

# A BETTER WAY TO WORK



## TRAVEL MODE COST COMPARISON

Most commuters in Edinburgh will have a range of transport choices, from personal car use or car tripsharing, through to taking the bus and cycling. Changing from the car to the bus could help you save over £2,800 a year; and from the car to a bike over £3,000 a year. Even making a small change, like taking the bus or cycling once a week, could help you save more than you might think.

The table below summarises the average annual cost of each transport mode.

**Table 1: Summary of Annual Travel Costs in Edinburgh**

Transport Mode	Annual Cost	Notes
<b>Car – petrol</b> <i>5,000 miles annually</i>	£3,445.50	See Table 2 for full details.
<b>Car – diesel</b> <i>5,000 miles annually</i>	£3,184.50	See Table 2 for full details.
<b>Car tripshare – petrol</b> <i>5,000 miles annually</i>	£2,687.82	Based on the average carsharer saving £757.68 annually (figure from <a href="http://www.TripshareEdinburgh.com">http://www.TripshareEdinburgh.com</a> ).
<b>Bus</b>	£ 560.00	Lothian Buses Ridacard, pay monthly by direct debit.
<b>Bicycle – commuter bike</b> <i>5,000 miles annually (9.6 miles each way on a daily commute)</i>	£ 459.65	Commuter bike is a road bike with an original value of £500. For a shorter commute, the annual cost will be lower. See Table 2 for full details.
<b>Bicycle – standard bike</b> <i>5,000 miles annually (9.6 miles each way on a daily commute)</i>	£ 360.55	Standard bike is a hybrid with an original value of £300. For a shorter commute, the annual cost will be lower. See Table 2 for full details.



## Annual Vehicle Ownership Costs

The tables below aim to give a detailed comparison of the annual ownership costs of cars and bicycles. To enable a like-for-like comparison, the annual mileage has been taken as 5,000 miles. This equates to a daily 9.6 mile commute each way. If a commute is shorter - as is likely for many cyclists - the annual running costs will be correspondingly lower as wear and tear, fuel consumption, etc, will be reduced.

**Table 2: Annual Car and Bicycle Ownership Costs**

	Type of Vehicle				Notes
	Petrol Car*	Diesel Car*	Commuter Bicycle	Standard Bicycle	
	Purchase price when new				
<b>Standing Charges</b> (£ per year)	Up to £12,000	Up to £12,000	£550	£350	A
VED (vehicle tax)	£ 130	£ 95	-	-	B
Insurance	£ 725	£ 733	£ 87	£ 72	C
Capital cost	£ 236	£ 226	£ 15.40	£ 9.80	D
Depreciation	£ 1,217	£ 1,160	£ 116.25	£ 72.75	E
Breakdown cover	£ 50	£ 50	-	-	F
<b>Total, per year</b>	<b>£ 2,358</b>	<b>£ 2,264</b>	<b>£ 218.65</b>	<b>£154.55</b>	
<b>Standing Charges</b> (pence per mile, 5,000 miles annual mileage)	47.16p	44.82p	4.37p	3.09p	
<b>Running Costs</b> (pence per mile)					
Fuel	12.90p	9.53p	1.78p	1.48p	G
Tyres	1.07p	1.07p	1.0p	0.6p	H
Service labour costs	4.14p	3.81p	1.4p	1.4p	I
Replacement parts	2.04p	2.20p	0.64p	0.64p	J
Parking and tolls	1.80p	1.80p	-	-	K
<b>Total, per mile</b>	<b>21.95p</b>	<b>18.41p</b>	<b>4.82p</b>	<b>4.12p</b>	
<b>Annual Costs</b> (5,000 miles per year)					L
Standing charges	£ 2,358.00	£ 2,264.00	£218.65	£154.55	
Running Costs	£ 1,097.50	£ 920.50	£ 241.00	£ 206.00	
<b>TOTAL</b>	<b>£ 3,455.50</b>	<b>£ 3,184.50</b>	<b>£ 459.65</b>	<b>£ 360.55</b>	
As pence per mile	69.11p	63.69p	9.19p	7.21p	

\*Data given for the petrol and diesel cars are taken from the AA costs for motoring 2011, see [http://www.theaa.com/motoring\\_advice/running\\_costs/](http://www.theaa.com/motoring_advice/running_costs/) for further details.



**Table 3: Notes**

A	Bicycle costs include helmet, lock and lights. Assuming accessories will cost £50 per bike, the commuter bike has an initial value of £500 and the standard bike £300.
B	The car VED (vehicle tax) values given by the AA assumes that the car was first registered after March 2001 and is the average in each price group.
C	<p><b>Insurance:</b> The car insurance value displayed is a UK average cost for a fully comprehensive policy with 60% no-claims discount.</p> <p>Bicycle insurance includes breakdown cover and rescue service costs, and £1 million public liability. Quotes vary depending on insurance provider, postcode of residence and number of bikes insured: around £50 annually for the commuter bike and £35 for the standard bike. 3<sup>rd</sup> party liability insurance provided through membership of a cycling body such as CTC. Annual membership £37.</p>
D	<p><b>Capital cost:</b> This sum represents the loss of income from the owner having money tied up in a vehicle, which otherwise could be earning interest in a deposit account. A savings rate of 2.8% has been used. For the cars, the AA has used the average value of the cars in the study group.</p>
E	<p><b>Depreciation:</b> The car depreciation values from the AA assume that depreciation costs are averaged over four years from purchase.</p> <p>The bicycle depreciation costs are also averaged over four years from purchase. The value at the end of the four years is taken as 7% of the £500 commuter bike, and 3% of the £300 standard bike, as per HM R&amp;C guidelines for the Cycle to Work Scheme: <a href="http://www.hmrc.gov.uk/manuals/eimanual/eim21667a.htm">http://www.hmrc.gov.uk/manuals/eimanual/eim21667a.htm</a> .</p> <p>Commuter bicycle: £500 x 7% = £35 £500 - £35 = £465 / 4 years = £116.25 depreciation per year.</p> <p>Standard bicycle: £300 x 3% = £9 £300 - £9 = £291 / 4 years = £72.75 depreciation per year.</p>
F	<p><b>Breakdown cover:</b> The car breakdown cover is based on the cost of AA's Roadside annual vehicle based cover. Bicycle breakdown cover and rescue service costs are included within overall insurance costs.</p>
G	<p><b>Fuel costs:</b> Petrol car – based on petrol costs of 133.3 pence per litre. Diesel car – based on diesel costs of 139.7 pence per litre.</p> <p><b>Cycling</b> Commuter bicycle – average speed 14mph, journey time 41 mins (9.6 miles), calories burnt 284. Equates to 29.6 calories per mile. Standard bicycle – average speed 11mph, journey time 52 mins, calories burnt 236. Equates to 24.6 calories per mile. These figures include the base metabolic rate, i.e. are not purely calories used by cycling.</p> <p>Calories calculated using online tool: <a href="http://chuck-wright.com/calculators/bicycle.html">http://chuck-wright.com/calculators/bicycle.html</a> based on a 12 stone (168lb) average person weight, 20lb bike and 200ft elevation climbed. Assuming fuel is consumed in the form of porridge made with semi-skimmed milk (a large 90g bowl of porridge equates to about 550 kcal, and costs 31.5p, equating to 0.06p per calorie): Commuter bicycle – 1.78p per mile. Standard bicycle – 1.48p per mile.</p>



H	<p><b>Tyre costs:</b> Cars - the figure used is based on an estimated tyre life of 27,000 miles. Prices are based on online tyre dealer prices.</p> <p>Commuter bicycle – based on a pair of tyres costing £50, changed once a year. Standard bicycle – based on a pair of tyres costing £30, changed once a year.</p>
I	<p><b>Service labour:</b> £70 for an annual full bicycle service, or 1.4p per mile. This cost includes replacement gear and brake cables and brake pads.</p>
J	<p><b>Replacement parts:</b> Cars - the replacement parts included cover those likely to be needed under normal driving conditions, such as brake materials, oils, filters, bulbs, wipers, and hoses.</p> <p>Commuter bicycle - £32 per year. Based on 2x innertubes at £5 each + extra set front and rear brake pads at £8/pair + lubricant £6. Standard bicycle - £32 per year. Based on 2x innertubes at £5 each + extra set front and rear brake pads at £8/pair + lubricant £6.</p>
K	<p>Car parking and toll payments are based on a national average for an urban driver, AA figures.</p>
L	<p>5,000 miles per year, assuming vehicle is used for commuting only, equates to 19.2 miles per day (based on 260 working days in a year), or a 9.6 mile journey to/from the workplace.</p>

