

Cycle-friendly employers & cycle-commuting

THIS BRIEFING COVERS

Commuting/business travel facts; the benefits of cycling for commuting and business travel; action from employers; managing health and safety issues.

HEADLINE MESSAGES

- Encouraging staff to cycle to work and for business journeys helps improve staff health and can boost productivity. It can also reduce a company's transport costs.
- Workplaces that promote cycling successfully 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.

KEY FACTS

- The 2011 Census found that 741,000 working residents in England and Wales aged 16 to 74 cycled to work - 90,000 more than in 2001. Over those ten years, however, the proportion of working residents who commuted by bike struggled to rise above 2.8%.
- Together, commuting (i.e. travel to/from work) and business travel (i.e. travel as part of work) make up almost a quarter of all weekday trips in England (19% & 4% respectively).
- In 2015 (England), 37.5% of cycle trips were for commuting/business purposes; 20% of car/van trips (as driver or passenger) were for commuting/business purposes.
- In Scotland, over 5% of people commute at least regularly in 14 of 32 local authorities (15.2% in Edinburgh City, in 2013/14).
- The number of people living in London who cycled to work more than doubled in ten years from 77,000 in 2001 to 155,000 in 2011. In Cambridge, 29% of working residents cycle to work - more than anywhere else - but for 29 other local authorities, this figure is 1%.
- On average, employees who cycle-commute take at least one day p.a. less off sick than colleagues who do not cycle to work, while car commuters are at least 13% more likely to feel constantly under strain or unable to concentrate than those who cycle/walk to work.

Cycling UK VIEW

- Employers should recognise the health, environmental and economic benefits of promoting the use of cycles for commuting and work purposes.
- Actions that employers should take include:
 - making cycling an integral part of a travel plan
 - paying the full, tax-free cycle mileage rate
 - subscribing to other tax incentives (e.g. the Cycle to Work Scheme)
 - incentivising cycling through 'workplace challenges', events etc.
 - providing good quality facilities (e.g. cycle parking, showers and lockers)
 - supporting a bicycle users group (BUG)
 - supplying 'pool' bikes
- Employers should not be discouraged from promoting cycling because of liability fears; neither should they make cycle training or wearing a helmet a prerequisite for cycling on business.



BACKGROUND INFORMATION

1. Travelling to work and business travel: facts

a. General

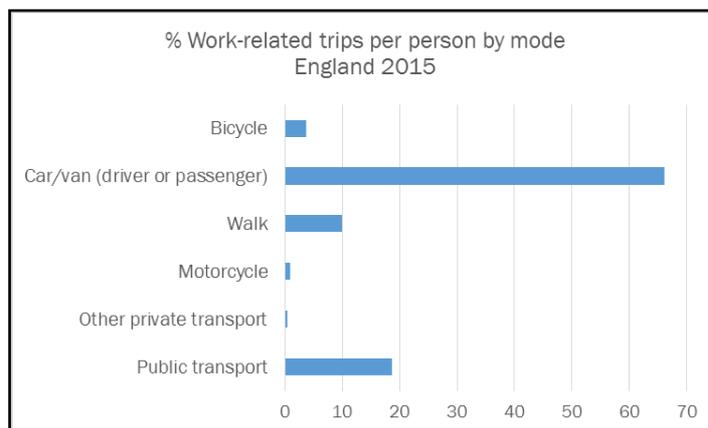
How many trips are for work-related travel?

- Together, commuting (i.e. travel to/from work) and business travel (i.e. travel as part of work) make up almost a quarter of all weekday trips in England (19% & 4% respectively).¹



How many work-related trips are cycled?

- In 2015 (England):²
 - 37.5% of cycle trips were for commuting/business purposes;
 - 20% of car/van trips (as driver or passenger) were for commuting/business purposes;
 - Most commuting and business trips were driven (around 65% & 75% respectively), and only a very small percentage cycled (fewer than c4.2% & 1.4% respectively).



How far do people commute?

- In England and Wales, the average commuting distance is 15km or 9.3 miles; 55% of part-time and 38% of full-time workers commute less than 5km (about three miles).³

b. Cycling to work:

According to the 2011 Census, which offers the most comprehensive picture of commuting habits:^{4,5}

- In England & Wales, 741,000 working residents aged 16 to 74 cycled to work - 90,000 more than in 2001. However, the proportion of working residents who cycle to work has struggled to rise above 2.8%.
- 33,821 working residents in Scotland and 6,253 in N Ireland cycled to work.
- Men are more likely to cycle to work than women (3.9% of male workers compared with 1.6% of female workers in England & Wales).
- Cycling is most common amongst people working in elementary and professional occupations and least common amongst managers, directors and senior officials (England & Wales).

The Census also makes it clear that some places are doing much better than others:

- Between 2001 and 2011 the number of people living in London who cycled to work more than doubled from 77,000 in 2001 to 155,000 in 2011. There were also substantial increases in other cities including Brighton (increasing by 109% between 2001 and 2011), Bristol (94%), Manchester (83%), Newcastle (81%) and Sheffield (80%).

- In contrast, in the majority of English and Welsh local authorities (202 out of 348), the numbers of working residents cycling to work declined between 2001 and 2011.
- In Cambridge, 29% of working residents cycled to work – more than anywhere else. Next is Oxford (17%), followed by Isles of Scilly and Hackney (14%). There are also 31 local authorities where over 5% of working residents cycled to work (about 10% in six of them). On the other hand, in 29 local authorities, less than 1% of working residents cycled to work.

In Scotland (2013-14):⁶

- The proportion of those cycling to work at least 'regularly' is over 5% in 14 of 32 local authorities, the five highest being: Edinburgh City (15.2%); Argyll & Bute (12%); Moray (12%); Highland (11%); Dumfries and Galloway (9.2%). As a whole, 6% of people in Scotland cycle to work at least regularly.

2. The benefits of cycling for commuting and business travel

Cycling UK view: Employers should recognise the health, environmental and economic benefits of promoting the use of cycles for commuting and work purposes.

Encouraging cycling instead of driving helps workplaces mitigate the negative impact their transport activities have on the environment, on people's health and on the economy.

There is strong potential for converting the short, two to five miles commuting/business trips that people usually drive into cycling journeys: most people are able to cycle these distances, and it's a cost-effective, healthy option for them. Combining cycling with public transport makes longer commuting/business journeys feasible too.

a. Health

Cycling is a convenient and low-cost way to get to work and exercise at the same time, so it offers health benefits for individuals, workforces and the public overall:

- A Dutch study found that employees who regularly cycle to work are less frequently ill, with on average more than one day p.a. less off sick than colleagues who do not cycle to work.⁷
- A population-wide study in Copenhagen found that people who cycled to work had a 39% higher mortality rate than their non-cycle-commuting colleagues. This was the case regardless of whether they sometimes took part in other physical activities at other times.⁸
- Cycle commuting improves fitness in men and women and is inversely associated with body mass index (BMI - a measure of whether someone is a healthy weight for their height), obesity, triglyceride levels, blood pressure, and insulin level in men.⁹
- Active commuting has a beneficial effect on overall psychological wellbeing when compared to car travel. For instance, car commuters are at least 13% more likely to feel constantly under strain or unable to concentrate than those who cycle or walk.¹⁰
- Health is also a very popular reason for cycling to work: 77% of the cycle commuters questioned in Cyclescheme's annual survey (2015) said it was one of their motivations. Building exercise into their daily regime (74%) and fresh air (52%) were also top motivators (along with saving money (47%) and losing weight (40%)).¹¹

Cycling and health is covered in more detail in Cycling UK's briefing at:
www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling



b. Environment

Road transport is responsible for high levels of local noise, greenhouse gas emissions and air pollution.

- In the UK, road transport is responsible for about a third of nitrogen oxides emissions, and a quarter of particulate matter. These are known health hazards.¹²
- Overall, the transport sector emitted 21% of the UK's greenhouse gases in 2013; 92% of this came from road transport (as opposed to air, rail etc.); and 99.1% was CO₂.¹³
- Cycling UK calculates that the average person making a daily commute of four miles each way would save half a tonne of CO₂ per year by switching from driving to cycling.¹⁴ This represents about 6% of their personal carbon footprint.

For more on air quality and climate change, see Cycling UK's briefings at:
www.cyclinguk.org/campaigning/views-and-briefings/air-quality &
www.cyclinguk.org/campaigning/views-and-briefings/climate-change

c. The economy and business savings

Cycling is beneficial not just to the national economy, but also helps businesses save money:

- The Cycle to Work scheme (see 3b) generates at least £72 million in economic benefits for the UK economy and employers through improved physical fitness and associated health benefits, amounting to over twice the estimated cost to the Treasury in lost tax and National Insurance.¹⁵
- A 2011 report from the London School of Economics found that in terms of reduced absenteeism, cycling already saved the economy £128m p.a. and could save a further £2b over the following ten years.¹⁶
- A 2007 study commissioned by Cycling England concluded that the value for each additional cyclist could be £382 p.a., maximum.¹⁷
- The authors of the Dutch study mentioned above (see 'Health') calculated that between them employers in the Netherlands could save around 27 million Euros in terms of absenteeism if they encouraged more people to cycle.¹⁸
- Parking space for cycles is far less costly than accommodating cars. GlaxoSmithKline in West London estimates that it costs them £2,000 a year to maintain one car parking space (see Case Study below). One car parking space can easily accommodate around eight cycles.
- The tax-free cycle mileage rate for business travel (20p) is less than half that for cars (45p).

For more on the economic benefits of cycling, see Cycling UK's briefing at:
www.cyclinguk.org/campaigning/views-and-briefings/cycling-and-economy





3. Action from employers

Cycling UK view: Actions that employers should take include:

- making cycling an integral part of a travel plan
- paying the full, tax-free cycle mileage rate
- subscribing to other tax incentives (e.g. the Cycle to Work Scheme)
- incentivising cycling by entering 'workplace challenges' and putting on events etc.
- good quality facilities (e.g. cycle parking, showers and lockers) and 'pool bikes'
- supporting a bicycle users group (BUG)

a. Travel plans

A travel plan is a collection of practical measures that a workplace develops to help it reduce its car use for commuting and business travel. The benefits are likely to exceed any initial or ongoing outlay.

A good, cost-effective plan will have cycling at its core, set out ways to encourage more staff to cycle instead of drive, and address anything that puts them off (e.g. insecure cycle parking, no lockers etc – see 3g below). Some larger companies appoint Travel Plan Officers to oversee and monitor the strategy, while many also talk to their local council about road safety and/or access problems. A hub of local advice on travel planning, from the council or elsewhere, may also be available, e.g. www.travelplans.org.uk/ in Manchester.

The HMRC says that certain specific benefits provided through a travel plan can attract a tax exemptions.¹⁹

The Essential Guide to Travel Planning, from the Department for Transport, is a useful resource.²⁰

CASE STUDY

- GlaxoSmithKline (GSK), the healthcare company, has been encouraging its 3,000+ staff to cycle to its premises in West London since 2002. The company offers a range of cycling facilities including parking, maps, incentives and promotions, purchasing, training and repair facilities, plus changing rooms with showers, towels, irons, dryers and storage.
- GSK says: "Each cyclist, not requiring a car parking space, saves GlaxoSmithKline £9,900 and cyclists at GSK House save 88 tonnes of CO2 each year by cycling."
- In a survey of the GSK House cycling group, 92% of respondents agreed that their health improved as a direct result of the support they received from GSK to cycle to work; 74% stated they were more productive and 73% believed they were more motivated.

More at:

www.bitc.org.uk/our-resources/case-studies/glaxosmithkline-sustainable-travel-and-new-ways-working

Other useful case studies include: Boots, Bluewater retail and leisure, Nottingham City NHS, Pfizer & University of Bristol. See DfT's [Making Travel Plans Work](#)



b. Tax incentives

- **Mileage rates**

Paying staff the full, tax-free mileage rate of 20p a mile for using their own cycles for business purposes is a good way of encouraging cycling and saving money: at 45p for the first 10,000 miles, the rate for cars is over twice as much. **Note:** it is possible to pay more than 20p, but it then attracts tax; the benefit is only payable for cycling on business, not for cycle commuting.

- **Cycle to Work Scheme**

More and more employers are providing cycle/cycling safety equipment to their staff through the Government's salary-sacrifice *Cycle to Work Scheme*. The scheme is very popular and, according to the Cycle to Work Alliance, generates 9,200 new cyclists every year, with 183,423 people signing up in 2014, an 11.6% increase over 2013.^{21, 22}

Through Cycle to Work, the employee typically pays a monthly rental for a bike they should, under the terms, use mainly for commuting to and from their workplace. The payment is deducted from their salary before national insurance and income tax. This means that their taxable income is smaller, so they pay less tax. At the end of the loan period, the employer can invite the employee to buy it. On average, staff can save up to 40% of the total cost of a new cycle.

VAT registered employers can reclaim VAT on the purchase of the cycle (or related safety equipment) at their marginal rate and pass this on as an additional saving to staff.

Some employers hesitate to introduce the scheme because they worry about the administrative burden. However, there are a number of companies - or 'facilitators' (usually, but not necessarily bike retailers) - set up to help. They are now very experienced and easy to identify on the Internet.

Fortunately, in 2016 the Government made the scheme exempt from its plans to subject most salary sacrifice schemes to the same tax as cash income.²³

- **Lending or hiring cycles or cyclists' safety equipment**

If an employer lends or hires cycles or certain cyclists' safety equipment to employees, the benefit is exempt from tax on employment income. The cycles or equipment should be generally available to all employees, and mainly used for travel between home and the workplace. The exemption also covers the provision of a voucher for hiring bicycles and equipment.

For more on all the above tax incentives, see our guide at:
www.cyclinguk.org/article/campaigns-guide/tax-incentives

c. Workplace challenges and other events

- **Workplace cycle challenges**

Workplace challenges are, essentially, fun competitions between organisations in a given town/urban area, or between worksites of a large employer, to see who can get the most employees to cycle.

Usually, participants are invited to give cycling a try over two to three weeks, log their activity online and receive positive feedback (e.g. calories burned, CO2 saved etc.). They can cycle wherever they feel comfortable and whenever they like over the challenge period, and even very brief rides count.

- **Cycle to Work Days**

Encouraging cycling to work on specific days (in Bike Week (bikeweek.org.uk/), or at any other time of the year) are good motivators. Employees used to be able to enjoy a tax-free meal (e.g. breakfast) paid for by their employer, but unfortunately the Government axed this benefit in 2013.

d. Cycle facilities

- **Cycle parking:** somewhere secure and convenient to store cycles during the working day is essential. If space around the premises is limited, a good alternative may be to fit wall-mounted racks/hooks in a locked room inside.

For more on cycle parking, see:

www.cyclinguk.org/article/campaigns-guide/cycle-parking-good-practice

- **Showers, lockers and drying room:** cyclists appreciate being able to shower at work and keep their cycling equipment in a secure locker. A drying room is also welcome in wet weather.

e. Bicycle user groups (BUGs)

A BUG is a group of staff who help an employer cater well for cyclists' needs. Often championed by a keen cyclist plus a core of fellow employees, some BUGs not only look after the interests of existing cyclists, but also work to encourage other employees to take up cycling by, for instance, 'bike-buddying', offering advice on all-weather cycling kit, routes, etc.

Active backing from the management helps make workplace cyclists feel valued. Regular meetings, a small yearly budget (e.g. for leaflets, events etc.) and the use of facilities (e.g. photocopying, noticeboard, meeting space, webpage etc.) are good ways for employers to show their support.

For more on BUGs, see Cycling UK's guide:

www.cyclinguk.org/article/campaigns-guide/bicycle-user-groups-bugs

f. Pool bikes

A fleet of cycles available to all staff for any kind of journey, is a good way of building up a workplace cycling culture. It gives people an efficient, cost-effective and convenient transport option, especially for local meetings, travel between sites or lunchtime errands. Strict health and safety requirements do apply to the provision of pool bikes (see below, p9).

- Transport for London's *Pool Bikes for Business* is a useful guide. It includes advice on liability, fleet management and insurance.

<http://content.tfl.gov.uk/pool-bikes-for-business.pdf>

g. The barriers

A combination of the above measures may help staff overcome at least some of the barriers to cycle commuting. Distance (c35%) and the weather are both deterrents for a significant proportion of people, but so are motorists' behaviour, motor traffic volume and speed, rough road surfaces, being unfit or lazy, arriving at work in an unkempt state, no bike and/or no cycle parking.²⁴





4. Managing health and safety issues

Cycling UK view: Employers should not be discouraged from promoting cycling because of liability fears, neither should they make wearing a helmet or training a prerequisite for cycling on business.

a. Liability and risk

Some employers worry about their liability if they promote cycling in any way. Sometimes their health and safety departments may even advise against it, and/or they adopt a regulatory approach that is more likely to depress cycling levels than boost them. There is no justification, however, for exaggerating the risks of cycling and taking a disproportionate approach to managing them:

- The health and other benefits of cycling are significant and far outweigh the risks (see section 2), yet many people think it is far more dangerous than it actually is. Generally speaking, you are about as unlikely to be killed in a mile of cycling as in a mile of walking (although in both 2014 and 2015, pedestrians fared rather worse).²⁵
- Cyclists are far less likely than drivers to cause death or injury to members of the public, making promoting cycling as an alternative to driving a responsible approach: in 2015 (GB), of the 541 reported road deaths involving a driver/rider driving for work (i.e. on business), 437 (81%) were neither the driver nor one of their passengers. A further 208 deaths were reported in road traffic collisions involving a driver/rider commuting to or from work, of whom 77 (37%) were not the driver/rider or their passenger.²⁶
- The Health and Safety Executive's guidance on managing work-related road safety, which applies "to any employer, manager or supervisor with staff who drive, or ride a motorcycle or bicycle at work" stresses that employers are required to take account not just of the risks to their own employees but also to third parties. Also, it says nothing to suggest that safety issues relating to staff cycling need to be managed.²⁷
- By identifying cycling as a health and safety risk, an employer becomes responsible for all aspects of managing that risk, thus adding to their liability burden rather than protecting themselves from it. This reinforces the point that employees should not put disproportionate effort into managing cycle safety compared with other transport modes. Ultimately, it is the employee's responsibility to comply with road traffic law and, if anything is putting staff at risk, it is not the employer, but hostile road conditions (e.g. bad driving, poor infrastructure etc.).



Extracts from the *Travel Plan Resource Pack*, Section 5, (DfT, 2006):

“Employers have a legal duty under the Health and Safety at Work Act ‘to ensure, so far as is reasonably practicable, the health and safety and welfare at work of employees’. An employer’s responsibilities for pool bikes are no different from those that apply to any other company-provided vehicle, i.e. it must ensure that the vehicle is roadworthy and the user is competent to use it in accordance with the Highway Code.

As with a company car, responsibility for compliance with road traffic law rests with the cyclist; although clearly the statutory requirements for a valid driving licence, MOT and insurance do not apply to cyclists.

When assessing the risks, it is important to adopt a consistent approach to all modes of transport, for example, car travel is considerably more dangerous than travel by rail, however, few organisations would discourage people from driving on that basis. [...]. In addition, the risks associated with cycling are much lower than is popularly believed to be the case. [...]

“Maintenance and inspection

The Provision and Use of Work Equipment Regulations 1998 apply so, as with any other company-provided vehicle, the employer has a legal duty to ensure the cycles are safe for use and maintained in a safe condition. A regular maintenance programme is, therefore, essential. One problem with many pool bike schemes is that no-one takes ownership of them, which means that tyres, brakes etc. are not checked regularly. This could be a job for the fleet manager where there is one (who could undertake specific cycle maintenance training if he/ she does not already hold these skills), as they are used to planning service intervals for other vehicles. Alternatively, consider agreeing a maintenance plan with a local cycle shop. You could consider issuing a standard checklist, covering basic safety checks like brakes, tyres and lights, for pool-bike users to go through at the time they take out the bike. Whatever maintenance procedures are set up, it is important that they are adhered to, as not to do so could increase the employer’s liability in case of an accident.

“Insurance

The employer should ensure that employees are covered by insurance whilst riding pool bikes. Ideally, this should be provided by the employer and cover damage to the bike, third-party damage and personal injury. There should be parity with insurance cover for users of pool cars. If the onus for insurance is put on to the employees, this might deter use of the bikes, and would also be considered unfair by many employees when drivers of pool cars and vans would not be expected to provide their own insurance.

“Competence to ride safely

To fulfill its Health and Safety at work responsibilities, the employer needs to be satisfied that its employees are competent to use any equipment it provides, including pool bikes. As there is no formal test and licensing system for bicycles, defining the level of competence required to ride safely is less clear-cut than with a car. The approach adopted by many pool bike providers is to require staff to declare formally that they are competent.”

<http://webarchive.nationalarchives.gov.uk/20070207080646/http://www.dft.gov.uk/pgr/sustainable/travelplans/work/resourcepackemployers/section5identifyingmeasures>



b. Cycle training for staff

Some employees may well welcome high quality national standard cycle training (often branded as 'Bikeability') before they embark on cycling for business purposes, or for their work commute. Such training is easy for a company to arrange and offer to the whole of their workforce, and it helps to promote cycling in a positive way. <https://bikeability.org.uk/>

However, employers should not make cycle training a prerequisite for 'allowing' members of staff to cycle. This could suppress interest in cycling and, as cyclists do not have to take tests or hold licences, there is no legally recognised qualification for employers to check anyway. Also, there is no formal definition of 'competence', so settling on a level of skill that renders someone 'eligible' to cycle for work is problematic. Cycle training should therefore only ever be voluntary.

For more on cycle training, see Cycling UK's briefing at:
www.cyclinguk.org/campaigning/views-and-briefings/cycle-training

c. Cycle helmets

Helmets have not been shown to be an effective way to reduce cyclists' injury risks. Indeed they might even be counter-productive, by encouraging drivers or cyclists to behave less cautiously, and/or by increasing the risks of neck and other injuries. Compelling employees to wear helmets if they cycle for work in some capacity is therefore not justified in terms of health and safety.

Cycling UK understands from the Health and Safety Executive that cycle helmets are not defined in law as 'Personal Protective Equipment' (PPE) and are specifically excluded from the PPE regulations. As a result, an employer who wishes to make helmets compulsory for work-related cycling would have to demonstrate that there was something particular about the kind of cycling required that would make their staff particularly prone to some type of injury for which a helmet might provide protection.

Should an employer make helmets compulsory as PPE, they would then become responsible not only for ensuring that helmets are worn, but also for providing them and ensuring that they are maintained in a safe condition. In other words, rather than protecting themselves from potential health and safety liabilities, they would open themselves up to more of them. Also, they may be faced by a challenge from an employee on human rights grounds because attempts to impose helmet rules as work uniform may breach European Human Rights law in some circumstances.

For more on helmets and organisational helmet rules, see Cycling UK's briefings at:
www.cyclinguk.org/campaigning/views-and-briefings/cycle-helmets





FURTHER READING/WEBSITES/SUPPORT

- Cycling UK's guides to: *Cycle friendly employers*; *Tax incentives*; *BUGs*; *Cycle parking*
www.cyclinguk.org > articles > campaigns articles
- *Cycle to Work Resource*: a DfT funded resource on cycling to work. Although from 2003, this is still a useful collection of good practice examples and case studies.
www.cyclinguk.org/article/campaign-article/cycling-to-work-resource-2003
- *Cycling Scotland's Cycle Friendly Employer Award*, developed with support from the Scottish Centre for Healthy Working Lives, this provides workplaces with tools, best practice guidance and incentives to promote cycling and improve their sustainable travel plans. It also rewards those organisations already working hard to increase workplace cycling. Support includes commuter training, small grants and activity resources.
www.cyclingscotland.org/our-projects/award-schemes/cycle-friendly-employer/

¹ DfT. *National Travel Survey 2015*. Sept 2016. Table NTS0502.

www.gov.uk/government/collections/national-travel-survey-statistics Note: until 2014, the NTS covered the whole of Great Britain. From 2014 onwards, coverage was restricted to England only. There is, however, very little difference between the figures for the whole of GB and those for England alone.

² DfT. *National Travel Survey 2015*. Sept 2016. Table NTS0409.

www.gov.uk/government/collections/national-travel-survey-statistics

³ ONS. *2011 Census Analysis – Distance Travelled To Work*. March 2014.

www.ons.gov.uk/ons/rel/census/2011-census-analysis/distance-travelled-to-work/2011-census-analysis---distance-travelled-to-work.html

⁴ All these figures come from *2011 Census Analysis: Cycling to Work*. ONS. March 2014. www.ons.gov.uk/ons/dcp171776_357613.pdf

⁵ *Scotland Census 2011*. Table DC7101SC <http://www.scotlandscensus.gov.uk/ods-web/home.html> ; *Northern Ireland Census 2011*.

Table DC7101NI. <http://www.ninis2.nisra.gov.uk/public/Theme.aspx?themeNumber=136&themeName=Census+2011>

⁶ Cycling Scotland. *Annual Cycling Monitoring Report 2016*. Feb 2016.

<http://www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf>

⁷ TNO Quality of Life. *Reduced sickness absence in regular commuter cyclists can save employers 27 million euros*. Feb 2009.

<http://www.vcl.li/bilder/518.pdf>

⁸ Andersen L et al. *All-cause mortality associated with physical activity during leisure time, work, sports and cycling to work*.

Archives of Internal Medicine, 160: 1621-1628, 2000 <http://archinte.ama-assn.org/cgi/reprint/160/11/1621.pdf>

⁹ Gorden-Larsen, P et al. *Active Commuting and Cardiovascular Disease Risk (The CARDIA Study)*. *Arc Intern Med*. 2009; 169(13):1216-1223. July 2009.

¹⁰ Martin, A (et al). *Does active commuting improve psychological wellbeing?* The research was based on data on 17,985 adult commuters in eighteen waves of the British Household Panel Survey (1991/2–2008/9). It took into account feelings of worthlessness, unhappiness, sleepless nights, being unable to face problems, plus facts like income, having children, moving house or job, and relationship changes. *Preventive Medicine*. <http://dx.doi.org/10.1016/j.ypmed.2014.08.023>

¹¹ Cyclescheme. *Cycling 10:10 Report*. March 2015. <http://www.cyclescheme.co.uk/files/Cyclescheme-10-10-Report.pdf>

¹² DEFRA. *Emissions of Air Pollutants in the UK, 1970 to 2015*. December 2016.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579200/Emissions_airpollutants_statisticalrelease_2016_final.pdf

¹³ DECC. (RICARDO-AEA). *Transport GHG Inventory summary Factsheet*. 2015.

<https://www.gov.uk/government/publications/uk-greenhouse-gas-inventory-summary-factsheets>

¹⁴ Calculated on the basis of 170 gm/km for an average car, around 200 trips per year.

¹⁵ Swift S. et al. *Impact of the Cycle to Work Scheme: evidence report*. (509). Institute for Employment Studies. June 2016.

<http://www.employment-studies.co.uk/resource/impact-cycle-work-scheme>

¹⁶ LSE. *The British Cycling Economy: 'Gross Cycling Product' Report*. 2011. Supported by Sky/British Cycling.

<http://eprints.lse.ac.uk/38063/>

¹⁷ SQW. *Valuing the Benefits of Cycling*. June 2007. Executive summary at:

<http://webarchive.nationalarchives.gov.uk/20110407094607/http://www.dft.gov.uk/cyclingengland/site/wp-content/uploads/2008/08/valuing-the-benefits-of-cycling-full.pdf>

¹⁸ TNO Quality of Life. *Reduced sickness absence in regular commuter cyclists can save employers 27 million euros*. Feb 2009. <http://www.vcl.li/bilder/518.pdf>

¹⁹ HMRC. *Employee Travel: A tax and NIC guide for employers* (490). August 2015.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455952/490.pdf

²⁰ DfT. *An essential guide to travel planning*. March 2008.

<http://webarchive.nationalarchives.gov.uk/20101124142120/http://www.dft.gov.uk/pgr/sustainable/travelplans/work/essentialguide.pdf>

²¹ Swift S. et al. *Impact of the Cycle to Work Scheme: evidence report*. (509). Institute for Employment Studies. June 2016.

<http://www.employment-studies.co.uk/resource/impact-cycle-work-scheme>

²² Cycle to Work Alliance news. *2014 sees more people than ever cycling to work*. 16/2/2015.

http://cycletoworkalliance.org.uk/media/1022/news_47_134255308.pdf

²³ Chancellor's Autumn Statement November 23 2016.

<https://www.gov.uk/government/topical-events/autumn-statement-2016>

²⁴ See Cyclescheme. *Cycling 10:10 Report*. March 2015. <http://www.cyclescheme.co.uk/files/Cyclescheme-10-10-Report.pdf> (p8), and Cycling Scotland. *Annual Cycling Monitoring Report 2016*. Feb 2016.

www.cyclingscotland.org/wp-content/uploads/2015/03/2892-Annual-Monitoring-Report-2016-00000002.pdf

²⁵ DfT, *Reported Road Casualties Great Britain 2015*. Sept 2016. Table RAS30070. In 2014 and 2015, 39 and 35 pedestrians were killed per billion miles walked, respectively. The figures for cyclists were 35 (2014) and 31 (2015).

www.gov.uk/government/collections/road-accidents-and-safety-statistics

²⁶ DfT *Reported Road Casualties Great Britain 2015*. Sept 2016. Table RAS30037.

www.gov.uk/government/collections/road-accidents-and-safety-statistics

²⁷ Health and Safety Executive. *Driving at Work: Managing work-related road safety*. April 2014.

www.hse.gov.uk/pubns/indg382.pdf.