The aim of our analysis and website is to be able to understand how transport usage within England and Wales differs and what factors are likely to affect this. To this end we have undertaken a geodemographic approach at the MSOA level to create different groups of transport profiles from which a greater understanding of how transport usage changes across the UK. The results from this can then be used to inform national transport policies that aim to shift transport mode usage towards more sustainable forms of transport. This analysis fits within the broader themes of existing transport literature, discussing the importance of transport and how we can influence individuals transport choice, along with extending the existing geodemographic analysis literature to the domain of transport.

Transport supports our work, education and social interaction among other things (Delbosc, 2012), but our choice of mode has wide ranging repercussions. As noted by Buehler (2011), our transport behaviour affects global warming, environment pollution and our dependence on oil, while Laverty, et al., (2013) provide evidence that shifting towards public transport and more active modes of travel are associated with reductions in risks of cardiovascular problems and diabetes. It is therefore not surprising that there is considerable research and literature on understanding how we can change transport usage habits towards more sustainable forms of transport. This includes how attitudes, beliefs and individual characteristics may affect transport mode choice. For example, it is noted that educating individuals that their transport choice can make a difference in terms of climate change can influence their regular transport mode (Collins & Chambers, 2005), while perceptions of existing infrastructure, regardless of the actual provision, can also influence choice and therefore perceptions are important (Ferdous, et al., 2011). Furthermore, the physical environment can influence transport modes such as accessibility, density and land use mix are all associated with transport mode choice, even when controlling for demographic characteristics (Pinjari, et al., 2007). The overall conclusion of such research is that in order to improve the usage rates of sustainable modes of transport, policies need to not only make sustainable modes more attractive through time and cost reductions, but to also make sure that less sustainable modes such as automobile use is made less attractive (Buehler, 2011). It is therefore important that we first understand how transport usage differs across England and Wales to then more effectively target resources and policies to areas in which they are most likely to be successful.

The methodology employed to tackle this problem is geodemographic analysis. This dates as far back as Charles Booth’s 1903 poverty Map of London in which he separated populations into different economic groups based on underlying demographic and economic characteristics, and has since been expanded to cover a wide variety of areas (Harris, et al., 2007). Traditionally this has been based on census data that is produced decennially and split into different administrative units, but the improvement in data collection and storage, along with analytical tools such as GIS, has allowed data such as household surveys, property information and loyalty card data to be utilised in such analysis. This has allowed more recent work across both the public and private sectors to cover topics such as health, policing and education to inform public resource allocation to areas that need them most (Adnan, et al., 2010), and in retail analysis to understand consumer behaviour and hence allowing for more efficient targeted marketing (Titheridge, et al., 2008). The methods used for this include cluster analysis which groups together populations, at an aggregate level, based on chosen variables in a situation in which there is no prior classification (Shelton, et al., 2006), and classification analysis to understand other variables and characteristics that may be associated with different groups identified by the cluster analysis. This allows for a comparison between and across groups to understand the way in which they differ and thus subsequently how resources may best be allocated to influence such groups. In terms of transport however there has been little utilisation of such methodologies to understand transport profiles and how this could be used to inform transport resource allocation decisions (Titheridge, et al., 2008). Therefore, our analysis seeks to fill this gap, linking both transport studies and geodemographic analysis.