

# WHAT COLOUR *is* YOUR BUILDING?

Measuring and reducing the energy  
and carbon footprint of buildings

David H. Clark



## Appendix K Travel planning

[www.whatcolourisyourbuilding.com](http://www.whatcolourisyourbuilding.com)

## Appendix K: Travel planning

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*It can hardly be a coincidence that no language on earth has ever produced the expression 'As pretty as an airport.'*

Douglas Adams,  
The Long Dark Tea-Time of the Soul, Pocket Books, 1991.

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This appendix provides further information referred to in Chapter 9 (Green travel).

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## K1. REDUCING TRAVEL

Figure K.1 provides a flow chart of questions to ask when planning a journey, while Figure K.2 shows average CO<sub>2</sub>e emissions from different modes of transport for journeys of over 10 miles (16 km).<sup>1</sup>

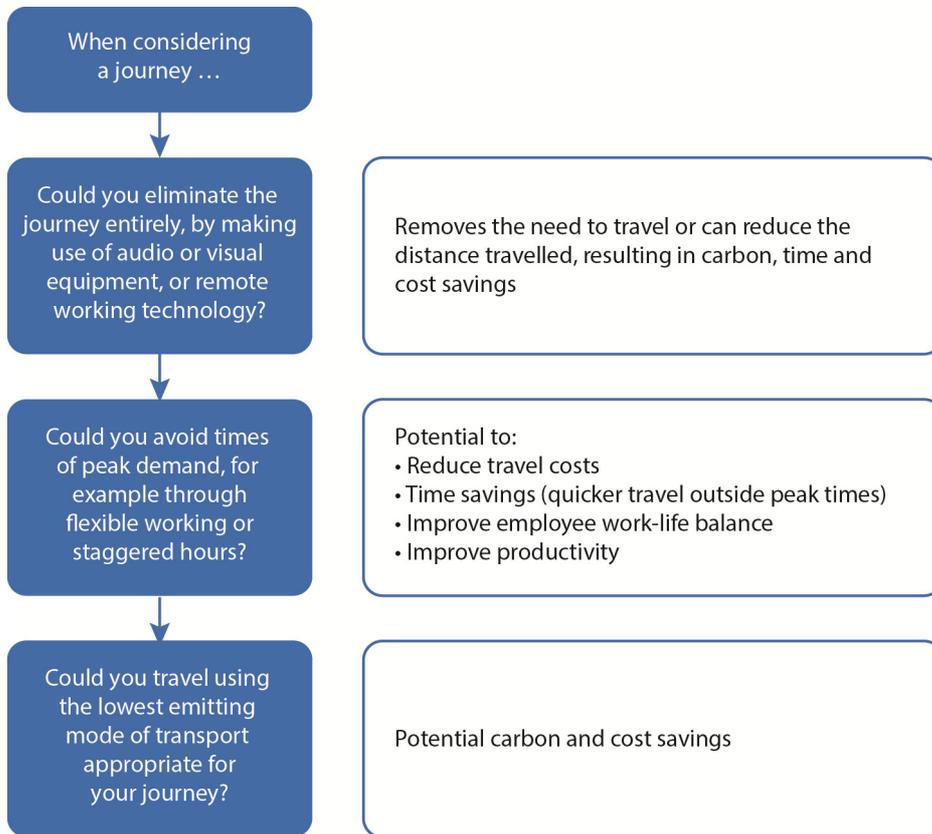


Fig K.1 Questions to ask when planning a journey

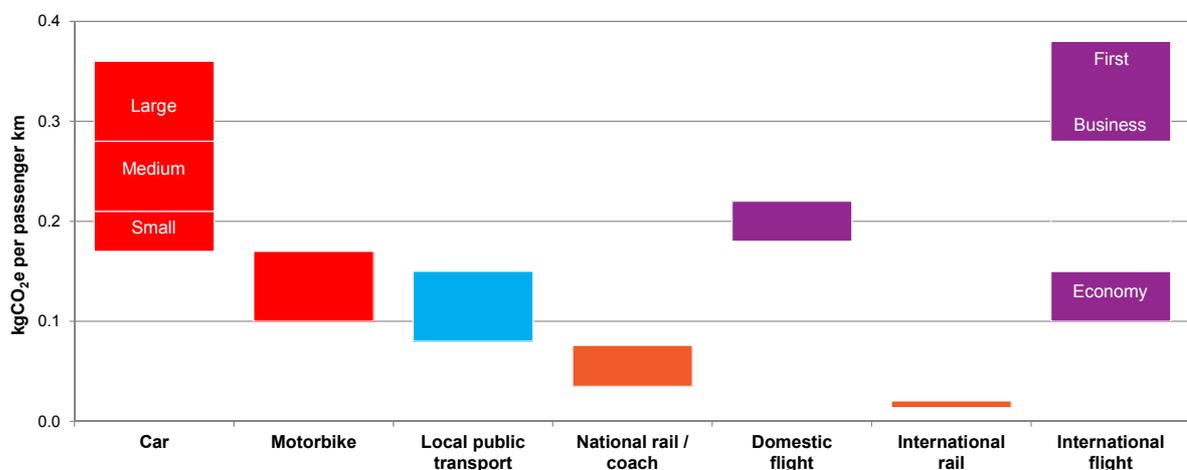


Fig K.2 Typical CO<sub>2</sub>e emissions from different modes of transport (adapted from DEFRA, 2012)

Further guidance on planning journeys can be found at:

- Ways 2 Work ([www.ways2work.bitc.org.uk](http://www.ways2work.bitc.org.uk)).
- ACT Travel Wise ([www.acttravelwise.org](http://www.acttravelwise.org)).
- Transport Direct ([www.transportdirect.info](http://www.transportdirect.info)).
- Energy Saving Trust ([www.energysavingtrust.org.uk/business/Business/Transport-in-business](http://www.energysavingtrust.org.uk/business/Business/Transport-in-business)).
- Cycle to Work ([www.cycletoworkguarantee.org.uk](http://www.cycletoworkguarantee.org.uk)).

## K2. CYCLING TO OFFICES

In 2012, the British Council for Offices (BCO) undertook a survey to investigate the cycling habits of office users.<sup>2</sup> The key findings included:

- Fitness is a key motivator for cyclists, ahead of enjoyment and convenience.
- Showers are the most sought after workplace facility followed closely by lockers and safe cycle storage.
- Safety is the main reason given by the non-cyclists for not cycling to work, followed by ‘lack of clear cycling routes/cycle lanes’ – refer to Figure K.3.
- The quality and availability of workplace cycle facilities influences the career choices of more than half of respondents.

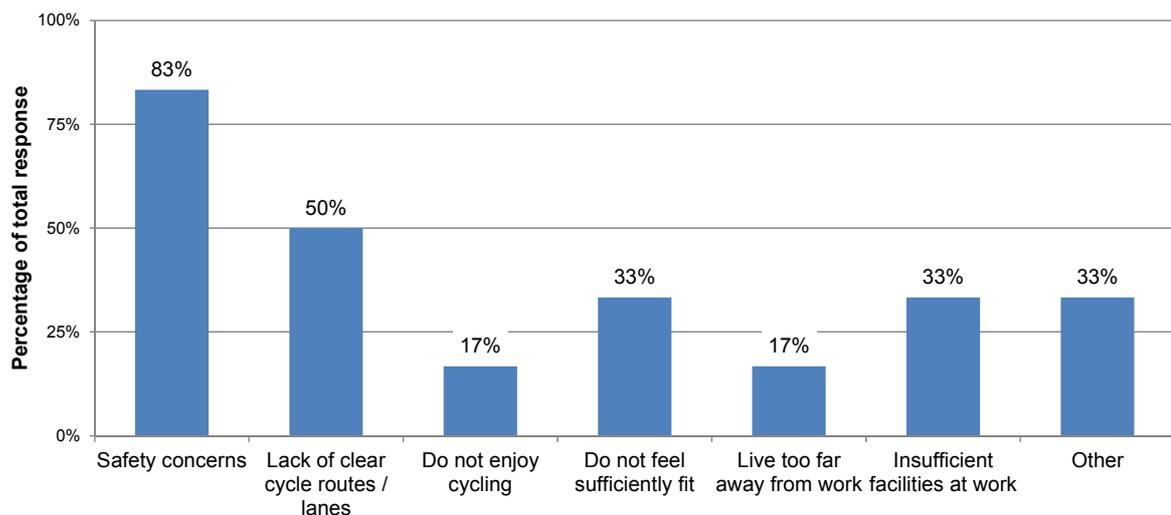


Fig K.3 Reasons why non-cyclists don't cycle to work (Source: BCO 2012)

### K3. WEB JOURNEY PLANNER

The UK Transport Direct website assists in planning journeys using multiple modes of transport.<sup>3</sup> It is more useful than Google Maps directions, because it utilises public transport timetables to provide different options based on time of departure or desired time of arrival. A variety of options are presented for each journey, including duration, maps, directions, train/bus service details, CO<sub>2</sub> emissions and cost of travel by car.

To illustrate how it works, the author’s commute to work is illustrated with screen shots from the UK Transport Direct website – refer to Figure K.4. Maps are also available but due to copyright restrictions with Ordnance Survey are not reproduced here.

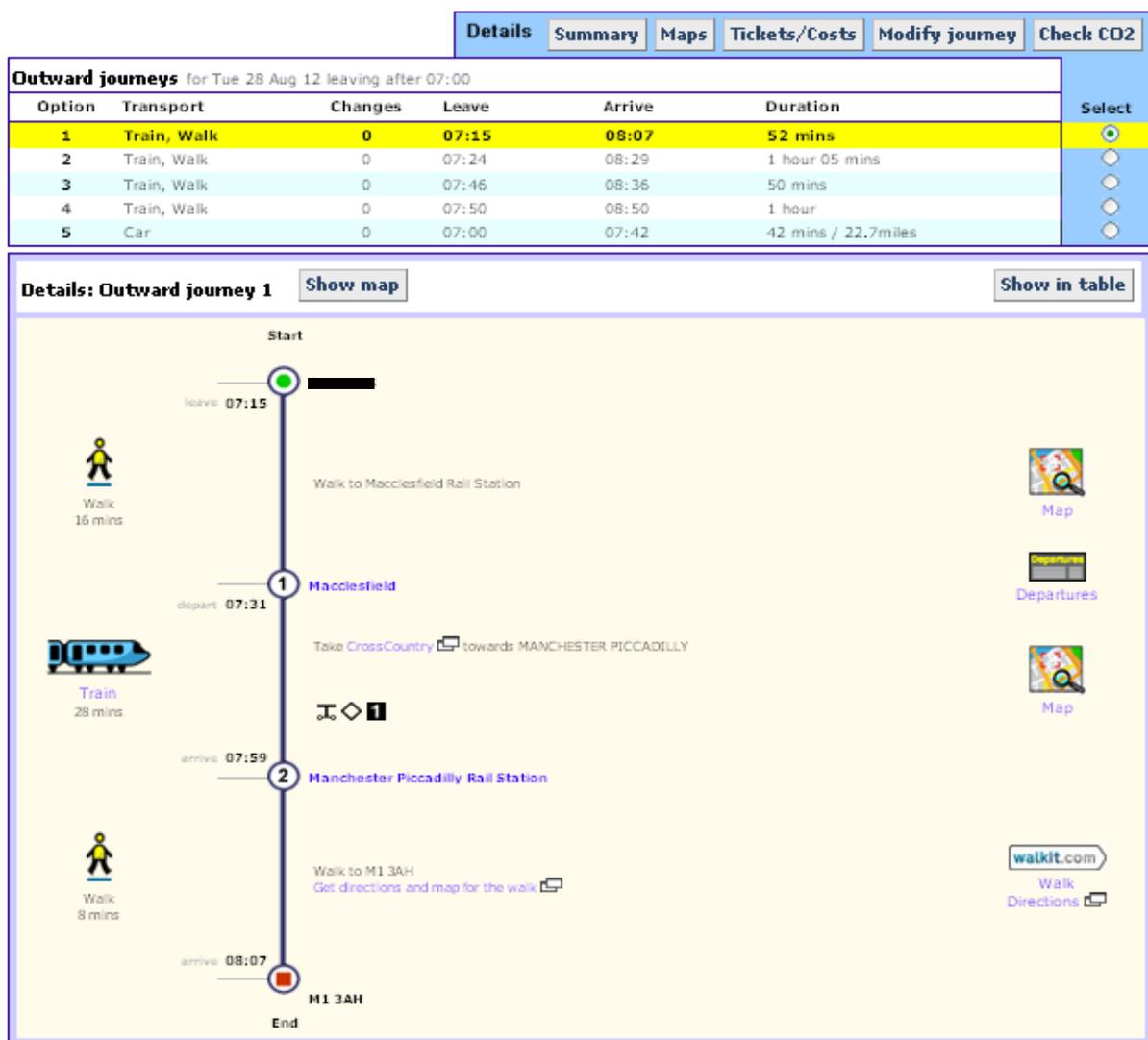


Fig K.4 The author’s journey to work (source: www.transportdirect.info)

Figure K.5 provides a comparison of CO<sub>2</sub> emissions of a car journey compared to alternative transport modes for the same travel distance. The actual journey by train is only 16.9 miles and so the comparable emissions are 1.5 kgCO<sub>2</sub> compared to 7.6 kgCO<sub>2</sub> for the car journey of 22.7 miles.

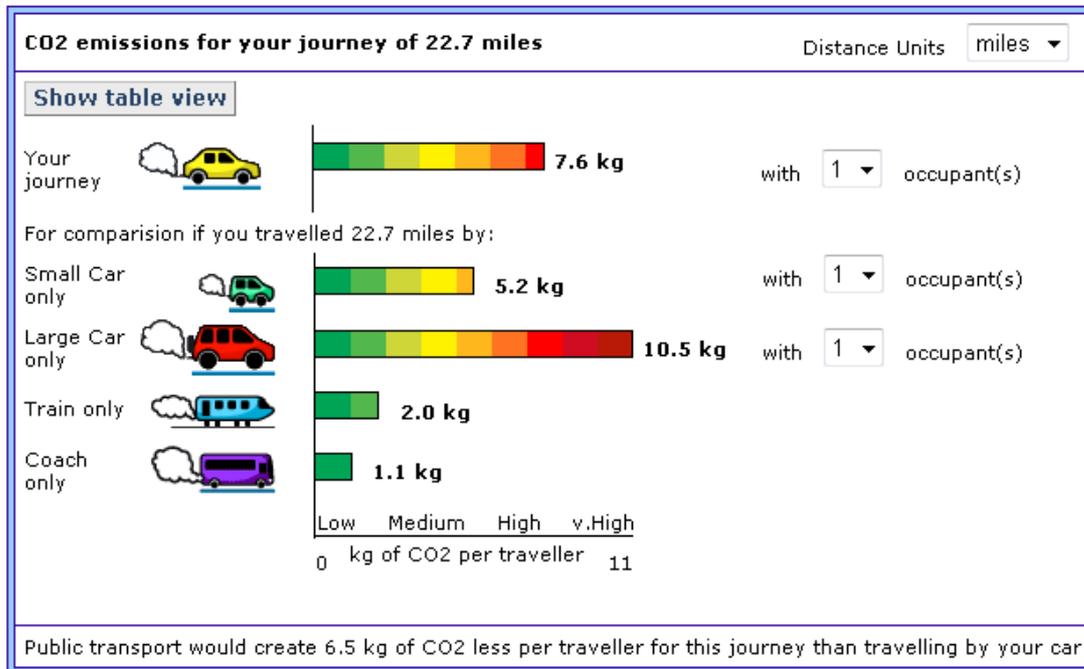


Fig K.5 Comparison of CO<sub>2</sub> emissions for same distance travelled (source: www.transportdirect.info)

Figure K.6 provides an indicative cost of travel by car. In 2012, the return journey by car cost £30 (including fuel and maintenance costs), plus £6 for early bird car parking in the city centre. The train cost £14 return at peak times with 40 minutes of exercise (walking) for free. Overall journey times door to door are similar.

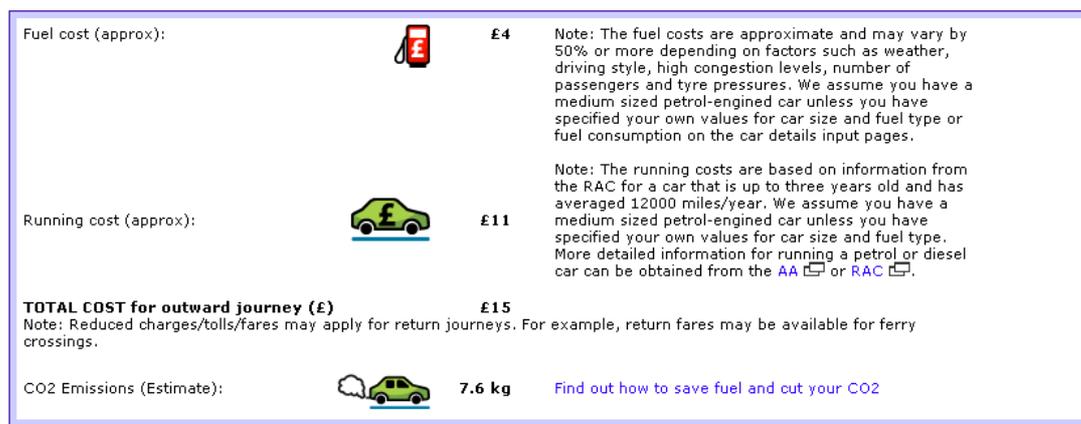


Fig K.6 Indicative cost of car travel (source: www.transportdirect.info)

## Notes

All websites were accessed on 25 May 2013 unless noted otherwise. Information papers referenced are available to download from [www.wholecarbonfootprint.com](http://www.wholecarbonfootprint.com).

1. Data adapted from *2012 Guidelines to DEFRA / DECC's GHG Conversion Factors for Company Reporting*. Refer also to *Alternatives to Travel: Next Steps*, Department of Transport, November 2011. <http://assets.dft.gov.uk/publications/alternatives-to-travel/next-steps.pdf>
2. *Cycling And The Modern Workplace*, by Melanie Thompson, British Council for Offices, August 2012
3. [www.transportdirect.info/Web2/Home.aspx](http://www.transportdirect.info/Web2/Home.aspx).

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