

Road information:

the user perspective June 2019







Road information: the user perspective

Foreword

This research explores how road users access and use information at all stages of a journey on England's motorways and major 'A' roads, the Strategic Road Network (SRN) managed by Highways England on behalf of the Government. Research previously undertaken by Transport Focus has covered road users' views about information in the context of different aspects of a road journey. However, this is the first study focusing specifically on road user information requirements in the broadest sense.

Transport Focus, Highways England and the Office of Rail and Road have worked in partnership to understand:

- What sources of road-related information are used currently, and how and when they are accessed?
- What information needs are not currently being met, and how any gaps might be filled?
- What the future looks like in terms of need for and access to information, and what Highways England's future role in the provision of information might be?

The research showed that while road users are generally satisfied with information provided across Highways England's network, they are

less happy with that provided on major 'A' roads than they are with that provided on motorways. Also, they felt that the information provided at times of unexpected disruption was not always timely, accurate or useful.

As part of a wider campaign to improve road user information, Transport Focus will engage with Highways England and the Office of Rail and Road in its work to ensure that the insight gained from this study is used to drive improvements in the provision of information to road users.

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Key findings

Contextual factors are important

Several contextual factors influence how and when information is used by road users when they plan and make journeys. These factors include the frequency with which the journey is made, the length of the journey and whether the journey is time-critical or not. The vehicle used and the journey purpose are also important; that is, whether someone is commuting, engaged in business travel or pursuing a leisure activity.

While participants in the research were divided by driver 'type' mentioned above, many were able to think about and discuss the issue from different perspectives. For example, those who were recruited to discuss commuting journeys also sometimes drove for leisure purposes.

"It depends if you're in a rush, doesn't it. If you're just going somewhere social, then you're not too fussed."

Leisure Driver, 21-40, Newcastle

"I'll go on the computer and have a look on Google Maps... Especially if it's somewhere I've not been before."

Professional Driver - Large Vehicles, Manchester

"I'll use Waze if I'm not sure of the route but if I know the roads, I won't bother obviously."

Business driver, 21-40, Notts

Information at different journey stages

Before the journey - planning

Many participants in this research reported planning in advance for some types of journey, mainly those which were unfamiliar or time-critical. Reasons for planning a journey fell into two main categories: either to check the route before travelling or to find out about potential disruption. There was some variation in how far in advance the planning occurs; the typical range being from the night before to immediately before setting off – although Transport Focus is aware that freight users and coach operators will plan significantly further ahead. For road users generally, information about potential disruption is typically sought closer to departure.

"If I'm going a long way, I'll go on Google Maps and put my destination in. It shows the best route and it shows the traffic as well."

Leisure Driver, Nottingham, 65+

Some types of road user indicated they have specific reasons to look for information before making a journey. For example, those with disabilities might need to check where services are located on their route. Similarly, those making journeys on motorbikes often need to plan more carefully as they are less able to use technology to check directions while travelling.

"I always plan because for the A roads and motorways I need to know what the services are. With MS, if I need to go to the toilet I've got about a minute to find a toilet."

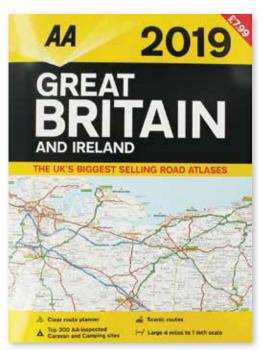
Depth, Disabled, Slough

"I use Google Maps before. I can't use anything during; I can only prepare for what's happening currently.

Motorcyclists, 21-40, Norwich

Digital mapping applications such as Google and Apple maps were frequently mentioned as sources of information used before making journeys. The perceived benefits of these systems relate to their familiarity, reliability and the ability to synchronise with other devices and in-vehicle systems which could be used while making journeys. Many also mentioned Waze as having similar benefits of accuracy and the ability to connect to in-car systems, but also a sense of shared community endeavour. Paper maps or atlases, local television or radio are used for planning a journey much less often, and then generally only by certain types of road user, most typically those who are older, e.g. leisure drivers over 60 years of age.





Few used social media as a source of journey planning information and those who did were often professional drivers who sometimes check specific forums. Those in the logistics and coach sector have access to journey planning tools designed specifically with them in mind, such as Microlise, Inrix and Paragon. The Highways England app and website are used by some in the logistics and coach sector, but much less so by general road users.

"We're finding that the Highways Agency aren't updating it enough to know what's going on."

Professional drivers - large vehicles, 41+, Bristol

"Sometimes I go on the Highways Agency to see if the road's closed. It's not that user friendly. It's everywhere and you've got to zero in on where you're going.'

Leisure drivers, 35-60, Manchester

"We've got Microlise. Work provide it."

Professional drivers - large vehicles, 41+, Bristol

"If you take our current service to our members, our NRIX service... NRIX take the data and turn it into a journalistic form, as they do for the BBC-it's a similar sort of approach. We currently get that out in email form and as a web page as well."

Stakeholder, Freight

"Google maps has got to have ten out of ten. Because it's an actual oracle in your pocket

Motorcyclist, Notts

"In the morning I can get up and just put up in Google Maps where I've got to be and it calculates all the times and distances so I know when I've got to leave."

Business driver, 31-40, Bournemouth



During the journey

During the research a distinction was made between 'pull information' (sought out by the road user) and 'push information' (delivered without the road user initiating it). For example, that on electronic and static signs was characterised as 'push information' while traffic updates through a satellite navigation device were characterised as 'pull information' (although once switched on, it becomes 'push information').

Road users said that the amount and quality of 'push information' they received while travelling was generally acceptable on most motorways and major 'A' roads when traffic was following smoothly. They were, however, less positive about the information on some major 'A' roads, and about the quality of information provided at times of disruption on both motorways and major 'A' roads. Road users value information during disruption because it gives them a greater sense of choice or control; it acts as a trigger to seek further information and to take action, such as amending their route.

"I'd listen to the local radio, for hold ups. It's very useful. They tell you where the hold-ups are so you can adjust your journey."

Depth, physical disability

"I put Heart Radio on when I was stuck in traffic, to listen for updates."

Professional drivers - large vehicles, 41+, Bristol

Other sources of 'push information' are often used to complement on-road signage about disruption. For example, local news reports, or radio traffic updates were sometimes considered useful, although their relative lack of frequency made this a less useful source than others. There was only limited awareness of Highways England's Twitter feeds. As with journey planning, those in the logistics and coach sector used slightly different sources of information. These road users also noted that they received reliable information, particularly at times of disruption, via police updates and through their employer's control centre.

"We have a separate Control Team that are passing messages to drivers on the real-time conditions that they're going to face now. They'll, say, call a driver as he's going into Bristol and say oh, there's an accident on the motorway between this junction and this junction, and you'd be better off diverting via ... '

Stakeholder, Coach

"I know that, over at our control towers...they feed back information to drivers all of the time. They use mobile phones and in-truck audio systems. And they also use on-board cameras, as well as position-finders and that kind of thing."

Stakeholder, Logistics

In general, satellite navigation and app-based systems are used as 'pull' sources of information while travelling. However the decision to activate these systems, or not, is dependent on the type of road user and/or journey being made. Key triggers to activate 'pull' systems include whether the journey is familiar to the road user, if it is timecritical, or if it appears that there is going to be disruption.

"I think you feel more in control about things if you're actively seeking the information rather than dependent on road signs and things."

Business Drivers, 41+, Norwich

After the journey

A minority of road users involved in this research said they feed back their experiences or looked to find out later what caused the disruption they experienced. Despite general lack of interest in seeking out information after making a journey, some road users reported contacting friends and families, colleagues or their firm's control centre to warn others about disruption. For those driving as part of their job, evidence of delays can be important to, for example, explain late delivery to a client.

Despite general ambivalence towards feeding back to others about their experience, some road users could see the benefit of clarity about which organisation manages particular roads. For those users, adding branding to signs would make it clear who they should go to in the event of wanting to report a problem and would allow them to more effectively hold the relevant body to account.

"I never hit the button on Google Maps [to give feedback], but maybe l

Commuters, 41+, Bristol

"If I'm half an hour late for a meeting, I need to be able to ideally let my customer know in advance, and to be able to explain it when I get there."

Business driver, 21-40, Notts



What do road users want to see improved?

While road users were broadly happy with the information on motorways when traffic is flowing as expected, almost nobody said there was currently too much information provided. Road users identified a relative lack of information on some major 'A' roads, including that there is less electronic signage and less sense of knowing where you are. Poorly signed diversion routes were also cited as a cause of frustration.

"The signs don't tell you where you are Lon major A roads in the local area]. I'd like to see more signs about which road you're on."

Leisure drivers, 61+, Bristol

SO Free recovery

Average speed check

The key area of dissatisfaction concerns information at times of unexpected disruption. For road users, information in these circumstances is often perceived to be inaccurate or out-of-date, and insufficient or lacking in detail. Road users say that lack of information in these situations makes them feel they have no control over their journey; that they are unable to make an informed choice to modify their plans. Moreover, where information appears to be out-of-date (for example, warning about an obstruction that is no longer there), or where information from different sources is inconsistent, it causes frustration and can lead to distrust in information more generally. Some road users suggested that there are safety implications, as the perceived need to verify information results in people searching for more details while driving.

"If the sign tells me the road's closed and Google Maps says it's not, I'm going down that road."

Business driver, 31-40, Bournemouth

"What was so annoying was there was no information about why the road was closed."

Professional drivers, Bristol

"They should take into account that they need a diversion that's OK for lorries [i.e. low bridges], but they don't always."

Professional drivers - large vehicles, 41+, Bristol

"It might say beware accident and it's happened three or four days ago."

Business driver, 50-70, Brighton

Road users indicate that being given additional detail about the cause of delay can reduce frustration and potentially increase goodwill towards those managing the road. They mentioned that providing additional explanation is useful as it assists in making informed choices, empowering road users to take control. Those involved in the research gave specific examples of when additional information could be useful; for instance, explaining why there are roadworks but no work is going on, or explaining that delays have arisen because of a serious accident (which road users feel would lead to greater tolerance of the situation).

"It said there was heavy traffic but didn't say why. There were signs saying quenes are likely. It turned out there was a three-way traffic light coming off the A road. If I'd known that, Id have gone another route."

Depth, Disabled, Slough

For professional drivers and stakeholders, a key frustration with current information is perceived lack of tailoring to their needs. For example, some felt there was not enough information about whether diversions are suitable for those driving large vehicles. Stakeholders also had concerns about the timeliness of Highways England's information, saying that they would prefer more notice of planned roadworks and other likely delays.

"Advance information is useful, because it means you can avoid and plan around problems. Our members do know what they're doing in terms of where they're going. It's highly planned but there's also an element of local knowledge."

Stakeholder, Logistics

Highways England's role

Highways England's role in providing information tended not to be 'top of mind' for road users; they thought about the organisation more in terms of its responsibility for the road itself. Road users tended to be largely unaware of Highways England's online information and social media offering.

In contrast, those representing stakeholders were much more likely to know about the information available from Highways England and to make use of it. Several organisations involved in the distribution of roads information said that they use Highways England's National Traffic Information Service and consider this data to be very important to their work.

"They're [HE] massively important.
There could be catastrophic effects
otherwise. Companies could lose millions
(mainly due to fuel costs being stuck in
traffic for hours). We do 7 or 8 miles
to the gallon. And that's bad for the
environment."

Stakeholder, freight and logistics



Future of road information

As part of this research, road users and stakeholders were asked what they felt the future of road information could entail.

In general, road users find it difficult to conceptualise the future of road information. However, views focus primarily on the changes connected/self-driving cars and geo-locational technology might bring. Some road users can conceive of a future in which information is specifically tailored to the journey being made and is delivered directly to the vehicle.

"They could have an app linked by Blue Tooth to your car, that cuts into your radio station or pops up on the onscreen display... It'll be like sitting in a space shuffle. You'll press a buffon and it'll tell you your best route."

Depth, physical disability

Along with information tailored to their needs, road users would welcome information which is less contradictory, more 'joined-up' and ideally originating from a single trustworthy source. While road users want to be able to get information from a variety of channels and 'customised' to their needs, they feel the data everybody uses should come from one trusted central source.

Stakeholder groups predicted similar developments in road information, though they were more likely to

have deeper insight into potential future developments. Stakeholders generally predict a decline in the use of dashboard satellite navigation and mobile devices in favour of in-vehicle systems. They also predict an increase in the use of voice-controlled navigation systems and a greater reliance on social media and crowd-sourced data for information. Stakeholders also see challenges ahead; in particular those related to the collection of large amounts of information and its distribution in a timely manner.

"Things like black boxes that you have on cars that make the insurance cheaper. I visualise a time when these are going to be built into cars and they'll send speed information, positional information and traffic volume information live back from thousands of different vehicles doing different things constantly. It's one of those situations where the technology is available, but can that amount of data actually be handled in a way that's worthwhile?"

Stakeholder, Car Manufacturing



New apps under development aim to provide in-car information in real time about roadworks and speed restrictions or lane closures well before drivers cannot take an alternative route.

Conclusions and recommendations

When traffic is flowing freely, road users are broadly content with the information they are getting when using a road managed by Highways England, although motorways were felt to be better than major 'A' roads - something borne out in the Transport Focus Strategic Roads User Survey (SRUS).

The key area of dissatisfaction with information is when there is disruption to a journey, either because of roadworks or an accident. The main issues are: timeliness/ accuracy of information; lack of detail and explanation; poorly signed diversions; lack of advance warning; and insufficient provision of sector-specific information.

In terms of Highways England's role in information provision, most road users had given this little thought; but when they did, there was a clear sense of wanting the accuracy, timeliness and usefulness of information to improve, with a strong implication that Highways England has a role to play because it is 'their road'. When thinking about a future where there may be self-driving cars, road users wanted a trustworthy single source of the truth, even if they still got the information from their app of choice.

On the basis of these research findings Transport Focus makes the following recommendations:

Recommendation 3:

Highways England should consider whether its longterm role is that of the trusted supplier of high-quality 'single source of the truth' data to third parties who then provide the interface - push and pull - with road users. Also, Highways England should consider partnering with a third party to provide its branded online and other digital information tools.

Recommendation 4:

Highways England should look to increase road users' awareness of when they are on a road that it manages, working with satellite navigation and mapping providers, and introducing Highways England branding to roadside signage in a safe, cost-effective wav.

Recommendation 1:

Highways England should seek to increase satisfaction with information among those using its 'A' roads - where SRUS shows the proportion who are very satisfied with information on electronic message signs at 27 percent is appreciably lower than on motorways at 36 percent. For information on permanent signs it is 32 percent very satisfied and motorways 40 percent. This should include examining how to meet users' desire for better information at times of disruption, potentially through provision of more electronic message signs.

Recommendation 2:

While recognising that several initiatives are in hand, Highways England should examine what more it can do to meet road users' desire for information that puts them in control when journeys are disrupted. This should focus on:

- Increased accuracy and timeliness
- Facilitating informed choice
- · Greater driver confidence when diverted off a strategic road
- Provision of warnings further in advance
- Improving information specific to certain user groups (e.g. lorry drivers)

How Transport Focus carried out the research

Transport Focus commissioned the independent research agency Define to engage with road users about the information they use when making journeys on England's motorways and major 'A' roads, and to explore where their information needs are not being met.

In February 2019 Define spoke to more than 130 road users; undertaking 66 'trios' (mini focus-groups involving three people), four focus groups, and seven in-depth interviews with a range of road users.

Groups were divided between those where road users generally travelled for commuting, business or leisure reasons, and those with professional drivers and motorcyclists. In-depth interviews were undertaken with drivers who had passed their driving test within the last two years, older drivers, and those drivers with a disability.

Define also conducted 15 in-depth telephone interviews with those representing different stakeholder groups including the logistics and coach sectors, providers of road information, and vehicle manufacturers.

Contact Transport Focus

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Transport Focus is the operating name of the Passengers' Council