



Cyclists (Protective Headgear) Bill: the case against legislation

**A submission to the Northern Ireland
Assembly Environment Committee
14th March 2011**

from CTC and Sustrans

Executive Summary

This submission to the Environment Committee's consultation on the Cyclists (Protective Headgear) Bill is made by the two leading UK wide transport charities; CTC with 67,000 members and Sustrans with 40,000 members. In partnership with the Northern Ireland Executive and local councils, both Sustrans and CTC have worked hard in recent years to encourage more people to cycle in Northern Ireland. **These efforts are yielding real results – for example, at 10 sites measured in Belfast, cycling levels have risen by 147% in 9 years and, at 31 locations across Northern Ireland cycle use has risen by 76% in the same period.**

CTC and Sustrans object in principle to the Cyclists (Protective Headgear) Bill and to all the clauses in the Bill.

We feel that the proposed Bill will undo much of the work which has gone into raising cycling levels in Northern Ireland, and detract from more effective ways of promoting more and safer cycling.

If effected this Bill would:

1. **deter people from cycling.** Where attempted elsewhere, enforcing a legal requirement to wear a helmet has led to a dramatic drop in cycling levels. If this happened in Northern Ireland, it would cause a serious loss of cycling's health, environmental and other benefits.
2. **be a disproportionate response to the relatively low risks of cycling.** Cycling is a safe activity which significantly improves people's health and life expectancy. With so few injuries, the health costs alone of this proposed law would far outweigh any possible benefits.
3. **be difficult, expensive and unpopular to enforce,** requiring considerable costs at a time of tight budget constraints.
4. **particularly affect people from socially deprived communities,** as they are less likely to wear helmets.
5. **mean the substantial costs of helmet promotion and enforcement campaigns detracting from better and more cost-effective ways to achieve more and safer cycling.** The available resources would be better spent tackling the causes of road danger by developing safer and well designed roads and supporting programmes to promote cycling such as modern on road cycle training.

There is compelling evidence against legislation that would require the wearing of cycle helmets:

- A sharp fall has been observed in cycle use among young people in the immediate aftermath of the introduction of legislation. **In New Zealand 47,000 teenagers (13-17 years) stopped cycling in the in the immediate aftermath of the of cycle helmets becoming compulsory.**
- A recent analysis showed that helmet laws, and even promotional campaigns, are almost bound to **result in a large net disbenefit to public health**⁵⁹.
- Cycling in mid-adulthood typically gives a level of fitness equivalent to being 10 years younger²⁷ and a life expectancy 2 years above the average²⁸. Its health benefits are estimated to outweigh the risks involved by a factor of c20:1³¹.
- **The risk per mile of being killed is higher for walking than for cycling**⁴³ There have been no cyclist fatalities on Northern Ireland's roads since 2008, and no child has been killed in a road crash since 2005⁴⁶.
- In relatively affluent Newtownabbey where Sustrans recently carried out the Bike It programme, 100 of the 103 pupils arrived at school with cycle helmets. By contrast, at a school in a more economically deprived part of Belfast, just 5 of the 96 children wore helmets.
- The UK Health Development Agency estimated that **the introduction of 20mph speed limits on residential streets could reduce child pedestrian and cyclist injuries by 67%**⁷⁵.

We believe that the best measures which the Northern Ireland Executive could take to reduce cycle-related injuries and deaths, based on the available evidence, must include:

- **Investment in measures that seek to create safe, attractive cycling conditions** including the extension of 20 mph speed limits to all residential roads in towns, cities and villages
- **Promotion of cycling as a healthy and enjoyable means of transport and recreation,** both for the population in general, and for specific groups e.g. school and college pupils, employees, women, health patients, and various disadvantaged or minority groups.
- The introduction of high quality cycle training for all children in P7 to a standard equivalent to that currently available in England, Scotland and Wales.

1. Introduction

- 1.1 This submission to the Environment Committee's consultation on the Cyclists (Protective Headgear) Bill is made by the two leading charities in both Northern Ireland and the UK: CTC and Sustrans. In partnership with the Northern Ireland Executive and local councils, Sustrans and CTC have worked hard in recent years to increase cycle use in Northern Ireland. Sustrans has been co-coordinating the development of the National Cycle Network in Northern Ireland since 1995, while promoting cycling in schools through the Bike It and Safe Routes to Schools initiatives. Meanwhile CTC's Bike Club project, delivered in partnership with youth and life-long learning charities UK Youth and ContinYou, has recently launched in Belfast, offering young people the opportunities to cycle, particularly among disadvantaged communities.
- 1.2 **These efforts are yielding real results – for example, at 10 sites measured in Belfast, cycling levels have risen by 147% in 9 years and, at 31 locations across Northern Ireland cycle use has risen by 76% in the same period.**
- 1.3 While recognising the concerns of the proposer and supporters of the Bill, CTC and Sustrans object in principle to the Bill and, in particular, to all the Clauses of the Bill. There is a real risk that the proposed legislation, including even the 3-year campaign to promote voluntary helmet use before bringing the law into effect (as proposed in clause 12 of the Bill), could undo much of the work which the Northern Ireland Executive, local councils, Sustrans and other organisations have achieved in increasing levels of cycling in Northern Ireland.
- 1.4 We appreciate the sincerity of the desire of the Bill's promoters to improve cycle safety. Neither CTC nor Sustrans is "anti-helmet", and we do not take sides on whether or not it is a good idea for individual cyclists to wear them. However we shall show that there is strong evidence that enforced helmet laws result in a substantial loss of the health and other benefits of cycling, without compensating benefits for cyclists' safety that would justify this. We also believe there are better ways to improve cyclists' safety, and that the Northern Ireland's police service has more important priorities, including a stronger emphasis on traffic policing to improve road safety for everyone.
- 1.5 We further believe that the Bill could potentially discriminate against members of minority racial and ethnic groups and against those who hold certain religious beliefs. For this reason, if the Bill was to proceed further, we believe it should be referred to an ad hoc assembly committee on equality issues, as provided for under Assembly Standing Orders.
- 1.6 In this submission, we set out evidence showing why cycle use is likely to fall if legislation is introduced. We highlight key groups, including socially excluded groups, which we believe will be adversely affected if legislation goes ahead.
- 1.7 We also weigh up the potential health costs and benefits of such a move, and examine whether helmet legislation is a proportionate measure in the light of the low actual risk of serious injury or death in a cycle collision.
- 1.8 Finally, we review the evidence on the causes of cycling injuries, and conclude that cycle safety could be more effectively improved if high quality cycle training was made available to all children, and investment was made in measures that seek to create safe, attractive cycling conditions, including 20 mph speed limits on residential roads. These measures would also have the added benefit of increasing, rather than reducing, cycling levels.

2. Cycle helmet legislation: the impact on cycle use

The benefits of cycling

- 2.1 Cycling has a wide range of benefits for our own health our neighborhoods and the environment. The evidence for cycling's health benefits is discussed in section 2. Other benefits include:

Economic benefits:

- Cycling makes extremely efficient and economical use of road-space. **One lane of a typical road can accommodate 2,000 cars per hour – or 14,000 cycles.**¹
- Encouraging cycling also makes workers more productive and **reduces the costs of absenteeism, ill health and air pollution**. It also frees up pressure to provide valuable urban land as car parking space.
- Cycling is promoted by the NI Tourist Board² to visitors from ROI, GB and Europe and as these countries do not have cycle helmet laws **we worry about the negative impact on visitor numbers**.

Climate and other environmental benefits:

- A person making **the average daily commute of 4 miles each way would save half a tonne of carbon dioxide** if they switched from driving to cycling per year.³
- **If we doubled cycle use by switching from cars, this would reduce Britain's total greenhouse emissions by 0.6 million tonnes**, almost as much as switching all London-to-Scotland air travel to rail.⁴
- As zero-emission vehicles, cycles reduce levels of harmful pollutants such as oxides of nitrogen. Cycles also make virtually no noise.

Equality and quality of life benefits:

- **Cycling is an option for both transport and leisure for many people who cannot drive**, including children, people with disabilities and lower income groups. The disparities in the amount travelled by higher and lower income groups are far lower for cycling than for driving.
- Instead of streets filled with cars, cycle-friendly town centres are far more attractive both for shopping and relaxing. **You can park 10 bikes in the space required for one car.**
- Cycle hire schemes around the world (where helmets are not supplied with bikes) are proving to be a huge success, including in Dublin and London. Consideration is being given to implementing a scheme for Belfast and compulsory helmet use would prove to be a significant barrier to a successful scheme.

2.2 In short, a **doubling of cycle use in Britain would deliver:**

- **Economic benefits of around £3.5 billion**⁵
- **A one third reduction in the risks of cycling**⁶
- **A saving of 0.6 million tonnes of carbon dioxide per year**⁷

Reductions in cycle use due to helmet laws

2.3 **Evidence from Australia and New Zealand suggests that large numbers of cyclists will be deterred from cycling by helmet legislation.** In particular, there is specific evidence that helmet legislation has reduced cycling in the following groups of people:

- Cycle commuters
- Children cycling to school
- Teenage cyclists

2.4 The reductions in cycle commuters and children cycling to school are of particular concern because **utility cycle trips, if stopped, are unlikely to be replaced with other forms of exercise** and, in addition, are likely to be replaced with car journeys. This will contribute to rising levels of obesity, and have an economic cost in terms of increased congestion and an environmental cost through increased pollution.

2.5 **The evidence also suggests a particularly strong deterrent effect among teenagers.** Teenagers are a key target group for efforts aimed at encouraging physical activity; if children can be persuaded to continue cycling as teenagers, the habit will last into their adult years. Conversely, those deterred from cycling as teenagers are much less likely to pick up the habit again.

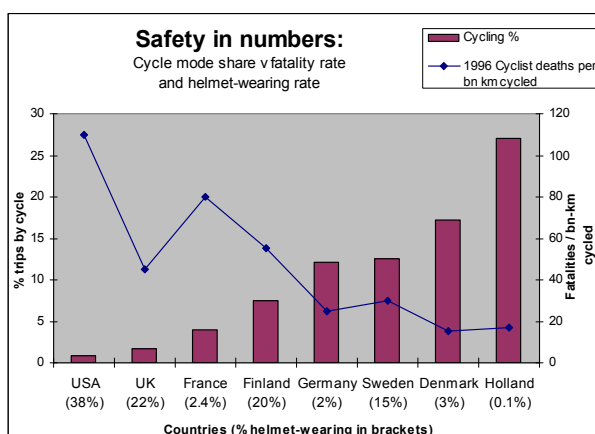
2.6 **Helmet laws, where enforced, have consistently led to substantial reductions in cycle use**⁸. Reductions in the year following helmet laws include:

- a 36% reduction in New South Wales (29% among adults, 42% among children and as much as 90% among female secondary school pupils in Sydney⁹);
- a 36% reduction among child cyclists in Melbourne (including a markedly steeper reduction of 44% among teenagers¹⁰);

- a 20% reduction in Perth (continuing to 30-40% below pre-law levels after 3 years¹¹) and
- more than a 60% reduction in Nova Scotia¹².

Helmet laws elsewhere have had similar results¹³.

- 2.5 Some countries or states have seen recoveries of mainly adult recreational cycling. However where helmet law enforcement is maintained, cycle use remains low, particularly among children and/or for day to day journeys (e.g. for school or commuter travel). Cycling trips in New Zealand initially fell by 26% following that country's helmet law in 1994, but continued falling to 51% below their pre-law levels by 2006¹⁴.
- 2.7 **It is estimated that a total of 136,000 adults and children in New Zealand – nearly 4% of the total population – stopped cycling in the immediate aftermath of the introduction of cycle helmet legislation in 1994.¹⁵ A high proportion of this figure were teenagers (13-17 years), who accounted for 47,000 of those who were stopped.**
- 2.8 There is also evidence of sharp falls in cycle use among young people in the immediate aftermath of the introduction of legislation in New South Wales and Melbourne in Australia. In New South Wales, the law came into effect in January 1991 for adults and in July 1991 for children. Figures from a major study, involving pre-law and post-law counts at 120 locations, showed that there was a 49% fall in child (under 16 years) cyclists counted at road intersections and a 48% drop in child cyclists counted at school gates between 1991 (pre-law) and 1993. There was also a smaller but still significant 32% fall in recreational areas.¹⁶ Thus, **the greatest deterrent effect appears to have related to utility cycle trips made by children.**
- 2.9 **In Victoria State**, which includes Melbourne, a cycle helmet law was introduced in July 1990. Another major study, involving counts at 64 locations in Melbourne, **found that there was a 46% drop in the number of teenage (12 – 17 year old) cyclists in the wake of the implementation of the legislation**, despite the fact that their numbers had been rising prior to the introduction of the law.
- 2.10 **By contrast, three Western countries with some of the highest rates of cycling have relatively low levels of cycle helmet wearing**. In the Netherlands, 27% of all journeys are carried out by bike and less than 1% of cyclists wear helmets. In Denmark, the proportion of journeys made by bike is 18%, and less than 5% of adults wear helmets. In Germany, 10% of trips are carried out by bike, and just 2% of adults wear helmets.¹⁷
- 2.11 **The graph below is one of many examples of the “safety in numbers” effect – the more cyclists there are, the safer it is to cycle^{18 19}. For instance, the last 10 years have seen a 117% increase in cycling on London’s main roads, together with a 24% fall in absolute numbers of fatal and serious cycling injuries in the capital²⁰. There is also evidence that the converse is also true, i.e. reductions in cycle use are associated with worse cycle safety²¹.**



High cycle use is related to a low cycle injury rate, despite low helmet-wearing rates in countries like Denmark and the Netherlands. The opposite applies in countries like the UK and USA. Note the similarities with the cycle use and obesity graph shown later.

The effects of helmet promotion campaigns

- 2.12 **There is also evidence that even the voluntary promotion of helmet wearing (as proposed by the promoters of this Bill) may reduce cycle use.** Research commissioned by the UK Department for Transport found that, in areas where a helmet campaign was held, *“a larger increase in helmet wearing was found than in the areas which had not held such a campaign. However, this increase was found to be strongly linked to a **decrease** in the numbers of cyclists observed: in those areas where a campaign had been held and the numbers of cyclists had increased, helmet wearing fell”* (emphasis in the original)²².
- 2.13 **Similarly, a report for the European Conference of Transport Ministers (ECMT) noted that, “From the point of view of restrictiveness, even the official promotion of helmets may have negative consequences for bicycle use, and that to prevent helmets having a negative effect on the use of bicycles, the best approach is to leave the promotion of helmet wear to manufacturers and shopkeepers”**²³.

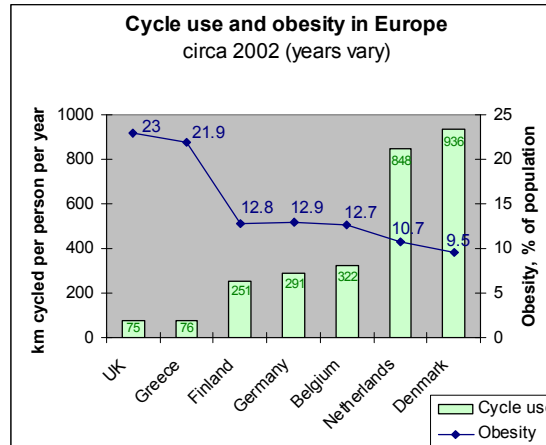
There is a risk that the 3-year pre-law helmet promotion campaign proposed in clause 12 of the Bill might serve merely to bring forward the reduction in cycle use to before the law, rather than after it – indeed this may well have happened in the case of Canada’s helmet laws. As the next section shows, there could still be very serious negative public health impacts from such a campaign, far greater than any possible benefits

3. Is legislation a proportionate measure?

- 3.1 For anyone whose life has been affected by a fatal or disabling injury, it is a very understandable reaction to feel that anything that might have prevented the tragedy they have suffered must be self-evidently desirable, and who would therefore strongly welcome a cycle helmet law.
- 3.2 **However, the introduction and implementation of all legislation, not least that pertaining to public health and safety, needs to be done on the basis of the available evidence.** That must include an examination of the actual risks of serious head injury or death while cycling, vis-à-vis the health and other benefits lost if large numbers of people give up or are deterred from cycling as a result of any helmet legislation.

Health benefits of cycling

- 3.3 Cycling can confer considerable health benefits and can play a major part in counteracting obesity, which is currently increasing at an alarming rate and is a drain on the public purse. It is estimated that physical inactivity costs the UK economy £8.2 billion a year, while obesity represents a further economic cost of around £3.5 billion²⁴. A “Foresight” report for the UK Government projected that, unless action is taken to address current trends, then by 2050 the costs to society due to overweight and obesity could rise to £49.9bn annually (in today’s prices)²⁵.
- 3.4 The health benefits of cycling are substantial²⁶. Cycling in mid-adulthood typically gives the fitness of a person 10 years younger²⁷, and a life expectancy 2 years above the average²⁸. People who do not commute regularly by cycle have a 39% higher mortality rate than those who do²⁹. Thanks to these extra life-years, **the health benefits of cycling far outweigh the risks involved³⁰ – by 20:1 according to one estimate³¹.**
- 3.5 It is estimated that physical inactivity costs the UK economy £8.2 billion a year, while obesity represents a further economic cost of around £3.5 billion³². In NI the cost to the Executive is estimated at £500m per annum.



Although not demonstrably a causal relationship, international comparisons suggest an apparent link between cycle use and obesity rates

- 3.6 Physical inactivity also contributes to heart disease and stroke, type 2 diabetes, various forms of cancer and arthritis. **Cardiovascular disease is the UK's biggest killer**, it is estimated that 2.6 million people in the UK suffer from the condition, and it causes 94,000 deaths annually³³.
- 3.7 **One third of all children aged 2-10 years in Northern Ireland are overweight or obese**, while 38% of 11-15 year olds fall into this category³⁴. Obese and overweight children are likely to grow up to become obese and overweight adults, thus placing a considerable strain on the health service.
- 3.8 **Children are spending an increasing amount of time in cars.** In England, nearly 40% of 5-10 year olds are driven to school, compared to 22% in the mid-1980s, while just 37% of all men and 25% of women are active at the levels recommended by the Chief Medical Officer of 30 minutes of moderate exercise per day for adults and 60 minutes for children³⁵. We are confident that similar levels of car dependency on the school run and of adult inactivity exist in Northern Ireland.
- 3.9 **The easiest and most acceptable forms of physical activity are those that can be incorporated into our everyday lives – cycling is well-suited for this purpose**³⁶. A 15-minute bike ride to work five days a week can burn up the equivalent of 11 pounds of fat in a year³⁷. A study commissioned by the UK Department for Transport found that, when people who haven't previously exercised start cycling, they move from the least fit one third of the population to the fittest third of the population within just a few months³⁸.

How safe is cycling?

- 3.10 The evidence clearly shows that the risks of serious injury or death from cycle are relatively low. **You are in fact more likely to be killed in a mile of walking than a mile of cycling**⁴³, and young people aged 17-20 are more at risk of death during a mile of car travel than a mile of cycling⁴⁴.
- 3.11 Cyclists accounted for 2% of serious road casualties on Northern Ireland's roads in the 6 years to 2009/10⁴⁵. There have been no cyclist fatalities on Northern Ireland's roads since 2008, and no child fatalities since 2005⁴⁶.
- 3.12 One calculation, based on Australian data, concludes that cycling without a helmet carries only slightly more risk of death or serious injury per hour than driving⁴⁹. It has also been estimated that the risk of injury per hour when playing football, squash, basketball soccer is much higher than when cycling⁵⁰. A further study has found that the injury risk per hour is lower for cycling than for gardening⁵¹.
- 3.13 Despite cycling being the second most common form of physical activity for children⁵², cycling accounts for just 6.5% of the head injuries for which children are admitted to hospitals in Northern Ireland⁵³. One study calculated the figure for English hospitals, adding that around three quarters were to parts of the head which would not be protected by a helmet⁵⁴. Another UK-wide study found that cycling accounted for 10% of child injury admissions, but that pedestrians accounted for 36%, while falls accounted for a further 24%⁵⁵.

3.14 **Nor are cyclists' injuries particularly likely to be head injuries**, or to be serious, or both. Australian data suggests that the proportion of injuries requiring hospitalisation was about the same for cyclists (27.4%) as for drivers and pedestrians (28.5%)⁵⁶. Among children admitted to hospitals in England in 2002-3, head injuries accounted for 37% of cycling injuries but 43% of pedestrian injuries⁵⁴. Danish data has shown that, compared with pedestrian and car occupant injuries, cycling injuries result in the shortest hospital stays and are least likely to be serious⁵⁷.

Helmet legislation: a net health benefit or cost?

3.15 **In determining whether or not cycle helmet legislation is the right way forward for Northern Ireland, it is vital to factor in the health benefits of cycling – and the cost to both the health of individuals and to the health service if cycle use were to fall as a result of the proposed Bill.**

3.16 Using the World Health Organisation's "HEAT" (Health Economic Assessment Tool) methodology⁵⁸, CTC has estimated that **a UK-wide law would result in 263 extra deaths annually due to increased physical inactivity**, and that the net public health cost would be £304-415m, even based on the UK Department for Transport study's estimate of helmet effectiveness (n.b. CTC does not accept this estimate). This excludes the costs to the remaining cyclists of purchasing helmets (we estimate this at around £180m initially, plus replacement costs of around £45m annually).

3.17 Interestingly, this is close to the \$400m (or c£260m) estimate of the disbenefit of a UK helmet law estimated by Australian statistician Professor Piet de Jong⁵⁹. De Jong has developed an algebraic model which can be used to show that helmet laws, and even helmet promotion campaigns, are almost bound to lead to net disbenefits to public health. The slight possibility of a small positive health benefit depends on improbably optimistic assumptions about a very low reduction in cycle use, a very high level of risk due to cycling relative to its health benefits, and helmets providing very high levels of protection against those risks.

Please see **Part B** of the CTC supplementary evidence to the Committee which elaborates on this important point.

How effective are cycle helmets?

3.18 Based on the information above, it will be apparent that the debate about the effectiveness or otherwise of helmets is almost certainly academic. Nonetheless, the topic continues to be hotly disputed. However the following points are worth noting:

- Helmets are (and can only be) designed to withstand forces equivalent to falling from a stationary riding position⁶⁰ – i.e. **they are not designed for impacts with motor vehicles**, especially not heavy vehicles or those moving at speed.
- One study found that cyclists with helmets have a 14% higher injury risk per mile travelled than non-wearers⁶¹.
- A systematic review of the evidence from places with helmet laws (e.g. Australia and New Zealand) shows **no link between increases in helmet-wearing and improvement in cyclists' safety**⁶².
- Similarly, **UK evidence shows no detectable link between changes in helmet use and cyclists' safety**, either for cyclists in general⁶³ or for children in particular⁶⁴.
- A review of helmet evidence commissioned by the **UK Department for Transport** noted that **"impossible to definitively quantify the effectiveness or otherwise of cycle helmets based on the literature reviewed."**⁶⁵

Please see **Part A** of the CTC supplementary evidence to the Committee which elaborates on this important point.

4 Enforcement

4.1 To increase helmet-wearing rates, countries have needed to invest heavily in promoting and then enforcing their helmet laws. **In Queensland, cyclists were 3 times more likely per mile travelled to receive a penalty for not wearing a helmet than all other road users for all other traffic offences put together**⁶⁶.

- 4.2 Meanwhile in the Australian State of Victoria there were 19,229 Bicycle Offence Penalty Notices and 5,028 Bicycle Offence Reports issued in the first year of the state's helmet law alone. These represented 2.6% of all traffic offence notices, **and the risk per km cycled of being cited for a helmet-related offence was higher than for all other traffic offence notices together**⁶⁶.
- 4.3 We reiterate that the risks of cycling are not high. **To enforce a ban on cycling without helmets will be seen as unfairly targeting a minority group**, simply because their healthy and sustainable transport option or leisure activity is perceived as "hazardous" due to the risks imposed on them by drivers. As the next section shows **it is people from lower income groups who are least likely to own or to wear helmets, thereby adding to the likelihood that they will be criminalised by a law perceived as unjust and discriminatory.**
- 4.4 **It would be wrong and unpopular to penalise parents of children who are cycling while not under parental supervision.** For example a child may leave the house wearing a helmet and then remove it when out of sight of their parents. This would still mean the parent were open to criminal prosecution under the proposed Bill.
- 4.5 Given the land border with the Republic of Ireland which does not have a compulsory helmet law **it will be confusing and potentially off putting to those, particularly tourists, wishing to travel from the ROI to Northern Ireland.**

5 Why legislation could exacerbate social exclusion

- 5.1 There is evidence that the following groups are less likely to wear cycle helmets, and therefore more likely to be deterred from cycling if helmet legislation is introduced:
- Children from socially-deprived areas
 - Minority ethnic groups
- 5.2 In addition, there is evidence that **cycle helmets already have a deterrent effect on women** which would be exacerbated if this Bill was introduced.

Children from socially deprived areas

- 5.3 In Northern Ireland, in the course of undertaking schools' Bike It programme, Sustrans has observed a marked difference between helmet-wearing rates at schools in relatively affluent areas and schools in more socially deprived areas. **For example, at one relatively affluent school in Newtownabbey where Sustrans recently carried out the Bike-It programme, 103 of the 106 pupils arrived at school with cycle helmets. By contrast, at a school in a socially deprived part of west Belfast, just 5 of the 96 pupils turned up with helmets**⁶⁷.
- 5.4 This pattern has also been observed elsewhere. A study carried out among more than 1,000 children, aged 9-10 years, at 28 primary schools in Nottingham found that children who lived in a deprived area were less likely to own a helmet⁶⁸. A study carried out in Quebec found that a four-year helmet-wearing campaign was less effective in more socially deprived areas, despite innovations such as discount coupons for the purchase of helmets⁶⁹. **The researchers concluded that, for families in these areas, the purchase of a helmet, even at a discounted price, might well have been beyond their budget.**
- 5.5 There is also evidence that cycle helmet legislation has little long-term impact on helmet wearing among children in lower income areas. A large study in Toronto, which examined the impact of cycle helmet legislation, found that children in lower and mid-income areas were consistently less likely to wear helmets than their counterparts in more affluent areas.

Minority ethnic groups

- 5.6 A major survey of cycle helmet-wearing rates in Great Britain, carried out by the Transport Research Laboratory for the Department for Transport in 2008, found that ‘white’ cyclists were more likely to wear a helmet than those of other ethnic origins⁷⁰.
- 5.7 One particular concern which we have is the potential impact of the proposed legislation on migrant workers. Circumstantial evidence suggests that many migrant workers in Northern Ireland use bicycles, particularly to commute to and from work. However, helmet usage among this group appears to be low. Given that not all migrant workers speak or read English fluently, there is clearly a risk that some will be penalised for non-compliance with a law of which they are not aware.
- 5.8 We further note that, as the Bill stands, there is no provision for any exceptions to be made on the grounds of a person’s wish or obligation to wear headwear prescribed by their religion e.g. Sikh turbans.
- 5.9 On the above grounds, we consider that the Bill would discriminate against members of minority racial and ethnic groups and against those who hold certain religious beliefs. For this reason, if the Bill was to proceed further, we believe it should be referred to an ad hoc assembly Committee on equality issues, as provided for under Assembly Standing Orders.

Women

- 5.10 In both Northern Ireland and Great Britain, the percentage of women cycling lags well behind mainland Europe. While the proportions of men and women who cycle in mainland Europe are broadly equal, in Great Britain, men are three times as likely to cycle as women.⁷¹ While no similar statistics exist for Northern Ireland, we know that the proportion of male cyclists greatly outweighs female cyclists here.
- 5.11 It would appear that the perception of cycling as a “dangerous” activity is a deterrent to women – a clear correlation has been found between levels of cycle use in different areas and the proportion of cycle trips which are made by women⁷². Conversely, **the way to encourage more women to cycle is to promote it as a safe and stylish activity which can be undertaken in whatever clothes women feel comfortable wearing.**
- 5.12 A survey of 1,099 women, carried out by YouGov for Cycling England, found that more than a quarter (27%) of respondents in the 18-24 year old age group said they were put off cycling by the fact that cycle helmets might mess up their hair.⁷³ Sustrans has found that concern about ‘helmet hair’ is frequently mentioned by women and teenage girls as a deterrent factor.

6 Tackling the causes of road danger to encourage more and safer cycling

- 6.1 We have already noted (in section 2) that **cycling gets safer the more cyclists there are** – there is consistent evidence showing that cyclists gain from “safety in numbers”. Cycling policy must therefore aim to achieve ‘more’ as well as ‘safer’ cycling, in order to maximise its health, environmental and other benefits.
- 6.2 **This in turn requires efforts to tackle the fears which deter people from cycling**, through measures such as 20mph speed limits, cycle-friendly road and junction design, stronger and better enforced traffic laws, and the provision of quality cycle training for adults and children alike. By contrast, measures such as helmet laws – or even helmet promotional campaigns of the kind advocated by the Bill prior to a law coming into force – will merely increase those fears. That would reduce the number of cyclists and perhaps also undermine the “safety in numbers” benefits for those who remain.

The extension of 20 mph speed limits

- 6.3 A review of 20 mph zones in London found that there was an average reduction in casualties of 42%, compared with an 8% reduction in surrounding areas. Although injuries amongst cyclists reduced at a lower rate than other

users (only 17%), this does not take account of the fact that cycling levels increased much more than for other modes⁷⁴. The UK Health Development Agency estimated that introducing 20mph limits on residential streets could reduce child pedestrian and cyclist injuries by 67%⁷⁵.

6.4 Casualty severity in cycle accidents involving both children and adults increases with the speed limit; in other words, **the higher the permissible speed limit, the higher the risk of an accident.**⁷⁶ Indeed, Kim et al. found that the risk of an injury or fatality in a cycle traffic accident increased markedly where the speed limit was more than 20 mph.⁷⁷ Moreover, a major review of road traffic accident data in the North West of England recently concluded that, if all residential areas in the region were designated as 20 mph zones, the following reductions in road traffic casualty figures could have been achieved across the region:

- 31% reduction in child fatalities and serious injuries
- 18% reduction in adult and child cyclist fatalities and serious injuries⁷⁸

6.5 **We therefore believe there is a strong argument that the Department for Regional Development should invest in measures that seek to create safe, attractive cycling conditions including the extension of 20 mph speed limits to all residential roads in towns, cities and villages.**

“Smarter choices”: providing the encouragement, incentives and opportunities to try cycling

6.6 **The value of measures to influence attitudes and awareness – often known as ‘smarter choices’** – has gained considerable recognition in the last few years. Such measures include public awareness campaigns, school and workplace travel plans and individualised travel marketing, as well as cycle training (see below).

6.7 **Smarter choices measures can be targeted at specific groups**, for instance school or college pupils, employees, women, health patients and various minority or disadvantaged groups. They can be offered an opportunity to try out cycling, with supporting incentives and information, tailored to their needs and interests. For many groups who lack confidence, a chance to try out cycling in a local park or sports stadium is an excellent starting point. For others who are able to cycle but are wary of doing so in busy traffic, cycle training and the promotion of cycling through schools and workplaces can deliver substantial increases in cycle use at a remarkably low cost.

6.8 Other “smarter choices” measures include promotion and advertising campaigns, cycle maps and journey planners, and mass bike rides. “Smarter choices” measures can be combined with physical measures (e.g. cycle access or parking facilities) in the context of green travel plans for schools or colleges, workplaces, or residential areas. For an overview of the topic, see CTC’s Smarter Choices briefing⁷⁹.

6.9 **A Department for Transport review of ‘smarter choices’ measures found typical benefit-to-cost ratios of around 10:1**⁸⁰. A review for the Scottish Government found that travel plans were also among the most cost-effective ways to reduce transport’s carbon emissions⁸¹.

6.10 SIB has appointed consultants on behalf of Belfast City Council and DRD to examine the feasibility of a public cycle hire facility similar to schemes in London and Dublin. **However the success of those schemes contrasts starkly with a similar scheme in Melbourne which has attracted very low use by comparison, almost certainly because of the helmet law there**⁸². The Assembly needs to consider the risks of a helmet law undermining this and other initiatives to promote cycling in Northern Ireland.

Cycle training

6.11 **One of the most effective alternative uses for the Department of the Environment funding which would otherwise be required for implementing this Bill (including the proposed cycle helmet promotion initiative) would be to invest it in expanding provision for cycle training for children:**

- The safety benefits of cycle training are well established⁸³.
- An Ipsos MORI survey (2010) showed 87% of parents feel more confident allowing children to cycle on the road and 49% of parents report an increase in frequency of their child cycling following the child completing the Bikeability training⁸⁴.
- **The benefits of cycle training for a child will last a lifetime.**

- 6.12 At present, the Department of the Environment's Road Safety Branch coordinates cycle training for approximately 9,000 P7 pupils (aged 10 – 11 years) each year.⁸⁵ However, this represents just 40% of all P7 pupils in any given year in Northern Ireland.⁸⁶ Moreover, it is not carried out to the same standards as Bikeability, now commonly available in England, Scotland and Wales, relying primarily on playground-based bike-handling skills rather than on-road training.
- 6.13 We believe all primary school pupils in P6 should have access to high quality cycle training on a par with that available in Great Britain.⁸⁷
- 6.14 Thus, these statistics only serve to underline the need for all children to have access to cycle training at an appropriate age. Indeed, research has shown that cyclists who have received cycle training are three times less likely to be injured in a cycle accident than those who have not⁸⁸.

7. Conclusion

- 7.1 We believe the Environment Committee should recommend that the Assembly reject the Cyclists (Protective Headgear) Bill. **The relatively small risks of cycling do not remotely justify banning any age group from cycling without a helmet**, while mass helmet use has not in practice been found to materially reduce those risks. What is clear is that enforced helmet legislation would suppress cycle use, and that the lost health benefits alone would be a serious net cost to society.
- 7.2 **A recent study showed that there would be a clear net loss to public health alone from a helmet law**, even if one assumed that the law would reduce cycle use only marginally, that the resulting loss of cycling's health benefits was not particularly large relative to the risks involved, and that helmets were highly effective at addressing those risks. In fact, none of these assumptions are realistic. At a time of mounting concern over the twin crises of obesity and climate change, the last thing we should be doing is forcing yet more people, especially children, into car-dependent sedentary lifestyles.
- 7.3 Instead, we hope that the Environment Committee will take this opportunity to recommend that the Department of the Environment and the Department for Regional Development should initiate our recommendations of:
- Investment in measures that seek to create safe, attractive cycling conditions including the extension of 20 mph speed limits to all residential roads in towns, cities and villages
 - Promotion of cycling as a healthy and enjoyable means of transport and recreation, both for the population in general, and for specific groups e.g. school and college pupils, employees, women, health patients, and various disadvantaged or minority groups.
 - The introduction of high quality cycle training for all children in P6 to a standard equivalent to that currently available in England, Scotland and Wales. A review on the Roads Safety Officer Service including options for future delivery of cycle training is due for completion in April 2011 – which presents an opportunity to change policy and practice relating to young cyclists early in the next Assembly mandate.
- 7.4 We are confident that these measures will have a tangible positive impact on the numbers of cyclists involved in road traffic accidents, and in the levels of death and serious injury related to such accidents. Moreover, both these measures will instill confidence in cyclists and potential cyclists, and are likely to lead to higher levels of cycling. By contrast, the proposed legislation will lead to a significant reduction in cycling levels.

About us:

Sustrans is the charity that's enabling people to travel by foot, bike or public transport for more of the journeys we make every day. Our work makes it possible for people to choose healthier, cleaner and cheaper journeys, with better places and spaces to move through and live in.

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CTC, UK's the national cyclists' organisation, was founded in 1878 and has 67,000 members throughout the UK, including 500 in Northern Ireland. CTC works to promote cycling by raising public and political awareness of its health, social and environmental benefits, and by working with all communities to help realise those benefits.

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