



Incidents and roadworks

A road user perspective
November 2016



Jeff Halliwell

Foreword

Transport Focus represents the interests of all users of England's motorways and major 'A' roads, the Strategic Road Network (SRN). In 2015 we published research looking at road users' needs and experiences of the SRN, and into road users' priorities for improvement to the network.

We found that road users wanted to see improvements in how roadworks are planned and carried out and wanted to see better management of unplanned delays. This was the case among car and van drivers, motorcyclists¹, and lorry drivers². Given this, we decided to delve deeper into how both roadworks and incidents impact on road users and understand how things could be made better.

Our key findings in relation to roadworks are:

- Road users want to see continued investment in our motorways and major 'A' roads. They accept that it will come with some short-term pain, but feel that this could be lessened if users' interests were more strongly considered when planning and implementing roadworks. For example, shorter lengths of roadworks, more visible work activity and better information helps road users to tolerate roadworks.
- That freight companies wish to be involved, as key clients of Highways England, in planning roadworks to minimise the impact on them.

And our key findings regarding incidents are:

- That road users are broadly sympathetic when there are accidents. However, they are still looking to Highways England to get the road open again more quickly and, if it is clearly a major incident, to take bold measures to get people on their way and protect the welfare

of those stuck in the queues.

- That road users have many examples of where their need for clear, accurate information is not currently being met, particularly once they are out on the road.

We have made a number of recommendations, summarised on page 17. The headlines are:

- That Highways England should put road users' needs at the heart of how it plans roadworks, whether they are needed to deliver a new road, upgrade what is there already or carry out routine maintenance. Thinking about the needs of road users must become part of Highways England's culture, alongside considerations of cost and time to complete the work.
- Highways England should work to reduce the time taken to reopen roads, while doing more for its customers who are trapped behind the problem. Doing more could be as simple as providing accurate information about how long people will be stuck, but it will also include welfare measures on behalf of those people with disabilities, and things like distributing water on particularly hot days.

Transport Focus will use these findings in our work with Highways England, the Department for Transport and others to help shape the management of incidents and roadworks to better meet the needs of road users.

Jeff Halliwell

Jeff Halliwell
Chair, Transport Focus

¹ <http://www.transportfocus.org.uk/research/publications/road-users-priorities-for-improvement-car-and-van-drivers-and-motorcyclists>

² <http://www.transportfocus.org.uk/research/publications/road-users-priorities-for-improvement-heavy-goods-vehicle-drivers>

Introduction

We wanted to find out about road users' experiences when there are incidents and roadworks, and to understand their views about what could be done to improve them.

We commissioned research among a wide range of users of England's motorways and major 'A' roads, known as the Strategic Road Network (SRN).

This involved:

- seven focus groups involving leisure users, business users and those travelling to or from work in cars, vans or light goods vehicles
- three focus groups with HGV drivers
- 10 individual interviews, speaking at depth with disabled road users, coach drivers and motorcyclists
- Four 'accompanied journeys' (where our researcher travelled with the driver on their trip)
- Six interviews speaking in depth with industry stakeholders (trade associations and logistics organisations).

The research covered a mix of gender, age, background and those who travelled on different days of the week, at various times of the day and for a variety of purposes.

Focus groups were held in:

- Manchester (commuters and HGV drivers)
- Croydon (M25) (leisure and business drivers)
- Birmingham (leisure and business drivers)
- Newcastle (HGV and leisure drivers)
- Bristol (HGV and leisure drivers).



Roadworks

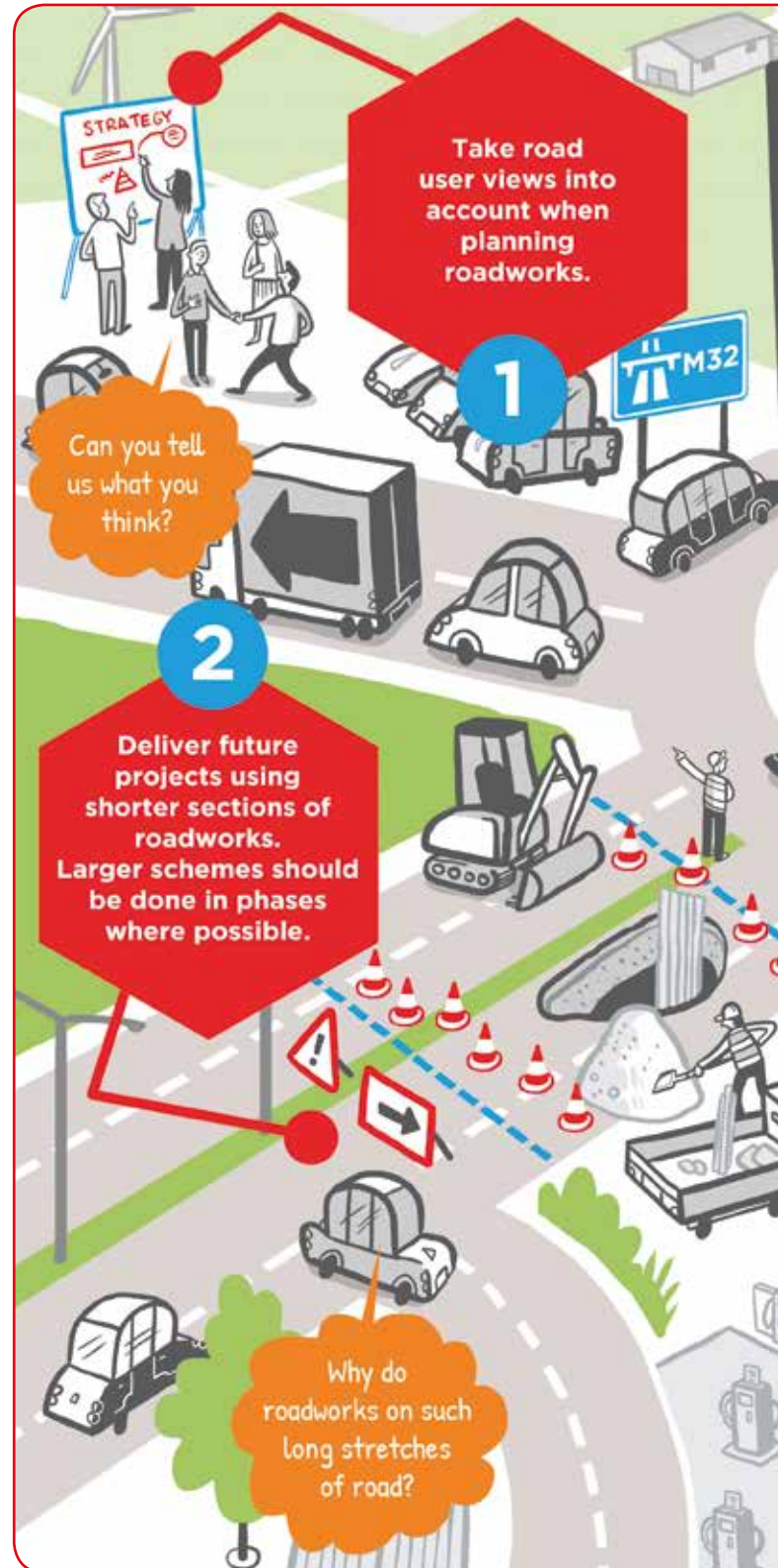
Road users told us that they want to see investment in motorways and major 'A' roads. They understand, and even accept, that it will bring short-term pain. However, they also told us that roadworks are the most frequent cause of the delays they experience, and that they should be organised with more consideration for those driving through them.

There is a strong perception that roadworks are planned and implemented for the convenience and cost efficiency of Highways England and its contractors, rather than for the convenience of motorists.

Those taking part in the research also felt that roadworks-related delays must have a wider cost to the economy, but did not feel this was considered (for example, wasted business hours) when works are planned. A number felt it was their 'road tax' paying for the repairs so they should be viewed more as the 'customer.'

Co-ordination between Highways England and Local Authorities is also perceived to be poor, with individual examples of frustrating situations recalled by those taking part in the research.

We asked when it is best to carry out roadworks in terms of time of year, day of the week and time of the day. This reveals interesting user preferences. Scheduling roadworks at times of lighter traffic (perceived to be during the school summer holidays) is preferred. The rationale is that it will inconvenience fewer people and allow Highways England to take advantage of longer daylight hours in which to work. There were exceptions mentioned: for example, roadworks should not disrupt large numbers of people heading for South West England summer holiday destinations.



Incidents and roadworks: the road users perspective

ROADWORKS



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Improve the accuracy and clarity of roadworks information for the public.

5



We're going to miss our flight

Where is junction 36?



4

Involve freight companies in how roadworks are planned, in particular when roads will be closed completely and diversions are involved.

3

Roadworks should be carried out by working 24/7 where possible. Give road users a clear explanation whenever this is not possible.

Why not work 24/7? Just get on with it!



RECOMMENDATION 1

That Highways England should develop a strategy to put road users' needs at the heart of how it plans roadworks, whether they are about delivering a new road, upgrading what is there already or carrying out routine maintenance. The needs of road users must be considered alongside issues of cost and time.

Road users taking part in the research were clear that they do not like very long sections of roadworks with seemingly endless cones, narrow lanes and speed cameras.

We specifically asked drivers if they would prefer one continuous 12-mile section of roadworks taking 12 months to complete, or three phases with four miles of roadworks at any one time and taking 18 months to complete the work.

Overwhelmingly, they opted for the latter. They accept that it would mean taking longer to get the whole job done. Drivers believe shorter stretches keeps traffic moving better, reduces concentration fatigue, and reduces the chances of there being accidents/vehicle breakdowns in the roadworks, often considered to be a cause of further delay.

The research suggests that recent practice of continuous roadworks for 15-20 miles is not what road users want.

"The M1 was coned off from the bottom of the M6 to Northampton with a 50 limit and that must be about 30 miles. They should do it on a rolling basis so they keep all the plant and just keep progressing up the motorway. It wouldn't seem so long if each section was only 10 miles."

Business, Midlands

RECOMMENDATION 2

Highways England should deliver future projects using shorter sections of roadworks than has been recent practice. Larger schemes should be carried out in phases where possible.



"You appreciate roadworks have to happen but you go miles before you see a cluster of blokes standing there having a fag and you think 'get on with it, do something'. You'd like to see a digger moving now and again but you don't."

Leisure, Midlands

A strong theme coming out of this research is that road users perceive there to be long stretches of roadworks with nothing apparently happening. This is particularly irritating as drivers feel the inconvenience, but see nothing going on from which they will benefit.

Road users told us that in return for suffering inconvenience they want to feel maximum effort is being made to get work completed as quickly as possible. Drivers told us they would like to see 24-hour working, seven days a week, wherever possible.

This was about Highways England *actually* getting the job done more quickly, but it was also about the company demonstrating a *desire* to cause as little inconvenience as possible for as little time as possible. Where cones remain but no work is happening Highways England should explain why in an open, transparent way.

"Why do roadworks on such long stretches of road and why not work 24/7 especially during the summer months? Where is the consideration of the impact and cost for UK PLC?"

Stakeholder

RECOMMENDATION 3

Highways England should plan for 24/7 working as the norm for new schemes, with a clear explanation to road users when this is not possible.



"What gets me most annoyed is when there's nobody working in the road. The M3 has been like that for goodness knows how long, there's miles and miles of cones and nobody working. I find that unbelievable"

Leisure, M25

"They should have 24-hour rolling shifts seven days a week with one shift taking over from another to keep the thing going and get the roads opened as quickly as possible."

Business, M25



The needs of the freight industry, with deliveries to make throughout the night, was highlighted in our research.

Freight industry representatives told us their members would like a closer relationship with Highways England so they can input to how roadworks are planned, and so help the company reduce the impact on their businesses.

When roadworks are taking place, they want accurate, timely information so they can plan their schedules, particularly when diversions are involved. There were concerns that diversion routes were often unsuitable for HGV drivers with low bridges, weight restrictions etc.

The freight sector is, in effect, one of Highways England's major clients. Our research suggests that the company needs to work more effectively with the sector to ensure that roadworks are planned with freight companies in mind, and that details about road closures are widely and accurately communicated early enough for businesses to plan alternative routes.

Concerns over accuracy of information about future roadworks is a 'known issue'. Transport Focus will continue to press Highways England to make major improvements in the accuracy and usefulness of information in this area.

"Roadworks are always bad news for freight and the authorities often overlook freight issues. Doing work at night can be a problem for freight and diversions can have major implications for operators who are unable to meet delivery deadlines."

Stakeholder



RECOMMENDATION 4

Highways England should actively involve freight companies in how roadworks are planned, in particular when roads will be closed completely and diversions are involved.

RECOMMENDATION 5

Highways England should significantly improve the accuracy and clarity of roadworks information in the public domain, whether provided through its own channels or through an 'open data' feed that others can use.

Road users tell us that they find driving through roadworks wearing, and that it calls for high levels of concentration. This appears to be because of a number of factors, such as narrow lanes, picking out temporary road markings, making sure you aren't speeding and (for regular users) being alert to changes in the layouts.

Road users generally understand why reduced speed limits are used in roadworks, acknowledging the dangers of speed to site workers. However, they questioned why speed limits are necessary if no work is taking place and therefore no workers are in danger.

"I can understand a 50 limit to protect workers but if there's no workers there why not put it back to 70?"

Business, Midlands

"Sometimes it is hard to tell where the lane lines are and as a motorcyclist you have to try and stay in the middle of the lane and sometimes it is hard to tell where that is."

Motorcyclist, North East

RECOMMENDATION 6

Highways England should set speed limits in roadworks no lower than is required to maintain safety, and should encourage compliance by explaining why a limit is required (i.e. more than just saying 'for safety reasons').

Road users told us that they want to see new approaches considered within roadworks. Based on the views of those taking part in the research, we ask:

- Could lanes in roadworks be made full width, but with fewer lanes open than normal?
- Would it help if the inside lane was 'lorries only'?
- Should large vehicles be banned from overtaking in roadworks?
- Why can't the speed limit be raised overnight if no workers are at the site?

"At night time, if they are not working on it, then just leave it at 70 miles an hour. Many a motorway if you are driving at night and there is not a person in sight, we still have to drive at 50 and it is frustrating especially when no one is on it."

HGV, North West



Incidents

Almost all of those taking part in our research were regular users of motorways and major 'A' roads and had experienced delays caused by incidents. Although encountered less often, incidents are often regarded as more disruptive than roadworks.

They told us that, in the main, they are tolerant and understand when caught up in delays caused by accidents. While not pleased to be delayed, they empathise with those involved. They also realise that incidents can happen anywhere, at any time and can be challenging for the authorities to deal with.

Nevertheless, road users want to see improvements in the way incidents are dealt with, in particular getting roads open again as quickly as possible. Some perceive that this takes longer than necessary, which they attribute to a cautious approach to health and safety.

"When you see flashing lights and the emergency services I just think of the people affected and hope nobody's hurt. I sympathise with them and don't feel so angry about the delay."

Leisure, M25



Incidents and roadworks:
road users perspective

INCIDENTS and INFORMATION

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7

Reopen roads quickly after an incident, to 'free' road users who are stuck in stationary traffic and prevent vehicles from joining the back of a long queue.

9

Improve roadside communication about forthcoming and current roadworks. Tell drivers when, how long, what is being done and how they will be affected.

"If it's a catastrophic thing and it's clear it won't be cleared for ages they have to start changing the lanes around, allowing people to turn round and come back up slip roads, that sort of thing, whatever it takes to get people off the motorway."

Business, M25

Where major incidents occur involving long road closures, road users felt that the welfare of those trapped in stationary traffic should be a key priority, with measures taken to 'free' them as quickly as possible. When an incident is clearly major, road users want decisive and bold steps to be taken that will prevent users being stuck for many hours in a queue.

In particular, the welfare of those with disabilities, pregnant women and young children can become acute quickly. Our interviews with disabled road users revealed that their needs can increase more quickly in such circumstances.

While we were asking road users about incidents, Highways England Traffic Officers and their role in managing traffic was mentioned. Those who had some knowledge of them had mixed views about their effectiveness. However some people recognised their usefulness to motorists in sometimes difficult circumstances.

"I can only drive for a maximum of 45 to 60 minutes so I need to take frequent breaks. I try to avoid peak time and need to know where roadworks are so I always check for any delays before I set out."

Driver with a disability, M25

RECOMMENDATION 7

Highways England should further develop its CLEAR strategy (see below) to reopen roads quickly after an incident, to 'free' road users who are stuck in stationary traffic and prevent vehicles from joining the back of a long queue.

CLEAR (collision, lead, evaluate, act and reopen) is an initiative launched by the Department for Transport (DfT) to bring together the police, Highways England, ambulance, fire services, and related departments to improve the handling of motorway incidents.

Road users felt that traffic should be prevented from joining the back of a queue from which it cannot escape. At the time of the research there had recently been significant delays on the M6 in the West Midlands involving some road users being stuck in trapped traffic for several hours. Transport Focus has raised a number of nationally-applicable questions as a result.

- How soon after an incident does Highways England, working with the police, expect to help road users avoid the disruption by physically preventing more vehicles passing the last junction?
- How soon after the start of an incident does Highways England expect to start evacuating stranded road users, whether through a managed return to the previous junction, access to the opposite carriageway or some other method?
- What are the arrangements for distribution of welfare-related essentials like food and drink when road users are stranded for long periods? Had this incident happened in sub-zero temperatures, or during a heat-wave, what would Highways England have done differently?
- How does Highways England safeguard the welfare of disabled road users and those with time-critical medical conditions?
- Does Highways England consider temporary repairs to get traffic moving again as quickly as possible (for example in time for a morning or evening peak), with full repairs following later on a planned basis?
- While accident investigation is ongoing, does Highways England get access to the site to determine what repairs are required – enabling the mobilisation of labour and materials so work can start the moment police work finishes?

Regular 'peak-hour' delays

Road users told us that they are aware of regular delays caused by 'peak-hour' traffic on specific parts of the road network. They seem generally resigned to these types of delay as being the 'norm' and build in contingency travel time as a result. They expect peak-time delays to become worse over time.

Information

Our research revealed a number of important things about information, many relevant to both roadworks and incidents.

Journey planning for SRN journeys appears to be relatively unusual, except if making a long or unfamiliar trip. Many road users are therefore not being exposed to information in advance about roadworks or incidents that could affect them.

If our participants did plan a journey, they regarded Google Maps as the trusted 'go to' website.

Those using Satnavs linked to real-time information about delays and incidents were positive about their role in helping to avoid jams, while those with basic devices saw no benefit.

Satnav use was low among the lorry drivers in our research. This was because many knew their route already, some employers actively discourage their use because of distraction risk, and because there are perceived to be few products with reliable 'low bridge' and other data specific to their needs.

Unless habits change dramatically, this suggests that many people will continue to encounter incidents and roadworks that they are not expecting. And it points to an ongoing need for Highways England to communicate with those who are already affected by roadworks or an incident, or who are about to be.

Providing accurate, timely and useful information online, whether directly from Traffic England or via a website that uses Highways England's data, is important for those able to access it safely and legally during a journey.

Social media has a role to play, particularly if travelling with passengers, as does radio and television travel news. Also, every opportunity should be taken to exploit new technologies that can 'push' information to vehicles to help drivers make informed choices. **However, it appears that Highways England needs to improve communications with drivers in the short-term at the roadside, although we recognise that this will not be easy to achieve.**

"This is the most useful sign because it gives an indication of whether the road is clear or not in a way that is easy to pick up quickly without needing to read anything."

Coach driver, M25



Day to day

In normal circumstances, or when there are minor delays caused by congestion or roadworks, road users told us that electronic signs giving a junction number, place name, journey time and distance are the most helpful at giving a 'feel' for how good the journey will be.

Significant delays

If there are significant delays, whether caused by an incident or roadworks, drivers have fairly straightforward information needs. They want signs to help them understand how long they are likely to be delayed, followed by the cause.

We found that electronic signs showing delays between two numbered junctions are not as helpful as those with place names as well. Similarly, signs saying 'long delays' are seen as unhelpful – long will mean different things to different people.



For those who are stuck

For those in stationary traffic, particularly if the road ahead is closed, getting an estimate for when traffic will start moving is key. Electronic messages reading 'incident – 40mph' when people have not moved for an hour is not helpful. They want to know how long they are likely to be delayed so that they are able to inform others of their expected arrival, or to make alternative arrangements (especially for commuter and business drivers).

"Even if it's just someone on a motorbike or walking through the traffic with a board so you're not sitting there trying to keep warm with your petrol going down and starting to panic."

Business, M25

Advance notice about roadworks

Road users felt that 'advance notice' roadworks information is important at the roadside, particularly for drivers who use a particular road regularly. Key requirements were felt to be:

- start dates and duration
- how I will be affected
- what is being done
- how I will benefit

A single small yellow sign, as currently used, does not fully address these needs. The information they contain is difficult to absorb at speed and it can be unclear, as in the example below, whether they apply to the main carriageway, the slip road or both. Road users want clear, simple information that will help them plan their journeys better.



Accuracy

Many road users told us they regularly encounter inaccurate information, particularly on electronic signs and in relation to variable speed limits. Examples including 'fog' when there is no apparent fog, 'accident' or 'debris in road' when none can be seen, and speed limits when the road seems to be clear were all mentioned in our focus groups.

The perception of inaccurate speed limits may relate to automatic triggering of restrictions designed to smooth the traffic flow. Road users feel the limits are set too low for the prevailing conditions and, because they never see a cause, they don't believe it was necessary in the first place. This is likely to undermine trust and reduce compliance.

"It's a problem when warning signs aren't turned off properly because you lose your confidence and trust in them. Things evolve very quickly on motorways so from a driver's point of view it only takes a few incidents for you to lose confidence."

Leisure, Midlands

"One of the worst things is when they put 40 miles an hour signs up and everyone hits the brakes and the traffic tails back and when you get through it you think 'what was that all about?'"

Business, Midlands

"Sometimes I don't know where the sign is referring to so I immediately panic when I see a sign but can't place if that is on my journey or not and whether it will affect me. Junction numbers mean nothing to me."

Leisure, North East

Clarity

Messages on electronic signs are confusing to some. For example, a road number without the geographical context – e.g. queue after A505. Where is the A505? On the approach to junctions, some messages are not clear whether they apply to the main carriageway or the slip road. A message saying "road closed at ..." without help to understand the impact and what to do instead is only partially useful.

RECOMMENDATION 8

Highways England should communicate more effectively with drivers 'in the moment', by:

- rolling out travel-time messaging to as many electronic signs as possible using the junction number, place name, journey time and distance format
- significantly improving the effectiveness of electronic signs at meeting drivers' core information needs:
 - how long the delay will be
 - a succinct explanation of the cause
 - if a road ahead is closed completely – what to do instead
 - key to success will be using 'everyday' language.
- communicating with road users stuck in stationary traffic, including bespoke messages on relevant electronic signs or involving staff, perhaps Traffic Officers, to provide information on the ground.



RECOMMENDATION 9

Highways England should develop a strategy to significantly improve communications at the roadside about forthcoming and current roadworks. The objective should be to allow drivers affected, or likely to be affected, to quickly assimilate the following:

- when it is happening and for how long
- how I will be affected
- what is being done
- how I will benefit
- if it's a lengthy project, how much time is left before completion.

"I would be more patient if they said 'we're investing in changing this road from three lanes to four' because you could see it will improve your journey in the long term so I would feel better about knowing the work will improve my journey times."

Leisure, M25

Driving standards, knowledge and awareness

Many road users in our focus groups had strong views about other drivers' poor driving and knowledge of the Highway Code. This was seen as a contributing factor to their general user experience, the cause of accidents and the experience of driving through long stretches of roadworks.

The behaviours that cause most concern are lane-hogging, using mobile devices, tailgating, ignoring mandatory signs, lane hopping in slow moving traffic, cutting in at the last minute and speeding. Many asked whether the current tuition and testing processes are adequate to deal with the demands of driving on modern roads. For example, our research suggests that understanding of the 'red X' often found on motorway gantries is not universal.

They would like to see a zero-tolerance approach to these transgressions and stricter enforcement. They mentioned that awareness programmes, driver education, refresher courses, or even re-testing could be beneficial (illustrated by generally positive attitudes from those in our research who had attended a speed awareness course).

Smart motorways

During our research smart motorways were mentioned by some respondents. Some had useful insight into why they were being introduced and their help in smoothing traffic flows and reducing congestion. However some respondents had concerns that drivers would become fixated on ever-changing mandatory speed limit

signs to the detriment of road safety. Other concerns are around the lack of a hard shoulder in an emergency and what they need to do in the event of a breakdown.

Drivers with disabilities are concerned about what to do if they break down on a smart motorway and cannot safely exit their vehicle.

"Warning signs are there for a purpose but what frustrates me is when people still blast past you at 70, 80, 90 miles an hour because they could cause an accident I will get stuck in."

Business, Midlands

"Some people sit in the middle lane and others pull into your braking space. There are cameras on the motorways so why don't the police pick these drivers up? I want to see more training."

Business, Midlands



Summary of recommendations

RECOMMENDATION 1

That Highways England should develop a strategy to put road users' needs at the heart of how it plans roadworks, whether they are about delivering a new road, upgrading what is there already or carrying out routine maintenance. The needs of road users must be considered alongside issues of cost and time.

RECOMMENDATION 2

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