

DRAFT

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Transport, health and wellbeing: the potential for equity and wellbeing gains for young people

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Summary

Children and young people are particularly vulnerable to the inequalities reflected in and caused by transport policies, particularly those policies which prioritise adult car drivers' needs. However, interventions focused on 'healthier' transport systems and more liveable cities have huge potential for simultaneously improving social wellbeing and equity for young people. Two research studies in London illustrate this potential. The implementation of 20mph zones has mitigated widening inequalities in child pedestrian injury, and free bus travel for young people has had positive effects on sustainability, equity and wellbeing. Universal free bus travel has removed 'transport poverty' as an issue for young people in London; contributed to young people's independent mobility; and enhanced social participation, without reducing levels of physical activity. In transport, structural interventions which address the 'root causes' of inequality may have more potential than those which target individuals.

Introduction: inequalities in transport related wellbeing for young people

In modern societies, transport is essential to the determinants of health – we need it to not only access goods and services, but also to enable social participation. Being mobile, and having some control over our own mobility, is absolutely core to wellbeing, and limitations in mobility can be both a cause and a consequence of social exclusion.

Children and young people are particularly vulnerable to mobility related social exclusion. In the UK, as in many other countries, the dominance of the private car over our transport environments first excludes young people through the effects of road danger. Although road injury rates are declining, child pedestrians are still at high risk, and gradients in road injury remain the steepest for any cause of death or morbidity (Edwards et al., 2006, Edwards et al., 2008). In London, for instance, child pedestrians in the most deprived areas of London are around three times more likely to be injured on the roads than those in the least deprived areas (see Fig 1).



Figure 1.

Relative risk of being injured on the road by deprivation decile in London: child pedestrians

Source: (Edwards et al., 2007)

These risks have a feedback effect, with parental fears further reducing children’s mobility. As Freund and Martin put it, ‘the hegemony of the car over contemporary social space means that space... once used for socialising and playing has been appropriated’ (2008 p232). This prioritisation often remains unquestioned: the social organisation of space and time reproduces assumptions that what matters is fast travel (minimising adult travel time); the needs of business and commuters; economic growth. The needs of children and young people are marginalised, and they have become increasingly excluded from public space. Road injury then becomes not a political problem, but one of children’s behaviour, to be changed by better road safety skills, or training in being adequately attentive in the road environment.

The well rehearsed statistics on declining numbers of children walking to school is one indicator: in 1985, 67% of 5-10 year olds walked to school, by 2008, this had declined to 48% (Steinbach et al., 2012). This reflects general declines in the amount of walking and cycling young people do compared with time spent in cars (see Fig 2), and the finding that parents are delaying the age at which their children are allowed to travel alone (O'Brien et al., 2000).

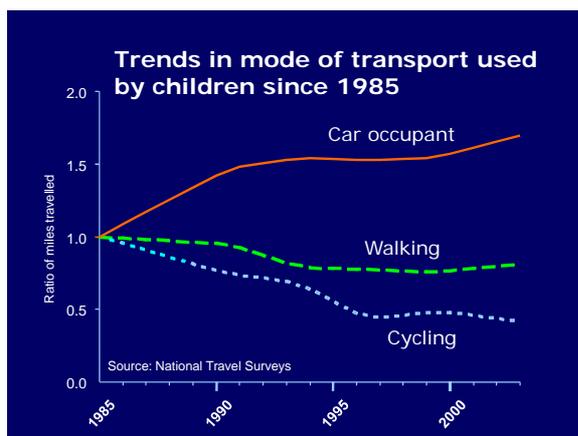


Figure 2.

Declines in walking and cycling relative to car transport since 1985

Source: National Travel Surveys, DfT

This decline in more active forms of mobility has implications for children’s future physical and mental health, with increasingly sedentary populations potentially at risk of, for instance, obesity and heart disease (Wanless and Treasury, 2004) and

limited 'independent mobility' linked to reduced capacity for developing confidence, and self esteem (O'Brien et al., 2000). However, beyond these implications for young people as future adults are some more immediate concerns for young people themselves. Increasingly domesticated in local environments that may be inhospitable to walking and cycling, young people become more reliant on adults for their mobility needs (Kytta, 2004, Fotel and Thomsen, 2004), with less autonomy to travel, socialise and participate in wider society.

Car dominated transport systems do not only disenfranchise children and young people in general: they also disproportionately impact on the poorest. A social life dominated by private car transport is one which inevitably means that children and young people are reliant on parental license and guardianship to access social participation: to get to sports, clubs and social events. Again, inequalities are stark: those in the poorest households are least likely to have access to a car, and face the most difficulties in participating in events that require car transport: sports teams requiring regular, timely attendance at practices and league games in dispersed suburban fields; children's parties organised in out of town leisure centres; trips to shopping malls. These all form the backdrop to young people's social lives and participation, but become difficult to organise without access to a car, leaving the least advantaged with the biggest challenges in social participation.

So, young people as a group are marginalised by car dominated transport systems, and the poorest young people are at greatest risk from both the direct effects of those systems (eg traffic injuries), and the social exclusion that can result from transport poverty.

Interventions for equity: upstream or downstream, targeted or universal?

When thinking about how to address inequalities in health, we can either go 'upstream', and remove the root causes (ie make society itself more equal) or go 'downstream', in for instance 'targeting' poor people or poor communities to off-set the deleterious effects of social inequalities. The problems of the former approach are political will; the problems with the latter are in the often unpleasant implications of holding the vulnerable responsible for the risks they incur through their social position. Further, there are perhaps few examples of downstream interventions working well on health outcomes. In transport, downstream interventions might include educational programmes training children to cross roads safely (something for which there is precious little evidence for effectiveness (Green and Edwards 2008)), or targeting help with costs for school or college transport for the poorest students.

Economically, targeting might appear to make sense in terms of equity, and at times of economic constraint, more questions get asked about universal benefits, as evident perhaps in recent calls for older people's bus passes to be means tested. However, there are risks in targeting, apart from those of lack of effectiveness in many cases - in for instance, the potential for stigmatising those in receipt of targeted benefits (Sen 1995).

Of course universal interventions for public health also throw up dilemmas for addressing inequality. It would be straightforward if interventions that improved the public health also reduced inequalities - but the evidence is often to the contrary. In transport injury, for instance, declining rates of child injury have been accompanied by widening gaps, and there are often 'trade-offs' between public

health goals and equity goals (Green 2008). The challenge of improving the health of the poorest, fastest, has proved an enduring one.

Transport is one field where policy has huge potential for the ‘double win’ of not only improving wellbeing for all, but also addressing the root causes of transport related inequalities. Interventions in transport networks, transport environments or transport policy address relatively ‘upstream’ determinants of health, but political will can be mobilised, because such interventions also have benefits across a number of valued social agenda – sustainability, congestion, improving the liveability of cities. Interventions at the broad, structural level have the advantage of providing better environments for all, and gains across the board, whilst also removing or mitigating some of the inbuilt biases against children as a whole, and the poorest children in particular.

Two recent research studies in London illustrate how very different transport policy interventions have this potential for delivering this ‘win-win’. First, briefly, I will show how 20 mph zones have, historically, both decreased injury rates, and ameliorated widening inequalities in child pedestrian injury in London. Second, taking a universal benefit for young people in London, the free bus pass, I will suggest that this ‘upstream’ intervention universally removed one key contributor to travel exclusion in London, and has had gains for equity, sustainability and young people’s wellbeing overall.

20mph zones: mitigating road injury inequalities through removing one cause of injury

By 2008, there were nearly 400 20 mph zones in London. Historically, these have had a dramatic effect on road injury, with a well designed study suggesting they were associated with a 42% decline in injuries within the zones, after allowing for the background trend in declining injury, and no displacement of injuries to adjacent zones (Grundy et al., 2009). Since 1991, these zones have been increasingly situated in more deprived areas of London (Fig 3).

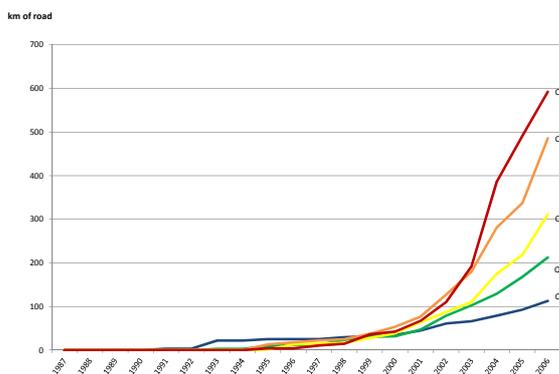


Figure 3

Kilometres of road inside 20 mph zone by deprivation quintile

(Source: Steinbach et al 2011)

Q1 – least deprived
Q5 – most deprived

If we look at what effect a 20 mph zone has, it works exactly the same across the different deprivation levels – ie when cars go less fast, they proportionally, cause fewer injuries whether in poor or rich areas. So we might expect a targeting of

zones in more deprived areas to have had a dramatic impact on injury inequality. However, the background trend in London was one of reducing rates of injury overall – and reductions that were proportionally greater in the *least* deprived areas. That is, although road safety was improving, inequalities in road injury were getting worse. If, in 1987 50% more casualties occurred in the most deprived areas compared with the least deprived, by 2001, there were 90% more casualties in the most deprived areas (Steinbach et al., 2011). Figure 4 shows this general picture of decline across all deprivation levels, with a less steep decline in the poorest areas – so the gap between the top and bottom was wider in 2006 than it was in 1987 (See Fig 4).

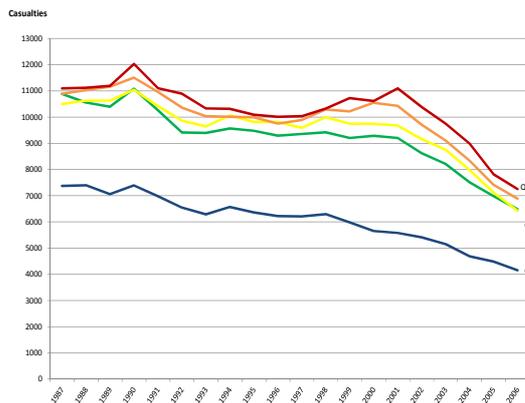


Figure 4

Casualties in London by deprivation quintile

(Source: Steinbach et al 2011)

But, 20mph zones, through historically targeting the most deprived areas have mitigated this widening gap – comparing what happened in areas with zones to those without, we can calculate how many more injuries would have occurred without the zones – and as Figure 5 shows, far more injuries were ‘saved’ in zones in more deprived areas. So we could say that the implementation of these zones has improved the general environment for all young people, but by focusing efforts where the poorest live, it has also had an effect of at least mitigating widening inequalities in child injury.

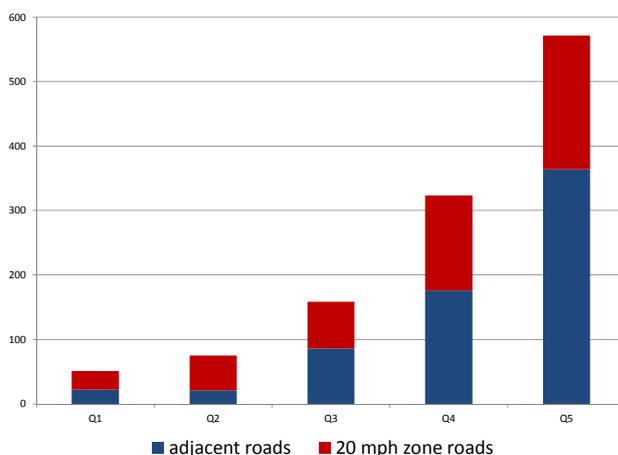


Figure 5

Estimates of number of casualties saved by 20 mph zones by deprivation quintile

(Sources: Steinbach et al 2011)

Free bus passes for young people: delivering transport inclusion for all

So if 20 mph zones had a positive effect on both equity and health from an intervention which benefited everyone but was focused on poorer areas, I want to now turn to the advantages of a universal intervention that addresses a root cause of inequality - and how it had a number of perhaps unanticipated benefits for wellbeing across the board.

The free bus pass for young people – known as the ‘Zip card – was brought in by Transport for London in 2005 for under 17s and extended to under 18s a year later. The stated aims of the scheme were:

“to help young people to continue studying, improve employment prospects and promote the use of public transport” (TfL, 2006, p7)

and to:

“embed more environmentally sound travel habits from an early age” (TfL, 2007).

So there were twin policy incentives of addressing one element of potential transport exclusion – lack of funding to travel to college or training – and of addressing a broader sustainability agenda, in which persuading people that public transport in general and buses in particular was a good way to get around the city was core.

Now bus travel is interesting in this regard, because it is in many ways a rather devalued form of transport, disproportionately used by those with no access to a more valued form of travel, such as the car. Although Margaret Thatcher’s comment that a ‘man who finds himself on the bus at the age of 30 can consider himself a failure’ is almost certainly apocryphal, it is believable perhaps because this does reflect a common prejudice around bus travel - no one would choose it unless they had to.

Yet, if we are to wean people off unsustainable obsession with dependence on private car transport, then alternatives such as walking, cycling and mass transit have got to be made more appealing.

Providing free bus travel for young people carries some risks in this regard. If it merely reinforces bus travel as a form of transport used by the young (and old) because they can’t drive, and devalued because it’s free, this will do nothing to improve the status of bus travel: it may simply reinforce the bus as the mode of last resort.

It also potentially has some risks in terms of transport related wellbeing – if young people’s levels of walking and cycling are already in decline, might offering a free bus pass simply reduce even further the amount of activity they do?

We conducted an evaluation of the scheme to address some of these questions- to sum up, overall, what the impacts on wellbeing had been in terms of social exclusion, activity levels and other outcomes. I’m not here going to discuss the findings in general of this evaluation – except to say we found no evidence of the scheme having decreased the amount of active travel done by young people – but I want to focus here on a couple of promising implications of the scheme in terms of

the potential for upstream interventions such as this for gains in wellbeing as well as equity. And I'm going to draw on young people's accounts of their travel from interviews done as part of the study to illustrate.

The first thing to say about the scheme is that it had, it seemed, completely removed transport poverty as an issue for young people in London. It is always difficult to demonstrate a negative, but the complete absence of any accounts from young people of financial constraints in their ability to get around London was striking. As these two young men suggest, bus travel is a taken for granted way of getting around, and cost is not a restriction on their mobility.

I go places more... like football, just places to out with my friends... if I had to pay for the bus then it would cost more to go out...than I've got (Male, Sutton, aged 14-18).

I take the bus every day... going to school, going to dancing, going to see my friends, maybe going to church... because it's free ... I can go to different places, so anywhere I want to go (Male, Havering, aged 15)

Now one might say this is perhaps just because bus travel is low cost anyway for young people – surely, even without the scheme, a 50p bus ride would not a deterrent for many? Well, the experiences of young Londoners who didn't have a pass – for instance because it had been confiscated because of a behaviour code violation – was instructive here – without a free bus, they found themselves rather limited in their ability to participate:

[W]hen I didn't have [free bus travel] I did struggle in terms of not getting everything done because I didn't have that freedom to get on a bus (Male, Hammersmith and Fulham, aged 12-17).

'Getting everything done' and going 'anywhere I want to go' importantly included not just what might be called essential journeys to school or college, which may well have been subsidised by parents, but the more discretionary journeys that were an important element of young people's social lives. In a city where there are few public spaces where young people are welcome (particularly those that are affordable for a range of people), and in where friends and family may live not only at some distance, but also in circumstances where it is not always easy to socialise at home, the bus itself not only became a way to get places- but a place in itself, for an adventure, to pass the time, or to simply socialise:

It's one of the main things you do on the bus, if you go out with someone you sit down and you talk about things. (Male, Sutton, aged 14-18)

[L]ike we'll just be bored and we don't want to go home, so we'll just hop on a bus and we'll go anywhere. (Female, Hammersmith and Fulham, aged 12-17).

The opening up of the bus as a space for socialising had a number of consequences. One was the ability to explore the city as a whole, without the financial risk or, crucially, the risk of getting lost and unable to return home. Young people from all areas talked about exploring far afield, and of their growing knowledge of London beyond their immediate neighbourhoods.

When we [my friends and I] was in London we just saw a bus that was going...towards Oxford Street, didn't know exactly where it was going ...and

we get on it, we're lost, see, see where we end up... (Male, Havering, aged 16).

Mostly every Saturday we'll probably just jump on a bus because we have a free [pass] and go anywhere, and get another bus from there, and another one. And we just travel, we don't know where we're going ... we ended up near Hammersmith, and near the West End (Female, Islington, aged 16)

Second was the way such experiences were valued not just for developing skills in independence (children in training as future adults) but as a way of being independent in terms of not reliant on parents for money for travel – or time for lifts:

F1 [Free bus travel] is good, it's really useful. It gives, at this age especially, it gives us more independence *to do what we want*, especially on buses [...because] if it was too expensive we'd probably end up getting our parents to drive us everywhere which would be a real problem.

F2 I think at this age it's really important to have that because we need to learn about the world or London now sort of thing, and how to *travel by ourselves*. (Outer London, aged 17)

Not relying on parents for lifts and money for travel was, for some young people, a real contribution to constrained family budgets.

My mum's lost her job and stuff, so it's difficult for her. [Me taking the bus] doesn't cost her anything, and it helps her out (Female, Islington, aged 12)

However, the importance of the free bus travel scheme lies in its universality, rather than being a scheme targeted at just the poorest. With almost all young people in London eligible for a free bus pass, the bus becomes the default mode of travel for all. Across the data set, what was obvious was that sociability was a key criteria in choosing travel – young people preferred to travel together, and indeed 'not leaving' your friends was a core requirement of loyalty to your peer group. The bus became, then, the most usual mode of first resort – this was the way everyone could travel together, not only without financial restriction, but also without the logistics that might be required in co-ordinating lifts:

F1: [We sometimes go by bus] because it's free as well so if people run out of money on their Oyster then we'll all go with them because we don't want anyone to go by themselves. (Outer London, aged 17)

M: My mum or dad would drive me if I want them to but it's like I said you meet friends on the bus and things like that. (Male, Sutton, aged 13-16).

A third consequence of the scheme was the sense of belonging it engendered – not just of socialising with peers, but of belonging to the wider communality of the city. Some young people explicitly noted that this was a 'London thing' – not only did the card mark out London as a geographical entity in so far as it created, through transport boundaries, a bigger entity than their neighbourhood, but it also, gave the bearer an additional aspect of their identity as 'a Londoner'

M:It [the Zip Card scheme]...makes you feel proud [to be a Londoner] because you're at the front of everyone, because you're the ones who have brought in these new schemes that are working and making your life easier...

F: And also you have this mutual understanding of [being...] a Londoner, you're the same as me now. ...And there's...this sense of community in this huge, huge [city.] (Sutton, aged 15-18)

Finally, it is important to note that these effects are specific to a system in which there is a relatively good bus service, and one in which investment has happened to make the bus more appealing across the board. This was evident in the exceptions in our data – particularly young people with disabilities. Although they shared free travel concessions, many found the service relatively inaccessible, with long waits for a bus with space to board, frequent problems with the wheelchair ramps and – crucially, given the importance of sociability – only room for one wheelchair at a time on the bus.

Some ramps don't tend to work, so that's a bit of a hassle ... sometimes it's dangerous with an electric chair, it's heavy... I just think the bus driver should check the ramp is working (O, >16)

But, for their able bodied peers, who experienced an efficient, accessible service, one result was that in their travel around London, young people come across a range of other passengers also benefiting from a relatively good service – commuters, older citizens, young mothers, tourists – as this exchange for a discussion suggests:

F: I've had many a conversation with older people, not so much like 30 to 50 year olds they don't, they keep to themselves ... You can see mothers chatting to other mothers from their primary schools and stuff

M: Those are the workers who are so miserable that they just stand there and then especially when a bus is packed they say like, so rude and they get in your face and they're just like, why are you standing in my way? ...

M: And then the school kids

F: And then school, well children yeah

M: And then, but the good thing, sometimes the good thing about having old people in the bus is that you get that moral side out of you because when they come on the bus and you're sitting down in the seat you feel like oh because they're old you should give them your seat. So you feel good when they seat down because they normally say thank you (Sutton, aged 15-18)

Although I don't want to paint an overly rosy picture of integrated London, with everyone getting along swimmingly (indeed many of the stories about buses are stories about conflicts...) these encounters are a vitally important element of materially reinforcing that the public transport system is for everyone – it is a normal, universal, way of getting around – just because it is lowest common denominator, does not mean (at least in this setting) that it is devalued. This may be one of the most radical contributions the scheme has to equity, in making mass transport a normal and indeed often preferred means of getting around for the next generation. The last word can go to these two young women from Sutton, one of whom had passed her driving license, but still preferred to get the bus, not because it was free, but because it was intrinsically valued as a public mode of transport:

F: Yeah I do like getting the bus because you can meet new people on the bus and because everyone's doing the same thing ... every single bus journey is always interesting because something would always go on and you could

listen to other people's conversations if you want to and brighten up your day a bit.

F: I love the bus, I like journeys with my friends, obviously bus is good because if you want to have a drink then you don't, you can use the bus to get home instead of driving. And always, you can always have funny conversations with people on the bus when you're on the way home from a club or something (Sut, 15-18)

So here is a scheme which appears to have had a number of positive effects for all young people in terms of the problems I started with - primarily that of transport exclusion and declining opportunities for independent travel. It:

- Provides an independent mode of travel for all
- Provides an important (rare) space for social interaction
- Increases opportunities for young people to travel together, as preferred
- Removes financial barriers to transport related social participation
- Increases young people's feelings of belonging (citizenship)
- Contributes to destigmatising bus travel

More speculatively, this has positive implications for declining future dependence on car travel - which will be good for wellbeing, and good for equity.

Implications: what does work and why?

So, I have given a flavour of the evaluation of the free bus travel scheme, but in summary, we could say this scheme works in part because it is universal - many of the effects we identified were because everyone had it, not just the poorest. Second, it works because it is offering a service that is being improved for all - so the intervention does not offer a low-status benefit, for those with no other option, but an increasingly normalised mode of transport, that the rest of population of London enjoy.

20mph zones worked because they removed one root cause of road traffic injury for child pedestrians - fast moving traffic. In improving the safety and liveability of local environments for everyone, they mitigated what would otherwise have been even wider inequalities in road traffic injury.

In the field of transport, it seems that 'going upstream' can deliver on the elusive 'win win' of improving the lot of all children and young people, whilst at the same time delivering on equity goals. Addressing the social determinants of health - in this case through improving access to mobility, and improving the safety and 'liveability' of neighbourhoods - addressed some of the root causes of inequalities and improved the lot of all.

Acknowledgements

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However, the views and opinions expressed herein are those of the author and do not necessarily reflect those of the Department of Health, LSHTM or colleagues. For more information on the On the Buses study see:

<http://www.lshtm.ac.uk/php/hsrp/buses/about/index.html>

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