



accidents don't have to happen

Decarbonising Transport: Setting the Challenge

RoSPA's Response to the Department for Transport's Consultation

Date: June 2020



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Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Department for Transport's consultation on the document Decarbonising Transport: Setting the Challenge. It has been produced following consultation with RoSPA's National Road Safety Committee.

In June 2019, the UK became the first major global economy to pass a law that requires it to achieve 'net zero' greenhouse gas (GHG) emissions by 2050. Transport has a huge role to play.

The Government have set out six strategic priorities for the Transport Decarbonisation Plan, to deliver a vision of a net zero transport system:

- Accelerating modal shift to public and active transport
- Decarbonisation of road vehicles
- Decarbonising how we get our goods
- Place-based solutions
- UK as a hub for green transport technology and innovation
- Reducing carbon in a global economy

Our response focuses on the modal shift to public and active transport and actions that can be taken to make cycling and walking safer and therefore a more attractive transport mode.

Accelerating modal shift to public and active transport

RoSPA welcomes the Government's priority towards acceleration of modal shift to public and active transport.

Travel is an important aspect of our everyday activities and our daily habits are often dependent on the transport available to us. Whether it is through the purchase of a new type of vehicle, moving to greater sharing of transport to increase utilisation, or switching modes, behaviour change will be an important aspect of the decarbonisation of transport.

The Government would like public transport and active travel to be the natural first choice for our daily activities. An important aspect of reducing emissions from transport will be to use cars less and be able to rely on a convenient, cost-effective and coherent public transport network. For those able to do so, cycling and walking should be the obvious choice for short journeys.

RoSPA also welcomes the fact that the Government is committed to increasing cycling and walking and making our roads safer for those who walk or cycle. We recognise this is likely to bring public health benefits through increased active travel and improved air quality. In 2017, the Government published its first statutory Cycling and Walking Investment Strategy. The strategy set out the Government's ambition to make cycling and walking the natural choice for all shorter journeys or as part of a longer journey by 2040. The Government has set an aim to double cycling activity, increase walking to 300 stages per person per year and increase the percentage of children aged 5 to 10 that usually walk to school to 55% by 2025.



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The Cycling and Walking Investment Strategy identified £1.2 billion of funding projected for investment in cycling and walking between 2016 and 2021. However, interest was so great that the initial £1.2 billion has already been invested and a further £1.2 billion is projected over the next two years for infrastructure and other active travel projects. This includes investment in projects such as Bikeability training for school children, Cycle Ambition Cities and walking and cycling schemes crossing motorways and major roads.

Further to this, on 11 February 2020, the Prime Minister announced £5 billion funding for investment in local buses and cycling and walking infrastructure. It includes funding at least 4,000 zero emission buses to make greener travel the convenient option, driving forward the UK's progress on its net zero ambitions; and measures to improve modal shift onto the bus, such as high frequency services, more 'turn up and go' routes, new priority schemes, and more affordable fares. This is also part of the creation of a long term cycling and walking programme and budget that will enable delivery of the Government's aim to double cycling and increase walking by 2025, including through the £350 million Cycle Infrastructure Fund announced in the Conservative Party manifesto.

There are regional variations in how people travel for both leisure and work – for example, across Great Britain, 68% of workers typically travelled to work by car in 2018. However, in London where public transport is a viable alternative and road space has been reallocated to encourage cycling and walking the figure is substantially lower at just 27%. This provides a very valuable lesson; namely that people will make the shift if safe and economically viable alternatives are available. Outside the major cities this is not yet the case and must be addressed if people are to be persuaded to change their travel behaviour.

RoSPA strongly supports measures which encourage healthy and sustainable travel. Cycling in Great Britain is increasing (although not uniformly across the country) because it is an excellent way to get about, and provides a wide range of health and environmental benefits which are widely understood. Equally, walking provides a similar range of health and environmental benefits.

These benefits , include:

- Reducing the risk of dying prematurely, especially from heart disease
- Reducing the risk of stroke
- Reducing the risk of developing high blood pressure
- Reducing the risk of developing colon and breast cancer
- Helping to control weight
- Helping older adults to become stronger and maintain their mobility
- Promoting psychological wellbeing
- Saving money by cutting down on fuel, parking and public transport costs.

There are also a number of benefits at an environmental level, including:

- Easing congestion
- Reducing noise pollution, and
- cutting exhaust emissions



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However, the sad reality is that in 2018, 555 pedestrians and cyclists were killed on our roads, making up nearly one third of all road fatalities, and thousands more were seriously injured¹. The key to increasing cycling and walking is to create a safe on and off-road environment, improve road user attitudes and behaviour towards each other, and safer vehicles that reduce the risk of collisions occurring and the severity of those that do occur.

The Covid 19 pandemic has created interest in cycling and for many it is now being recognised as an alternative to using public transport. RoSPA supports measures such as pop up bike lanes and would like this to go further with all highway authorities being compelled to come up with local plans showing how cyclists will be provided with segregated routes along key strategic commuting corridors.

RoSPA also recognises that for some people walking and cycling is not a viable alternative to the car, especially for the very young and those with certain health conditions. Therefore it is essential that good quality, reliable and frequent public transport is available across the country, where it provides a realistic alternative to private transport. Away from the main conurbations public transport subsidies have been cut resulting in higher prices and a less frequent service. This needs to be addressed for public transport to be a universal travel choice option.

Improving road safety

RoSPA believes that central to getting more people cycling and walking is achieving an improvement in road safety. In our view, the ambition to significantly increase the amount of walking and cycling will only be achieved if people feel safe when walking and cycling, otherwise the huge numbers of people who would cycle or walk if they felt they could do so, are unlikely to be persuaded. A RoSPA commissioned You Gov survey found that 39% of respondents said they would cycle more often if the roads were made safer.

Creating a safer cycling and walking environment must also be supported by education (including training and publicity) and enforcement to improving road user behaviour, and to helping everyone share the road safely together. All road users must also take responsibility for their own choices and behaviour. Behaviour change techniques and interventions such as education campaigns may need to be deployed to persuade motorists out of single occupancy vehicles onto public transport and to walk and cycle where possible. Motorists also need to appreciate the vulnerability of cyclists and to give them enough space for example when overtaking.

Improving the safety of pedestrian and cyclists will also unlock the latent demand for both leisure and utility cycling. In 2019, the first wave of the National Travel Attitudes Study (NTAS)² showed that 61% of adults aged 18+ in England agreed that "it is too dangerous for me to cycle on the roads".

¹ Department for Transport (2019) 'Table RAS30001: Reported road casualties by road user type and severity, Great Britain 2008 – 2018'

<https://www.gov.uk/government/statistical-data-sets/ras30-reported-casualties-in-road-accidents>

² Department for Transport (2019) 'Walking and Cycling Statistics, England: 2018'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/821842/walking-and-cycling-statistics-2018-accessible.pdf



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A YouGov survey commissioned by RoSPA showed that in 2015, when asked how much they would like to cycle in the future, 36% of people said they would like to cycle more than they currently do, 44% said about the same as now, and 3% said they'd like to cycle less often. The main reasons given when asked what prevents them from cycling more often were "concerns around the safety of road cycling" (41%) and "concerns about drivers treating me badly when cycling" (31%). Other common reasons were "cycling not a realistic option for the journeys I make" (32%), "weather not good enough" (24%), "lack of motivation to cycle" (22%) and "a health condition" (16%). "I'd like to improve my cycling skills first" was cited by 7% of respondents, and another 7% said they couldn't ride a bicycle. Overall, 39% of respondents said they would cycle more often if cycling on the roads were made safer. These findings suggest that a perception that cycling is not safe is preventing many people from cycling, which means that they are not benefitting from the health improvements that cycling brings. This must be addressed if active travel is to be promoted.

Ideally, pedestrians and cyclists should be segregated from motorised traffic as much as possible, especially on higher speed, heavily-trafficked roads, and where this is not possible, effective speed management policies and schemes need to be put in place to reduce speeds to appropriate levels.

The Safe System approach

RoSPA recommends the further adoption of the safe systems approach throughout Great Britain. The safe system approach recognises that people make mistakes and designs roads and vehicles so that these mistakes are not likely to result in death or serious injury. It places human vulnerability to injury at the centre of the road system and proposes that roads, vehicles, and traffic speeds are modified to prevent exchanges of energy that are likely to cause fatal injuries. This approach can be applied to all types of roads and for all road users.

In general, the safe system philosophy identifies ways of separating traffic, and especially separating vulnerable road users from motor vehicle traffic on high speed roads, and where this cannot be achieved, designing roads to reduce traffic speed. RoSPA prefers the segregation of traffic from pedestrians and cyclists from traffic. Of course, this is not always possible, so effective speed management schemes are also needed.

Some studies have estimated the number of lives that could be saved by the safe system. For example:

- A Swedish study³ in found that in 63% of the crashes studied, the road or vehicle did not meet the safety standards of the safe system approach, and concluded that these deaths could have been prevented by the safe system, even without addressing road user behaviour.
- An Australian study⁴ in 2008 categorised 57% of crashes as failure of the safe system.

³ Stigson et al (2008) Use of fatal real-life crashes to analyze a safe road transport system model, including the road user, the vehicle, and the road, *Traffic Injury Prevention*, 9(5): 463-471.



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Infrastructure and road design

RoSPA supports the 2018 CWIS recommendations and the recently announced £2 billion package to create a new era for cycling and walking.

However, the reality is that the current cycle infrastructure in many areas requires considerable improvement. Cycle and walking routes should be continuous, direct and join up residential, commercial and schools. Cyclists should not have to cycle unprotected in busy and fast moving traffic, and pedestrians need safe and well-designed footways and crossing facilities.

A new cycle route manual should be produced which builds on current technical advice that cycle routes need to be:

- Direct –shortest, quickest route to minimise delay. Continual starting and stopping to cross roads is both frustrating and tiring.
- Safe –The route must be both statistically safe and feel safe
- Coherent –Joined up and easy to follow
- Attractive –Enhance the existing streetscape
- Comfortable –Clean, smooth surface in all weathers
- Adaptable -Allow future upgrades to accommodate an increase in use

Badly maintained footways also increase the likelihood of trips, whilst hitting a pothole can result in riders being thrown from their bicycle. It is essential that highly used footways and cycle routes are maintained to a high standard and are regularly inspected. They need to be swept to reduce the risk of puncture, especially in the autumn when hedges are cut. Key walking and cycle routes also need to be included in highways winter maintenance programmes if people are to be encouraged to walk and cycle in the winter. The needs of those with impaired mobility must also be considered, when moving away from single car occupancy towards public transport and active travel. The following should be considered for pedestrians with special needs:

- Tactile paving at the edges of steps and pavements and safe crossing places
- Well-maintained, firm, flat and wide footways making the roads easier to navigate and safer to use for those with disabilities
- Tarmac, rather than paving stones, which reduces the risk of uneven surfaces and trips and falls, and makes the use of mobility scooters more comfortable and efficient
- Dropped kerbs to allow easier access for wheelchair users and;
- Safe crossings with signalling that can be detected by those with sight or hearing loss and longer crossing periods for people with mobility impairments to safely cross the road.
- Reduction in street clutter where it poses a danger to those with visual impairment.

Multi modal transport

⁴ Wundersitz L and Baldock M, The relative contribution of system failures and extreme behaviour in South Australian crashes: Preliminary findings, *Australasian Road Safety Research, Policing and Education Conference 2012, 4 -6 October 2012*.



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How public transport is organised and delivered is likely to be very different in the future, with less reliance on the car. The governments 'Future of Transport Regulatory Review' recognises this and will create a great opportunity to reduce single vehicle trips.

With increasing availability of data and digital capability in the transport sector, we are seeing the emergence of new business models that package different modes and services together onto one platform to make planning and payment of trips easier for consumers. Such innovation has been termed 'Mobility as a Service' (MaaS), which allows 'the integration of various modes of transport along with information and payment functions into a single mobility service. Flexible bus services have the ability to take passengers where they want, when they want at potentially much lower cost than a traditional fixed route.

A longer journey may involve a person walking, cycling and using public transport. MaaS has the potential, through innovative approaches, to integrate a variety of transport modes, promote the use of mass transit and more sustainable travel, and improve the journey experience for consumers.

Training

Training for road user groups is another way in which active modes of travel such as cycling and walking can be encouraged and made safer. The £50 million for Bikeability training for school children reflects the government's commitment to cyclist training. RoSPA would like to see a similar scheme for child pedestrians as this will provide children with a life skill and encourage parents to allow their children to walk to school.

The provision of practical cyclist training, especially for child cyclists, has increased in recent years, but the opposite is true for child pedestrian training, whose provision has fallen. A RoSPA commissioned YouGov survey⁵ in 2019 revealed 49% of children aged 6-11 had received no pedestrian training in the previous 12 months. RoSPA believe that pedestrian training should receive the same level of support, development and funding from which practical cyclist training has benefited. It should not be a choice between funding Bikeability and pedestrian training, both provide valuable life skills. It is worth bearing in mind that in 2018, there were 5,246 child pedestrian casualties, compared to 1,954 child cyclist casualties.

Both cyclist training (Bikeability) and pedestrian training schemes (Kerbcraft) and local schemes such as Staffordshire County Council's Stepping out scheme have been independently evaluated. Results have shown that practical training improves a child's road safety knowledge and ability to interact with traffic. RoSPA would like to see this training made universally available to all pupils in key stages 1 and 2.

Pedestrian casualties increase as children grow older and become independent travellers. Road safety education and training for children at Key Stages 1 and 2 should be conducted in real-road environments, rather than

⁵ Total sample size was 424 parents of 6-11-year-olds in England. Fieldwork was undertaken between January 30 – February 1 2019. The survey was carried out online.



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sessions undertaken solely in a classroom or playground. It should also cover modern-day scenarios, such as distraction by mobile phones or MP3 players while walking, and crossing between parked vehicles. Pedestrian training could usefully be seen as the beginning of a lifelong cycle of road safety training that also encompasses cycle training, pre-driver education, the learning-to-drive process and “refresher” or further driver training throughout life.

Think! Road Safety

RoSPA believes that the Think! Road Safety campaigns play an important role in providing road user education. One of the strengths of Think! Is that it provides a range of campaigns on different specific topics, aimed at different road user groups, and is very well targeted, delivered and evaluated. It is important that Think! Road Safety continues to be developed and delivered to encourage safe sustainable travel.

Large vehicle drivers

Professional HGV, bus and coach drivers must do 35 hours of periodic training every 5 years. The drivers CPC syllabus sets out a range of issues that can be included, with some providers offering a specific ‘cyclist’ module. RoSPA would like this to be mandatory within the CPC syllabus, ideally including a practical ‘changing places’ element.

Vehicles and equipment

Pedestrian and cyclist safety can be improved through vehicle design and technology. RoSPA supports TfL Direct Vision Scheme and would like this to be a requirement in other UK cities.

Vehicles are increasingly designed to be safer for pedestrians, with technologies evolving rapidly as autonomous technology is developed and trialled.

Some ways in which vehicle design and technology can offer protection to pedestrians include:

- Intelligent speed adaptation (ISA) –to support drivers' compliance with speed limits. This is an important advantage compared to the speed limiters for heavy good vehicles and coaches, which only limit the maximum speed.
- Autonomous emergency braking (AEB) which uses sensors to detect a risk of a collision with a vehicle or pedestrian, warn the driver or automatically apply the brakes.
- Bonnet design to reduce injury severity in collisions with pedestrians. Vehicle manufacturers are now developing cars with an ‘active bonnet’ which can detect an impact with a pedestrian, within a set speed range, and reduce the severity of any pedestrian injuries.

Financial road tax incentives along the lines implemented with diesel vehicles, could be implemented for cars achieving EURORAP pedestrian safety standards.

One of the main developments in the short and medium term is likely to be autonomous vehicles. As cars become highly autonomous, but still rely upon occasional driver intervention, RoSPA is concerned about how this may affect pedestrian and cyclist safety.



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RoSPA has no further comments to make on the consultation process, other than to thank the Department for Transport for the opportunity to comment. We have no objection to our response being reproduced or attributed.

