

CLIENT PROJECT REPORT CPR2807

Monitoring and evaluation of the 60mph trials

Customer survey analysis report

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Executive summary

Temporary mandatory speed restrictions are considered for road works on high-speed roads in order to limit the risks posed to road users from specific traffic management features. Guidance at the time of the trials recommended a speed reduction of 20mph for many traffic management features. Where safe to do so, a change in the recommended speed reduction has potential to bring benefits to road users in the form of improved journey times and increased satisfaction.

This report presents an analysis of the combined customer survey data collected from separate investigations of a 60mph speed restriction on eight road works schemes:

- M49 Avonmouth (27 November 2018 to 6 February 2019)
- M5 Willand (21 January to 27 March 2019)
- M20 junction 10a (1 April to 27 May 2019)
- M1 junction 13-16 (25 June to 22 August 2019)
- A1(M) Leeming to Ripon (8 August to 5 November 2019)
- M6 junction 2-4 (15 September 2019 to 13 January 2020)
- M4 junction 3-12 (4 October 2019 to 14 April 2020)
- M6 junction 13-15 (27 January to 23 March 2020)

The purpose of this analysis was to understand the impact of changing the speed restriction from 50mph to 60mph through road works on customers' self-reported feelings of safety and levels of journey satisfaction.

During each investigation, an online survey was administered to individuals who had identified themselves as having driven through the scheme during either a baseline period (before the 60mph speed restriction was implemented and a 50mph restriction was in place) or a trial period (when the 60mph speed restriction was in place). The survey collected data on the impact of the speed restriction on customers' self-reported feelings of safety and levels of journey satisfaction; 492 eligible individual survey responses (from a total of 7,971) were provided by road users who had identified themselves as having driven through one of the eight schemes during either the baseline or trial periods. This report pools these responses together to enable a single analysis of all customer survey responses.

The results from this analysis show that changing the speed restriction through road works from 50mph to 60mph did not substantially impact customers' self-reported feelings of safety or levels of journey satisfaction. Generally, most participants indicated that the speed restriction did not affect how safe they felt (67%) or their level of journey satisfaction (54%) and most commonly rated the speed restriction as 'about right' in terms of safety (55%) and journey satisfaction (54%), irrespective of whether it was 50mph or 60mph.

Following this report, results from the eight investigations (including data on driver behaviour, and road worker and road user safety) will be collated together, forming a basis of the large sample of evidence obtained. This evidence base will be used to inform a toolkit, which will provide guidance to future road works schemes on the use of appropriate speed restrictions within road works.

1 Introduction

1.1 Background

Safety and customer satisfaction are critical components of Highways England's vision for the future. As part of this vision, Highways England is committed to improving road user experience through road works by ensuring that road works are implemented with appropriate speed restrictions to minimise disruption for customers, whilst also ensuring risk to road users and road workers is as low as reasonably practicable.

Following on from previous investigations into varying speed restrictions within road works, consultation with stakeholders from across Highways England and the Supply Chain, this project was established to support the safe implementation and monitoring of three new trial scenarios. A key defining feature of many of these scenarios is the trial implementation of a 60mph speed restriction within road works with narrowed lane width restrictions.

1.2 Contents of this report

This report summarises the findings from various on-road trials of 60mph speed restrictions within road works on the Strategic Road Network (SRN) between November 2018 and March 2020. TRL was commissioned by Highways England to monitor customer satisfaction and perceptions of safety (along with driver behaviour, and scheme cost and delivery) to understand the potential benefits of changing the speed restriction during the investigation.

This report combines the customer survey responses from eight separate investigations and outlines the data collection methodology, and presents and summarises the survey results. The road works schemes involved in the investigations were:

- M49 Avonmouth (27 November 2018 to 6 February 2019)
- M5 Willand (21 January to 27 March 2019)
- M20 junction 10a (1 April to 27 May 2019)
- M1 junction 13-16 (25 June to 22 August 2019)
- A1(M) Leeming to Ripon (8 August to 5 November 2019)
- M6 junction 2-4 (15 September 2019 to 13 January 2020)
- M4 junction 3-12 (4 October 2019 to 14 April 2020)
- M6 junction 13-15 (27 January to 23 March 2020)

2 Method

2.1 Monitoring approach

The on-road investigations sought to monitor the effect of the change in speed restriction on driver behaviour and customer perceptions, including feelings of safety and journey satisfaction. To do this, each investigation involved monitoring across two separate monitoring locations at the scheme (a control location and an experimental location) and across two separate monitoring periods (a baseline period and a trial period) – see Table 1.

Table 1: Summary of monitoring approach and speed restrictions

Description of activity	Control location ¹	Experimental location
Baseline monitoring period		
Trial monitoring period		

A full description of the methodology employed at each of the eight investigations can be found in the published scheme reports (see References).

2.2 Data collection

To gather evidence of the impact of changing the speed restriction at the road works schemes from 50mph to 60mph on customer perceptions, an online survey (see Appendix A) was implemented. The survey collected data on the impact of the speed restriction on customers' self-reported feelings of safety and levels of journey satisfaction, as well as the impact of the width of the running lanes on feelings of safety and levels of journey satisfaction. Since the width of the lanes varied between road work schemes, it was not possible to combine these data into a single analysis; as such, this report focuses only on the impact of the *speed restriction* on customer perceptions. Analysis of the impact of the width of the running lanes for each individual scheme can be found within each of the published scheme reports (see References).

The survey was administered to road users who had identified themselves as having driven through one of the schemes during either the baseline or trial periods. Targeting of these individuals was achieved using a social media advertising campaign, with individuals within a 50km radius of each scheme being targeted to take part in the study. The adverts were also shared with multiple special interest groups on social media platforms. This approach ensured the recruitment of individuals who regularly drove the route over the duration of the investigation.

¹ As part of the M5 Willand investigation, no 50mph speed restriction was in place at the control location. The monitoring location was situated outside of the scheme's temporary traffic management; as such, the National Speed Limit was in place.

2.3 Data analysis

Chi-squared tests were conducted to examine whether there were any significant differences in customers' perceptions of the 50mph speed restriction compared with the 60mph speed restriction (in other words, to determine whether participants' feelings of safety or levels of journey satisfaction were significantly impacted by the change in speed restriction). To ensure the assumptions of the statistical test were met, response categories with fewer than five responses were excluded from the statistical comparisons. Results were classified as 'statistically significant' if the p-value was less than 0.05 (a common standard in the behavioural sciences). The p-value is a measure of probability and a value of less than 0.05 implies that any differences between the groups being tested had a less than 5% chance of occurring at random.

For any statistically significant result, an effect size was also calculated to illustrate the magnitude of the phenomenon or the degree of association between two variables. Generally, an effect size of less than 0.2 denotes a small effect, 0.5 denotes a medium effect and 0.8 denotes a large effect. Throughout the report, the effect size has been reported to understand if the effect may have been due to large sample sizes or if it implies a strong relationship between two variables. Effect sizes indicate the importance or scale of a result, in contrast to the statistical significance which refers to the probability that the result occurred at random.

The results from these analyses are presented in Section 3.

3 Results

Of the 7,971 total responses received across the eight separate investigations, 492 participants were identified as eligible for inclusion in the investigation. Of those, 373 participants indicated that they last drove through one of the eight road works schemes when a 50mph speed restriction was in place (representing the control sample) and 119 participants indicated that they last drove through one of the schemes when a 60mph speed restriction was in place (representing the trial sample).

Table 2 shows a breakdown of survey responses by scheme and applicable speed restriction.

Table 2: Breakdown of customer satisfaction survey responses by scheme and applicable speed restriction

Scheme	Dates	Eligible survey responses	
		Reporting on the 50mph speed restriction	Reporting on the 60mph speed restriction
M49 Avonmouth	27 November 2018 to 6 February 2019	7	5
M5 Willand	21 January to 27 March 2019	21	29
M20 junction 10a	1 April to 27 May 2019	72	20
M1 junction 13-16	25 June to 22 August 2019	25	14
A1(M) Leeming to Ripon	8 August to 5 November 2019	29	31
M6 junction 2-4	15 September 2019 to 13 January 2020	9	4
M4 junction 3-12 ²	4 October 2019 to 14 April 2020	34	0
M6 junction 13-15	27 January to 23 March 2020	176	16
All schemes		373	119

3.1 Feelings of safety

Participants were asked to rate how they thought the speed restriction affected their feelings of safety. The responses are shown in Figure 1.

² For the M4 junction 3-12 scheme, all four survey responses from the dynamic trial period (when either a 50mph or 60mph speed restriction was in place) were excluded from this report because it was not possible to determine whether these participants were reporting on the 50mph or 60mph speed restriction.

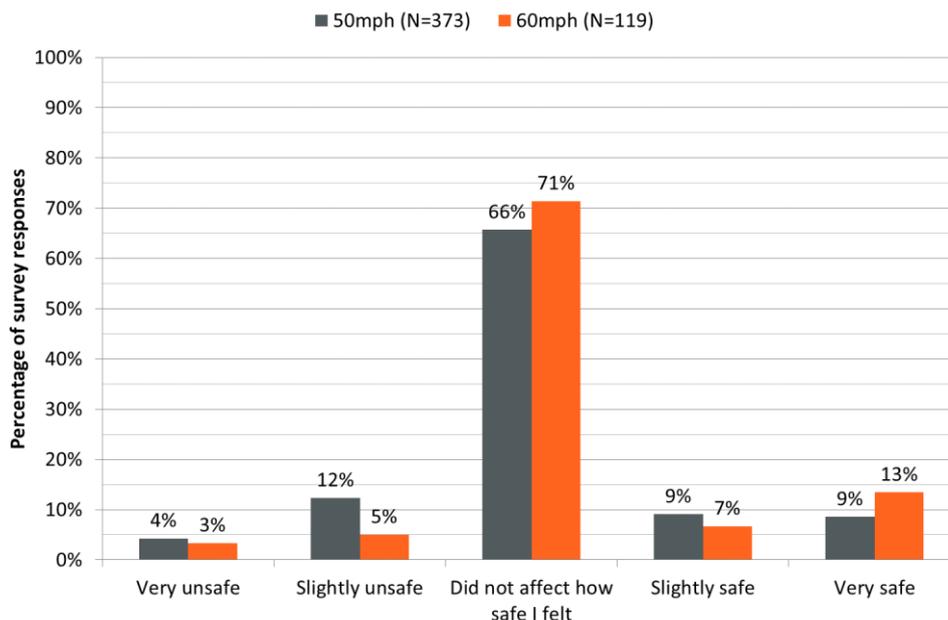


Figure 1: Responses to question: “How do you think the speed restriction affected your safety? Did it make you feel...?”³

Across the investigations:

- 66% of the control sample reported the 50mph speed restriction did not affect how safe they felt and 71% of the trial sample reported the 60mph speed restriction did not affect how safe they felt.
- 16% of the control sample reported the 50mph speed restriction made them feel either slightly or very unsafe and 8% of the trial sample reported the 60mph speed restriction made them feel either slightly or very unsafe.
- 18% of the control sample reported the 50mph speed restriction made them feel either slightly or very safe and 20% of the trial sample reported the 60mph speed restriction made them feel either slightly or very safe.

A chi-square test found no statistically significant difference in the distribution of responses between the control (50mph) sample and trial (60mph) sample ($p=0.08$), suggesting the speed restriction did not significantly impact customers’ self-reported feelings of safety.

Participants were also asked to rate how appropriate they thought the speed restriction was, in terms of safety; these responses are shown in Figure 2.

³ Due to rounding, the sum of the percentages for the trial sample responses in this figure equals 99%.

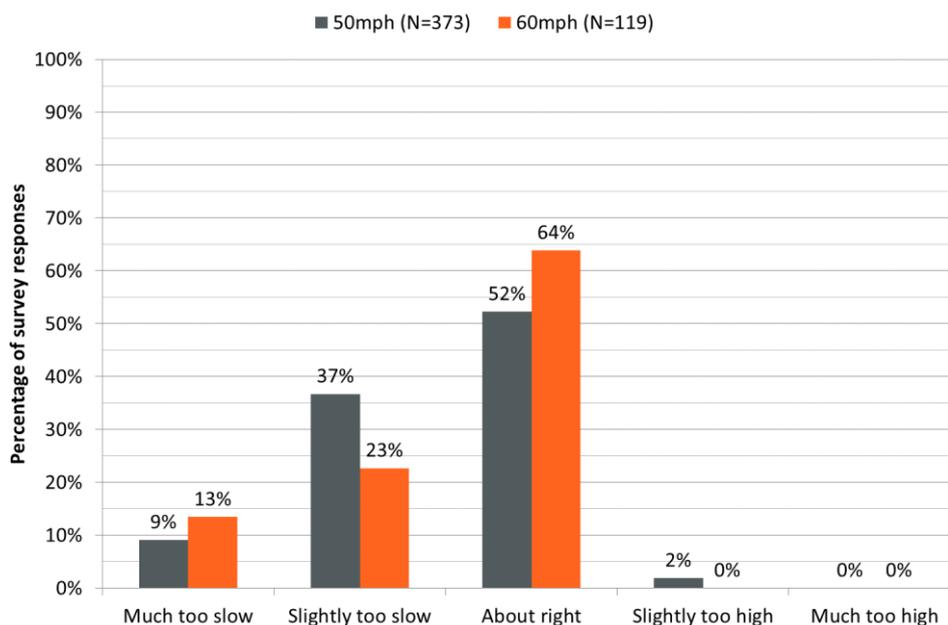


Figure 2: Responses to question “In terms of safety, do you think the speed restriction was...?”

Across the investigations:

- 52% of the control sample reported the 50mph speed restriction was about right in terms of safety and 64% of the trial sample reported the 60mph speed restriction was about right in terms of safety.
- 46% of the control sample reported the 50mph speed restriction was too slow in terms of safety and 36% of the trial sample reported the 60mph speed restriction was too slow in terms of safety.
- 2% of the control sample reported the 50mph speed restriction was slightly too high in terms of safety and no participants from the trial sample reported the 60mph speed restriction was too high in terms of safety.

A chi-square test found a significant difference in the distribution of responses between the control (50mph) sample and trial (60mph) sample ($p=0.06$), although the effect size was very small (0.08), suggesting the difference between the two speed limit restrictions was slight. This suggests that overall perceptions about the appropriateness of the speed restriction in terms of safety were not greatly affected by the actual speed restriction in place. Most participants felt the speed restriction was about right, irrespective of whether the speed restriction was 50mph or 60mph.

In an open question, participants were asked to provide any further comments on their feelings of safety when they last drove through one of the eight schemes.

Table 3 shows themes that represent general patterns observed in participants’ qualitative responses.

Table 3: Themes from participants' comments relating to the impact of the speed restrictions on their feelings of safety

	50mph speed restriction	60mph speed restriction
Positive comments	The speed restriction encouraged safe driving behaviours.	
	<p>The speed restriction increased safety for road workers and road users.</p> <p>The speed restriction was appropriate for the road works.</p>	<p>Compared with a 50mph speed restriction, the 60mph speed restriction:</p> <ul style="list-style-type: none"> ▪ Encouraged drivers to be more vigilant. ▪ Discouraged close following. ▪ Discouraged HGV drivers from exceeding the speed restriction and from overtaking other vehicles. <p>The speed restriction discouraged HGV drivers from tailgating other drivers.</p>
Negative comments	<p>The speed restriction was unnecessary.</p> <p>The speed restriction changed too frequently on the same journey.</p> <p>There was not enough warning of a change in the speed restriction whilst on the journey.</p> <p>The speed restriction caused traffic to brake suddenly.</p> <p>Other drivers (including HGV drivers) exceeded the speed restriction.</p> <p>Other drivers drove well below the speed restriction (sometimes the middle lane [meaning HGV drivers could not overtake] or causing HGV drivers to overtake in the offside lane [where HGVs are usually not permitted]).</p> <p>The speed restriction encouraged other drivers (including HGV drivers) to tailgate other vehicles.</p> <p>The speed restriction encouraged other drivers to hog the middle lane.</p>	
	<p>The speed restriction was too low.</p> <p>The speed restriction covered too many miles of the motorway.</p> <p>Speed restrictions on VMS were not updated quickly enough after congestion or a collision.</p> <p>It took too much time to overtake other vehicles while obeying the speed restriction.</p> <p>The speed restriction encouraged all drivers to drive at the same speed, which felt unsafe.</p> <p>The speed restriction encouraged HGV drivers to overtake other vehicles.</p>	<p>The speed restriction made driving monotonous, which could have led to safety issues regarding driver fatigue.</p>
Suggestions to improve feelings of safety	Stricter enforcement of the speed restriction (for example, via average speed cameras) to combat non-compliance.	
	<p>Increase the speed restriction to at least 56mph to match the speed limiter on HGVs.</p> <p>Increase the speed restriction to 60mph.</p>	

	50mph speed restriction	60mph speed restriction
	Increase the speed restriction to 70mph. Increase the speed restriction when there are no road workers present. Deter tailgating through police presence.	

The above themes show that responses from participants were generally mixed. Both positive and negative feedback was received from participants on the 50mph and 60mph speed restrictions. This supports the findings from the quantitative survey responses outlined above; whilst views may differ between individual participants, overall the data suggest no consistent or substantial impacts of the speed restriction on customers' self-reported feelings of safety.

3.2 Journey satisfaction

Participants were asked to rate how they thought the speed restriction affected their journey satisfaction (see Figure 3).

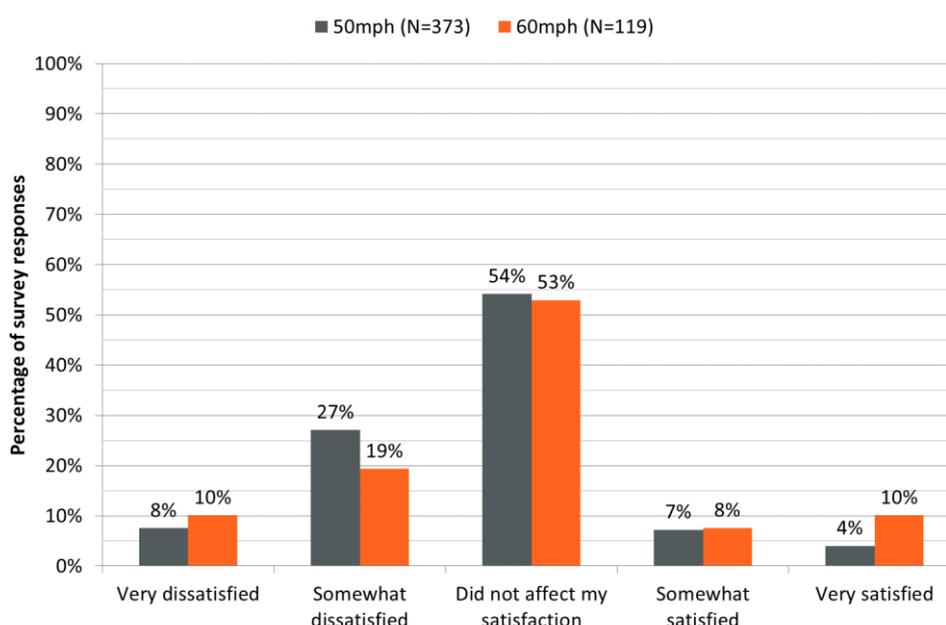


Figure 3: Responses to question: “How satisfied or dissatisfied were you with the speed restriction?”

Across the investigations:

- 54% of the control sample reported the 50mph speed restriction did not affect their journey satisfaction and 53% of the trial sample reported the 60mph speed restriction did not affect their journey satisfaction.
- 35% of the control sample reported the 50mph speed restriction made them feel either somewhat or very dissatisfied and 29% of the trial sample reported the 60mph speed restriction made them feel either somewhat or very dissatisfied.

- 11% of the control sample reported the 50mph speed restriction made them feel either somewhat or very satisfied and 18% of the trial sample reported the 60mph speed restriction made them feel either somewhat or very satisfied.

A chi-square test found no statistically significant difference in the distribution of responses between the control (50mph) sample and trial (60mph) sample ($p=0.16$), suggesting the speed restriction did not significantly impact customers' self-reported levels of journey satisfaction.

Participants were also asked to rate how appropriate they thought the speed restriction was, in terms of their own journey satisfaction. Responses are shown in Figure 4.

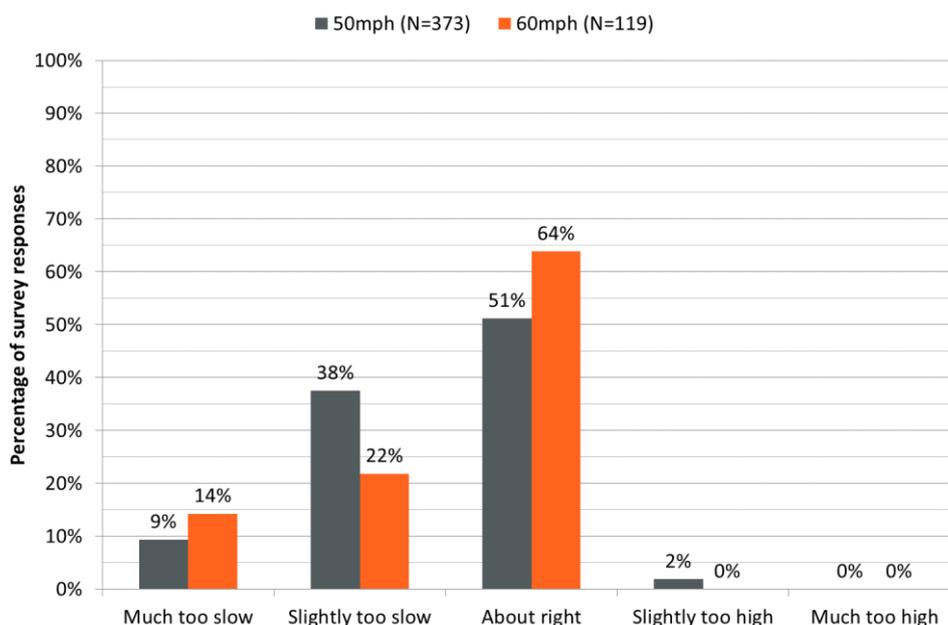


Figure 4: Responses to question: “In terms of journey satisfaction, do you think the speed restriction was...?”

Across the investigations:

- 51% of the control sample reported the 50mph speed restriction was about right in terms of journey satisfaction and 64% of the trial sample reported the 60mph speed restriction was about right in terms of journey satisfaction.
- 47% of the control sample reported the 50mph speed restriction was too slow in terms of journey satisfaction and 36% of the trial sample reported the 60mph speed restriction was too slow in terms of journey satisfaction.
- 2% of the control sample reported the 50mph speed restriction was slightly too high in terms of journey satisfaction and no participants from the trial sample reported the 60mph speed restriction was too high in terms of journey satisfaction.

A chi-square test found a significant difference in the distribution of responses between the control (50mph) sample and trial (60mph) sample ($p=0.03$), although the effect size was very small (0.09), suggesting the difference between the two speed limit restrictions was slight. This suggests that overall perceptions about the appropriateness of the speed restriction in terms of journey satisfaction were not greatly affected by the actual speed restriction in place.

As with perceptions of safety, most participants felt the speed restriction was about right, irrespective of whether the speed restriction was 50mph or 60mph.

In an open question, participants were asked to comment on their journey satisfaction when they last drove through one of the eight schemes. Table 4 shows themes that represent general patterns observed in participants' qualitative responses.

Table 4: Themes from participants' comments relating to the impact of the speed restrictions on their journey satisfaction

	50mph speed restriction	60mph speed restriction
Positive comments	<p>The speed restriction was acceptable.</p> <p>The speed restriction was appropriate for the road works.</p> <p>The speed restriction kept traffic flowing.</p>	<p>Compared with a 50mph speed restriction, the 60mph speed restriction:</p> <ul style="list-style-type: none"> ▪ Increased levels of journey satisfaction ▪ Reduced feelings of frustration ▪ Improved traffic flow
Negative comments	<p>The speed restriction was too low when traffic flow was light.</p> <p>The speed restriction was unnecessary (for example, when no road workers were present).</p> <p>Other drivers (including HGV drivers) exceeded the speed restriction.</p> <p>The speed restriction encouraged HGV drivers to tailgate other vehicles.</p>	
	<p>The speed restriction was too low.</p> <p>The speed restriction covered too many miles of the motorway.</p> <p>It took too much time to overtake other vehicles while obeying the speed restriction.</p> <p>The speed restriction extended journey times, which required additional planning in advance of the journey.</p> <p>The speed restriction encouraged HGV drivers to overtake other vehicles.</p>	<p>The speed restriction made driving monotonous.</p> <p>The speed restriction was meaningless because it was not being enforced.</p>
Suggestions to improve journey satisfaction	<p>Stricter enforcement of the speed restriction (for example, via average speed cameras) to combat non-compliance.</p>	
	<p>Increase the speed restriction to 70mph.</p> <p>Provide customers with information about the need for restricted speed restrictions through road works.</p> <p>Deter tailgating through police presence.</p>	

As with the themes which emerged regarding perceptions of safety, a pattern of mixed responses can be seen here too. This supports the findings from the quantitative survey ratings; variation between participants is observed, but when taking together the data from the whole sample it is clear there are no consistent or substantial impacts of the speed restriction on customers' self-reported levels of journey satisfaction.

4 Conclusions

This report combines the customer survey responses from eight separate on-road investigations of increasing the speed restriction through road works from 50mph to 60mph. A combined sample of 373 responses related to a 50mph speed restriction and 119 responses related to a 60mph speed restriction enabled a robust assessment of the impact of the change in speed restriction.

As reported in Section 3, some statistically significant differences were found between the responses of the control (50mph) and trial (60mph) sample related to perceptions of the appropriateness of the speed restrictions in terms of safety and journey satisfaction. However, the effect sizes for these differences were very small (0.08 and 0.09 for safety and journey satisfaction, respectively). Therefore, despite the statistical significance in these differences, the effect sizes tell us that the magnitude of the difference was negligible and there was no strong relationship between the speed restriction and the customer survey responses.

As such, the following conclusions can be drawn from this analysis:

1. There was no substantial effect of the use of a 60mph speed restriction on customers' self-reported feelings of safety.

Generally, most participants indicated that the speed restriction did not affect how safe they felt, irrespective of whether it was 50mph or 60mph. Most participants in both the 50mph and 60mph groups indicated that they felt the speed restrictions were 'about right' in terms of safety.

2. There was no substantial effect of the use of a 60mph speed restriction on customers' self-reported levels of journey satisfaction.

Most participants indicated that the speed restriction did not affect their levels of journey satisfaction. In terms of journey satisfaction, most customers indicated that the speed restriction was 'about right', irrespective of whether it was 50mph or 60mph.

Overall, it can therefore be concluded that there is no evidence of a change in self-reported customer feelings of safety or levels of journey satisfaction as a result of the change in speed restriction from 50mph to 60mph on these eight schemes.

It is important to note that the eight road works schemes varied in terms of their temporary traffic management design, vehicle flows and composition, and geographical location. Potentially, these environmental factors may have influenced customers' self-reported feelings of safety and levels of journey satisfaction. As such, customer perceptions cannot be solely associated with the different speed restrictions used. Nevertheless, no significant or substantial effects of the speed restriction on customer perceptions were found within each investigation, as outlined in the published scheme reports (see References), reinforcing the findings presented herein.

4.1 Continued use of 60mph on participating schemes

Upon completion of the various on-road investigations of 60mph, reviews and validation exercises were undertaken by the schemes in order to determine if the 60mph speed restriction could be further implemented. These reviews utilised the results of individual

investigations regarding changes in driver behaviour, along with data on road worker and road user safety.

In line with the agreed monitoring process detailed in the scheme-specific risk assessments, available data were reviewed to determine if the safety objectives had been met during each individual trial. Based on the reviews, the continued use of a 60mph speed restriction was deemed appropriate.

4.2 Implementation of 60mph at other schemes

Lessons learned were captured as part of each investigation; these have been outlined in the accompanying scheme reports (see References) and should be considered when implementing a 60mph speed restriction on other schemes in the future.

The full set of results (in addition to the customer survey data presented in this report) from the eight investigations will be collated together, forming a basis of the large sample of evidence obtained. This evidence will be used to inform a toolkit, which will provide guidance to future road works schemes on the use of appropriate speed restrictions within road works.

References

Glaze S, Chowdhury S and Ramnath R (2019). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M49 Avonmouth (MIS8).* Crowthorne: Transport Research Laboratory.

Glaze S, Hammond J, Ramnath R and Sharp R (2019). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M5 Willand (MIS9).* Crowthorne: Transport Research Laboratory.

Glaze S, Ramnath R, Chowdhury S and Sharp R (2019). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M1 junction 13-16 (MIS11).* Crowthorne: Transport Research Laboratory.

Glaze S, Ramnath R, Hammond J and Sharp R (2019). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M20 junction 10a (MIS7).* Crowthorne: Transport Research Laboratory.

Rajasooriya A, Ramnath R, Chowdhury S and Sharp R (2020). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M4 junction 3-12 (CPR4835).* Crowthorne: Transport Research Laboratory.

Rajasooriya A, Ramnath R, Chowdhury S and Sharp R (2020). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M6 J13-15 scheme (CPR2784).* Crowthorne: Transport Research Laboratory.

Rajasooriya A, Ramnath R, Chowdhury S, Sharp R and Wallbank C (2020). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the M6 junction 2-4 (MIS20).* Crowthorne: Transport Research Laboratory.

Rajasooriya A, Ramnath R, Sharp R and Chowdhury S (2020). *Monitoring and evaluation of the 60mph trials: report for the on-road trials of 60mph on the A1(M) Leeming to Ripon (MIS18).* Crowthorne: Transport Research Laboratory.

Appendix A Customer satisfaction survey

Page 1

MOTORWAY SURVEY

- This research aims to improve understanding of drivers' opinions and perceptions about driving on motorways.
- The research is being carried out by TRL (the Transport Research Laboratory) on behalf of Highways England. Findings from the research will be shared with Highways England to help them inform future policy.
- As part of the research, we would be very grateful if you could complete the survey (it should only take around 10 minutes), but you are under no obligation to do so and you may stop at any time.
- There are no 'right' or 'wrong' answers – we are interested in your opinions.
- The only personal data we will ask for is an email address if you wish to be entered into the prize draw. All information that you provide will be kept private. TRL's full Privacy Notice can be found at <https://trl.co.uk/privacy-notice>.
- If you have any questions about the survey, please contact TRL at motorways@trl.co.uk.
- This survey is conducted in accordance with the Market Research Society Code of Conduct.

As a thank you for taking part in this survey, you may choose to be entered into a prize draw for a chance to win £300 in Amazon vouchers.

To be entered into the prize draw, you will need to provide your email address below, which will be used only to contact you if you are selected as the prize draw winner.

The full prize draw terms and conditions can be found at <https://trl.co.uk/motorway-survey>.

Please enter your email address here if you would like to be entered into the prize draw:

1. Have you read and understood the information about this survey?*

- Yes
- No <skip to 'End of survey' section>

2. Are you happy to take part in this survey? (Remember you can withdraw your participation at any time, without giving a reason.)*

- Yes

⁴ * denotes questions for which responses are mandatory.

- No <skip to 'End of survey' section>

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3. On which of the following sections of motorway do you *regularly* drive (as a driver, not a passenger)? By regularly, we mean once a week or more during the past year. Please select all that apply.*

- A1(M) northbound between junction 50 (Ripon/Thirsk) and junction 51 (Leeming Bar/Northallerton)
- A1(M) southbound between junction 51 (Leeming Bar/Northallerton) and junction 50 (Ripon/Thirsk)
- M1 northbound between junction 13 (Milton Keynes/Bedford) and junction 16 (Northampton/Daventry)
- M1 southbound between junction 8 (Hemel Hempstead) and junction 5 (Watford/Knutsford) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M4 westbound between junction 3 (Cranford/Hayes) and junction 12 (Theale/Calcot)
- M4 westbound between junction 5 (Colnbrook/Langley) and junction 11 (Reading) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M4 westbound between junction 15 (Swindon) and junction 20 (Bristol) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M5 southbound between junction 21 (Weston-Super-Mare) and junction 23 (Bridgwater/Glastonbury) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M5 southbound between junction 27 (Uffculme/Tiverton) and junction 28 (Stonyford/Cullompton)
- M6 northbound between junction 2 (Coventry) and junction 4 (Birmingham)
- M6 southbound between junction 4 (Birmingham) and junction 2 (Coventry)
- M6 northbound between junction 13 (Stafford/Acton Gate) and junction 15 (Stoke-on-Trent/Clayton)
- M6 southbound between junction 15 (Stoke-on-Trent/Clayton) and junction 13 (Stafford/Acton Gate)
- M11 southbound between junction 11 (Cambridge) and junction 8 (Stansted) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M18 northbound between junction 1 (Hellaby/Rotherham) and junction 5 (Thorne/Scunthorpe) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M20 eastbound between junction 10 (Ashford/Willesborough) and junction 11 (Sandling/Saltwood)
- M40 southbound between junction 11 (Banbury) and junction 9 (Bicester) <dummy response – skip to 'End of survey' section if participant selected no schemes>
- M40 southbound between junction 15 (Warwick/Longbridge) and junction 11 (Banbury) <dummy response – skip to 'End of survey' section if participant selected no schemes>

- M49 (Avonmouth)
- M62 eastbound between junction 10 (Birchwood/Croft) and junction 12 (Worsley/Trafford Park)
- None of the above <skip to 'End of survey' section>

4. Which of these sections of motorway did you drive on most recently?*

- A1(M) northbound between junction 50 (Ripon/Thirsk) and junction 51 (Leeming Bar/Northallerton)
- A1(M) southbound between junction 51 (Leeming Bar/Northallerton) and junction 50 (Ripon/Thirsk)
- M1 northbound between junction 13 (Milton Keynes/Bedford) and junction 16 (Northampton/Daventry)
- M4 westbound between junction 3 (Cranford/Hayes) and junction 12 (Theale/Calcot)
- M5 southbound between junction 27 (Uffculme/Tiverton) and junction 28 (Stonyford/Cullompton)
- M6 northbound between junction 2 (Coventry) and junction 4 (Birmingham)
- M6 northbound between junction 13 (Stafford/Acton Gate) and junction 15 (Stoke-on-Trent/Clayton)
- M6 southbound between junction 4 (Birmingham) and junction 2 (Coventry)
- M6 southbound between junction 15 (Stoke-on-Trent/Clayton) and junction 13 (Stafford/Acton Gate)
- M6 northbound between junction 2 (Coventry) and junction 4 (Birmingham)
- M6 northbound between junction 13 (Stafford/Acton Gate) and junction 15 (Stoke-on-Trent/Clayton)
- M20 eastbound between junction 10 (Ashford/Willesborough) and junction 11 (Sandling/Saltwood)
- M49 (Avonmouth)
- M62 eastbound between junction 10 (Birchwood/Croft) and junction 12 (Worsley/Trafford Park)

Page 3

DETAILS ABOUT YOUR LATEST JOURNEY

The questions on this page relate to details of your *latest* journey on the [scheme selected for question 4].

5. On which date did you last drive on the [scheme selected for question 4]? If you cannot remember, please provide an estimate.*

6. What time of the day did you complete the majority of your latest journey on the [scheme selected for question 4]? If you cannot remember, please provide an estimate.*

- 05:00 – 08:59
- 09:00 – 11:59
- 12:00 – 15:59
- 16:00 – 18:59
- 19:00 – 04:59

7. Please provide the number or location of the junction at which you *joined* the motorway. If you cannot remember, please provide an estimate.*

8. Please provide the number or location of the junction at which you *exited* the motorway. If you cannot remember, please provide an estimate.*

9. What type of vehicle were you driving?*

- Passenger car or van
- Motorcycle
- Light goods vehicle (up to and including 7.5 tonnes)
- Heavy goods vehicle (over 7.5 tonnes)
- Bus/coach
- Other (please specify) _____

10. What was the main purpose of your journey?*

- Commuting to a place of work or education (including escorting others)
- Business (e.g. attending a meeting, transporting goods/people for business purposes)
- Leisure (e.g. shopping, visiting family/friends, holidays)
- Other (please specify) _____

11. What were the lighting conditions?*

- Daylight
- Dark with street lighting
- Dark without street lighting

12. What were the weather conditions? Please select all that apply.*

- Dry
- Light rain
- Heavy rain
- Sunny
- Cloudy
- Foggy
- Other (please specify) _____

13. Did you notice any of the following?*

	Yes	No	Don't know/ can't remember
Service stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speed limit signs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic signage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Narrowed lanes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. What was the speed limit?*

- 30mph
- 40mph
- 50mph
- 60mph
- 70mph
- Can't remember

Page 4

FEELINGS OF SAFETY

The questions on this page relate to your feelings of safety when you *last* drove on the [scheme selected for question 4].

15. How do you think the speed limit affected your safety?*

The speed limit made me feel very unsafe	The speed limit made me feel slightly unsafe	The speed limit did not affect how safe I felt	The speed limit made me feel slightly safe	The speed limit made me feel very safe
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. In terms of safety, do you think the speed limit was...*

Much too slow?	Slightly too slow?	About right?	Slightly too high?	Much too high?
<input type="radio"/>				

17. How do you think the width of the lanes affected your safety?*

The width of the lanes made me feel very unsafe	The width of the lanes made me feel slightly unsafe	The width of the lanes did not affect how safe I felt	The width of the lanes made me feel slightly safe	The width of the lanes made me feel very safe
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. In terms of safety, do you think the width of the lanes was...*

Much too narrow?	Slightly too narrow?	About right?	Slightly too wide?	Much too wide?
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19. Do you have any other comments about your feelings of safety on this journey?

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JOURNEY SATISFACTION

The questions on this page relate to your feelings of satisfaction (e.g. comfort, ease of driving, driving experience) when you *last* drove on the [scheme selected for question 4].

20. How satisfied or dissatisfied were you with the speed limit?*

		The speed limit did not affect my journey satisfaction		
Very dissatisfied	Somewhat dissatisfied		Somewhat satisfied	Very satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. In terms of journey satisfaction, do you think the speed limit was...*

Much too slow?	Slightly too slow?	About right?	Slightly too high?	Much too high?
<input type="radio"/>				

22. How satisfied or dissatisfied were you with the width of the lanes?*

		The width of the lanes did not affect my journey satisfaction		
Very dissatisfied	Somewhat dissatisfied		Somewhat satisfied	Very satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. In terms of journey satisfaction, do you think the width of the lanes was...*

Much too narrow?	Slightly too narrow?	About right?	Slightly too wide?	Much too wide?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Do you have any other comments about your feelings of satisfaction (e.g. comfort, ease of driving, driving experience) on this journey?

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25. Please indicate how clearly you remember your last journey on the [scheme selected for question 4].*

Not at all clearly

*I had to guess most
of my answers*

Not very clearly

*I had to guess some
of my answers*

Quite clearly

*I am confident in
most of my answers*

Very clearly

*I am confident in all
of my answers*

Page 7**END OF SURVEY**

Thank you for taking the time to complete this survey.

All responses you have provided will be kept private. This project is currently due to end in March 2020, after which the anonymised findings will be submitted to our client, Highways England. Your contribution to this research project will assist in informing future policy on motorway road works speed limits.

If you have any questions about this research, please contact TRL at motorways@trl.co.uk.

If you are interested in being contacted about future research, you can register at <https://simulatortrials.trl.co.uk/> or see our latest news at <https://trl.co.uk/news>.

Monitoring and evaluation of the 60mph trials



This report presents an analysis of the combined customer survey data collected from eight separate on-road investigations of a 60mph speed restriction on various road works schemes. The purpose of this analysis was to understand the impact of changing the speed restriction from 50mph to 60mph through road works on customers' self-reported feelings of safety and levels of journey satisfaction.

During each investigation, an online survey was administered to individuals who had identified themselves as having driven through the scheme during the monitoring periods. The survey collected data on the impact of the speed restriction on customers' self-reported feelings of safety and levels of journey satisfaction.

492 survey responses (373 related to a 50mph speed restriction and 119 related to a 60mph speed restriction) were collected as part of the eight separate investigations and analysed to assess the impact of the change in speed restriction. Results show that changing the speed restriction through road works from 50mph to 60mph did not significantly impact customers' self-reported feelings of safety or levels of journey satisfaction.

These findings will be used, alongside other findings from the eight investigations, to inform the development of guidance material for future road works design.

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