



# Junction numbers survey

Transport User Panel

April 2019

# Background to this survey

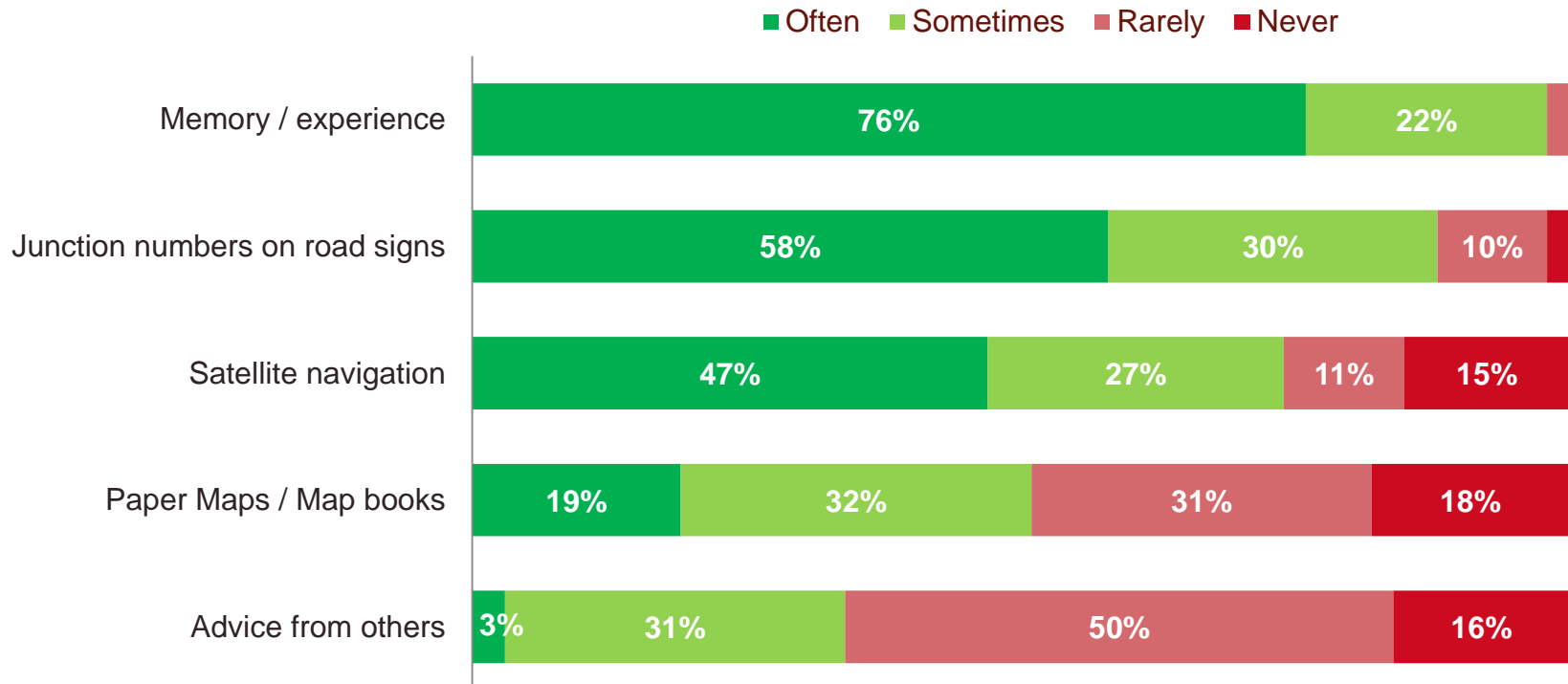
- In most countries 40 to 60 per cent of the total number of accidents occur at junctions.<sup>1</sup> This survey was carried out to test the hypothesis that some unsafe driving on motorways is related to the position of the junction number on the signage.
- The survey was intended to establish:
  - to what extent junction numbers are used to navigate
  - whether road users think that obscured or invisible junction numbers are a cause of poor driver behaviour
  - where road users think the junction number should be on signs
  - whether road users have experienced obscured/invisible junction numbers and, if they have, what caused the junction number to be obscured
  - whether road users say they have driven poorly because of an obscured or invisible junction number.

# Key findings and recommendations

- Those driving on motorways use junction numbers to navigate, alongside other methods: they are an important element of signage.
- Top left is the preferred position for the junction number as it is seen as the natural place to start reading. Other factors are cited as well: the top of a sign is preferred because it is less likely to be obscured by large vehicles and vegetation.
- Motorway users think inadequate tuition is the primary cause of poor driver behaviour at junctions, but perceive that obscured junction numbers are a contributory factor.
- Half of users say junction numbers are sometimes or often obscured when they travel. Among those who have experienced obscured junction numbers, the presence of large vehicles is the main cause.
- Almost one in five admit that an obscured junction number has caused them to drive poorly, while many claim to have seen poor driver behaviour at junctions.
- **Recommendation:** in light of these findings, Transport Focus recommends that Highways England reviews the position of junction numbers on road signs to ensure maximum visibility for the safety and convenience of all road users.

# Junction numbers are frequently used to navigate

*When you are making a journey which involves driving on a motorway, how often do you use each of the following to find your way to your destination?*

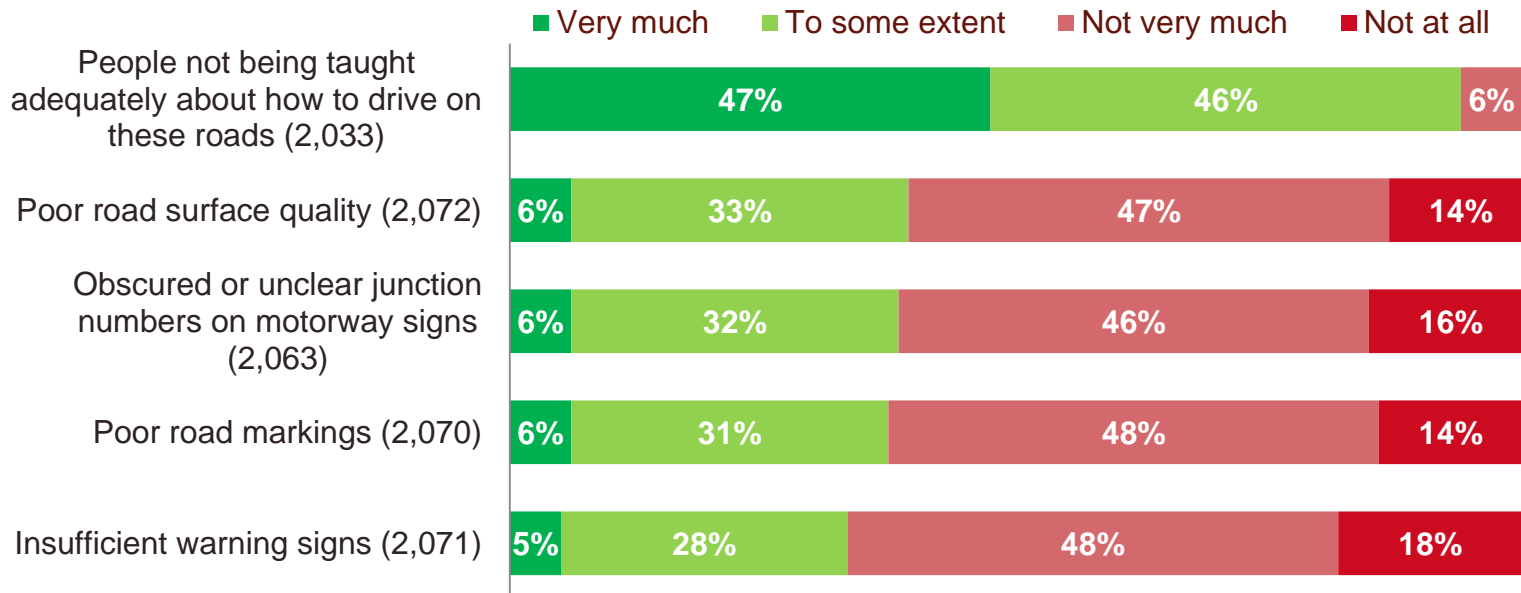


Base: Panelists who drive on motorways in England (2076)

# Junction numbers and driver behaviour

**Almost 40 per cent think that the position of junction numbers causes poor driver behaviour at least to some extent.**

*To what extent do you think that each of the following are a cause of poor driver behaviour on motorways..?*

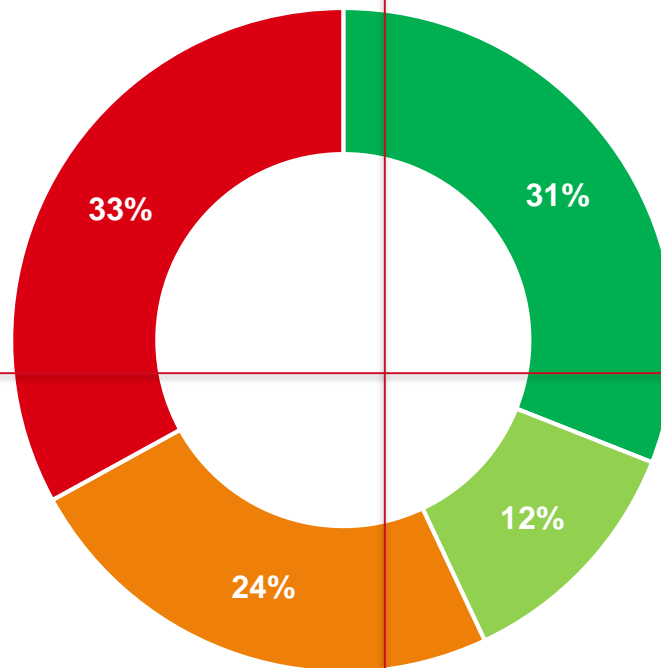


Base: Panelists who drive on motorways in England with an opinion (base sizes in brackets)

# Position of junction numbers

The position of junction numbers at the top of signs is preferred; top left is the most popular.

Here are some motorways signs which have the junction number placed in different positions. Looking at all the signs which one, in your opinion, has the junction number in the best position?



Base: Panelists who drive on motorways in England (2076)

# Reasons for top left as the preferred position

**Top left is preferred as a natural place to start reading, but other factors like vegetation and large vehicles play a part.**

*Why is this [top left] your preferred position on the junction number on a motorway sign?*



“It implies to me that the next left turn will be junction 25.”

“..it is in the most prominent position and the least likely to be obscured by vegetation and high vehicles.”

“The information is together and can be seen in one glance.”

“Minimal diversion of attention from driving the vehicle. Three quarters of the information is in one place.”

“It stands out more at the top and it’s next to the other written information on the sign, so that makes it quick and easy to read.”

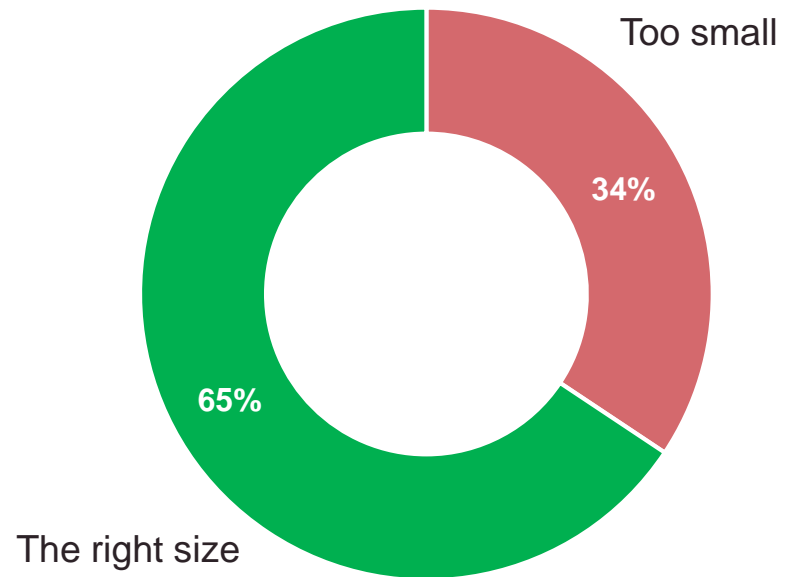
“It’s the natural place to start reading.”

Base: Panelists who drive on motorways in England

# Junction number font size

**Two-thirds feel that the font size used for junction numbers is appropriate.**

*Looking at the picture of the road sign above, would you say that the size of the text used to indicate the junction number is..?*



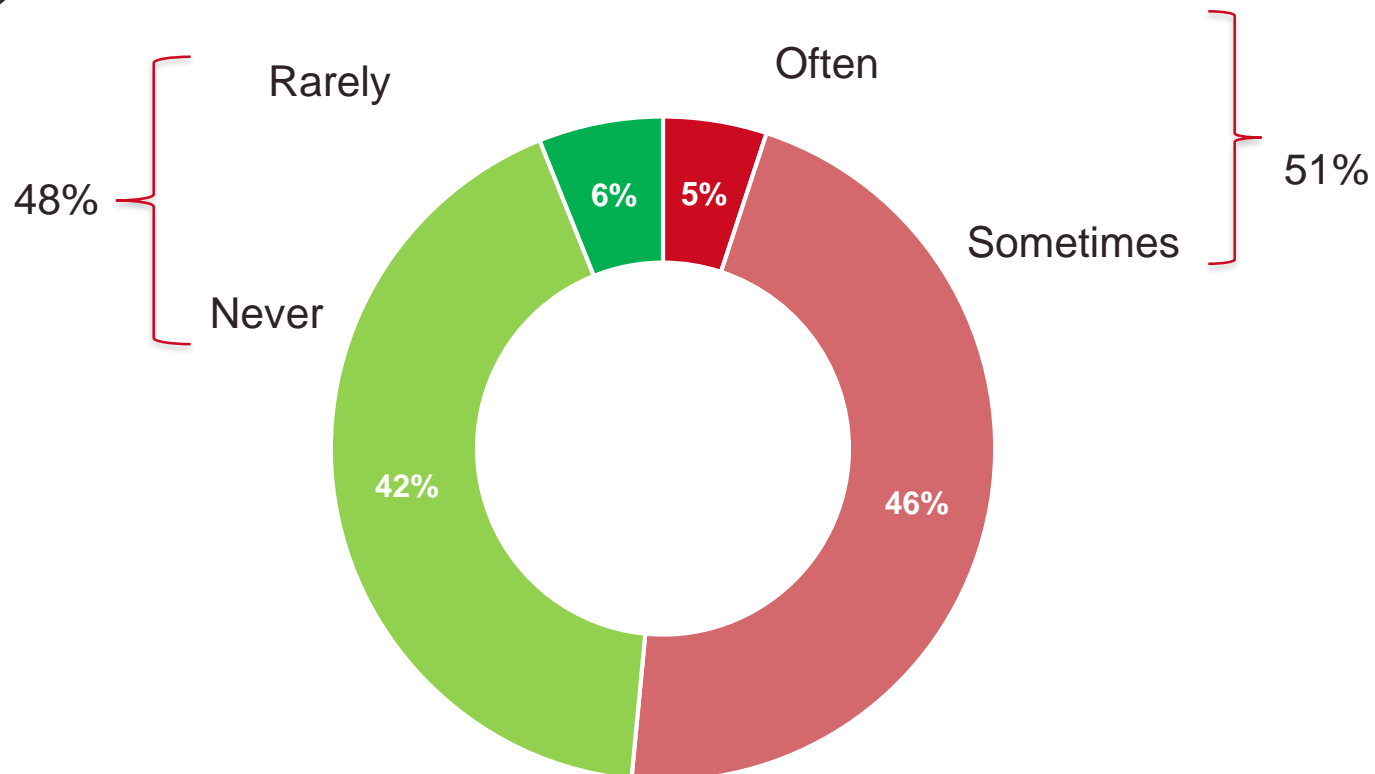
Base: Panelists who drive on motorways in England (2076)



# Visibility of junction numbers

**Half of panellists driving on motorways say junction numbers are often or sometimes obscured.**

*How often, if at all, do you find that the junction number on a motorway sign has been obscured or is not visible?*

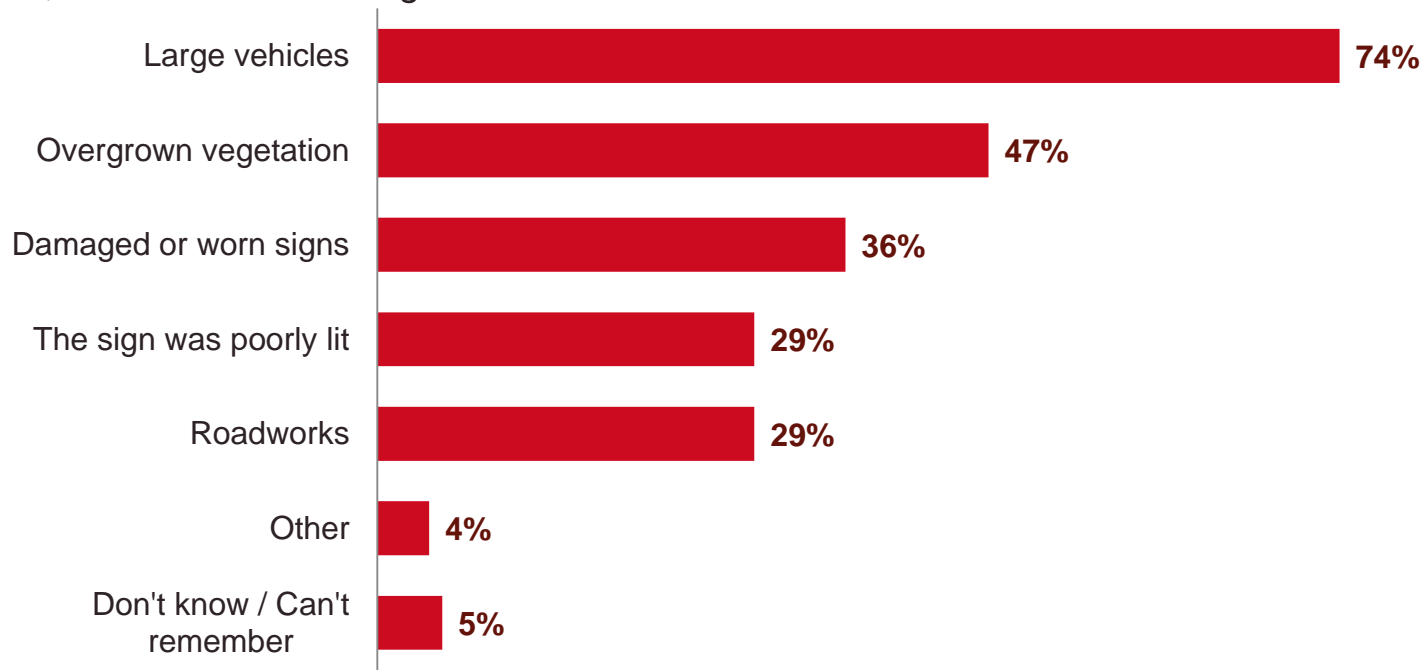


Base: Panelists who drive on motorways in England (2076)

# Impact of large vehicles

**Three quarters of users who found junction numbers obscured suggest large vehicles are the reason for this.**

*When you have found that the junction number on a motorway sign has been obscured or is not visible, which of the following has been the cause of this?*



Base: Panelists who drive on motorways in England and have found the junction number to have been obscured at least rarely (1944)

# Impact of large vehicles – what users say

**The number of large vehicles is often mentioned when drivers explain why they had to make an unsafe manoeuvre.**

*“It was not obvious that the junction was there so I had to quickly pull in in front of a lorry to get into the left hand lane to take the junction.”*

*“Signs were obscured by large vehicles travelling very close together. I have had to make last minute lane changes that were less safe than I would like, but have also chosen to miss exits altogether and return via the next exit. In my view motorway exit signs are not best placed for visibility. Many of these were installed in the 1970's when lorries were much smaller and fewer in number!”*

*“Overtaking large vehicles at the same time as going past the road sign and so not seeing the sign that the junction is coming up and then having difficulty getting back across to take the junction.”*

*“The junction sign was obscured by a large convoy of lorries on the inside lane. My manoeuvre wasn't unsafe but was less than desirable.”*

Base: Panelists who drive on motorways in England and have made an unsafe manoeuvre because of an obscured junction number (338)

# Unsafe manoeuvres due to obscured junction numbers

**Almost one in five say they have made an unsafe manoeuvre because of an obscured junction number.**

*Have any of the following ever happened to you...?*

I had to make a last-minute or potentially unsafe manoeuvre because the junction number on the sign was not visible or obscured



I missed the junction that I needed because the junction number on the sign was not visible or obscured.

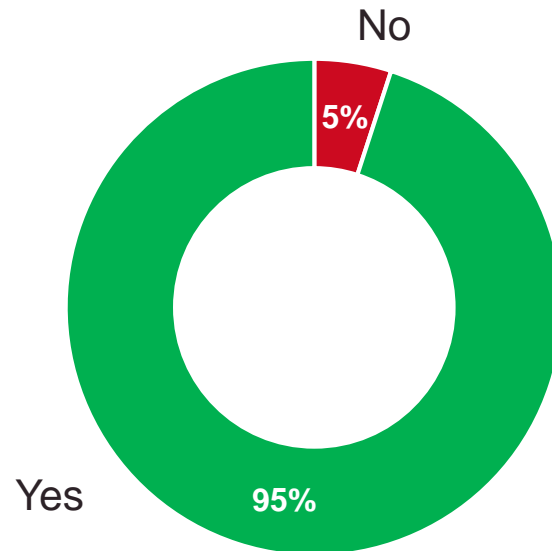


Base: Panelists who drive on motorways in England and have found the junction number to have been obscured at least rarely (1944)

# Unsafe driver behaviour

**95 per cent say that they have witnessed others making unsafe manoeuvres to exit a junction.**

*Have you ever witnessed other vehicles making sudden or unsafe manoeuvres to exit the motorway at a junction?*



Base: Panelists who drive on motorways in England (2076)

# Reasons for poor driver behaviour at junctions

**It is difficult to assign observed poor driver behaviour at junctions to the position of the junction number.**

“The driver in front had obviously missed his intended exit and actually stopped in Lane 1 and began to reverse back towards it. I had to react extremely quickly to avoid what could have been a very nasty collision, probably involving several vehicles.”

“Unsure if it was related to poor signage or just an \*\*\*\*\*!”

“Cars swerving across two or even three lanes to leave a motorway or major road. I've witnessed this on multiple occasions”

“Ha - It's all the time, dozy people veering across lanes to make the exit. Cutting in to avoid following slower traffic in the slow lane etc ...”

“At the last moment driving across solid white lines and chevrons to take an exit. Probably see this at least once a month.”

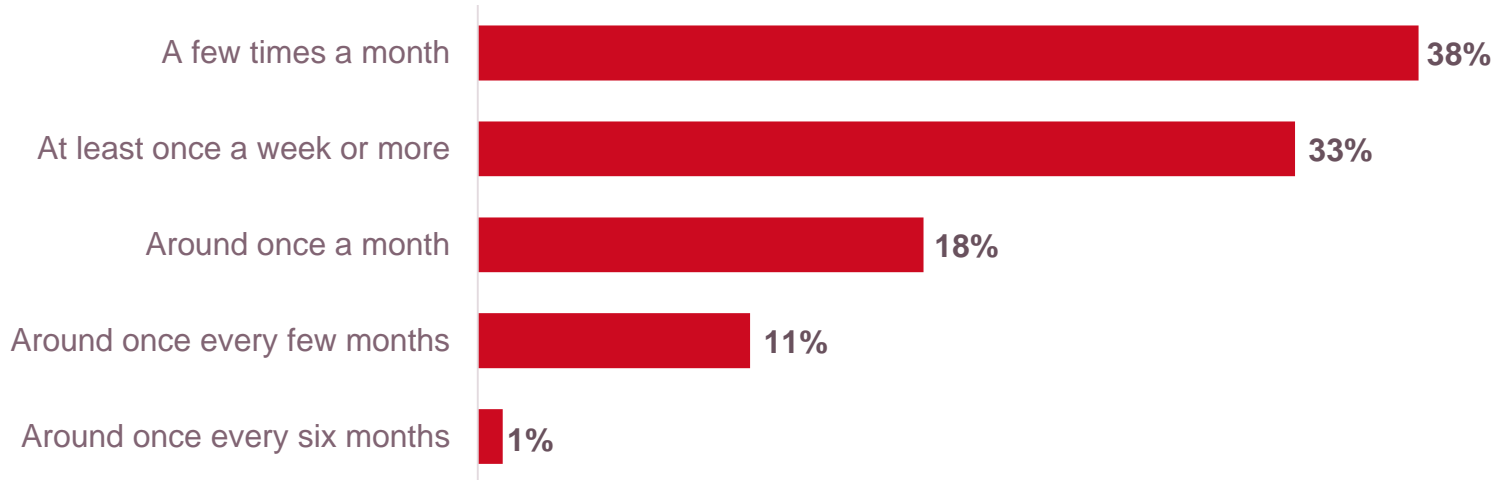
Base: Panelists who drive on motorways in England and have witnessed others making an unsafe manoeuvre to exit a junction (1970)

# How Transport Focus carried out the survey

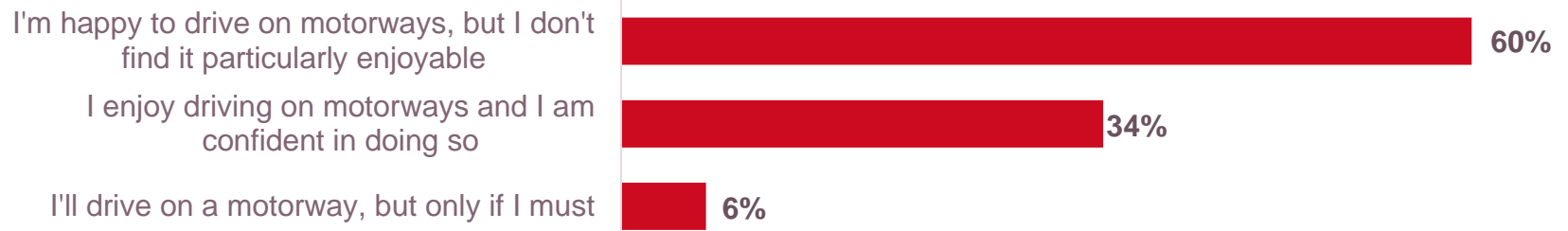
- On 22 November 2018 the survey was sent to 3,445 members of the Transport User Panel who had previously told Transport Focus that they drive on motorways.
- The Transport User Panel is made up of transport users who have said they are happy to complete Transport Focus surveys.
- On 12 December 2018 the survey closed with 2,076 panellists completing the survey; this represents a 60 per cent response rate.
- One reminder mailing was sent to those who had provided no initial response or who had completed only part of the survey.
- Data is unweighted and should be seen as indicative rather than representative of users of Highways England's roads.

# Profile of respondents

## *Frequency of driving on motorways in England*



## *Attitude to motorway driving*



Base: Panelists who drive on motorways in England (2076)