

Cycling and Walking Investment Strategy (CWIS) safety review – PACTS response

<https://www.gov.uk/government/consultations/cycling-and-walking-investment-strategy-cwis-safety-review>

Submitted by David Davies, Executive Director,

Parliamentary Advisory Council for Transport Safety (PACTS)

Clutha House, 10 Storey's Gate, Westminster, London SW1P 3AY

<http://www.pacts.org.uk/>

May 2018

About PACTS

PACTS believes in “safe transport for all”. We support evidence-based policies that will move the UK much faster towards zero transport deaths and serious injuries. PACTS supports the safe system approach to road safety which acknowledges the inevitability of human error and targets danger reduction. PACTS provides the secretariat to the All-Party Parliamentary Group for Transport Safety.

PACTS' focus is transport safety. We also support policies delivering wider public benefits, such as benefits to public health, the environment, the economy and quality of life. We recognise that transport safety measures should provide value for money and have public support.

Overall policy context

PACTS welcomes the Cycling and Walking Investment Strategy (CWIS) safety review and the opportunity it affords to consider how walking and cycling can be made safer in the context of encouraging and increasing these two important travel modes. The safety and attractiveness of walking and cycling cannot be addressed effectively in isolation from wider transport and planning policy. We therefore set out some evidence on these strategic matters before answering the six specific consultation questions.

UK road safety performance – international comparisons

The consultation document states that “Britain has some of the safest roads in the world”. This is true for total UK road user deaths relative to population, with 28 deaths per million people in 2015. In a report for PACTS in 2016, TRL showed that, in the previous ten years, the UK had ranked highest in the league table of safest countries (excluding Malta).¹ However, the statement needs scrutiny in relation to pedestrians and cyclists.

The fatality rate for pedestrians (2010-2015 average) was 6.8 deaths per million population, only 8th lowest among selected European and OECD countries.² For child pedestrians (0-14 years), the UK

¹ TRL Report PPR796, *Understanding the strengths and weaknesses of Britain's road safety performance*, 2016 (published by PACTS) <http://www.pacts.org.uk/2016/09/safest-roads-in-the-world/>

² Department for Transport, *Reported Road Casualties Great Britain, annual reports: 2011-2016*, Table RAS52001

rate in 2014 (the most recent year available) was 2.6 deaths per million population, placing the UK joint 17th in the list of countries for which information is provided.³ By contrast, the UK has the lowest international overall rate for child road deaths (i.e. all modes) at 4.3 deaths per million population (2010-15 average).

International fatality rates for cyclists relative to population are not particularly useful as the level of cycling varies greatly between countries. Rates per million kilometers travelled are a more useful measure but these are available for a few countries only. Based on these limited cases, the fatality rates for cyclists in GB are about twice the rates in the Sweden, Netherlands, Norway and Denmark.⁴ These countries have higher levels of cycle use and have more comprehensive networks of segregated cycle paths than the UK. They are not a typical sample of European countries, but they are close to the UK in terms of overall road safety performance.

Professor Oliver Carsten has calculated that, if Britain had the same levels of vulnerable road user activity (walking, cycling and powered two wheelers) as some other comparator countries, our overall fatality rate would be considerably higher.⁵

Further information on pedestrian and cyclist casualty rates across Europe is provided by ETSC.⁶

Recent UK road safety trends

We do not dispute the statement in the consultation paper that “Casualties have fallen substantially over the past 10 years”. It should be recognised, however, that this fall took place almost entirely in the previous decade.⁷ Between 2010 and 2016, UK fatalities fell by only 2% (3% for GB) and serious injuries rose by 6%.⁸

PACTS does not seek to undermine the UK’s generally good road safety record but believes that it needs to be made clear that road collisions remain a major source of death and injury and that there has been little progress in reducing total casualties in recent years. Much more needs to be done and with more urgency. In particular, there is still a great deal to be done before we achieve a safe system for walking and cycling.

How to increase walking and cycling

The CWIS sets out the Government’s aim to increase walking and cycling and to improve safety. It is helpful to learn from previous initiatives, such as the 1996 National Cycling Strategy⁹ which set a target of quadrupling cycle journeys by 2012, largely by detailed measures to promote cycling and to

³ Department for Transport, *Reported Road Casualties Great Britain, annual report: 2016*, Table RAS52001

⁴ ETSC, *Pedalling Towards Cycling Safety, EU Cycling Safety Ranking*, Fig 6, 2012 <https://etsc.eu/pedalling-towards-safety-eu-cycling-safety-ranking/>

⁵ Professor Oliver Carsten, Britain’s road safety performance: are we as sunny as we think? *Local Transport Today*, LTT 643, 21 March 2014

⁶ ETSC, *Making Walking and Cycling Europe’s Roads Safer, PIN Flash Report 29*, 2015

file:///C:/Users/user/Downloads/etsc_pin_flash_29_walking_cycling_safer.pdf

⁷ PACTS, *Road Safety Since 2010*, 2015

⁸ Department for Transport, *Reported Road Casualties Great Britain, annual report: 2016*.

⁹ Department of Transport, *National Cycling Strategy*, July 1996

provide a more cycle-friendly infrastructure. Despite much support, levels of cycle use fell and the target was abandoned in 2004.¹⁰

There has never been a dedicated national walking strategy. Even under the comprehensive integrated transport planning of the John Prescott era, when there were many “daughter” strategies, walking was omitted.¹¹ While there have been design manuals aimed at improving the pedestrian environment, these do not provide evidence-based strategies to increase walking. This has been a serious mistake.

Rather than debate strategies, it is more useful to consider in what circumstances walking and cycling have actually increased – or not.

Jeff Speck shows how levels of walking in cities in USA and Europe determined by “ten steps of walkability”.¹² These are predominantly about transport, land use and urban design policy. Foremost among the ten steps is “Put cars in their place”. Only one of the ten is about pedestrian road safety and he is critical of conventional highway design standards and pedestrian levels of service criteria.

Cycling historian Carlton Reid analyses “bicycle booms” over many years in a number of North American and European cities.¹³ He is clear that the three necessary conditions are:

- measures or conditions that make private car use less attractive (congestion, limited parking, restricted access, congestion charging, etc.);
- a cycling-friendly culture;
- a cycle-friendly infrastructure – one which is convenient and makes cyclists feel safe.

The first two are essential. He cites examples, such as Stevenage and Milton Keynes, which have the infrastructure but not the other two conditions and consequently have few cyclists.

Specific consultation questions

1. Infrastructure and traffic signs - [view in consultation document](#)

Do you have any suggestions on the way in which the current approach to development and maintenance of road signs and infrastructure impacts the safety of cyclists and other vulnerable road users? How could it be improved?

Safe system principles require low speeds where vulnerable road users mix with motorized traffic and segregation at higher speeds.

¹⁰ DfT, [National Cycling Strategy: a review](#), 2010

¹¹ DETR, *A new deal for transport: better for everyone*, White Paper, 1997
<http://webarchive.nationalarchives.gov.uk/20100304074821/http://www.dft.gov.uk/about/strategy/whitepapers/previous/anewdealfortransportbetterfo5695?page=1#a1000>

¹² Jeff Speck, *Walkable City*, 2012

¹³ Carlton Reid, *Bicycle Boom*, 2017

The UK has introduced various cycle facilities (lanes, tracks, converted footways etc.) over many years. Some are of a good standard but many are poor, while others are useless, inconvenient or positively dangerous.¹⁴

The Dutch CROW design manual of the 1993¹⁵ set out cycle infrastructure five design principles that remain valid today:

- coherence
- directness
- attractiveness
- safety
- comfort.

These were endorsed in the 1996 CIHT and DfT *Cycle Friendly Infrastructure Guidelines* for the UK.¹⁶ A point stressed in the latter is to avoid the “something is better than nothing” approach.

The CWIS safety review consultation (2.2) appears to endorse the “hierarchy of road users” approach in transport planning. PACTS supports this. This hierarchy is set out in *Manual for Streets 2* published by CIHT in 2010.¹⁷ It would be helpful for DfT to reiterate its support for this hierarchy approach.

Segregation is not a safety panacea. Pedestrians have a segregated network (pavements) but there are still many fatalities and injuries, mainly where pedestrians cross roads. Segregated cycle facilities do not ensure zero cyclist casualties. Over recent years, deaths of cyclists in which no motor vehicle was involved accounted 24% of cyclist deaths in the Netherlands.¹⁸ Segregation will also require crossings of roads – as do pedestrian footways – where casualties arise.

Safety and priority at junctions is a key issue, both for cyclists and pedestrians. PACTS would like to see the proposals in British Cycling’s *Turning the Corner* carefully examined.

2. The laws and rules of the road - [view in consultation document](#)

Set out any areas where you consider the laws or rules relating to road safety and their enforcement, with particular reference to cyclists and pedestrians, could be used to support the government's aim of improving cycling and walking safety whilst promoting more active travel.

Enforcement is an essential part of a safe system. In terms of influencing road user behaviour, prompt, consistent and efficient enforcement is more important than the severity of the

¹⁴ <https://www.amazon.co.uk/Crap-Cycle-Lanes-Warrington-Campaign/dp/1903070589>

¹⁵ CROW, *Sign up for the bike, Design manual for cycle-friendly infrastructure*, 1993, Netherlands

¹⁶ <http://www.ciht.org.uk/en/knowledge/publications/technical-guidelines.cfm/cycle-friendly-infrastructure-1996>

¹⁷ CIHT, *Manual for Streets 2*, 2010 <http://www.ciht.org.uk/en/document-summary/index.cfm/docid/055693F6-8DB0-4BBE-AA9FF1B5BC5E9412>

¹⁸ SWOV (2017). *Cyclists*. SWOV Fact sheet, June 2017. SWOV, The Hague. <https://www.swov.nl/en/facts-figures/factsheet/cyclists>

punishment.¹⁹ Various opportunities to improve the effectiveness of enforcement, including better sharing of intelligence, technology and dashcams, were presented at the PACTS *Street Legal* conference in March 2018.²⁰

20mph limits are being introduced widely in a number of towns and cities. We support lower speed limits in urban areas but it is important that these deliver real benefits and not the illusion of change. It is imperative that the Atkins study for DfT be completed and published without delay and the DfT Speed Limit Guidance be refined if required. PACTS has submitted evidence on this issue to consultation in the Scotland.²¹

About one third of road deaths are in the course of work. Unusually for work-related deaths, approximately half of these deaths are not workers but members of the public.²² Employers have legal responsibilities to comply with health and safety requirements and to ensure that their staff comply with traffic laws. They need to better recognise their driving for work road safety responsibilities, including those to vulnerable road users.

There have been some appalling cases of deaths to cyclists from hauliers and others deliberately flouting laws and regulations.²³

The DfT, BEIS, DVLA and HSE should be more proactive on these fronts. The CLOCS and FORS schemes are positive initiatives that should be extended.

There has been talk of the merits of introducing a legal presumption in favour of pedestrians and cyclists in cases of collision with a motor vehicle. We believe some of this is misplaced and would probably not be compatible with English law. It would be helpful to have a legal examination to clarify this issue, as Birketts provided to DfT on dangerous cycling.

We are not convinced about creating an offence of causing death/injury by dangerous/careless cycling, as recommended in the report by Birketts for DfT.²⁴ Although mentioned in the consultation, it is not part of this review call for evidence. We may respond separately on this matter.

3. Training - [view in consultation document](#)

Do you have any suggestions for improving the way road users are trained, with specific consideration to protecting cyclists and pedestrians?

¹⁹ PACTS response to MoJ consultation on driving offences and penalties, 2017

<http://www.pacts.org.uk/2017/02/ministry-of-justice-consultation-on-driving-offences-and-penalties-relating-to-causing-death-or-serious-injury-pacts-response/>

²⁰ PACTS *Street Legal* – new ways to safe and compliant road use, Conference proceedings, March 2018

<http://www.pacts.org.uk/2017/12/pacts-conference-street-legal-new-ways-to-safe-and-compliant-road-use/>

²¹ <http://www.pacts.org.uk/2017/08/pacts-response-to-consultation-on-changing-the-default-speed-limit-in-built-up-areas-across-scotland-from-30mph-to-20mph/>

²² HSE, *Fatal injuries in the workplace in Great Britain 2013*, cited in Transport Safety Commission report, *UK Transport Safety: Who is responsible*, p20, 2015 http://www.pacts.org.uk/wp-content/uploads/sites/2/TSCResponsibility_LowRes%20COMPLETE%20FINAL.pdf

²³ See response by Cycling UK to MoJ consultation on driving offences and penalties, 2017

²⁴ Laura Thomas, Birketts LLP, *Cycle Safety Review*, February 2018, <https://www.gov.uk/government/publications/cycle-safety-review>

Hazard perception testing, part of the driving theory test, has been found to reduce collision rates for young drivers. There are reasonable grounds to believe that wider use of hazard perception training and testing would be beneficial and could be designed to highlight vulnerable road users.

PACTS would also support hazard perception testing as part of the CBT undertaken by motorcyclists.

Bikeability provides cyclists with skills, confidence and safety education. PACTS supports it and would like to see it available more widely, at all levels, for children and adults.

We see pedestrian training (covered under Education in the consultation text) as similarly important – providing children with independent mobility and safety skills. Kerbcraft was evaluated and found to be effective. There is a plethora of schemes now operating in schools. Research and guidance on effectiveness is needed from DfT.

See also Q6 – understanding and awareness

4. Educating road users - [view in consultation document](#)

Do you have any suggestions on how we can improve road user education to help support more and safer walking and cycling?

The public want and expect road safety education, particularly for children. However, distinguishing it from training discussed earlier, it is difficult to demonstrate that it impacts on behavior. It is even harder to demonstrate robustly that education leads to casualty reductions.

The main role is probably to help prepare road users for enforcement and infrastructure measures. The examples of the Close Pass initiative and National Speed Awareness Courses are linked to police enforcement. These should continue.

Threat/fear based schemes may be popular but are largely ineffective.²⁵ We urge the DfT to provide guidance on these matters so that effort and public money is not wasted and opportunities missed to take more effective action.

We recommend that the DfT consults pedestrian and cyclist organisations more thoroughly on THINK! Campaigns.

There is a multiplicity of road safety education delivered in schools. A review of its effectiveness and guidance on which schemes, or types of scheme, are effective is needed.

5. Vehicles and equipment - [view in consultation document](#)

Do you have any suggestions on how government policy on vehicles and equipment could improve safety of cyclists and pedestrians, whilst continuing to promote more walking and cycling?

²⁵ *The Impact of Threat Appeals on Fear Arousal and Driver Behavior: A Meta-Analysis of Experimental Research 1990–2011*: National University of Ireland
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0062821>

The biggest opportunity to substantially reduce casualties to pedestrians and cyclists (and other road users) lies with the current proposed revisions to the European Union General Safety Regulation and the Pedestrian Safety Regulation. Although this is alluded to in the consultation document, by mention of work at the UNECE, it is surprising that the EU Regulations are not explicitly referred to.

The recent proposals by the European Commission would make 15 safety measures mandatory for all cars sold in the EU, with additional regulations for lorries and vans.²⁶ These include measures such as

- Intelligent Speed Assistance (ISA-VOL);
- Autonomous Emergency Braking that would detect pedestrians and cyclists (AE -PCD);
- Drowsiness and Distraction Detection (DAD - DAD), and
- more rigorous pedestrian windscreen-impact testing (HED-MGI).

There are separate important regulations for lorries and vans, which include Front and side vulnerable road user detection and warning (VIS-DET) and minimum direct vision requirements (VIS-DIV).

The report by TRL for the EC on the cost-effectiveness of these proposals shows very substantial benefits to all road users at little cost to government or to the motorist.²⁷

Regardless of Brexit, it is almost certain the UK will be required to, or will opt to, conform to these higher vehicle safety standards and regulations in the near future. PACTS calls on the UK Government to strongly support these proposals through the EU approval processes, including the Council of Ministers (transport and business).

Autonomous vehicles potentially offer even greater safety benefits. It is important, however, that real-world testing does not endanger pedestrians and cyclists and that AVs are designed to fit in with the CWIS objectives. Pedestrians and cyclists should not be restricted in order to accommodate AVs.

Bicycle lighting regulations do not take account of modern technology or current practice. They should be simplified and updated.

Cycle helmets can prevent or reduce injury to the head in the event of a collision or fall.²⁸ They are mostly beneficial in low speed situations and those where crushing by a heavy vehicle is not involved. Many cyclists chose to wear a helmet, particularly sport cyclists, mountain bikers, those commuting in busy or “high-risk” areas²⁹ and others who like the protection provided. PACTS supports voluntary helmet use, but not compulsion.

Mandatory helmet laws are highly contentious.³⁰ Some people and organisations are strongly in favour, while others, generally those arguing on wider public health grounds, are opposed. It would

²⁶ European Commission, *Road safety framework*, May 2018.

<file:///C:/Users/user/AppData/Local/Microsoft/Windows/INetCache/IE/X8NFM6JA/car-safety-features.pdf>

²⁷ <https://publications.europa.eu/en/publication-detail/-/publication/ed4aff17-49c5-11e8-be1d-01aa75ed71a1/language-en>

²⁸ Cuerden, R, TRL report PPR697, 2014 <https://trl.co.uk/news/prev/6698>

²⁹ <https://trl.co.uk/reports/TRL154>

³⁰ https://www.theguardian.com/lifeandstyle/video/2018/may/31/why-forcing-cyclists-to-wear-helmets-will-not-save-lives-video-explainer?CMP=tw_t_gu

be unfortunate if the general consensus among groups seeking to deliver the objectives of the CWIS (more and safer cycling and walking) were divided or alienated by this single issue. Almost certainly, compulsory helmet use would be deter some cycle use, probably mainly by the “occasional cyclist” who would gain most from the health benefits.

6. Attitudes and public awareness - [view in consultation document](#)

What can government do to support better understanding and awareness of different types of road user in relation to cycle use in particular?

Influencing attitudes and public awareness on road safety matters is difficult. It is even harder to demonstrate robustly that this leads to casualty reductions. Even so, attitudes and public awareness campaigns are expected by the public and have a place in shaping public debate. Their main role is probably to help prepare road users for enforcement and infrastructure measures.

As noted above, employers need to better recognise their driving for work road safety responsibilities, including those to vulnerable road users. The DfT, BEIS, DVLA and HSE should be more proactive on this front. The CLOCS, FORS and Exchanging Places schemes are positive initiatives that should be extended.

The term “vulnerable road user” should be used only where appropriate. Whilst it may be appropriate in relation to the safety of pedestrians and cyclist, in other contexts they might be referred to as benign, zero-emissions, active travel modes etc. “Non-motorised users” is a more neutral terms that also distinguishes pedestrians and cyclist from powered two-wheeler riders who are also vulnerable road users.

End