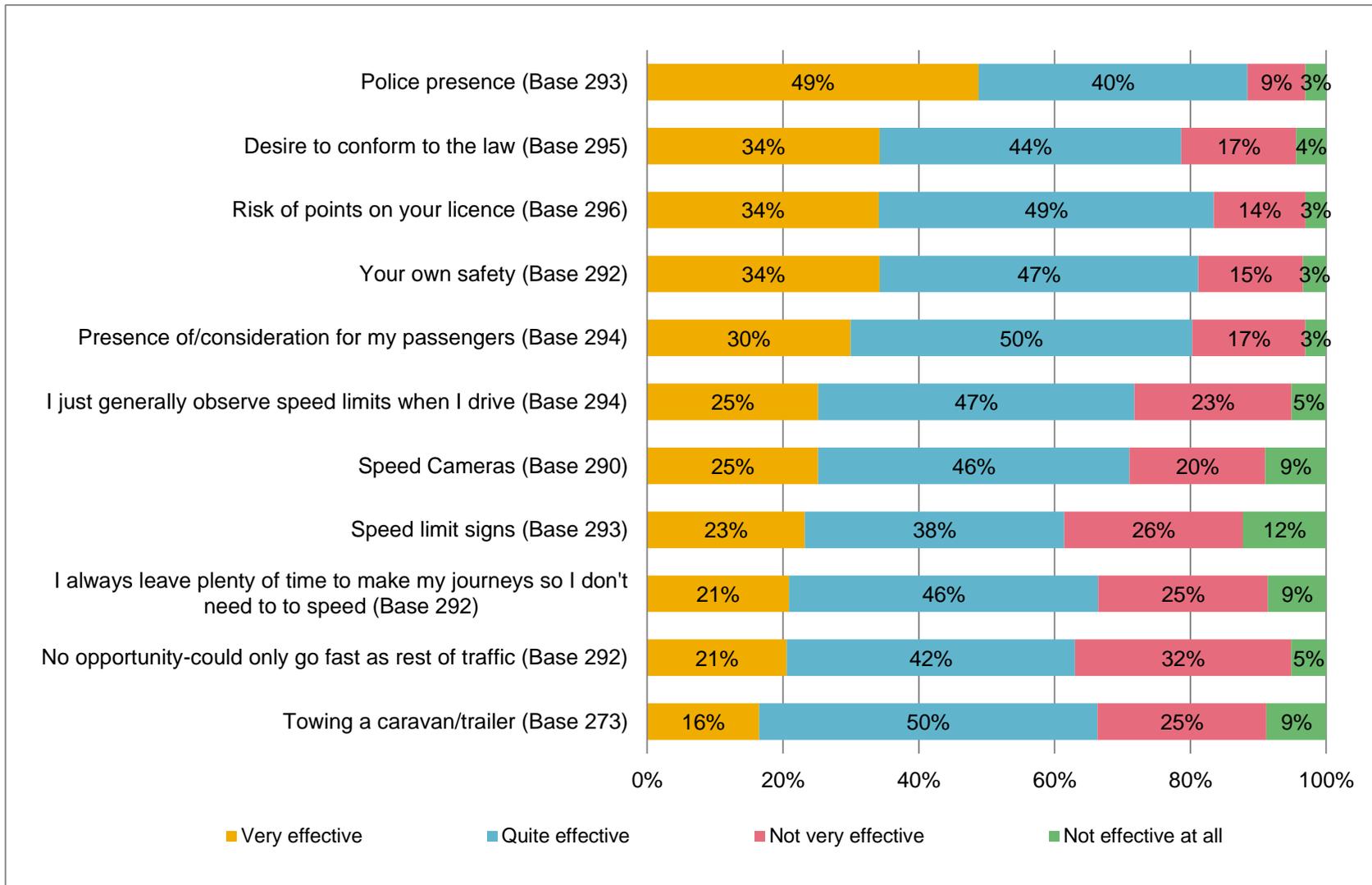
There were no statistically significant differences in effectiveness of *speed cameras* between the general speeders and non-speeders on rural single carriageways suggesting average speed cameras are as effective at controlling speeds of both people who generally speed and those that do not (80% for speeders 79% for non-speeders).

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<sup>11</sup> The results to this question in both surveys suggest respondents were thinking in general rather than just about their last journey. This is not necessarily a problem as the question was asked in the same manner in both the Before and After surveys, hence the results are deemed comparable.

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**Figure 4.4a Effectiveness in enforcing respondents’ speed on the A9 (Before Survey)**

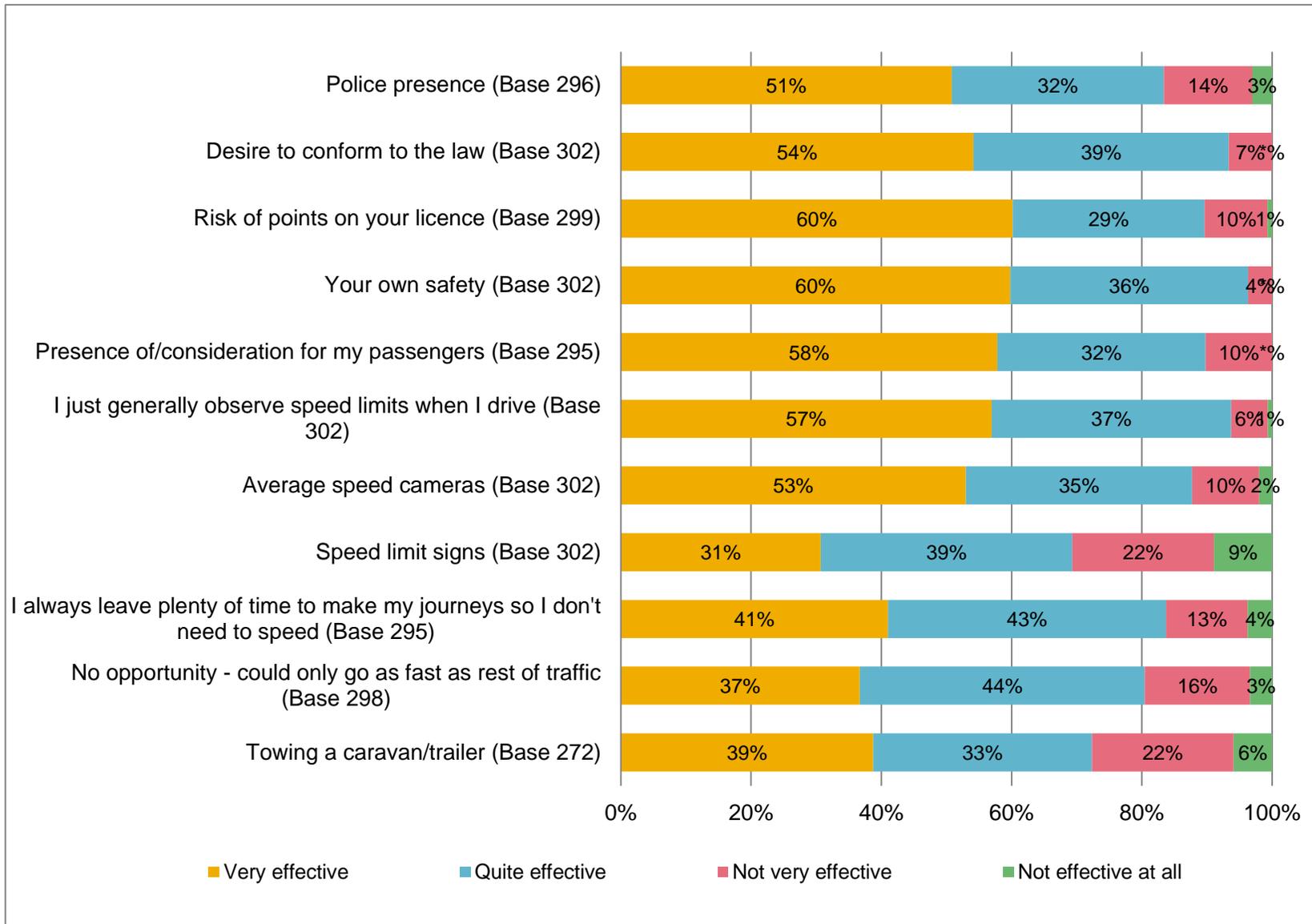


How effective would you say the following were in enforcing your speed when using the A9 on your most recent journey? Excludes respondents who said they did not know and those who were not aware of scheme

\*Average speed cameras were not asked about in the Before survey but they were in the After survey, thus results to this response are not entirely comparable.

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**Figure 4.4b Effectiveness in enforcing respondents’ speed on the A9 (After Survey)**



*How effective would you say the following were in enforcing your speed when using the A9 between Perth and Inverness on your most recent journey? Excludes respondents who said they did not know and those who were not aware of scheme*

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### 4.5 Witness of different types of risky driving behaviour

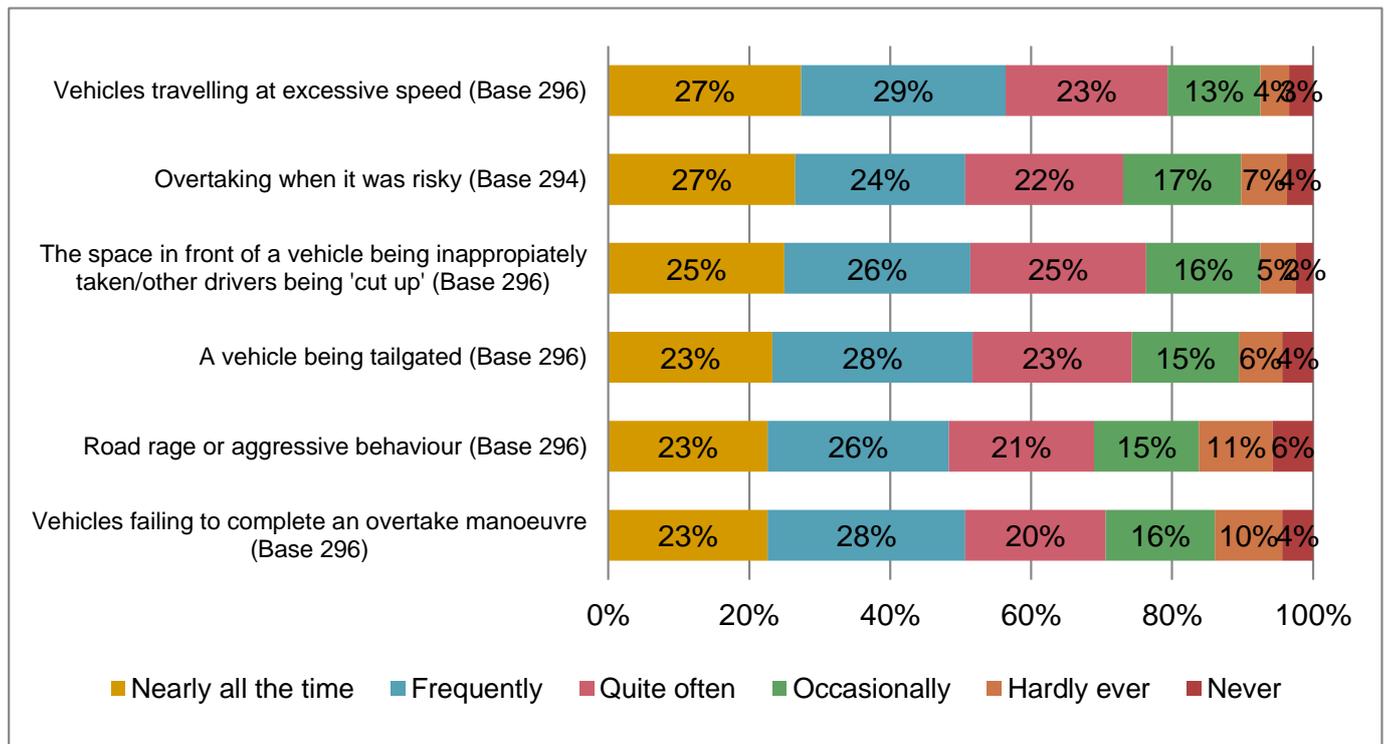
Respondents were asked about how often they had witnessed a selection of risky driving behaviours during their last journey on the A9 on a six point scale from ‘nearly all the time’ to ‘never’. Offences were seen by the vast majority of respondents (varying from 94% to 98% in the Before survey and 81% to 89% in the After survey) as shown in **Figure 4.5a** for the Before survey and **Figure 4.5b** for the After survey.

All the behaviour statements had statistically significantly more respondents saying ‘Never’ in the After survey compared to the Before survey. When the frequencies are grouped into ‘Quite often or more frequently’ and ‘Occasionally or less frequent’ the After survey shows a statistically significant decrease in the witnessing of all risky driving behaviours.

Even when this is cross tabulated by type of general driver behaviour statements in **Section 3** of this report there are still statistically significant decreases. For example those who admit to *tailgating* ‘often or more frequently’ in **Section 3** said they had witnessed *tailgating* significantly less than in the Before survey (70% down to 32%) as had those who *tailgate* less often in **Section 3** (94% down to 46%).

These results suggest that the changes on the A9 have resulted in a reduction in a variety of undesirable and unsafe behaviours on the A9.

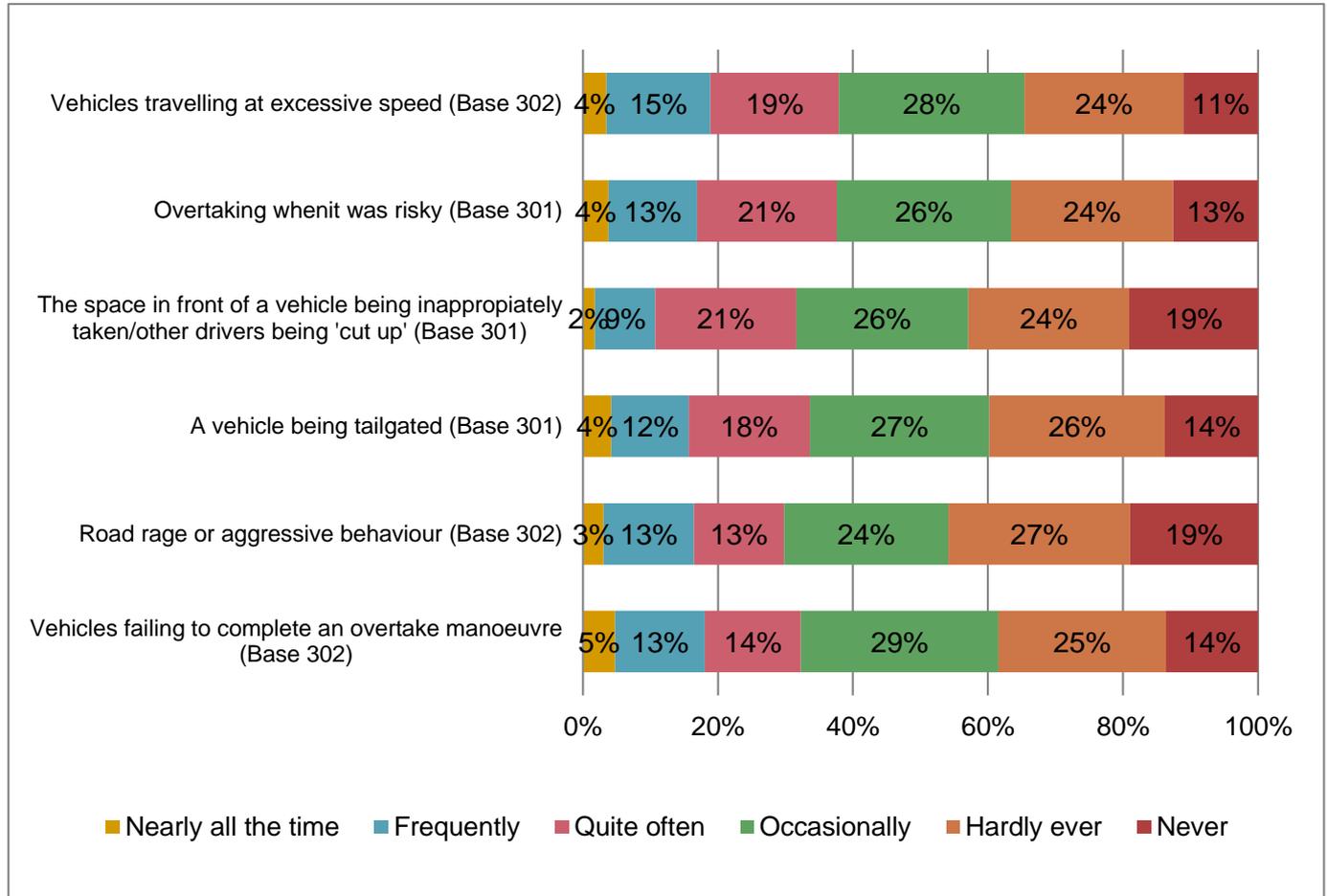
**Figure 4.5a Witness to different types of risky driving behaviour during last journey on A9 (Before survey)**



Now just thinking about the part of your journey that was on the A9, how often (if at all) did you witness the following on THIS particular trip? Does not include ‘not applicable’

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**Figure 4.5b Witness of different types of risky driving behaviour during last journey on A9 (After survey)**



Now just thinking about the part of your journey that was on the A9 between Perth and Inverness, how often (if at all) did you witness the following on THIS particular trip? Does not include 'not applicable'

**4.6 Enjoyment, satisfaction and safety**

Respondents were asked to rate their enjoyment, satisfaction with journey time and safety on their last journey along the A9 with scores given on a scale of 1 to 5 where 1 was low and 5 high. Mean scores are shown in **Table 4.2**. Results for the sample as a whole have increased from the Before to the After. Despite this, the similarity in responding patterns between the three factors in each of the Before and After surveys suggests that there may be some response bias related to the presentation of or scale used for this question.

**Table 4.2 Mean score of enjoyment, satisfaction with journey time and safety on their last journey**

	Before Mean	Base	After Mean	Base	Change
Enjoyment	3.17	296	3.76	302	0.59
Satisfaction with journey time	3.20	296	3.75	302	0.55
Felt safe	3.23	296	3.79	301	0.56

How enjoyable was your journey?; How satisfied were you with how long the journey took?; How safe did you feel during your journey?(1=low, 5=high)

The overall proportions of respondents giving each score are shown in **Figure 4.6a** and **Figure 4.6b**. There have been significant increases in respondents giving high scores (4s and 5s) from the Before survey to the After.

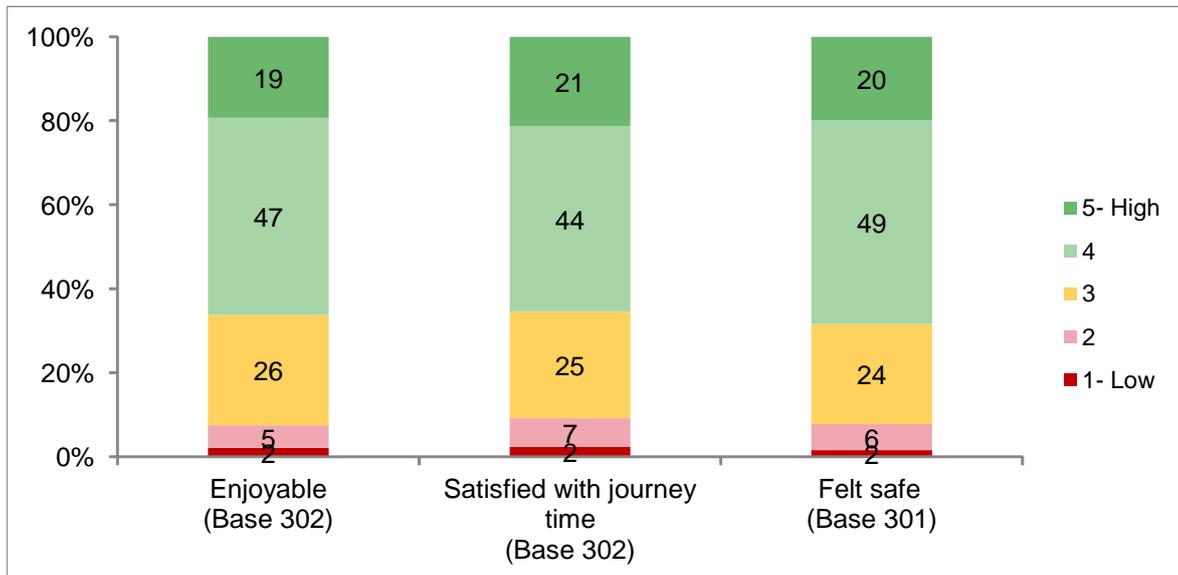
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**Figure 4.6a Enjoyment, satisfaction and safety with/on journey (Before survey)**



*How enjoyable was your journey?; How satisfied were you with how long the journey took?; How safe did you feel during your journey?(1=low, 5=high)*

**Figure 4.6b Enjoyment, satisfaction and safety with/on journey (After survey)**



*How enjoyable was your journey?; How satisfied were you with how long the journey took?; How safe did you feel during your journey?(1=low, 5=high)*

This pattern of enjoying the journey more, feeling safer and also being more satisfied with journey time is the case even when cross tabulated against whether respondents tend to generally speed on dual carriageways and on rural single carriageways with the results shown in **Table 4.3**. There were larger differences between Before and After scores for those who do not regularly speed on roads like the A9 compared to those who do regularly speed.

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**Table 4.3 Enjoyment, satisfaction and safety with/on journey by user type**

	Do not regularly speed on dual carriageways (general)		Regularly speed on dual carriageways (general)		Do not regularly speed on rural single carriageway (general)		Regularly speed on rural single carriageway (general)	
	Before	After	Before	After	Before	After	Before	After
Enjoyable	3.25	3.82	2.99	3.32	3.19	3.80	3.08	3.37
Satisfied with journey time	3.28	3.81	3.01	3.33	3.22	3.78	3.12	3.49
Felt safe	3.27	3.82	3.12	3.58	3.22	3.81	3.24	3.57

How enjoyable was your journey?; How satisfied were you with how long the journey took?; How safe did you feel during your journey?(1=low, 5=high)

**4.7 Effect of Average Speed Cameras on the A9**

Respondents to the After survey were then read the following text by the interviewer:

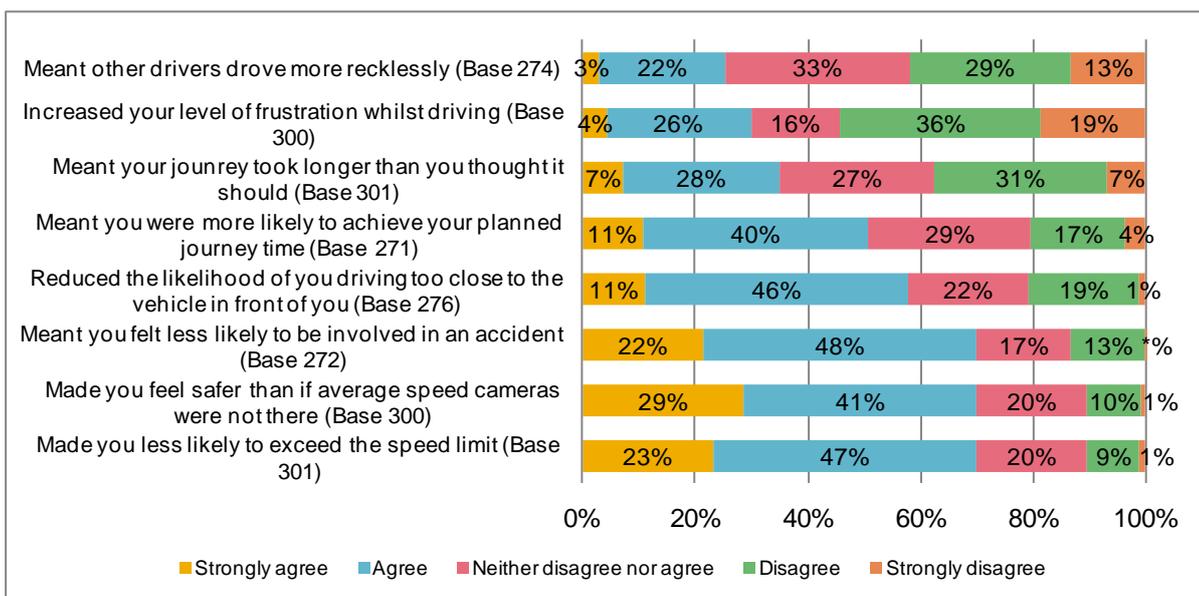
*“An Average Speed Camera System is an automatic digital camera system that determines the average speed of vehicles. It detects vehicles through Automatic Number Plate Recognition (ANPR) and calculates their average speed by measuring the time taken to travel between defined points of a known distance apart. A conspicuous signing strategy is used to inform drivers that they are entering an average speed control zone. In October 2014 average speed cameras were activated along the A9 between Perth and Inverness.”*

This text and subsequent statements were different in the After survey to the Before and thus it is not possible to compare results across surveys.

After hearing the information they were asked what effect the introduction of ASCs had had on their most recent journey along the A9; the results are shown in **Figure 4.7**. The majority of respondents reported they ‘strongly agreed’ or ‘agreed’ that they felt:

- Less likely to be involved in an accident (70%);
- Safer than if average speed cameras were not there (70%); and
- Less likely to exceed the speed limit (70%).

**Figure 4.7 Effect of Average Speed Cameras on A9 (After Survey only)**



How far do you agree that the presence of average speed cameras on the A9 for your most recent journey, has...?

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When this is broken down by general driving behaviour and also propensity to speed on the A9, the results are shown in **Table 4.4** and summarised below:

- Those who speed on A9 are statistically significantly more likely than those who do not speed to say:
  - *ASCs increased your level of frustration whilst driving (39% compared to 17%);*
  - *Mean your journey took longer than you thought it should (41% compared to 21%); and*
  - *Meant other drivers drove more recklessly (29% compared to 15%).*
- Those who speed on dual carriageways generally were statistically significantly more likely than those who do not speed to say:
  - *Increased your level of frustration whilst driving (54% compared to 26%);*
  - *Reduced the likelihood of you driving too close to the vehicle in front of you (75% compared to 55%);*
  - *Mean your journey took longer than you thought it should (50% compared to 33%);*
  - *Made you less likely to exceed the speed limit (89% compared to 67%); and*
  - *Meant other drivers drove more recklessly (50% compared to 22%).*
- Those who do speed on rural single carriageways are statistically significantly more likely than those who do not speed to say:
  - *Reduced the likelihood of you driving too close to the vehicle in front of you (77% compared to 55%); and*
  - *Mean your journey took longer than you thought it should (55% compared to 33%).*

Those with a tendency to speed appear to be more likely to report that ASCs have increased their level of driver frustration and their perceived journey time. However, given the figures for witnessing risky driving behaviours shown in Section 4.5 this does not appear to have meant they are so frustrated that they drive more riskily or poorly than Before.

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**Table 4.4 Effect of Average Speed Cameras (After Survey only) by whether respondents speed generally and on the A9**

Thinking of your most recent journey on the A9, the presence of average speed cameras...

Agree/agree strongly	Exceed the speed limit on the A9		Exceed the speed limit on a dual carriageway (general)		Exceed the speed limit on a rural single carriageway (general)	
	No	Yes	Does not speed regularly on dual carriageways	Do regularly speed on dual carriageways	Does not regularly speed on rural single carriageway	Do regularly speed on rural single carriageway
Increased your level of frustration whilst driving	17%	39%	26%	54%	29%	35%
Reduced the likelihood of you driving too close to the vehicle in front of you	50%	63%	55%	75%	55%	77%
Mean your journey took longer than you thought it should	21%	41%	33%	50%	33%	55%
Made you feel safer than if average speed cameras were not there	69%	72%	70%	68%	70%	65%
Meant you felt less likely to be involved in an accident	67%	73%	69%	78%	69%	79%
Meant you were more likely to achieve your planned journey time	52%	50%	51%	53%	51%	53%
Made you less likely to exceed the speed limit	65%	74%	67%	89%	69%	87%
Meant other drivers drove more recklessly	15%	29%	22%	50%	25%	35%

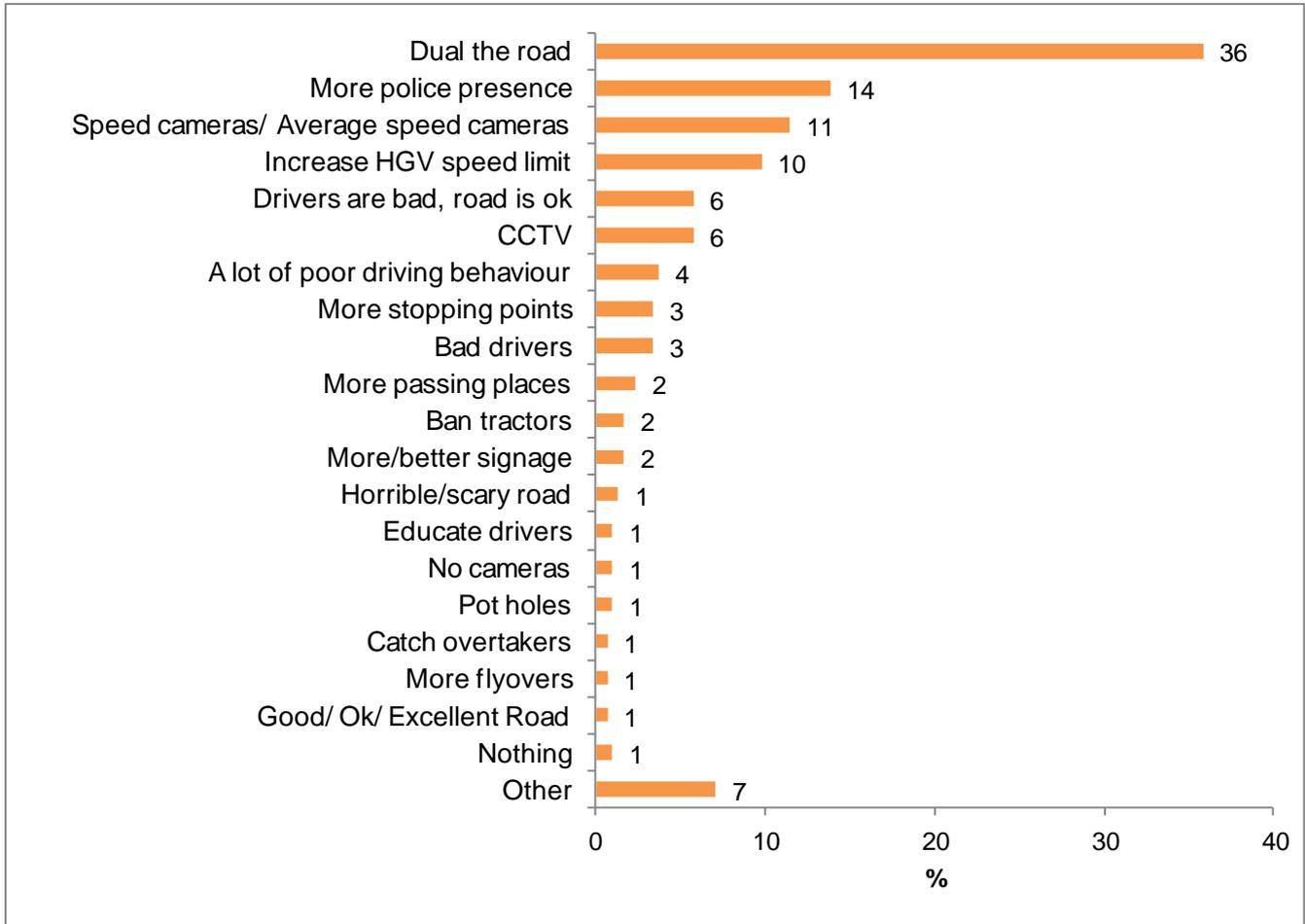
#### 4.8 Other comments

As a final question respondents were asked if they had any other comments in relation to safety on the A9. Responses have been put into themes as shown in **Figure 4.9a** (Before survey) and **Figure 4.9b** (After survey). Similar proportions of respondents are still mentioning that the A9 should be dualled (36% in Before compared to 36% After). Comments relating to *police presence* fell from 14% in the Before survey to just 2% in the After survey. The third and fourth most common comments in the Before survey, *speed cameras* and *increase HGV speed limit*, have now been dealt and thus do not feature in the After survey comments.

A full list of responses is included in **Appendix B**.

Capabilities on project:  
 Transportation  
 Market Research

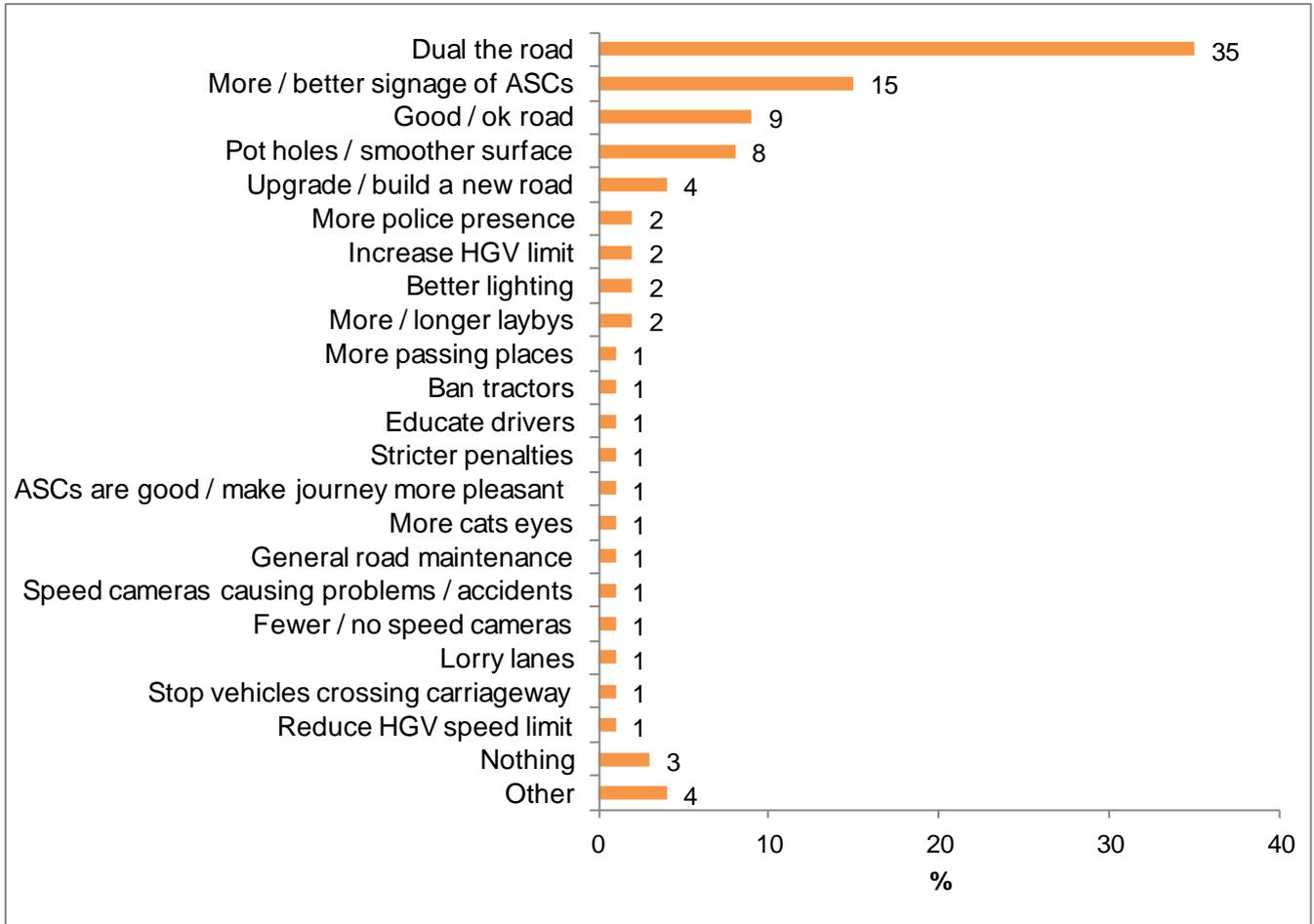
**Figure 4.9a Other comments relating to safety on the A9 (Before survey)**



Base 296 Is there anything else that you would like to say in relation to your views on safety along the A9...?

Capabilities on project:  
 Transportation  
 Market Research

**Figure 4.9b Other comments relating to safety on the A9 (After survey)**



Base 284 What, if anything, could Transport Scotland do to improve road safety for vehicle drivers and passengers on the A9 between Perth and Inverness...?

## **Summary and conclusions**

Capabilities on project:  
Transportation  
Market Research

## 5 Summary and conclusions

This section gives a summary and details of the next stages to this program of research.

### 5.1 Summary of main findings

This report details the results of a Before and After survey evaluation of self-reported attitudes and driving behaviours following the introduction of average speed cameras on the A9.

Taken as a whole, the results suggest that the introduction of ASCs on the A9 (and the concurrent change in the HGV speed limit) have resulted in a reduction in self-reported excessive speeding, a reduction in undesirable and unsafe driving behaviours, and an increase in perceived enjoyment, satisfaction and safety. The results indicate that the presence of ASCs may have had the effect of positively increasing the perception of speed limit enforcement more generally, which means that the system could have an effect beyond the A9.

Even when those respondents who generally exceed the speed limits on roads like the A9 are analysed as a subgroup they are more satisfied with journey time and safety than they were in the Before study and also significantly less likely to speed by 15mph along the A9.

Respondents general views and behaviour about their last journey has also improved with respondents responding positively to a number of statements put to them about the A9 with ASCs. They were generally *less likely to speed, felt safer than if cameras had not been there and felt less likely to be involved in an accident.*

It would be difficult to argue that since the introduction of ASCs there has not been a positive change in the behaviour of drivers and how safe they feel whilst travelling along the road even if it is difficult to ascertain whether this is down to the presence of ASCs, other factors or a mixture of both.

### 5.2 Limitations

Although the survey has been deemed as success it is not without limitation and as such caution should be used when findings are interpreted.

Firstly there were differences in the Before and After samples. Although the affect of this has been mitigated through weighting and subsample analysis, it would have been more desirable, albeit extremely difficult, to have mirrored this completely.

Further to this, the After survey took place at a different time of year. It is difficult to quantify the effect of seasonal changes on results and so this is a limiting factor.

Finally, as with similar studies of this type, there are other possible confounds that could have affected results such as roadworks during either the Before and After studies.

### 5.3 Next stages

This primary research was the second part of a two-stage research approach with the aim of comparing the effects on drivers' attitudes of the introduction of ASCs on the A9.

The comparisons will help to meet the objectives outlined in Section 1.2 of this report and notably help Transport Scotland and The A9 Safety Group understand how peoples' attitudes and perceptions towards driving on the A9 have changed.

## **Appendices**

Capabilities on project:  
Transportation

## Appendix A - Questionnaires

### A9 Road User Survey Questionnaire (Before Survey)

<b>Interviewer:</b>	
<b>Date:</b>	
<b>Time:</b>	
<b>Survey Location:</b>	
<b>Reference Number (OFFICE USE ONLY)</b>	

#### Screening

Good morning/afternoon/evening

We are conducting some research on behalf of Transport Scotland with users of the A9, between Perth and Inverness. Could you spare a few minutes to answer some questions?

Yes	1	CONTINUE
No	2	THANK AND CLOSE

**S1** When did you last make a journey, lasting at least 15 minutes on the A9, as a car driver. **SHOW MAP**

Within the last 24 hours	1	CONTINUE
Any other time	2	THANK AND CLOSE

**S2** How often do you make journeys, as a car driver, on the A9? *(Tick one only)*

Daily / Weekly	1
Monthly / Occasionally	2
One off / first time / tourist	3

**S3a** What do you think the speed limit is for cars along the A9 where it is a single carriageway? *(Tick one only)*

30mph	1
40 mph	2
50 mph	3
60 mph	4
70 mph	5

**S3b** What do you think the speed limit is for cars along the A9 where it is a dual carriageway? *(Tick one only)*

30mph	1
40 mph	2
50 mph	3
60 mph	4
70 mph	5

**S4** Where are/ were you travelling to and from on the most recent journey you made using the A9? / or now?

**From:** \_\_\_\_\_ **Approx departure time:** \_\_\_\_\_

**To:** \_\_\_\_\_ **Approx arrival time:** \_\_\_\_\_

Capabilities on project:  
Transportation

**S5 What is/ was the purpose of your trip? (Tick one only)**

Commuting	1	CHECK QUOTA
Business	2	CHECK QUOTA
Leisure	3	CHECK QUOTA

**We would now like to ask some questions about your driving in general (not just the A9). The answers you give will be treated in confidence, so please answer frankly. The answers will only be used for transport planning purposes and your response won't be traceable.**

**Q1 IN GENERAL, how often do you drive on business purposes, that is, in connection with your work? (Tick one only)**

Once a week or more	1	CONTINUE
Less than once a week	2	CONTINUE
Never	3	GO TO Q3

**Q2 And is this by... (Tick one only)**

Car	1
Van/Light goods vehicle	2
Bus/coach/HGV	3

**Q3 For how many years have you held a car driving licence? (Tick one only)**

Less than 2 years	1
2 to 5 years	2
6 to 10 years	3
More than 10 years	4

**Q4 Roughly how many miles have you driven in the last 12 months?**

\_\_\_\_\_

**Q5 How confident would you say you were, as a driver, on the following types of road? SHOWCARD A (Tick one for each row)**

	<i>Very confident</i>	<i>Reasonably confident</i>	<i>Not very confident</i>	<i>Not at all confident - a nervous driver</i>
Motorways	1	2	3	4
The A9 – between Perth/ Inverness	1	2	3	4
Other single carriageway roads	1	2	3	4
Other dual carriageway roads	1	2	3	4
In towns and villages	1	2	3	4

Capabilities on project:  
Transportation

I am now going to ask you about your GENERAL driving behaviour. Using this scale from one to six, where:

1= Nearly all the time 2=Frequently 3=Quite often 4=Occasionally 5=Hardly ever  
6=Never

**Q6 Remembering that this survey is confidential, IN GENERAL how often do you...? SHOWCARD B** (Tick one for each row)

	<i>Nearly all the time</i>	<i>Frequently</i>	<i>Quite often</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>
Overtake a slower moving vehicle on the outside	1	2	3	4	5	6
Overtake a slower moving vehicle on the inside i.e. undertake	1	2	3	4	5	6
Travel close to (tailgate) another vehicle	1	2	3	4	5	6
Exceed the speed limit on a dual carriageway	1	2	3	4	5	6
Get into the wrong lane approaching a roundabout or a junction	1	2	3	4	5	6
Have to slow down when you are aware that there is a speed camera ahead	1	2	3	4	5	6
Exceed the speed limit on a rural single carriageway	1	2	3	4	5	6
Exceed the speed limit on a motorway	1	2	3	4	5	6
Switch on one thing, such as the headlights, when you meant to switch on something else, such as the wipers	1	2	3	4	5	6
Sound your horn to indicate your annoyance to another road user	1	2	3	4	5	6
Find yourself driving faster than you intend to	1	2	3	4	5	6
Exceed the speed limit in towns and villages	1	2	3	4	5	6

**Q7 IN GENERAL, how effective would you say the following are in improving road safety? SHOWCARD C AND SHOWCARD D** (UNPROMPTED, DO NOT EXPLAIN. Tick one for each row)

	<i>Very effective</i>	<i>Quite effective</i>	<i>Not very effective</i>	<i>Not effective at all</i>	<i>Don't know</i>	<i>Unaware of this measure</i>
Fixed position speed cameras	1	2	3	4	5	6
Mobile speed camera vans	1	2	3	4	5	6
Average speed cameras	1	2	3	4	5	6
Police presence	1	2	3	4	5	6
Flashing signs showing speed of the approaching car	1	2	3	4	5	6
Speed limit signs	1	2	3	4	5	6

Capabilities on project:  
Transportation

**Q8 Now thinking about the most recent time you drove on the A9, i.e. in the last 24 hours, how often did you...?  
SHOWCARD E (Tick one for each row)**

	<i>Frequently</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>	<i>Not applicable</i>
Overtake on a single carriageway section of road	1	2	3	4	5
Overtake on a dualled section of road	1	2	3	4	5
Feel frustrated due to being in traffic travelling slower than the speed you wanted to drive at	1	2	3	4	5
Feel frustrated at the lack of opportunity to overtake	1	2	3	4	5
Feel unsafe due to the actions of other road users	1	2	3	4	5
Check your phone or make/ take a call	1	2	3	4	5
Feel that the journey is/was taking longer than it should	1	2	3	4	5
Start to overtake but had to abandon the manoeuvre	1	2	3	4	5
Think you exceeded the speed limit by more than 15 mph	1	2	3	4	
Think you exceeded the speed limit by more than 10 mph	1	2	3	4	
Think you exceeded the speed limit by up to 3 miles per hour	1	2	3	4	
			<b>Go to Q10</b>		

**Q9 To what extent were any of the following reasons for you exceeding the speed limit on the most recent trip made on the A9? SHOWCARD F**

	<i>To a very large extent</i>	<i>To some extent</i>	<i>Not a factor</i>	<i>Don't know</i>
Felt pressurised by following traffic	1	2	3	4
To make up time after being stuck behind slow moving vehicles	1	2	3	4
Didn't leave enough time to make my journey	1	2	3	4
I generally exceed speed limits when I drive	1	2	3	4
I felt it was safe to do so	1	2	3	4
Because I like going fast	1	2	3	4

Capabilities on project:  
Transportation

**Q10 How effective would you say the following were in enforcing your speed when using the A9 on your most recent journey? SHOWCARD G (Tick one for each row)**

	<i>Very effective</i>	<i>Quite effective</i>	<i>Not very effective</i>	<i>Not effective at all</i>	<i>N/A or did not encounter</i>
Speed cameras	1	2	3	4	5
Speed limit signs	1	2	3	4	5
Police presence	1	2	3	4	5
Risk of points on your licence	1	2	3	4	5
Your own safety	1	2	3	4	5
Desire to conform to the law	1	2	3	4	5
No opportunity – could only go as fast as rest of traffic	1	2	3	4	5
I just generally observe speed limits when I drive	1	2	3	4	5
I always leave plenty of time to make my journeys so I don't need to speed	1	2	3	4	5
Towing a caravan/ trailer	1	2	3	4	5
Presence of/ consideration for my passengers	1	2	3	4	5

**Q11 Now just thinking about the part of your journey that was on the A9, how often (if at all) did you witness the following on THIS particular trip? SHOWCARD H (Tick one for each row)**

	<i>Nearly all the time</i>	<i>Frequently</i>	<i>Quite often</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>
Overtaking when it was risky	1	2	3	4	5	6
Vehicles failing to complete an overtake manoeuvre	1	2	3	4	5	6
Road rage or aggressive behaviour	1	2	3	4	5	6
A vehicle being tailgated	1	2	3	4	5	6
Vehicles travelling at excessive speed	1	2	3	4	5	6
The space in front of a vehicle being inappropriately taken/ other drivers being 'cut up'	1	2	3	4	5	6

**Q12 On a scale of 1 to 5, where 1 is low and 5 is high, how enjoyable was your journey?**

<i>Low</i> 1	2	3	4	<i>High</i> 5
-----------------	---	---	---	------------------

**Q13 On a scale of 1 to 5, where 1 is low and 5 is high, how satisfied were you with how long your journey took?**

<i>Low</i> 1	2	3	4	<i>High</i> 5
-----------------	---	---	---	------------------

Capabilities on project:  
Transportation

**Q14 On a scale of 1 to 5, where 1 is low and 5 is high, how safe did you feel during your journey?**

<i>Low</i> 1	2	3	4	<i>High</i> 5
-----------------	---	---	---	------------------

**Q15 READ OUT: AVERAGE SPEED CAMERAS** are sets of two or more cameras installed along a fixed route that work by using an automatic number plate recognition (ANPR) system to record a vehicle's number plate at each fixed camera site. As the distance is known between these sites, the average speed can be calculated by dividing this by the time taken to travel between two points. The cameras use infrared illumination allowing them to operate both day and night.

On a scale of 1 to 5 where 1 is strongly disagree and 5 is strongly agree, how far do you agree that if average speed cameras had been installed on the A9 for your most recent journey, you would... **SHOWCARD I** (*Tick one for each row*)

	<i>Strongly agree</i>	<i>Agree</i>	<i>Neither agree nor disagree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
Have felt more frustrated while driving	1	2	3	4	5
Have had a significantly longer journey	1	2	3	4	5
Have found driving to be a more pleasant experience	1	2	3	4	5
Have felt less safe	1	2	3	4	5
Have been more likely to encounter tailgating	1	2	3	4	5
Be less concerned about delays resulting from accidents	1	2	3	4	5
Would have been less likely to exceed the speed limit	1	2	3	4	5

**Q16 Is there anything else that you would like to say in relation to your views on safety on the A9? (Probe fully)**

And finally, just to ensure that we have spoken to a representative sample of drivers,

**D1 Which age group do you fall into? SHOWCARD J**

- 1 17-19
- 2 20-24
- 3 25-34
- 4 35-44
- 5 45-54
- 6 55-59
- 7 60-64
- 8 65+

**D2 Gender (DO NOT ASK)**

- 1 Male
- 2 Female

Capabilities on project:  
Transportation

**D3 Which of the following best described your working status? SHOWCARD K**

- 1 Full-time (30 hours/wk+)
- 2 Part time (8-29 hours/wk)
- 3 Not working (under 8 hours)
- 4 Retired
- 5 Unemployed
- 6 Student
- 7 Other (please specify) \_\_\_\_\_

**D4 Interviewer please probe for SEG code**

- 1 AB
- 2 C1
- 3 C2
- 4 DE

**D5 Please could you provide the first part of your postcode e.g. G12?**

\_\_\_\_\_

And finally...

**D6 How many accidents have you been involved in, in the past three years when you were driving, regardless of blame?**

\_\_\_\_\_

**D7 How many penalty points have you received for speeding in the past three years?**

\_\_\_\_\_

Thank you for completing this survey. To be in line with MRS Code of Conduct, AECOM need to back check 10% of all completed surveys. To help this I would be grateful if you could supply me with your name and telephone number.

**THIS WILL NOT BE USED FOR ANYTHING ELSE AND WILL BE DESTROYED IMMEDIATELY ON COMPLETION OF THE BACK CHECKING PROCEDURES**

Name \_\_\_\_\_

Telephone number \_\_\_\_\_

**THANK AND CLOSE**

Capabilities on project:  
Transportation

## A9 Road User Survey Questionnaire (Follow-up Survey)

<b>Interviewer:</b>	
<b>Date:</b>	
<b>Time:</b>	
<b>Survey Location:</b>	

### Screening

Good morning/afternoon/evening

We are conducting some research on behalf of Transport Scotland with users of the A9, between Perth and Inverness. Could you spare a few minutes to answer some questions?

- |     |   |                 |
|-----|---|-----------------|
| Yes | 1 | CONTINUE        |
| No  | 2 | THANK AND CLOSE |

**REMINDER: FOR RESPONDENTS TO BE ELIGIBLE THEY MUST HAVE USED THE A9 BETWEEN PERTH AND INVERNESS FOR AT LEAST 15 MINUTE IN THE LAST 24 HOURS. THEY DO NOT HAVE TO HAVE TRAVELLED THE ENTIRE DISTANCE BETWEEN PERTH AND INVERNESS THOUGH.**

**S1 When did you last make a journey, lasting at least 15 minutes on the A9 between Perth and Inverness, as a car driver. SHOW MAP**

- |                          |   |                 |
|--------------------------|---|-----------------|
| Within the last 24 hours | 1 | CONTINUE        |
| Any other time           | 2 | THANK AND CLOSE |

**S2 How often do you make journeys, as a car driver, on the A9 between Perth and Inverness? (Tick one only)**

- |                            |   |             |
|----------------------------|---|-------------|
| Daily / Weekly             | 1 |             |
| Monthly / Occasionally     | 2 |             |
| One off/first time/tourist | 3 | CHECK QUOTA |

**S3 Which age group do you fall into? SHOWCARD J**

- |   |       |             |
|---|-------|-------------|
| 1 | 17-19 | CHECK QUOTA |
| 2 | 20-24 | CHECK QUOTA |
| 3 | 25-34 | CHECK QUOTA |
| 4 | 35-44 | CHECK QUOTA |
| 5 | 45-54 | CHECK QUOTA |
| 6 | 55-59 | CHECK QUOTA |
| 7 | 60-64 | CHECK QUOTA |
| 8 | 65+   | CHECK QUOTA |

**S4 Gender (DO NOT ASK)**

- |   |        |             |
|---|--------|-------------|
| 1 | Male   | CHECK QUOTA |
| 2 | Female | CHECK QUOTA |

**S5a What do you think the speed limit is for cars along the A9 between Perth and Inverness where it is a single carriageway? (Tick one only)**

- |        |   |  |
|--------|---|--|
| 30mph  | 1 |  |
| 40 mph | 2 |  |
| 50 mph | 3 |  |
| 60 mph | 4 |  |
| 70 mph | 5 |  |

**S5b What do you think the speed limit is for cars along the A9 between Perth and Inverness where it is a dual carriageway? (Tick one only)**

- |        |   |  |
|--------|---|--|
| 30mph  | 1 |  |
| 40 mph | 2 |  |
| 50 mph | 3 |  |
| 60 mph | 4 |  |

Capabilities on project:  
Transportation

70 mph	5
80 mph	6

**S6 Where are/ were you travelling to and from on the most recent journey you made that used the A9 between Perth and Inverness? / or now?**

**From:** \_\_\_\_\_ **Approx departure time:** \_\_\_\_\_  
**To:** \_\_\_\_\_ **Approx arrival time:** \_\_\_\_\_

**S7 What is/ was the purpose of your trip? (Tick one only)**

Commuting	1	CHECK QUOTA
Business	2	CHECK QUOTA
Leisure	3	CHECK QUOTA

**We would now like to ask some questions about your driving in general (not just the A9). The answers you give will be treated in confidence, so please answer frankly. The answers will only be used for transport planning purposes and your response won't be traceable.**

**Q1 IN GENERAL, how often do you drive on business purposes, that is, in connection with your work? (Tick one only)**

Once a week or more	1	CONTINUE
Less than once a week	2	CONTINUE
Never	3	GO TO Q3

**Q2 And is this by... (Tick one only)**

Car	1
Van/Light goods vehicle	2
Bus/coach/HGV	3

**Q3 For how many years have you held a car driving licence? (Tick one only)**

Less than 2 years	1
2 to 5 years	2
6 to 10 years	3
More than 10 years	4

**Q4 Roughly how many miles have you driven in the last 12 months?**

\_\_\_\_\_

Capabilities on project:  
Transportation

**Q5** How confident would you say you were, as a driver, on the following types of road? **SHOWCARD A** (Tick one for each row)

	<i>Very confident</i>	<i>Reasonably confident</i>	<i>Not very confident</i>	<i>Not at all confident - a nervous driver</i>
Motorways	1	2	3	4
The A9 – between Perth/ Inverness	1	2	3	4
Other single carriageway roads	1	2	3	4
Other dual carriageway roads	1	2	3	4
In towns and villages	1	2	3	4

I am now going to ask you about your **GENERAL** driving behaviour. Using this scale from one to six, where:

**1= Nearly all the time 2=Frequently 3=Quite often 4=Occasionally 5=Hardly ever 6=Never**

**Q6** Remembering that this survey is confidential, **IN GENERAL** how often do you...? **SHOWCARD B** (Tick one for each row)

	<i>Nearly all the time</i>	<i>Frequently</i>	<i>Quite often</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>
Exceed the speed limit on a rural single carriageway	1	2	3	4	5	6
Overtake a slower moving vehicle on the outside	1	2	3	4	5	6
Have to slow down when you are aware that there is a speed camera ahead	1	2	3	4	5	6
Exceed the speed limit in towns and villages	1	2	3	4	5	6
Switch on one thing, such as the headlights, when you meant to switch on something else, such as the wipers	1	2	3	4	5	6
Get into the wrong lane approaching a roundabout or a junction	1	2	3	4	5	6
Sound your horn to indicate your annoyance to another road user	1	2	3	4	5	6
Travel close to (tailgate) another vehicle	1	2	3	4	5	6
Overtake a slower moving vehicle on the inside i.e. undertake	1	2	3	4	5	6
Find yourself driving faster than you intend to	1	2	3	4	5	6
Exceed the speed limit on a motorway	1	2	3	4	5	6
Exceed the speed limit on a dual carriageway	1	2	3	4	5	6

Capabilities on project:  
Transportation

**Q7 IN GENERAL, how effective would you say the following are in improving road safety? SHOWCARD C AND SHOWCARD D (UNPROMPTED, DO NOT EXPLAIN. Tick one for each row)**

	<i>Very effective</i>	<i>Quite effective</i>	<i>Not very effective</i>	<i>Not effective at all</i>	<i>Don't know</i>	<i>Unaware of this measure</i>
Average speed cameras	1	2	3	4	5	6
Fixed position speed cameras	1	2	3	4	5	6
Speed limit signs	1	2	3	4	5	6
Flashing signs showing speed of the approaching car	1	2	3	4	5	6
Mobile speed camera vans	1	2	3	4	5	6
Police presence	1	2	3	4	5	6

**Q8 Now thinking about the most recent time you drove on the A9 between Perth and Inverness, i.e. in the last 24 hours, how often did you...? SHOWCARD E (Tick one for each row)**

	<i>Frequently</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>	<i>Not applicable</i>
Feel frustrated due to being in traffic travelling slower than the speed you wanted to drive at	1	2	3	4	5
Overtake on a dualled section of road	1	2	3	4	5
Feel unsafe due to the actions of other road users	1	2	3	4	5
Start to overtake but had to abandon the manoeuvre	1	2	3	4	5
Feel frustrated at the lack of opportunity to overtake	1	2	3	4	5
Feel that the journey is/was taking longer than it should	1	2	3	4	5
Overtake on a single carriageway section of road	1	2	3	4	5
Check your phone or make/ take a call	1	2	3	4	5
Think you exceeded the speed limit by more than 15 mph	1	2	3	4	
Think you exceeded the speed limit by more than 10 mph	1	2	3	4	
Think you exceeded the speed limit by up to 3mph	1	2	3	4	

**Q9 IF RESPONDENT EXCEEDS SPEED LIMIT BY 15mph/ 10mph/ 3mph (grey shaded in Q8) THEN: To what extent were any of the following reasons for you exceeding the speed limit on the most recent trip made on the A9 between Perth and Inverness? SHOWCARD F**

	<i>To a very large extent</i>	<i>To some extent</i>	<i>Not a factor</i>	<i>Don't know</i>
Didn't leave enough time to make my journey	1	2	3	4
Felt pressurised by following traffic	1	2	3	4
I felt it was safe to do so	1	2	3	4
I generally exceed speed limits when I drive	1	2	3	4
Because I like going fast	1	2	3	4
To make up time after being stuck behind slow moving vehicles	1	2	3	4

**Q10 How effective would you say the following were in enforcing your speed when using the A9 between Perth and Inverness on your most recent journey? SHOWCARD G (Tick one for each row)**

	<i>Very effective</i>	<i>Quite effective</i>	<i>Not very effective</i>	<i>Not effective at all</i>	<i>N/A or did not encounter</i>
Speed limit signs	1	2	3	4	5
I just generally observe speed limits when I drive	1	2	3	4	5

Capabilities on project:  
Transportation

Desire to conform to the law	1	2	3	4	5
Police presence	1	2	3	4	5
No opportunity - could only go as fast as rest of traffic	1	2	3	4	5
Towing a caravan/ trailer	1	2	3	4	5
Average speed cameras	1	2	3	4	5
Risk of points on your licence	1	2	3	4	5
I always leave plenty of time to make my journeys so I don't need to speed	1	2	3	4	5
Your own safety	1	2	3	4	5
Presence of/ consideration for my passengers	1	2	3	4	5

**Q11** Now just thinking about the part of your journey that was on the A9 between Perth and Inverness, how often (if at all) did you witness the following on THIS particular trip? SHOWCARD H (Tick one for each row)

	<i>Nearly all the time</i>	<i>Frequently</i>	<i>Quite often</i>	<i>Occasionally</i>	<i>Hardly ever</i>	<i>Never</i>
Vehicles failing to complete an overtake manoeuvre	1	2	3	4	5	6
Vehicles travelling at excessive speed	1	2	3	4	5	6
Road rage or aggressive behaviour	1	2	3	4	5	6
Overtaking when it was risky	1	2	3	4	5	6
The space in front of a vehicle being inappropriately taken/ other drivers being 'cut up'	1	2	3	4	5	6
A vehicle being tailgated	1	2	3	4	5	6

**Q12** On a scale of 1 to 5, where 1 is low and 5 is high, how enjoyable was your journey?

<i>Low</i> 1	2	3	4	<i>High</i> 5
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**Q13** On a scale of 1 to 5, where 1 is low and 5 is high, how satisfied were you with how long your journey took?

<i>Low</i> 1	2	3	4	<i>High</i> 5
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Capabilities on project:  
Transportation

**Q14 On a scale of 1 to 5, where 1 is low and 5 is high, how safe did you feel during your journey?**

<i>Low</i> 1	2	3	4	<i>High</i> 5
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**Q15 READ OUT:** An Average Speed Camera System is an automatic digital camera system that determines the average speed of vehicles. It detects vehicles through Automatic Number Plate Recognition (ANPR) and calculates their average speed by measuring the time taken to travel between defined points of a known distance apart. A conspicuous signing strategy is used to inform drivers that they are entering an average speed control zone. In October 2014 average speed cameras were activated along the A9 between Perth and Inverness.

**Please answer how far you agree with the following statements on a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree.**

**Thinking of your most recent journey on the A9, the presence of average speed cameras... SHOWCARD I (Tick one for each row)**

	<i>Strongly agree</i>	<i>Agree</i>	<i>Neither agree nor disagree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
Increased your level of frustration whilst driving	1	2	3	4	5
Meant you were more likely to achieve your planned journey time	1	2	3	4	5
Meant you felt less likely to be involved in an accident	1	2	3	4	5
Meant your journey took longer than you thought it should	1	2	3	4	5
Reduced the likelihood of you driving too close to the vehicle in front	1	2	3	4	5
A vehicle being tailgated	1	2	3	4	5
Made you less likely to exceed the speed limit	1	2	3	4	5
Made you feel safer than if average speed cameras were not there	1	2	3	4	5

**Q16 What, if anything, could Transport Scotland do to improve road safety for vehicle drivers and passengers on the A9 between Perth and Inverness? (Probe fully)**

**Q17 Did you use any part of the A9 between Perth and Inverness before the introduction of average speed cameras in October 2014? (Tick one only)**

- Yes 1
- No 2
- Can't remember 3

Capabilities on project:  
Transportation

**And finally, just to ensure that we have spoken to a representative sample of drivers,**

**D1 Which of the following best described your working status? SHOWCARD K**

- 1 Full-time (30 hours/wk+)
- 2 Part time (8-29 hours/wk)
- 3 Not working (under 8 hours)
- 4 Retired
- 5 Unemployed
- 6 Student
- 7 Other (please specify) \_\_\_\_\_

**D2 Interviewer please probe for SEG code**

- 1 AB
- 2 C1
- 3 C2
- 4 DE

**D3 Please could you provide the first part of your postcode e.g. G12?**

\_\_\_\_\_

**And finally...**

**D4 How many accidents have you been involved in, in the past three years when you were driving, regardless of blame?**

\_\_\_\_\_

**D5 How many penalty points have you received for speeding in the past three years?**

\_\_\_\_\_

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**Thank you for completing this survey. To be in line with MRS Code of Conduct, AECOM need to back check 10% of all completed surveys. To help this I would be grateful if you could supply me with your name and telephone number.**

**THIS WILL NOT BE USED FOR ANYTHING ELSE AND WILL BE DESTROYED IMMEDIATELY ON COMPLETION OF THE BACK CHECKING PROCEDURES**

Name \_\_\_\_\_

Telephone number \_\_\_\_\_

**THANK AND CLOSE**





Capabilities on project:  
Transportation

## After survey

Dual road, more lay-bys, speed signs  
Dual speed signage for HGVs  
Dual, accidents are happening due to speed cameras  
Dual, pot holes, more signs about speed for tourists  
Dual, less agricultural vehicles i.e. tractors  
Dual all the road  
Dual, less pot holes, more signs for the speed limit  
Expand to double lane  
Extra lighting at crossover junctions  
Fill in potholes, lower the speed limit  
Fill potholes, dual in full  
Fine as it is, no complaints  
Fines for bad drivers  
Fix potholes  
Fix potholes  
Fix potholes, dual speed signage for certain vehicles  
Fix potholes, all dual carriageway  
Fix potholes, dual it all  
Good  
Good changes  
Good now  
Good now  
Good roads  
Great road, great drive  
Has to be a dual carriageway  
Have two lanes or have one lane, it gets confusing for people who don't use the road often  
Heavy fines for speeders  
Heavy fines to speeders and problem causers  
Heavy fines, less potholes and dual it  
Improve potholes, dual road  
It's good now/maybe potholes need attention  
It's much better now, less stress driving  
It's fine now  
It's fine now  
It's good  
It's much better  
It's much better now  
It's ok now  
Keep cameras but make all dual carriageway  
Large lay-by for rest, and less potholes  
Large sign with speed limit on it  
Less cameras, more smooth roads  
Less cameras, more police  
Less potholes, more police  
Less road works, smoother surface  
Let trucks go faster  
Let us know correct speed and also the difference from cars to trucks  
Let us know how fast the cameras are set to catch you  
Let us know how fast we can go, make it clear  
Longer stretches for overtaking, more signs for information  
Lorries should go 60mph  
Lorries to drive at same speed as cars  
Lorry lanes  
Love it all. Make all roads speed cameras and we would have fewer accidents  
Make it all motorway  
Make full length motorway or dual carriageway  
Make it all dual carriageway  
Make it all dual carriageway, no single lanes  
Make it all motorway or at the least dual carriageway. We pay road tax the same as England  
Make speed the same for everyone  
Minimum speed and average speed is OK, but slow moving cars are a concern  
More cameras

Capabilities on project:  
Transportation

## After survey

More dual  
More dual  
More dual, police presence, slower HGVs, prominent speed signs  
More dual carriageway  
More dual carriageway  
More dual carriageway  
More lights  
More overtaking areas  
More overtaking lanes  
More police  
More police  
More police cameras  
More police in the lay-bys  
More signs  
More signs for cars speed 60/70 and hgv 50  
More signs to show speed  
More signs of what the average speed is  
More signs to say speed limit  
More signs, let us know how fast we can go  
More speed signs  
More speed limit signs  
More speed signs  
More speed signs  
More speed signs especially on dual carriageways  
More time to go from dual carriageway to single  
Much better now  
Much safer now  
Much safer now  
No, it's good for now  
No, it's spot on now, it's safer  
No problems  
No problems  
No problems with speeders, just potholes  
No signs of speed, cats' eyes  
None  
None  
None  
Not as heavy fines, dual  
Not sure  
Not sure, I'm new to Scotland  
Nothing  
Nothing  
Nothing  
Nothing  
Nothing  
Nothing, apart from all of it being dual carriageway  
Nothing else, the camera should do the trick  
Nothing, it's good  
Nothing, only dual  
Nothing, until dual  
Nothing, the road is more structured and better now  
Nothing, unless it's dualled  
Parts need widening  
Passing places to stop  
Potholes  
Potholes  
Potholes more signs for tourists  
Potholes need filling in  
Potholes need sorting  
Potholes filling in  
Potholes, dual  
Published data on findings would be interesting

Capabilities on project:  
Transportation

## After survey

Put in a motorway, it's a disgrace that Scotland does not have motorways to the major cities in the north. Puts me off travelling to Scotland

Put in longer lay-bys

Put lorry speed back down, causing problems

Put up speed signs with limit seen

Quite happy with it as it is right now

Repair potholes

Repaired

Road feels safer

Road good now

Road is better

Road is fine

Show how slow you can go

Signage on speeds is unclear

Signs for speed limit

Signs for speed limits, more cat eyes

Signs to let us know correct speed

Slow trucks down

Some potholes

Speed bumps at dangerous parts

Speed camera are causing more disruption, slowing it down

Speed cameras are doing a good job

Speed cameras are working, more lanes needed

Speed cameras good, Dual it

Speed limit signs

Speed limit signs

Speed signs need to be clearer

Speed signs to remind tourists to travel on the left

Stick to lower speed limits

Stop cars crossing carriageway, stop tractors as they cause fatalities

Stop the slip roads into the villages and make it all dual carriageway

Street lighting in darker stretches

Take out speed cameras, make all 3 lanes

Take speed cameras away and dual carriageway all the way

Take the cameras away

Take the numpties off the road. Lights on junctions and better visibility on junctions

Tell us what the proper legislation is, what the % are and what they will let people away with They have never issued any information on this

Traffic is too slow now

Upgrade fully to motorway

Very dangerous road/dual carriageway

Widen it all dual carriageway and extra overtaking lanes

Widen road, dual carriageway

Widen roads

Capabilities on project:  
Transportation

## Before survey

40mph causes frustration, more police needed  
A lot of cars overtake dangerously  
All dual carriageway  
All dual carriageway  
Allow lorries to go faster, flyovers at junctions  
Anything that helps make it safer  
Average speed cameras near Dunkeld, don't want dualled from Pitlochry to Perth  
Average speed cameras would help  
Average speed cameras would work a treat  
Bad drivers, been driving it for 30 years and it's bad drivers  
Ban tractors  
Better short cuts  
Better signage, educate drivers  
Bigger police presence  
Bigger police presence, mobile phone leaver lanes  
Bollards to stop overtaking  
Camera to catch overtakers  
Camera to stop these silly people speeding  
Cameras a good idea  
Cameras and dual all the way  
Cameras needed to catch overtakers  
Cameras to catch overtakers  
Cameras to catch people overtaking which put others at risk  
Cameras would help  
Cameras would help other people slow down and stop overtaking  
Can have more stop points or petrol stations for a stop  
Catch overtakers  
Catch speeders and give driving ban, more police, dual all the way  
CCTV  
CCTV  
CCTV  
CCTV on the roads to catch overtakers putting drivers at risk  
Change the speed limit for  
Clamp down on overtakers  
Don't know  
Don't know  
Don't know  
Drivers are crazy, roads are okay  
Drivers observe more, road is okay, it's the drivers that are not  
Drivers should be fined more for speeding  
Dual  
Dual  
Dual  
Dual  
Dual  
Dual all along  
Dual all along  
Dual all along  
Dual all along A9  
Dual all along A9 and not just small sections  
Dual all along the A9  
Dual all along the road  
Dual all road  
Dual all road  
Dual all the way  
Dual all the way, bad drivers  
Dual all the way, restrict HGVs from travelling

Capabilities on project:  
Transportation

## Before survey

Dual and make speed all the same for HGVs and all other vehicles  
 Dual and more cops  
 Dual carriageway  
 Dual carriageway all on that stretch of road  
 Dual carriageway all the road up to Nairn  
 Dual carriageway all the way  
 Dual carriageway all the way is a must  
 Dual carriageway but not take away look of land, people don't want countryside to be upset  
 Dual carriageway make speed limit the same for everyone  
 Dual carriageway most of the way  
 Dual carriageway need to be upgraded  
 Dual carriageway or let lorries go faster  
 Dual carriageway or police presence for speeders  
 Dual carriageway the whole way  
 Dual carriageway would be good all the way  
 Dual carriageway would stop the overtaking  
 Dual carriageway, lorries go too slow, drivers bad  
 Dual carriageway, people to do a refresher course at driving  
 Dual carriageway, police presence  
 Dual carriageways all the way, police should sit at the junctions and corners  
 Dual for longer  
 Dual for safety, but we live here but people live here and don't want it next to your house  
 Dual from here to Inverness  
 Dual it  
 Dual it all  
 Dual it all  
 Dual it all the way  
 Dual it and ban tractors  
 Dual it!  
 Dual it, due to the drivers taking liberties on speed limits and overtaking while unable to see oncoming traffic  
 Dual it, speed cameras, improve railway line  
 Dual road, impose heavy fines for bad drivers  
 Dual road, potholes need sorting  
 Dual the best way to go  
 Dual the road  
 Dual the road, get trucks doing 50mph on single track  
 Dual the whole road, more police on the road  
 Dual/more flyovers  
 Excellent road, bad drivers don't know much  
 Excellent road, has been improved over last few years  
 Faster lorries, gates for deer, more cameras, heavy fines for trouble causers  
 Fines for people driving in excess of the speed limit  
 Get lorries to go a bit faster  
 Give lorries a slow lane and put it to dual carriageway  
 Give lorries a slow lane or up the speed as it holds you back  
 Good idea to dual it all the way  
 Good road, bad drivers  
 Good road, bad drivers  
 Good road, bad drivers  
 Good road, just bad drivers  
 Good road, naughty drivers  
 Happy as it is a good stretch of road  
 Horrible road, queues, people get frustrated going from dual to single  
 I saw a lot of fast drivers and a lot trying to overtake  
 If there was more cameras people would slow down more  
 Improve bad driving, nothing wrong with roads

Capabilities on project:  
Transportation

## Before survey

Increase speed limit for lorries they go slow and hold up traffic  
Indifferent on the subject  
It should be a dual carriageway all the way  
It should be dual carriageway all the way, that's why accidents happen  
It's all down to bad drivers  
It's not the road, it's the drivers  
It's not the road, it's the drivers, stop being in a hurry  
It's the drivers not the road so dual carriageway would be good  
Lack of services, speed cameras, need a dual carriageway  
Larger vehicles need to go faster  
Less slow lorries, let them go faster  
Less slow moving trucks  
Less tractors  
Let lorries go faster than 40mph and make it dual all along A9  
Let lorries go up to 50mph and dual carriageway the whole road  
Let the trucks go faster than 40mph  
Lorries and larger vehicles need to go faster  
Lorries going faster as the speed they do is dangerous to drivers that want to overtake  
Lorries slow down as they are going too fast or they go too slow and cause accidents  
Make dual carriageway all the way  
Make HGVs travel at the same speed as everyone else  
Make it all dual  
Make it all dual carriageway  
Make it dual  
Make it dual, less slow trucks  
More cameras  
More cameras  
More cameras  
More cameras (speed)  
More cameras to name and shame people who over take and cause accidents  
More cameras, more police  
More cameras, more police  
More cameras, stop the overtakers  
More dualling, less slow lorries  
More dualling, too many bottle necks  
More flyovers  
More flyovers to help the backlog of traffic  
More lay-bys  
More lay-bys and speed cameras  
More lighting is needed  
More passing areas  
More passing areas  
More passing areas, more police  
More passing places  
More passing places  
More places to stop and more police presence  
More police  
More police and dualling  
More police and speed limit increase  
More police or a dual carriageway would help  
More police presence  
More police presence  
More police presence  
More police presence  
More police presence, lorries to go faster

Capabilities on project:  
Transportation

## Before survey

More police, better signage  
 More police, dual all the way  
 More police, dual carriageway  
 More police, speed cameras  
 More policing would help, not the road, it's the drivers  
 More service stations  
 More signs needed for the speed limit  
 More signs, more cameras, dual it  
 More speed cameras  
 More speed cameras  
 More speed cameras where they can't overtake  
 More speed cameras would be good  
 More speed cameras would slow traffic down  
 More speed cameras, CCTV for overtaking  
 More train lines, I would then take the train to work  
 More warning signs to tell you when it's a single lane, dual it  
 Move passing places, more dual  
 Need more police assistance  
 Need more police drivers taking too many risks  
 Need more police presence  
 Need more speed cameras  
 Need something to help stop overtaking  
 Need to make it dual carriage, lorries are holding us back  
 Need to make the road dual carriageway there are too any accidents  
 Needs to be a dual carriageway all the way  
 Needs to be upgraded to dual all the way, people are in a hurry and it can cause accidents  
 New road - a motorway would be good!  
 No comment  
 No comment  
 No comment  
 No idea  
 No idea  
 No not anything I can think of  
 No nothing apart from stupid drivers taking risk  
 No problem with road, it's the drivers  
 None  
 None  
 None  
 None, good road  
 One of the worst roads, too many delays, lorries are going to slow  
 Passing places, dual all the way  
 People get very frustrated so that is the cause of speeding, police presence would be good  
 People learned how to drive properly  
 People overtaking causes accidents and make other drivers feel unsafe  
 Potholes  
 Potholes, some parts look like they have sunk  
 Put cameras in to catch overtaking  
 Put lorries up to 60mph, no cameras  
 Put speed of lorries up  
 Put the speed limit up for lorries and bigger vehicles  
 Reduce farming vehicles from using this road, dual it  
 Road good, bad drivers  
 Safety is a priority, overtaking/speeding terrible  
 Same speed limit for everyone  
 Should all be dual and more speed cameras  
 Should all be dual, more stopping places  
 Should be dual all the way  
 Should be turned into a dual carriageway all the way  
 Single track part is bad, people overtake, should up speed limit, average speed cameras  
 Small cut off points should be well lit and traffic slowed down  
 Some service stations needed  
 Speed bumps/more services

Capabilities on project:  
Transportation

## Before survey

Speed cameras  
Speed cameras  
Speed cameras  
Speed cameras  
Speed cameras and dual carriageway  
Speed cameras can make it worse as some of the cars will show down and might crash  
Speed cameras don't really affect the drivers who will speed regardless of a fine  
Speed cameras on single carriageway, dual some of it  
Speed limit increased for larger vehicles  
Teach people how to overtake HGVs only driving at 40mph  
The bad drivers, the roads are not bad  
The best thing that could happen is speed cameras – need more of them  
The people driving the road always in a hurry so dual carriageway would help  
The roads are fine, drivers are bad  
The roads are good, just the drivers that are not careful enough  
The roads are ok, it's the drivers that speed too much so more police presence would help  
The single lane parts are a bit scary  
The speed limit should be chopped so not much widening as it's a scenic route  
They should stop lorries passing on the dual carriageway  
They should take tractors off road, put speed up for lorries  
They should think about rising the speed limit for lorries so they don't hold up the rest of the drivers on the road  
This would need to be experienced to give an opinion on it but I think dual is the way to go  
Too easy to overtake  
Too many buses/bikes going too slow, speed limit needs to change  
Too many drivers going too fast and getting frustrated  
Too many overtakers  
Too many overtakers, lorries go to slow  
Too many overtakers, need more police presence  
Too many people in a hurry  
Too many potholes, need a dual carriageway  
Too much speeding, needs more speed cameras and police presence  
Turn into dual carriageway  
Vans and lorries going a bit faster as they go to slow  
Very dangerous, speed cameras would be good  
Would like to see it upgraded to dual carriageway