5 December 2012

Submission from Spokes¹ to the Get Britain Cycling Inquiry by the All-Party Parliamentary Cycling Group
http://allpartycycling.org/inquiry/

Our submission does not attempt to give a full response to the Inquiry theme or its individual suggested topics. There will be detailed responses and evidence on individual topics from many cycling organisations, and we do not necessarily have useful additional information.

Instead our response covers two particular issues, A and B below, which throw light on the inquiry theme and where we have something to say which is perhaps distinctive. Our response highlights some areas where research is inadequate - and one area in particular where we feel that many agencies supposedly promoting cycling and/or cycling safety suffer from head-in-the-sand syndrome, unwilling to take seriously evidence which challenges their preconceptions.

A. The Edinburgh experience

B. Cycle usage, cycling safety and the image of cycling presented by official agencies

C. First however, for completeness, and very briefly, here is our answer to the overall Inquiry theme, Get Britain Cycling ...

The top priority is widespread infrastructure which feels safe for everyday journeys by bike to shops, work, school, friends, the park and other such utility trips. And that means funding and political leadership. It is appalling that the Scottish government invests less than 1% of its transport budget in cycling² [despite its oft-repeated target that by 2020 10% of all trips will be by bike, from just 1% now]. And we suspect that the % of the UK transport budget going to cycling (from all relevant budget lines) is even less.

Many responses will doubtless point to excellent infrastructure examples from Copenhagen, Netherlands and elsewhere. Unfortunately, for implementation in Britain these require much more than technical know-how. They require serious political commitment – notably adequate funding and willingness to place greater restrictions on private motor traffic, particularly in terms of space allocation, and also of speeds³.

Finally, we urge the Inquiry to rely on evidence rather than on supposition, and to institute research where current knowledge is inadequate in terms of providing effective policy guidance.

¹ Spokes is a cycle campaign group working in Edinburgh and the Lothians, founded in 1977, now with over 1000 paid-up members, and almost exclusively volunteer-based. For more information see www.spokes.org.uk.
² Scottish Government cycle funding http://www.spokes.org.uk/wordpress/2012/09/cycling-up-very-slightly-in-budget/
³ Netherlands cycling safety is due in part to low speeds, not just segregation, reflected in excellent pedestrian safety too.
A. THE EDINBURGH EXPERIENCE

The facts needing to be explained: Against a background where cycle use in the UK (and Scotland) as a whole has remained fairly static, cycle use has grown consistently in Edinburgh, roughly doubling over each of the last few decades. We only have figures over the years for travel to work, but bike commuting as a % of all trips to work in Edinburgh has risen as follows...
1981 census 1%; 1991 census 2%; 2001 census 4%; 2009 Scottish Household Survey\(^4\) 7%.

Moreover this very substantial rise in bike use has been accompanied by falling cyclist injury figures (until recently), meaning that each individual cycling trip has become much safer.

Why has Edinburgh achieved rising cycle use when the all-Scotland and all-UK figures show cycle use static?

First, there is no research which gives the answer. However in the view of Spokes the top contributory factor (not the sole factor) has been the growing widespread presence of visible (coloured) onroad cycle facilities throughout the city. These in turn have happened only because of reasonably consistent political support over many years and, therefore, consistent funding (albeit often at a modest level) over many years.

Our supposition is not that individual facilities have necessarily in themselves raised cycle use, although this has doubtless happened in some cases, but that the widespread presence of onroad coloured cycling facilities – seen every day by a high proportion of citizens – has created a growing public feeling that cycling is expected, is a normal transport mode, and is not just the preserve of a few eccentrics or only for 'enthusiasts'.

Much UK research undertaken on cycle facilities has looked at particular individual facilities and has studied relatively short before-and-after timescales. We are not aware of UK research looking at widespread visible onroad facilities across a city and over long periods (e.g. a decade or more) although there is some relevant international research.\(^5\) This is a serious deficiency in the knowledge needed for policy development.

\(^4\) SHS Transport, Local Area Analysis 2009/10

\(^5\) Infrastructure, Programs and Policies to increase Bicycling, Pucher, Dill & Handy, 2009
http://policy.rutgers.edu/faculty/pucher/Pucher_Dill_Handy10.pdf
Whilst there is no local research into the reasons for Edinburgh's success, the evidence below supports our above theory. For further discussion see Spokes Bulletins\(^6\) numbers 105 p3, 103 p3 and 109 p8.

- The above graph shows a gradual increase in cycle use during 1980-1995 as Edinburgh's offroad cycle network expanded, then a much faster rate of increase as the coloured onroad network was developed from the mid-1990s on. This ties in with our point that the coloured onroad facilities are seen every day by huge numbers of citizens – raising the profile and 'normality' of getting about by bike. The offroad network, though attractive in many ways, is not visible and is not widespread in public consciousness.

- In the mid 2000's Edinburgh council's Streetscape section became very influential and attempted (with some limited success) to reduce the extent of coloured surfacing and indeed of 'unnecessary' white lines - for subjective visual reasons, and with no real concern for any impact on cycle use. A public consultation resulted in over 60 responses from individual cyclists of many types, explaining the importance of the onroad facilities in encouraging them and giving them the confidence to get about by bike. Many quotes can be found on page 3 of Spokes Bulletin 93.\(^7\) For example, “I doubt I'd have found the confidence to start cycling without the strong message of the coloured lanes.”

- In a survey of Spokes members (i.e of existing cyclists, some confident, some less so) in 2009, we asked an open-ended question as to why more people were using bikes in Edinburgh at a time when cycling was static or declining nationally. Of the 91 respondents, 62 mentioned the onroad facilities – cycle lanes, ASLs, bus/cycle lanes, etc, sometimes also saying how these improved safety or the feeling of safety. The next highest reason (increasing congestion and the reliability of cycling) only had 31 mentions (and anyway was less likely to be Edinburgh-specific). Only 21 mentioned the offroad network – reflecting the fact that although it is excellent in many ways, it is not visible or in the public consciousness, and it is less likely to provide direct connections from desired origin to destination.

Finally, because our views are often misinterpreted, we must absolutely stress that we are not saying that onroad unsegregated cycle lanes of the Edinburgh sort are necessarily the ideal infrastructure, though especially with tougher parking restrictions and other design improvements they may still have a major role. Certainly, though, many more potential cycle trips might be realised by infrastructure which felt safer to more people. However, many critics fail to recognise political and financial realities – of the present, but even more so of past years. The reality is that - thanks in part to consistent and determined campaigning over many years – first - Edinburgh's onroad cycle facilities have been politically and financially feasible, even in eras when the car was king, as it still is to a significant extent. Second, as above, we believe that the presence of these onroad facilities has raised cycle use substantially.

As a result - because there are now many more people using bikes, the political climate is changing and Edinburgh Council has taken bold new budgetary decisions on cycling\(^8\). Slowly the council's decisions on cycling infrastructure are becoming bolder too, as cycle use continues to rise. The biggest remaining obstacle is the political difficulty of imposing restrictions on car use. Edinburgh Council's recently installed Quality Bike Corridor\(^9\), from Kings Buildings to Princes Street, does include additional parking controls - but they are still much more modest than would be needed to allow for full-scale European-style facilities. Motor vehicle parking and/or loading in most onroad cycle lanes is still permitted at certain times of day.

At a recent Scottish Parliament 'Nordic Horizons' cycling seminar [4.12.12] the Copenhagen expert suggested, based on historic Copenhagen experience, a 'tipping point' perhaps at around 10%-15% of journeys by bike (commuting journeys or all journeys??) after which political will and confidence receive a major boost - and funding and facilities of current European dimensions become possible. This had been the Copenhagen pattern through the 1980s and 1990s, with early cycling provision being very limited compared to Copenhagen today.

Whilst it might be great to 'Copenhagenize' Britain overnight, that is not politically/financially feasible. Yet Edinburgh's experience (like that of Copenhagen in the 1980s/1990s) shows that consistent incremental improvement can consistently grow cycle use, in turn raising pressure for bolder measures, in a virtuous circle.

\(^6\) Spokes Bulletins are at http://www.spokes.org.uk/wordpress/bulletin/
\(^7\) Spokes Bulletin are at http://www.spokes.org.uk/wordpress/bulletin/
\(^8\) Edinburgh Council cycling budget http://www.spokes.org.uk/wordpress/2012/02/edinburgh-sets-new-standard/
\(^9\) Edinburgh Council Quality Bike Corridor http://www.spokes.org.uk/wordpress/2012/11/more-bikes-again-and-qbic-helps/
B. Cycle usage, cycling safety and the image of cycling presented by official agencies

The facts needing to be explained …

- In the last few years in the UK (and Scotland and Edinburgh) serious cycling casualties have ceased their long-standing downward pattern, and flattened out or started to rise.\(^{10}\)
- In most cases, the rise in casualties is greater than any rise in cycle use.
- In most cases, the rise in casualties is greater than for other road user categories, including pedestrians.
- This is happening exactly over the few years when cycling safety gear, notably helmets, is being extensively promoted and is becoming widespread. Thus either such safety gear is not in fact preventing many deaths and injuries or, if it is, then cycling danger is (very surprisingly) even more out of kilter with other safety trends than the bullet points above suggests.

These surely are vital issues which must be understood and tackled if cycling is to grow and is to be as safe as possible. Many will argue that 'Copenhagenizing' Britain is the answer - and we would like to see big moves in that direction – but the political and financial reality is that most cycling is likely to be on 'normal' roads for some time to come. Even the Copenhagenizing of Copenhagen took from the 1980s to the present!

Conventional explanations for the new casualty patterns do not work – or, at best, provide only partial answers. 'More casualties because more cyclists' is clearly not the answer, given that casualties are rising faster than cycle use. Traffic speeds are a danger, but do not explain cyclists being differentially affected now. And so on.

We do not have the answers to these difficult questions, but we have ideas and there is some limited evidence. In contrast, the agencies involved in promoting cycling safety seem willing only to pursue their traditional avenues, and not to countenance or investigate theories which do not fit existing views. Reasoned emails on this topic from Spokes to bodies such as British Cycling, Brake and Transport for London either have been ignored or have received anodyne responses which restate existing positions and do not engage with the arguments.

**In our view the questions and theories below need urgently to be taken seriously - because some existing approaches to safety and/or promotion may be inadvertently discouraging cycle use and may even be increasing danger.** The answers to these questions could have significant implications for policy on cycling promotion and cycling safety. If adequate evidence is already available, policy and its application may need to change urgently. If more evidence is needed, targeted research should be rapidly instigated to provide a guide for policy (and not as a delaying tactic!)

Q1. Is the composition of Britain's cycling population changing?

Is there more cycling on faster roads or for faster journeys (for example, commuting) and less on quiet and side roads (for example, to the local shop)? Is there more cycling by faster more confident males, and less by women or the elderly? Given the massive crash risk differentials of different road types, the differing crash statistics for different age and sex of cyclist, and the probable impact of differing cycling speeds, changes in the cycling population composition could very easily explain why injuries are increasing without cycle-use increasing.

Recent Norwegian research\(^{12}\) suggests changes in the cycling population as a reason why widespread helmet use in a country may not reduce overall cyclist casualties, though some people are helped in some crashes. The proportion of cyclists who cycle fast and fully equipped, for example commuting on faster roads, may rise; whereas the traditional slower and unequipped use of bikes for local trips becomes rarer. See also Q3 below.

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\(^{11}\) DfT RAS30018 – casualty rates by various criteria  http://www.dft.gov.uk/statistics/tables/ras30018/  Cyclist death rates per bn km are 39 for urban A roads, but only 8 for other urban roads – only one-fifth the 'A' road rate [rural figures, as is well known, are much higher, but again with a huge differential between 'A' and other roads].

\(^{12}\) Helmet promotion results in changing cycling population  www.sciencedirect.com/science/article/pii/S1369847812000587
Q2. Tying in with the above, is the image of cycling in Britain changing – and being changed?

The image portrayed by official messages and agencies is almost always that it is vital to dress up in safety gear to use a bike. You can drive or walk to your local shop without dressing up, but to cycle there you need helmet and hi-viz. Surely the message to the average citizen is that cycling is a dangerous way of getting around. This could deter the more cautious person, or maybe the average person, even if in practice local conditions are very safe – and, indeed, everyday cycling is a safe activity - and often very safe on local roads and for most types of cyclist [Q1].

Meanwhile those people who do decide to cycle, if they follow the image presented, dressed up in safety gear to face the challenges of the road, may feel prepared to tackle roads faster or busier than they would otherwise consider. In a self-reinforcing negative circle the public sees more and more cyclists dressed in safety gear, so the image of cycling becomes one of special equipment and of danger.

This is not to say that hi-viz should not be used, especially in the dark and/or on fast commuter roads. But the theory suggests it should not be made to look an essential requirement for everyday cycle trips, particularly on local roads and for trips such as down to the local shops in broad daylight.

Q3. Do helmets (and perhaps safety gear in general) make crashes more likely?

Whilst helmets help in some crashes (primarily slow speed, such as falling off your bike), if they also make crashes more likely this could help explain why increasing helmet use has been paralleled by increasing injuries.

Mechanisms by which helmet-use might bring about higher crash and/or injury rates have been raised often, but inadequately researched and not taken seriously by cycling agencies and those with an interest in selling or promoting helmets. At best the potential cyclist is told that wearing a helmet is a 'choice' – but a choice in which there are only benefits to making the choice. Yet even for the cyclist who chooses to be helmeted, an awareness of the potential risk factors would enable them to cycle more safely.

Some mechanisms by which helmet-wearing might increase crashes and/or injuries are...

- Motorists may pass closer to cyclists who are helmeted and so appear to be safe and competent. Passing closer may in extreme cases mean a crash - resulting from a wing-mirror clip or a snagged rucksack strap or, probably more commonly, the cyclist being forced closer to potholes etc.
- Cyclists may, often unwittingly, take greater risks if they feel safer – for example choosing a faster road, or cycling faster.

There are as many anecdotes supporting such theories as there are widely quoted anecdotes of the “a helmet saved my life” variety. For example the cyclist who told us, “I wouldn't use that road without my helmet” or the London taxi driver who said, “I make sure to give Boris cyclists a wide berth.” In other words, the helmeted cyclist takes on greater risk, whereas the unhelmeted Boris hire-cyclist takes on less – anecdotes which tie in with the low injury rates reported for Boris cyclists as compared to all London cyclists.

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13 Edinburgh Council's Road Safety Section, for example, and the local Police, who jointly promote cycling at community road-shows and festivals, will only print leaflets in which every cyclist is helmeted. Interestingly, another section of the council, dealing with cycling infrastructure, and with cycle-use targets as a high priority, intentionally uses pictures which show unhelmeted or mixed helmet-use cycling. Cycling Scotland, the government-funded body promoting cycling within Scotland, has a policy recommending helmet choice – yet pictures on their website http://www.cyclingscotland.org/ are overwhelmingly of 'fully-equipped' cyclists.

14 Risks per hour of cycling, walking or driving are not dissimilar, and for young men, driving is much more dangerous than cycling www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0050606 . For other comparisons see www.cyclehelmets.org/1026.html. Of course, if health benefits/disbenefits are counted, cycling is far safer than driving.

15 In fact, a recent meta-analysis of helmet research [Elvik R. Accident Analysis & Prevention, 2011;43(3):1245-1251 finds the benefits of helmet use are much less than previously thought. See discussion at http://cyclehelmets.org/1251.html.

16 Motorists may pass closer to cyclists who look safer http://www.bath.ac.uk/news/articles/archive/overtaking110906.html

17 Cyclists may behave less cautiously when helmeted. There are many relevant references, for example...


18 Low casualty rates for Boris hire cyclists http://rdrf.org.uk/2012/08/17/disaster-waiting-to-happen-the-london-bike-hire-scheme-and-why-bradley-wiggins-was-so-wrong-part-four
Policy implications

If some or all of the above theories are valid, there are important implications for cycling policy, which will need promulgated through national and local government, the police, organisations such as British Cycling and Cycling Scotland and charities such as Brake. For example ...

- Should cycling should be promoted as an everyday activity, like walking or jumping into a car, so that you can hop on your bike to go down to the shops without first donning special equipment? Should the bulk of promotional material on official websites show people cycling in their everyday clothing, as in Europe – rather than dressed up in special cycling gear?

- Should advice on helmets in official documents, handouts, bike shops, helmet boxes, etc be required to give equal prominence to the pros and cons of helmet use, so that potential users can make not a choice but an informed choice? For example, to warn that motor traffic may pass closer if you are helmeted, and to advise purchasers not to feel safe to use a faster road just because they are helmeted.

Cycling in Copenhagen …

An everyday and everybody means of getting from A to B – with no special dressing up. Often with physical segregation, but sometimes without - just low speed limits and/or coloured paint on the roads!!