



# Automated Enforcement

## A public attitude survey

Lewis Hill, Ajit Chauhan and Ilya Cereso  
Ipsos MORI Social Research Institute  
July 2018

**Ipsos MORI**

The Royal Automobile Club Foundation for Motoring Ltd is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist.

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# Disclaimer

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# Foreword

The use of camera technology to encourage compliance with road traffic law has been commonplace for many years, particularly to deter motorists from speeding and ‘jumping’ traffic lights. We could, potentially, see far greater deployment of camera based enforcement systems in future, for example as highway authorities consider the costs and benefits of employing average speed cameras.

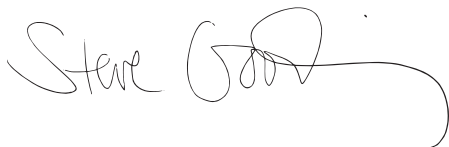
Of course we are keen to understand how well such approaches work in delivering safer roads. But the question we asked Ipsos MORI to explore for us is what makes the application of camera-based enforcement technology acceptable to the public.

The findings should make for interesting reading for any highway authority or constabulary operating or thinking of installing camera-based systems, because while the general picture that emerges is of a high degree of support for automated enforcement in principle, it also reveals a high level of scepticism about its effectiveness in practice.

Two thirds of those questioned agreed that camera-based monitoring is more of a force for good in society than for bad, but only a slightly smaller proportion (62%) felt that some cameras are used primarily to raise money rather than to improve traffic flow or make the roads safer.

Our view is that the best approach is to ensure that data relating to camera deployment is captured comprehensively and published openly so that the relevant authorities, and motorists themselves, can be informed by having the facts speak for themselves.

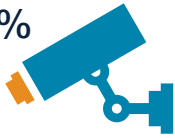
Steve Gooding

A handwritten signature in black ink, appearing to read 'Steve Gooding', with a long, sweeping horizontal line extending from the end of the name.

Director, RAC Foundation

## Attitudes towards automated monitoring and enforcement

66%



agree that monitoring cameras are more of a force for good in society than bad

62%



feel that some cameras are used to primarily raise money rather than improve traffic flow/safety

47%



trust the government and relevant authorities to use monitoring the right way

42%



feel like they are constantly being watched with the amount of cameras these days

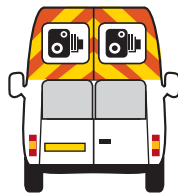
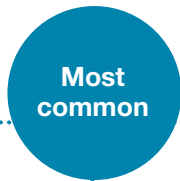
## Automated Road Traffic Enforcement in local areas

7 in 10

say they have noticed at least one sort of enforcement camera within 5 to 10 minutes' drive from home



**Fixed Speed Cameras (53%)**



**Mobile Speed Cameras (36%)**

**Average Speed Cameras (34%)**



## Support for Automated Road Traffic Enforcement

% support



If it leads to reduction in accidents and casualties on the road

70%



If it frees up more time for police to deal with other offences

66%



If it leads to better car park management and maintenance

58%



If it leads to investment in road safety improvements e.g. cycle and pedestrian paths

47%

BUT...

83%

agree that speed cameras only cause drivers to slow down then speed up afterwards



57%

of people believe they are designed to generate revenue



Half

of people believe they do not effectively discourage drivers from offending



## Confidence in Automated Road Traffic Enforcement



61% say they would feel more confident if there was at least some involvement by an enforcement officer with automated enforcement

## Automated Road Traffic Enforcement regulation



59%

say greater regulation, including stricter usage guidelines, would improve confidence

41%

feel that responsibility lies with the relevant police force



29%

think an independent body should regulate

19%

think local councils should be accountable



27%

feel that responsibility lies with the government





# 1. Summary of Findings



The principal findings of this report and the research conducted by Ipsos MORI on behalf of the RAC Foundation are summarised below.

## **The British public are polarised in their attitudes towards road traffic monitoring and enforcement**

Views on monitoring and enforcement appear to be polarised among the general public. Two thirds (66%) agree that monitoring cameras are more of a force for good in society than for bad, but on the other hand only a slightly smaller proportion (62%) feel that some cameras are used primarily to raise money rather than to improve traffic flow or make the roads safer. Just under half (47%) trust the government and relevant authorities to use monitoring and enforcement techniques in the right way, whereas just over two in five (42%) agree that they constantly feel like they're being watched with the amount of monitoring cameras in Britain these days.



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## Awareness of the technology is low...

Awareness of the different types of monitoring techniques is low, with no more than half of the public (50% exactly) saying they know a great deal or a fair amount about the monitoring techniques (e.g. speed cameras on local roads and motorways), while two in five (40%) say the same about automated road traffic enforcement (ARTE). A slightly smaller proportion (39%) say they know a great deal or a fair amount about monitoring on public transport, with slightly fewer (35%) feeling the same about monitoring of traffic flow. The public are least confident in their knowledge about the monitoring of mobile phones, with just under three in ten (28%) saying they know at least a fair amount about this.

Enforcement cameras are prevalent in local areas, with seven in ten (70%) saying they have noticed at least one sort of enforcement camera within five to ten minutes' drive from their home. Fixed speed cameras are most commonly noticed (by 53% of the public), with mobile speed cameras and average speed check cameras also noticed (by 36% and 34% respectively). About one in six (17%) say they have not noticed any type of enforcement camera when driving in their local area.

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## ...although general support for the use of monitoring is high in particular circumstances

In spite of the awareness issue, the majority of the British public instinctively support monitoring techniques in most cases, particularly on public transport (83%) and roads (77%), and of traffic speed (70%). The majority (55%) also support ARTE, while opinions are split about the monitoring of mobile phone use (35% support it, 29% are neutral and 32% oppose).

When ARTE is introduced as a concept, with a detailed definition, the majority of the British public (54%) say they are supportive of the use of ARTE in principle, while fewer than one in five (18%) are opposed. One quarter (25%) of the public say they neither support nor oppose its use.

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## Support increases if ARTE is used for the right reasons

While the majority of the British public are supportive of ARTE, this support increases to seven in ten (70%) if it leads to a reduction in the number of accidents and casualties on the roads. Almost as many (66%) support the use of ARTE if it frees up more time for police to deal with other offences, and a majority (58%) support it if it leads to better management and maintenance of car parks. Although the British public see safety improvements as a key issue, doing so via ARTE would appear to be viewed less favourably, as support for it falls to under half (47%) if it generates revenue to invest in road safety improvements (such as paths for cyclists and pedestrians, and junction improvements). Slightly under one quarter (23%) remain supportive of ARTE even if it fails to improve traffic flow and average journey

times. However, support for ARTE is not consistent across all subgroups of the population, as males are more likely to oppose the use of ARTE than females across all scenarios. The same is true of those aged 55–75.

When looking at particular offences where ARTE can be applied, the British public find the use of it acceptable in almost all situations. They are particularly likely to consider it acceptable if it is used to identify, via camera, a vehicle without insurance by means of automatic number plate recognition (ANPR) – 83% take this view. The only situation where less than the majority of the British public feel that the use of ARTE is acceptable is where a vehicle has stopped in a box junction on a major road in a large city; even so, more are still inclined to agree in this scenario than disagree (47% vs 20%). Across the majority of subgroups, there is less opposition in the case of an uninsured vehicle being caught using ANPR than to other uses of the technology, which may suggest that the British public are particularly eager to see punishment for this particular offence.

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### There is cynicism regarding the justification for ARTE

Despite the positive perceptions of ARTE, the British public nevertheless have a degree of cynicism about it. More than eight in ten (83%) agree that speed cameras only cause drivers to slow down for them before speeding up again afterwards, and the majority believe that ARTE is designed mainly to generate revenue (57%). Half (50%) believe that it does not effectively discourage drivers from offending. Two thirds (63%) think the numbers of penalty notices issued should be regularly published at a local level.

Male and older members of the British public (aged 55–75) remain sceptical about ARTE when it comes to its effectiveness: they are less inclined than other subgroups to agree that it discourages drivers from offending. On the other hand, younger drivers (aged 16–34) are more likely to feel safer knowing that ARTE is there to discourage drivers from offending (with 53% taking that view compared with 44% of the public overall).

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### The public support greater use of ARTE (in the right areas)

The British public appear positive when contemplating more use being made of ARTE in the future, with almost half (49%) saying they support its greater use in principle, while just under one in five (19%) oppose the idea – a net support of +30 percentage points. Those who feel they know more about ARTE are polarised when taking a view on its use: they are more likely to strongly support, more likely to tend to oppose, and more likely to strongly oppose more use being made of it – this may suggest that feeling more aware about the technology leads people to have stronger views, be they positive or negative.

Ensuring the ARTE process is not *completely* automated could instil greater confidence in the British public. Three in five (61%) say that they would feel more confident if there was at least some involvement by an enforcement officer. Greater regulation, including stricter usage guidelines, would improve confidence in ARTE according to 59% of people. Such

regulation could include regularly publicising data (56% agree) and/or publishing an annual review (54%). This is particularly the case for older drivers – those aged 55–75 – who are most sceptical about it.

### **There is little agreement about how ARTE should be regulated**

There is little consensus as to what body should regulate ARTE. Two in five (41%) feel the responsibility lies with the relevant police authority, while almost three in ten (29%) think an independent body should be set up specifically for this purpose. A similar proportion (27%) feel responsibility lies with the government and a fifth (19%) think local councils should be accountable. Those who are more sceptical about ARTE are more likely than average to want an independent body set up to regulate its use and extent.

### **The perils of misperception also presents a challenge**

Dr Adam Snow's report suggests that up to 12 million driving licence-holders receive a penalty notice each year, which would equate to approximately three in ten (30%) of Britain's 40 million drivers. We asked how many drivers out of 100 they believed received a penalty notice each year, and just one in seven (14%) provided an accurate response to within five percentage points.

## 2. Background



Independent researchers Ipsos MORI were commissioned in January 2018 by the RAC Foundation to undertake a piece of research with the public to gain their views on the legitimacy of automated enforcement of road traffic laws. The focus of the survey was to examine the British public's perceptions of, and attitudes towards, automated enforcement, and to investigate its perceived legitimacy. This topic was explored in detail in the October 2017 review by Dr Adam Snow.<sup>1</sup>

The objectives of the research included measuring:

- views and feelings about surveillance in society generally, and in road transport specifically;
- awareness of the extent and nature of automated enforcement in Great Britain;
- support for automated road traffic enforcement (ARTE), both generally and in specific circumstances;
- support for increased use of ARTE in the future;

<sup>1</sup> Snow, A. (2017). *Automated Road Traffic Enforcement: Regulation, governance and use – a review*. RAC Foundation. Accessed 1 May 2018 from [www.racfoundation.org/wp-content/uploads/2017/11/Automated\\_Road\\_Traffic\\_Enforcement\\_Dr\\_Adam\\_Snow\\_October\\_2017.pdf](http://www.racfoundation.org/wp-content/uploads/2017/11/Automated_Road_Traffic_Enforcement_Dr_Adam_Snow_October_2017.pdf)

- views about how future developments in automated enforcement should be monitored (and by whom); and
- how attitudes towards automated enforcement vary (or not) by geographical location and sociodemographic factors.

As with previous research, Ipsos MORI and the RAC Foundation collaborated in the design of an online self-completion questionnaire to ensure that the objectives of the research were met.

Fieldwork took place between 16 March and 20 March 2018 and was conducted through Ipsos MORI's online omnibus service, I-Omnibus. The final results were derived from 2,203 participants of the Ipsos MORI online panel aged between 16 and 75. Some details about licence-holding rates, car/van ownership and other demographics of the sample population is given in Appendix A, which shows the questions and responses designed to elicit this information.

More detailed sample information, along with a guide to statistical reliability, can be found in Appendix B. The questionnaire can be found in Appendix C.

Note: throughout this report an asterisk is displayed next to subgroups where the base is lower than 100. These findings are advised to be treated as indicative only.



# 3. Introducing Automation and Monitoring



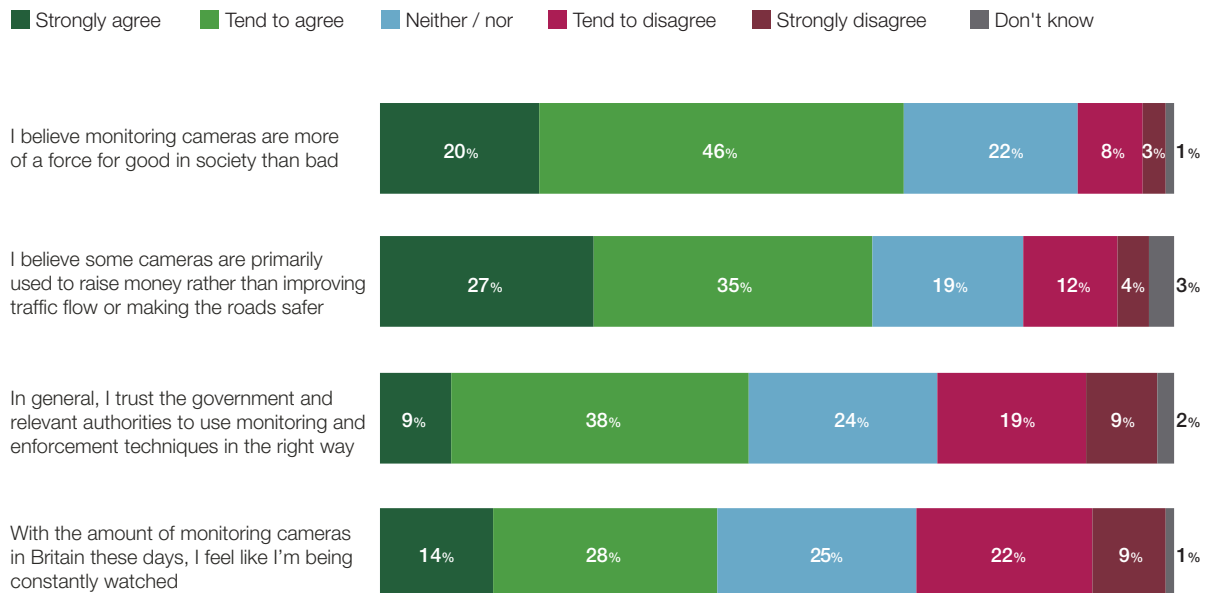
In the first section of the questionnaire, ‘automated enforcement’ was not defined in any detail to participants. This was a deliberate omission, designed to gauge perceptions of monitoring and enforcement in a general sense, before exploring more specific attitudes towards automated enforcement in a road traffic context later in the survey.

## 3.1 Attitudes towards monitoring and enforcement

Asked initially about a range of statements relating to monitoring and enforcement in Great Britain, two thirds (66%) of the British public agree that monitoring cameras are more of a force for good in society than for bad. However, a similar proportion – three in five (62%) – agree that some cameras are used primarily to raise money rather than for improving traffic flow or making the roads safer (see Figure 3.1, and refer to the notes in Appendix B when interpreting the results presented graphically in this report). Fewer than half (47%) of participants say they trust the government and relevant authorities to use monitoring and enforcement techniques in the right way, which is noticeably more than the 28% who disagree, while just over two in five (42%) agree that they constantly feel like they’re being watched with the amount of monitoring cameras in Britain these days, as compared with 32% who disagree.

**Figure 3.1: Attitudes towards monitoring and enforcement**

*Q1. To what extent do you agree or disagree with the following statements?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Male participants seem to be more cynical than average about the motivations behind monitoring and enforcement, being more likely than the British public overall to agree that cameras are used primarily to raise money (67% vs 62% overall) and that they feel like they are constantly being watched (46% vs 42% overall). Older people, aged 55–75, are also more likely to perceive some cameras as designed primarily to raise revenue (67%), in contrast with younger people aged 16–34, who are less likely to agree (55%).

Participants in the South East tend to be more positive towards monitoring and enforcement techniques, which might be due to the higher levels of exposure towards cameras in their local area (82% vs 76% overall who notice at least one enforcement camera in their local area). They are more likely than the public overall (at 72% vs 66%) to agree that monitoring cameras are more of a force for good than for bad and to agree that in general, they trust the government and relevant authorities to use monitoring and enforcement techniques in the right way (53% vs 47% overall). Those in Greater London are, relatively speaking, more negative towards a number of statements in this question. They are more likely than the public overall to agree with the statement “I believe some cameras are primarily used to raise money rather than improving traffic flow or making the roads safer” (72% vs 62% overall) and strongly agree with the statement “With the amount of monitoring cameras in Britain these days, I feel like I’m being constantly watched” (19% vs 14% overall), as well as being more likely to **disagree** with the statement “In general, I trust the government and relevant authorities to use monitoring and enforcement techniques in the right way” (34% vs 28% overall).



As one might expect, penalty notices and National Speed Awareness Courses (NSACs) appear to play a role in perceptions about monitoring and enforcement. Those who have received/attended one or both in the last two years are more likely to feel that some cameras are used primarily to raise money rather than for the purpose of improving traffic flow or making roads safer (72% vs 62%). Those who travel via car or van not for their work commute or travelling for business purposes\* are also (slightly) more likely to perceive some cameras as revenue raisers (64% vs 62% of the public overall). This sentiment is stronger among those who travel for either work or business purposes\*, with both being more likely to **strongly** agree to this statement (31% and 36% respectively, compared with 27% overall); they are also more likely to feel that they are constantly being watched with the amount of monitoring cameras in Britain (46% and 52% respectively, vs 42% overall).

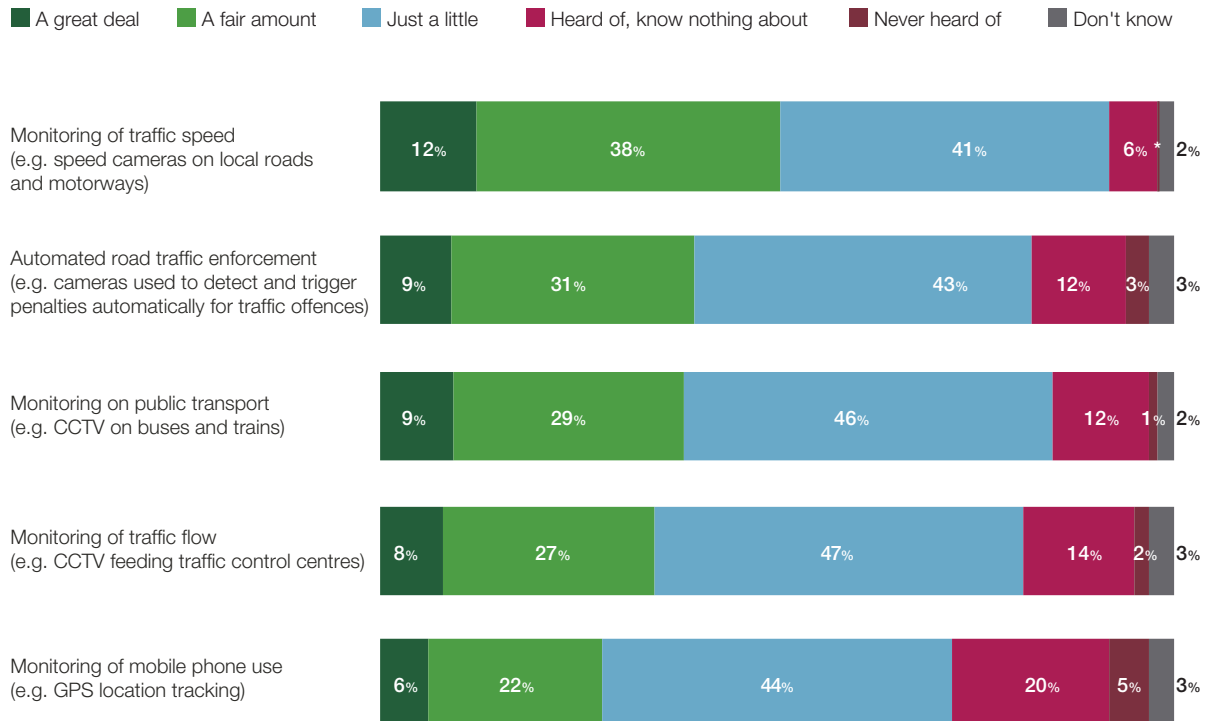
### 3.2 Knowledge of different monitoring techniques and ARTE

Having established some of their overall perceptions of monitoring and enforcement, the questionnaire then asked participants about their knowledge of different monitoring techniques. Participants were also introduced to the term 'automated road traffic enforcement (ARTE)' in this question, supplemented by examples of what this covers as part of the statement.

This question was used primarily to compare views between those with a higher and lower stated awareness of ARTE and other monitoring techniques. Nonetheless, half (50%) of participants say they know a great deal/fair amount about monitoring of traffic speed (e.g. speed cameras on local roads and motorways), whilst two in five (40%) say the same about ARTE (see Figure 3.2). Just under this proportion (39%) say they know a great deal or a fair amount about monitoring on public transport (39%), with slightly fewer (35%) feeling the same about monitoring of traffic flow. Just under three in ten (28%) say they know a great deal or a fair amount about monitoring of mobile phone use. In all cases, no more than half of the British felt they know a great deal or a fair amount about each of these monitoring techniques.

**Figure 3.2: Knowledge of different monitoring techniques and ARTE**

*Q2. How much, if anything, would you say you know about each of the following?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

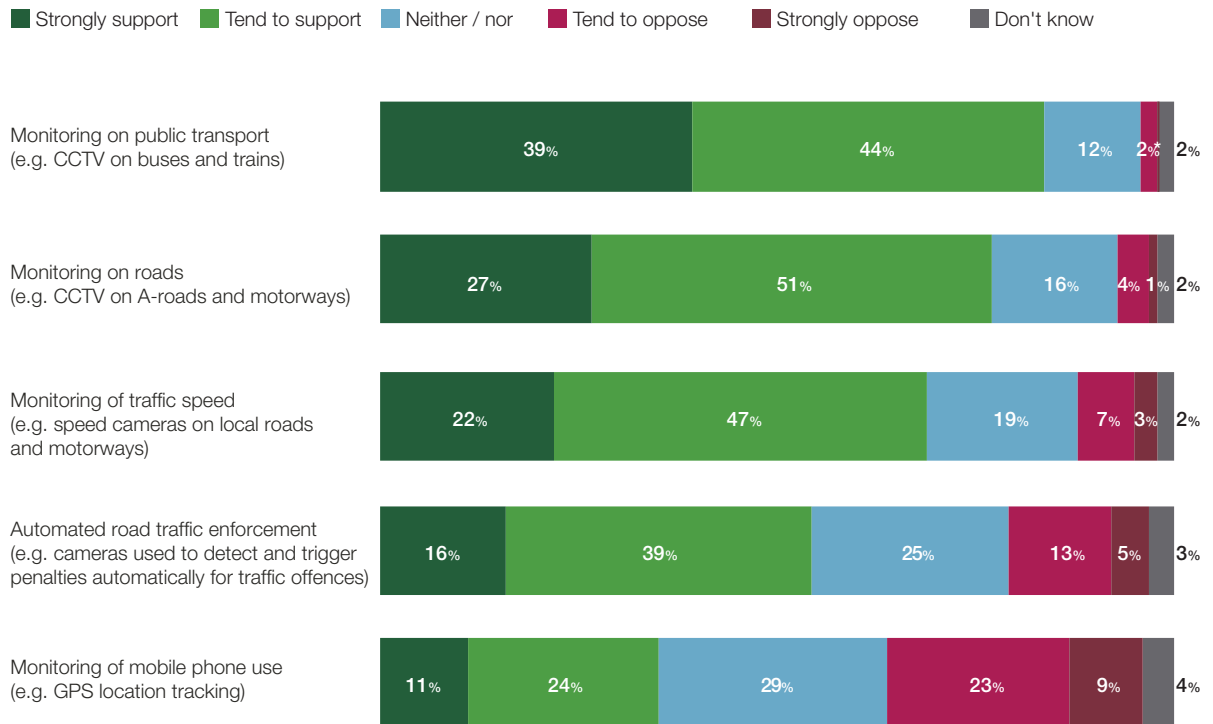
Those who have received a penalty notice or attended an NSAC in the last two years are more likely to say they know a great deal or a fair amount about ARTE (61% vs 40% overall), monitoring of traffic speed (70%) and of traffic flow (50%). Similarly, those with a full driving licence are more likely to know about monitoring on the roads, traffic speed (55%) and traffic flow (39%), as well as about ARTE (43%), than the British public overall.

### 3.3 Support for different monitoring techniques and ARTE

Despite relatively low stated awareness of these techniques, the majority of the British public instinctively support their use in most cases (see Figure 3.3), particularly monitoring on public transport (83%) and on roads (77%), and of traffic speed (70%). The majority said they support ARTE (55%) at this point in the survey. The British public are split on monitoring of mobile phone use (35% support, 29% are neutral and 32% oppose).

**Figure 3.3: Support for different monitoring techniques and ARTE**

*Q3. And in principle, to what extent do you support or oppose the use of the following in Great Britain?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Whilst male participants were more likely than female participants to say they know about the various type of monitoring and ARTE in Question 2, they are also more likely to oppose the use of almost all types of monitoring than are female participants (the exception is monitoring on public transport, where male and female participants are similarly, and overwhelmingly, in favour of its use). Older participants (those aged 55–75) are more likely than overall to support monitoring of mobile phone use (39% vs 35% overall), on public transport (87% vs 83% overall), and on roads (82% vs 77% overall), but are more opposed to the use of ARTE (22% vs 18% overall).

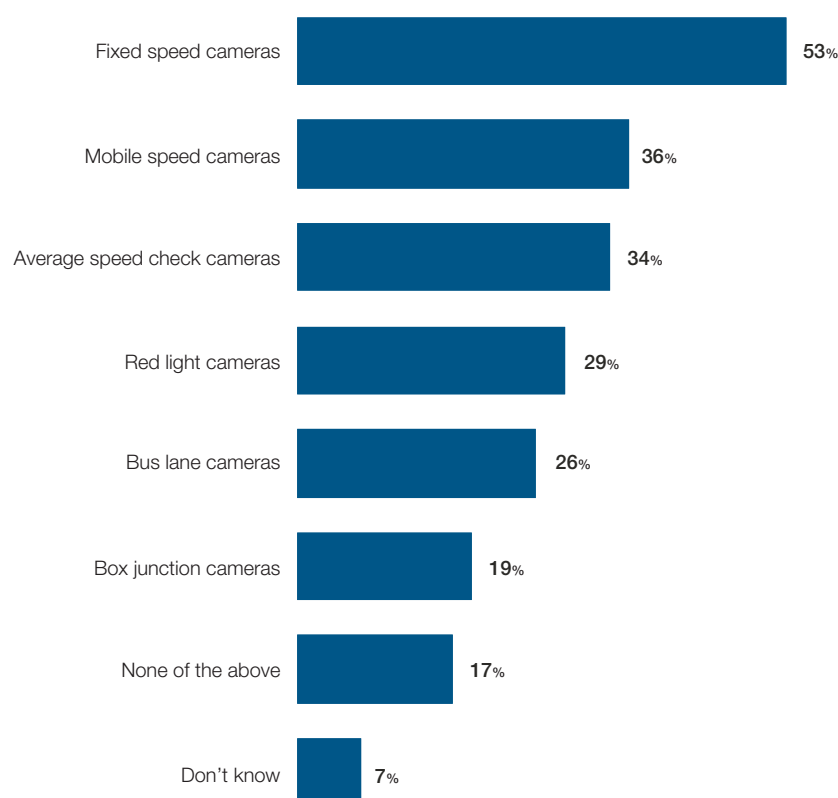
Those who see some cameras as designed primarily to raise revenue are more likely to oppose ARTE (25% vs 18% overall), while those who see monitoring cameras as more of a force for good than for bad are more supportive of all types of monitoring, including ARTE.

## 3.4 Awareness of cameras when driving in the local area

Participants were then asked whether they have noticed a range of different types of enforcement camera when driving in their local area (defined as the area within five to ten minutes' driving distance from their home). The results are shown in Figure 3.4. Seven in ten (70%) notice at least one enforcement camera in their local area. When breaking this down further, fixed speed cameras are the most commonly noticed kind (53%), followed by mobile speed cameras (36%) and average speed check cameras (34%). Box junction cameras are the least noticed by participants (19%), while 17% of participants have not noticed any of the listed types of camera while driving in their local area.

**Figure 3.4: Types of camera noticed when driving in the local area**

*Q4. Which, if any, of the following have you noticed when driving in your local area? By local area, we mean the area within five to ten minutes' driving distance from your home.*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Men are more likely than women to have noticed almost all types of camera in their local area (the exception being average speed check cameras). There is also a lot of variation regionally, with those in Greater London considerably more likely than those in Britain overall to have noticed several types of camera in their local area, including red light cameras (41% vs 29% overall), bus lane cameras (50% vs 26% overall), and box junction cameras (36% vs

19% overall). Those in the South East are more likely to have noticed fixed speed cameras (64% vs 53% overall). Mobile speed cameras are more likely to be noticed among those in Yorkshire and The Humber (47% vs 36% overall) and Wales (46%) than by those in the country as a whole, whereas average speed check cameras are more likely to be noticed by those in the East Midlands (44% vs 34% overall) and the East of England (42%).

Those who have received a penalty notice in the last two years are more likely than the public overall to say they have noticed cameras on the road (of all types), and those who have a full driving licence are more likely than those who have a provisional driving licence to have noticed at least one type of camera (82% vs 70%).

## 4. Views of Automated Enforcement and its Impact



Having provided information about their awareness of, and attitudes towards, various monitoring and enforcement techniques, participants were then provided with a detailed definition of ARTE before being asked a series of specific questions on that topic in Section 2 of the questionnaire. The definition read:

“The next few questions are about the use of automated road traffic enforcement. This is where police and enforcement agencies, such as local authorities and local police forces, use ‘automated’ techniques, for example, a speed camera, or a camera at a box junction, to detect road traffic offending and trigger the issue of a penalty. By automated we mean there is little or no involvement from an enforcement officer.”

For all questions throughout Sections 2 and 3 of the questionnaire, the following definition remained at the top of the screen for participants to refer back to:

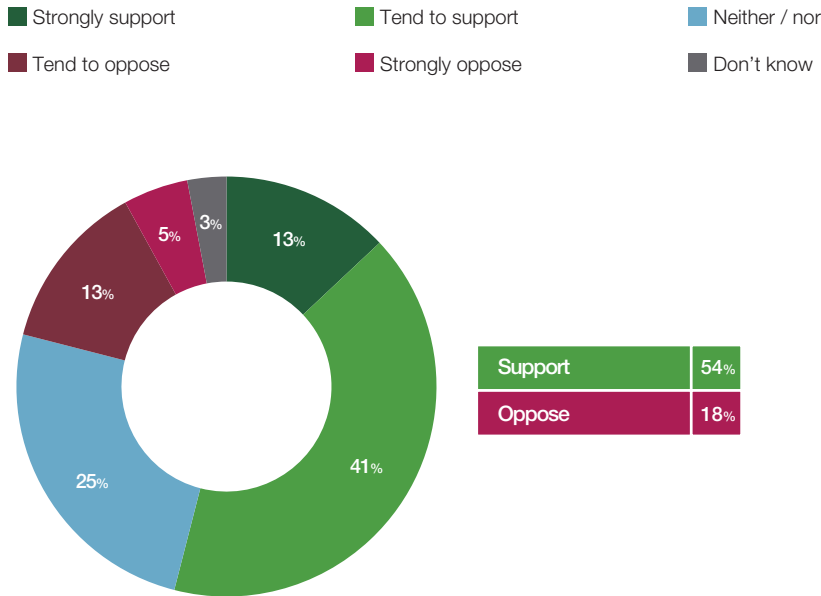
“Automated road traffic enforcement is where police and enforcement agencies, such as local authorities and local police forces, use ‘automated’ techniques, for example a speed camera, or a camera at a box junction, to detect road traffic offending and trigger the issue of a penalty. By automated we mean there is little or no involvement from an enforcement officer.”

### 4.1 Support for ARTE in principle

Participants were asked about their attitude to ARTE. In principle, a majority of the British public (54%) say they support ARTE, while 18% say they oppose its use (see Figure 4.1). A quarter (25%) of participants said they neither support nor oppose its use.

**Figure 4.1: Support for ARTE in principle**

*Q5. In principle, to what extent do you support or oppose the use of automated road traffic enforcement in Great Britain?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Those who feel that some cameras are used primarily to raise money are more opposed to ARTE in principle (25% vs 18% overall), whilst those who feel that monitoring cameras are more a force for good than for bad are more likely to support it (65% vs 54% overall). Among those who say they know a great deal or a fair amount about ARTE, both support



and opposition are higher than among the public overall (57% support, 24% oppose), suggesting a degree of polarisation among those who feel more familiar with the technology. Conversely, those who say they know a little about, or have heard of but know nothing about ARTE are more likely to sit on the fence (29% vs 25% overall who say they neither support nor oppose).

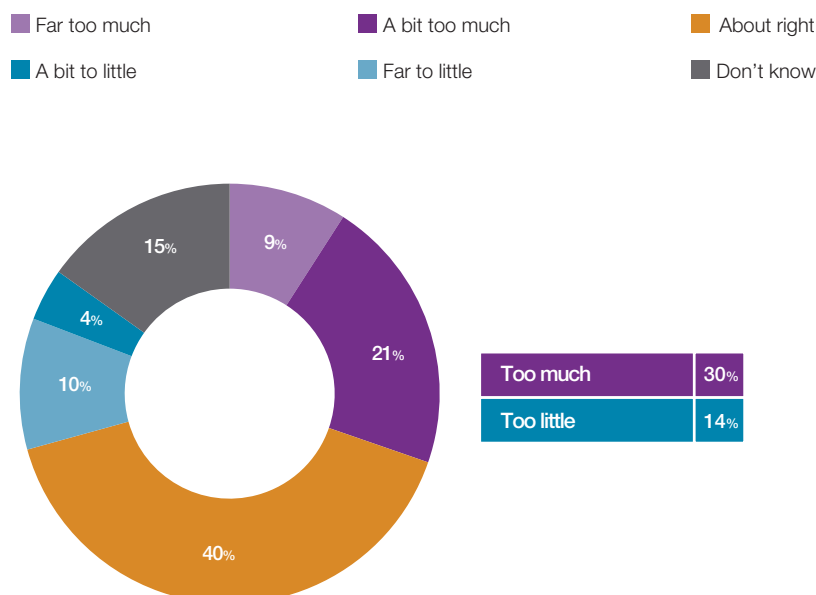
With regard to driving habits, those who drive as part of their usual commute to work or for businesses purposes\* are more likely to oppose ARTE in principle (at 21% and 33% respectively), as are those who have received a penalty notice or attended an NSAC in the last two years (25%). Regionally, those in the South East are more likely to support ARTE in principle (59% vs 54% overall), while those in London are more inclined to oppose (23% vs 18%).

## 4.2 Amount of ARTE on the roads

On the question of whether there is too much, too little, or about the right amount of ARTE on the roads in Great Britain today, views are more mixed (see Figure 4.2). Three in ten (30%) participants say that there is too much ARTE on roads in Great Britain today, more than twice the number of participants who feel there is too little (14%). However, participants are most likely to feel that the amount of ARTE on the roads in Great Britain today is about right (40%).

**Figure 4.2: Amount of ARTE on the roads in Great Britain today**

*Q6. Would you say there is too much, too little or about the right amount of automated road traffic enforcement on roads in Great Britain today?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

As well as being more opposed in principle, those who feel that some cameras are used primarily to raise money are also more likely to feel that there is too much ARTE on the roads (42% vs 30% overall), while those who feel that monitoring cameras are more a force for good than for bad are more likely to feel there is too little (17% vs 14% overall) or that it is about right (46% vs 40% overall). Knowledge of ARTE also appears to be linked to sentiment here, as those who say they know a great deal or a fair amount about it are more likely to say there is too much on the roads (41%). Supporters of ARTE in principle are far more likely to say that the amount is about right (53%), while those who oppose it are overwhelmingly likely to feel there is too much (77%).

Regionally, those in Greater London are more likely to feel that there is too much ARTE on the roads (35%), while those in the North are more likely to feel the amount is about right (44%). Commuters and those travelling for business\* are more likely to find that the amount of ARTE on the roads is too much (34% with a work commute and 44% using roads for business\* purposes respectively). However, receiving a penalty notice or attending an NSAC in the last two years seems to have some impact on views, with both being more likely to say there is too much ARTE on the roads today (40% and 32% respectively). Those who hold a full driving licence are more likely to feel that there is too much ARTE on the roads today (34%), whereas those who are still learning feel the amount is about right (50%).

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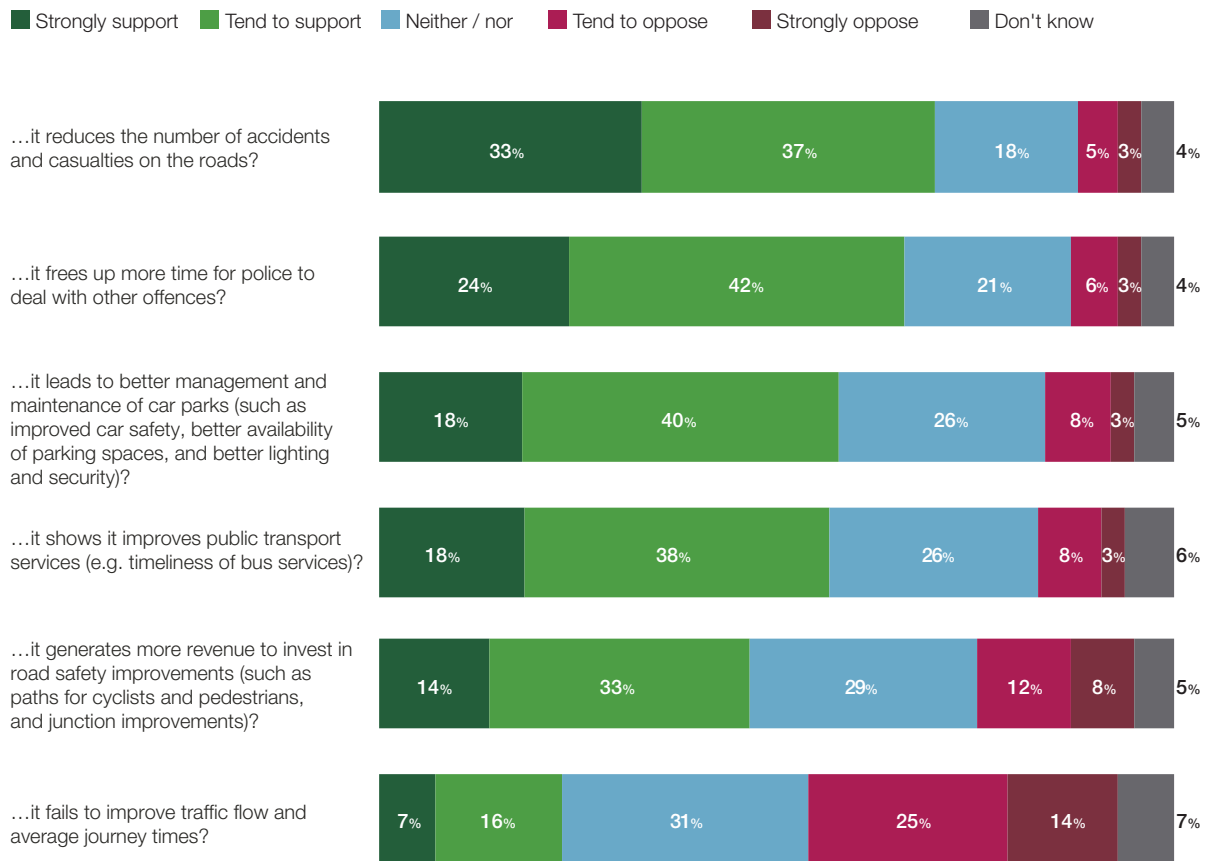
### 4.3 Conditional support for ARTE

While, as we have already seen (Figure 4.1), the British public are more likely to support ARTE in principle than to oppose it (by a margin of three to one), the survey found that levels of support change considerably when use of ARTE is tied to a range of positive and negative conditions (see Figure 4.3).

If ARTE leads to a reduction in the number of accidents and casualties on the road, support for its use increases to seven in ten (70%). Similarly, two thirds (66%) support the use of ARTE if it frees up more time for police to deal with other offences. Support for ARTE is broadly in line with its in-principle level if leads to better management and maintenance of car parks (58%) and similarly if it improves public transport services (57%). Interestingly, support for ARTE is slightly lower than its in-principle level if it generates more revenue to invest in road safety improvement (such as paths for cyclists and pedestrians, and junction improvements) at 47%, which could suggest that, while improving safety is a particularly salient issue for the British public, doing so through increased revenue generation is less appealing. Support for ARTE falls to less than one quarter (23%) if it fails to improve traffic flow and average journey times.

**Figure 4.3: Conditional support for ARTE**

*Q7. To what extent do you support or oppose the use of automated road traffic enforcement in Great Britain if...*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Across all scenarios, males are more likely to oppose the use of ARTE than females. Similarly, those aged 55–75 are more likely than average to oppose the use of ARTE in all situations apart from when it leads to better management and maintenance of car parks. Regionally, those in Greater London are more likely to support the use of ARTE when it results in an improvement in public transport services (63% vs 57% overall), whereas those in the North West are more likely to oppose it under this scenario (16% vs 11% overall).

Those who have noticed at least one type of road enforcement in their local area appear to be more negative towards all scenarios than the British public overall. However, they are more likely to have polarised views (i.e. are more likely than average both to support and to oppose its use) where ARTE fails to improve traffic flow and average journey times, reduces the number of accidents and casualties on the road, and leads to better management and maintenance of car parks.

## 4.4 Change in views of in-principle opponents of ARTE in different scenarios

Like the British public overall, in-principle opponents of ARTE are most likely to be persuaded to support it if it reduces the number of accidents and casualties on the roads. However, as Table 4.1 shows, there are other scenarios in which a number of in-principle opponents of ARTE say they would support it. It is noteworthy, however, that none of the scenarios listed manage to elicit support from a proportion of ARTE's in-principle opponents which matches the proportion of the British public overall who say they support ARTE (54%); in other words, none of the scenarios is persuasive enough to completely neutralise the bias against ARTE found in these in-principle opponents.

**Table 4.1: Change in views of in-principle opponents of ARTE in different scenarios**

| Automated road traffic enforcement (ARTE) scenario  | % of in-principle opponents of ARTE who would support it  |
|---|---|
| <i>Total who oppose the use of ARTE in Great Britain</i>  | <i>18% of all participants, forming the subgroup from which the percentages below are made up</i> |
| If it reduces the number of accidents and casualties on the roads?  | 47%   |
| If it leads to better management and maintenance of car parks (such as improved car safety, better availability of parking spaces, and better lighting and security)? | 37%   |
| If it frees up more time for police to deal with other offences?  | 34%   |
| If it shows it improves public transport services (e.g. timeliness of bus services)?  | 33%   |
| If it fails to improve traffic flow and average journey times?  | 27%   |
| If it generates more revenue to invest in road safety improvements (such as paths for cyclists and pedestrians, and junction improvements)?                           | 19%   |

Base: 393 British adults aged 16–75 who oppose ARTE in principle (16–20 March 2018)

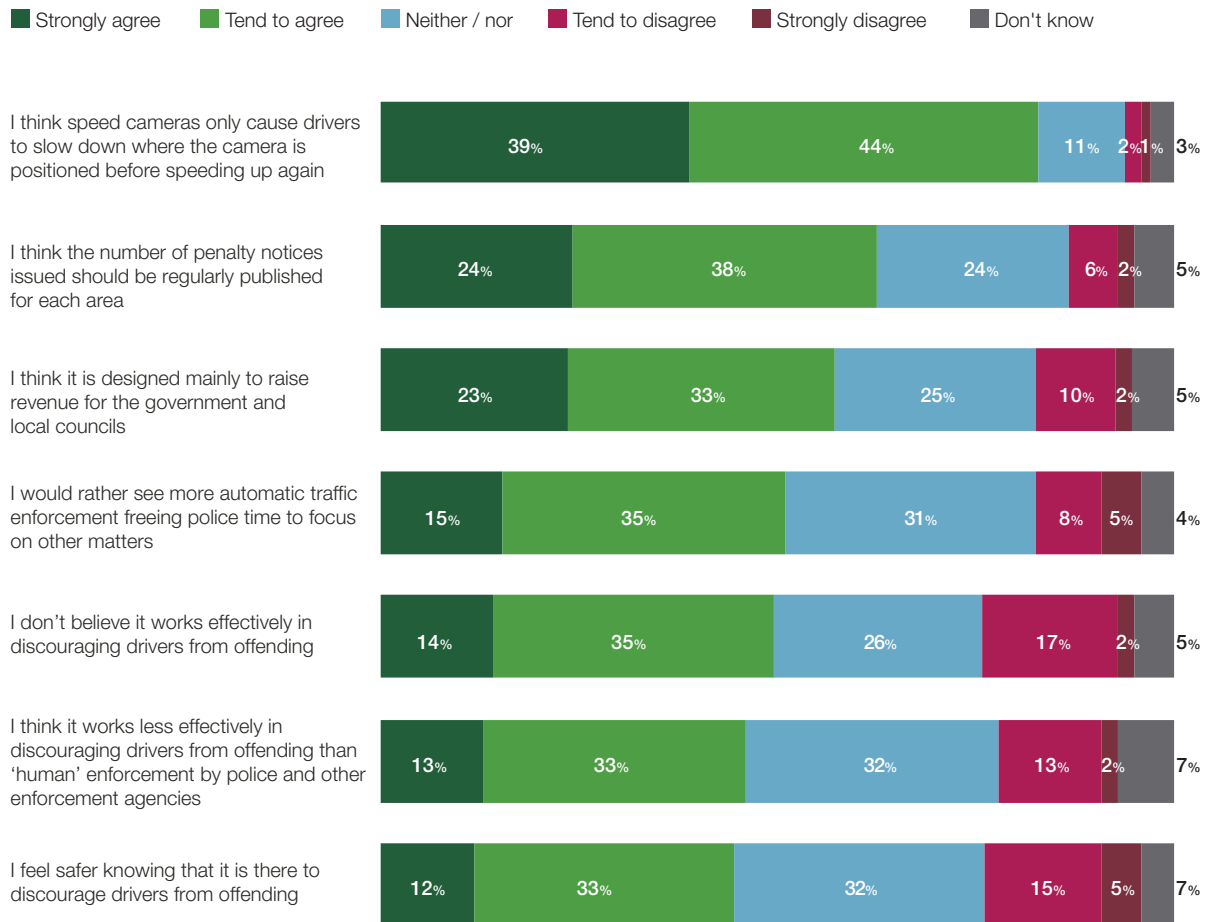
Similarly, however, some 38% of in-principle *supporters* of ARTE say they would *oppose* it if it fails to improve traffic flow and average journey times.

## 4.5 Attitudes towards ARTE

Participants were presented with a number of statements about ARTE, and asked to what extent they agree or disagree with them. The results are shown in Figure 4.4. Overall, there is a degree of cynicism about ARTE, with large proportions of the British public agreeing that speed cameras only cause drivers to slow down for them before speeding up again afterwards (83%), that they are designed mainly to generate revenue (57%), and that they do not effectively discourage drivers from offending (50%). Many agree that the number of penalty notices at local area level should be regularly published (63%); however, there is some uncertainty about the effectiveness of ARTE in discouraging poor driver behaviour compared with human enforcement (with 46% agreeing that it is less effective).

## Figures 4.4: Attitudes towards ARTE

Q8. To what extent do you agree, or disagree, with the following statements about automated road traffic enforcement?



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

In line with earlier findings, males and older members of the British public (aged 55–75) are more likely to be negative towards ARTE. These groups are more likely to agree that ARTE:

- doesn't work effectively in discouraging drivers from offending (those aged 55–75 are also more likely to **strongly** agree to this statement);
- is designed mainly to raise revenue for the government and local councils; and
- works less effectively in discouraging drivers from offending than 'human' enforcement by police and other enforcement agencies.

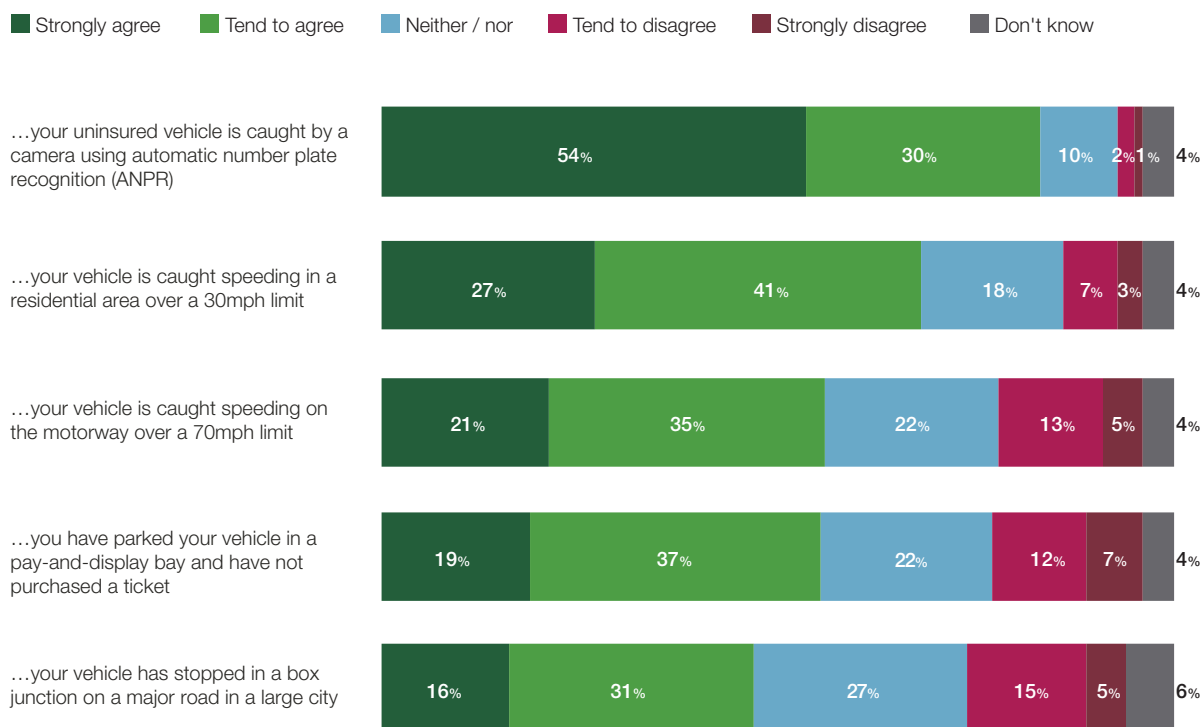
Younger drivers (aged 16–34) are more likely to be reassured by ARTE, with more feeling safer knowing that it is there to discourage drivers from offending (49% vs 44% overall). In line with earlier findings in this report, the subgroups more likely to be negative towards ARTE across the range of statements presented to them here are: those who feel that some cameras are used primarily to raise money, those who say they know a great deal or a fair amount about ARTE, those who think there is too much ARTE on the roads today, and those who have a full driving licence.

## 4.6 Acceptability of ARTE in certain specific situations

ARTE is currently used to detect a range of offences and driver behaviours. Participants were asked to what extent they agree or disagree that it would be acceptable to use ARTE if they were found in some of these situations. The majority of participants agree that the use of ARTE would be acceptable in almost all situations, particularly if they were caught without insurance by means of a camera using automatic number plate recognition (ANPR) (see Figure 4.5). Only in instances where their vehicle has stopped in a box junction on a major road in a large city does this fall below 50%, but the public are still more inclined to agree that ARTE would be acceptable here than to say that it is not (47% vs 20%).

**Figures 4.5: Conditional acceptability of ARTE**

*Q9. To what extent do you agree or disagree that it would be acceptable to use automated road traffic enforcement if...?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Those aged 55–75 are more likely to feel that ARTE is acceptable to detect them speeding on the motorway (60% vs 56% overall), to catch their uninsured vehicle by ANPR (89% vs 83% overall), and to spot them parking in a pay and display bay without purchasing a ticket (61% vs 56% overall). Looking at regional variations, those in the Greater London are less supportive of the use of ARTE in several scenarios, being more likely to disagree that ARTE is acceptable to use when it comes to speeding over 30 mph in a residential area (16% vs 10% overall), if their uninsured vehicle is caught by an ANPR camera (7% vs 4% overall), and

if they have parked their vehicle in a pay and display bay and have not purchased a ticket (23% vs 18% overall).

The subgroups who are more likely to disagree to most statements include those who:

- see some cameras as revenue raisers;
- say they know a great deal or a fair amount about ARTE;
- have noticed at least one road enforcement method in their local area;
- think there is too much ARTE on the roads today;
- oppose ARTE in principle; and
- have a full driving licence.

However, most of these groups are less opposed than the public as a whole to the use of ARTE in cases where their uninsured vehicle is caught using ANPR, suggesting that this particular offence is one they would like to see more people punished for, even if this means making use of automated techniques.



# 5. Future of Automated Road Traffic Enforcement



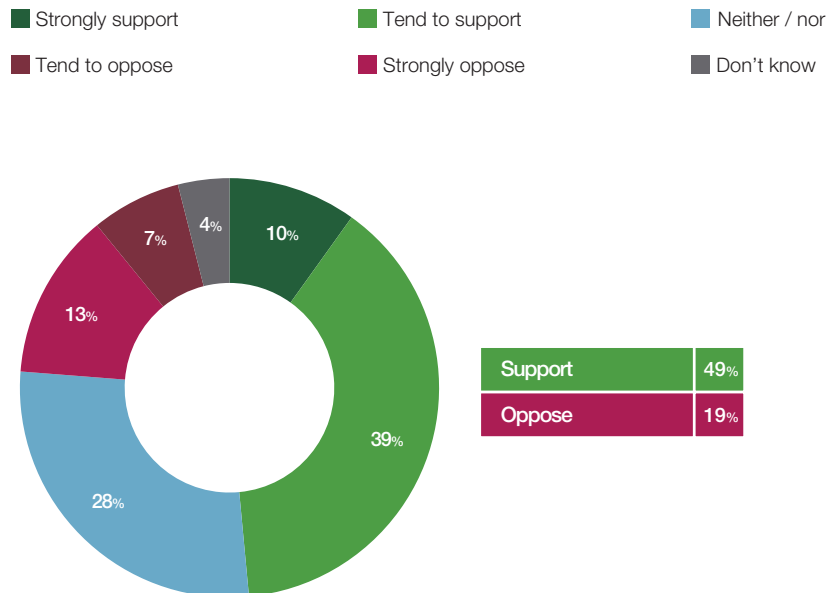
The survey then moved on to examine the feelings of the public about the use – or greater use – of ARTE in the future: whether this was desirable or concerning, and whether it was perceived as more or less acceptable given certain conditions; the issue of who should regulate ARTE was also raised.

## 5.1 Support for more use being made of ARTE

When asked about the future of ARTE, half of the British public (49%) say they would in principle support greater use of ARTE in Great Britain, with one in ten (10%) strongly supporting this, and just under two in five (39%) tending to support it (see Figure 5.1). Many (28%) say they neither support nor oppose this, while around one in five (19%) oppose more use being made of ARTE.

**Figure 5.1: Support for more use being made of ARTE**

*Q10. In principle, to what extent do you support or oppose more use being made of automated road traffic enforcement in Great Britain?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Men are more likely than women to oppose more use being made of ARTE in Great Britain in future (with 23% of men feeling that way, as compared with 16% of women). Regionally, participants in Greater London continue to show greater scepticism, being more likely to oppose greater use of ARTE (25% vs 19% overall), whereas those in the South East are more supportive (54% vs 49% overall). There is no real variation in views by age. Participants with a household income of £55,000 or more are also more likely to oppose greater use of ARTE (25% vs 19% overall). Attitudes towards ARTE explored in previous questions have a strong bearing on the future use of ARTE in Great Britain. Those who feel that some cameras are used primarily to raise money are more likely to oppose more use being made of ARTE in Great Britain (27% vs 19% overall), whereas those who agree that monitoring cameras are more of a force for good than for bad are more likely to support it (60% vs 49% overall).

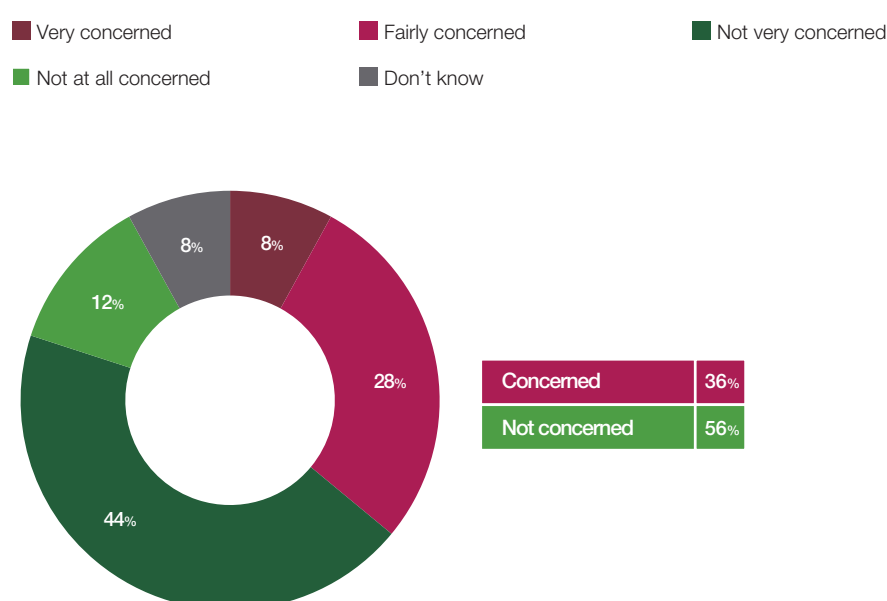
Perceptions amongst those who feel more knowledgeable about ARTE are polarised again on this question. They are more likely to strongly support (13% vs 10% overall), tend to oppose (15% vs 13% overall), and strongly oppose more use being made of ARTE (11% vs 7% overall), suggesting that feeling more aware about the technology leads people to have stronger views, whether positive or negative. Participants who support ARTE in principle in its current form are far more likely to support more use being made of it in future (76% vs 49% overall), and the same – as would be expected – is true of those who believe there is too little ARTE in Great Britain today (80%).

## 5.2 Concern about the increased use of ARTE

Participants were also asked how concerned, if at all, they are about the increased use of ARTE in the future. Most (56%) are not concerned (see Figure 5.2). A sizeable minority (36%) say they are concerned, but relatively few – eight per cent – are *very* concerned.

**Figure 5.2: Concern about the increased use of ARTE**

*Q11. How concerned, if at all, are you about the increased use of automated road traffic enforcement in future?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Concern over the increased use of ARTE in the future varies by gender. Male participants are more concerned than women (40% vs 32% of women). Regional differences remain consistent with results seen earlier in this report. Participants in the South East are more likely not to be concerned (65% vs 56% overall), while participants in Greater London are more likely to be concerned (45% vs 36% overall).

Those whose main journey purpose is for business\* are overwhelmingly more likely to be concerned about the increased use of ARTE in future (60% vs 36% overall). Participants who have received a penalty notice or attended an NSAC within the past two years are also more likely to be concerned about the increasing use of ARTE in the future (52% vs 36% of those who haven't recently received a penalty notice or attended an NSAC).

Once again, those who believe that some cameras are used primarily to raise money are less likely to be supportive of ARTE; here they are more concerned about the increased use of ARTE in the future (46% vs 36% overall). Participants who do not see monitoring

cameras as more of a force for good than for bad are far more likely to be concerned about the increased use of ARTE in the future (64% vs 29% of those who view monitoring cameras more as a force for good).

Greater knowledge of ARTE is linked to greater concern about its increased use in the future; those who know a great deal or a fair amount are more likely to be concerned about its increased use in future (46% vs 30% of those who know a little about it, or have heard of it but know nothing about it). Those who notice at least one enforcement method in their local area are slightly more likely to be concerned about the increased use of ARTE in the future (40% vs 36% overall). Perceptions shift slightly among in-principle supporters and opponents of ARTE when thinking about their future concerns. More than one in five in-principle supporters of ARTE (22%) say they are nonetheless concerned about its increased use in the future, while a similar proportion (19%) of those who oppose ARTE in principle are not concerned.

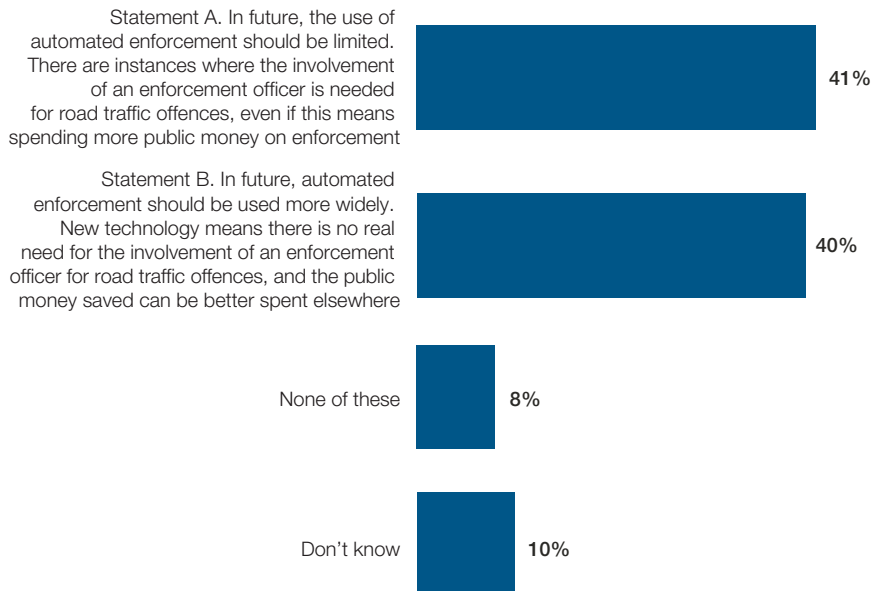
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### 5.3 The future direction of ARTE

At this stage of the questionnaire, participants were presented with two opposing statements and asked which, if any, came closest to their own view about the future direction of road traffic enforcement in Great Britain, the idea being to encourage participants to take a view one way or the other. The results are shown in Figure 5.3. The British public are almost perfectly split between those who believe that ARTE should be limited in future (41%) and those who feel it should be used more widely (40%). A further 8% do not agree with either statement, and one in ten (10%) say they don't know.

**Figure 5.3: The future direction of ARTE**

*Q12. Which of the following statements A or B, if any, comes closest to your own view about the future direction of road traffic enforcement in Great Britain?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Consistent with previous findings, men are more likely to feel that ARTE should be limited in future. Older members of the British public, those aged 55–75, are also more likely to agree that ARTE should be limited (48% vs 41% overall), reflecting their scepticism towards ARTE noted earlier. Those with a full driving licence are slightly more likely to think that the future use of ARTE should be limited (45% vs 41% overall), whereas those with a provisional driving licence are more likely to think ARTE should be used more widely (48% vs 40% overall). Participants whose main journey purpose is commuting for work are also a little more likely to agree with more use of ARTE in future (43% vs 40% overall), while those travelling for business\* purposes, as well as those travelling for reasons not related to work or business\*, are more likely to support more limitations on ARTE in future (61% and 44% respectively, vs 41% overall).

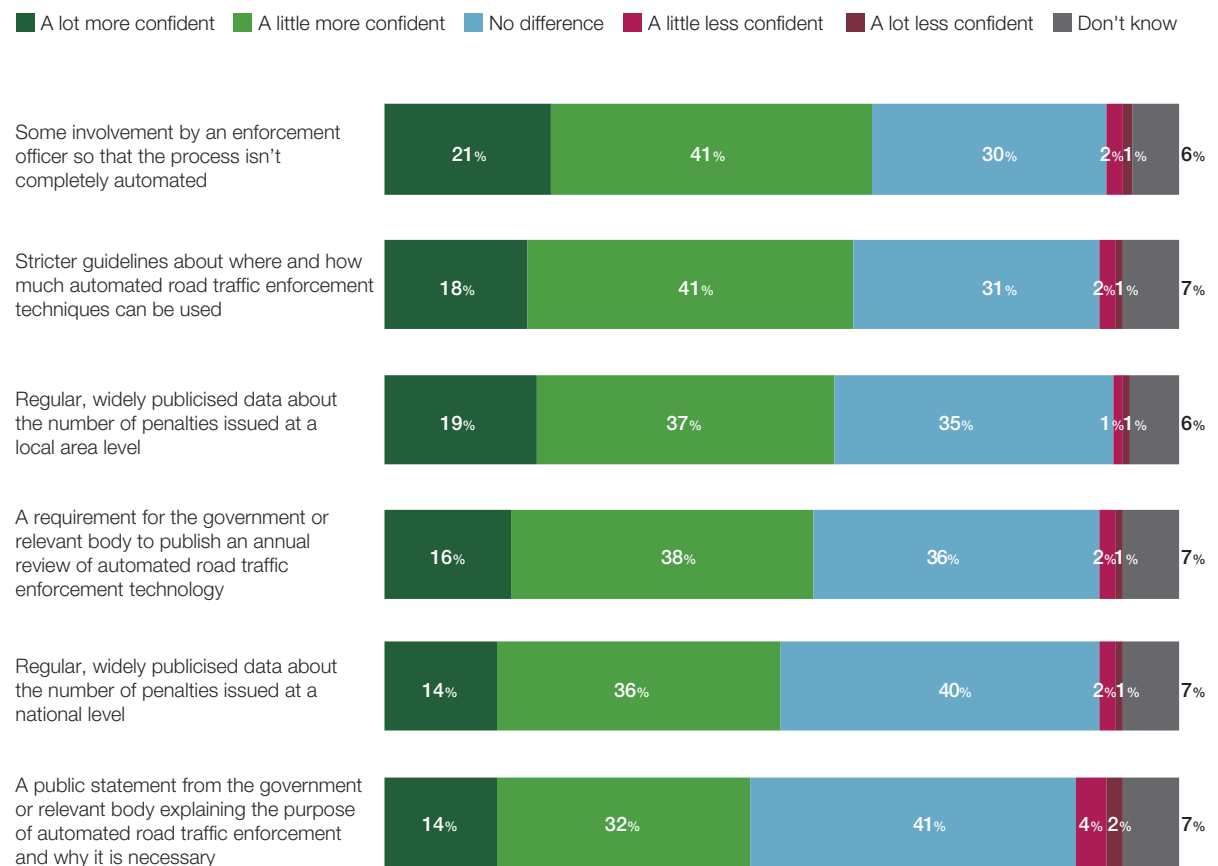
## 5.4 Provisions which might affect confidence in ARTE in the future

The survey found that the public might be made to feel more confident about ARTE in the future if certain provisions are put in place. From a list of potential options, those which mitigate the ‘automated’ aspect of ARTE appear to provide most reassurance. Around three in five participants (61%) say they would feel more confident if there was some involvement by an enforcement officer to ensure that the process is not *completely* automated, and a similar proportion (59%) would feel more confident if there were stricter guidelines determining where and how much ARTE can be used (see Figure 5.4).

Other options which would instil confidence in the majority of the British public include having data which is regularly publicised widely about the number of penalties issued in local areas (56%), and the government or the relevant body being required to publish an annual review of ARTE technology (54%). Half of participants (50%) say they would be more confident in ARTE in the future if there was regularly data publicised widely about penalties issued at a *national* level, and just under half (46%) say a public statement from the government or relevant body explaining the purpose of and necessity for ARTE would make them more confident. It is important to note that a large chunk of the British public (ranging from 30% to 41% depending on the provision) believe that the listed provisions would make no difference to their confidence about ARTE.

**Figure 5.4: Factors which might affect confidence in ARTE in the future**

*Q13. To what extent would each of the following things make you feel more or less confident about automated road traffic enforcement in the future, or would they make no difference to your views?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Overall, older people (aged 55–75), who (as observed earlier) are among the most sceptical groups with regard to ARTE, would be more likely than average to feel more confident about ARTE in future if there was involvement by an enforcement officer (65% vs 61%), regularly

publicised data at a local level (61% vs 56%), a requirement for an annual review of ARTE technology (58% vs 54%), and stricter guidelines for its use (62% vs 59%).

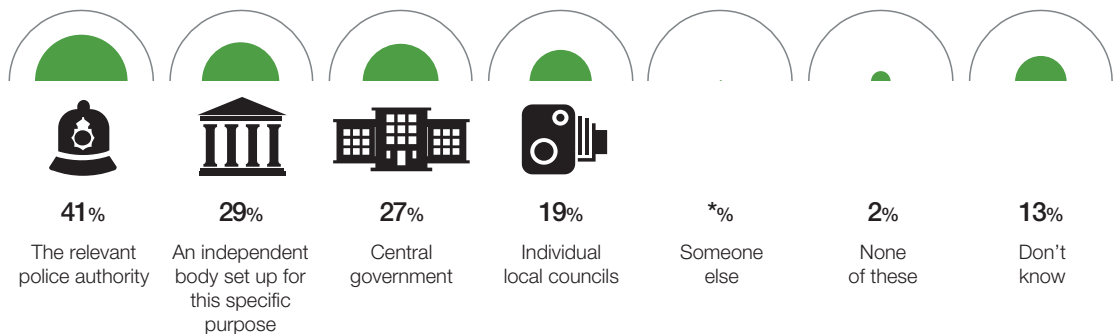
Participants who agree that some cameras are there primarily to raise funds are more likely to be confident about future use of ARTE across the board. Generally, participants who were positive about ARTE in previous questions feel more confident when considering these provisions. However, for those who think there is too much ARTE today, stricter guidelines also breed more confidence in ARTE (69% vs 59% overall). Participants with a full driving licence are more likely to feel more confident than average about ARTE in the future when faced with each of these possibilities; likewise, those who have not received a penalty notice or attended an NSAC are also more likely to feel more confident concerning ARTE’s future use when considering all of them.

## 5.5 Responsibility for regulation of ARTE

On the question of who should be responsible for regulating the use and extent of ARTE, two in five (41%) feel that this responsibility lies with the relevant police authority (see Figure 5.5). Almost three in ten (29%) think an independent body should be set up for this purpose, while a similar proportion (27%) think the responsibility lies with central government. A fifth (19%) think individual local councils should be responsible. Taken together, this suggests a large measure of uncertainty about regulatory responsibility for ARTE in future. It should be noted that more than one of the given answers to this question could be selected by the participants.

**Figure 5.5: Responsibility for regulation of ARTE**

*Q14. Which, if any, of the following bodies do you personally think should be responsible for regulating the use and extent of automated road traffic enforcement [multiple answers permitted]?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)



Generally, participants who are more positive about ARTE (including those who support it now and in the future, those who think there is the right amount of it on the roads today, and those who are not concerned about increased use of ARTE) are more comfortable with existing bodies – such as the relevant police authority, central government and individual local councils – being responsible for regulating ARTE. Conversely, those groups who are more sceptical about ARTE (including those in Greater London, those who oppose ARTE now and in the future, and those concerned about its increased use), are more likely than average to want an independent body set up to regulate its use and extent.

## 6. General Views about Driving Offences



The final part of the survey looked at how accurately members of the public estimated the commonness of receiving a penalty notice, and how many participants had been recently penalised, either by a notice or an NSAC.

### 6.1 Public perception of the number of penalty notices issued

According to research undertaken by Dr Adam Snow, up to 12 million driving licence-holders receive a penalty notice each year, meaning around three in ten (30%) of Britain's 40 million drivers receive a penalty notice annually (note that this figure includes parking offences).<sup>2</sup> The survey included a question asking participants how many drivers in Great Britain out of 100 they believed received a penalty notice each year. A sizeable minority of the British public underestimate the number of penalty notices issued (see Figure 6.1). One fifth (19%) of participants believe that the overall proportion of drivers in Great Britain who receive a penalty notice for driving offences each year is between one and ten in a hundred. A further one in ten believe the figure to be between

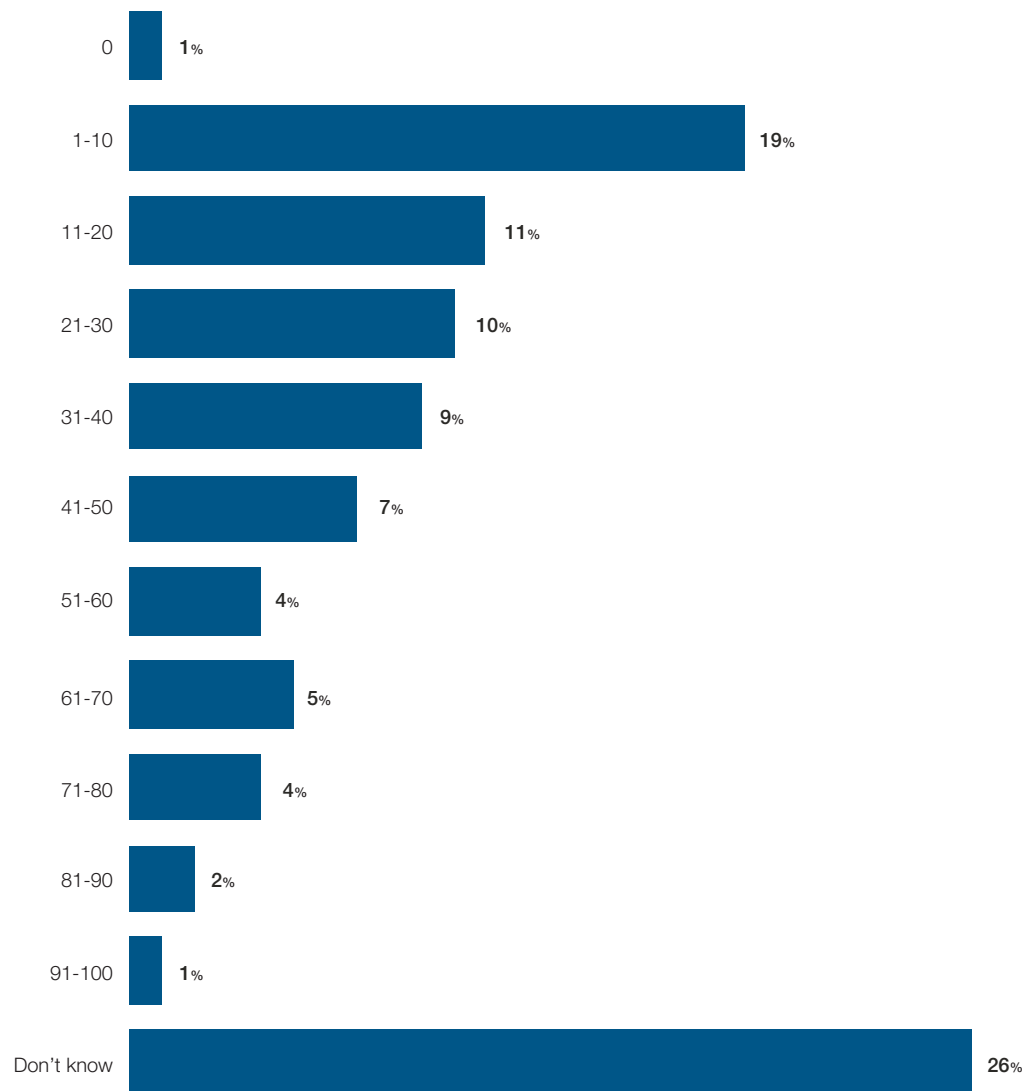
<sup>2</sup> (ibid.)

11 and 20 (11%); those estimating between 21 and 30 out of a hundred amount to 10%. Many also gave estimates above the correct figure of 30, with 9% answering between 31 and 40, and 21% giving an answer between 41 and 80. A quarter (26%) said they do not know and did not provide an estimate, suggesting a degree of uncertainty here.

Around one in seven (14%) gave a response accurate to within five percentage points of the right answer.

**Figure 6.1: Public estimate of the number of penalty notices issued in Great Britain**

*Q19. Out of every 100 drivers in Great Britain, about how many do you think are given a penalty notice for driving offences (including parking) each year, on average? This includes all offences captured both automatically and by individuals working for the police or other enforcement agencies.*



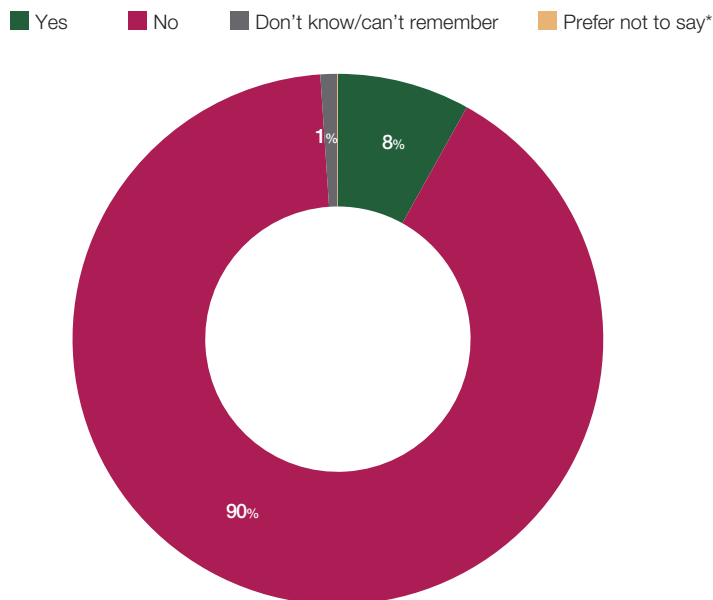
Base: 2,203 British adults aged 16–75 (16–20 March 2018)

## 6.2 Penalty notices issued to / National Speed Awareness Courses attended

A small proportion of the British public – 8% – say they have received a penalty notice or attended an NSAC within the last two years (see Figure 6.2). It may be possible that people aren't considering the range of parking offences in responding to this question given the variation here with estimates in Dr Snow's aforementioned report.

**Figure 6.2: Penalty notices issued to / National Speed Awareness Courses attended by participants**

*Q20. Finally, within the last two years, have you received a penalty notice or attended a National Speed Awareness Course for a speeding, careless driving, parking or other road-related offence?*



Base: 1,890 British adults aged 16–75 who have a full or provisional driving licence (16–20 March 2018)

Young people aged 25–34 are more likely to have received a penalty notice or attended an NSAC (12% vs 8% overall), as are those in the East of England (14% vs 8% overall). Those who are not supportive of ARTE are more likely to have received a penalty notice or attended an NSAC, which may have had a bearing on their attitudes towards automated enforcement now and in the future.

# Appendix A: Demographics and Behaviours/Habits

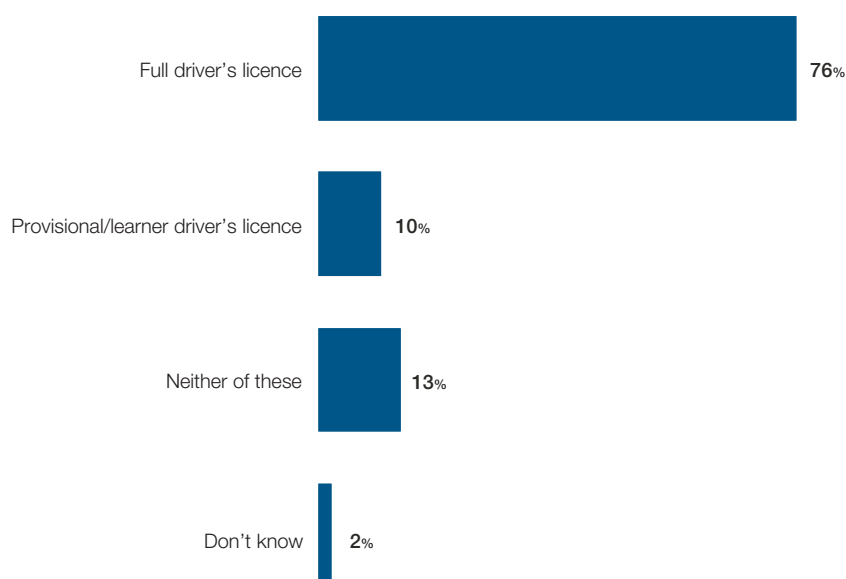
Several questions were asked of participants to assess their own experience in cars, both as drivers and passengers. These questions were included largely for analysis purposes, but the overall results and key subgroup differences are nevertheless presented below for interest.

## 7.1 Type of driving licence held

Firstly, participants were asked whether they possessed a full driving licence, a provisional driving licence, or neither. The results are shown in Figure 7.1. Three quarters (76%) of participants have a full driving licence, and one in ten (10%) have a provisional licence. An additional 13% do not have either type of licence.

**Figure 7.1: Type of driving licence held**

*Q15. Do you personally have a full driver's licence, or a provisional or learner driver's licence for driving a car or a van, or neither of these?*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

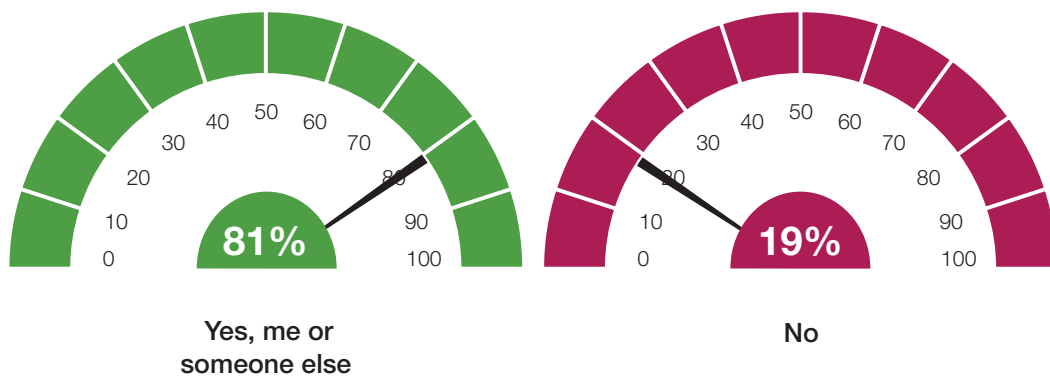
Male members of the British public are more likely to have a full driving licence (80% vs 72% of female participants). Those aged 45–75 are more likely to have a full driving licence (83% vs an overall proportion of 76%), while younger participants aged 16–34 are more likely to have a provisional licence (20% vs 10% overall).

## 7.2 Car or van ownership

Participants were also asked whether they or anyone in their household drives a car or van. The results are shown in Figure 7.2. Four in five participants (81%) do drive a car or van, or live with someone who does.

**Figure 7.2: Car or van ownership**

*Q16. Do you or anyone else in your household drive a car or van at the moment? This includes vehicles owned outright, being leased (e.g. by means of personal contract purchase), or any another arrangement (e.g. using a parent's car).*



Base: 2,203 British adults aged 16–75 (16–20 March 2018)

Participants were asked to specify whether they themselves drive at the moment, or whether it is someone else in their household who is the driver. Overall, 62% of participants say they do, or someone else does. Once again, male participants are more likely to drive themselves (67% vs 58% of female participants). Female participants are more likely to say that someone else in their household drives, at 41% (vs 34% of male participants). However, it is worth noting that those who say that someone else in their household drives may also be a driver themselves.

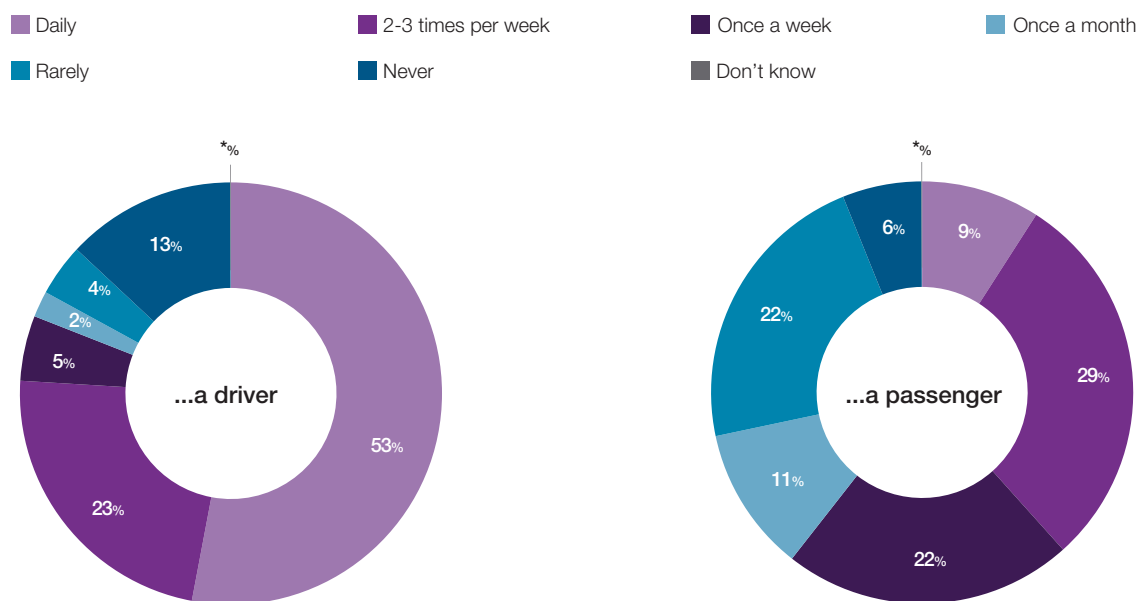
Greater London is the only region in which participants are more likely not to drive nor live with anyone driving at the moment (35% vs 19% for the country as a whole). Participants in the South West and Wales are more likely to drive at the moment (72% and 75% respectively, vs 62% overall).

## 7.3 Frequency of journeys made

Participants who responded that either they themselves, or someone in their household, drives a car or a van were then asked how often they make a journey in a car, whether as a driver and as a passenger. More than half (53%) of participants drive daily, and just under a quarter (23%) drive two to three times a week (see Figure 7.3). A further 5% drive once a week. Additionally, 13% never make a journey as the driver. Fewer participants make a journey daily as a passenger (9%). Fewer than a third make a journey as a passenger two to three times a week (29%), and 22% are passengers once a week. A further third are passengers once a month (11%) or are rarely passengers (22%). Only 6% say they never make car or van journeys as a passenger. Only 6% say they never make car or van journeys as a passenger.

**Figure 7.3: Frequency of journeys made**

*Q17. Approximately how often do you make a journey in your car or van as...?*



Base: 1,776 British adults aged 16–75 who either drive a car or van, or are part of a household in which someone else does (16–20 March 2018)



The following groups are more likely to make a daily car or van journey *as a driver* than the average 53%:

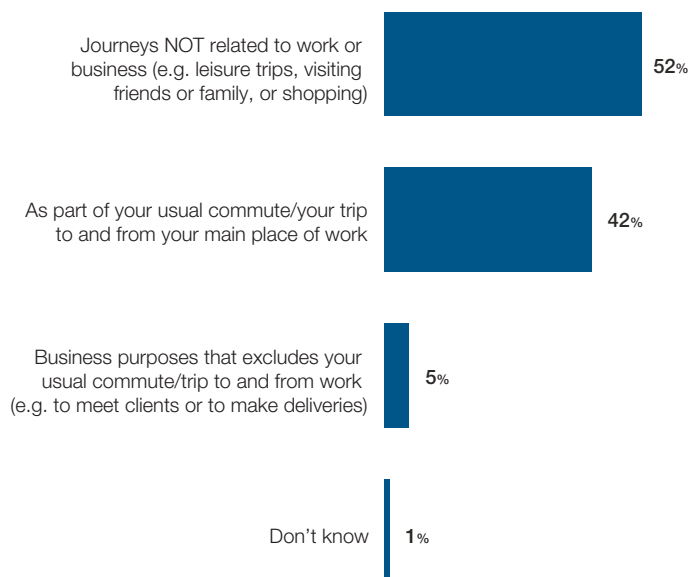
- male participants (56%);
- participants aged 35–54 (61%);
- participants in the ABC1 social category (55%);
- working participants (63%);
- participants with an income of £35,000 or more (58%);
- participants in the East Midlands (62%);
- participants in households with at least one child (59%);
- participants whose main journey purpose is their work commute (79%); and
- those whose main journey purpose is or for business\* (66%).

## 7.4 Purpose of journeys made

The survey also asked participants' their *main* journey purpose. More than half (52%) of the participants travel (whether as driver or passenger) by car or van for trips that are not related to work or business\*, such as leisure, visiting friends or family, or shopping (see Figure 7.4). A further 42% make these journeys to commute to and from work. The remaining 5% are travelling for business purposes\* which do not include commuting, for example meeting clients or making deliveries.

**Figure 7.4: Purpose of journeys made**

*Q18. What is your main purpose for making journeys when using this vehicle?*



Base: 1,776 British adults aged 16–75 who either drive a car or van, or are part of a household in which someone else does (16–20 March 2018)

Those not working are more likely than average to be travelling for reasons not related to work or business: female participants (54% vs 52% overall), participants aged 55–75 (67%), those out of work (87%), those on an income of up to £19,999 (65%), and those with no formal qualifications (63%). Moreover, participants in Greater London are far less likely to make journeys by car as part of their usual commute to work (27% vs 42% overall).

# Appendix B: Notes on Methodology and Reliability

## Social grade definitions

Throughout the report, the results are analysed by socioeconomic grades. A definition of these grades is included below for reference. In most cases, comparisons are made between ABC1 groups (non-manual occupations) and C2DE groups (manual occupations and those with no income aside from state benefits).

| Social grading |   |
|----------------|---|
| Non-manual     | A Senior management and professionals                       |
|                | B Middle management and professional                        |
|                | C1 Junior management; small traders with staff and premises |
| Manual         | C2 Skilled manual workers                                   |
|                | D Semi-skilled and unskilled manual workers                 |
|                | E No income other than state benefits                       |

## Sample profile

Quotas were set to ensure that the profile of those responding was as representative of the Great Britain population aged 16–75 as possible. However, please note that owing to the nature of the methodology, this approach does exclude the offline population – those without access to the Internet.

Data has been weighted back to the known population of Great Britain to counteract non-response bias. Data is weighted by age, gender, working status, region, social grade, and number of vehicles in the household to reflect the population of Great Britain aged 16–75.

## Statistical reliability and margins of error

Participants in the research are only samples of the total population, so we cannot be certain that the figures obtained are exactly those we would have found if every single person in Great Britain aged 16–75 had been surveyed. However, we can predict the variation between the sample results and the true values from knowing the size of the samples on which the results are based and the number of times that a particular answer is given.

It is important to note that margins of error relate only to samples that have been selected using strict random probability sampling methods. However, in practice it is reasonable to assume that these calculations provide a good indication of the confidence intervals relating to this survey and the sampling approach used.

Table B.1 illustrates the predicted ranges for different sample sizes and percentage results at what is called the '95% confidence interval'.

**Table B.1: Sampling tolerances**

| Size of sample on which the survey results are based                                      | Approximate sampling tolerances applicable to percentages at or near these levels |            |      |
|---|---|------------|------|
|   | 10% or 90%  | 30% or 70% | 50%  |
|   | ±   | ±          | ±    |
| 2,203 (all participants)  | 1.3%  | 1.9%       | 2.1% |
| 1,890 (all participants)  | 1.4%  | 2.1%       | 2.3% |
| 1,776 (all who drive a car or van, or are part of a household in which someone else does) | 1.4%  | 2.1%       | 2.3% |

For example, with a sample of 2,203 where 50% give a particular answer, the chances are 19 in 20 (95%) that the true value (which would have been obtained if the whole population had been surveyed) will fall within the range of plus or minus 2.1 percentage points from the sample result, i.e. between 47.9% and 52.1%.

Unless otherwise stated, all subgroup differences included in the report represent statistically significant differences.

## Technical note

Data points which appear as asterisks (\*) denote a figure of less than 0.5% but greater than zero.

Throughout this report an asterisk is displayed next to any mention of the subgroup 'those who mainly travel for business purposes', as the base is lower than 100. These findings are advised to be treated as indicatively.

Where percentages do not sum to 100, this is due to computer rounding, multiple responses or the exclusion of 'don't know' categories.

Where percentages of combinations are shown (e.g. 'Agree'), these reflect the combined raw numbers, and so may not be the same as the sum of the individual percentages (e.g. 'Strongly agree' and 'Tend to agree').

# Appendix C: Questionnaire

## Section 1: Introducing automation and monitoring

*[DP NOTE: THIS AND SUBSEQUENT HEADINGS ARE FOR REFERENCE ONLY, NOT TO INCLUDE IN THE SCRIPT]*

**Firstly, we would like to ask you some questions about the use of monitoring and enforcement techniques in Great Britain today.**

### Question 1.

To what extent do you agree or disagree with the following statements?

|   | Strongly agree        | Tend to agree         | Neither agree nor disagree | Tend to disagree      | Strongly disagree     | Don't know            |
|---|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| With the amount of monitoring cameras in Britain these days, I feel like I'm being constantly watched                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I believe monitoring cameras are more of a force for good in society than bad   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| In general, I trust the government and relevant authorities to use monitoring and enforcement techniques in the right way | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I believe some cameras are primarily used to raise money rather than improving traffic flow or making the roads safer     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Question 2.

How much, if anything, would you say you know about each of the following?

|   | A great deal          | A fair amount         | Just a little         | Heard of, know nothing about | Never heard of        | Don't know            |
|---|-----------------------|-----------------------|-----------------------|------------------------------|-----------------------|-----------------------|
| Monitoring of mobile phone use (e.g. GPS location tracking)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>        | <input type="radio"/> | <input type="radio"/> |
| Monitoring on public transport (e.g. CCTV on buses and trains)  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>        | <input type="radio"/> | <input type="radio"/> |
| Monitoring of traffic flow (e.g. CCTV feeding traffic control centres)  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>        | <input type="radio"/> | <input type="radio"/> |
| Monitoring of traffic speed (e.g. speed cameras on local roads and motorways)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>        | <input type="radio"/> | <input type="radio"/> |
| Automated road traffic enforcement (e.g. cameras used to detect and trigger penalties automatically for traffic offences) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>        | <input type="radio"/> | <input type="radio"/> |

## Question 3.

And in principle, to what extent do you support or oppose the use of the following in Britain?

|   | Strongly support      | Tend to support       | Neither support nor oppose | Tend to oppose        | Strongly oppose       | Don't know            |
|---|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| Monitoring of mobile phone use (e.g. GPS location tracking)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Monitoring on public transport (e.g. CCTV on buses and trains)  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Monitoring on roads (e.g. CCTV on A roads and motorways)  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Monitoring of traffic speed (e.g. speed cameras on local roads and motorways)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Automated road traffic enforcement (e.g. cameras used to detect and trigger penalties automatically for traffic offences) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

#### Question 4.

Which, if any, of the following have you noticed when driving in your local area? By local area, we mean the area within 5-10 minutes' driving distance from your home.

|                          |                             |
|--------------------------|-----------------------------|
| <input type="checkbox"/> | Red light cameras           |
| <input type="checkbox"/> | Fixed speed cameras         |
| <input type="checkbox"/> | Mobile speed cameras        |
| <input type="checkbox"/> | Bus lane cameras            |
| <input type="checkbox"/> | Box junction cameras        |
| <input type="checkbox"/> | Average speed check cameras |
| <input type="checkbox"/> | None of the above           |
| <input type="checkbox"/> | Don't know                  |

## Section 2: Support for/opposition to automated enforcement, and its perceived impacts

The next few questions are about the use of automated road traffic enforcement. This is where police and enforcement agencies, such as local authorities and local police forces, use 'automated' techniques, for example, a speed camera, or a camera at a box junction, to detect road traffic offending and trigger the issue of a penalty. By automated we mean there is little or no involvement from an enforcement officer.

NOTE FOR DP: The following text should be permanently on screen (preferably at the top of the screen) throughout sections 2 & 3:

"Automated road traffic enforcement is where police and enforcement agencies, such as local authorities and local police forces, use 'automated' techniques for example a speed camera, or a camera at a box junction, to detect road traffic offending and trigger the issue of a penalty. By automated we mean there is little or no involvement from an enforcement officer."

#### Question 5.

In principle, to what extent do you support or oppose the use of automated road traffic enforcement in Great Britain?

|                       |                            |
|-----------------------|----------------------------|
| <input type="radio"/> | Strongly support           |
| <input type="radio"/> | Tend to support            |
| <input type="radio"/> | Neither support nor oppose |
| <input type="radio"/> | Tend to oppose             |
| <input type="radio"/> | Strongly oppose            |
| <input type="radio"/> | Don't know                 |



### Question 6.

Would you say there is too much, too little or about the right amount of automated road traffic enforcement on roads in Great Britain today?

|                       |                  |
|-----------------------|------------------|
| <input type="radio"/> | Far too much     |
| <input type="radio"/> | A bit too much   |
| <input type="radio"/> | About right      |
| <input type="radio"/> | A bit too little |
| <input type="radio"/> | Far too little   |
| <input type="radio"/> | Don't know       |

### Question 7.

To what extent do you support or oppose the use of automated road traffic enforcement in Great Britain if...

|   | Strongly support      | Tend to support       | Neither support nor oppose | Tend to oppose        | Strongly oppose       | Don't know            |
|---|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| ...it generates more revenue to invest in road safety improvements (such as paths for cyclists and pedestrians, and junction improvements)?                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...it fails to improve traffic flow and average journey times?  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...it frees up more time for police to deal with other offences?  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...it shows it improves public transport services (e.g. timeliness of bus services)?  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...it reduces the number of accidents and casualties on the roads?  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...it leads to better management and maintenance of car parks (such as improved car safety, better availability of parking spaces, and better lighting and security)? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

### Question 8.

To what extent do you agree, or disagree, with the following statements about automated road traffic enforcement?

|  | Strongly agree        | Tend to agree         | Neither agree nor disagree | Tend to disagree      | Strongly disagree     | Don't know            |
|--|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| I don't believe it works effectively in discouraging drivers from offending  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I feel safer knowing that it is there to discourage drivers from offending   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think it is designed mainly to raise revenue for the government and local councils   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think it works less effectively in discouraging drivers from offending than 'human' enforcement by police and other enforcement agencies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think the number of penalty notices issued should be regularly published for each area   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I think speed cameras only cause drivers to slow down where the camera is positioned before speeding up again                              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would rather see more automatic traffic enforcement freeing police time to focus on other matters  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

### Question 9.

To what extent do you agree or disagree that it would be acceptable to use automated road traffic enforcement if...?

|   | Strongly agree        | Tend to agree         | Neither agree nor disagree | Tend to disagree      | Strongly disagree     | Don't know            |
|---|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| ...your vehicle has stopped in a box junction on a major road in a large city                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...your vehicle is caught speeding in a residential area over a 30MPH limit                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...your vehicle is caught speeding on the motorway over a 70MPH limit                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...your uninsured vehicle is caught by a camera using Automatic Number Plate Recognition (ANPR) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ...you have parked your vehicle in a pay and display bay and have not purchased a ticket        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Section 3: Future of automated road traffic enforcement

Now thinking about how automated road traffic enforcement might be used in the future.

### Question 10.

In principle, to what extent do you support or oppose more use being made of automated road traffic enforcement in Great Britain?

|                       |                            |
|-----------------------|----------------------------|
| <input type="radio"/> | Strongly support           |
| <input type="radio"/> | Tend to support            |
| <input type="radio"/> | Neither support nor oppose |
| <input type="radio"/> | Tend to oppose             |
| <input type="radio"/> | Strongly oppose            |
| <input type="radio"/> | Don't know                 |

**Question 11.**

How concerned, if at all, are you about the increased use of automated road traffic enforcement in future?

|                       |                      |
|-----------------------|----------------------|
| <input type="radio"/> | Very concerned       |
| <input type="radio"/> | Fairly concerned     |
| <input type="radio"/> | Not very concerned   |
| <input type="radio"/> | Not at all concerned |
| <input type="radio"/> | Don't know           |

**Question 12.**

Which of the following statements A or B, if any, comes closest to your own view about the future direction of road traffic enforcement in Great Britain?

**Statement A**

In future, the use of automated enforcement should be limited. There are instances where the involvement of an enforcement officer is needed for road traffic offences, even if this means spending more public money on enforcement.

**Statement B**

In future, automated enforcement should be used more widely. New technology means there is no real need for the involvement of an enforcement officer for road traffic offences, and the public money saved can be better spent elsewhere.

|                       |                             |
|-----------------------|-----------------------------|
| <input type="radio"/> | Agree more with Statement A |
| <input type="radio"/> | Agree more with Statement B |
| <input type="radio"/> | Agree with none of these    |
| <input type="radio"/> | Don't know                  |

### Question 13.

To what extent would each of the following things make you feel more or less confident about automated road traffic enforcement in the future, or would they make no difference to your views?

|  | A lot more confident  | A little more confident | No difference         | A little less confident | A lot less confident  | Don't know            |
|--|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-----------------------|
| Some involvement by an enforcement officer so that the process isn't completely automated  | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |
| A public statement from the government or relevant body explaining the purpose of automated road traffic enforcement and why it is necessary | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |
| Regular, widely publicised data about the number of penalties issued at a local area level   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |
| Regular, widely publicised data about the number of penalties issued at a national level   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |
| A requirement for the government or relevant body to publish an annual review of automated road traffic enforcement technology               | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |
| Stricter guidelines about where and how much automated road traffic enforcement techniques can be used                                       | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> |

### Question 14.

Which, if any, of the following bodies do you personally think should be responsible for regulating the use and extent of automated road traffic enforcement?

|                          |   |
|--------------------------|---|
| <input type="checkbox"/> | The relevant police authority   |
| <input type="checkbox"/> | Central government (e.g. the Department for Transport, the Home Office) |
| <input type="checkbox"/> | Individual local councils   |
| <input type="checkbox"/> | An independent body set up for this specific purpose                    |
| <input type="checkbox"/> | Someone else (PLEASE SPECIFY) <input type="text"/>                      |
| <input type="checkbox"/> | None of these   |
| <input type="checkbox"/> | Don't know  |

## Section 4: Demographics and road behaviours/habits

Finally, we have just a few questions about your driving habits. These responses will be used for classification purposes only.

### Question 15.

Do you personally have a full driver's licence, or a provisional or learner driver's licence for driving a car or a van, or neither of these?

|                       |                                      |
|-----------------------|--------------------------------------|
| <input type="radio"/> | Full driver's licence                |
| <input type="radio"/> | Provisional/learner driver's licence |
| <input type="radio"/> | Neither of these                     |
| <input type="radio"/> | Don't know                           |

### Question 16.

Do you or anyone else in your household drive a car or van at the moment? This includes vehicles owned outright, being leased (e.g. Personal Contract Purchase), or any another arrangement (e.g. using a parent's car).

|                       |                                    |
|-----------------------|------------------------------------|
| <input type="radio"/> | Yes, me                            |
| <input type="radio"/> | Yes, someone else in the household |
| <input type="radio"/> | No                                 |

ASK ALL WHO CODE 1 OR 2 @ Q16

### Question 17.

Approximately how often do you make a journey in your car or van as...?

|             | Daily                 | 2-3 times per week    | Once a week | Once a month          | Rarely                | Never                 | Don't know            |
|-------------|-----------------------|-----------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|
| A driver    | <input type="radio"/> | <input type="radio"/> |             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| A passenger | <input type="radio"/> | <input type="radio"/> |             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

ASK ALL WHO SAY 'YES' AT Q16 (CODES 1 and 2)

### Question 18.

What is your main purpose for making journeys when using this vehicle?

- ☐ As part of your usual commute/your trip to and from your main place of work
- ☐ Business purposes that excludes your usual commute/your trip to and from work (e.g. to meet clients or to make deliveries)
- ☐ Journeys NOT related to work or business (e.g. leisure trips, visiting friends or family, or shopping)
- ☐ Don't know

## Section 5: General views about driving offences

Finally, we have some questions about driving offences and how they are dealt with.

### Question 19.

Out of every 100 drivers in Great Britain, about how many do you think are given a penalty notice for driving offences (including parking) each year, on average?

This includes all offences captured both automatically and by individuals working for the police or other enforcement agencies.

- ☐ Enter a number
- ☐ Don't know

ASK ALL WHO SAY THEY HAVE A FULL OR PROVISIONAL/LEARNERS' DRIVING LICENCE AT Q15 (CODES 1 OR 2)

### Question 20.

Finally, within the last two years, have you received a penalty notice or attended a National Speed Awareness course for a speeding, careless driving, parking or other road-related offence?

- ☐ Yes
- ☐ No
- ☐ Don't know / can't remember
- ☐ Prefer not to say





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