

Enterprise and Learning Committee

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Traffic Free Cycle Routes

Submission from CTC the national cyclists' organisation to the Enterprise and Learning Committee inquiry on the Proposed Draft (Legislative Competence)(Traffic Free Routes) Order 2009

Introduction

CTC, the national cyclists' organisation, was founded in 1878. CTC has 70,000 members and supporters, provides a range of information and legal services to cyclists, organises cycling events, and represents the interests of cyclists and cycling on issues of public policy.

CTC believes that cycling has a wide range of benefits in many different areas of policy. These include improved health, independent mobility for all (including children, older people, lower income groups etc) and local economic benefits (in urban and rural areas alike), as well as reductions in the adverse effects of motorised travel (e.g. congestion, road danger, pollutant and greenhouse emissions, noise, community severance and the spatial pressures for increased road and parking capacity in both urban and rural areas).

CTC campaigns for the promotion of cycling at national, regional and local level throughout the UK. Our interests cover not only the role of cycling in transport policy (including road safety, highway planning design, influencing travel behaviour, and integration with public transport), but also how cycling fits in with other areas of policy: health, environment, education, traffic law and enforcement, taxation, land-use planning and development, regeneration, countryside access and tourism.

In addition to its professional campaigns team who lobby at national level, CTC's network of c400 local volunteer 'Right to Ride' (RtR) campaigners are active throughout the UK in influencing the policies and actions of local highway and planning authorities, as well as other key players: schools, employers, health authorities, retailers, public transport operators etc. A newly formed partnership with IMBA UK (the UK branch of the International Mountain Biking Association) will add strength to the existing network of RtR reps who are already working on off-road and rights of way issues.

CTC's Cycling Development team meanwhile runs programmes to encourage people to cycle, notably our work in promoting cycle training to the "Bikeability" to the National Standard now endorsed by the UK and Welsh Assembly Governments. The Welsh Assembly has recently funded CTC to help catalyse the growth of Bikeability cycle training in Wales. Quality cycle training has been shown to be highly effective in encouraging people to make more and longer trips by cycle and to feel more confident when doing so. Other projects run by our Cycling Development team include a "Cycle Commuter Challenge" to promote cycling to work, and a Cycling Champions programme to promote cycling among groups who might not normally be expected to take up cycling, including, people with health and fitness problems requiring increased physical activity, women from black and minority ethnic groups, and people with disabilities.

CTC also has a professional services team which provides advice to local authorities through programmes such as our Local Authority Benchmarking programme. Over 80 local authorities have now participated in the programme. CTC has documented over 100 examples of "best practice" as identified by Benchmarking participants themselves. CTC's Benchmarking Project Manager, Tony Russell, is also involved in co-ordinating the provision of advice for local authorities under a programme funded by Cycling England.

Overview

The proposed legislative competence order (LCO) raises some serious dilemmas for CTC. We would very much like to see the development of a network of well-designed, well-maintained traffic free routes where these will either provide advantages of a quicker or more direct route than the equivalent on-road route, or where the facility would encourage recreational cycling. However, the Department for Transport's newly published guidance on Cycle Infrastructure Design, and its earlier Manual for Streets guidance (both of which apply in Wales) both rightly stress that there are many situations where off-road routes are not the most suitable form of provision for cyclists, and in some cases they can be seriously problematic.

It is therefore unfortunate that the proposed LCO does not differentiate between suitable and unsuitable traffic-free routes, or between well-designed and poorly designed routes. Hence there is a risk that, if passed in its current form, the LCO could distort the priorities and planning processes for cycle provision, towards schemes and design solutions which in some situations would not be the most appropriate or cost effective way to encourage more and safer cycling. It is therefore with considerable regret that we feel unable to give it our wholehearted support to it in its current form.

We nonetheless conclude this submission by proposing various amended or alternative versions of the LCO for consideration. We regret having not yet had an opportunity to discuss these with Sustrans, however we are keen to do so with a view hopefully to being able to recommend a preferred option by the time next week's hearing takes place.

The benefits and disbenefits of different types of traffic-free routes

A well-designed and well-maintained traffic-free cycle route can be highly effective at encouraging increased cycle use, and can be a joy to ride on. The most useful routes will provide direct links to places which people want to reach, in ways which are not only safer but

also quicker and/or more attractive than the nearest equivalent on-road route. Even where they do not provide direct and convenient links to the places for "utility" cycling, good off-road routes can still encourage recreational cycle use, with a range of benefits both to public health and to rural economies.

However not all traffic-free routes are good, indeed some can be positively dangerous. Cycle tracks alongside roads (as distinct from those entirely separate from the road network) in particular are often very poorly designed, serving only to create conflict between pedestrians and cyclists (something neither group wants), whilst increasing the hazards cyclists face when crossing junctions and driveways.

Inappropriate or poorly designed cycle tracks adjacent to the carriageway can present several possible disadvantages:

They keep cyclists out of the way of the drivers' field of attention, thus placing the onus on the cyclist to watch out for possible hazards.

They force cyclists to give way at side roads (where they are often also obstructed by waiting vehicles), and to look out for hazards from all directions - from in front, from behind, or from side-roads. By contrast, riding out wide in the carriageway (as advocated under the cycle training National Standard) makes it easier for a cyclist (a) to see (e.g. by traffic emerging from the left), (b) to be seen (e.g. by traffic from behind or to the left) and (c) to avoid being overtaken where this would be dangerous (e.g. by left-turning drivers 'cutting up' a cyclist from behind).

Segregated tracks create conflict between pedestrians and cyclists, which is unwelcome to both groups (and especially to people with disabilities).

The Department for Transport's new Cycle Infrastructure Design (CID) guidance makes very similar points in paragraphs 8.1.2 and 8.1.3, noting in particular that "In general, off-road cycle routes in urban areas tend to be the last desired option, and it is usually better to cater for urban cyclists on-road if this is practicable". It also stresses (paragraph 1.3.2) that "the road network is the most basic (and important) cycling facility available, and the preferred way of providing for cyclists is to create conditions on the carriageway where cyclists are content to use it, particularly in urban areas." Annex 1 sets out some of the key quotes from this guidance.

The photos in Annex 2 illustrate some of the more absurd problems which can arise with off-road cycle facilities. They are taken from the Warrington Cycling Campaign's "Cycle facility of the month" website, which has acquired a certain cult status among regular cyclists, who tend to view off-carriageway cycle facilities with a good deal of scepticism. Off-road cycle tracks, particularly those on pavements alongside roads, are often unhelpful and sometimes positively dangerous. Moreover, drivers are often extremely aggressive towards cyclists using the road when there is an adjacent off-road track, sometimes actually driving into cyclists to push them off the road in the apparent (but incorrect) belief that they have no right to be there, and clearly with no understanding of the (usually completely valid) why they have chosen not to use them. It was not for nothing that 11,000+ cyclists complained bitterly to their MPs when a consultation draft of the revised Highway Code proposed some wording which could have had seriously affected the position in both civil and criminal law of any cyclist who chose not to use a cycle facility, however good their reasons for not doing so.

It is nonetheless important to reiterate that CTC is in no way opposed to the provision of well-designed and well-maintained off-road facilities in the right places. On the contrary, they can provide useful routes through green open space which may be safer and pleasanter for less confident or more leisurely-minded riders, and which can be more direct for faster and more confident cyclists too.

Outside of urban areas, cycle facilities alongside or parallel to (but separate from) higher-speed inter-urban roads can ensure that cyclists are not forced to chose between mixing with high-speed traffic or taking a much longer detour.

However, in urban areas particularly, faster and more confident cyclists will typically opt to use the road network unless the alternative is at least as quick. The road network generally offers them a better riding surface, avoids conflict with pedestrians and allows them to maintain priority at junctions. Junction priority is valued not just to avoid the extra effort of stopping and starting, but also on safety grounds. Around three quarters of cycle collisions occur at or near junctions, hence the protection provided by off-road riding has to be weighed up against the disadvantages of not being able to position oneself on the road where one can best see and be seen.

The Hierarchy of Provision

The considerations above explain the thinking behind DfT's "Hierarchy of Provision" for cycling, as set out both in CID and in the earlier Manual for Streets:

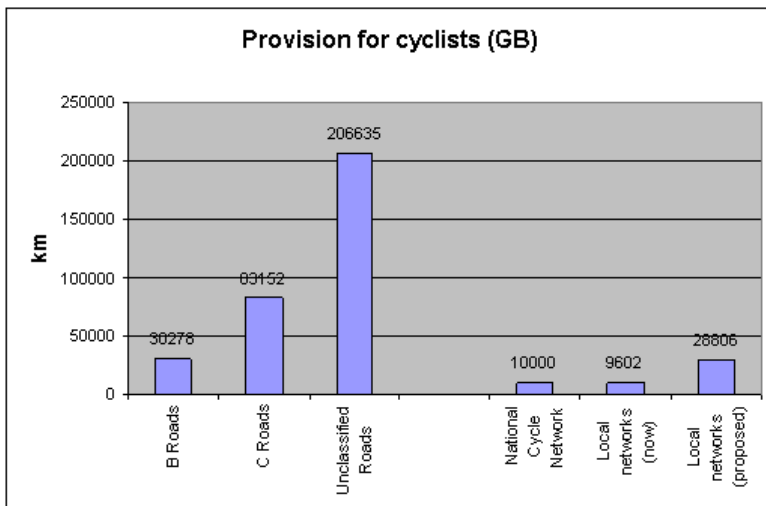
Consider first	Traffic reduction
	Speed reduction
	Junction treatment, hazard site treatment, traffic management
	Reallocation of carriageway space "(e.g. bus lanes, widened nearside lanes, cycle lanes)"

	Cycle tracks away from roads
Consider last	Conversion of footways/footpaths to shared use cycle tracks for pedestrians and cyclists

The underlying principle behind the "Hierarchy" could be summarised as being that pavements should be for pedestrians and the carriageway should be a safe place for cycling. Additional links, e.g. through parks or along canals or riversides, can be attractive and safe, and will sometimes also be more direct too. Moreover, in the case of fast busy inter-urban roads (particularly those with high HGV flows) the provision of a cycle track is generally the best response (despite being at the bottom of the Hierarchy). In this situation, the problems often associated with cycle tracks will be minimised, with few pedestrians or side-road turnings. Such tracks must nonetheless be well designed and maintained.

The fact remains though that cyclists will want to reach the same range of destinations as other road users. They therefore need access to the whole of the road network, not just to a more limited "cycle route network" separated from the front doors of houses, shops and other destinations. Hence in urban areas their needs are generally better met by 20mph streets with no dedicated cycle facilities or, on wider and busier roads, by wide cycle lanes (min 1.5m, preferably 2.0m especially on roads with 40mph speed limits) or bus lanes (preferred width 4.5m). Facilities which are narrower than the recommended widths are counter-productive as they merely encourage drivers to overtake with too little margin for the safety and comfort of cyclists. They are also contrary to the CID recommendation (paragraph 7.1.4) that the positioning of cycle lanes should reflect how cyclists are trained to ride under the Government-backed National Standard (for more on the reasoning for this, see paragraph 0). If an adequate width cycle lane or cycle track cannot be provided, an alternative solution from higher up the "Hierarchy" should be sought. We return to the case for 20mph speed limits in the following section.

The following graph, whilst now somewhat dated (it was prepared in 2002), illustrates the problem of attempting to provide for cyclists by focusing on dedicated off-road provision. It highlights how the planned lengths of the National Cycle Network and local networks combined would still only amount to a small fraction of the length of the network of 'B', 'C' and unclassified roads.



20mph speed limits

We mention above that one of the most effective (and cost-effective) ways to provide for cycling in urban areas is the introduction of 20mph speed limits on the majority of the length of the urban street network. In many European towns and cities, 30kmh limits (the continental equivalent) cover 65-85% of the street network. The Commission for Integrated transport found that such cities not only have better road safety records, but also that they have higher levels of walking and cycling (which is better both for public health and the environment) together with strong local economies. Lower speed limits create attractive places to live, work and shop, which in turn boosts property values and retail footfall.

In built-up areas, pedestrians and cyclists account for about a quarter of all road casualties, and almost a half of the serious and fatal casualties. Lowering speeds to 20mph could significantly reduce these casualties. The impact speed with which a car hits a pedestrian makes a huge difference to survival rates - only about 5% of pedestrian deaths occur at impact speeds below 20mph, whereas 85% of pedestrian fatalities are accounted for by speeds up to 40mph. The chances of a collision with a pedestrian proving fatal rise by about 5% for each 1mph increase in speed.

A GB-wide review found that 20 mph zones have reduced injury collisions of all severities by 60% while those involving child killed and serious injuries (KSI) went down by 70%. London's 20mph zones were found to have reduced total casualties by 42%, with KSI going down by 53%. Hull Council has introduced 20 mph zones covering around a quarter of the length of its street network. These zones recorded a 74% reduction in crashes involving child pedestrians and a 69% reduction in child cycle collisions. Overall, Hull's 20mph zones have achieved a 60% decrease in total injuries and a 90% reduction in KSI injuries.

A Transport for London (TfL) review of 20 mph zones in London boroughs found that these zones had achieved a 45% reduction in casualties, and a 57% reduction in fatal or serious casualties (KSI) in these zones. Child fatal and serious injuries fell by 60%.

The Health Development Agency says that reducing the speed limit to 20 mph would reduce the deaths and injuries of children by 67% each year.

20mph speed limits can be introduced very cost-effectively. Portsmouth City Council has applied 20mph limits on 1200 roads in a 9 month period at a cost of just £475,000. Although before and after casualty data are not yet available, average speeds have fallen by more than 3mph.

Finally, 20mph speed limits are popular, with around 75% public support and even with 72% support among drivers. The UK Government Minister Jim Fitzpatrick has indicated that he wishes to see more 20mph limits implemented and is looking at ways to simplify the processes for local authorities to do this more quickly.

Design considerations for off-road routes

Where routes for cyclists are provided away from roads, it is important to avoid conflict with pedestrians and other user groups.

Evidence from the Countryside Agency found that actual conflict is rare, and that the majority of rights of way users are unconcerned about the presence of cyclists, with objectors being a relatively small minority. We recognise nonetheless that some groups, particularly those with mobility or sensory difficulties, can feel highly vulnerable in the presence of cyclists, and that they are entitled to get around without fear (even if the "danger" is more perceived than real).

Conflict is most acute where there is insufficient width for the volumes of pedestrians and/or cyclists using the route, and/or where there are limited sightlines. Before promoting such routes, ways to address these difficulties (e.g. by acquiring additional land) should be carefully considered. Where such options are not available, alternative routes may be preferable.

Whilst it is often assumed that segregation is the best way to reduce conflict between pedestrians and cyclists, this is not necessarily correct. This will depend on partly on the available widths and sightlines, partly on whether or not it is visually appropriate in the context to use white lining, and partly on how pedestrians are expected to use the route. On routes where there is likely to be a good deal of leisurely (as opposed to purposeful) walking, pedestrians are unlikely to observe attempts to regulate their movement, whether by painting white lines or other means. This will in turn create resentment from cyclists, and resulting conflict, if the design suggests to them that they have a right to proceed at full speed and that wayward pedestrians are obstructing them. Moreover, painting white lines is often inappropriate in a rural setting. The alternative of providing stronger physical segregation, e.g. by height differences, may keep apart the flows of pedestrians and cyclists along a route but will impede pedestrian, cycle and especially wheelchair movements onto, off and across the route.

For all these reasons it is normally preferable for facilities to be unsegregated unless the route is predominantly going to be used for purposeful linear pedestrian and cycle movement. It is better to create designs (notably the choice of surface colour and texture) which indicate to the cyclists that the space is predominantly for pedestrians, and that they need to take a sharing approach. Suggesting to cyclists that they have a space of their own (even though this may not be respected in practice) will tend to lead to higher cycling speeds. The idea of designs which encourage considerate sharing is very much analogous to the concept of "shared space streets" or "naked streets", where attractive pedestrian-friendly street design (rather than segregation) is used to encourage drivers to share street-space with consideration for non-motorised road users.

Smarter choices

An important component of any effective strategy to promote cycling is a mix of good design and infrastructure together with measures to raise awareness and change behaviour. These measures are collectively known as "smarter choices" interventions, and have been found to be highly cost-effective ways to promote sustainable transport alternatives. They include Individualised marketing (such as Sustrans's Travelsmart programme), Green Travel Plans for schools and employers, events such as Bike Week and Walk to School week, publishing cycle maps, and providing cycle training to the "Bikeability" national standard.

Smarter choices measures have been found to have a typical cost-benefit ratio of 10:1 looking purely at their ability to reduce congestion. This compares very favourably with road schemes (whose benefit ratios are rarely better than 2.5:1), and with the added benefit that they improve health and the environment, rather than contributing to environmental damage and physical inactivity.

Rights of Way

One major advantage of the LCO as drafted is that it would create opportunities to increase and improve the extent and the maintenance of the rights of way network available for cycling. CTC is fully supportive of measures, as such routes are generally shared with consideration and there is little evidence of either conflict or intimidation.

In particular we strongly welcome the Welsh Assembly's commitment to open up as much as possible of the Welsh coastline for cycle use: this could be a wonderful tourist asset.

Alternatives to the Legislative Competence Order

We wish to put forward 2 alternative versions of the LCO for consideration:

One version which maintains the focus on off-road cycle facilities (including the rights of way network) but with a clearer focus on the locations and design criteria appropriate for such facilities;

Another presenting a duty to create safe and attractive conditions using a wider range of infrastructure solutions (in accordance with the Hierarchy of Provision), together with a balancing emphasis on "smarter choices" measures such as travel plans, travel awareness campaigns and provision of "Bikeability" cycle training to the Government-backed National Standard.

The first might read:

"Provision imposing duties on highway authorities in Wales in relation to the development and maintenance of the rights of way network and other routes where they provide direct, safe and attractive alternatives to the road network or where they will encourage recreational cycling."

The second might read:

"Provision imposing duties on highway authorities in Wales in relation to the promotion of walking and cycling, by (a) creating safe, convenient, accessible, comfortable and attractive walking and cycling conditions, through measures which reduce traffic volumes or speeds (including the introduction of 20mph speed limits), improving or providing cycle-friendly junctions or crossing facilities, reallocating road-space, and providing well-designed and maintained facilities for cyclists and (b) promoting activities or other measures to influence public attitudes and behaviour in relation to walking and cycling, including (but not limited to) awareness-raising campaigns and activities, and the provision of cycle training to the National Standard."

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