

Brake and AXA UK driver survey reports

# Vehicle safety systems and the future of driving



In September 2023, Brake and AXA UK asked 2,033\* car drivers about vehicle safety technology that can help prevent crashes. The survey was carried out by independent market research company SurveyGoo.

\*Discrepancies in or between totals are due to rounding.

**As a major motor insurer, road safety is incredibly important to us. We believe that enhanced vehicle technology has the potential to significantly reduce collisions and make our roads safer.**

Our third report in partnership with Brake focuses on the technology in our vehicles, exploring the public's understanding of advanced safety features and attitude towards them. We asked if people understand them, and whether they are prepared to pay more for improved safety.

It's encouraging to see that almost 80% understand what safety technology they have in their vehicle. While a handful of people turn off safety features because they find them annoying, over 50% believe they should be embedded in the vehicle with no option to override them. And surprisingly, despite the cost-of-living crisis, 63% of those questioned said they would be happy to pay more for a car with additional technology designed to protect the driver.

This study is a clear indication that safety on our roads is a key concern for the public. We therefore urge the Government to bring forward the Road Safety Strategic Framework as soon as possible and demonstrate its commitment to improving road safety.

At AXA, we have been involved in the development of assisted and self-driving technology for the last decade. We have partnered with the Government on five projects to explore how this technology can be used to make our roads safer and share our insights on liability. Research shows that self-driving technology has the potential to significantly reduce crashes, as 85% of collisions currently involve an element of human error.

AXA welcomes the Automated Vehicles Bill announced in the King's Speech. We have long been calling for this legislation due to the wide range of benefits that self-driving technologies have the potential to unlock. For example, road crashes cost the economy £43 billion in 2022, of which £2.3 billion was a direct cost to the NHS in medical treatment and ambulance services.<sup>1</sup> In addition, the self-driving industry is expected to be worth £42 billion to the economy by 2035 and could create 50,000 highly skilled green jobs.<sup>2</sup>

Finally, without a road safety strategic framework and safety focused legislation for self-driving, we risk falling behind other countries and missing out on opportunities to improve road safety, reduce crashes, and save lives.

**Jon Walker**

Commercial CEO, AXA UK



1. Department for Transport (2023) Reported road casualties Great Britain annual report: 2022. Table RAS 4001: Cost of prevention of road collisions and casualties  
2. Connected Places Catapult (2021) Market forecast for connected and autonomous vehicles.





**With practice, humans find driving almost trivially easy. Given the complexity of the task, this is an amazing feat requiring visual acuity, hazard awareness, movement prediction, understanding of road rules, physical dexterity and more.**



**Nonetheless, the sheer volume of driving that takes place each day on our roads means that death and serious injury are all too common. Every day, five people die on UK roads, and many more receive serious, life-changing injuries, in crashes that we know are largely preventable.**

Many technological innovations have helped to reduce the risk of death and injury in a crash. These include vehicle crumple zones, three-point inertia reel safety-belts and airbags – all systems that help to mitigate the severity of injury when a crash takes place. Increasingly, technological systems are helping us to achieve an even better outcome – avoiding the crash in the first place. Examples include anti-lock brakes (ABS) and electronic stability control (ESC) – systems which activate automatically when vehicle sensors detect loss of control to help the driver to avoid the worst outcomes. Importantly, these systems operate in the background. A driver may not be aware of their presence until they are needed.

A new generation of vehicle safety systems goes a step further, detecting more information about the driver and driving environment and making more active interventions to help reduce collision risk. These include intelligent speed assistance, driver drowsiness detection and lane-keeping assistance and are often called advanced driver assistance systems (ADAS).

What is characteristically different about these systems is that they are more likely to be triggered in everyday driving situations and, although designed to support safety, may work in ways that a driver might consider surprising, or even annoying. Critically, these systems may conflict with the driver's mental model of how their vehicle should operate as it may be outside their previous experience or training, unlike simpler systems that only operate in emergencies. It is therefore important that drivers are aware that such systems are fitted to their vehicle, and where and how they may intervene to support safe driving.

The research undertaken by Brake and AXA UK is vital in building our understanding of drivers' awareness of ADAS, how it works and which features they consider to be most desirable. This can inform regulators, system designers, automotive marketing and driver training in developing approaches that maximise the use – and therefore the benefit – of these safety technologies. In doing so, it positively supports progress towards a vision in which no-one is killed or seriously injured on our roads.

## Nick Reed

Founder of Reed Mobility and chief road safety advisor at National Highways



### Vehicle technology can play a significant role in improving road safety



**More than 30,000 people are killed or seriously injured on UK roads every year, and most crashes include human error as at least one of the causes.<sup>3</sup>**

It's clear that advanced vehicle technology, which we know can help prevent crashes, can play a significant role in improving road safety and prevent a great number of families and communities from needless suffering.

A recent briefing report by the Parliamentary Advisory Committee on Transport Safety (PACTS) described vehicle safety as “the single most important means of preventing and mitigating serious injury in motor vehicle crashes and the most efficient means of reducing deaths and serious injuries in road crashes.”<sup>4</sup> In this report, we explore the attitudes of drivers to some of the latest vehicle safety systems available in modern vehicles. We discover how much drivers know about the safety features in their cars, and whether they think these features will improve safety – for themselves and their passengers, as well as for other road users, including people who walk and cycle. We also find out whether drivers think safety features should be made mandatory for vehicles in the UK, in line with new regulations in place across Europe.

It is encouraging to see that people are prioritising safety, especially when purchasing a new vehicle – our research found that 82% of drivers believe the safety rating is important. It's even more reassuring to find, during a cost-of-living crisis, that 63% of drivers are willing to pay more for safety features. However, it is concerning that only 36% know what safety features they have in their vehicle. In addition, we found that many drivers (41%) are opting to switch off important safety features in their vehicles because they find them annoying. This worrying statistic shows there is more work to be done to help the public understand the lifesaving benefits of modern vehicle technology, and build their trust in using it. This trust can only be built through a combination of robust legislation and clear, evidence-based messaging. This is especially important as we transition to the future of driving, where our research shows that 68% are supportive of self-driving technology if it improves safety.

**Ross Moorlock**  
Interim CEO, Brake



3. Department for Transport (2023), Reported road casualties Great Britain annual report: 2022.

4. PACTS (2022) Vaccine for vehicles: Preventing death and injury on UK roads.

<https://www.pacts.org.uk/vaccine-for-vehicles-preventing-deaths-and-injuries-on-uk-roads-pacts-briefing-january-2022/>



In this report, we explore the attitudes of drivers to vehicle safety systems. We sought to determine driver views on the technology in their car, with a focus on safety for drivers and their passengers, as well as for people outside the vehicle.

We also explore whether drivers think safety features should be mandatory for new cars in the UK.



## Section 1 - How important is safety to drivers?

In this section, we asked drivers what they look for when buying a new car and whether they prioritise safety.

In question 1, we asked drivers what their top three most important factors are when choosing a new vehicle, aside from cost.

Build quality and reliability was the most popular choice, chosen by 75% of respondents, while fuel economy came a close second (72%), and safety features followed third (46%).

Looking at the results by age, younger drivers appear to value power and performance more than safety features. Less than a third (31%) of drivers aged 17-24 put safety in their top three. Build quality and reliability was the top choice for this age group (69%), followed by power and performance (52%), then fuel economy (46%). This is particularly worrying as young and newly qualified drivers are high-risk road users and often over-represented in collision data.

For more data tables to support the information given in this report, go to [www.brake.org.uk/vehicle-safety-survey](http://www.brake.org.uk/vehicle-safety-survey).



Build quality and reliability **75%**



Fuel economy **72%**



Safety features **46%**



Power and performance **34%**



Brand **29%**



Versatility and utility **27%**



Environmental impact **11%**



Entertainment/infotainment systems **7%**

## Section 1 - How important is safety to drivers?

We saw significant variation for factors directly associated with cost. On average, three-quarters (75%) of drivers earning less than £50,000 a year listed fuel economy as one of their three most important factors, compared with just 58% of those with an annual household income above £100,000.

It's interesting to compare with similar questions that Brake has asked previously. For example, in a similar survey by Brake in 2021, safety was ranked fourth out of six options.<sup>5</sup>

Results were comparable in a 2018 survey, where safety features were again ranked fourth – although this survey also included price, which was ranked most important.<sup>6</sup>

# 46%



of drivers prioritise safety features  
when buying a new vehicle

5. Brake, Direct Line and Green Flag (2022) Making safe and healthy journeys. [www.brake.org.uk/roadmap](http://www.brake.org.uk/roadmap)

6. Brake and Direct Line (2018) Advanced driver assistance systems. [www.brake.org.uk/reports](http://www.brake.org.uk/reports)



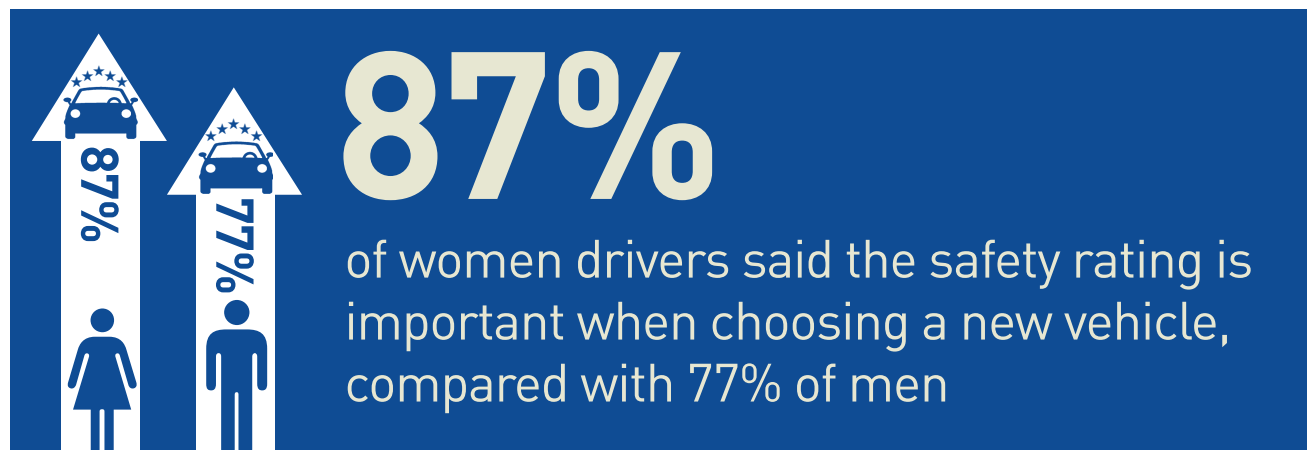
## Section 1 - How important is safety to drivers?

In question 2, we asked drivers how important the safety rating is when choosing a new vehicle.

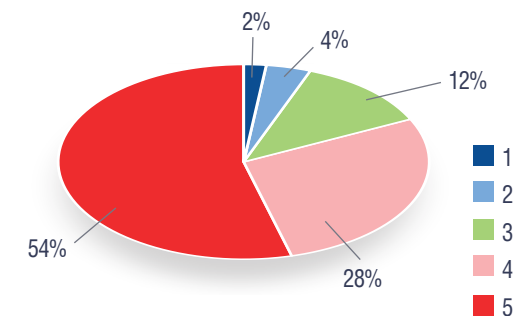
The overwhelming majority (82%) of respondents said that the safety rating is important or very important.

Safety ratings appear to be less important to drivers in London, where only two-thirds (66%) said the safety rating of a new vehicle was important or very important. By contrast, almost all (96%) respondents in Northern Ireland said the safety rating is important or very important.

The safety rating appears to be more important to women than men: 87% of women said it is important or very important, compared with just 77% of men.



**Q2.** When choosing a new vehicle, how important is the safety rating to you? (1 = not important at all, 5 = very important)



# Section 1 - How important is safety to drivers?

## Vehicle safety features

In July 2022, the European Union introduced a new Vehicle General Safety Regulation,<sup>7</sup> making certain vehicle safety features mandatory for new vehicles. The new safety measures will help protect passengers, pedestrians and cyclists, and although not mandatory, many features are available in vehicles sold in the UK. It has been estimated that they could prevent more than 1,700 deaths and 15,000 serious injuries over 16 years, if the full package of measures was fully implemented in Britain, and save up to £7 billion in health costs.<sup>8,9</sup>

The research in this report centred on the following safety features, all of which are mandatory for new cars in the EU.

- **Intelligent speed assistance** - GPS-linked technology to alert a driver if they are exceeding the speed limit and/or automatically reduce vehicle speed to keep within the speed limit.
- **Reversing detection with camera or sensors** - a camera attached to the back of the car to provide greater visibility when reversing or a sensor attached to the bumper that measures the distance to an obstacle and alerts the driver when an object is too close.

- **Attention warning in case of driver drowsiness** – to monitor head and eye movements for signs of drowsiness or distraction.
- **Emergency stop signal** – to alert the driver behind by making brake lights blink if a driver brakes sharply.
- **Lane-keeping assistance** – to alert a driver if their car strays too close to lane markers and either turn the steering vehicle or brake on one side to keep in lane.
- **Advanced emergency braking** – a system that will automatically brake in an emergency (e.g. if a pedestrian steps out in front of the car or a vehicle in front stops suddenly).
- **Event data recorders** – 'black box' that records data about driving behaviour, and records data if there's a collision.

7. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32019R2144>

8. <https://www.pacts.org.uk/wp-content/uploads/Vaccine-for-Vehicles.-Final-1.pdf>

9. GSR currently applies to vehicles produced in Northern Ireland, but not Britain, due to different EU regulatory standards applying in Northern Ireland.

## Naming standards

**This report uses the same terminology as the Vehicle General Safety Regulation, but there is no standardisation across the industry.**

Many different names are used by vehicle manufacturers, making it very difficult for consumers to understand which features are in their car, and compare the safety benefits.

For example, intelligent speed assistance is also known as Speed Limit Pilot (Mercedes), Traffic Sign Recognition with Speed Limiter (Renault) and Automatic Speed Limiter (Volvo).

Advanced emergency braking is also known as Pre Sense City (Audi), Smart City Brake Support (Mazda) and Forward Collision Avoidance Assist (Kia).

Lane-keeping assistance is also known as automated lane keeping systems (ALKS), and so on.

AXA UK is calling for vehicle manufacturers to use standardised terminology and dashboard warnings to prevent confusion.



## Section 2 - Safety features

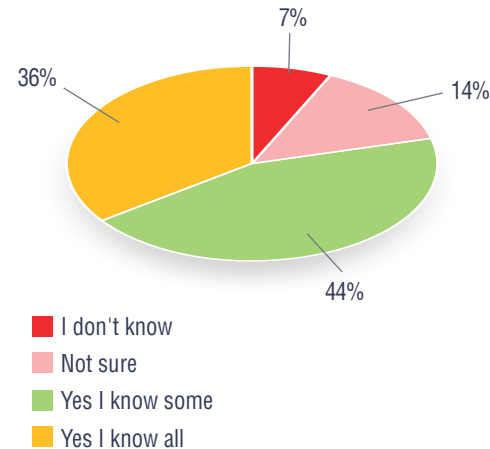
In this section we asked drivers about safety features in their car. We asked if they know what features they have, whether they ever switch them off, and if so, why. We also explored what might encourage them not to switch off safety features.

### In question 3, we asked drivers about the safety features they have in their car.

A clear majority, almost four-fifths (79%) of respondents, said they know, at least to some extent, what safety features their car has. However, it's worrying to see only about a third (36%) of drivers know for sure.

We also asked them to select the safety features they have in their car. Reversing detection (59%) was by far the most common safety feature, followed by intelligent speed assistance (29%), and lane-keeping assistance (29%).

**Q3a. Do you know what safety features you have in your car?**



Only **36%** of drivers know for sure what safety features their car has

### Most common safety features



## Section 2 - Safety features

Drivers in the highest income groups appear to know most about the safety features in their car: more than 90% of those earning above £75,000 said they know, compared with just 69% of those earning below £10,000 and 66% of those earning £10,000 -£24,999.

Older groups were less likely to know: 28% of 65–74-year-olds and 33% of those aged 75+ said they don't know or are unsure which safety features their car has, compared with 21% overall.

Drivers of older cars also appear to know less about safety features in their car. They are also – unsurprisingly – significantly less likely to have any of the listed features. More than two-fifths (42%) of drivers with a car that is 8–10 years old, and 58% of those with a car 10+ years old said their car had none of the listed safety features. By contrast, 95% of drivers who own a car that is three years old or less said they had at least one safety feature.

Overall, more than three-quarters (77%) of respondents said they had some safety features, and we found a clear income difference here: less than two-thirds (64%) of those earning £10,000–£24,999 had some of the safety features, compared with more than 92% of those earning £75,000 or above.

Younger drivers were far more likely to have cars with the listed safety features. More than 84% of all groups aged 44 or under had some features, compared with only 74% or less for those aged 45 or older. The data shows that older drivers are more likely to drive older vehicles. 56% of drivers aged 75+ drive a car that is more than 8 years old, compared with just 19% of 17–24-year-olds.

This may also correlate with higher concerns about safety, and higher levels of uncertainty among older drivers about the safety features in their cars, as seen in the answers to previous questions.

Most regions were similar, except for London where 94% of drivers said they had some of the safety features listed. For many of the safety features, numbers in London were significantly higher than other regions, e.g. 'attention warning in case of driver drowsiness': 47% in London, compared with only 8% in East of England, 14% in Yorkshire and Humber and a national average of 21%.



# 41%

of drivers have  
switched off safety  
features in their car



In question 4, we asked drivers if they have switched off any of the safety features in their car, and why they did so.

**59%** of drivers haven't switched off any safety features

**8%** have switched off emergency stop signal

**14%** have switched off intelligent speed assistance

**5%** have switched off advanced emergency braking

**13%** have switched off reversing detection with camera or sensors

**2%** have switched off event data recorders

**10%** have switched off attention warning in case of driver drowsiness

**5%** don't know if they have switched off any safety features


**10%** have switched off lane-keeping assistance



## Section 2 - Safety features

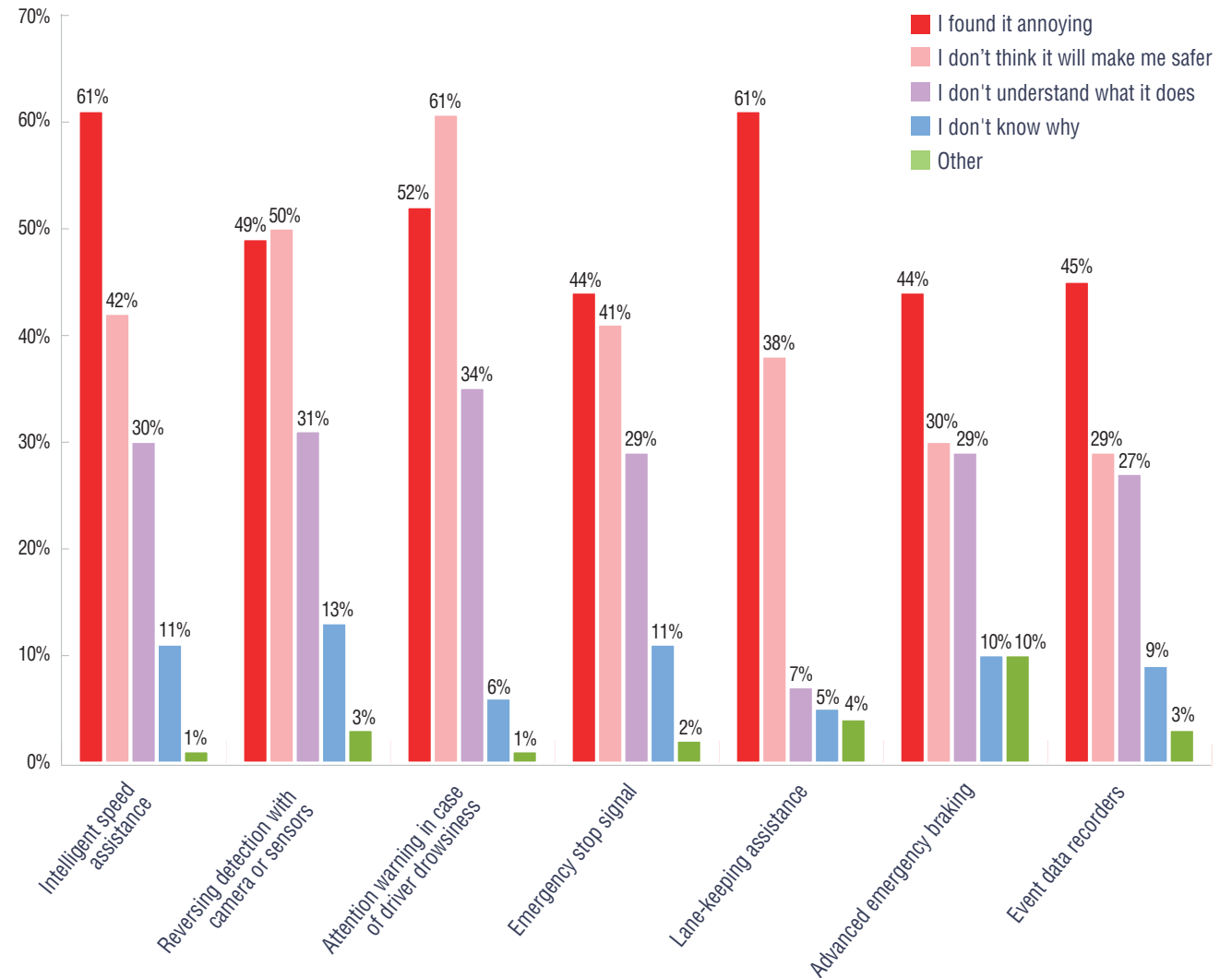
We found that when drivers are switching off safety features, it's largely because they find them annoying. This correlates with reports from the European Transport Safety Council (ETSC), which has criticised intelligent speed assistance (ISA) for having an audible warning rather than an active intervention (reducing the vehicle speed), on the grounds that drivers would find it irritating and therefore would be more likely to switch it off.<sup>10</sup>

**47%**  
of male drivers have switched off safety features in their car, compared with 35% of women



10. <https://etsc.eu/opinion-will-intelligent-speed-assistance-isa-live-up-to-its-promise/>

### Q4b. Why did you switch off each safety feature?

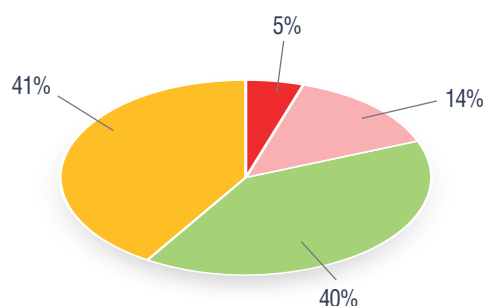


In question 5, we asked drivers whether they understand what the different safety features do.

Overall, most drivers (95%) said they understand – at least to some extent – the function of the safety features in their vehicle. However, it is again worrying to see that a much smaller percentage (41%) understand what all the safety features do.

The responses to questions 3, 4 and 5 clearly show that many drivers do not fully understand the safety benefits of the technology in their vehicles.

**Q5. Do you understand what all these safety features do?**



- No, none of them
- Yes, a few of them
- Yes, most of them
- Yes, all of them

### Intelligent Speed Assistance

**Intelligent Speed Assistance (ISA) helps a driver keep within speed limits by warning when the limit is reached and/or by reducing the vehicle's speed:**

1. The car receives information about the speed limit from a digital road map.
2. The speed limit is displayed on the dashboard.
3. The system helps the driver not to speed when the speed limit is reached.
4. The driver can override the system by pushing harder on the accelerator.

In 2014, research carried out on behalf of Highways England (now National Highways) concluded that one in seven (14%) fatal crashes on England's Strategic Road Network (motorways and A roads) could have been prevented if advisory ISA was fitted in all vehicles.<sup>11</sup> There is also evidence that speed limiting technology increases compliance with speed limits. For example, the Transport for London ISA bus trials found that all buses fitted with ISA remained within the speed limit 97–99% of the time.<sup>12</sup>

ISA systems became mandatory for all new cars sold in the EU and Northern Ireland in July 2022.

11. TRL (2014) Study on fatal collisions on the SRN during 2014. <https://s3.eu-west-2.amazonaws.com/assets.highwaysengland.co.uk/Knowledge+Compendium/Towards+Zero+Study+on+fatal+collisions+on+the+SRN+during+2014.pdf>
12. Transport for London (2016) Successful trials prove effectiveness of speed limiting technology on buses. <https://tfl.gov.uk/info-for/media/press-releases/2016/march/successful-trials-prove-effectiveness-of-speed-limiting-technology-on-buses>



## Section 2 - Safety features

In question 6, we asked drivers what would encourage them to think twice about switching off safety features in their car.



Knowing that I'm safer on the road **65%**



Lower insurance premiums **49%**



Protecting my passengers if there's a crash **49%**



Less severe penalties if I am involved in a crash **37%**



None of the above **12%**

In comparison with question 1 (see page 4), where we see financial considerations like fuel economy being prioritised above safety, in question 6, safety appears to be a bigger consideration.

Two-thirds (65%) of drivers selected personal safety as a reason not to switch off safety features in their car, and around half (49%) would be encouraged by protecting their passengers in the event of a crash.

Lower insurance premiums and passenger protection were more popular choices for older drivers. More than half of all age groups aged 55 and older selected lower insurance premiums, and more than half of drivers aged 45 and older chose passenger protection.

# 65%



of drivers say personal safety is a reason not to switch off safety features in their car

### Lane-keeping assistance

**Lane-keeping assistance (LKA) helps drivers to stay in their lane by either turning the steering wheel or engaging the brakes on one side of the vehicle. It can help prevent a driver from drifting into the wrong lane if they are tired or distracted.**

Some LKA systems use infrared sensors to read road markings and determine vehicle position. Other systems use video cameras mounted in the rear-view mirror unit.

Research by TRL found that fitting LKA to passenger cars and light goods vehicles in the EU could prevent up to 3,500 deaths and 17,000 serious injuries.<sup>13</sup>

LKA systems became mandatory for all new cars sold in the EU and Northern Ireland in July 2022.

13. Visvikis, C., et al. (2008) Study on lane departure warning and lane change assistant systems: Final report, TRL Limited



## Section 3 - What safety features do drivers want in a new car?

In this section, we asked drivers to tell us about the safety features they would choose for a new car, whether they would be willing to pay more for them, and whether they would make them feel safer.

**In question 7, we asked drivers to select which safety features they would want on their next car.**

**76%** want reversing detection with cameras or sensors

**52%** want intelligent speed assistance

**55%** want attention warning in case of driver drowsiness

**46%** want lane-keeping assistance

**55%** want advanced emergency braking

**29%** want event data recorders

**53%** want emergency stop signal

**4%** don't want any of these safety features

Almost all (96%) drivers said they would want at least one of the safety features listed on their next car, and there was very little variation across different age groups on this.

Reversing detection was by far the most popular feature, chosen by more than three-quarters (76%) of drivers. Event data recorders were the least popular choice, which may reflect a lack of knowledge about the safety benefits (see question 9 on page 17) or concerns about data protection.\*

We saw a clear correlation with age for the different safety features, with consistent increases across all age groups for all features except driver drowsiness detection, which was most popular among 35-44-year-olds (60%).

Regional patterns were much less consistent. Although 99% of London drivers said they would like at least one of the features listed on their next car, they were less likely to select the individual safety features. The notable exception was a system to protect against driver drowsiness, which was selected by 70% of London drivers (compared with the national average of 55%).

\*According to the European Transport Safety Council (ETSC), the original reason for requiring event data recorders in all new vehicles was to "provide a data source to prevent future crashes." European legislation includes robust data privacy requirements for event data recorders. However, ETSC warns that the technical requirements are too strict and has called for time and location data to be made available to authorised parties such as collision investigators and safety researchers.<sup>14</sup>

14. <https://etsc.eu/car-black-boxes-will-be-virtually-useless-to-safety-researchers>

**96%** of drivers want at least one safety feature on their next car



## Section 3 - What safety features do drivers want in a new car?

In question 8, we asked if drivers would be willing to pay more for a car with safety features that protect people inside and outside the car.

**63%**   
of drivers would pay more for safety features to protect drivers and passengers

Most respondents said they were willing to pay more for safety features, with almost two-thirds (63%) of drivers willing to pay more for safety features to protect drivers and passengers. It's encouraging to see a willingness to protect other road users too: more than half (55%) of drivers said they would pay more for features to protect people outside their car, such as cyclists and pedestrians.

### Prioritising safety in a cost-of-living crisis

**It is encouraging to see so many drivers willing to pay more for safety features to protect themselves and other road users, even when their finances are being squeezed.**



Earlier research by Brake and AXA UK has revealed that many drivers could be compromising their safety in order to meet higher costs associated with driving and the ongoing cost-of-living crisis.<sup>15</sup>

At the time of writing (November 2023), inflation in the UK stood at 4.6% (down from 6.7% in September 2023, and a 41-year high of 11.1% in October 2022).<sup>16</sup> A survey by the Office for National Statistics found that in November 2023, 52% of adults in Britain reported an increase in their cost of living compared with the previous month.<sup>17</sup>

15. Brake (2023) Brake and AXA UK survey reports: How the cost-of-living crisis affects road safety. [www.brake.org.uk/reports](http://www.brake.org.uk/reports)

16. House of Commons Library (2023) Rising cost of living in the UK. <https://commonslibrary.parliament.uk/>

17. Office for National Statistics (2023) Public opinions and social trends, Great Britain: 1 November to 12 November 2023. [www.ons.gov.uk](http://www.ons.gov.uk)

 **55%**   
of drivers would pay more for safety features to protect cyclists and pedestrians



## Section 3 - What safety features do drivers want in a new car?

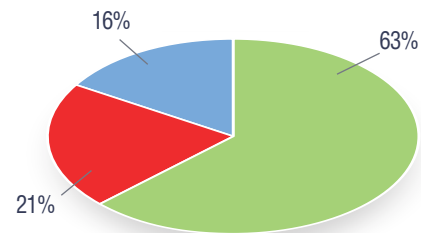
Not surprisingly, those in lower income groups were generally less willing to pay more for additional safety features. More than two-thirds of drivers in all income groups earning £50,000+ said they would pay more for features to make the driver and passengers safer; but this went down to 51% among those earning between £10,000 and £24,999, and 46% among those earning less than £10,000. Similarly, in all groups earning £50,000+, more than 60% said they would be willing to pay more for safety features to protect people outside the vehicle, compared with only 43% of those earning between £10,000 and £24,999.

Younger drivers appear to be more willing to pay for safety features – more than 70% of all groups aged 44 and under said they would pay more to protect the driver and passengers, compared with less than 60% of drivers aged 55 and older. Around two-thirds of all groups aged 44 and under would pay more to keep those outside the vehicle safer, compared with less than half of all those aged 55 and older.

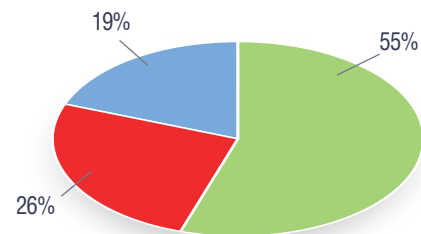
London drivers are the most likely to pay more for safety features – 83% said they would pay more for safety features protecting the driver and passengers, and 80% would pay more for safety features that protect people outside the vehicle.

### Q8. Would you be willing to pay more for a car with safety features that...

Protect people inside the car  
(e.g. driver and passengers)



Protect people outside the car  
(e.g. pedestrians and cyclists)



■ Yes ■ No ■ I don't know





## Section 3 - What safety features do drivers want in a new car?



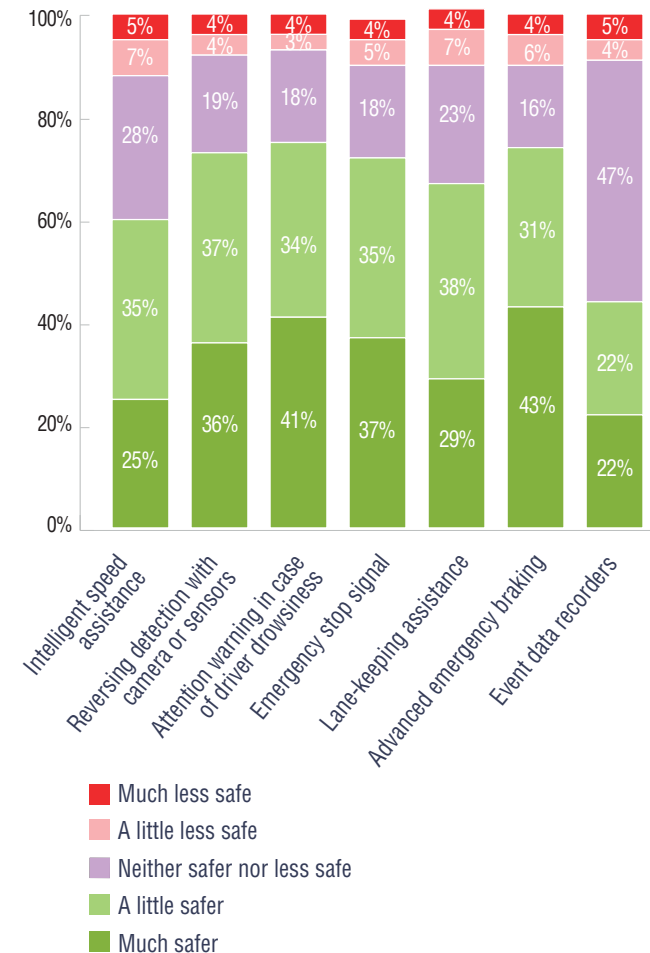
**In question 9, we asked drivers whether they thought the safety features would make them more or less safe.**

Overall, drivers confirmed they would feel safer with safety features fitted in their car. For nearly all of the safety features listed, a clear majority (70% or more) said they would feel safer if they had that feature fitted in their car. The one notable exception was event data recorders, which 47% of respondents said would make them feel neither safer nor less safe. Recent Brake research found that 27% of people surveyed would consider using event data recorders ('telematics') in their vehicle to improve safety.<sup>18</sup>

There was slightly higher scepticism among younger drivers: for example, a quarter (25%) of 17-24-year-olds and 30% of 25-34-year-olds said intelligent speed assistance would make them feel less safe, compared with the average across all age groups of 12%. However, in question 8, younger drivers stated that they would be more willing to pay for safety features.

18. Brake (2023) How the cost-of-living crisis affects road safety.  
[www.brake.org.uk/cost-of-living](http://www.brake.org.uk/cost-of-living).

**Q9. If you had these safety features fitted in your car, how do you think it would make you feel?**



## Section 4 - Safety regulation

In this section, we asked about safety regulations. We explored who should take responsibility for ensuring drivers understand the safety features in their car. We also asked drivers if they think the safety features discussed in this report should become mandatory for new vehicles in the UK, in line with new European regulations.

**In question 10, we asked who should take most responsibility for ensuring drivers understand the safety features in cars.**

**51%** said drivers

**27%** said vehicle manufacturers

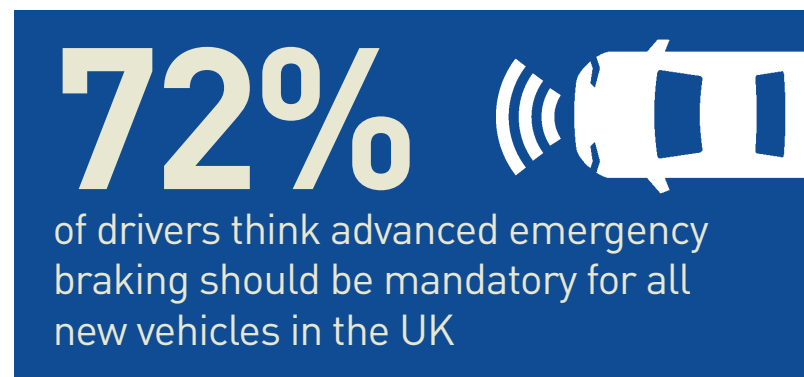
**14%** said vehicle sellers

**7%** said government

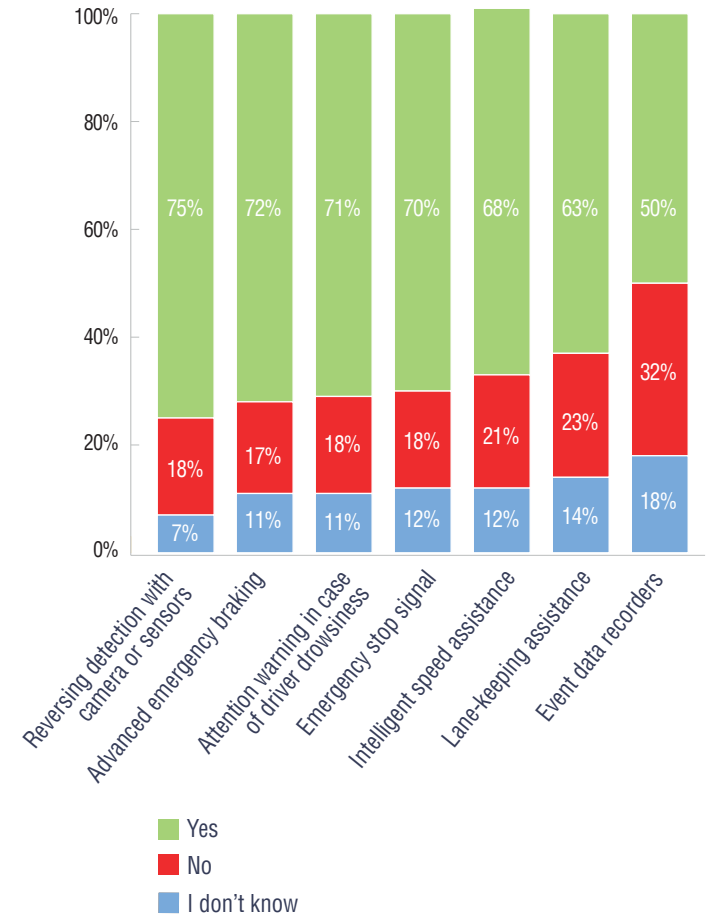
**2%** said insurers

**In question 11, we explored which safety features should be mandatory for all new vehicles in the UK.**

For most of the safety features listed, a clear majority of respondents supported the feature being made mandatory for new vehicles. This was fairly consistent across age, gender and region. One notable exception was London drivers, of whom 70% agreed that event data recorders should be mandatory in all new vehicles (compared with the national average of 50%).



**Q11. Do you think that these safety features should be mandatory for all new vehicles in the UK?**



### Advanced Emergency Braking

**Advanced Emergency Braking (AEB) senses the chance of a collision ahead and automatically brakes to mitigate or avoid it. AEB improves safety in two ways:**

1. Helps prevent crashes by identifying critical situations early and warning the driver.
2. Reduces crash severity by lowering the speed of collision and, in some cases, by preparing the vehicle and restraint systems for impact.

TRL research estimated that up to a third (34%) of road deaths on the Strategic Road Network (motorways) could have been prevented if AEB had been made mandatory on all vehicles.<sup>19</sup>

AEB systems became mandatory for all new cars sold in the EU and Northern Ireland in July 2022.

### Dev's Law

**Brake trustee and independent road safety campaigner Meera Naran MBE is calling for AEB to be fitted on all new vehicles following the death of her son on a smart motorway in 2018.**

**Dev Naran was just 8 years old when he died in a road traffic collision on the M6 near Birmingham. A lorry collided with the stationary car he was in.**

**Meera is lobbying the UK Government to mandate AEB technology to help reduce the risk of collisions in live lane breakdowns on any type of motorway or road. She believes AEB could have saved Dev's life.**

**[www.devslaw.co.uk](http://www.devslaw.co.uk)**

19. TRL (2014) McCarthy and Barrow, Towards Zero Study on fatal collisions on the SRN during 2014, Report 2264 for Highways England, 2017





## Section 5 - Vehicle safety technology and the future of driving



Brake and AXA UK driver survey reports  
Vehicle safety systems and the future of driving

**In question 12, we asked drivers what would make them support a future with fully self-driving vehicles\***

**68%** said improved safety

**51%** said lowered costs

**36%** said improved traffic flow

**27%** said reduced emissions

**19%** said better connected areas

\*Results show percentage of respondents who ranked each option first or second.

Improved safety was by far the most popular option for making drivers more willing to support a future with fully self-driving vehicles. Lowered costs came next, followed by improved traffic flow, reduced emissions and better connectivity.

Safety was a particular concern for drivers aged 65 or older, with a majority ranking this first, compared with around 40% of those aged 44 and younger.

Looking at the results by household income, those earning under £10,000 were the only group who ranked lowered costs (43%) higher than improved safety (40%).

**Q12. Which of the following would make you more likely to support a future with fully self-driving vehicles on our roads? Drivers were asked to rank their choices from 1 to 5, where 1 is top choice, and 5 is lowest choice**

	1	2	3	4	5
Improved safety	45%	23%	14%	11%	7%
Lowered costs	29%	22%	19%	16%	14%
Improved traffic flow	14%	22%	26%	20%	17%
Reduced emissions	8%	19%	22%	24%	28%
Better connected areas	5%	14%	19%	28%	34%

### The move towards autonomy

**It is encouraging to see so many drivers willing to support a future with self-driving vehicles – if the new technology also brings improved safety and reduced costs.**

We know that self-driving vehicles have the potential to reduce or even eliminate crashes where human error is a contributory factor, including crashes caused by speed, driver distraction and intoxication.

Although we are still some way from a world where fully autonomous vehicles are the norm on our streets, many of the safety features used by self-driving vehicles, including intelligent speed assistance, advanced emergency braking and lane-keeping assistance, are already widely available.

Our research shows that drivers are ready and willing to adopt new technology in their vehicles, and value the safety benefits. However, it is also clear that a lot of drivers either find the technology annoying or don't know or don't understand what safety technology they have in their own car, and as a result many are choosing to switch off lifesaving features. The shift to autonomy would ensure that safety features are enabled and improve road safety.

The recommendations that follow are in response to public appetite for safety, coupled with a lack of awareness of the safety benefits that assistive driving technology can bring.

The survey results underline the importance of safety for drivers – with more than four-fifths (82%) of respondents saying the safety rating is important to them when buying a new vehicle, and two-thirds (63%) saying they would pay more for a car with safety features. It is clear that people want themselves, their families and their communities to be safe on the roads.

We urge the Government to listen to this overwhelming call to make safety a key part of vehicle design and a key factor in future decisions about our roads. Technology is changing, the world is changing, so it is vital that safety is the primary factor in all decision making about the future of road travel.

To achieve this, we recommend that the Government commits to:

## 1. Publishing and implementing a Road Safety Strategic Framework similar to the EU's Road Safety Policy Framework

In 2022, 1,766 people were killed on UK roads, a 10% increase from 2021. The results from this survey show that people want to be safe on our roads. We firmly believe that everyone has a right to make safe journeys on our roads, and we must ensure that safety is at the heart of every decision made about the future of our roads and our vehicles.

The EU Road Safety Policy Framework sets out a series of recommendations on how to embed safety into every aspect of our roads. Key points from this include intelligent speed assistance, lane-keeping assistance and advanced emergency braking – three measures which approximately two-thirds of our respondents told us would make them feel safer (60%, 67% and 74% respectively).

We recommend that the Government follows this example to create a Road Safety Strategic Framework which places safety at the heart of its transport policy decisions to save people, their communities, and the planet from harm on our roads.

## 2. Ensuring safety is at the heart of the Automated Vehicles Bill

More than two-thirds (68%) of the drivers we surveyed said that improved safety would make them support a future with fully self-driving vehicles.

During the King's Speech, an Automated Vehicles Bill was identified as legislation that was to be implemented by this Government.

We welcome the announcement of this Bill that will help prepare the UK for changes in the landscape of driving over the next few years. This Bill will help ensure that technology is developed and adopted in

a safe and accessible manner, whilst also futureproofing our legislative system to adapt to the development of assisted and autonomous vehicles.

The next General Election will be called by January 2025. Given that technological advancements will happen globally at a fast rate, it is imperative that this Bill be passed by the Government prior to any General Election.

## 3. Raising awareness of the safety benefits of assistive driving technologies

Only a third (36%) of drivers surveyed were certain about what safety features they have in their car. A significant percentage of drivers don't understand the safety benefits of these features.

This demonstrates that further awareness is required to build understanding of what assistive driving systems are, while also building trust in the safety benefits they bring as we move towards a future with fully self-driving vehicles.

An educational campaign outlining the definitions, the features, and the research and evidence collated on how and why these features can make people safer on roads would greatly improve awareness and trust.

The survey results show a level of support for manufacturers to provide more information about vehicle safety features at the point of sale (27% of drivers surveyed said that vehicle manufacturers should take most responsibility for ensuring drivers understand the safety features in their cars, and 14% of drivers put the onus on vehicle sellers). We recommend all vehicle manufacturers are required to improve the promotion of safety features, and all new vehicle sellers are required to carry out an enhanced handover to explain safety features in new vehicles at the point of sale.

#### 4. Making safety features mandatory on all new vehicles in the UK

Our survey results show clear support for mandating safety features in new vehicles, including 72% of respondents in favour of automated emergency braking being mandatory, 68% in favour of intelligent speed assistance, and 63% in favour of lane keeping assistance. Approximately two-thirds of our respondents also told us these three features would make them feel safer.

Given this appetite for embedding safety features into our vehicles, and a clear body of evidence showing they can prevent road crashes and mitigate against death and catastrophic injury if a crash happens, we recommend the UK follows

the example of the General Safety Regulations introduced in Europe in July 2022 and regulates for safety features to be included in every new vehicle.

Our research also found that drivers in lower income groups are much less likely to be driving vehicles with lifesaving technology (see page 9). We consider it essential that safety is affordable and accessible for everyone, and making safety technology mandatory on all new vehicles would ensure that this is the case.

It has been estimated that implementing these safety features in all new vehicle models in Great Britain could prevent more than 1,700 deaths and 15,000 serious injuries over 16 years, and save up to £7bn in health costs.<sup>20,21</sup>

AXA UK is also calling for the terminology for this technology to be standardised in vehicles. Many different names are used by vehicle manufacturers, making it very difficult for consumers to understand which features are in their car.

20. <https://www.pacts.org.uk/wp-content/uploads/Vaccine-for-Vehicles.-Final-1.pdf>

21. GSR currently applies to vehicles produced in Northern Ireland, but not Britain, due to different EU regulatory standards applying in Northern Ireland.





## About the authors

### About Brake, the road safety charity

Brake is a national road safety charity, founded in 1995, that exists to stop deaths, serious injuries and pollution on roads, and to care for families bereaved and injured in road crashes. Brake campaigns for safe and healthy roads through seeking government policies and investment to end the carnage, and through projects that help communities, schools and employers promote safe and pollution-free streets locally. Brake delivers Road Safety Week, the UK's biggest road safety campaign.

Brake is the national provider of care and support to victims of road crashes and their families through the **National Road Victim Service**, helping families cope with the shock, turmoil and devastation that road crashes cause families across the UK every day.

For more information and to fundraise for the charity, go to [www.brake.org.uk](http://www.brake.org.uk)

To find out more about partnering with Brake to support our vital work caring for bereaved and injured road victims and campaigning for zero harm roads, for everyone, email [corporate@brake.org.uk](mailto:corporate@brake.org.uk) or go to [www.brake.org.uk/partnerships](http://www.brake.org.uk/partnerships)

### About AXA UK

AXA Insurance UK plc registered in England and Wales under registered number 078950 and authorised by the Prudential Regulation Authority and regulated by the Prudential Regulation Authority and the Financial Conduct Authority under Financial Conduct Authority registration number 202312. Registered office is 20 Gracechurch Street, London, EC3V 0BG

AXA UK is part of the AXA Group, a worldwide leader in insurance and asset management, with 149,000 employees serving 95 million clients in 50 countries. In 2021, IFRS revenues amounted to Euro 99.9 billion and underlying earnings to Euro 6.8 billion. AXA had Euro 1,051 billion in assets under management as of December 31, 2021.

In the UK & Ireland, AXA operates through a number of business units including: AXA Insurance, AXA Health and AXA Ireland. AXA UK & Ireland employs around 10,000 staff.

### About AXA UK and Brake's partnership

AXA UK is a Strategic Partner of Brake, meaning they help shape strategy, develop work and achieve maximum impact. Brake selects Strategic Partners who are fully aligned with the vision, campaign goals and work, and can commit to working closely, usually for multiple years. Strategic Partners bring expertise, knowledge and time, as well as funding. Find out more at [www.brake.org.uk/partners](http://www.brake.org.uk/partners)

