

Domestic transport behaviour

On average, each of us currently travels about 14 000 km per year, excluding trips abroad. 83% of this distance is by car, van or motorcycle, 7% by rail, 6% by bus, 2% on foot, 1% by air and 0.5% by bike.

Level 1

Level 1 assumes that by 2050 each of us travels 1300 km per year more than in 2007, with a slight shift from road and rail to bus and air: 82% road, 6% rail, 7% bus, 2% foot, 2% air and 0.7% bike.

Level 2

Level 2 assumes that by 2050, each of us travels 900 km per year more than in 2007. Slightly less travel is by road and slightly more by bus: 80% road, 6% rail, 9% bus, 2% foot, 2% air and 0.7% bike. Passenger distance by bus will be 20% higher than in Level 1.

Level 3

Level 3 assumes that by 2050, each of us travels an extra 900 km per year more than in 2007 and with a substantial shift away from cars towards buses, rail and bikes: 74% road, 8%

rail, 13% bus, 2% foot, 2% air and 5% bike. 1 in 20 car trips are shared with one extra person.

Level 4

Level 4 assumes that in 2050 each of us travels the same distance per year as today. There is a big shift away from the car: 62% road, 10% rail, 19% bus, 2% foot, 2% air and 5% bike. There is an increase in alternatives to travel such as teleconferencing or more flexible working arrangements. 1 in 10 car trips are shared with one extra person, cycle use will increase 10-fold compared to today, passenger distance by bus will be 250% higher; rail passenger distance will be 115% higher.

Interaction with other choices

We can power the UK's cars, buses and trains by biofuel rather than diesel or petrol, or rely on electricity or hydrogen fuel cells. In the 2050 Calculator, the technology used and hence the emissions created are influenced by how much transport is electrified, how much electricity is decarbonised, and how much bioenergy is available for transport.



Figure 1. In 2007, 0.5% of distance travelled was by bicycle. Level 4 assumes that this increases to 4.7% by 2050.

	2007	2050 Level 1	2050 Level 2	2050 Level 3	2050 Level 4
km travelled/person/y	14 104	15 363	15 023	15 023	14 076
% of km by:					
Car, van or motorcycle	83%	82%	80%	74%	62%
Rail	7%	6%	6%	8%	10%
Bus	6%	7%	9%	13%	19%
Foot	2%	2%	2%	2%	2%
Domestic air	1%	2%	2%	2%	2%
Bicycle	1%	1%	1%	1%	5%

Table 1. The assumptions about km travelled and the split of how that distance is travelled.

