



THE FUTURE OF ROADS POLICING

RUTH HALKON and RICK MUIR

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EXECUTIVE SUMMARY

The United Kingdom has the reputation of having some of the safest roads in the world. Yet there is increasing evidence that they are becoming more dangerous. On average around 25,000 people are killed or seriously injured on our roads each year. This number had been constant for the last decade, following many years of reductions. Now the most recent data shows a five per cent rise in fatality rates, the first significant increase in 40 years.

Improvements in technology may have made cars safer for those inside them, but there is evidence that these bigger, heavier vehicles are more hazardous for those on the outside. Cyclists and pedestrians may be doing their bit for the environment, but they are putting themselves at risk in streetscapes designed for cars. More needs to be done to facilitate such green transport methods if we are to emulate the models set by our European neighbours.

At the same time, there have been significant cuts to the numbers of dedicated road police officers. Between 2010 and 2014 numbers of traffic officers fell by 22 per cent and between 2015 and 2019, numbers fell by a further 18 per cent. This is despite a growing body of evidence that shows cutting the number of traffic officers has directly contributed to making our roads less safe.

Roads policing falls in the gap between the Department for Transport and the Home Office, and its absence from the Strategic Policing Requirement has led to it being seen as a 'nice to have' rather than an obligation. Roads policing has thus been disproportionately hit by austerity, compared to core areas such as violent crime and terrorism, even though it could prevent far more deaths. As a result resources vary hugely across the country – some forces have roads police who also act as firearms officers, while others do not have a single dedicated roads officer.

The evidence shows that the fear of getting caught and fined by police is one of the few factors able to persuade motorists to abide by speed limits and other restrictions. Without sufficient enforcement, some drivers are getting away with dangerous and illegal behaviours, and as a result more people are dying on the roads. The Covid-19 pandemic may have led to fewer cars on the road and more people walking and cycling, yet overall our roads became more dangerous, as empty streets tempted drivers to indulge in more risky behaviours.

As well as carrying out enforcement, traffic officers investigate serious and fatal road traffic collisions and support families of those killed. Yet these functions are under resourced, and victims and their families are suffering as a result.

New technologies, such as autonomous cars and increasingly advanced roadside cameras, are sometimes suggested as alternatives to having police officers on the roads. It is true that these advances will alter the work of roads police, but will only make them more necessary – artificial intelligence cannot judge whether drivers are travelling at inappropriate speeds for the road and conditions, even if within the speed limit. And there needs to be more focus on educating drivers around the safe use of the technology in their cars.

Improving road safety is not the business of the police alone, the public, government, industry and the third sector are part of the problem, but they are also part of the solution. With proper leadership, education and enforcement, as well as better design that puts the needs of the most vulnerable first, we have a chance at making our roads safe for everyone.

Only once we take road death seriously, begin to see it as preventable rather than inevitable and start seriously to work towards a future where no one dies on our roads, can we truly say the UK's roads are among the safest in the world. Our report sets out a number of recommendations to government, the police and the public which go some way towards making that vision a reality.

RECOMMENDATIONS

Recommendation One

The Home Office should include roads policing in the Strategic Policing Requirement (SPR) in order to ensure that roads policing is sustained as a core policing capability throughout the country. This should sit alongside a strengthening of what fulfilling the SPR entails for local forces. To comply with the SPR, PCCs should be required to set out a road safety and roads policing plan for their area, working in partnership with community groups, local authorities, businesses, schools, and other public services to identify road safety goals, set out how they will be achieved and measure progress toward achieving them.

Recommendation Two

The national roads policing lead should be supported by a dedicated full-time secretariat, based within the NPCC. This secretariat will provide national leadership on the policing of the roads network and will be empowered to set guidelines and make recommendations to chief constables for how much capability ought to be provided in each policing area.

Recommendation Three

The government should appoint a Road Safety Commissioner, comparable to the Victims Commissioner, responsible for promoting good practice and partnership working, and holding government departments and police accountable so that lessons are learned, and future road deaths are prevented.

Recommendation Four

The Vision Zero approach should be rolled out nationally. The Home Office expects police forces to make "measurable improvements" across a range of policing outcomes (Malthouse, 2020). Making progress towards achieving zero road deaths should be among these measurable outcomes. The strategic ownership of this goal should lie with the Home Office, with the backing of the Prime Minister, and the support of other government departments including transport and health. Local delivery will be led by PCCs.

Recommendation Five

The relevant agencies should create an entity which brings together experts from police, government, academia, industry and the third sector with the aim of anticipating future road dangers, such as caused by changes in technology, and ensuring police and other actors are equipped to deal with them. A useful template for this entity - which could be a standing committee or policy forum - could be the Scientific Advisory Group for emergencies (SAGE). Part of its remit would be raising awareness of emerging risks and making recommendations to ensure that drivers' skills keep pace with developments in incar technology. This entity should also be charged with advising on measures necessary to enable the roads policing function to respond to a changing technological environment, including skills development in investigation and the setting of digital data and technology standards.

Executive summary 3

1. INTRODUCTION

The relationship between the police and the roads dates back to before the formation of the Metropolitan Police in 1829. In the early 1800s members of the Bow Street Runners began patrolling the roads into London on horseback, tasked with deterring and apprehending highwaymen. A century later the police role on the roads network changed radically with the rise of the motorcar and the need to regulate its use, which created hitherto unknown friction between the police and the middle classes (Emsley, 1993). From the 1960s the police shifted from the traditional foot patrol to a new, motorised 'unit beat' system of patrol using the 'panda car', changing the way the police operate and affecting their relationship with local communities (Wakefield, 2006). Over the decades, the role of the police on the roads has expanded to encapsulate improving road safety, disrupting criminality and countering terrorism (NPCC, 2018). Today, roads policing remains an important specialist component of police work, although one that operates in a context transformed by new technologies, more complex crime patterns and the wider diversification of police work.

This paper explores the future of roads policing. It is motivated by two insights. First, the way we travel and use the road network is changing and is likely to change even more significantly in the years ahead, in particular due to new technologies available to both the police and to car owners. Autonomous vehicles are no longer matters for science fiction but are products in development that will transform the way we travel.

Second, although Britain has a comparatively strong road safety record, reductions in road deaths have slowed in the last decade, and there are signs the number of fatalities is again beginning to rise. Thousands of people still die or are seriously injured every year on our roads and we need to dramatically change the way we use and monitor our roads if we are to reduce these numbers in the years ahead.

This paper asks how roads policing will need to transform in order to respond to the challenges of the 2020s and 2030s.

The paper comes in six parts:

- 1. We explain the origins and evolution of roads policing in England and Wales.
- We describe how the challenge facing roads policing is changing; looking at trends in road safety and the changing nature of crime on the road network.
- 3. We describe the current state of roads policing in England and Wales.
- 4. We set out how technology is transforming the way we use the roads and the implications of this for how they are policed.
- We describe the wider system of actors and institutions who play a role in improving road safety and what improved collaboration between them might look like.
- 6. Finally, we set out a number of recommendations aimed at improving road safety outcomes and articulating what the police role should look like in the future.

The paper is based on a review of the relevant policy and academic literature on policing and road safety. It is also informed by a seminar held in June 2021 by the Police Foundation and DriveTech. This event brought together experts from the government, third sector, industry, academia and the police service to discuss the future of roads policing. Some of those experts were also present at a subsequent seminar in December 2021 to discuss and finesse this report's final recommendations. The paper is intended as an expert contribution to the *Strategic Review of Policing in England and Wales*, a major independent review of the future of policing chaired by Sir Michael Barber and delivered by the Police Foundation. The Review will publish its final recommendations in March 2022.

2. THE HISTORY OF ROADS POLICING

In order to think about the future of the police role on the roads, it is important to consider how roads policing has evolved over time. The police have long played a role on the road network, one which precedes the birth of modern professional policing in the first part of the nineteenth century. Many of the challenges policing faces today – the battle to stay abreast of new technologies, the challenges of interacting with populations unused to police attention and the problem of resources outstripping demand – also affect roads policing

2.1 BEFORE THE MOTOR CAR

The Bow Street Runners were the eighteenth-century brainchild of Henry and John Fielding who, as magistrates, recruited hundreds of new 'police officers' to apprehend criminals and bring them before the courts. In the early nineteenth-century a mounted division of the Bow Street Runners was formed to patrol the roads going in and out of London, in particular to deter and apprehend highwaymen. They travelled as far out as Enfield, Epsom, Windsor and Romford and dressed in blue coats and scarlet waistcoats, greeted travellers with the declaration 'Bow Street Patrol!' (Critchley, 1978).

The early professional police, founded with the creation of the Metropolitan Police in 1829, played a role in promoting road safety. In those days most people travelled by horse or on foot, but as the population grew, the streets in many of the big cities became congested. The first road traffic laws were introduced in the late 1800s, which gave the police the responsibility and power to help reduce this congestion and ensure the safety of pedestrians and horses by enforcing speed limits (Anstead, 2018).

2.2 ROADS POLICING IN THE AGE OF THE MOTOR CAR

From the 1890s the motor car transformed the travelling habits of the nation, and the police were quickly called upon to lead the enforcement of traffic laws. The first fine for a traffic offence was issued in 1896 after an off-duty constable caught a motorist going four times over the speed limit. In 1900 the first police car chase occurred when an officer commandeered a car to apprehend a man drunk in charge of a horse.

In 1903, under the Motor Car Act, which also introduced motor vehicle registration and driver licensing, the speed limit was increased from 14mph to

20mph. This legislation "pitched the police into...conflict with motorists" who saw themselves as "battling" what they considered to be "overzealous police", an attitude which persists to this day (Anstead, 2018, p.36). In the early 1900s police officers began operating "speed traps" on the Brighton Road, now the A23, using a combination of hand signals and a stopwatch over a measured mile of road (House of Commons, 2006).

The origins of the Automobile Association

On 19 June 1905 a small group of motoring enthusiasts banded together to warn fellow drivers about speed traps. They opted to call themselves the Motorists' Mutual Association. In response to what they perceived to be the overzealous police enforcement of driving restrictions, the group organised teams of cyclists who, through a combination of signals and salutes, assisted drivers to stay safe on the roads and avoid penalties. A month later, as the group established an enthusiastic following among the motoring community, they settled upon a new name – The Automobile Association.

The British police were slow to introduce their own motor vehicles, purchasing their first two cars in 1903. This grew to a fleet of 35 by the end of the first world war, but these were mainly used for senior officers and support functions rather than for attending calls. Especially in rural forces, the police remained wedded to horses and foot patrols for many years, and even bicycles were discouraged (Emsley, 2021). But as the war ended the number of cheap cars available grew rapidly, and the increasing use of vehicles by criminals and the escalating issues posed by their widespread use by the general public meant the police had to adapt.

This period saw the origin of many of the structures and priorities that typify roads policing, and of the problems that bedevil it to this day – such as the challenges posed by interactions with populations unused to police attention and the idea of roads policing as an "optional" policing task (HMICFRS, 2020).

Just after the first world war, the Metropolitan Police reorganised its responsibility for the management of traffic and placed it under one command. In 1920, the London police were issued with motorcars for controlling traffic to "speed up traffic generally and confine slow moving vehicles to the kerb" (Anstead, 2018, p.50). This introduced the triple role of roads policing in England and Wales: to keep traffic flowing, combat criminality and to ensure safety. Anstead argues that the function of these officers was primarily to maintain the fast movement of the population and to rapidly clear up collisions, which were seen as a sad but inevitable consequence of this new age of speed (Anstead, 2018).

The rise of the motorcar introduced a whole series of modern problems: car theft, criminals using cars as getaway vehicles, congestion, collisions and speeding. For the first time it also put the police into potential conflict with ordinary and normally law-abiding citizens who do not see road crime as 'real crime' (Emsley, 1993). In the 1930s the speed limit was so universally disobeyed that its maintenance was thought to put the law into disrepute. However, rather than spending money recruiting and equipping more traffic officers, speed restrictions were scrapped (Anstead, 2018).

1930 also saw the rollout of police traffic divisions across the country as the first Road Traffic Act required all forces to institute mobile patrols to improve driving behaviour by example and gave them the funding to buy cars specifically for enforcing road traffic regulations (Anstead, 2018). This in turn necessitated specially trained police drivers able to get to collisions as quickly and safely as possible. As with today's roads police, the emphasis was on educating the public on safer behaviour with punishment only used if they refused to come into line.

In 1955 the first edition of the police driver training manual Roadcraft was published bringing together for the first time the recommended professional practice in good driving. The manual, alongside its companion Motorcycle Roadcraft, is written and published by the Police Foundation to this day.

In 1958 Lancashire Police was tasked with controlling the country's first motorway. In 2022 the force no longer has any full-time traffic police (Anstead, 2018; BBC, 2022).

By the middle of the 20th century the role of the traffic officer can be summarised as:

Attending and dealing with all fatal and serious collisions

- Motorway policing
- Escorting abnormal loads, VIPs and ambulances
- Hazardous chemical transportation enforcement
- Dealing with overweight vehicles
- HGV enforcement
- Roadworks supervision
- Enforcement of road traffic laws
- Driver education
- Armed response
- Chasing and catching criminals (Anstead, 2018).

Much of this would be familiar to traffic officers to this day, although some of these responsibilities have since been transferred to other agencies.

From the 1960s onwards the so-called 'panda car' replaced foot patrol as the main provider of police presence and response. However so-called 'unit beat policing', largely carried out by car, when combined with a shortage of officers, led to a perceived distancing between police and public (Brain, 2010). Exacerbated by a rise in crime throughout this period, policing transformed into a largely reactive service, set up to attend incoming emergency calls by car. This led to concerns about the loss of the traditional 'bobby on the beat' that continue to resonate to this day.

Greater use of technology, such as traffic lights and speed cameras, decreased the need for certain police traffic functions. For instance, it had been common until the 1970s for police officers to stand at a fixed point at a junction to direct traffic by use of hand signals ('point duty'). Thankfully for those police officers who had to do this work this was soon superseded by the spread of traffic lights, and by the 1990s other traffic management features such as automated enforcement provided by speed cameras had come in (Brain 2010). The 1990s also saw the assumption by local authorities of powers to enforce parking, waiting and loading offences, which had previously been dealt with exclusively by the police. In particular, the 2004 Traffic Management Act created Highways Agency traffic officers who are responsible for ensuring the smooth flow of traffic on the motorways and have powers to direct motorists (House of Commons, 2006).

However, instead of redeploying newly available police officers to proactively police the roads, many Chief Constables instead gave them additional responsibilities unrelated to traffic, such as firearms, or moved them out of traffic policing entirely. This decision was justified by the ever-decreasing road casualty rates, which many attributed to new technologies such as speed cameras that purportedly enforced the speed limit without the need for police presence (Snow, 2017).

As we will explore elsewhere, this encouraging downward trend in fatalities began to slow at the same time as the emphasis began to shift away from traffic patrols. It is extremely difficult in practice to establish the relationship between overall levels of policing and the number of collisions or casualties, as a recent Parliamentary Advisory Council for Transport Safety (PACTS) report explains. However their analysis indicates a positive correlation between increased police-led enforcement such as Fixed Penalty Notices and a reduction in the numbers of people killed or seriously injured (Norbury, 2020). This implies that while technology can make officers more efficient and effective in carrying out their duties, it cannot replace them (House of Commons, 2006).

2.3 THE DIVERSIFICATION OF POLICE SPECIALISMS

In the late 20th and early 21st century the traditional duopoly in specialist policing of CID and traffic began to break down with the addition of new specialisms, themselves a response to more complex demand and the diversification of police work. For example,

public order policing has grown considerably over the years, particularly following the political turbulence of the 1980s (Brain, 2010), and today constitutes one of the most significant specialist capabilities in policing. Similarly, the number of trained armed officers has increased in response to the rise of serious crime and terrorism, particularly after 2016, currently standing at around 6,500 nationally (Home Office, 2021a).

In the 2000s following the tragic death of Victoria Climbié and the subsequent Laming Inquiry, child safeguarding became a duty on the police (and other agencies). Other public protection responsibilities relating to the monitoring of serious offenders and support for vulnerable victims were gradually added, making public protection another important police specialism. The adoption in that same decade of the National Intelligence Model created an increased requirement for specialist intelligence officers (Brain, 2010).

In short, police work has radically diversified. Inevitably this has meant that the older major specialisms of traffic and detection have faced increased internal competition for resources. And because for various reasons the public consider fighting crime to be more of a priority than traffic offences, roads policing has lost out (House of Commons, 2006). As we shall see, this has had a tangible impact on what roads policing has been able to achieve, particularly in the last decade, as fewer officers mean fewer people carrying out enforcement, education and deterrence, as well as detecting offences.

3. THE CHALLENGE FACING ROADS POLICING

We will now review the current challenge facing roads policing. This challenge is made up of two components, the need to reduce danger on the roads, and the need to disrupt wider crime on the road network. First, this section describes recent trends in fatality rates, casualty rates and the characteristics of the victims of road traffic collisions, setting out the road safety challenge that policing faces. We note how England and Wales compare with other European countries. Second, we discuss the police role in disrupting wider crime on the roads network.

3.1 FATALITIES

Every day on average five people are killed and 68 people are seriously injured in road traffic collisions in England and Wales. In 2019, 1,752 people were killed on Britain's roads. During 2020, 1,460 people were killed on the roads, a decrease of 17 per cent on the previous year and 22,539 were killed or seriously injured - a decrease of 22 per cent compared to 2019. However, the UK spent four months of 2020 in lockdowns, during which the population was advised to stay at home and only travel for essential journeys. Consequently, the amount of road traffic followed a similar trend in the same period, decreasing by 21 per cent (DfT, 2021). Worryingly, although there were fewer cars on the road and thus fewer overall deaths, the fatality rate, which is defined as the risk a traveller runs of being killed per billion miles travelled, actually increased by five per cent in 2020 compared to the

previous year (See Figure 3.1). This is the first increase in a decade and has been linked to a number of factors including increased speeding due to emptier roads and fewer traffic police. (DfT, 2021; BBC, 2022).

Following the end of the first lockdown, casualties within police force areas started to increase to similar levels as the 2017 to 2019 three-year average, according to the Department for Transport's analysis. (DfT, 2021a). This indicates that the declines in numbers of killed and injured occurring in 2020 were an aberration, and it is expected that numbers should return to previous levels post-pandemic. For this reason, we will use data from 2019 for the following analysis.

The UK has one of the best road safety records in the world, with an annual average of 28 road deaths per million inhabitants in 2019 compared to an EU average of 51 road deaths per million (European Commission, 2020). In England and Wales, the first decade of the

2015

2016

2017

2018

Figure 3.1 Fatality rates per billion vehicle miles by severity in Great Britain 2010 to 2020

2019

2020

2011

2012

2013

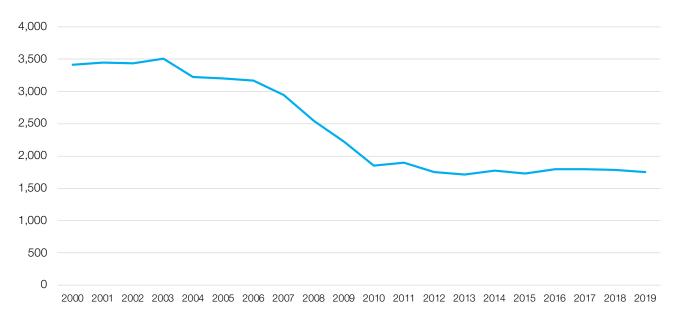
2014

2010

Source: DfT, 2021

Figure 3.2 Number of people killed on roads in Great Britain 2000-2019

Source: DfT 2020



21st century saw steep declines in the numbers of people killed on the roads, especially between 2006 and 2010, as Figure 3.2 shows. However, over the past decade, progress has stalled and the number of people killed on the road each year has remained more or less constant since 2012 (DfT, 2020). The previous steep decline in fatalities has been attributed to the rapid improvements in in-car safety technology such as airbags, car frames and seatbelts as well as improvements in medical treatment. Road safety experts say much of the 'low hanging fruit', in relation to improving car safety has been 'picked', and so progress has stalled since in order to continue improvements,

difficult decisions about road design and car use need to be made (Baker, 2019).

Nevertheless, these features, which are mainly aimed at improving safety for those inside vehicles, have made cars bigger and heavier so arguably put pedestrians at greater risk (Zipper, 2020). Moreover, as Figures 3.5 and 3.6 show, those steep declines in fatalities were mainly among car drivers, and the deaths of other road users such as cyclists and pedestrians did not similarly reduce. As Figure 3.5 shows, the number of cars on our roads has increased by around 10 per cent since 2010.

Figure 3.3 Road death reduction across Europe between 2010 and 2019

Source: ETSC, 2020)

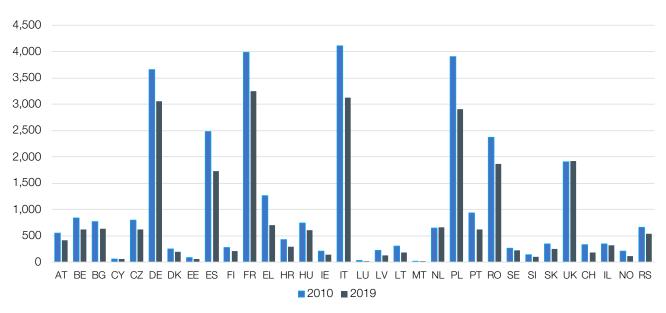
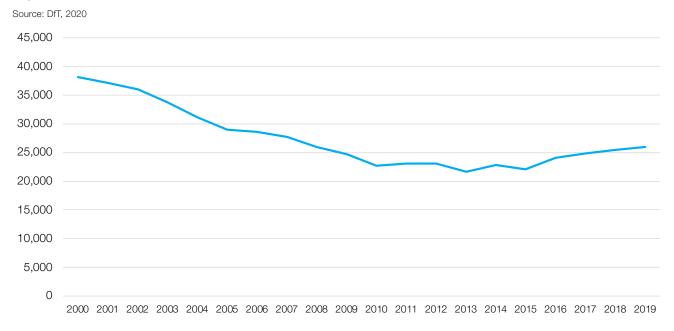


Figure 3.4 Killed or seriously injured casualties between 2000 and 2019



In its 2019 Road Safety Statement, the Department for Transport states that the flatlining of road deaths since 2010 was not unique to the UK, and that other European and OECD (Organisation for Economic Co-operation and Development) countries have seen comparable patterns. This, it says, "points to a complex phenomenon with many possible causes and interactions" (DfT, 2019). However, according to data from the European Transport Safety Council, in Europe as a whole the number of people killed on the roads has declined by 23 per cent over the last decade (Figure 3.3). Sweden had 22 road deaths per million inhabitants in 2019 and over the last 10 years has seen a decline of 17 per cent in annual road deaths. Ireland had 29 road deaths per million inhabitants in 2019 and over the last decade has seen a decline of 33 per cent in annual road deaths, and Germany has seen a decline of 16 per cent over the past decade, albeit from a higher baseline (European Commission, 2020).

3.2 CASUALTIES

In 2019, there were 25,945 killed or seriously injured casualties in reported road traffic collisions in England and Wales. This figure is as reported to the police and is not completely comparable to earlier years because of changes in reporting systems, such as the switch to the Collison Reporting and Sharing System (CRaSH). Adjusted estimates produced by the Department for Transport suggest that there has been a slight decline in serious injuries since 2010, compared to a sharper decline in the decades before that (DfT, 2020). There was a total of 153,158 casualties of all severities in reported road traffic collisions in 2019. This is five per

cent lower than in 2018 and is the lowest level since 1979. However, this figure should be treated with caution as non-fatal (and particularly non-serious) casualties are underreported to the police (DfT, 2020).

3.3 THE CHARACTERISTICS OF VICTIMS

Of the road deaths in 2019, the majority (57 per cent) occurred on rural roads (994). Young drivers (aged 17-to-24) are over-represented in rural crashes with fatalities highest for those aged 17 (27 per cent) (AA Charitable Trust, 2021). Although motorways carry around 20 per cent of traffic, they only account for six per cent of fatalities (DfT, 2020).

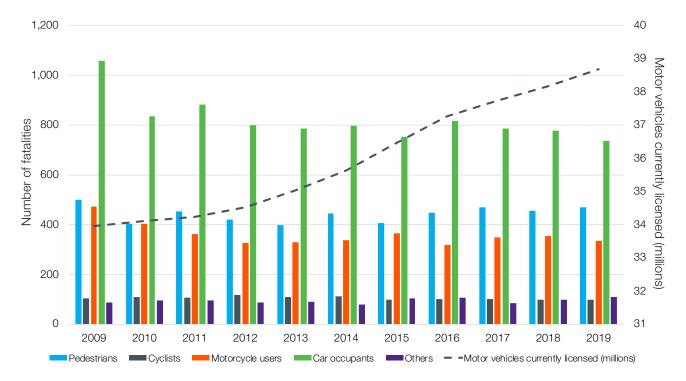
The number of car occupants killed far outweighs that of any other road user, as Figure 3.5 shows. In 2019, car occupants accounted for 42 per cent of road deaths, pedestrians 27 per cent, motorcyclists 19 per cent and pedal cyclists six per cent (DfT, 2020).

A total of 736 car occupants were killed in 2019, down five per cent (or 41 fatalities) from 777 in 2018 (DfT, 2020). The majority of car occupant fatalities were car drivers, with 508 car drivers killed and 228 car passengers killed in 2019. Overall, car occupant casualties decreased by five per cent to 89,331 in 2019 compared to 2018, and were the lowest on record. This represents 58 per cent of all casualties in reported road crashes in 2019.

The fact that there are more fatalities among car occupants than any other road user is not due to any inherent danger in that mode of travel, but rather due

Figure 3.5 Number of people killed on roads in Great Britain 2000-2019 by road user type

Source: DfT, 2020)



to the fact that cars make up 80 per cent of traffic on Britain's roads (DfT, 2020). The vast majority of journeys over a mile are made in a car or van, with 60 per cent of journeys between one and two miles being made by motor vehicle. In contrast a quarter of journeys of less than one mile are made by foot, making up just three per cent of distance travelled. Fewer than two per cent of journeys are made by bicycle, accounting for just over one per cent of total distance travelled (DfT, 2018).

Although these other road users account for fewer journeys, they bear the greatest risk. In a collision with a car, the pedestrian is almost 300 times more likely to be killed or seriously injured (KSI) than the car occupant(s). When a cyclist has a collision with a car, they are almost 200 times more likely to be KSI than the car occupant(s) (DfT, 2020). Motorcyclists are by far the most vulnerable road user. Motorcyclists account for just 0.8 percent

of traffic but make up 26 per cent of all those killed or seriously injured each year (HMICFRS, 2020). Collisions involving heavy goods vehicles (HGVs) are the most dangerous. Although they account for a relatively small proportion of the volume of traffic on motorways and trunk roads, HGVs are involved in 28 per cent of collisions that involve either serious injury or a fatality. This increases to over 30 per cent when fatalities alone are considered (HMICFRS, 2020).

Figure 3.6 shows the casualty and fatality rates of various road users when adjusted for billion miles travelled, which gives a more accurate picture of the danger faced by each type of road user.

It is interesting to note that while fatality and casualty rates remain comparable for most methods of transport, these figures differ wildly with regards to cycling. While

Figure 3.6 Fatality and casualty rates per billion miles by road user type in 2019



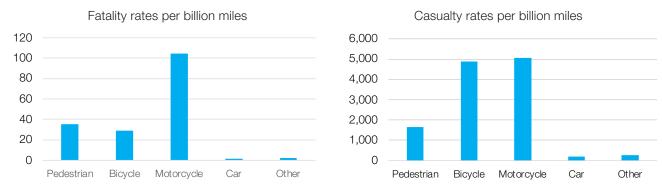
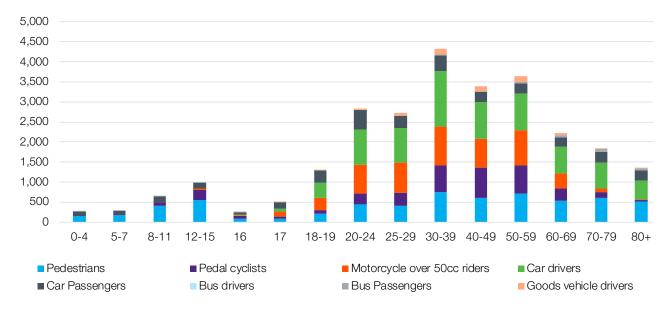


Figure 3.7 Numbers of people killed or seriously injured by road user age and type in 2019

Source: DfT, 2020



the overall casualty rate of 4,891 casualties per billion miles cycled is close to the motorcycling casualty rate, the fatality rate of 29.0 per billion miles cycled is much closer to the pedestrian rate. This suggests that cyclists are at a high risk of receiving injuries compared to other road users but are less likely to be killed than other vulnerable road users (DfT, 2020).

The young and the elderly are particularly vulnerable on Britain's roads. Car occupant fatality rates per million population are especially high for 17-24 year-olds and those aged 75 and over.

Similarly, as Figure 3.7 shows, pedestrian fatality rates per million population are particularly high for those aged 75 and over compared to the total number of fatalities for that age group (DfT, 2020). Transport collisions are the leading cause of death for children and

young adults aged five to 29 years globally and are the third most common cause of death in the UK for young people aged five to 19 years-old (WHO, 2021; ONS, 2017). Young male drivers are four times more likely to be killed or seriously injured on the road than drivers aged 25 years or older – in 2019 young drivers under the age made up seven per cent of all licence holders but were involved in 16 per cent of fatal and serious crashes (House of Commons, 2021). The road safety charity Brake has linked this to young drivers having "an over-active accelerator (limbic region) and under-active brakes (pre-frontal cortex)", resulting in young drivers being more likely to take risks and engage in dangerous behaviours when driving (House of Commons, 2021).

People from more deprived areas, some ethnic minorities, disabled people, children and older people

Figure 3.8 Annual change in pedestrian deaths 2010-2018

Source: Adminaité-Fodor and Jost, 2020)

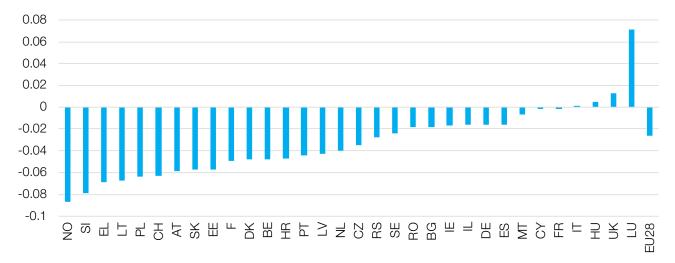


Figure 3.9 Cyclist death per billion km cycled



experience the worst impacts of road danger, noise and air pollution. Those in the most deprived areas of London are more than twice as likely to be injured as those in the least deprived areas. Londoners from ethnic minorities are more at risk, with children in this group being on average 1.5 times more likely to be killed or seriously injured on the roads than white children (TfL, 2018).

When looking specifically at vulnerable road users who are killed or seriously injured, the UK's record at reducing road deaths is poor compared to other European countries. Although the number of pedestrians killed annually on the roads in the UK is lower than the EU average, which is skewed by high mortality rates in Romania, Latvia and Lithuania, its record is worse than other countries including Norway, Netherlands, Germany, Denmark and Sweden (See Figure 3.8). While Europe saw an average annual decline in road deaths of 2.6 per cent between 2010 and 2018, the UK was one of only two countries in which pedestrian road deaths increased over this time, charting an average annual increase of one per cent (Adminaité-Fodor and Jost, 2020).

The UK fared slightly better in terms of cyclist casualty reduction, reducing the number of cyclists killed between 2010 and 2018 by on average 1.5 per cent, compared to an EU average of 0.4 per cent. The mortality rate of cyclists reported to the police in the UK is far lower than the EU average, and is dwarfed by the Netherlands, but this is believed to be because only 14 per cent of respondents cycle at least once a

week, compared to 71 per cent in the Netherlands. As Figure 3.9 shows, of the eight European countries who collect this data, Great Britain had the lowest distance cycled per year per inhabitant but the second highest number of cycling deaths per billion kilometres cycled (Adminaité-Fodor and Jost, 2020).

In summary, the risk carried by those who use the roads in England and Wales is unevenly distributed, with motorcyclists, pedestrians and cyclists much more vulnerable than those travelling by HGV or car. Moreover, younger and more inexperienced drivers are far more at risk than their older counterparts. Although Britain compares favourably to the rest of Europe in terms of the number of people killed and seriously injured, comparable countries continue to reduce road deaths, particularly for vulnerable road users, while progress in England and Wales has stalled.

3.4 THE CAUSES OF ROAD TRAFFIC COLLISIONS

In its 2019 Road Safety Statement, the Department for Transport argues that the failure to reduce road deaths over the past decade "points to a complex phenomenon with many possible causes and interactions" (DfT, 2019). This part of the paper explores these possible causes and interactions.

3.4.1 'The fatal four'

Four factors are found in the majority of fatal collisions, either through causing the crash directly or enhancing its severity. Together these are known as 'the fatal four', and the majority of police enforcement is focused on them (NPCC, 2018).

These are:

- 1. Excessive speed
- 2. A driver over the legal alcohol limit,
- 3. Failure to wear a seat belt
- 4. Driving while distracted, either because of mobile phone use or another external or internal source (Norbury, 2020).

All of these behaviours, bar seatbelt use, increase the risk not only to the driver but to other road users. Neglecting to wear seatbelts does not in itself cause crashes but increases the risk of these collisions leading to fatalities – according to the DfT, 31 per cent of motor vehicle occupants killed in 2019 were not wearing a seat belt.

Some police forces, such as Devon and Cornwall, make reference to the fatal five, adding 'careless and inconsiderate driving' to the list. Devon and Cornwall Police cites the General Advice section of the Highway Code, which states:

- 1. Rule 147: Be considerate
- 2. Rule 148: Safe driving and riding needs concentration and
- 3. Rule 150: You MUST exercise proper control of your vehicle at all times.

Examples of dangerous behaviours include:

- Driving too close to the vehicle in front
- Failing to give way at a junction
- Inappropriate speed for the road and conditions, even if within the speed limit
- Operating a sat nav or in-car technology while driving
- Eating and drinking at the wheel
- Under-taking or dangerous over-taking (Devon and Cornwall Police, 2014).

Speeding

In the Road Safety Statement 2019, the Department for Transport states that "the majority of drivers and other road users are careful, considerate and use common sense" and most road crime is perpetrated by a small minority who use our roads in ways that are "dangerous, intimidating and inconvenient" (DfT, 2019). However, the road safety group RoadPeace has criticised the report for ignoring the fact that the "majority of drivers" actually "choose to exceed the [...] speed limit" adding that this is demonstrated by the DfT's own surveys (RoadPeace, 2017). Research suggests that between 79 per cent (Stradling et al., 2009) and 99 per cent (Corbett, 2003) of drivers admit to speeding on occasion, suggesting that the law is not one that enjoys great levels of respect (Wells, 2016).

More than half of drivers in the UK report having driven faster than the speed limit at least once in the last 30 days – on motorways (56 per cent), on rural roads (58 per cent) and in built up areas (50 per cent) (Vias Institute, 2018).

Non-compliance with speed limits is most prevalent on 20 mph roads, with drivers breaking 30 mph speed limits the second most prevalent (Department for Transport, 2019). With reference to the fatal four, speeding has the greatest impact in terms of death, injury and intimidation as well as environmental damage (Action Vision Zero, 2021). The DfT reports speeding is involved in 28 per cent of fatal crashes, including 19 per cent reported as exceeding the speed limit and another nine per cent as driving too fast for the conditions (DfT, 2020). These figures are based on contributory factors that are estimated at the scene before any investigation has been done, meaning the real figure could be much higher (Action Vision Zero, 2021c). For example in London, around half of collisions had speed as a contributing factor, according to work carried out by the Metropolitan Police (TfL, 2020).

Many drivers explain their speeding as due to time pressure rather than any intention to break the law, with the consequences of arriving late, particularly when driving for work, being more important for them than the risk of a traffic offence or collision (Wells and Savigar, 2019). Other drivers say they do not intend to speed, but the behaviour of other drivers, such as honking if they do not go fast enough, means they feel they must (Fuller et al., 2008). UK research by Stradling et al. (2009) reported that 41 per cent of drivers would speed when running late, with 19 per cent reporting they would speed when their passenger was running late.

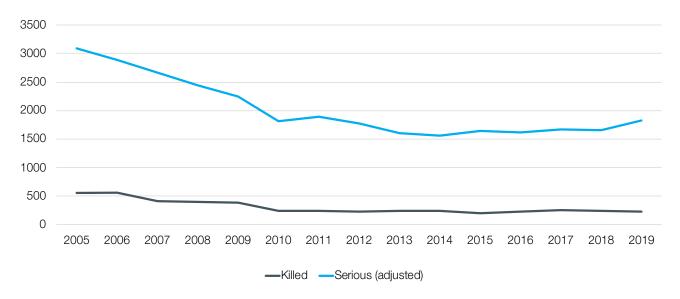
Drink and drug driving

Drink driving is responsible for 13 per cent of all road deaths. Drunk drivers are also more likely to carry out other high-risk behaviours such as not wearing a seatbelt. Since 2010, there have been around 240 deaths a year in Great Britain involving a driver over the legal drink driving limit and a further 1370 serious injuries (Mohan et al., 2021). In contrast to the previous decade, no progress has been made in reducing these numbers (Norbury, 2020).

According to 2019's Royal Automobile Club (RAC) Report on Motoring, some one per cent of motorists admit they have probably driven while over the drinkdrive limit in the past 12 months (Torney, 2019). This proportion rises to just under half of motorists aged under 25, and 27 per cent of those aged between 25 and 44 (Mohan et al., 2021). Almost a guarter of drivers say that they normally consume at least one small alcoholic drink whenever they drive with friends or family members to a social occasion (Torney, 2019). Those under the age of 20 are more likely to be involved in drink-driving related collisions. Drink drivers frequently re-offend, especially those with alcohol problems. Of all offences committed since 2010, 17 per cent have been committed by those previously convicted of drink driving (Mohan et al. 2021).

Figure 3.10 Estimated number of reported drink drive casualties in Great Britain, 2005 to 2019

Source, Department for Transport, 2020



A recent study by PACTS (2021) into drink driving found that while some drivers who had driven while drunk did so because they were selfish and did not care about the consequences, many others did so because they were confused about how much they could drink and be under the limit, or they had planned on not drinking and had felt pressure to do so at social gatherings, or they did not trust public transport to get them safely home (Mohan et al., 2021). Half of participants believed that if the drink drive limit was lowered to zero, so it was clear that it was not acceptable to drive after any alcohol, they would have not drunk and driven (Mohan et al., 2021).

Data on contributory factors has reported that drug driving was involved in just six per cent of collisions, however as with speeding, the data collection method is inconsistent and the total could be far higher (Action Vision Zero, 2021c). Speaking at the recent Police Federation Roads Policing Conference, Executive Director of PACTS David Davies, said that drug driving deaths and prosecutions were rising rapidly, but there was not yet accurate enough data on drug driving casualties to determine the true nature of the problem (Davies, 2021). This is made worse by the high costs and long delays of obtaining and processing samples due to lack of capacity in laboratories, leading many police to save enforcement for only the most obvious cases. As with drink driving, drug drivers are very likely to reoffend, with nearly half of offences committed by someone who has been caught previously, and two thirds of offences committed by people who had prior convictions (Webster, 2021).

Failing to wear a seatbelt

Compliance with seatbelt wearing among drivers is considered to be high, and has increased over the past decade, however the rates of compliance are lower for passengers. The latest data, from 2017, indicates 98.6 per cent of car drivers wear seat belts, 96.6 per cent of front seat passengers, 97 per cent of children in the rear seats and 78.9 per cent of adult passengers in the rear seats (Norbury, 2020). However, casualty data give some indications that non-wearing may be increasing, particularly among high-risk groups. Based on the STAT19 database (a collection of all road traffic accidents that resulted in a personal injury and were reported to the police within 30 days of the accident), 26 per cent of those who died in cars in 2018 were not wearing a seat belt, higher than the 20 per cent reported in 2016. A PACTS report, using police forensic collision investigators' data, found that non-compliance among those who die in cars could be even higher. According to the report, in 2018, 31 per cent of those who died in vehicles were unbelted, compared to 25 per cent in previous years (Webster, 2020).

Driving while distracted

There are many forms of distraction, but this analysis will focus on illegal mobile phone use. Drivers who talk on phones, both hands-free and hand-held, are four times more likely to be in a crash resulting in injury and are more likely to be the cause of the collision (McEvoy, 2005; Asbridge et al, 2013). Self-reported behaviour studies suggest that there is a certain hypocrisy among drivers who will break a law they

claim they agree with. This is particularly noticeable when it comes to mobile phone use behind the wheel. Hill et al. (2015) found that while 46 per cent of drivers claimed they themselves were capable of talking on a mobile phone while driving, only 8.5 per cent perceived 'other drivers' as capable. Phenomena called self-enhancement bias (where drivers think they are better than average) and crash-risk optimism (where drivers underestimate the likelihood they will crash) help to explain why phone-use can simultaneously be raised as one of the main dangers on the roads, but self-reported offending continues to rise (Torney, 2019; Wells et al. 2021). Contributory factors data reported illegal mobile phone use by drivers as being involved in just one per cent of fatal crashes, however again, the data collection method is inconsistent and the total could be far higher (Wells et al., 2021). Moreover, only hand-held use is illegal, but using the phone, even without actually touching it, also increases the risk of crashes as drivers using a hands-free phone still suffer from what is known as 'inattention blindness', in which they may 'see' hazards but do not register them (Action Vision Zero, 2021c; Briggs and Hole, 2019).

In 2020, there was a worrying increase in the number of motorists who admit they make or receive calls on a hand-held mobile phone while driving: this year, 29 per cent of motorists say they do this at least occasionally, up from 24 per cent in 2019 and the highest proportion since 2016, according to the 2020 RAC Report on Motoring (Torney, 2020). There was also an increase this year in the number of drivers who say they make or receive handheld calls while their car is stationary with the engine on (which is also illegal): 42 per cent say they do this at least occasionally, up from 39 per cent in 2019. Three in 10 drivers say they write texts or emails, or post on social media, while stationary with the engine on (Torney, 2020).

3.5 WIDER CRIME ON THE ROADS

In addition to promoting road safety, the police have always used their presence on the roads to detect and disrupt crime more generally. The NPCC Roads Policing strategy places great emphasis on "denying criminals the use of the road" (NPCC, 2018).

For example, on the road network the police can intercept organised crime groups who may be trafficking illicit items or people. In recent years we have seen the rise of 'county lines' drug dealing, through which organised crime groups exploit vulnerable children to transport drugs out of the big cities and into provincial areas. Policing on the roads and other parts of the transport network is an important way of intercepting this kind of drug trafficking. Similarly, crimes such as modern slavery often involve the transportation of people around the country and interception on the roads network is one way of detecting this.

It is often through intervening on road safety grounds that the police are able to uncover wider crimes. Research published by TRL (Transport Research Library) concerning the collision rate of stolen cars found that stolen cars were around four times more likely to be involved in an injury collision than legitimately driven ones (Knowles, 2003).

Police Scotland recently drew attention to the fact that "intelligence-led policing of the strategic road network, such as the M74 cross border corridor" had led to "the successful seizure of large quantities of cash, illicit drugs and other illegal goods …" (Police Scotland, 2016, p.18).

However, while this part of roads policing is important, critics have argued that it must always be secondary to an orientation to improve road safety. To privilege the wider crime control dimension may risk trivialising casualty reduction by "unintentionally giving the impression that road traffic offences are *only* important as signals for other 'proper' offences" (The Police Foundation and DriveTech, 2021).

4. THE STATE OF ROADS POLICING

This section reviews the current state of roads policing in England and Wales. First, we describe the resources available to roads policing and how these have been affected by the government's austerity programme since 2010. Second, we set out trends in police enforcement activity in recent years. Finally, we assess the impact of these trends on road safety.

4.1 THE RESOURCES AVAILABLE TO ROADS POLICING

Austerity has led to cutbacks in all parts of policing, but roads policing has been hit especially hard. According to analysis by HMICFRS of data collected by the Chartered Institute of Public Finance and Accountancy (CIPFA), the total amount of money spent by police forces in England and Wales on all police functions between 2013 and 2019 reduced by about 6.1 per cent, while that spent solely on roads policing dropped by 34 per cent in real terms (HMICFRS, 2020). Over the same period there has been a cut in the numbers of dedicated traffic officers. Between 2010 and 2014 numbers of dedicated traffic officers fell by 22 per cent and between 2015 and 2019, numbers fell by a further 18 per cent, as Figure 4.1 shows. Only four out of the 43 police forces saw an increase in the number of these officers between 2015 and 2019 (Home Office, 2020).

We should make an important qualification especially when making longer term comparisons. Some police traffic functions have since passed to other agencies, most significantly with the creation of Highways Agency

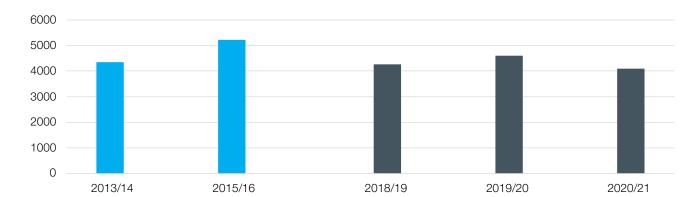
Source, Norbury 2020, Action Vision Zero, 2021d

traffic officers to ensure the smooth flow of traffic on the major roads. Therefore some reduction in roads police since the mid-2000s might have been expected independently of the austerity programme (House of Commons, 2016). As at 20 January 2020, there were 1,121 traffic officers employed by Highways England, which has since been renamed as National Highways (Highways England, 2020).

Between 2019 and 2020, the number of roads police officers rose by 200 to 4,615. Between 2020 and 2021, the numbers of roads police officers dipped to 4,091. The majority (25) of the 43 police forces in England and Wales reported an increase in roads policing officer numbers, but most forces reported only small increases and there were declines in nine forces (Home Office, 2020; Home Office, 2021).

Furthermore, in the same period, the overall number of police officers in England and Wales rose by 4.7 per cent to over 135,000 officers, so that while in England and Wales, roads policing officers accounted for 3.6 per cent of total police numbers in 2020, the relative share of roads police officers decreased to three per cent of the total number of police officers in 2021 (Action Vision Zero, 2021d). This is much lower than the seven per

Figure 4.1 Number of roads policing officers in England and Wales¹

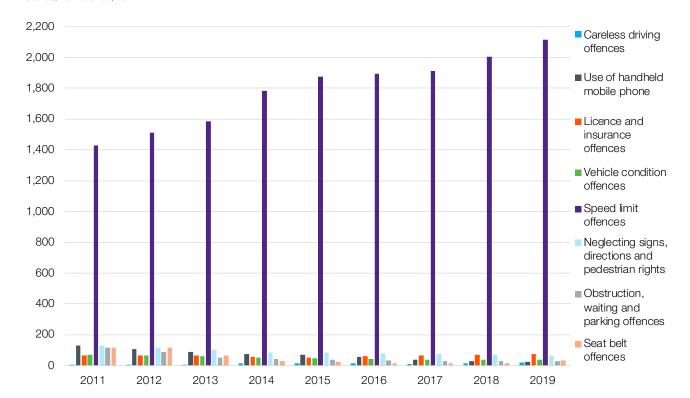


■ Post 2015 reclassification

■ Pre 2015 reclassification

¹ The Home Office's functions framework change means that statistics for years prior to 2015 are not directly comparable to statistics for years 2015- 2019.

Figure 4.2 Motoring offences resulting in fixed penalty notices and other sanctions from 2011 to 2019 Source, Home Office, 2021



cent of total police in 1998 and 15 to 20 per cent of total police officers in 1966 (Norbury, 2020).

There are caveats around the Home Office workforce data as it includes police officers who are "double hatting", i.e., working within units whose role it is to fulfil multiple functions, usually roads policing and armed policing. These other functions often take priority, resulting in situations where there is "no one left to police the roads" (Norbury, 2020). Therefore Home Office workforce figures do not accurately indicate whether roads police have the capacity to meet the demands placed on them. Examining enforcement rates serves as a good indication of whether police officers have the capacity to meet the demands placed on them (Norbury, 2020).

4.2 POLICE NUMBERS AND ENFORCEMENT

It has been argued that there is no correlation between numbers of police officers, in this case traffic officers, and effectiveness of enforcement and it is old fashioned to think in this way. While addressing the House of Commons Transport Committee, Roads Minister Andrew Jones said he had "no concerns" about the reduction in the numbers of traffic officers (Transport Committee, 2020). However, it is clear that over the past decade, the decrease in the number of

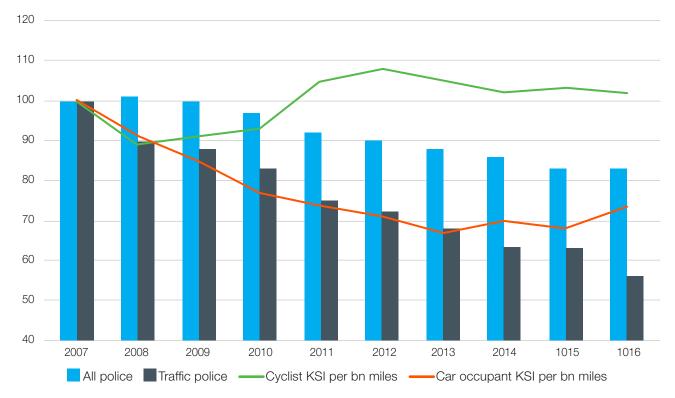
roads policing officers has coincided with a decrease in the number of road traffic offences detected and sanctioned by the police, as Figure 4.2 shows. The only exception is speeding, which, in the main, is detected automatically by the use of speed cameras and so there is no need for officers to be present to carry out speed detection. With the exception of a few forces, between 75 and 95 per cent of speeding offences were detected by camera, according to 2016 figures (Snow, 2017a).

The declines are particularly significant when it comes to Fixed Penalty Notices (FPNs) issued for using mobile phones while behind the wheel, which fell by 70 per cent between 2011 and 2018 and by 27 per cent between 2017 and 2018 alone. It is very likely that this is happening not because the public are becoming more law abiding, but because cuts to police numbers have reduced their capacity to carry out effective enforcement (Green, 2020).

In 2016 the House of Commons Transport Committee noted that the number of road traffic offences had fallen but: "the number of 'causing death' offences, which will always be recorded where they occur, hasn't fallen". Since causing death offences had not fallen, it is unlikely that the actual number of less serious offences had fallen also, even if the recorded number had. It called this finding "significant" as it suggests that although there was a reduction in recorded offences, this did not mean that there was a similar "reduction in offences

Figure 4.3 Numbers of traffic police and numbers of cyclists and car occupants killed or injured

Source: Allan, 2018



actually being committed" (HMICFRS, 2020, p.32, Transport Committee, 2016).

In a 2019 report into the use of mobile phones while driving, the Committee presented a trend in the reduction of FPNs issued alongside an upward trend in the number of KSIs recorded where mobile phone use was listed as a contributory factor, making an explicit link between declining enforcement and a rise in deaths (Transport Committee, 2019).

With regard to drink driving, between 2015 and 2018, the number of breathalyser tests carried out in England and Wales dropped by 25 per cent, from 425,325 to 320,988. In the year ending December 2019 there was a further 11 per cent fall from the previous year. However, the proportion of them that proved to be positive, or were refused, has increased from 11.9 per cent in 2015, to 16 per cent in 2019 (Home Office, 2020). This suggests that underlying offending behaviours may have increased, but the police are failing to apprehend and sanction perpetrators, or else targeting only those who are obviously over the drink-drive limit (HMICFRS, 2020).

A chart compiled by Cycling UK, shown in Figure 4.3, illustrates that there is a correlation between the falls in the number of traffic police officers between 2007 and 2016 and a rise in the number of people killed or seriously injured either in cars or on bicycles (Allan, 2018).

Moreover, the national picture surrounding police enforcement is very inconsistent – there is huge variation by police force, with some recording ten times more convictions (Davies, 2021). For example, in 2019 the Metropolitan Police had the highest number of drug driving convictions (1,093) followed by Merseyside (991) and Essex (784). The lowest numbers were in Warwickshire (56), Northamptonshire (61) and Bedfordshire, (63). The greatest variation is seen with careless driving, with 20 times as many offences being sanctioned per KSI in the top five police services compared to the bottom five police services. Officer detected speeding offences comes next with 15 times as many offences detected in the top as opposed to the bottom (Action Vision Zero, 2021a

Speaking at the Police Federation Roads Policing Conference, Davies said that this indicated there was a "postcode lottery" in place. Areas with very similar characteristics nevertheless reported very different levels of convictions, which suggests the disparities were due to differences in priorities and in resources (Davies, 2021). Recent data obtained by BBC's Panorama indicate the same postcode lottery is found in automated enforcement. Across the country, 40 per cent of the fixed cameras in England and Wales are inactive. Some areas – like North Yorkshire, Durham, and Northamptonshire – have no fixed speed cameras working at all. Northumbria has had no working fixed cameras for the past decade after they were turned

off by the council because the technology they used was no longer supported and there was no money to upgrade them. Wiltshire Police has no information on dedicated traffic officers and no working fixed or mobile cameras at all, instead relying on hand-held cameras. It also only gives out 25 tickets a week, far fewer than the rest of the country (BBC, 2022).

4.3 THE EFFICACY OF POLICE ENFORCEMENT

The decline in police enforcement activity is significant because police enforcement is very effective at reducing the number of collisions. A Canadian study of 10 million drivers over a decade found that each conviction of a driver for traffic offences led to a 35 per cent reduction in the risk of death over the next month for drivers and other road users, conversely each conviction not issued led to a corresponding increase in death risk (Redelmeier et al, 2003). There are differences in the way that policing happens in different jurisdictions so we cannot necessarily generalise. However, analysis by the recent PACTS report into roads policing also drew a link between additional police performing additional patrols and a positive effect on road safety (Norbury, 2020). Interestingly the perceived risk of being caught, rather than the actual risk, is most likely to influence driving behaviour. So highly visible enforcement activity accompanied by publicity can make the public believe they are more likely to be caught if they break driving laws than they actually are (Riley, 1991).

In 2001 France had one of the worst road safety records in Europe, but after adopting a 'zero tolerance' policy over speeding offences, and substantial investment in safety cameras and road traffic policing,

deaths dropped by 43 per cent between 2001 and 2007. One survey from 2004 found that 45 per cent of French drivers said that 'fear of punishment' had made them change their behaviour, while 37 per cent said 'better awareness of risk' had done the same (La Prévention Routière/Gatard, 2004).

A report from the European Transport Safety Council also concluded that drivers are more willing to comply with the rules if they feel that they are likely to be caught and punished and thus recommends that police enforcement should be regular and long-term, unpredictable and difficult to avoid, be well publicised when appropriate and combine both highly visible and less visible activities (ETSC, 2020). Conversely breaking the law without being caught is likely to embolden people to commit further offences (Stafford and Warr, 1993), For example those who drink drive without being caught are more likely to drink drive again as they do not think they will be caught next time (Szogi et al., 2017). A similar phenomenon is found in the fact that, in most cases, illegal behaviours do not result in crashes. This leads to some people experiencing crash-risk optimism, which causes them to repeat the behaviour in the belief they will again escape negative consequences, and so increases their likelihood of a collision (Wells et al., 2021).

Numerous surveys indicate that the public in England and Wales do not consider it very likely that they will be caught by the police for breaking traffic laws. A recent survey by the AA of nearly 16,000 drivers (See Figure 4.4) indicates the public think the police are not very likely to catch drivers who were driving using a handheld mobile, driving carelessly, drug driving, driving a vehicle in a dangerous condition, not wearing a seatbelt or not stopping at a red traffic light. Drink driving, driving without insurance and speeding were the only offences

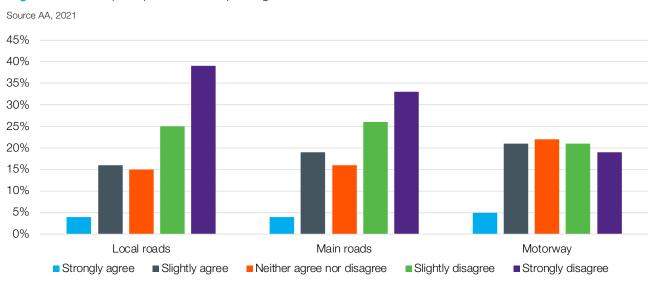


Figure 4.4 Public perception of visible policing

in which the public thought the police either had an even chance or were more likely than not to catch the offender (AA, 2021).

The same survey by the AA found that the majority of drivers disagreed that there was visible policing on the local roads, main roads and motorways in the area in which they lived, as Figure 14 shows. Similarly, the E-Survey of Road Users' Attitudes (ESRA) which asked European drivers about their experience of driving in their home country, found that car drivers in the UK believe that they are far less likely to be checked by the police for committing traffic offences than the European average (Vias Institute, 2021). For example, 88.5 per cent of UK drivers believe they are unlikely to be checked by the police for using a hand-held mobile phone to talk or text, compared to an average of 78.9 per cent for the other countries. 86 per cent believe they are unlikely to be checked by the police for wearing their seat belt, compared to an average of 80 per cent in the other countries and 75 per cent of drivers believe they are unlikely to be checked by the police for speeding compared to 65.6 per cent for other comparable countries (Vias Institute, 2021).

In the National Travel Attitudes Survey 2019, three quarters of respondents felt that mobile phone laws were not properly enforced. In Wave 2 of the same survey, 63 per cent of respondents felt the laws around driving under the influence of drugs are not being properly enforced (DfT, 2019a; 2020a).

In summary, there is substantial evidence linking numbers of roads police officers with enforcement of and public conformity to road traffic legislation. There are strong grounds for believing that the reduction in police numbers over the past decade may have had the effect of stalling the decline in road traffic deaths over the same time period.

4.4 THE REASONS FOR THE LACK OF PRIORITISATION OF ROADS POLICING

So, why has roads policing been de-prioritised in recent years?

4.4.1 Public attitudes

The public is concerned about road safety, and do recognise that our roads are becoming less safe. According to a survey carried out in 2017, more than half of motorists believed driver distraction, aggressive driving, drug driving and speeding were bigger problems than three years previously (IAM RoadSmart, 2017). A survey carried out by the charity Brake in 2019 found similar beliefs that the roads were getting less safe. When asked about various elements of dangerous driving, nearly six in 10 drivers said they had seen an increase in speeding vehicles and more than half of drivers an increase in drivers using mobile phones. For dangerous driving around cyclists, around 40 per cent said that levels had stayed the same or risen (Brake, 2019).

Nevertheless, there has been much less public demand for action on the issue than in other areas of crime, such as serious violence. Despite the death toll and the adverse effects that come from road danger, there is far less media attention and far fewer resources given to roads policing than for example, homicides, even though far more people are killed by collisions than are victims of murder and manslaughter, as Figure 4.5 shows.

In 2018 1,624 people were killed on the roads, while in the year to March 2018, 726 lost their lives to homicide. Of

Source: ONS, 2019 and DfT, 202

3,500

2,500

1,500

1,000

500

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

*Homicide data is in financial years, transport is in calendar years

-Road traffic collision —Homicide

Figure 4.5 Numbers of fatalities on roads and numbers of homicide victims in England and Wales

4. The state of roads policing

these, 285 were killed as a result of knife crime (or other sharp implement) (HMICFRS, 2020). A similar number of people are killed as a result of drink driving alone as are killed with a sharp instrument (Norbury, 2020). As stated earlier, car crashes are the leading cause of death among young people, yet only one in six drivers say they believe it is the greatest threat to their safety, compared to 39 per cent who say young people are most at risk from drugs (AA, 2021). Speaking at the Police Federation Roads Policing Conference, Chief Inspector Michael Hodder, who heads up Surrey and Sussex's Roads Policing Unit, said that road deaths were not taken seriously either by the police or the public, adding that if the number of deaths were as high for domestic violence or knife crime as they were for road deaths, there would be "uproar across the country". He added that senior police officers did not see roads officers as dealing with crime even though roads policing actually deals with every aspect of crime, including the fatal five, as well as being deployed in public order situations such as the recent Insulate Britain protests (Hodder, 2021). This echoed comments made by Chief Constable Jo Shiner at the same conference, who called for changes in the language used to describe behaviours which cause people to lose their lives over speeding, using seatbelts, drink and drug driving so that these were seen to be as much of a crime as county lines (Shiner, 2021).

Research carried out by the Police Foundation found that the public do not prioritise roads policing when asked to choose between contending police priorities. The report found that when asked to rank police priorities the public make an assessment of the harm or impact associated with an activity. After the 250 participants had been given insight into the breadth of policing business, they were asked to rank policing duties as higher or lower priorities. Only 5.9 per cent considered "promoting road safety by addressing speeding and dangerous driving" to be a high priority, compared to 88.9 per cent who said the police should prioritise tackling knife crime and serious violence (Higgins, 2020). Low public concern means that resource can be diverted away from this area of business without causing uproar, and Police and Crime Commissioners (PCCs) have (until recently) been reticent about including roads policing in their Police and Crime Plans (Wells and Millings, 2019).

Academics argue that the reasons why normally law-abiding citizens admit breaking these road traffic laws, and do not condemn others for doing so, unlike offences such as assault occasioning grievous bodily harm or homicide, lies in the issue of intent (Wells and Savigar, 2019). Wells suggests that unlike laws based

on mens rea where an intent is needed, driving laws are risk-based, such that someone can easily become an accidental offender; for example by misreading the speed limit and running someone over. Therefore, she argues that there is an unwillingness to condemn others for "behaviour we engage in ourselves" and which could see us "change place with the offender" - even if the behaviour ends up in someone being killed (Wells and Savigar, 2019, p.2). Moreover, taking road traffic collisions seriously means taking seriously our own potential to kill or seriously injure other people, which people are reluctant to do. This could be linked to the fact that collisions are still referred to as "accidents". which "presupposes a conclusion that no one bears responsibility", and so are easier to ignore when getting behind the wheel (Badger, 2015).

The very frequency of serious road traffic injuries and deaths may be one explanation why they are given less police and media attention and hold a less significant place in the public consciousness than, for example, homicide. Most studies of risk strongly suggest that individuals over - and underassess - the probability of low and high risk events respectively. As a 2012 report on behalf of The World Road Association explains, people are much more afraid of unknown, uncontrollable dangers that have dreadful consequences - for example plane crashes. In contrast, road traffic collisions are something that people are exposed to on a regular basis, and thus are perceived as not dreadful and known (Arditi, et al., 2012). Moreover, driving is associated with high personal and social benefits, therefore road deaths could be seen by society as "inevitable" collateral damage in exchange for the freedom that cars bring. (Johnson et al., 2014).

4.4.2 Resource pressure

The second reason for the de-prioritisation of roads policing has been the resource pressures imposed by financial austerity and changing demand. Police budgets and officer numbers have been cut, and the balance of risk has shifted away from public spaces and 'volume' crime, which roads policing falls under, to online threats and 'hidden' vulnerability. This means that many aspects of public facing 'core' policing, have effectively become 'de-prioritised' (Higgins, 2020).

HMICFRS examined the Police and Crime plans of the forces in England and Wales and found that roads policing or road safety was listed as a priority in only 19 of 43 force plans in 2019, which one participant at our roundtable described as "a huge problem" (HMICFRS, 2020; The Police Foundation and DriveTech, 2021).

4.4.3 A lack of accountability

The charity RoadPeace in its report, Our Lawless Roads, argued that lack of prioritisation is reinforced by the fact that apart from the most serious offences such as causing death by dangerous driving, motoring crime is not notifiable crime, unlike shoplifting or bicycle theft, and thus is not included in the regular HMICFRS PEEL inspections (Actions Vision Zero, 2021a, RoadPeace, 2017). Notifiable offences, defined as any that could possibly result in a jury trial, have to be reported to the Home Office. This means that Chief Constables are not judged and measured on their response to motoring crime (RoadPeace, 2017). One participant at our roundtable said that Chief Constables and PCCs have "a lot of priorities and a limited budget" adding that "it is difficult to measure/find evidence for results that come from investing in roads policing" (The Police Foundation and DriveTech, 2021).

4.4.4 Weak governance

Roads policing is not the responsibility of a single government department. Instead the Home Office holds the assets (the police) but not the risk (road safety), which is held by the Department for Transport.

Between 2000-2010 the UK government's road safety strategy *Britain's Roads – Safer for Everyone*, set challenging national targets for casualty reduction. But with a new government direction in May 2011, The Department for Transport released The Strategic Framework for Road Safety which did not set national targets but established a Road Safety Outcomes Framework to help local authorities to assess and prioritise their actions (Devon and Cornwall PCC, 2021).

The Department for Transport published its Road Safety Statement *A Lifetime of Road Safety* in 2019, which "is a commitment to the idea that road deaths and casualties are not merely the result of poor driving, centrally relevant though that is, but of a transport system as a whole, from signage to road user education, from enforcement to infrastructure design and construction" (DfT, 2019).

The absence of national targets since 2011 has led to a mixed landscape – with some force areas setting formal targets and others tracking performance but without time and outcome defined targets (Devon and Cornwall PCC, 2021). This is seen as a key reason for a lack of focus on road safety at the local level within England, which has had negative consequences in terms of priority, resources and operational capacity (Amos, 2015).

Moreover, roads policing has not as yet been viewed as a national strategic priority for police forces, as set by the Home Office in the Strategic Policing Requirement (SPR) (Norbury, 2020). The SPR delineates a number of "threats to public safety" such as terrorism, organised crime and child sex abuse which "can assume such grave proportions that they place unforeseen demands on local resources and can only be addressed by forces acting in concert and mobilising their resources across boundaries" (Home Office, 2015).

HMICFRS argue that the threat road danger poses to public safety means that it should be incorporated within the SPR in order that there should be a concerted national approach to tackling it rather than the current haphazard local one. While some forces had strategic oversight of what happened on their roads and had plans to reduce numbers of casualties and make roads safer, in many others it was "often an afterthought" and what work they did was solely around tackling criminality on the roads (HMICFRS, 2020).

The result of this approach is to inhibit forces' ability to:

- "Enforce the law and educate those who, due to their behaviour, increase the risk of death or serious injury on the roads.
- Develop effective partnerships and coordinated joint working with highways agencies and local authorities.
- Exchange information and intelligence with these organisations about dangerous roads and road users.
- Work effectively with vulnerable road users, such as motorcyclists and young people.
- Evaluate the effectiveness of police initiatives intended to make the roads safer" (HMICFRS, 2020).

The HMICFRS report recommends that roads policing be made part of the SPR, which campaign groups such as Cycling UK, Brake and Action Vision Zero have also called for. They argue that road safety and criminals' use of the roads are both issues which require national coordination, a wider network of intelligence, and joint working to address them effectively. Including roads policing in the SPR would help to make those things happen (Norbury 2020).

However, as Sir Tom Winsor noted in his 2019 *State of Policing* report, under the current arrangements, Chief Constables and local policing bodies must only "have regard" to the Strategic Policing Requirement, meaning that there is still local variation in the capacity and capability of forces to respond to threats, and levels of preparedness vary nationally (Winsor, 2020).

There is hope that this approach will change. In 2019, the DfT and the Home Office launched the *Roads Policing Review*, designed to determine how we can better use intelligence to target dangerous behaviours, how technology can assist in enforcing road traffic law now and in the future and also how to better understand the value of enforcement in influencing road user behaviour and the current enforcement capability (DfT, 2020b). It is hoped that the Review will lead to more joined up working between the two government departments and will ultimately lead to the creation of a fair and "operationally effective enforcement capability in police and other agencies to deliver the best outcome for the safety of all road users" (DfT, 2020b, p.4).

4.4.5 Reliance on automation

There is a widespread belief that roads policing is less important in an era of automated enforcement. This is particularly true in a US context where there is considerable concern about the impact of traffic stops. In particular this relates to the way that policing culture interacts with firearms ownership means that officers carrying out routine traffic stops are primed to expect danger and so act with "outsize aggression" – especially if the person stopped is Black. This leads, all too frequently, to unarmed motorists being killed. Automatic enforcement is seen as a way of ensuring traffic laws are upheld fairly and safety while reducing the risk to both drivers and law enforcement (Kirkpatrick et al., 2021; Quintanar, 2016).

Automatic speed enforcement cameras were first introduced into the UK in 1992. These speed and red light cameras were rolled out nationally and situated in collision cluster sites. An independent review published in 2005 showed that fixed and mobile cameras had led to reductions in KSIs of 50 per cent at fixed sites and by 35 per cent at mobile sites (Gains, 2005). However, a recent report by the company Road Safety Support (RSS), argues that this way of reducing road deaths has run its course, and since most of the sites already have cameras, continuing to use camera technology in this way will only serve to maintain casualty figures, not reduce them further (Hughes, 2019).

Similarly, one study carried out by the London School of Economics found that the positive effects of the camera (so called 'halo effects') were limited to within 500 metres of the camera sites; beyond that there was a slight increase in collisions, as drivers brake for the camera and then speed up afterwards (Tang, 2017). Average speed cameras, which take the average speed of a driver over a longer section of road, have been

demonstrated to produce compliance over a greater section of the road network, however there is limited evidence that they influence speeding behaviour or reduce crashes outside the immediate vicinity of the enforced section (Soole, 2013).

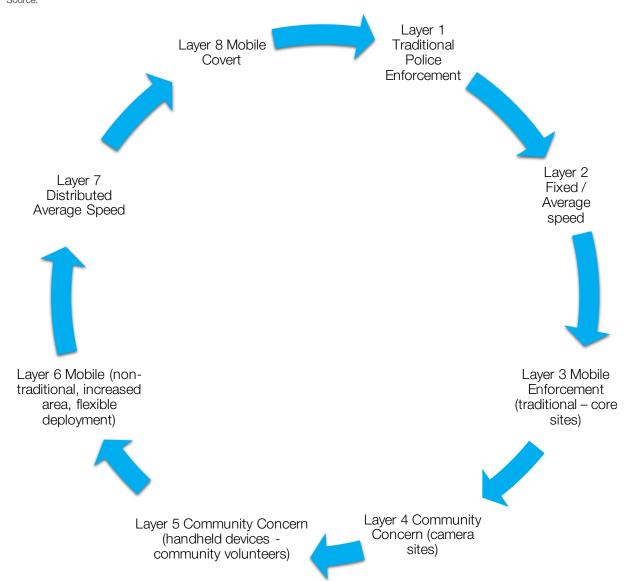
Moreover, as Dr Wells writes, the use of technology in such a way can be easily overcome by drivers who see speed cameras as an 'obstacle' to be avoided or negotiated around. She argues that for many motorists speeding is a rational choice as it ensures they reach their destination more quickly and their focus is more on the risk of being caught than on the risk of killing someone (Wells, 2015). Drivers can, and do, use technology to counteract the effects of cameras in slowing down the journey, for example by having apps that can inform them where speed cameras or police vans are likely to be located so that they can either slow down and then speed up again or take a route that avoids cameras entirely (Juniper, 2021). Without an "effectively communicated and justified enforcement rationale" as to why keeping to the speed limit is necessary, it is easy for drivers to see speed cameras as "(at best) an obstacle to swift travel, or (at worst) a form of state-sponsored victimization" which exists simply to provide money to the Government (Wells, 2015). Initiatives like the NDORS National Speed Awareness Course seek to provide that rationale. It is offered by nearly all police forces in England and Wales and seeks to retrain drivers who commit lowlevel speeding offences rather than punishing them. The course aims to prevent reoffending by "challenging attitudes towards speeding, offering motorists insight, awareness and understanding about their speed choices, and helps equip participants to change their behaviour". A recent evaluation showed that after receiving a course offer, course participants were observed to reoffended on 23 per cent fewer occasions after six months and on 10 per cent fewer occasions after three years than those who had declined the offer of a course (Barrett, 2018).

Human enforcement is arguably more effective at reducing collisions than the use of automated cameras. The RSS report mentioned above cites the example of a 2011 experiment by Cumbria Police which deployed mobile speed camera vans randomly to give the impression of a greater police presence than there actually is. The report suggested this intervention resulted in casualty reductions of up to 30 per cent within 18 months (Hughes, 2019). Research shows that 'halo effects' for manned enforcement are five times larger and last nine weeks longer than unmanned cameras (Smith et al., 2015).

A number of studies advocate instead a blended 'general deterrence' method combining modern technology such as variable and mobile speed and automatic number plate recognition (ANPR) cameras with the use of overt policing methods, in a layered approach, as Figure 4.6 shows. This strategy raises the risk of apprehension over time with each level contributing to the deterrence effect (Smith et al., 2015; Hughes, 2019a). For example, the ANPR system, when used in conjunction with a database of dangerous drivers, alerts operators so roads policing officers can be dispatched to target them. Thus for ANPR to work effectively, it needs to be supported by an adequate number of roads policing officers who can act on the intelligence the system provides, and also use their discretion appropriately, for example when the car is being driven by another driver (Norbury, 2020).

These examples above show that, while there is a space for the continued use of automation in detecting speeding and other offences, this should be done in addition to rather than instead of human enforcement. Human enforcement is seen by the public as fairer and provides an opportunity for education as well as deterrence (Wells, 2015; Norbury, 2020). Unlike an algorithm, a police officer can use their discretion to take account of individual circumstances, for example treating a traffic stop as an opportunity to deliver education rather than a fine if the offence committed was a genuine mistake rather than a deliberate act. In contrast, technology reconceptualises a complex subjective issue into a binary of safe/dangerous, which is often not really related to the actual danger on the ground (Snow, 2017).

Figure 4.6 The Road Safety Support Enforcement ModE Source:



There are of course dangers with discretion, as the US context shows – but the answer is not to ban police traffic stops, but instead ensure they are carried out in a procedurally just fashion. Research surrounding procedural justice theory, as it applies to roads policing, demonstrates that enforcement done correctly, by a police officer rather than just a camera, can enhance rather than undermine people's faith in the police and thus their compliance and cooperation, and can also reduce their risk of reoffending (Bates, 2014).

Procedural justice is the degree to which someone perceives people in authority to apply processes or make decisions in a just and fair way. It is demonstrated by acting authentically, making unbiased decisions and applying rules consistently, giving the public a chance to communicate their perspective, and treating them with respect (Tyler, 2003). As it applies to road policing, fair treatment at the hands of a police officer reminds drivers they are part of society and thus should adhere to its rules (Bradford, 2015). In a study from Queensland, Australia on the use of random breath tests (RBT) which are legal there (unlike in the UK) some police officers stopped and carried out tests in a procedurally just way and some did not. Drivers who perceived their random breath test encounter to be procedurally just were 1.24 times more likely to report their views on drinking and driving had changed, and were more likely to report greater faith in the police than before (Mazerolle et al., 2013). Similar results have been found in experiments around speeding (Bates, 2014).

An attempt to replicate the Queensland experiment in Scotland actually damaged rather than improved police legitimacy, showing the danger of transplanting an idea trialled in one place into a very different policing context, and further illustrating the need for interventions to be procedurally just if they are to be successful. Since the RBT was a routine occurrence in Australia, drivers were prepared to be stopped and pleased that they were being talked to in a respectful way rather than the usual brusque manner. However, since RBTs are not legal in Scotland there is not the same precedent for routine stops of this nature, so that the stops were perceived as "worrying" or "unnecessary". The script provided to officers and the manner in which they delivered did not succeed in dispelling that impression – senior officers supported the experiment but did not sufficiently explain the rationale to those who were delivering the intervention so some resented it (MacQueen and Bradford, 2015).

4.5 CONSEQUENCES OF THE LACK OF PRIORITISATION OF ROADS POLICING

4.5.1 Loss of specialist resource

The cuts in traffic police numbers may not have had as great an impact if those who were left were highly trained and used efficiently and effectively. Many studies have shown that while the number of officers is important for crime reduction, what is more important is that those available are used efficiently and are spending time on effective activities that have a proven evidence base (Braga et al., 2012, Braga and Weisburd, 2012).

The evidence suggests although some forces may on paper have specialist traffic teams, the reality is quite different. Research by PACTS found that officers were often abstracted to assist in local operations or serious incidents meaning that there was often "nobody left to police the roads" (Norbury, 2020).

In some forces, traffic officers are dedicated to enforcing road traffic law and investigating serious road traffic collisions. In others, the role is carried out by armed response officers. And a few areas do not have any dedicated roads policing officers at all (HMICFRS, 2020). In these areas, according to HMICFRS, the need to make financial savings had led forces to adopt a "whole-force" response to roads policing in which all officers were expected to carry out enforcement. A "whole force" response can be positive in that it breaks away from 'silo thinking' which happens when different teams focus on their own work, to the detriment of the force's overall performance; not sharing information and intelligence, where getting support from other teams can be really difficult (Wiggett, 2017). However the "whole system" approach only works when everyone has training and is briefed on the current challenges and what needs to be done. In at least one force which had adopted this whole system approach, response officers were rarely briefed on roads policing issues and lacked the appropriate training, so they simply did not carry it out (HMICFRS, 2020).

4.5.2 Poor use of data and intelligence

The HMICFRS report also found that those officers left in roads policing units were not given the analytical support they needed to better understand their demand and determine where their resources could best be used (HMICFRS, 2020). Statistics published by the Home Office and Ministry of Justice are only

released annually, unlike the quarterly releases for notifiable crimes, and so do not allow for up-to-date or detailed understanding of enforcement in local areas. In contrast, in London, the Metropolitan Police Service, City of London Police and Transport for London (TfL) publish an annual report of roads policing activity which presents data at the borough level and speed enforcement by speed limit (Action Vision Zero, 2021). The Metropolitan Police, through its relationship with TfL, has access to analytical products, such as weekly data about serious collisions, which allow it to make effective decisions. West Midlands Police has a similar emphasis on analysis, with daily tasking informed by data relating to collisions, and ANPR information, and is using this data to protect its communities.

However other forces do not make good use of the data supplied to them, with one partner agency telling inspectors they regularly provided a force with road safety data but suspected they "did nothing with it" (HMICFRS, 2020). One force stopped roads policing patrols at 2am when there were fewer collisions because of lack of resources, despite having intelligence that drink driving was more likely to happen at that time. In some forces, the inspectorate claimed, proactive enforcement was discouraged because it was seen as a distraction from the core role of responding to crime. In other forces people suspected of drug driving were effectively left to carry on by police. Limited forensic budgets and lack of equipment in some forces meant the use of drug screening tests and the number of blood samples submitted for analysis were restricted, or the closure of stations meant officers had to take those suspected of drink driving some distance to the nearest police station for an evidential breath sample, by which time they were under the limit (HMICFRS, 2020).

4.5.3 The wellbeing of officers

The impact of lack of resources and increased demand as detailed here has had a negative effect on the mental health and wellbeing of traffic officers. Sergeant Darren Harris who works in a roads policing unit in Suffolk, writes that over the past 10 years changes have meant that in his force there is a joint traffic and firearms department. In his experience "a smaller group of officers more regularly deal with traumatic and major incidents" and "find themselves 'going from crash to crash to crash' and then dealing with firearms incidents with no respite in between". Officers do not get the time to process trauma which "can destroy great officers... due to the strain of mental health issues" (Harris, 2020).

4.5.4 The quality of investigations

It is not only in enforcement that roads policing compares unfavourably with other areas of policing. HMICFRS inspections draw attention to the fact that while all homicides are investigated by appropriately trained investigators, some forces have decided it is not economical to do the same for fatal collisions – meaning either roads policing officers do not have the right qualifications to conduct a thorough investigation, or collisions are investigated by detectives who are not specialists in that field.

Similarly, while each homicide report has its own dedicated family liaison officer (FLO), HMICFRS in its recent report found several examples of serious collision investigators 'double hatting' and carrying out the family liaison role. Often FLOs were overstretched with far more cases than their equivalents working on homicide, and their welfare needs were not met (HMICFRS, 2020). This in turn meant that victims' families were not always getting the support they needed, according to one participant of our roundtable, even though the circumstances of their family members' death might have been just as sudden and traumatic as a homicide (Norbury, 2020; The Police Foundation and DriveTech, 2021). The participant argued that the level of road deaths resulting from criminal driving behaviour was high enough that fatal collisions should be treated as criminal until proven otherwise, which is the opposite of the current guidance, so that investigations are properly resourced (The Police Foundation and DriveTech, 2021).

In the main, fatal and life-threatening collisions are investigated by specialist forensic investigators. But, according to Action Vision Zero's manifesto for the 2021 PCC elections, the standard of investigation varies between forces (Action Vision Zero, 2021). In some areas fatal collisions are not given the level of investigation that for example an assault occasioning actual bodily harm might be and so perpetrators often escape detection. The campaign group claims that, for example, best practice surrounding the collection of samples is unclear. The National Collision Investigation Board is focused on meeting forensic standards for fatal collisions, like collecting and storing a drink drive sample. But there is no requirement that drink drive samples must be taken in the first place (Action Vision Zero, 2021).

There is a failure in roads policing to understand that not all injuries are physical and that when there has been a traumatic near miss, it should be treated as an injury (Sanders, 2015). For example the policies

of many forces state that officers "shall not routinely attend non-injury road traffic collisions" and apart from certain circumstances there is no obligation to record damage-only collisions (Thames Valley Police, 2021). This means people, particularly cyclists, who have suffered traumatic near misses because of careless or dangerous driving, tend to be overlooked (Aldred, 2016). For example, a survey by Cycling UK of the use police make of video evidence generated by handlebar cams found that 63 per cent of respondents had reported dangerous driving to the police, of which 92 per cent had felt they were victims, however only 30 per cent received any response and just 17 per cent felt the police had thoroughly investigated and appropriately dealt with their complaint (Gallagher, 2020).

The 2016 report of the Transport Committee on Road Traffic Law Enforcement indicated that better training was needed for all investigators as inadequate investigation could lead to serious miscarriages of justice (House of Commons, 2016). The All-Party Parliamentary Cycling Group (APPCG) in 2017 described just how inadequate the current standard of investigation was and how in some cases of serious injury the collection of basic evidence such as drink and drug tests, mobile phone records, speed assessments and eyesight testing was either rushed or overlooked completely: "We have received many examples of the police failing to investigate properly or even interview victims or witnesses. Too often weak investigations have undermined subsequent cases" (Peck, 2017, p.18).

In the same year RoadPeace published a report on the back of data which revealed that while road deaths dropped by five per cent between 2010-2015, road death prosecutions dropped by a far greater margin of 23 per cent and convictions fell by 29 per cent. The report found that national guidance was inadequate, so that that there were varying standards and practices in different forces (Aeron-Thomas, 2017). There were some examples of best practice, but these, according to the report, were often down to the dedication of individual officers (Aeron-Thomas, 2017). Part of the reason for incomplete or inadequate investigations

could be lack of specialist officers – HMICFRS discovered that some forces had difficulties in filling the posts of specialist serious collision investigators, which resulted in long-term vacancies and increased workloads (HMICFRS, 2020).

It is hoped, however that this ad hoc approach to investigations will soon change. In 2012 the Forensic Science Regulator (FSR) directed that all police forces' Forensic Collision Investigation functions must be properly accredited by 2021/22. In 2019 the NPCC launched a 'network of best practice' designed to facilitate that accreditation and improve efficiency in defining and carrying out scientific methods and testing and ultimately give the best service to victims and their families. The FSR's most recent annual report stated that "while there was a long way to go before all collision investigation meets the required standards" the discipline had embraced the chance to improve and professionalise with "enthusiasm" (Tully, 2021).

A participant in our roundtable suggested that one way to ensure the police met the needs of vulnerable road users was through adopting a road danger reduction approach, as has been done, for example, in the City of London. The focus would be wider than investigating after someone is killed or seriously injured. Instead. police would seek to identify the causes and consequences of collisions with the objective of reducing risk factors: "understanding who is hurting whom, which modes are in conflict with which and where, will assist in identifying measures to address dangerous behaviours and locations" (The Police Foundation and DriveTech, 2021; City of London, 2018). There is currently a rich amount of information available about collisions on numerous databases. But there is currently no ability to coordinate and synthesise learning, meaning issues are missed and it is difficult to know which interventions are effective (DfT, 2021). The DfT has recently held a consultation on the formation of a Road Collision Investigation Branch. This is envisaged to be comparable to similar bodies for the air, rail and marine industries, which have the legal power to investigate accidents and recommend interventions to prevent reoccurrences (DfT, 2021c).

4.5.2 International best practice

Norway

Norway has the lowest mortality rate owing to road deaths as measured by population, number of registered vehicles and distance travelled among the 33 countries covered by the International Traffic Safety Data and Analysis Group (Highways and Network Management, 2019). The Norwegian Ministry of Transport and Communications attributes this excellent road safety record to the establishing of the "Vision Zero" goal in 1999 and then remaining committed to achieving it through a multi-layered, multi-pronged approach (Olsen, 2018).

In 2018, Norway introduced its fifth four-year "Vision Zero" strategic plan which continues to commit to:

- Developing a fully integrated approach addressing 13 different priority areas covering a range of concerns including driver behaviours (like seat belt use and speed reduction), vulnerable groups, vehicle technology, and work conditions.
- · Establishing benchmarks and measuring progress through specific targets and interim key performance indicators.
- Creating specific and targeted measures after collecting and analysing the most useful data to understand the road safety risk for different population groups.
- Highlighting that road safety is both a shared and personal responsibility for all road users.
- Using intelligent transport / vehicle technology systems.
- Fostering cooperation of all levels of government to enhance safety through road infrastructure improvements.
- Employing targeted enforcement.

Involving a wide variety of public and private sector organisations to work with the police to improve safety on the road (Norway, 2018; Road Safety Network, 2019).

Spain

Road deaths in Spain were reduced by 45 per cent over 10 years, from 2,478 in 2010 to 1,366 in 2020. Serious injuries on the road were also reduced by the same amount (45 per cent) in the same time span, from 11,995 to 6,642. One important component in achieving these figures and improving road safety in Spain was traffic law enforcement. The Civil Guard increased the number of drink-driving checks they conducted by one million over the course of a year, between 2018 and 2019, going from 5.5 million checks in 2018 to 6.5 million in the following year (Adminaité-Fodor, 2021). The success of the increased traffic law enforcement has occurred alongside reductions in legal speed limits. In 2019 the legal speed limit on rural Spanish roads was reduced from 100km/h to 90km/h, and in 2021 speed limits on urban single carriageways were reduced from 50km/h to 30km/h. A number of cities have also implemented a citywide 30km/h speed limit (Spanish Government, 2021)

New Zealand

New Zealand, which until recently had an excellent record for road safety, has a roads police function which is separate and distinct from its crime function and is funded separately, to ensure that its resources are not swallowed into emergency response and other policing functions. Moreover it is funded based on outcomes to ensure the right police resources (officers or technology) target the right roads policing activities and interventions to localities, communities, routes and times of greatest risk (Peacey, 2012).

More than two decades ago it initiated a high-intensity enforcement and advertising programme to successfully prevent road fatalities and injuries and which formed the basis for the national road safety strategy. Since then, the country has developed its regulatory environment, invested in improving its road infrastructure and adjusted its road safety rules by adopting a safe systems approach which prioritises reducing risk.

The effects of these efforts to improve road safety were seen in a reduction in road deaths of 45 per cent between 2000 and 2013. However, road deaths increased by 39 per cent between 2013 and 2019. Analysis identified significantly increased odds of crashes where alcohol was a causal factor while at the same time the numbers of alcohol-related offences fell significantly. This period coincided with a time when government focus shifted and levels of enforcement were reduced and serves as a "bellwether to other nations indicating successful road safety strategies can be undermined by failing to maintain levels of enforcement" (Walton et al., 2020). In the last year New Zealand has adopted a new road safety strategy which aims to reach zero road deaths, has reduced speeds and increased enforcement and enhanced funding for dedicated roads police officers and those who carry out roads policing functions. This has coincided with further reductions in road deaths (International Transport Forum, 2020).

5. TECHNOLOGY AND THE FUTURE OF ROADS POLICING

The technological revolution will continue to transform the way we travel and the way in which the rules of the road are enforced. In this part of the report, we examine the road safety implications of a number of technological innovations.

5.1 AUTOMATED VEHICLES

Perhaps the most significant development coming quickly down the track is the automation of the motor car. Figure 5.7 shows the different stages of automation that we can foresee in the years ahead, beginning with the driver being fully in control and ending with the car

being fully in control. According to a speaker at our roundtable event, the first robot taxis could be on the roads as early as 2025 (The Police Foundation and DriveTech, 2021; DriveTech, 2020).

Existing innovations in automation are thought to have led to road safety improvements. Current Advanced Driver Assistance Systems (ADAS) are designed to help

Figure 5.1 The Six levels of vehicle automation

Source: DriveTech, 2020

Partially automated No system Peet off Driver in complete charge Control Vertical or lateral o		Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
System task Driver in complete charge Charge Driver in complete charge Charge Driver in charge of lateral or longitudinal control Vertical or lateral Or lateral Vertical or lateral Or lateral Or lateral Or lateral Or lateral Driver needs to be ready to take over as backup Tell control. Vehicle runs both longitudinally and laterally in certain conditions. Vehicle runs both longitudinally and laterally in certain conditions.	Driver task			Partially	Highly		Driverless
complete charge of lateral or longitudinal control Contr		No system	Feet off	Hands off	Eyes off	Brain off	Driverless
control. runs both Vehicle capable of wheel o	System task	complete	charge of lateral or longitudinal control Vertical or lateral control. Vehicle	vertical and lateral control. Vehicle runs both longitudinally	to be ready to take over as backup Full control. Vehicle runs both longitudinally and laterally in certain conditions. Vehicle will give	during defined use cases Autonomous. Vehicle runs both longitudinally and laterally in certain conditions. Vehicle capable of establishing	No driver Vehicle is capable of performing all driving tasks independently with no driver required. Vehicle possibly does not have a steering wheel or pedals.

the driver and improve their safety on the road, while leaving overall control to them (DriveTech, 2020a). A speaker at our roundtable said that such systems had offered significant improvements in safety (The Police Foundation and DriveTech, 2021). These systems include:

- Advanced emergency braking
- Adaptive cruise control
- Lane departure warning
- Driver drowsiness and attention warning
- Driver distraction warning
- Reversing detection
- Event data recorder (DriveTech, 2020).

These systems can provide drivers with important information, relieving them by taking over parts of the driving task and providing added control to drivers in critical situations (DriveTech, 2020a). Various studies have suggested that around 20 per cent of all road accidents are fatigue-related, up to 50 per cent on certain roads, meaning that drowsiness detection systems could reduce accidents massively. (DriveTech, 2020a). The European Transport Safety Council (ETSC) calculates that a 1km/h reduction in speed would save 2,100 lives per year across Europe and that effective intelligent speed assistance alone would reduce casualties by 20 per cent (DriveTech, 2020b).

Other in-car systems are designed to prevent drivers who may wish to recklessly or intentionally break the law, either through drink driving or speeding, from doing so. These include alcolocks, which allow the fitting of a device which requires an alcohol-free breath sample before a car can start – although they do not prevent the driver getting in another car which has not got one fitted – and intelligent speed assistance, which prevents drivers breaking the speed limit, but do not prevent unsafe speeds within the posted limit. Moreover, these technological solutions could give drivers a false sense of security by encouraging them to think that they can drive when unfit because the car will step in and save them (Briggs and Hole, 2019).

Event data logs contained in cars could aid investigation by allowing police to build an accurate picture of what was happening, and why, inside and outside the car in the minutes before a collision happened (Beaumont, 2020). These 'black boxes' can also have a deterrent effect as drivers know they are being monitored, with vans and trucks fitted with them reporting 20 per cent fewer collisions than those without (Wouters, 2000).

There are differing views on whether increased automation will improve safety on the roads or pose new risks, especially during the period of transition when there will be a mixed fleet of traditional vehicles and those with various levels of automation. Some argue that cars could be pre programmed to obey all traffic rules and that this would "eliminate the need for enforcement of speed limits, illegal turns, running stop signs and lights and many other traffic infractions if cars drove themselves" (Zagorsky, 2015). Drawing on data from the US, Zagorsky (2015) argues that the reduction in offending caused by autonomous cars could lead to a reduction in police officer numbers of 60 per cent. Some argue that this technology will also reduce the opportunity for traffic stops and therefore undermine a source of police intelligence and disruption tactics. Woods (2019) asserts the cost of this is outweighed by the benefits to officer safety as pursuits and violent traffic stops are eliminated. Licensing offences would become a thing of the past and pursuits may be eliminated. However, roads policing is not simply about enforcing traffic laws, as has been discussed throughout, and so the need for roads police officers will not disappear completely.

For the foreseeable future, new automated technologies mean there is more need for roads police officers, not less. There is a growing body of evidence that shows currently available driver-assistance systems are either not being understood or not being used properly by drivers. According to Thatcham Research: "We are starting to see real-life examples of the hazardous situations that occur when motorists expect the car to drive and function on its own. Specifically, where the technology is taking ownership of more and more of the driving task, but the motorist may not be sufficiently aware that they are still required to take back control in problematic circumstances" (DriveTech, 2020, p.5).

Thatcham Research surveyed 1,500 people in seven countries in 2018 and found that 70 per cent wrongly believed one could buy an autonomous car, and 11 per cent would be tempted to nap, watch a movie, or read the paper while using a driver-assistance feature (Stewart, 2018). This confusion is not helped by car manufacturers who give their technology misleading names such as Autopilot and ProPilot, used by Tesla and Nissan respectively, which imply "freedom...and a totally passive experience" (DriveTech, 2020, p.9). Even if a motorist is aware that they should take control in critical situations, collisions may still occur in the space between spotting an obstacle and taking back control. Researchers from the University of Southampton found that in simulated emergencies, up to a third of drivers using automated vehicles did not recover the situation

in time, whereas almost all drivers of manual cars were able to do so. While advanced driver assistance systems may prevent speeding above the limit it will not stop drivers travelling at inappropriate speeds for the conditions, such as outside a school or on a narrow country lane - indeed the risk of them doing so may be elevated as drivers become more passive (DriveTech, 2020b). The President of the AA Edmund King agrees, arguing that while speed limiters can prevent problems of excessive speed, under certain circumstances they could make drivers more reckless: "The best speed limiter is the driver's right foot. The right speed is often below the speed limit - for example, outside a school with children about - but with intelligent speed adaptation, there may be a temptation to go at the top speed allowed" (Leggett, 2019). Therefore there is a role for police in improving education as well as enforcement so that drivers are aware of the advantages and limitations of the technology in their new cars and have the training to embrace new developments safely (DriveTech, 2020a).

5.2 CONNECTED VEHICLES

Linked to increased automation is the fact that in the future more and more vehicles will be connected digitally. This has given rise to a concern about cars being "hacked", or in extreme cases used in terror attacks as an alternative to more conventional car bombs (Caldwell et al., 2020).

Connected vehicles could also however by utilised by the police, who could take advantage of GPS data to take them on the most efficient route to an emergency, or on pre-programmed patrol routes incorporating hotspots identified by up-to-the minute data, while the officers themselves concentrate on spotting criminals, or preparing for whatever might face them (Hurtado, 2018). Moreover, these technologies might enable police officers to take control of fleeing vehicles, eliminating the need to take part in dangerous pursuits (Woods, 2019).

5.3 E SCOOTERS

E Scooters are becoming a common sight on roads and pavements, particularly in town centres, despite the fact their use is illegal outside hire schemes. Dubbed "the most dangerous thing on the pavement and the most vulnerable thing on the road" by one of our roundtable participants, e-scooters are legal to buy in

the shops but those riding privately-owned scooters on public roads or in parks face six points on their licence and £300 fines (The Police Foundation and DriveTech, 2021).

The exact number of crashes involving e-scooters is said to be under-reported, however Chief Superintendent Simon Ovens from the Metropolitan Police said the numbers were increasing "sharply". In 2020 there were 484 casualties in collisions involving e-scooters, of which 384 were e-scooters users. Of those casualties, one was killed, 128 were seriously injured and 355 slightly injured (DfT, 2021b).

Moreover, e-scooters have been linked to a number of offences such as robberies and assaults – they were involved in 574 recorded crimes in London between 1 July 2020 and 30 April 2021 (BBC, 2021). Nonetheless, according to Freedom of Information requests carried out by one scooter selling company, while the Metropolitan Police seized 284 scooters in 2020, Hertfordshire was the next highest with 15, and other forces saw few or none, which demonstrates that while e-scooters may be illegal, very little enforcement is being carried out to prevent their usage (Wiles, 2021).

5.4 MOBILE PHONE CAMERAS

In March 2020, New South Wales in Australia became the first place in the world to use artificial intelligence to detect drivers using their mobile phones. Since then, the cameras have caught and fined 270,000 drivers. The cameras take pictures of the front of every passing vehicle and AI analyses these pictures to identify drivers with a phone in their hand. Officials then review the images before handing out fines. A review suggests since the cameras were introduced, they have led to an 80 per cent reduction in use and prevented 19 serious or fatal collisions (Klein, 2021). There are plans to introduce these cameras in the UK to coincide with a change in the law that will make touching a mobile phone while driving a criminal offence (Norton, 2021). These cameras however only detect illegal hand-held use, not the equally dangerous but legal handsfree use, which, unlike conversations with a passenger, makes use of visual resources and processing that are also needed for driving and thus can significantly increase reaction times (Briggs and Hole 2019; Wells, et al. 2021). Thus mobile phone cameras will not solve the problem of driving while distracted because of mobile phone use and may indeed displace it.

5.5 DASHCAMS

One new initiative demonstrates the huge benefits but also the challenges that the onward march of technology brings to policing. A growing army of cyclists and drivers are adopting dashcams or helmet/handlebar cams to improve their safety and provide valuable evidence in the event of a collision. Their presence can act as a 24/7 deterrent since although the police cannot be everywhere, the public can be (The Police Foundation and DriveTech, 2021).

Operation Snap was developed in Wales to take advantage of this wealth of data by encouraging the public to share it with police on a dedicated platform. It is now spreading nationally. But whereas some forces are able to use this data effectively, others are completely overwhelmed by the volume they receive (HMICFRS, 2020).

An investigation carried out by Cycling UK found that only 11 forces were using the data effectively. In those 11 forces, 33 per cent of reports resulted in action against the driver. This could be because of poor police practice, or because footage submitted was of insufficient quality or did not actually show any laws being broken. In London, a similar initiative using dashcam footage has an enforcement rate of 66 per cent for footage submitted. Furthermore, only 30 per cent received a response after submitting video evidence and only 17 per cent felt the police had thoroughly investigated their complaint (Gallagher, 2020).

A participant at the roundtable stressed the need for consistency on this nationally to ensure all forces were using the systems effectively (The Police Foundation and DriveTech, 2021). The same participant made the point that initiatives such as Operation Snap show that the improving road safety is not only the business of the police alone, but that the "public are part of the solution" (The Police Foundation and DriveTech, 2021).

6. COLLABORATION AND PARTNERSHIP

While the evidence shows that a visible police presence can be a powerful force for improving road safety, the police are just one actor and must work collaboratively with others.

6.1 THE PUBLIC

Community Speedwatch, which enables trained volunteers to work within their locality to carry out speed checks on their local roads, is seen as a way of providing guardians and empowering the public to improve their own safety. The aim of Community Speedwatch is to make motorists who speed through residential neighbourhoods aware of the impact their actions have on local residents, or the danger they pose to other road users and pedestrians. Vehicles observed speeding will be sent a warning letter along with advice to help change their driving behaviour. For the Chief Constables and PCCs who encourage its use, the advantage lies in the fact it is a cheap way of ensuring police legitimacy by reassuring concerned members of the public that "something is being done" (Wells and Millings, 2019). However this attitude means that schemes are not often given the police support they need to work effectively both in providing training and in sending out letters to those caught speeding - leading to disillusionment from those willing to support the police but do not feel the police are interested in them (Jung, 2020).

Done well, Community Speedwatch can not only improve police legitimacy but actually make a positive difference to road safety. Community Speedwatch Online started in Sussex seven years ago. Rather than relying in onerous paperwork it automates the process "from roadside to letterbox" by entering data directly into back-office police systems using tablets, gathering performance information and facilitates the autogeneration of warning letters to errant drivers (Jung, 2020). According to its founder, 90 per cent of first time recorded offenders by Community Speedwatch are not observed again within the first 12 months of receiving their first letter, meaning the police can focus enforcement on the remaining 10 per cent of drivers who are deliberately breaking the law (The Police Foundation and DriveTech, 2021). A recent evaluation of the scheme proved, over five years the percentage of people who reoffended dropped from 25 per cent to six per cent (Jung, 2020a). It is difficult to calculate the reduction in KSIs but a report estimates that

Community Speedwatch Online could lead to around 11.9 per cent fewer killed and seriously injured annually (Jung, 2020a).

6.2 ROAD SAFETY PARTNERSHIPS

Local authorities have a statutory duty under section 39 of the 1988 Road Traffic Act to "take steps both to reduce and prevent accidents". Road Safety Partnerships operate across the country based around police force areas. They normally comprise local authorities, police, courts, the fire and rescue service, the health authority and other bodies. Their main aim is to work together to reduce the number of casualties on the roads in the partnership's area. These partnerships originally arose out of safety camera partnerships established in 1999 to enforce speed limits and red traffic lights by the use of cameras.

With the recession of 2010, these partnerships suffered from significant budget cuts, meaning that the work many could do was severely limited. Since 2015 road safety partnerships have been responsible for providing NDORS (National Driver Offender Retraining Scheme) courses to drivers and riders who were caught having committed an offence such a speeding or careless driving or riding, and the money these generate can be used to invest in road safety – although many of these courses are now delivered by private sector providers.

The partnerships collect and analyse casualty data to identify causation factors and provide information, advice and training to educate road users about the responsibilities they have and how their actions can lead to road crashes and human casualties. Some of the more effective ones work collectively with other sectors such as public health, sustainable transport and other sectors, and some have adopted a Safe Systems Approach with clear targets to reduce KSIs (Amos, 2015; Devon and Cornwall PCC, 2021).

However, the localised nature of these partnerships and the fact there is no central coordination makes it hard to assess their effectiveness. The funding model means they are unable to truly plan ahead and are dependent on offending for their survival.

6.3 A SAFER SYSTEMS APPROACH

Empowering the public to take responsibility for their own wellbeing and safety on the roads lies at the heart of the Vision Zero approach to road safety which is currently being embraced in Norway and in cities like London, Vancouver, Amsterdam and New York. At the heart of Vision Zero is the safe system approach, which views human life and health as the paramount consideration when designing a new road network. It focuses on safe speeds, safe roads, safe vehicles, safe people and post-crash care in order to prevent collisions where possible and reduce their impact if not.

The principles underpinning the safe system acknowledge that:

- "People make mistakes which can lead to crashes; however, no one should die or be seriously injured on the road as a result of these mistakes.
- The human body has a limited physical ability to tolerate crash forces – any impact greater than 30km/h increases the risk of dying significantly.
- Road safety is a shared responsibility amongst everyone, including those that design, build, operate and use the road system.
- All parts of the road system must be strengthened in combination to multiply the protective effects and if one part fails, the others will still protect people".

For example, in the case of a young driver being involved in a late night collision, going too fast for the conditions and influenced by their peers, a safer systems approach would not seek to lay all the blame with the young driver but seek to address faults in the system (such as lack of late night public transport) that allows such a collision to happen (Senserrick and Kinnear, 2017).

A safer system would include looking at scanning the environment and determining what interventions are best for those particular circumstances, for example in urban environments building roads with cycle lanes designed into them rather than being painted on at a later date (The Police Foundation and DriveTech, 2021).

Of course, while studies have shown a safe system approach would eliminate the majority of crashes, there will always be a small minority of "extreme drivers" who choose to break the law (Wundersitz, 2014). The role of the police in this safe system would therefore be guiding, promoting and enforcing – using the former two for drivers who involuntarily break the laws and punishing those who continue to intentionally break the law (Faulks et al., 2011). According to STATS19, in 2019 UK collisions cost an estimated £33.4bn for lost output, medical and ambulance, police, insurance and admin and damage to property. Working together in partnership in this way to prevent collisions could have a huge impact not just in saving human life but also public money (DfT, 2020).

London, which embraced a Vision Zero strategy in 2018, aims to eliminate all deaths and serious injuries from London's streets by 2041 (TFL, 2018). As part of that vision the Metropolitan Police launched an independent advisory group made up of key identified stakeholders with an interest in road safety. The city also set up a new 'Road Crime Team' made up of handpicked officers with a remit to focus on "the most risky people, the most risky places and the most risky issues" (Cox, 2020). This team is tasked at a monthly meeting which reviews emerging threat and risk and task resources accordingly. This has in turn led to a 17 per cent rise in public perception of likelihood of traffic enforcement (Cox, 2020). Detective Chief Superintendent Cox, who spearheaded this scheme in London argues that there was no reason why this system should not be rolled out in the rest of the country, although partnerships would need to be created to manage it since there is no TfL equivalent outside the capital (The Police Foundation and DriveTech, 2021).

The success of the model in London lies in its use of partnerships between police forces and other local organisations such as local authorities, local fire and rescue services, road victims' organisations and others, which according to the PACTS report, are "key to the delivery of road safety" (Norbury, 2020, p.101). There is overwhelming evidence that road safety partnerships can help create better road safety outcomes, by integrating education, enforcement and engineering through collaborative working, but austerity has meant that resources for them are tight (Norbury, 2020). Police chiefs interviewed for the PACTS report saw partnership working as important, even as more than half said those collaborations were of varying quality due to the lack

¹ See http://www.towardszerofoundation.org/thesafesystem/ for more information on the Safe System approach

of proper information sharing and also lack of proper funding (Norbury, 2020; DriveTech, 2020c). Information sharing was also seen as vital between bodies such as the Driver and Vehicle Standards Agency (DVSA), Health and Safety Executive (HSE) and National Highways, although it can be complicated and does not happen as much as it should (Norbury, 2020)

In its submission to the DfT Call for Evidence for the Roads Policing Review, DriveTech emphasised that the "private sector, academia, the third sector and statutory bodies" should work "together to make the roads policing challenge manageable and realistic". (DriveTech, 2020c) These partners can most effectively help the police by sharing with them the job of educating the public and preventing them from engaging in the risky behaviour that leads to collisions.

Examples of partnership working given by the PACTS report include:

- "Working with the DVLA and HSE on operations relating to dangerous loads;
- working with the Traffic Commissioners on issues regarding heavy goods vehicle (HGV) licensing;
- working with National Highways and its traffic officers when patrolling or operating on the strategic road network;
- and working with the Motor Insurance Bureau on tackling issues of non-insurance (Norbury, 2020, p.101)."

6.4 UNIVERSITIES AND RESEARCH INSTITUTIONS

In our roundtable, reference was made to RPAN (the Roads Policing Academic Network), which is beginning to bring together academics from all the different disciplines with interest in roads policing in its widest sense. Unlike many aspects of policing, roads policing suffers "from the need to constantly justify its own value in a way that other areas of policing do not seem to have to do" as a consequence of "all the issues of tolerance and de-prioritisation" we've already discussed. Academic networks like RPAN

can help by researching evidence-led interventions and helping evaluate what works which is "key to attracting resources, and really difficult in a context where we need to show what we have prevented from happening" (The Police Foundation and DriveTech, 2021). RPAN has contributed to Think! Campaigns, has influenced police strategy and government policy and is increasingly represented on strategic boards and committees. It also supports frontline officers who are engaged in research (Keele University, 2021).

Moreover these networks could research the most effective way of communicating these road safety messages to the public – whether the best results can be gained through alarming the public with the consequences of speeding or communicating to them in a positive and encouraging way (The Police Foundation and DriveTech, 2021).

6.5 THE THIRD SECTOR

Operation Close Pass is a joint initiative between the police and the charity Cycling UK to educate road users on the dangers of overtaking cyclists too closely. It started in the West Midlands five years ago with undercover cycling police officers pulling over drivers who gave them less than 1.5 metres, the width of a car space, when overtaking them. The offenders would then receive a short lesson on how to overtake cyclists safely. In the first year alone it coincided with a 20 per cent reduction in casualties and is now spreading nationwide. The first Operation Close Pass national day of action was held in 2021 in which 39 of 43 forces participated (Wevill, 2021).

This approach works because, as one roundtable participant put it, "education and enforcement are closely linked". The public are helped to understand why obeying the rules of the road matter but are also made aware of the consequences of breaking them, both to others and to themselves. One participant at the roundtable working in driver training said through education as well as sanctions, drivers are encouraged to take "personal responsibility" for their actions and recognise that they were at fault, and more importantly, change their behaviour so that it does not happen again (The Police Foundation and DriveTech, 2021).

7. THE IMPACT OF THE COVID-19 PANDEMIC ON ROADS POLICING

The 2020-2021 Covid-19 pandemic has had a profound effect on all aspects of policing and the policing of the roads is no exception. In June 2021 the Department for Transport released provisional numbers of road casualties reported by police in 2020. This data includes a total of four months of national lockdown (April to June and November) meaning it cannot be compared to previous years. However the insight it gives into a world where fewer car journeys are made – there was a decrease in road traffic of 21 per cent – is illuminating.

There were 1,460 reported road deaths in 2020, a reduction of 17 per cent on the previous year. There were an estimated 23,529 killed or seriously injured (KSI) casualties in 2020, a decrease of 22 per cent compared to the same period in 2019. Yet, as has been discussed earlier, the fatality rate per billion miles travelled actually increased by five per cent , for the first time in 40 years.

While pedal cyclist traffic increased by 46 per cent in 2020 compared to 2019, pedal cyclist fatality rates decreased by three per cent and casualty rates by 34 per cent. The analysis suggests this may be as a result of reduced motor vehicle traffic and increased pedal cyclist traffic (DfT, 2021). Other evidence shows improvements in air quality of cities during lockdown – but these returned to previous levels when restrictions began to lift (Quinio, 2020).

While the overall number of KSIs may have decreased, when comparing traffic deaths to the number of miles driven, people were more likely to be killed, not less. It is believed that this increased risk of dying is linked to increased speeding during lockdowns, as emptier roads tempted drivers to stomp on the accelerator. In 2020

56 per cent of cars exceeded the speed limit on 30mph roads along with 53 per cent on motorways and 12 per cent on national speed limit single carriageway roads, compared with 54 per cent, 50 per cent and nine per cent respectively for 2019 (DfT, 2021d). This suggests that, for a significant minority of drivers, it is only traffic density, not respect for the law or each other, that slows them down normally (Middleton, 2021). There are also fears that once people have got into a habit of speeding they might find it difficult to stop (Domonske, 2021).

It is impossible to overstate the devastating consequences of the pandemic for those who have lost life, livelihoods or loved ones, or to a country still struggling through it. However, the grim few months of lockdown nevertheless provided an indication of how road deaths may be reduced and how people can be made to feel safer if there were fewer cars, proper policing to ensure those still on the roads stuck to the speed limit, and more journeys made by bicycle or on foot. As part of its recovery from the pandemic, London is discussing the introduction of a "15 minute city" an urban set-up where locals are able to access all of their basic essentials at distances that would not take them more than 15 min by foot or by bicycle, and which was successfully implemented in Paris (Moreno, 2021).

The recovery programme for London outlines a mission to promote walking and cycling, cut down on unnecessary car journeys and lead to fewer cars on the roads through radically overhauling infrastructure and creating greener high streets (Mayor of London, 2021). These road systems would be designed so that no individual should be seriously harmed, with the focus not merely on the safe road user, but on safe roads and roadsides, safe speeds and safe vehicles, supported by safe policies and management.

8. CONCLUSIONS AND RECOMMENDATIONS

For many years England and Wales could claim to have some of the safest roads in the world, ranking near the top in league tables of fewest deaths per head of population. (Lawton and Fordham, 2016).

However, while the numbers of car occupants killed remains low in comparison to similar countries, this is not the case for pedestrians, motorcyclists and cyclists. Britain's roads are more dangerous for these vulnerable road users than for other countries with a similar number of road deaths per head (Lawton and Fordham, 2016).

Moreover, while other European countries are continuing to reduce road deaths, the number of people killed on roads in England and Wales has remained stubbornly constant for the last decade.

As we have argued earlier police enforcement is proven to reduce road deaths, as the fear of getting caught is one of the few factors shown to persuade motorists to abide by speed limits and other restrictions. Conversely breaking the law without being caught, such as through drink driving without being stopped by police, is likely to embolden people to commit further offences.

Yet over the last decade there have been reductions in the numbers of traffic police, of funding given to roads policing and in the amount of enforcement activity carried out. The evidence suggests that this reduction in roads policing activity and the stagnation in the number of road deaths are linked. While all aspects of policing have been hit by austerity, roads policing has been disproportionately hit, and is not benefiting (at least in the immediate term) from the increased resources made available through Operation Uplift.

One of the main reasons for the lack of prioritisation of roads policing in recent years highlighted by a number of participants in our roundtable event, is that roads policing does not have the oversight of a single government department. As stated above, the Department for Transport own the problem (deaths and casualties in the roads) while the Home Office owns the assets (the police service).

This basic challenge at the level of government is then compounded by the fact that many local Police and Crime Commissioners (PCCs) have not generally prioritised roads policing and that austerity has meant a squeeze on under prioritised areas of policing. Moreover, a lack of accountability via the PCC has meant Chief Constables have been able to take resources from roads policing to fill gaps in areas that were in the Strategic Policing Requirement (SPR).

To ensure roads policing is effectively prioritised and is given the resources it needs to function effectively there needs to be a better alignment of leadership, incentives and accountability to ensure the roads are properly policed and roads safety is properly promoted.

There are two possible ways of doing this. One would be to create a single national roads policing service, taking traffic responsibilities away from local police forces. This would function in a similar manner to the separate policing function provided on the rail network by British Transport Police.

However, we conclude that it would be a mistake to 'hive off' roads policing in this way. This is because policing the roads is intimately connected with other objectives of local police forces, such as tackling crime and providing a visible police presence. Creating a separate organisation to police local roads would risk bifurcating policing and creating new barriers to information sharing and collaborative working.

Therefore rather than creating a separate structure for roads policing it makes more sense to find ways of ensuring that within the existing structure, roads policing receives greater emphasis and resource.

Of course, it is not solely the responsibility of the police to reduce the numbers of people killed or seriously injured on the nation's roads. Partnership working between the police, third sector, academics, the industry and the public themselves are needed to bring about change. Moreover, this partnership needs to be properly coordinated and led so that different groups can come together to share ideas, promote best practice and ensure consistent improvement across

the country. The so-called 'safe systems' approach, mobilising all the relevant forces to create the conditions for safe use of the roads, is one that we strongly favour.

In order for there to be lasting change, there needs to be a switch to an approach which, while punishing those who break the law, works on creating safe roads and roadsides, safe speeds and safe vehicles, supported by safe policies and management. The recent changes to the Highway Code released in July 2021 are a step in the right direction as they recognise that pedestrians and cyclists are at greater risk of harm than car occupants. These changes create a "hierarchy of road users" in order to ensure that "those who can do the greatest harm have the greatest responsibility to reduce the danger or threat they may pose to others". They also strengthen pedestrian priority on pavements and crossing the road and offer guidance on safe passing distances and speeds and ensuring that cyclists have priority at junctions. Of course, making something a rule does not mean people know about it, let alone follow it, but it does at least ensure that learner drivers are taught to recognise their obligation to maintain the safety of other road users.

Deaths on our roads are avoidable. But they will only be avoided if there is clear and unambiguous national leadership on this question and a whole-system approach to improving road safety. At the close of our round table event, Edmund King, President of the AA, summarised what needs to happen for our roads to be safe, saying:

"We need more cops in cars. Drivers have a high level of acceptance for speed cameras. Other problems such as drink driving, tailgating, etc cannot be caught by cameras, so we need police on the roads for this. We need 5 star drivers in 5 star cars on 5 star roads. Most importantly – we need serious leadership" (The Police Foundation and DriveTech, 2021).

Moreover, we need to ensure that the police are equipped to keep up with the rapidly evolving technological innovation of motor vehicles, while never losing sight of the needs of the invisible people who are harmed and intimidated outside of them.

8.1 RECOMMENDATIONS

Recommendation One

The Home Office should include roads policing in the Strategic Policing Requirement (SPR) in order to ensure that roads policing is sustained as a core policing capability throughout the country. This should sit alongside a strengthening of what fulfilling the SPR entails for local forces. To comply with the SPR, PCCs should be required to set out a road safety and roads policing plan for their area, working in partnership with community groups, local authorities, businesses, schools, and other public services to identify road safety goals, set out how they will be achieved and measure progress toward achieving them.

Recommendation Two

The national roads policing lead should be supported by a dedicated full-time secretariat, based within the NPCC. This secretariat will provide national leadership on the policing of the roads network and will be empowered to set guidelines and make recommendations to chief constables for how much capability ought to be provided in each policing area.

Recommendation Three

The government should appoint a Road Safety Commissioner, comparable to the Victims Commissioner, responsible for promoting good practice and partnership working, and holding government departments and police accountable so that lessons are learned, and future road deaths are prevented.

Recommendation Four

The Vision Zero approach should be rolled out nationally. The Home Office expects police forces to make "measurable improvements" across a range of policing outcomes (Malthouse, 2020). Making progress towards achieving zero road deaths should be among these measurable outcomes. The strategic ownership of this goal should lie with the Home Office, with the backing of the Prime Minister, and the support of other government departments including transport and health. Local delivery will be led by PCCs.

Recommendation Five

The relevant agencies should create an entity which brings together experts from police, government, academia, industry and the third sector with the aim of anticipating future road dangers, such as caused by changes in technology, and ensuring police and other actors are equipped to deal with them. A useful template for this entity – which could be a standing committee or policy forum – could be the Scientific Advisory Group for emergencies (SAGE). Part of its remit would be raising awareness of emerging risks and making recommendations to ensure that drivers' skills keep pace with developments in in-car technology. This entity should also be charged with advising on measures necessary to enable the roads policing function to respond to a changing technological environment, including skills development in investigation and the setting of digital data and technology standards.

APPENDIX A: ROADS POLICING ROUND TABLE PARTICIPANTS

Amy Aeron-Thomas, Action Vision Zero

Assistant Chief Constable Steve Barry, Department for Transport

Ian Bint, DriveTech

Dr Gemma Briggs, Roads Policing Academic Network

Tracy Catling, Home Office

David Cox, Cycling UK

Andy Cox, Lincolnshire Police

Paul Farley, Motor Insurers' Bureau

Gemma Fox, Police Federation

Nick Gargan, former Chief Constable

Roger Geffen, Cycling UK

Caroline Hay, City of London Police

Johnathan Hewett, Thatcham

Jan Jung, Community Speedwatch Online

Edmund King, The AA

Jeremy Leach, ActionVisionZero

Victoria Lebrec, RoadPeace

Des Morrison, DriveTech

Charles Norman, DriveTech

Colin Paterson, DriveTech

Ruth Purdie, UKRoEd

Nick Simmons, RoadPeace

Leo Taylor, DriveTech

Mark Turner, CEO of Road Victims Trust

Dr Helen Wells, Roads Policing Academic Network

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