

Personal Case Study

# Understanding my transport costs

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A personal case study based on my own situation and requirements, assessed on an ongoing basis.

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# Introduction

## Objectives

I spend a significant percentage of my income on transport, in fact most of us do. These costs are often just accepted as a 'must have' and left unquestioned, this seems wrong as they add up to very significant sums of money across our lives. To understand these costs better, we need some data and I believe that I already have sufficient to have a look at my own spending.

## Approach

How should cost be measured, is it by mile, by trip or by day? I believe that the only sensible to this is to measure by day as to using the other potential measures is likely to mask behaviours that should be challenged such as excessive numbers of trips or mileage.

The primary objective of this investigation is to answer the following.

1. How much am I spending?
2. Cost aside, is my mix of transport modes in line with my real requirements?
3. Am I getting good value?
4. Should I be doing something to reduce my costs now?
5. Do I need to make any decisions to manage future costs better?

## Background

At the start of this exercise (July 2021) my situation was as follows.

- I was not trying to eliminate travel costs; I accept that they are a necessary part of life.
- There were several transport options available to me, these are Car, Bus, Train, Bike / eBike, eScooter and walking. I am restricting this study to UK travel although it is unlikely that I will travel further afield anyway.
- I was working full time, largely from home but there are / will be occasional visits to the office which is between 40 and 50 miles from home.
- Prior to the Covid pandemic, I travelled extensively for leisure. I have adapted easily to not doing so and have no current desire to go back to my previous lifestyle.
- My work is based on a temporary contract, this restricts my desire to spend large sums of capital on new vehicles as my transport requirements could change very quickly if I start working elsewhere.

- During the pandemic I started using an eBike for leisure and exercise and am willing to pay a premium to keep this mode of transport in the mix for reasons of enjoyment and maintaining fitness.
- I have a cheap trailer which I can use with the bike, this is great for bulky items although it does have weight limitations.
- I live in one of the Government eScooter trial areas so can legally use a rented one but not a privately owned one. Having said this, privately owned machines are becoming an increasingly common sight.

## Approach to Costing

### Fixed and Variable Costs

Transport costs are often made up of a combination of fixed and variable costs, this can complicate the situation when trying to make decisions. This breakdown is shown in the table below.

Mode	Fixed Costs	Variable Costs
<b>Car</b>	<ul style="list-style-type: none"> <li>• Purchase, depreciation, or loan repayments</li> <li>• Road tax</li> <li>• Insurance</li> <li>• MOT testing</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel</li> <li>• Servicing</li> </ul>
<b>Bus</b>	None	<ul style="list-style-type: none"> <li>• Tickets</li> </ul>
<b>Train</b>	None	<ul style="list-style-type: none"> <li>• Tickets</li> </ul>
<b>eBike</b>	<ul style="list-style-type: none"> <li>• Purchase, depreciation, or loan repayments</li> </ul>	<ul style="list-style-type: none"> <li>• Servicing</li> <li>• Electricity</li> </ul>
<b>eScooter</b>	<ul style="list-style-type: none"> <li>• Purchase, depreciation, or loan repayments</li> </ul>	<ul style="list-style-type: none"> <li>• Servicing</li> <li>• Electricity</li> <li>• Hire</li> </ul>
<b>Walking</b>	None	None

## Historic Running Costs

I have historically been an exceptionally high mileage driver and in 42 years of driving have clocked up over 1,000,000 miles. For many years, I have kept a record of my motoring expenses (I needed to do so to claim expenses and it became habit). When I first purchased my eBike back in 2020, I did the same. This should provide some historical data.

I have decided to go back as far as the start of April 2019 to calculate car running costs as that is when my current car (at the time of starting this study) was purchased, it was a cheap runabout purchased while I thought about what I really wanted but the pandemic changes all that.

For all other modes of transport, I am calculating costs based on when I first used them after the start of April 2019, this is quite easy as I used the car for all journeys until the start of the pandemic when I purchased my eBike and I have not used public transport at all over this period although I will do so from now on (July 2021).

## Key Events

During this study there have been key events which may have an impact on any findings, they have been recorded here.

<b>Date</b>	<b>Event</b>	<b>Comments</b>
<b>Sept 2021</b>	Scrapped Car	The car has been scrapped and I do not have immediate plans to replace it until I need another one.
<b>Oct 2021</b>	Work Policy	It has been deemed acceptable to return to the office on a business needs basis following pandemic restrictions, this may increase the frequency of work journeys although I remain largely home based.
<b>Oct 2021</b>	Purchase	Bought a second-hand eBike to overcome the problem of having no transport every time I break my mountain bike (often).
<b>June 2022</b>	Purchase	Bought another second-hand eBike, this is permanently fitted with shopping panniers and makes life easier,

# August 2022 Update

I now have a complete year of data to work with, as at the end of July 2022 and this has allowed me to make the following calculations and observations.

## Appropriate Mode per Trip

I have been trying to use the best mode of travel for each trip, this is a considerable change as I previously used the car for all other than leisure exercise (bike).

This seems to be going well, obviously more of the longer trips would have involved a car but as I don't at present, I use the train which has been fine.

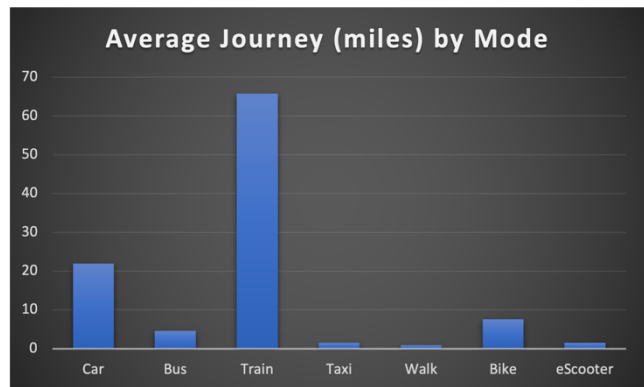


Figure 1 - Average journey by mode

## Costs

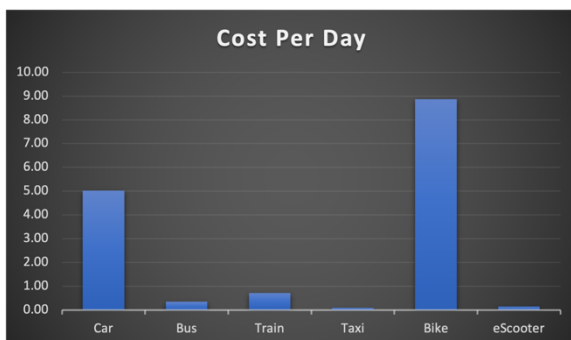


Figure 2 - daily cost by mode

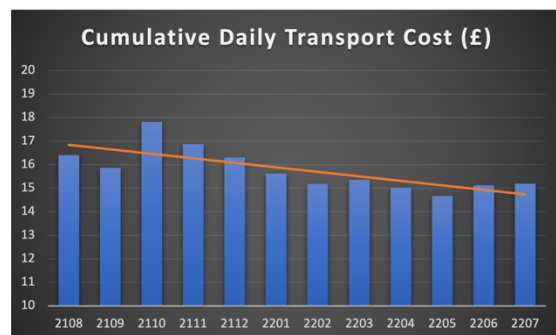


Figure 3 - overall daily transport cost

I still feel that my costs (£15.22 a day) are a lot higher than they should be although they have reduced slightly over the year (from £16.41). The peaks coincide with investments in bikes, and it is interesting to note that this investment has been possible without impacting cost significantly over the year (i.e., self-funding).

- Average daily cost for a car has reduced simply as I'm not paying for one at present, but it is likely that I'll get another at some point. I considered removing these costs but have decided not to as the money has been spent and we can't look at trends if I change the rules. This 'historic' cost is still the second largest element of the overall cost.

- Bike costs have not gone down as I'd previously expected, this is because I have invested in two second-hand eBikes and am now well-equipped so the situation should hopefully begin to improve. By far my biggest cost, I could have done it cheaper but as it is also my pastime, I'm not concerned about it at all.
- Public transport costs are heavily influenced by work, I have no control over this and do expect it to rise or maybe even double, but it is still not going to be a big issue.
- Scooter costs have reduced, I find that I am using them less as a direct consequence of having better cycling options. Unless I buy one, this cost should remain flat.
- Taxi costs are creeping up slowly, this is simply because I can now go out for a drink occasionally now that covid lockdown is over. I don't see this becoming a major cost.

## Reasons for Travel

Cost and journeys by reason; I have no control over the number of work journeys but could influence the other two sources (domestic & leisure) but do not currently see a need to. Since cycling is my Main leisure activity, I think the costs are currently acceptable (a lot cheaper than my old hobbies which involved a lot of car journeys).

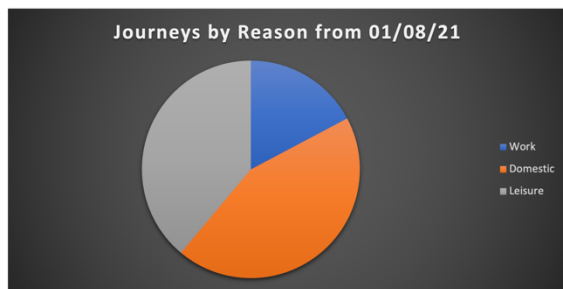


Figure 4 - journeys by reason

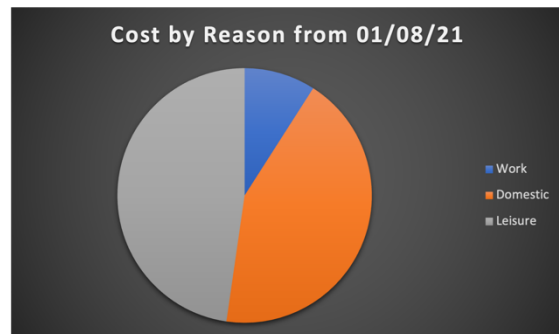


Figure 5 - cost by reason

## Comparing Travel Modes

How does the breakdown of journeys compare with the breakdown of cost? This is reflected in the charts below. Arguably it is too early to draw any conclusions due to the heavy investment in bikes. It clearly demonstrated that I'm happy to use a bike for most journeys and I do this without even thinking about it.

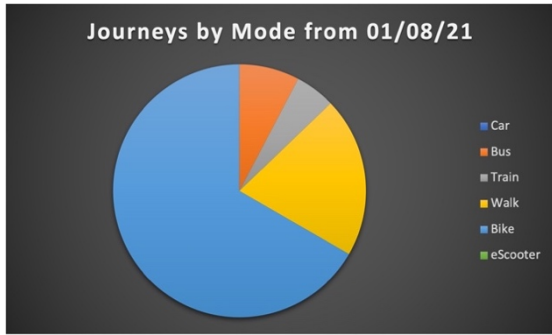


Figure 5 - journeys by mode

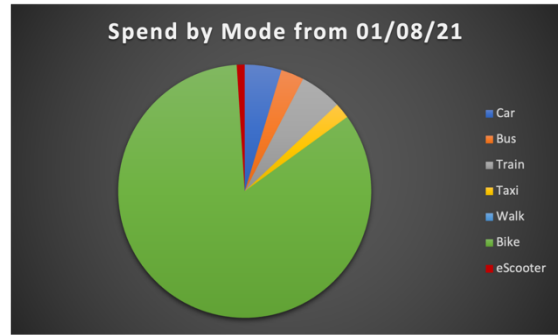


Figure 6 - cost by mode

## Public vs Personally Owned Transport

I have nothing against public transport but have only been using it for longer journeys or on the rare occasions when I'm drinking, our local services are not great, but I guess we have it better than some.

I cannot see this split changing much unless work circumstances dictate it.

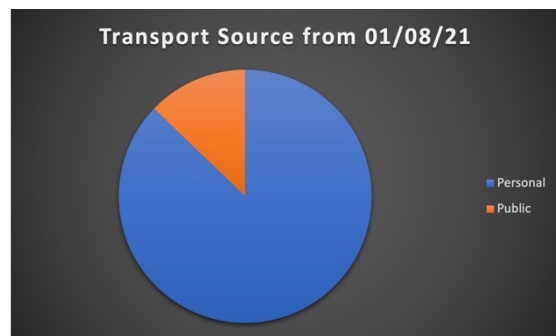


Figure 7 - personal vs public

## Exercise

I've never been one for going to the gym, I can see a lot of benefit in using 'active transport' to get some exercise at the same time as getting from A to B.

It seems to be working well now although it is easier in the summer months. I'm probably exercising more than ever before in my life.

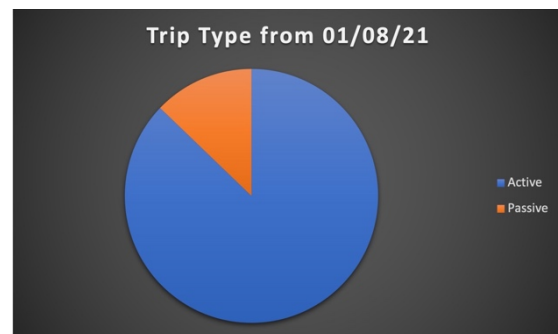


Figure 8 - active vs passive



# Observations as at 31/08/22

It is still too early to come to major conclusions but there are a few points to note.

1. Work travel. The use of public transport is not too onerous based on up to one office visit a week; this would change if the requirement was to increase but I am told that this is not currently expected.
2. Moving towards the use of an ebike for domestic activities (shopping etc) has fundamentally changed the way which I approach them. I am far more likely to 'shop local' or to do 'top up' shopping when I am out for other reasons. This benefits the local economy. A monthly online shop with supermarket delivery may be worth trying out on a regular basis but I don't suppose I will.
3. Retaining a car for my level was not justifiable due to the high level of fixed costs. To be honest, I've not really missed it despite my initial misgivings as I can rent one if I want to go on a long trip.
4. I did feel exposed by the reliability of an ebike for day-to-day transport, this was largely due to using it off-road for leisure which can be very damaging. Adding to my bikes has resolved this completely. Yes, it cost me a bit but compared to having a car sitting about it was a very small cost.
5. Hire scooters good for one-way journeys, especially going to the station.

## Conclusion

After years of just spending on travel without thinking about it (it was one of my largest costs), I now have a grip on where it is being spent. I think I have put the right changes in place to bring it under control but as I'm reporting based on long term average daily costs it is a bit like turning an oil tanker. I do expect my actual spend in the next year to be far lower and will also have rather a lot less hours spent travelling than I use to.

After decades of driving every day, I'm shocked to find that I do not miss it. Yes, there are places and events I don't go to any more but; No, I'm really not bothered about that and feel far more relaxed in my time off work.

## What Next?

The future of my travel is very much at the whim of my employer, I'm in no rush to buy a car unless work travel becomes a significantly more frequent requirement and that seen unlikely in the immediate future.

It is planned that legislation will be put forwards during the current parliament to legalise eScooters. If this happens. I may consider getting one so that would be a significant expense.

Other than that, I'm expecting a much cheaper year as I have the bikes I need and the gear to go with them. I has been a long process to get this in place but, barring major breakdown, I should be looking at maintenance and public transport costs only for the next and I hope that will have a noticeable effect on my daily cost. year will revisit some of these measures once there has been time to gather some more data, my expectation is that my overall costs will initially rise as and when I find a second ebike (or if scooters are legalised) and then fall again over time as the daily car cost reduces following its disposal and the bike costs are spread over a longer period.

I think that I'll carry on watching this for another year as it is no great effort, and it would be interesting to see what actual financial effect my lifestyle changes have had.