

## National Transport Policy

**THIS BRIEFING COVERS:** the case for cycling; how to deliver a cycling revolution in Britain through: leadership and ambition (cycle use targets and motor traffic restraint); sustained investment (indicative spend on cycling in selected countries/cities/towns, road building, bias against investing in cycling, spending priorities); consistent high design standards; road safety measures and safety targets; and positive promotion (schools/colleges, employers, health sector, public transport).

### HEADLINE MESSAGES

- Cycling provides huge benefits for everyone, whether or not they take up cycling themselves. For individuals, it is a fast, flexible, healthy and cost-saving option for day-to-day journeys; for society, it helps create a fitter population, a cleaner environment, a vibrant economy and a better quality of life.
- These benefits can be maximised by giving cycling a central role in national transport policy. This requires strong leadership and ambition; cross-departmental action; sustained funding; nationally determined cycle-friendly design standards; a commitment to tackle deterrents to cycling; and promoting cycling as a safe and normal activity for people of all ages, backgrounds and abilities.

### KEY FACTS

- The *Get Britain Cycling* report (April 2013) recommended aiming to boost national cycle use from around 2% of trips in Britain at present, to 10% (roughly German levels) by 2025 and to 25% (roughly Dutch levels) by 2050. It also recommended long-term funding for cycling of at least £10 per person annually, rising to £20 as cycle use goes up.
- According to research commissioned by Cycling UK, the cumulative benefits of meeting these targets would be worth £248bn between 2015 and 2050 to England's national economy, yielding annual benefits in 2050 worth £42bn in today's money.
- The *Infrastructure Act 2015* commits the Government in England to a 'Cycling and Walking Investment Strategy' in law.
- Cycling investment has been consistently found to have exceptionally high benefit-to-cost ratios (BCRs) compared with road schemes and other large transport projects.



## Cycling UK VIEW

- A high-level, sustained commitment to promote, encourage and provide for cycling as a safe and normal activity for people of all ages, backgrounds and abilities, should be a key element of national transport policy.
- Cycling has such wide-ranging benefits for policy areas beyond transport that it should be supported cross-departmentally by other government ministries, e.g. health, planning, sport, tourism and recreation, education, environment and the Treasury. This partnership approach should involve the public, private and voluntary sectors, and be adopted at local level too.
- The Government should set a national cycling target of 10% of trips within 12 years & 25% by 2050.
- Government transport and planning policy should recognise that cycling both contributes to and benefits from less motor traffic. It should explicitly support the principle of motor traffic restraint and the mechanisms used to achieve it.
- The Government should create a cycling budget of £10 per person per year, rising to £20 as cycle use increases, or commit 10% of its transport budget to cycling and walking.
- Decisions over transport spending should take account of the fact that much road-building has many adverse consequences and its economic benefits are debatable, whereas cycling offers high returns.
- The appraisal tools used for transport schemes are biased against investing in cycling and need to better reflect its full range of benefits, together with the disbenefits of higher-cost and less sustainable transport.
- The National Transport Model (NTM), which informs decisions on transport spending, undermines the case for investing in cycling and should be fundamentally overhauled.
- More money should be allocated to cycling from other streams, notably the Government's £15 billion Roads Investment Strategy and from public health funds. Road maintenance budgets and the planning system should also be used to provide substantial benefit to cycling.
- All direct and indirect provision for cycling should be subject to nationally defined cycle-friendly design standards, with mechanisms to ensure that all authorities and agencies comply with them. Action is also needed to boost the professional awareness and skills of anyone who is responsible for delivering policies and planning related to cycling.
- National policy should recognise that more and safer cycling should and can go hand-in-hand, and that action should be taken to tackle the actual and perceived fears that deter people from cycling, e.g.: high motor traffic volume/speeds, lorries and irresponsible drivers, unfriendly road design, while proper enforcement of road traffic law must have a higher priority.
- National and local road safety targets for cycling should be rate-based: e.g. the risk of a cycle casualty per mile or per trip. Perception-based targets should also be set for cycling: e.g. the proportion of the public who regard cycling as safe in their area.
- The Government should establish and fund a national target to give every child the opportunity to take part in cycle training free of charge before they leave school.
- Cycle safety awareness campaigns should not make cycling appear unduly dangerous.
- The Government should support all 'smarter choice' measures that encourage alternatives to driving, and encourage schools, colleges, employers, the health sector and public transport operators to promote and provide for cycling.



## BACKGROUND INFORMATION

### 1. The case for cycling

Cycling UK believes that a commitment to promote, encourage, provide for and invest in cycling should be a key element of national transport policy. Cycling UK also believes that cycling is not just about transport, because it offers enormous benefits across a wide range of other policy areas:

#### Economy

- If cycle use increased from less than 2% of all journeys (current levels) to 10% by 2025, and 25% by 2050 (as recommended by the Parliamentary Cycling Group's *Get Britain Cycling* report<sup>1</sup>), the cumulative benefits would be worth £248bn between 2015 and 2050 for England. This would yield annual benefits in 2050 worth £42bn in today's money, mainly because the population would be physically fitter. Less congestion and absenteeism, and improved air quality would also contribute.<sup>2</sup>
- Cycling tackles congestion: a typical road lane can carry seven times as many cycles as cars.<sup>3</sup>
- Making town centres and residential areas cycle-friendly enhances their attractiveness, boosting their retail vitality and desirability as places to live.<sup>4</sup>
- Even with Britain's current low levels of cycle use, it is estimated to contribute annual benefits to Britain's economy of around £3 billion.<sup>5</sup>

For more, see Cycling UK's briefing *Cycling and the Economy*:  
[www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy](http://www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy)

#### Health

- A study of around 73,000 men and 83,000 found that mixed public and active transport commuters had significantly lower BMI and body fat than their car-only counterparts.<sup>6</sup>
- Academics have calculated that, in the Netherlands, cycling prevents about 6,500 deaths each year and adds half a year to life expectancy. These health benefits correspond to more than 3% of the Dutch gross domestic product.<sup>7</sup>
- A population-wide study in Copenhagen found that, compared with those who cycled regularly to work, people who did not do so had a 39% higher mortality rate, regardless of whether or not they also took part in other physical activities.<sup>8</sup>
- Increased cycle use is associated with improvements in cyclists' safety: the 'safety in numbers' effect.<sup>9</sup> Moreover, cyclists have a very low rate of involvement in collisions where another road user is injured. Hence, more cycling is good not just for cyclists' safety but for other road users too.<sup>10</sup>

For more, see Cycling UK's briefings on *Cycling and Health* and on *Road Safety*:  
[www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling](http://www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling)  
[www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview](http://www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview)

#### The environment

- A person making the average daily car commute of four miles each way would save half a tonne of CO<sub>2</sub> annually by switching to cycling – 5% of the average UK carbon footprint.<sup>11</sup>
- Doubling cycle use through switching from driving to cycling would reduce Britain's total greenhouse emissions by 0.6 million tonnes, about as much as switching all air travel between London and Scotland to the rail network.<sup>12</sup>
- Cycling is one of the easiest and cheapest ways for individuals to reduce their contribution to climate change on a day-to-day basis.
- Converting as many driving trips as possible to cycling helps reduce the harmful impact of outdoor air pollution and reduces traffic noise, particularly in urban areas.

For more, see Cycling UK's briefing on *Climate Change and Air Quality*:  
[www.cyclinguk.org/campaigning/views-and-briefings/climate-change](http://www.cyclinguk.org/campaigning/views-and-briefings/climate-change)  
[www.cyclinguk.org/campaigning/views-and-briefings/air-quality](http://www.cyclinguk.org/campaigning/views-and-briefings/air-quality)



### Promoting education, access to employment and equality of opportunity

- Cycling is a good option for many people who do not or cannot drive, e.g. children, those on lower incomes, older and disabled people. It is a way of keeping mobile, independently.
- Cycling employees are more productive and are absent less often.<sup>13</sup>
- Physical activity improves concentration and learning ability in children and adults alike.

See Cycling UK briefings on Cycling to School and Cycle-friendly Employers

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-schools-and-colleges-ctc-views](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-schools-and-colleges-ctc-views)

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-employers-ctc-views](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-employers-ctc-views)

### Quality of life and a healthier natural environment

- Cycling's impact on townscapes, rural landscapes and biodiversity is far less negative than that of motor transport because far less land needs to be allocated for roads and parking.

See Cycling UK's economy briefing for information on the rural economic benefits of cycling-based recreation and tourism

[www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy](http://www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy)

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## 2. How to deliver a cycling revolution in Britain

To deliver a 'cycling revolution' in Britain,<sup>14</sup> Cycling UK believes that any national strategy or action plan should encompass all the **key aspects** recommended by the All Party Parliamentary Cycling Group's *Get Britain Cycling* report, 2013.<sup>15</sup> They are:

- Leadership and ambition:** high-level commitment, together with targets for substantially increased cycling.
- Sustained investment:** a long-term commitment to provide capital and revenue funding for cycling.
- Consistent high design standards,** in line with continental best practice, together with mechanisms for ensuring that they are followed by highway and planning authorities (including Highways England) in all highway and traffic schemes, new developments, and road maintenance programmes.
- Safety measures:** in addition to consistent cycle-friendly design, action is needed to address the actual and perceived threats to cyclists from lorries and irresponsible drivers.
- Positive promotion:** cycling needs to be encouraged and promoted as a safe and normal activity for people of all ages, backgrounds and abilities. This requires cross-departmental and cross-organisational action both nationally and locally, involving the public, private and voluntary sectors.





## a. Leadership and ambition

### Cycling UK view:

- A high-level, sustained commitment to promote, encourage and provide for cycling as a safe and normal activity for people of all ages, backgrounds and abilities, should be a key element of national transport policy.
- Cycling has such wide-ranging benefits for policy areas beyond transport that it should be supported cross-departmentally by other government ministries, e.g. health, planning, sport, tourism/recreation, education, employment, environment and the Treasury. A partnership approach should involve the public, private and voluntary sectors, and be adopted at local level too.
- The Government should set a cycling target of 10% of trips within 12 years & 25% by 2050.
- Government transport and planning policy should recognise that cycling both contributes to and benefits from less motor traffic and explicitly support the principle of motor traffic restraint and the mechanisms used to achieve it.

- **Joined-up approach**

As mentioned in section 1 above, cycling is not only efficient transport, but has the potential to contribute to the success of other public policies. It has much to offer, for instance, to the national and local economy, improved health and air quality, better places to live, recreation and tourism etc. This, however, is an ironic weakness because no single government department has sole responsibility for capturing all of its benefits.

Making a cycling revolution happen, therefore, needs to involve not only the Department for Transport (DfT), but also the departments responsible for business and employment, health, the environment, planning and local government, countryside access and rights of way, recreation and sport, education and traffic law and enforcement and, of course, the Treasury.

Equally, action at local authority level needs to be joined-up too. Work on cycling should not be left to the departments with specific responsibility for transport alone, and it should also be high on the agenda when working with other councils, with schools and colleges, employers, the health sector, public transport operators, the police, community groups and the voluntary sector. Local Enterprise Partnerships (LEPs) in England, bodies that bring councils and businesses together, offer a good opportunity for concerted action on cycling. For more on local transport and cycling, see our briefing: <https://www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-local-transport>

- **Cycling targets** (For **cycle safety** targets, see 'Safety Measures' section below (2d).

The *Get Britain Cycling* report recommended aiming to boost cycle use from c.2% of trips at present, to 10% (just under German levels) by 2025, and to 25% (roughly Dutch levels) by 2050. Current national targets are:

**England:** doubling cycling 'stages' (i.e. the part of any journey that involves cycling) by 2025. This target is proposed by the draft *Cycling and Walking Investment Strategy* (see P7), and is not an ambitious one: if met, English cycle use would only reach Dutch levels (27% of trips) by the start of the 23rd century.

**Scotland:** The *Cycling Action Plan for Scotland's* target is for 10% of all journeys by bike by 2020.<sup>16</sup>

**Wales:** The *Active Travel Action Plan for Wales* aims "to move towards a pattern by 2026 where 10% would cycle at least once a week", but this is subject to the development of "appropriate targets".<sup>17</sup>

**Northern Ireland:** The aims of the *Bicycle Strategy for Northern Ireland* (2015) are for cycling levels to reach, by 2025: 20% of all journeys less than one mile; 10% of all journeys between one and two miles; 5% of all journeys between two and five miles; and, by 2040: 40% of all journeys less than one mile; 20% of all journeys between one and two miles; 10% of all journeys between two and five miles.<sup>18</sup>

- **Motor traffic restraint**

Motor traffic restraint and providing for more cycling as a viable alternative to driving, especially for short trips, helps reduce car dependency and motor traffic volume. This contributes to a better quality of life, less pollution and a fitter population. In turn, cycling itself benefits because fewer cars means less hostile road conditions, plus a more attractive environment for existing and would-be cyclists.

- Academics who studied 100 years of urban cycling policy, use and practice in 14 European cities found that: *“Inspired by the environmental movement and urban activists’ campaigns, investments in public transit, cycling, and walking combined with car-curbing policies have had the greatest positive impact in increasing urban cycling and overall livability.”*  
*Cycling Cities: The European Experience* (Ruth Oldenziel, Martin Emanuel, Adri Albert de la Bruheze and Frank Veraart, eds). 2016. Foundation for the History of Technology. (Eindhoven, the Netherlands). [www.cyclingcities.info/](http://www.cyclingcities.info/)
- An overview of evidence concluded that the most effective means of increasing active travel resulted from measures to deter motor traffic.  
*Transport, Physical Activity and Health: Present knowledge and the way ahead.* (Mackett RL and Brown B). 2011. [www.ucl.ac.uk/news/pdf/transportactivityhealth.pdf](http://www.ucl.ac.uk/news/pdf/transportactivityhealth.pdf)
- Research into travel habits in London found that: people living in non-car owning households were between two and three times more likely to travel actively for 30 mins on a given day than people in multi-car owning households; and those who own and use a bicycle were around twice as likely to travel actively for at least 30 mins compared to those who do not own a bicycle.  
*Active travel in London: The role of travel survey data in describing population physical activity.* (Fairnie, GA., et al). 2016. [www.sciencedirect.com/science/article/pii/S221414051600013X](http://www.sciencedirect.com/science/article/pii/S221414051600013X)

Active support for cycling can be complemented by other measures to influence travel behaviour, e.g.:

- charging for the use of certain roads (road pricing, road tolls);
- imposing financial levies on the basis of vehicle emissions;
- charging vehicles for entering a defined urban/city zone, usually at peak times and with various exemptions, inc. low-emission cars;
- reducing the capacity of junctions/roundabouts for motor traffic, ideally by reallocating road space for cycling and walking; and
- reducing the availability of car parking, and/or increasing fees.

Some of the above methods help restrain motor use in general and target longer journeys (e.g. emissions charging, road tolls), whilst others are designed to reduce congestion and/or pollution in specified urban areas (e.g. car parking restraint, charging zones, low emission/clean air zones). One effective way to reduce car use and support cycling is to invest some of the revenue raised from congestion charging to fund sustainable transport: an ECF (European Cyclists’ Federation) evaluation of congestion charging concludes that this helps “... both to make the reduction in car traffic more effective and permanent, and to win public support for the scheme. Cycling should play an integral role in this process.”<sup>19</sup>

Although it is possible for local authorities to introduce a number of these measures without reference to central government (e.g. limiting car parking, reducing capacity for motor traffic on local roads etc.), national support for the principles and the proven mechanisms of motor traffic restraint needs to be explicitly stated in transport and planning policy. See also ‘road building’ below (2b).

- London's congestion charge, introduced in 2003 after extensive public and stakeholder consultation, operates from Monday to Friday 07:00 – 18:00, except on Bank Holidays (discounts and exemptions apply).
- Since the charging zone was established, cycling levels there have gone up by 66%, while motor traffic entering it has dropped by 27%, amounting to 80,000 fewer cars each day.

*Transport for London, Congestion Charge Factsheet, June 2014.*

[www.tfl.gov.uk/cdn/static/cms/documents/congestion-charge-factsheet.pdf](http://www.tfl.gov.uk/cdn/static/cms/documents/congestion-charge-factsheet.pdf)

## b. Sustained investment

### Cycling UK view:

- The Government should create a cycling budget of £10 per person per year, rising to £20 as cycle use increases, or commit 10% of its transport budget to cycling.
- Decisions over transport spending should take account of the fact that much road-building has many adverse consequences and its economic benefits are debatable, whereas cycling offers high returns.
- The appraisal tools used for transport schemes are biased against investing in cycling and need to better reflect its full range of benefits, together with the disbenefits of higher-cost and less sustainable transport.
- The National Transport Model (NTM), which informs decisions on transport spending, undermines the case for investing in cycling and should be fundamentally overhauled.
- More money should be allocated to cycling from other streams, notably the Government's £15 billion Roads Investment Strategy and from public health funds. Road maintenance budgets and the planning system should also be used to provide substantial benefit to cycling.

Cycling UK believes that funding for cycling should meet the recommendations made in *Get Britain Cycling*, a report which MPs debated in September 2013 and voted for. This advised that long-term funding should start at £10 per person annually (at least), rising to £20 as cycling levels grow.

An alternative approach would be for the Government to commit 10% of its central transport budget to cycling and walking combined, as recommended in the Association of Directors of Public Health's (ADPH) *Take Action on Active Travel*, a document endorsed by over a hundred transport and health bodies.<sup>20</sup> At 2014/15 rates of transport expenditure by central government alone (and excluding grants to local authorities), this would amount to: £731m in England, (£13.50 per head); £184m in Scotland, (£35 per head); £66m in Wales, (£21 per head); and £52m in Northern Ireland, (£28 per head).<sup>21</sup>

At local level, the City of Edinburgh has set a precedent for percentage-based budgets, starting with a commitment made in February 2012 to spend 5% of its transport budget on cycling and increase this amount each year by 1%. Hence, cycling is due for an allocation of 9% in 2016/17.<sup>22</sup>

**England:** As a result of lobbying by a campaigning coalition including Cycling UK, the *Infrastructure Act 2015* committed the Government to a *Cycling and Walking Investment Strategy (CWIS)*.<sup>23</sup> CWIS must specify objectives and the financial resources for achieving them, and be reviewed every five years. Also, a progress report has to be laid before Parliament from time to time, and when varying CWIS, the Secretary of State is expected to "consult such persons as he or she considers appropriate" and "to have regard to the desirability of maintaining certainty and stability".

While the *Infrastructure Act* does not specify how much funding the Government needs to commit, campaigners hoped that it would help address the sporadic and patchy nature of central funding that



has dogged cycling in the past – i.e. the propensity to award short-term cycling grants to specific places (e.g. towns, cities, national parks etc.), rather than committing consistent and adequate funding throughout the country, so that everyone benefits, wherever they are.

Unfortunately, CWIS has not lived up to its expectations so far. An answer to a parliamentary question in April 2016, suggested that outside London, the total *per capita* funding allocated to cycling and walking through various streams will decline from around £1.75 in 2016/17 to just 72p in 2020/21.<sup>24</sup> Clearly, this is far below the figure recommended by the *Get Britain Cycling* report, and negligible in comparison with the £15billion (2015-2020) planned investment in roads.<sup>25</sup>

Cycling UK has been tracking CWIS since its introduction, (see news/blogs at: [www.cyclinguk.org](http://www.cyclinguk.org), e.g. [www.cyclinguk.org/blog/roger-geffen/cycling-walking-investment-strategy-woefully-little-investment](http://www.cyclinguk.org/blog/roger-geffen/cycling-walking-investment-strategy-woefully-little-investment) ).

**Scotland:** According to the Scottish Government's budget 2016/17, around £39 million is going to 'active travel' (i.e. both cycling and walking).<sup>26</sup> This includes the 'Cycling, Walking and Safer Streets' (CWSS) fund, set up in 2003 and distributed to all Scottish councils on the basis of population size. For 2016/17, CWSS has been allocated £5.9m, a drop on the £8m for 2015/16. In contrast, the budget for motorways and trunk roads for 2016/17 is £820 million (up c18% on 2015/16).

Spokes, the Lothian Cycle Campaign, says that Scotland's national investment in active travel represents only 1.9% of the total transport budget, much less than the 10% the campaign group recommends.<sup>27</sup>

**Wales:** In 2013, the *Active Travel (Wales) Act* imposed a duty on local authorities to carry out a mapping exercise and, on the basis of the results, continuously improve and create walking and cycling routes/facilities.

Welcome as this Act was, lack of adequate funding means that local authorities are struggling to implement it, a serious problem that the Assembly's Enterprise and Business Committee highlighted in a scrutiny report a year after the legislation came into force.<sup>28</sup> Having learnt that only £3 - £5 was being spent per head on active travel a year, the Committee advised the Government to have a specific budget line for active travel infrastructure projects and promoting active travel, and keep the level of funding under review.

The Committee also noted that local authorities were finding it difficult to plan strategically because they have to bid competitively for small pots of government money on a yearly basis (although this is going to change to an 'indicative' three yearly allocation). The Minister told the Committee that £24 million capital funding had been allocated to active travel schemes for 2016/17.

**Northern Ireland:** as is the case elsewhere in the UK, much of Northern Ireland's central funding for active travel has been offered in the form of grants for which councils have had to bid (e.g. the Active Travel Demonstration Projects awards to four councils in 2012).<sup>29</sup> The *Northern Ireland Bicycle Strategy* (2015), acknowledged that "the funding available for cycling has been limited and spread thinly across Northern Ireland." The Strategy notes calls for £10 per head per year, rising to £20, but said that fiscal constraints made such figures 'highly ambitious'.<sup>30</sup>

- **Per capita spend and cycle use**

As the table overleaf shows, cycle use tends to be higher in countries and cities where the per capita spend approaches £20 per head per year. For instance, the Netherlands spends at least £24 per head p.a. and 27% of trips are cycled, compared to just c.2% in the UK at the moment. In UK cities with high levels of funding per head (e.g. Cambridge), cycling levels are much higher than average.





Country/City	Cycle use				E. Spend on cycling per head per year (approx.)
	A % trips	B % residents cycling at least 1 x week	C % commuting to work	D % population who never cycle	
<b>Netherlands</b>	27%			13%	£24 at least (national + local spend)
Groningen	40-60%				
Amsterdam	50-60%				
<b>Denmark</b>	17%			18%	£17 at least (state + municipality funding, mainly for infrastructure).
Copenhagen	30%				
Odense	24%				
<b>Germany</b>	13%			30%	<£1 (Federal spend on main roads) / (£6-15 is the recommended spend for towns / cities).
Muenster	38%				
Berlin	13%				
<b>England</b>	2%	7%	2.6%	65%	i. DfT spend <b>only</b> (exc. London) 2010/11-2014/15 = £1.90; ii. DfT + local spend (exc. both London & Cycle Ambition Cities) = £4.25 (2011/12); £4 (2015/16); iii. DfT + local spend 2015/16, inc. Cycle Ambition Cities and London = £6.70 iv. DfT spend projected for 2020/21, inc. Cycle Ambition Cities, exc. London = £0.72 (includes some spend on walking)
<b>London</b>	2%	10%	4%	86%	TfL funding: 2011/12 = £2 2012/13 = £3 2013/14 = £9 2014/15 = £13 2015/16 = £18
Cambridge		48% (highest in England)	29% (highest in England)	43%	DfT + local spend: 2008-11 = £14 2014 & 15 = £23 2015-18 = £13
Bristol		17%	7.5%	74%	DfT + local spend: 2008-11 = £13.45 2015-18 = £11.80 Bristol's Cycling Strategy commits the council to £16.
York		23%	11.2%	68%	DfT + local spend: 2008-11 = £14
Birmingham		6%	1.5%	91%	DfT + local spend: 2014 & 2015 = £12.15 2015-18 = £9
Burnley		3% (lowest in England)	1%	94%	?



Continued/

Country/City	Cycle use				E. Spend on cycling per head per year (approx.)
	A	B	C	D	
	% of trips	% residents cycling at least 1 x week	% commuting to work	% population who never cycle	
<b>Scotland</b>	1%	2.7% for transport 3.5% for pleasure /fitness	5.6%	89%	Mixed funding sources: 2012/13 = £5.33 2013/14 = £5.93 2014/15 = £7.72 2015/16 = £6.72  (2016/17 = £7.22 - Government funding for both cycling and walking)
Edinburgh	2%		15.2% (2013/14) 12.2% (2012/13)		5% of CEC's transport budget 2012/13; 6% 13/14; 7% 2014/15; 8% 2015/16; 9% 2016/17 = c£4
Glasgow City			5% (2013/14) 6% (2012/13)		
<b>Wales</b>		6%	1%	94%	National spend: £3-5
Cardiff			3.6%		
<b>N Ireland</b>	1%		1%		See notes

**Notes on the table above:**

- The cycle use figures cited are indicative of recent levels of use (i.e. not all from the same year(s));
- British towns: given the low level of cycling in most places, figures should be treated with some caution.
- Spend per head: figures are best estimates using the most reliable sources available, some calculated from overall spend, divided by population. They do not necessarily take account of all funding streams that may be allocated to cycling in a given country/area.

**For sources and more detailed notes, see endnote <sup>31</sup>**

• **Cycling v road-building**

Cycling UK believes that reallocating transport spending in favour of cycling is strongly justified for a variety of reasons, but not least because cycling investment has been consistently found to have exceptionally high benefit-to-cost ratios (BCRs) compared with road schemes and other large transport projects.<sup>32</sup>

It is common practice to justify road schemes in particular on the assumption that they will yield economic benefits. Yet new roads can as easily suck out economic activity from an area as bring it in. Indeed, researchers have often found good reason to question the presumed relationship between road-building and economic growth.<sup>33 34 35</sup>

There is also clear evidence that road-building typically increases overall road traffic, with adverse consequences for both the local and global environment and for urban congestion.<sup>36</sup> Equally, it makes travel more difficult for non-drivers, who include children, many younger and older people, and anyone with sight or other disabilities that rule out driving.

The planning system can help reduce the need for road-building by avoiding locating new developments where car-dependent journey patterns are likely to be exacerbated, and providing well for cycle travel to, from and within them.

For more on how the planning system can and should support cycling, see Cycling UK's briefing at: [www.cyclinguk.org/campaigning/views-and-briefings/national-planning-policies](http://www.cyclinguk.org/campaigning/views-and-briefings/national-planning-policies)

- **Bias against investing in cycling**

**Appraisal process:** transport-related investment in England, Wales and Scotland is subject to an appraisal process (WebTAG in England; WeITAG in Wales, and STAG, Scotland). All these processes are regularly updated, and Cycling UK welcomes changes that reflect the full range of benefits that cycling offers, and the disbenefits of more costly and less sustainable transport.

**National Transport Model:** one notable source of bias against cycling investment comes in the form of the DfT's 'National Transport Model' (NTM).<sup>37</sup> Based solely on external factors, primarily economic growth, population growth and fuel prices, the NTM purports to predict future levels of transport demand. There are plans to allow other parties to use the software involved (although this has been met by concerns about erroneous use/results).<sup>38</sup>

Cycling UK and others have raised serious doubts about the NTM. For instance, if the model continues to ignore policies to boost cycle use and keeps making pessimistic predictions about cycling, decision-makers at local level may conclude that there is little demand and no point in investing in it. This is, essentially, 'planning to fail', or a self-fulfilling prophesy.

There are also growing doubts about the NTM's inbuilt hypothesis that economic growth correlates closely with increased car use, plus the implicit assumption that more roads need to be built to accommodate it.

Cycling UK has therefore called for a fundamental overhaul of the NTM, so that it reflects a range of policy options, as well as external drivers.<sup>39</sup> For its cycling forecasts, we advocate use of the DfT-commissioned 'National Propensity to Cycle Tool', currently being developed for England.<sup>40</sup> This will be able to estimate cycling potential at local level, and under a range of assumptions about the future.

The NTM publication issued in March 2015 suggests that the DfT have listened to some of our concerns, concluding: "... the factors we typically highlight as being key drivers of road demand - incomes, costs and population - have been important drivers of recent trends in traffic but that they may not tell the whole story."<sup>41</sup> The 2015 Model also took a more scenario testing approach, a step in the right direction.



- **Spending priorities and funding sources**

**Junctions and links:** in most places, the main priorities for significant transport capital spending in the years ahead are to redesign larger junctions to make them cycle-friendly, and/or to open up links to cross (or avoid) major barriers that are impeding safe and convenient cycle travel.

**Road maintenance budgets:** local authorities should be encouraged to look for synergies between their cycling and planned road maintenance programmes, so that new or improved cycle provision can be introduced at the same time as resurfacing a road. New York City has delivered some major cycle schemes at relatively marginal cost in this way. In the UK, Plymouth City Council is also taking this approach.

**Public health funds:** along with reallocating transport spending, Cycling UK also calls for a greater share of public health money to go towards active travel. This would provide a source of revenue funding to promote walking and cycling activities to a range of population groups: e.g. in schools and workplaces, for women, for health patients, people with disabilities and other disadvantaged or minority groups.

For more on how cycling supports the economy, and on the appraisal process, see Cycling UK's briefing: [www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy](http://www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy)

### c. Consistent high design standards

**Cycling UK view:** All direct and indirect provision for cycling should be subject to nationally defined cycle-friendly design standards, with mechanisms to ensure that all authorities and agencies comply with them. Action is also needed to boost the professional awareness and skills of anyone who is responsible for delivering cycle-friendly policies and planning.

Cycling UK's vision is to see a massive step-change in cycle use, so that people of all ages, backgrounds and abilities feel able to cycle safely and confidently for all types of journey.

Our neighbourhoods, town centres and road networks should be fundamentally redesigned to be 'people-friendly', with cycling not only contributing to a reduction in car dependence, but also benefiting from it. Through-traffic should be channelled onto a limited network of main roads – which should have dedicated cycle provision on or alongside them – while traffic volumes and speeds need to be kept low on other streets or lanes.

The cycle network should include the whole road network, supplemented by high-quality cycle routes away from it. Dedicated cycle provision should *be* safe and *feel* safe, showing that society positively values those who choose to cycle, and avoiding any impression that they are a 'nuisance' to be 'kept out of the way of the traffic.'





- **Cycle-friendly infrastructure**

In general, Cycling UK advocates a mix of:

- Dedicated space on busier urban or inter-urban main roads, normally physically protected, especially on the fastest and/or busiest roads;
- 20 mph limits and/or through-traffic restrictions for most built-up streets (including villages), and the widespread adoption of 40 mph or lower limits for rural lanes;
- Motor traffic-free routes using parks and open spaces, or along canals, waterfronts and disused rail corridors. As many cyclists will still want to use streets and roads, these options should complement safe, pleasant and direct cycle routes on the road network itself.

See Cycling UK's booklet, *Space for Cycling: a guide for decision-makers*, for a non-technical, well-illustrated explanation of these principles: [www.cyclinguk.org/space4cycling](http://www.cyclinguk.org/space4cycling)

*Segregated cycling facilities:* It is important to distinguish high quality segregated facilities from worse-than-useless pavement conversions. High quality segregation will generally:

- Involve reallocation of road-space (rather than simply placing cyclists on pavements);
- Avoid pedestrian conflict (especially at bus stops and pedestrian crossings);
- Be of adequate width, well-surfaced and maintained; and
- Retain adequate cycle priority at junctions. Junctions are hazardous places for cyclists: around three quarters of road crashes happen at or within 20 metres of them. <sup>42</sup>

*Road maintenance:* In addition to linking cycling improvements to planned road maintenance works (see p11), Cycling UK recommends that the needs of cyclists should be reflected in highway authorities' procedures for reporting, inspecting and repairing defects, and in the management of street works, winter maintenance, debris/vegetation clearance and lighting policies. When new off-road cycle facilities are planned, provision for their maintenance should be included in the costings.

**National standards:** Cycling UK believes that the DfT needs to produce consistent nationally defined standards on high-quality cycle-friendly planning and design. There is no benefit whatsoever from a 'localist' approach that allows different local authorities to adopt different design standards. This merely causes extra work, sows confusion among cyclists and drivers alike, and all too often leads to the provision of very poor infrastructure. We do not leave councils to adopt different design standards for motor vehicle lanes, junctions etc., and there is even less justification for doing so in the case of something as safety-critical as the design of a safe cycling environment

National standards should be informed by best practice both in the UK and elsewhere, and encompass highway and traffic schemes, and new developments. They should include best practice for the design and layout of roads and cycling infrastructure, signs, road markings and traffic signals.

These standards could be developed by combining elements of Transport for London's *Cycling Design Standards*<sup>43</sup> and the Welsh Government's standards drawn up in conjunction with the *Active Travel (Wales) Act*.<sup>44</sup> These documents are both far superior to the DfT's current weak, ill-defined guidance, *Local Transport Note 2/08*.<sup>45</sup> While campaigners generally welcomed Scotland's guidelines, *Cycling by Design* (published in 2010, revised 2011), they now need updating to reflect current thinking.

**Professional skills:** Action is also needed to boost the professional awareness and skills of anyone responsible for delivering cycle-friendly policies and planning. This includes councillors as well as council officers and others in charge of promoting cycling, or for delivering highway, traffic or cycling schemes.

For more on the principles of cycle-friendly design and planning, see Cycling UK's briefing at: [www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview](http://www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview)



#### d. Safety measures

##### Cycling UK view:

- National policy should recognise that more and safer cycling should and can go hand-in-hand, and that action should be taken to tackle the actual and perceived fears that deter people from cycling, e.g.: high traffic volume/speeds, lorries and irresponsible drivers, unfriendly road design, while proper enforcement of road traffic law must have a higher priority.
- National and local road safety targets for cycling should be rate-based: e.g. the risk of a cycle casualty per mile or per trip. Perception-based targets should also be set for cycling: e.g. the proportion of the public who regard cycling as safe in their area.
- National and local road safety targets for cycling should be rate-based: e.g. the risk of a cycle casualty per mile or per trip. Perception-based targets should also be set: e.g. the proportion of the public who regard cycling as safe in their area.
- The Government should establish and fund a national target to give every child the opportunity to take part in cycle training free of charge before they leave school.
- Cycle safety awareness campaigns should not make cycling appear unduly dangerous.

Without in any way suggesting that cyclists are blameless, police statistics indicate that the majority of cyclists' injuries are primarily the fault of other road users.<sup>46</sup> They also present very little danger to other road users. Moreover, there is clear evidence that increased cycle use, combined with good provision, is linked to improved cyclist safety.

It follows that cycle safety measures should aim to increase cycle use as well as improve cycle safety, rather than treating cycling itself as a safety problem. That in turn involves tackling the actual and perceived fears that put people off cycling, including: high traffic volumes and speeds; irresponsible driver behaviour; the unfriendly design of many roads and junctions; and lorries.

##### • Cycle safety targets

Cycle safety targets need to incentivise *more* as well as *safer* cycling. When applied to cycling (or indeed to walking), aiming simply to reduce casualty numbers can create a perverse incentive for road safety officers to discourage it. Cycling UK's *Safety in Numbers* campaign, however, has provided the evidence that more and safer cycling can, and should, go hand-in-hand ([www.cyclinguk.org/safetyinnnumbers](http://www.cyclinguk.org/safetyinnnumbers)).

For both national and local target-setting, Cycling UK advocates a combination of:

- *Rate-based targets*: e.g. the risk of a (serious or fatal) cycle casualty per mile or per trip;
- *Perception-based targets*: e.g. the proportion of the public who regard cycling as safe in their area.

Perception-based targets help deter councils from 'dangerising' cycling in their road safety awareness campaigns, and instead promote cycling as a safe and normal activity. They are also a useful substitute for rate-based targets in areas (notably shire counties) that lack the capacity to provide the reliable measurement of cycle use needed for a rate-based target.

The Government has already adopted the above approach for setting indicators (but not targets) at the national level.

For more on cycling and local transport policy, see Cycling UK's briefing at:  
[www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-local-transport](http://www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-local-transport)

- **Cycle training**

Meanwhile, the provision of cycle training to the National Standard (often branded as 'Bikeability') can also encourage people to cycle more, to ride safely and with greater confidence. It can also help parents feel happier about allowing their children to cycle. Moreover, the more people who learn about cyclists' needs from direct, personal experience, the more drivers there will be who know how to interact safely with them. The Government should thus establish and fund a national target to give every child the opportunity to take part in cycle training free of charge before they leave school.

For more on national road safety policy, see:

[www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview](http://www.cyclinguk.org/campaigning/views-and-briefings/road-safety-and-cycling-overview)

For more on cycle training, see Cycling UK's briefing:

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-training](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-training)

- **Cyclist and driver awareness campaigns**

**Drivers:** It is important to make drivers more aware of what they need to do to respect cyclists' safety. Key messages include watching out for cyclists when turning at junctions (particularly roundabouts), leaving sufficient space when overtaking, and not assuming that cyclists should keep out of their way at the side of the road (i.e. there are good safety-related reasons why cyclists are trained to adopt a central position in the traffic lane in some circumstances).

Driver awareness campaigns should be linked to enforcement activity – see next section. The experience of tackling drink-driving shows that the combination delivers stronger results than awareness and enforcement activities conducted in isolation. Awareness campaigns create a climate of public acceptance for the enforcement activity itself, while the enforcement activity ensures that the message reaches those who would not otherwise be receptive to awareness campaigns alone.

For more on driver awareness campaigns, see Cycling UK's briefing:

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-awareness-campaigns-for-drivers](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-awareness-campaigns-for-drivers)

**Cyclists:** It is also important to raise cyclists' awareness of how they can maximise their own safety – particularly when interacting with lorries.

However, care should be taken to avoid cycle safety awareness campaigns that make cycling appear unduly dangerous. This can prove counter-productive by deterring people from cycling or allowing their children to cycle and, as a result, erode the 'safety in numbers' effect, as well as undermining cycling's wider health and other benefits. Given the degree to which these benefits outweigh the relatively low risks involved, ill-judged 'road safety' measures that reduce cycling by even just a few percentage points would shorten more lives than they could possibly save, however beneficial they might be for the remaining cyclists.<sup>47</sup> The emphasis of cycle training and awareness campaigns should therefore focus on positive promotion.

- **Traffic law and the criminal justice system**

Cycling UK fears that inadequately resourced traffic policing, combined with failings in other areas of the criminal justice system, mean that many bad drivers are not being punished adequately and that their access to the roads remains unrestricted. Cycling UK's Road Justice campaign highlights many examples: [www.roadjustice.org.uk](http://www.roadjustice.org.uk).

In Cycling UK's view, therefore, proper enforcement of road traffic law must have a higher priority in national policy. It not only improves road safety, but also helps the police detect and prevent other forms of crime.<sup>48</sup>

We are very concerned both about the significant drop in the numbers of roads traffic police in recent years, and the number of offending drivers still in possession of their licences: in England and Wales, traffic police levels fell by 37% from 2002/3 - 2013/14; and between 2010 and 2014, the number of convicted drivers losing their licences fell by 32% (the drop in the number of people found guilty of road crime over this same period (c13%) is not nearly so steep).<sup>49</sup> The decline in cyclists' safety may well be a reflection of these trends.

Furthermore, introducing the offence of 'causing death by careless driving' in 2008 may have lowered the bar between 'dangerous' and 'careless' driving, despite no change in the legal definitions of these terms.<sup>50</sup> It is perhaps linked to this that convictions for both serious and slight motoring offences have fallen concurrently, at a rate faster than the overall decline in road casualties. This suggests that more instances of bad driving are going unpunished or receiving light sentences that fail to reflect the gravity of the offences.

For more, see Cycling UK's series of road safety and legal briefings, covering the police, law and enforcement and the justice system: [www.cyclinguk.org/campaigning/views-and-briefings](http://www.cyclinguk.org/campaigning/views-and-briefings)

- **Lorries**

Lorries have a relatively low involvement rate in cyclists' injuries, but a very high involvement rate in cyclists' fatalities – i.e. a collision with a lorry is disproportionately likely to prove lethal. Goods vehicles (exc. light vans) account for only around 3.7% of non-motorway motor traffic mileage on all the roads of Great Britain. Yet from 2010-14, they were involved in around 18% of cyclists' fatalities per year.<sup>51</sup>

The involvement rate of HGVs in cycle fatalities is higher than that of buses. The difference is likely to be that lorry drivers sit high up and are surrounded by metal, whereas bus drivers are much lower, and are able to see cyclists both in front and to the side of them thanks to a much larger area of window. Most lorry-cyclist fatalities involve a left-turning lorry, with the cyclist generally being hit by the front (typically the front corner) of the lorry, rather than by the side.

The lorry itself is an inherently dangerous machine, whose design is simply not appropriate for urban streets. This needs to be fully recognised and tackled through the principles of risk management, the primary of aim of which is to eliminate or reduce the problem at source. This should take precedence over training to avoid the hazard, although this should certainly follow.

Aside from improved cycling infrastructure (notably on main roads and at junctions), the most appropriate solutions are therefore:

- Restricting the use of lorries on the busiest roads at the busiest times, with exemptions only for specific journeys that clearly cannot be made in other ways or at other times, and only for vehicles, drivers and operators conforming to 'CLOCS' (Construction Logistics and Cyclist Safety standard), or the equivalent.
- Introducing 'direct vision', allowing drivers to see outside the cab as easily as a bus driver can (and adding this requirement to CLOCS).

Although these are the 'big wins', neither are 'quick wins'. Progress can be made meanwhile by:

- making it standard to fit cameras and sensors onto all lorries operating on urban streets;
- providing actual cycle training (not just cycle awareness training) for lorry drivers; and
- raising cyclist awareness of the risks of overtaking lorries on the left hand side, e.g. through stickers on the rear of lorries, cycle training and 'Exchanging Places' events (where cyclists get to sit in lorry cabs to see the extent of the driver's 'blind spot').

For more on goods vehicles, see  
[www.cyclinguk.org/campaigning/views-and-briefings/goods-vehicles-lorries-hgvs-vans-etc](http://www.cyclinguk.org/campaigning/views-and-briefings/goods-vehicles-lorries-hgvs-vans-etc)





## e. Positive promotion

**Cycling UK view:** The Government should support all ‘smarter choice’ measures that encourage alternatives to driving, and encourage schools, colleges, employers, the health sector and public transport operators to promote and provide for cycling.

Measures that provide encouragement, incentives and opportunities to try out alternatives to the private car are known as ‘smarter choices’. Smarter choices to encourage cycling must go hand-in-hand with improving cycling conditions on the highway. If anything, however, smarter choices are more cost-effective in terms of congestion, yielding on average £10 of benefits to every £1 spent.

Smarter choices measures include: elements of travel plans, advertising and promotional campaigns, cycle maps, marketing directly to individuals, tax incentives, cycle training, rides, events and activities for specific groups in society.

For more on ‘smarter choices’, see Cycling UK’s briefing at:

[www.cyclinguk.org/campaigning/views-and-briefings/smarter-choices](http://www.cyclinguk.org/campaigning/views-and-briefings/smarter-choices)

- **Schools and colleges**

Cycling to school or college helps pupils keep healthy, and develops their confidence, independence and self-esteem, and navigational and roadcraft skills. It also helps tackle local congestion, pollution and road danger created by the school run.

Travel for education contributes significantly to peak time traffic at about 29% of trips between 8 and 9 am in Great Britain, with an additional 18% escorting others to education. Only around 1% of trips for education purposes are cycled.

Involving pupils, parents, teachers and school governors in joint action to make the trips they generate more sustainable can unite a school community and provide a learning experience in social and environmental responsibility and project management.

Cycling is a skill for life. Encouraging as many children as possible to see it as viable transport helps ward off car dependency later in life, and contributes to reducing future traffic volume.

For more on cycling to school, see Cycling UK’s briefing at:

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-schools-and-colleges-ctc-views](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-schools-and-colleges-ctc-views)

- **Cycle-friendly employers**

Encouraging employees to commute by cycle and to cycle on business, can result in a healthier, more productive workforce and lower transport costs. For example, Dutch research has shown that employees who cycle to work take on average one day less sick leave than non-cyclists. Aggregated, this has the potential to offer huge productivity savings.<sup>52</sup>

Workplaces that encourage cycling help mitigate their negative impact on the local and wider environment. If employees are encouraged to cycle rather than drive, congestion is less severe at peak times, which is good for business and the economy.

For more on cycle-friendly employers, see Cycling UK’s briefing at:

[www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-employers-ctc-views](http://www.cyclinguk.org/campaigning/views-and-briefings/cycle-friendly-employers-ctc-views)



- **The role of the health sector**

Health sector bodies potentially have roles to play in shaping local transport and planning policies, and promoting active travel both for health patients and their populations more generally. As a major employer, the NHS should also promote active travel for its own employees.

For more on cycling and the health sector, see Cycling UK's briefing at:  
[www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling](http://www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling)

- **Integration with public transport**

It is important to make it easy for people to combine cycling with using public transport. This reduces dependency on cars, promotes realistic alternatives for long distance travel, and improves access to employment and leisure activities.

A whole package of improvements is necessary for better integration between cycling and public transport. It is no good simply focusing on only one aspect of provision; for example, there is little use in providing cycle parking at a station if access to the station feels unsafe and deters people from cycling there in the first place. Provision of parking should not be used, though, as an excuse to reduce cycle carriage on trains.

While Cycling UK applauds the additional funding that has been granted in recent years to enhance parking at rail stations and in some cases access to them, we fear that under new franchising regimes, train operating companies are losing the incentive to provide adequate space for cycles on trains. Cycling UK believes that all new and refurbished rolling stock must be equipped with both dedicated space for cyclists that they can reserve, plus some flexible space that can be used to accommodate cycles, push chairs, and in peak hours, standing passengers.

Integrating cycling and public transport requires a combination of:

- access to, from, within and through stations and interchanges;
- cycle parking and (where appropriate) storage and hire facilities;
- reasonable provision for cycle carriage on public transport, including sensible reservation systems for longer-distance trains;
- good information, both prior to and during the journey;
- stakeholder engagement and accountability, including cycling forums, and good transparent monitoring of what is working, and what isn't.

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Groningen	A. Various sources, including: Pucher & Buehler. <i>City Cycling</i> (2012); Groningen's bid to host Velo-city 2017 <a href="http://www.groningenvelo-city2017.eu/">www.groningenvelo-city2017.eu/</a> ; and <a href="http://groningenfietsstad.nl/">http://groningenfietsstad.nl/</a>
Amsterdam	A. <a href="http://www.iamsterdam.com/en/media-centre/city-hall/dossier-cycling/cycling-faq">http://www.iamsterdam.com/en/media-centre/city-hall/dossier-cycling/cycling-faq</a>
Denmark	A. The Danish National Travel Survey. <a href="http://www.cycling-embassy.dk/wp-content/uploads/2015/01/2011-2013-Fact-sheet-cycling-in-DK-1.pdf">http://www.cycling-embassy.dk/wp-content/uploads/2015/01/2011-2013-Fact-sheet-cycling-in-DK-1.pdf</a> D. <i>Attitudes of Europeans to Transport Mobility</i> (results of 2013 TNS survey), p10 <a href="http://ec.europa.eu/public_opinion/archives/ebs/ebs_406_en.pdf">http://ec.europa.eu/public_opinion/archives/ebs/ebs_406_en.pdf</a> E. Danish Road Directorate: Mia Stampe Lagergaard & Henrik Nejst Jensen. <i>What do you get for €133 M?</i> Presentation to Velo-City 2013 (Vienna). <a href="http://velo-city2013.com/wp-content/uploads/20130611_mialagergaard.pdf">http://velo-city2013.com/wp-content/uploads/20130611_mialagergaard.pdf</a>



Copenhagen	A. Cycling Embassy of Denmark. <i>Copenhagen's Bicycle Account 2014</i> . May 2015. <a href="http://www.cycling-embassy.dk/2015/05/06/new-bicycle-account-from-copenhagen/">www.cycling-embassy.dk/2015/05/06/new-bicycle-account-from-copenhagen/</a>
Odense	A. Odense Kommune. <i>Mobility Plan 2014-15</i> <a href="http://tinyurl.com/qhreeae">http://tinyurl.com/qhreeae</a>
Germany	A. <i>Mobility Panel Germany</i> . 2014/15. (Table Sheet 9). <a href="http://daten.clearingstelle-verkehr.de/192/123/Bericht_MOP_14_15.pdf">http://daten.clearingstelle-verkehr.de/192/123/Bericht_MOP_14_15.pdf</a> D. <i>Attitudes of Europeans to Transport Mobility</i> (results of 2013 TNS survey), p10 <a href="http://ec.europa.eu/public_opinion/archives/ebs/ebs_406_en.pdf">http://ec.europa.eu/public_opinion/archives/ebs/ebs_406_en.pdf</a> E. ECF News 21/9/2012. Fabian Küster. <a href="http://www.ecf.com/news/15-of-trips-by-bike-germanys-national-cycling-plan-under-the-microscope/">www.ecf.com/news/15-of-trips-by-bike-germanys-national-cycling-plan-under-the-microscope/</a> ; <i>Germany's Bicycle Masterplan 2020</i> . <a href="http://www.bmvi.de/SharedDocs/DE/Anlage/VerkehrUndMobilitaet/Fahrrad/nationaler-radverkehrsplan-2020.pdf?__blob=publicationFile">http://www.bmvi.de/SharedDocs/DE/Anlage/VerkehrUndMobilitaet/Fahrrad/nationaler-radverkehrsplan-2020.pdf?__blob=publicationFile</a>
Muenster	A. Pucher & Buehler. <i>City Cycling</i> . MIT Press 2012 / <a href="http://www.muenster.de/en/bicycles.php">http://www.muenster.de/en/bicycles.php</a>
Berlin	State of Berlin. <i>Berlin Traffic in Figures 2013</i> . <a href="http://www.stadtentwicklung.berlin.de/verkehr/politik_planung/zahlen_fakten/entwicklung/index_en.shtml">http://www.stadtentwicklung.berlin.de/verkehr/politik_planung/zahlen_fakten/entwicklung/index_en.shtml</a> (Figures from 2008. Berlin carries out a traffic census every 5 years – more recent results are awaited)
England	A & D. DfT. <i>National Travel Survey 2014</i> . Sept 2015. <a href="http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/458432/how-people-travel-cycling.pdf">www.gov.uk/government/uploads/system/uploads/attachment_data/file/458432/how-people-travel-cycling.pdf</a> B. DfT. <i>National Travel Survey 2014</i> . Table NTS0313. Sept 2015. <a href="http://www.gov.uk/government/statistics/national-travel-survey-2014">www.gov.uk/government/statistics/national-travel-survey-2014</a> C. Office of National Statistics. <i>2011 Census Analysis, Cycling to Work</i> . March 2014. <a href="http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510">http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510</a> E. All figures from answers to Parliamentary Questions: i. DfT spend, outside London - calculated from answer given 6/11/2014. <a href="http://www.theyworkforyou.com/wrans/?id=2014-11-03.213147.h">www.theyworkforyou.com/wrans/?id=2014-11-03.213147.h</a> ii & iii. DfT + local authority spend (exc. both London and Cycle Ambition Cities) - answer given 23/5/2016. <a href="http://www.theyworkforyou.com/wrans/?id=2016-05-18.37538.h">www.theyworkforyou.com/wrans/?id=2016-05-18.37538.h</a> iv. Projected spend 2020/21 - calculated from answer given 19/4/2016, assuming that each budget line quoted is evenly spread across the years for which it applies; and given that the Cycle Cities Ambition grants finish in 2017/18 and assured Bikeability funding in 2019/20. Includes a funding stream that covers both walking and cycling. <a href="http://www.theyworkforyou.com/wrans/?id=2016-04-11.33301.h">www.theyworkforyou.com/wrans/?id=2016-04-11.33301.h</a>
London	A. Transport for London. <i>Travel in London Report 8</i> . 2015. <a href="http://content.tfl.gov.uk/travel-in-london-report-8.pdf">http://content.tfl.gov.uk/travel-in-london-report-8.pdf</a> (Table 2.4) E. Mayor of London/GLA. <i>Human Streets: The Mayor's Vision for Cycling 3 years on</i> . March 2016. <a href="https://www.london.gov.uk/sites/default/files/human_streets_0.pdf">https://www.london.gov.uk/sites/default/files/human_streets_0.pdf</a> . Total spend 2015/16 = £145m. See also answer to Parliamentary Question 19/4/2016: <a href="http://www.theyworkforyou.com/wrans/?id=2016-05-18.37538.h">www.theyworkforyou.com/wrans/?id=2016-05-18.37538.h</a> For B,C,D see English cities below.
English cities	B & D. Sport England <i>Active People Survey</i> (of adults), published by the DfT. June 2015. <a href="https://www.gov.uk/government/statistics/local-area-walking-and-cycling-in-england-2013-to-2014">https://www.gov.uk/government/statistics/local-area-walking-and-cycling-in-england-2013-to-2014</a> (Tables CWO 111 & CWO 0101). C. Office of National Statistics. <i>2011 Census Analysis, Cycling to Work</i> . March 2014. <a href="http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510">http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510</a>





Cambridge	<p>E. From 2008-2011 (3 years), Cambridge was awarded Cycling City status and granted around £3.8m from the DfT, which it match-funded = £7.6m. The money also benefited parts of South Cambridgeshire, meaning that c.180,000 people were expected to benefit in total = around £14 a head a year. (See Cycling England. <i>Cycling City and Towns Programme Overview. March 2010.</i> <a href="http://ciltuk.org.uk/Portals/0/Documents/The%20Hub/monitoring/Cycling_City_Towns_Programme_Overview_2010.pdf">http://ciltuk.org.uk/Portals/0/Documents/The%20Hub/monitoring/Cycling_City_Towns_Programme_Overview_2010.pdf</a>).</p> <p>(From 2011-15, Cambridgeshire won and match-funded a £5m Local Sustainable Transport Fund (LSTF) grant, which benefited active travel in various areas, including Cambridge).</p> <p>For 2014 &amp; 2015, Cambridge received £4.1m Cycle City Ambition funding from the Government, which it match-funded = £8.2m. Again, South Cambridgeshire benefited = £23 a head a year (see DfT announcement <a href="http://www.gov.uk/government/news/government-shifts-cycling-up-a-gear">www.gov.uk/government/news/government-shifts-cycling-up-a-gear</a> ).</p> <p>For 2015-2018 (3 years), Greater Cambridge (population stated to be 272,622) received an extended Cycle Ambition City grant of £6m, adding £4.5m of local contributions = £10.5m = £13 a head per year: <a href="https://www.gov.uk/government/news/nick-clegg-announces-multi-million-pound-boost-for-cycling-in-8-major-cities">https://www.gov.uk/government/news/nick-clegg-announces-multi-million-pound-boost-for-cycling-in-8-major-cities</a> &amp; <a href="http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/68/transport_funding_bids_and_studies">http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/68/transport_funding_bids_and_studies</a></p>
Bristol	<p>E. From 2008-2011 (3 years), Bristol was awarded Cycling City status and £11.5m, which also benefited parts of South Gloucestershire, meaning that a total of 570,000 people were expected to benefit. The grant was match-funded locally = £23m = £13.45 a head a year.</p> <p>(From 2011-15, Bristol City Council won and match-funded a £24m LSTF grant for boosting West of England Sustainable Travel)</p> <p>For 2014 &amp; 2015, a Cycle City Ambition grant of £7.8m was awarded to the West of England (covering four council areas: Bristol, S Gloucestershire, Bath &amp; NE Somerset, and N Somerset). This was matched-funded locally with £3.3m = £11.1m. See <a href="http://www.gov.uk/government/news/government-shifts-cycling-up-a-gear">www.gov.uk/government/news/government-shifts-cycling-up-a-gear</a></p> <p>For 2015-2018 (3 years), Bristol/West of England received an extended Cycle Ambition City grant of £19.2m, match-funded locally with c£11.5m = £30.5m The population expected to benefit is around 867,000 people - <a href="http://travelwest.info/wp-content/uploads/2015/03/appendix-c-detailed-financial-breakdown.pdf">http://travelwest.info/wp-content/uploads/2015/03/appendix-c-detailed-financial-breakdown.pdf</a> = £11.80 a head a year.</p> <p>Bristol's cycling strategy commits the council to spend £16 per head per year. See press release 7/72014. <a href="http://news.bristol.gov.uk/first-cycle-strategy-aims-to-get-everyone-pedalling/">http://news.bristol.gov.uk/first-cycle-strategy-aims-to-get-everyone-pedalling/</a></p>
York	<p>E. From 2008-2011, York was awarded Cycling City status and received £3.8m, which it was expected to match-fund = £7.6. The population expected to benefit = 184,000 people = £14 a head per year. <a href="http://ciltuk.org.uk/Portals/0/Documents/The%20Hub/monitoring/Cycling_City_Towns_Programme_Overview_2010.pdf">http://ciltuk.org.uk/Portals/0/Documents/The%20Hub/monitoring/Cycling_City_Towns_Programme_Overview_2010.pdf</a></p> <p>(From 2011-2015, York received a £4.6m LSTF grant to boost active travel in the northern quadrant of the city. Match-funded locally, the total came to £7.71m. Some, but not all, was spent directly on cycling, building on the work carried out as a Cycling City: <a href="http://democracy.york.gov.uk/ieListDocuments.aspx?Cid=668&amp;Mid=8923&amp;Ver=4">http://democracy.york.gov.uk/ieListDocuments.aspx?Cid=668&amp;Mid=8923&amp;Ver=4</a> - see LSTF report 15/9/2015).</p>
Birmingham	<p>E. (For 2011-15, Birmingham City Council £4.1m won an LSTF grant to run the Bike North Birmingham project. With local match-funding the total sum came to £6.4m. <a href="http://www.birmingham.gov.uk/birminghamcyclerevolution">http://www.birmingham.gov.uk/birminghamcyclerevolution</a> )</p> <p>For 2014 &amp; 2015, Birmingham was awarded Cycle Ambition City funding of £17 million, matched-funded by £7.3m = £24.3m. The population of Birmingham is about 1.1m = £12.15 a head per year. <a href="http://www.gov.uk/government/news/government-shifts-cycling-up-a-gear">www.gov.uk/government/news/government-shifts-cycling-up-a-gear</a> .</p> <p>For 2015-2018 (3 years), Birmingham received an extended Cycle Ambition City grant of £22m, match-funded locally by £7.9m = £29.9 = £9 a head a year. <a href="https://www.gov.uk/government/news/nick-clegg-announces-multi-million-pound-boost-for-cycling-in-8-major-cities">https://www.gov.uk/government/news/nick-clegg-announces-multi-million-pound-boost-for-cycling-in-8-major-cities</a></p> <p>For more on Birmingham's funding for its cycle revolution, see: <a href="http://www.birmingham.gov.uk/birminghamcyclerevolution">http://www.birmingham.gov.uk/birminghamcyclerevolution</a></p>



<b>Scotland</b>	<p>A &amp; B. Scottish Government. <i>Transport and Travel in Scotland 2014</i>. Aug. 2015. <a href="http://www.transport.gov.scot/statistics/transport-and-travel-scotland-all-editions">www.transport.gov.scot/statistics/transport-and-travel-scotland-all-editions</a> (Tables TD2 &amp; 25a/b)</p> <p>C &amp; D Cycling Scotland. <i>Annual Cycling Monitoring Report 2015</i>. Feb. 2016 <a href="http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf">http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf</a></p> <p>E. 2012-16: SPICe. <i>Walking and Cycling</i>. April 2014. <a href="http://www.scottish.parliament.uk/ResearchBriefingsAndFactsheets/S4/SB_14-30.pdf">www.scottish.parliament.uk/ResearchBriefingsAndFactsheets/S4/SB_14-30.pdf</a> (Figures based on an annual survey compiled by Spokes, the Lothian Cycle Campaign, now discontinued - <a href="http://www.spokes.org.uk/documents/papers-documents/councils-survey/survey-ends-in-2015/">www.spokes.org.uk/documents/papers-documents/councils-survey/survey-ends-in-2015/</a> ).</p> <p>2016/17: Based on Scottish Government draft budget allocation to sustainable and active travel, and to 'Cycling, Walking and Safer Routes' (CWSS), divided by population. <a href="http://www.gov.scot/Publications/2015/12/9056">http://www.gov.scot/Publications/2015/12/9056</a>. (p130)</p>
Edinburgh	<p>A. City of Edinburgh (CEC). <i>Transport Strategy 2014-19</i>. Jan 2014. <a href="http://www.spokes.org.uk/wordpress/wp-content/uploads/2009/03/1401-14-Item_No_7.2_Local_Transport_Strategy_2014_2019_FINAL.pdf">www.spokes.org.uk/wordpress/wp-content/uploads/2009/03/1401-14-Item_No_7.2_Local_Transport_Strategy_2014_2019_FINAL.pdf</a></p> <p>C. Cycling Scotland. <i>Annual Cycling Monitoring Report 2015</i>. Feb. 2016 <a href="http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf">http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf</a></p> <p>E. In February 2012, CEC agreed to spend 5% of its transport budget on cycling and increase this amount each year by 1%. Hence, cycling is due for an allocation of 9% in 2016/17. City of Edinburgh Pledge 45 <a href="http://www.edinburgh.gov.uk/info/20141/council_pledges/713/maintaining_and_improving_the_quality_of_life_in_edinburgh">www.edinburgh.gov.uk/info/20141/council_pledges/713/maintaining_and_improving_the_quality_of_life_in_edinburgh</a> .</p> <p>See also Report to Transport and Environment Committee 15 March 2016, Item 7.7, <i>9% Budget Commitment to Cycling</i> <a href="http://www.edinburgh.gov.uk/meetings/meeting/3899/transport_and_environment_committee">http://www.edinburgh.gov.uk/meetings/meeting/3899/transport_and_environment_committee</a>. The projected capital and revenue spend 2016/17 (9% of the council's transport budget) = c£1.8m. The population of Edinburgh is about 493,000 people = £3.65 a head a year.</p>
Glasgow	<p>C. Cycling Scotland. <i>Annual Cycling Monitoring Report 2015</i>. Feb. 2016 <a href="http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf">http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf</a></p>
<b>Wales</b>	<p>B, C &amp; D. Welsh Government. <i>Statistical Bulletin. Walking and Cycling in Wales: Active Travel in Wales, 2014-15</i>. Oct. 2015 <a href="http://gov.wales/docs/statistics/2015/151028-active-travel-walking-cycling-2014-15-en.pdf">http://gov.wales/docs/statistics/2015/151028-active-travel-walking-cycling-2014-15-en.pdf</a></p> <p>E. National Assembly for Wales Enterprise and Business Committee. <i>Active Travel: The start of the journey</i>. Feb 2016. <a href="http://www.assembly.wales/laid%20documents/cr-ld10582/cr-ld10582-e.pdf">http://www.assembly.wales/laid%20documents/cr-ld10582/cr-ld10582-e.pdf</a></p>
Cardiff	<p>C. Office of National Statistics. <i>2011 Census Analysis, Cycling to Work</i>. March 2014. <a href="http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510">http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/publications/r-e-reference-tables.html?edition=tcm%3A77-353510</a></p>
<b>Northern Ireland</b>	<p>A &amp; C. Department for Infrastructure, N Ireland. <i>Travel Survey for Northern Ireland 2012-14</i>. Tables 3.6, <a href="https://www.infrastructure-ni.gov.uk/publications/travel-survey-northern-ireland-depth-report-2012-2014">https://www.infrastructure-ni.gov.uk/publications/travel-survey-northern-ireland-depth-report-2012-2014</a>. See also DRDNI's Bicycle Strategy for Northern Ireland (Aug.2015), which acknowledges that "the funding available for cycling has been limited and spread thinly across Northern Ireland." The Strategy notes calls for £10 per head per year, rising to £20, but said that fiscal constraints made such figures 'highly ambitious'.</p>

<sup>32</sup> Cavill N et al. *Economic analyses of transport infrastructure and policies including health effects relating to cycling and walking: a systematic review*. Transport Policy vol 16 issue 1, p 46 (see [www.sciencedirect.com/science/article/pii/S0967070X08000450](http://www.sciencedirect.com/science/article/pii/S0967070X08000450)).

<sup>33</sup> Standing Advisory Committee on Transport Assessment (SACTRA). *Transport and the economy*. [http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft\\_econappr/documents/pdf/dft\\_econappr\\_pdf\\_022512.pdf](http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft_econappr/documents/pdf/dft_econappr_pdf_022512.pdf)

<sup>34</sup> Scotney D. *Does transport investment create jobs and lead to economic growth?* Oct 2012. [www.eltis.org/index.php?uid=ZGp2ZQLX&ID1=4&id=107](http://www.eltis.org/index.php?uid=ZGp2ZQLX&ID1=4&id=107)

<sup>35</sup> An open letter to the UK Transport Secretary from 32 transport professors at UK universities, 2013. [www.tps.org.uk/main/news/id/0490/](http://www.tps.org.uk/main/news/id/0490/)

<sup>36</sup> Standing Advisory Committee on Trunk Road Assessment. *New roads and the generation of traffic*, 1994 (see <http://webarchive.nationalarchives.gov.uk/20121107103953/http://www.dft.gov.uk/publications/trunk-roads-and-the-generation-of-traffic/>)

<sup>37</sup> DfT. Road Traffic Forecasts. <https://www.gov.uk/government/publications/road-transport-forecasts-2013>



<sup>38</sup> Local Transport Today. Article by Tom Van Vuren. 1/4/2016. <https://www.transportxtra.com/publications/local-transport-today/news/48565/opening-up-access-to-ntm-is-not-without-risk->

<sup>39</sup> At the beginning of 2014, Cycling UK met with DfT official to discuss revisions to the NTM. For more, see: <https://www.cyclinguk.org/blog/chris-peck/why-models-matter-ctc-meets-dfts-modelling-team>

<sup>40</sup> <http://www.cedar.iph.cam.ac.uk/research/modelling/npct-tool/>

<sup>41</sup> DfT. Road Traffic Forecasts 2015. March 2015. <http://www.cedar.iph.cam.ac.uk/research/modelling/npct-tool/>

<sup>42</sup> DfT. *Reported Road Casualties Great Britain 2013*. Sept. 2014. Table RAS 20006. [www.gov.uk/government/statistics/reported-road-casualties-great-britain-annual-report-2013](http://www.gov.uk/government/statistics/reported-road-casualties-great-britain-annual-report-2013)

<sup>43</sup> See <https://tfl.gov.uk/corporate/publications-and-reports/streets-toolkit>

<sup>44</sup> See <http://gov.wales/topics/transport/walking-cycling/activetravelact/implementation/?lang=en>

<sup>45</sup> See [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/3808/ltn-2-08.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3808/ltn-2-08.pdf)

<sup>46</sup> [www.cyclinguk.org/blog/roger-geffen/boris-wildly-wrong-to-claim-23-serious-and-fatal-cycling-injuries-are-due-to-law-b](http://www.cyclinguk.org/blog/roger-geffen/boris-wildly-wrong-to-claim-23-serious-and-fatal-cycling-injuries-are-due-to-law-b)

<sup>47</sup> See <http://www.cyclehelmets.org/1249.html>. Although the paper described here relates to cycle helmets, the underlying mathematical argument would apply equally to other road safety measures which deterred cycle use.

<sup>48</sup> See [www.cyclinguk.org/campaigning/views-and-briefings/traffic-police-and-other-enforcement-agencies](http://www.cyclinguk.org/campaigning/views-and-briefings/traffic-police-and-other-enforcement-agencies).

<sup>49</sup> Ministry of Justice. *Criminal justice system statistics quarterly: December 2014*. May 2015.

<https://www.gov.uk/government/statistics/criminal-justice-system-statistics-quarterly-december-2014> (Overview tables A7.5 & A7.2).

<sup>50</sup> Cycling UK Road Justice report: *Charging and prosecution*. <http://www.roadjustice.org.uk/road-justice-reports>

<sup>51</sup> The traffic statistics in this section come from: DfT. *Road Traffic Estimates in Great Britain 2014*. June 2015. Table TRA0104 (2010-14); and the road casualty statistics come from: DfT. *Reported Road Casualties Great Britain: 2014*. Sept. 2015. Table RAS40004 (2010-14). [www.gov.uk/government/collections/road-traffic-statistics/](http://www.gov.uk/government/collections/road-traffic-statistics/) / [www.gov.uk/government/collections/road-accidents-and-safety-statistics](http://www.gov.uk/government/collections/road-accidents-and-safety-statistics)

<sup>52</sup> TNO Quality of Life. *Reduced sickness absence in regular commuter cyclists can save employers 27 million euros*. 2009. <http://www.vcl.li/bilder/518.pdf>