

# Green Flag & Brake Reports on Safe Driving

## Motorway driving



Produced by:



Working in partnership with:



Brake asked 2,010 drivers questions about motorway driving. The survey was carried out online in July 2020 by independent market research company, SurveyGoo.



**The debate surrounding smart motorways is an ongoing one. With the Government investing in schemes to allow the continuous flow of traffic on the UK's major roads, motorways are becoming more responsive in real time to constantly manage the volume of road users.**

Though this is a positive step - enabling road users to get to their destination more easily - rule changes and greater awareness are urgently needed to ensure that motorists and roadside recovery workers on all roads, including motorways and main carriageways, are not left even more vulnerable - safety is paramount.

Whether using the motorway for getting to work or for visiting friends and family, drivers need to have a basic understanding of motorway driving, yet the findings from our survey have revealed that less than half of motorists questioned were aware of the rules for driving on them.

With an average of two deaths or serious injuries every day on motorways in Britain, Green Flag is committed to ensuring smart motorways are as safe as possible for everyone, and that drivers understand how to use them.

We welcome the recent Government review and commitment to make smart motorways safer, and have joined forces with key members of the rescue and recovery industry including Highways England, which manages the motorway network on behalf of the Government, to see how we can support in trying to increase driver awareness and safety on these roads.

Green Flag understand it can be incredibly distressing to break down on a motorway and if you should ever find yourself in that situation you need your recovery to be as safe as possible.

Our priority is always to protect our customers in their time of need and to take control of their mobility issues. Their safety and the safety of our technicians and other road users is paramount when recovering customers on smart motorways.

You can find out more about driving safely on motorways by following the advice in our Green Flag blog on what to do if you should break down in an active lane:

<https://blog.greenflag.com/2020/green-flag-smart-motorways/>



**Damon Jowett**  
Head of Service Delivery  
at Green Flag

**GREEN FLAG**  
COMMON SENSE TO THE RESCUE







**As a fellow UK road safety charity, IAM RoadSmart is delighted to support the findings of this important new report from Brake. The survey shows just how vital motorways are to everyday life in the UK and give some important insights into driver behaviour and knowledge, particularly on new smart motorways.**

The survey findings give cause for concern, as motorways work best if everyone understands and acts on the rules. Incidents cause delays, add to pollution and lead to further crashes, so being aware of the basics means the tens of thousands of drivers using these roads daily can get where they want to go safely and efficiently.

IAM RoadSmart agrees that safety of road users is paramount and although the evidence shows smart motorways are just as safe as existing motorways, the perception among many users is different. With a quarter of drivers admitting that they do not know what a smart motorway is, or the rules that apply, it is clear that sustained education campaigns are still needed to help everyone prepare to use them properly. IAM RoadSmart welcomed the Government's review of these motorways which acknowledged their shortcomings and specified much needed additional safety measures, but that will take time to be implemented.

Being able to drive well and within the law means we must keep up to date with the Highway Code so it was pleasing to learn that 81% of those surveyed know how to use the left-hand lane of a motorway when they do not need to overtake. Slip roads are also relatively high-risk locations so it's great to see that most drivers know that those joining the motorway have to give way to the traffic already on the motorway. Merging safely with the traffic already on the motorway and knowing how this can assist flow is important to keeping everyone safe. Rear-end shunts are the most common crash on our motorways and that is no surprise when this survey shows that two-thirds of drivers got the stopping distance at 70mph wrong.

For some drivers, motorways are clearly a stressful environment, so anyone feeling unsure about travelling on one should consider a confidence-building driving course. This will allow them to enhance their skills and assist them in their decision making.



**Tony Greenidge**  
Interim CEO at IAM RoadSmart





**The UK's motorway network is one of the country's most important pieces of infrastructure, carrying millions of vehicle users across the length and breadth of the country, every day of the year, and at very high speeds. For safety reasons, it is vital that road users are confident in the correct understanding of the rules of the road, and the recent changes to the use of our fastest roads, with the rollout of smart motorways, makes this even more imperative for motorway users. We hope the findings of this report add a valuable perspective to this important, and topical, area of road safety.**

In comparison with other road types, motorways have a strong safety record, with road users less likely to be involved in a serious or fatal crash when using them. Interestingly, this fact runs counter to the perceptions of drivers - a 2019 Brake and Direct Line report on speed found that 4 in 10 drivers felt it most likely that they would be involved in a serious crash while driving on motorways, the highest of all road types.<sup>1</sup> However, this relative safety does not mean drivers can be complacent as when a crash does occur on a motorway, the speeds involved can be difficult for the existing road infrastructure to manage without death or serious injury occurring. With the use of motorways rising, up by nearly a quarter over the past decade, broadly in line with an overall motor traffic increase of 16%, it is clear that our focus on motorway safety must not slip and that there is still much to be done to make the conditions of these high-speed roads safer.<sup>2</sup>

The development and rollout of smart motorways is one area which is vital to monitor and there have been troubling reports of near-misses and a number of tragic accounts of deaths on these roads. We welcome the recent Government review and commitment to make smart motorways safer and our research highlights the importance of increased communications and awareness-raising alongside this, with less than half of drivers saying that they know the rules for driving on a smart motorway. In all areas of our roads, safety, not traffic flow, must remain the priority.

We hope this report helps to shine a light on some of the major risks facing motorway drivers and illustrates that more work is needed to raise awareness of what constitutes safe motorway driving. On average, there are more than two deaths or serious injuries every day on motorways in Britain, each one a preventable tragedy. We must do everything we can to make these crucial roads safer for everyone.



**Joshua Harris**  
Director of campaigns



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### WHAT ARE SMART MOTORWAYS?

Smart motorways were first introduced in the UK in 2006. They use technology to expand capacity and ease congestion on the strategic road network without widening the road infrastructure already in place. This may involve changing speed limits to make traffic flow more smoothly, activating warning signs to alert drivers to traffic jams and hazards, using the hard shoulder for traffic, or closing lanes to allow emergency vehicles through.

There are three main kinds of smart motorway:

- **Controlled motorways**, which use variable and mandatory speed limits to control traffic flow
- **All-lane running motorways**, which permanently convert the hard shoulder as a running lane and have emergency refuge areas
- **Dynamic hard shoulder running motorways**, which sometimes utilise the hard shoulder as a running lane depending on traffic needs at the time.

### HOW SAFE ARE SMART MOTORWAYS?

The introduction of all-lane running has been met with some concerns over its impact on safety. Critics argue that removing the hard shoulder means there is no space where drivers can pull over and stop during an emergency. Between 2015 and 2018, an average of 11 people died each year on smart motorways in England, and research has found people feel having a hard shoulder would be safer than not.

A review was launched to address these concerns in 2020. This led to the Government committing to abolish dynamic hard shoulder motorways, speed up the deployment of stopped vehicle detection across all all-lane running motorways, and reducing the distance between emergency refuge areas where feasible.<sup>3</sup>

## SECTION 1 - SMART MOTORWAYS

In this section we sought to understand drivers' knowledge and behaviour in relation to smart motorways.

**In question 1, drivers were asked whether they know what smart motorways are and whether they know the rules for driving on one.**

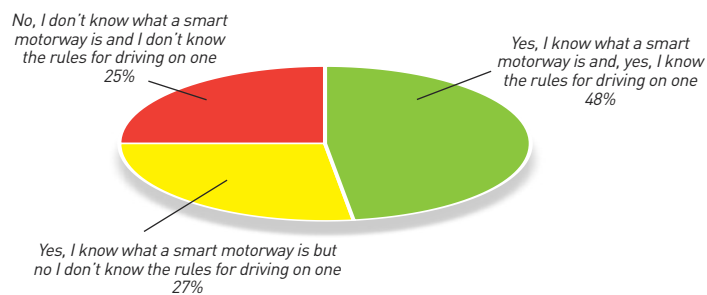
Three-quarters (75%) of drivers told us they know what a smart motorway is, and almost two-thirds of these (48%) also know the rules for driving on one. Just 25% of people do not know what a smart motorway is or the rules for driving on one.

Men appear to have a greater awareness around smart motorways than women do, with 58% claiming they know what these roads are as well as the rules associated with them, compared with 38% of women.

A quarter (25%) of men said they know what smart motorways are but do not know the rules, with 30% of women also selecting this option. In total, just 18% of men said they do not know what a smart motorway is, while 32% of women said they do not.

**Q1. Do you know what a smart motorway is and, if so, do you know the rules for driving on one?**

	Total	Men	Women
Yes, I know what a smart motorway is and, yes, I know the rules for driving on one	48%	58%	38%
Yes, I know what a smart motorway is but no I don't know the rules for driving on one	27%	25%	30%
No, I don't know what a smart motorway is and I don't know the rules for driving on one	25%	18%	32%

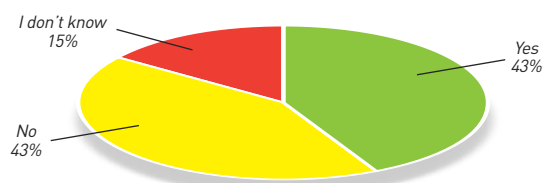


**In question 2, drivers were asked whether they have ever driven on a smart motorway.**

Less than half of drivers (43%) told us that they have previously driven on a smart motorway, and the same proportion said they had not, with the remaining 15% saying they were not sure. Men were more likely to have used a smart motorway than women, with 52% of men saying they had done so, compared with 34% of women.

**Q2. Have you ever driven on a smart motorway? - results by gender**

	Total	Men	Women
Yes	43%	52%	34%
No	43%	35%	50%
I don't know	15%	13%	16%



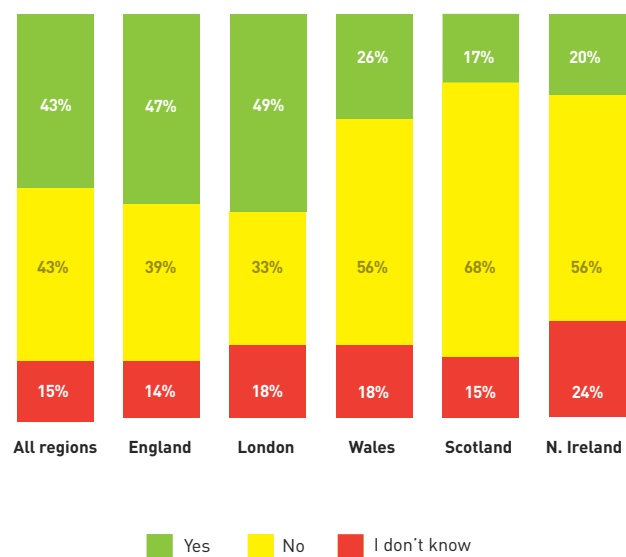
Looking at the results by region, the fact that most of the UK's smart motorways are located in England is clearly represented, with 47% of drivers from England saying they have used a smart motorway. This rises to 49% in London. In contrast, just 26% of drivers in Wales, 20% of drivers in Northern Ireland and 17% of drivers in



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Scotland said they had used a smart motorway. Drivers in Northern Ireland were the most likely to be unsure whether or not they had driven on a smart motorway, as almost a quarter (24%) selected 'I don't know'.

Q2. Have you ever driven on a smart motorway? - results by region



## SMART MOTORWAYS: THE RULES

Drivers on smart motorways are subject to the same laws as those travelling on any other roads. However, the inclusion of variable speed limits and more speed cameras may catch some drivers out and lead to legal penalties.

If no speed limit is displayed on a smart motorway, the national speed limit (70mph) applies. Speed cameras will still be in place to enforce variable speed limits, so anyone breaking the law can still be caught speeding and receive a £2,500 fine.

Signs over closed lanes may also display an illuminated red 'X'. This is to indicate that the lane is closed. Ignoring these signs and continuing to use the lane can lead to a £100 fine and three penalty points.

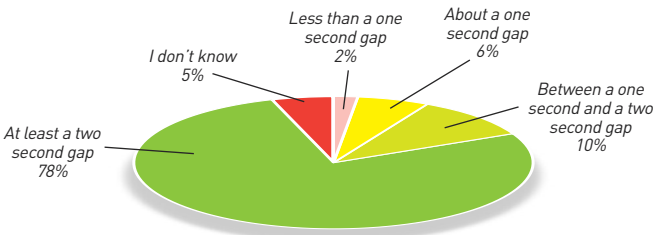
## SECTION 2 - MOTORWAY DRIVING

In this section we looked at the distance that drivers leave other vehicles and the lanes they choose to travel in.

In question 3, drivers were asked how much of a gap they leave to other vehicles when driving on a motorway in normal weather conditions.

Most drivers (78%) told us that they leave at least a two-second gap behind the vehicle in front of them. Results differed little between men and women. This finding is in line with Highway Code guidance for safe driving on the motorway and is important for minimising the chances of a crash should the vehicle in front suddenly stop. One in 10 drivers said they leave between one and two seconds, 6% leave a one second gap and just 2% said they leave less than one second. The remaining 5% said they do not know how much of a gap they leave.

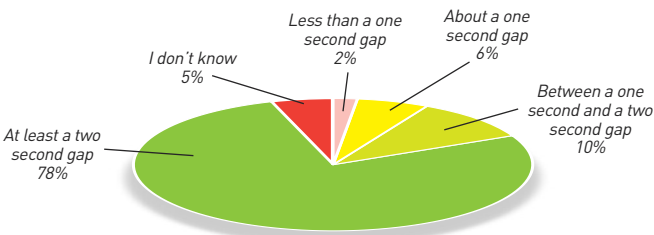
Q3. How much of a gap do you leave to the vehicle in front when driving on a motorway in normal weather conditions?



Looking at the results by region, drivers in London told us that they leave the least room for other vehicles when driving on a motorway. Less than half (49%) leave at least a two second gap, compared with 78% in the UK overall, while 6% of London drivers said they leave less than a one second gap – three times the rate that said this in England as a whole.

Q3. How much of a gap do you leave to the vehicle in front when driving on a motorway in normal weather conditions? - results by region

	All regions	England	London	Wales	Scotland	N. Ireland
Less than a one second gap	2%	2%	6%	0%	1%	4%
About a one second gap	6%	6%	17%	3%	3%	7%
Between a one second and a two second gap	10%	11%	23%	6%	11%	4%
At least a two second gap	78%	77%	49%	82%	81%	82%
I don't know	5%	5%	5%	8%	4%	3%



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### WHY DO WE USE MOTORWAYS?

Motorways form the backbone of the strategic road network and carry 20% of all vehicle miles in Great Britain.<sup>4</sup> Brake research with Direct Line, in 2018, investigated the most common reasons why people use motorways or dual carriageways:

- 79% use motorways/dual carriageways for personal reasons like visiting shops, friends or places of interest.
- 26% use motorways/dual carriageways for commuting.
- 12% use motorways/dual carriageways while working e.g. for making deliveries or driving between appointments.
- 8% do not use motorways/dual carriageways.<sup>5</sup>

### MOTORWAYS AND ROAD CASUALTIES

The number of miles driven on motorways in Britain has risen by 29% over the past 20 years and 14% over the past decade, reaching 70.5 billion vehicle miles in 2019.<sup>6</sup> In total, 894 people were killed or seriously injured on motorways in Britain in 2019, representing 3% of all road deaths and serious injuries recorded on the roads in that year.

These figures highlight how, despite being some of the busiest roads in the country, motorways are actually among the safest roads to travel on. Research into crash rates on motorways across Europe has found 50-90% fewer collisions are recorded on motorways than on other road types.<sup>7</sup>

Even though motorways see fewer collisions than other road types, when a crash does occur on a motorway it tends to be more severe. This is because the vehicles involved are much more likely to be travelling at higher speeds, resulting in greater impacts and increased risk of death or serious injury.



**In question 4, drivers were asked what they think their stopping distance would be when driving at 70mph on a motorway in normal weather conditions.**

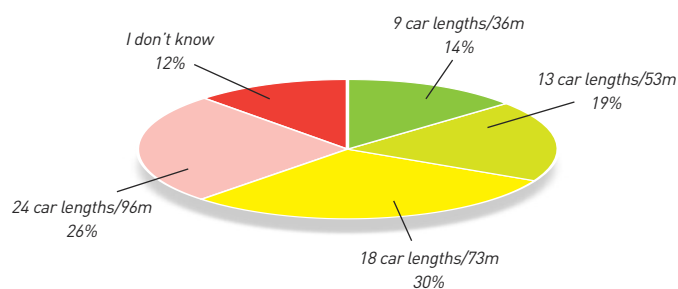
A car travelling at 70mph will travel 96m – or 24 car lengths – before stopping after the driver applies the brakes. This means it is vitally important that drivers leave plenty of room for other vehicles when travelling on a motorway.

The feedback to our survey paints a mixed picture of driver knowledge about stopping distances. While a quarter (26%) correctly stated that cars need 96m to stop, slightly more (30%) believe 73m, or 18 car lengths, is the correct distance. Another 19% chose 53m (13 car lengths) and 14% chose 36m (9 car lengths), with 12% admitting that they do not know the stopping distance at 70mph.

Looking at the results by age, younger drivers appear to have greater knowledge of stopping distances, with 35% of drivers aged 18-24 selecting 96m as their answer. However, drivers aged 65+ were the age group that was next most likely to choose this option (33%). Just 14% of drivers aged 25-44 chose the correct answer.

**Q4. What do you think your stopping distance would be when driving at 70mph (the speed limit on a motorway) in normal weather conditions?**

	All ages	18-24	25-44	45-64	65+
9 car lengths/36m	14%	11%	18%	12%	11%
13 car lengths/53m	19%	13%	26%	17%	16%
18 car lengths/73m	30%	30%	30%	29%	31%
24 car lengths/96m	26%	35%	14%	29%	33%
I don't know	12%	4%	13%	13%	9%





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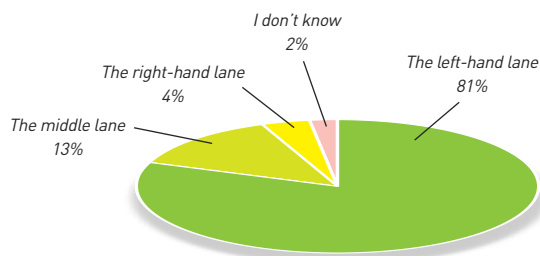
For question 5, drivers were asked which lane they would drive in if the road ahead was clear.

According to the Highway Code, drivers should always use the left-hand lane of the motorway when traffic is clear. Staying in the middle or right-hand lane can cause unnecessary congestion and can be punished with three penalty points and a £100 fine. Most drivers (81%) recognise this and told us they would drive in the left-hand lane if the road ahead was clear, with 13% saying they would stay in the middle lane and only 4% choosing the right-hand lane.

However, the proportion of drivers using the correct lane varies throughout the country. Nine in 10 (90%) Welsh drivers say they would drive in the left-hand lane and just 1% said they would use the right-hand lane if the road ahead was clear. This compares with 50% of drivers in London who would use the left lane, while 13% would use the right lane, if the road ahead was clear.

**Q5. When driving on a motorway, which lane would you drive in if the road ahead was clear?**

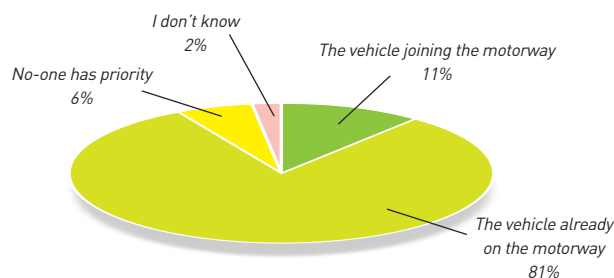
	All regions	England	London	Wales	Scotland	N. Ireland
The left-hand lane	81%	81%	50%	90%	80%	83%
The middle lane	13%	13%	33%	8%	15%	17%
The right-hand lane	4%	5%	13%	1%	4%	0%
I don't know	2%	2%	4%	2%	1%	0%



For question 6, drivers were asked who has priority when joining a motorway.

More than four-fifths (81%) of drivers correctly identified that vehicles that are already on the motorway have priority over vehicles that are attempting to join it. Approximately one in 10 (11%) believed the vehicle joining the motorway had priority, 6% believed no-one has priority, and 2% did not know.

**Q6. When joining a motorway, who has priority?**



When joining the motorway, you should always give priority to vehicles that are already on the road. Check the traffic on the motorway and adjust your speed so you can safely join the traffic flow in the left-hand lane. You should not cross solid white lines that separate lanes or use the hard shoulder and should stay in the left lane until you have matched the speed of traffic before considering overtaking other vehicles.<sup>8</sup>

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2. Department for Transport (2020), Road traffic estimates in Great Britain: 2019
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6. Department for Transport (2020), Road traffic estimates in Great Britain: 2019
7. European Commission (2018), Motorways 2018
8. Department for Transport, The Highway Code, Motorways [253 to 273]

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