



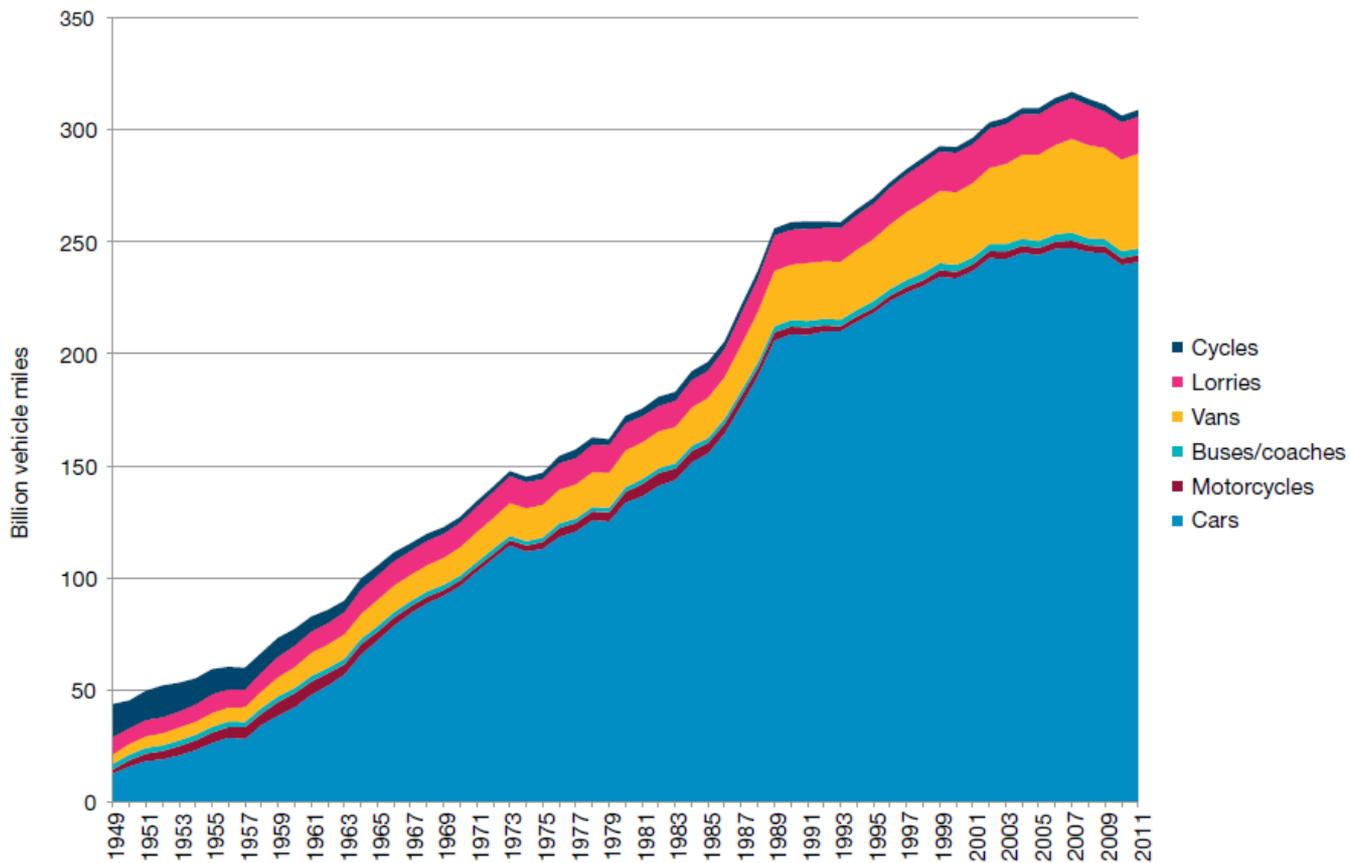
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Future Trends in Driving

Spotlight on Parking

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Source: Department for Transport (2012c)

Journey to Work

- There are 26.5 million working people aged 16–74 in England and Wales
- 16.7 million of these workers take a car/van to get to work as a driver or passenger
- 15.3 million drive themselves; 1.4 million catch a lift
- In rural areas, 73.4% of workers travel by car (whether as driver or passenger)
- In urban areas outside London, 67.1% of workers get to work by car (whether as driver or passenger)
- Even amongst Londoners the car is the most popular single mode of travel, used by 29.8% of workers

Mode	Total	% of employed workforce
Work mainly at or from home	1,422,708	5.4%
Underground, metro, light rail, tram	1,028,800	3.9%
Train	1,371,025	5.2%
Bus, minibus or coach	1,949,442	7.3%
Taxi	137,988	0.5%
Motorcycle, scooter or moped	214,244	0.8%
Driving a car or van	15,264,527	57.5%
Passenger in a car or van	1,357,280	5.1%
Bicycle	762,334	2.9%
On foot	2,846,588	10.7%
Other method of travel to work	171,400	0.6%
Total	26,526,336	100%

Source: Office for National Statistics⁴

Note: The 2011 Census asked people "How do you usually travel to work? Tick the box for the longest part, by distance, of your usual journey to work".

Great Britain Journey-to-Work Flows

The map displays flows between residence and workplace locations in 2001, revealing the complex network of urban relationships. The flows are coloured by the main mode of travel used: car trips in blue, public transport trips in red and walking-cycling trips in green.

Car 71%

Public Trans 18%

Walk Cycle 11%

Cartography: D A Smith
Data: Census 2001, cider.ac.uk

geographics.blogs.casa.ucl.ac.uk

Changing Travel Trends

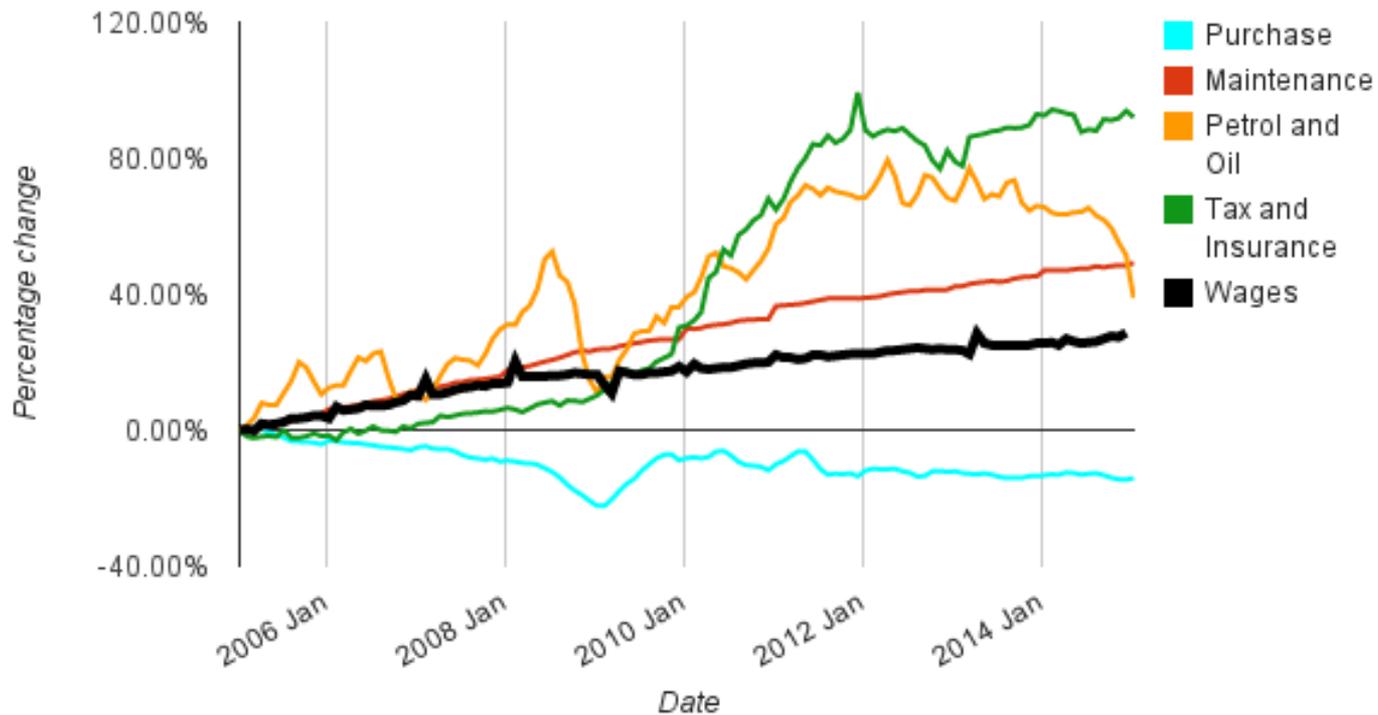
- Historical tendency for traffic (mileage per capita) and economy to be linked
- There is a clear need for good traffic forecasts – the DfT NTM isn't perfect!
- Changing trends in a number of automobilised, economically developed countries

National Travel Survey

- On average, 954 trips per person per year
- 6,691 miles per person per year
- 64% of trips are by car (driver & passenger)
- 22% walk, 6% bus, 3% rail & tube, 2% bike, 2% other
- 361 hours per year, 7 miles per trip

Cost of Motoring

Change in the cost of motoring over the last 10 years



Cost of Travel

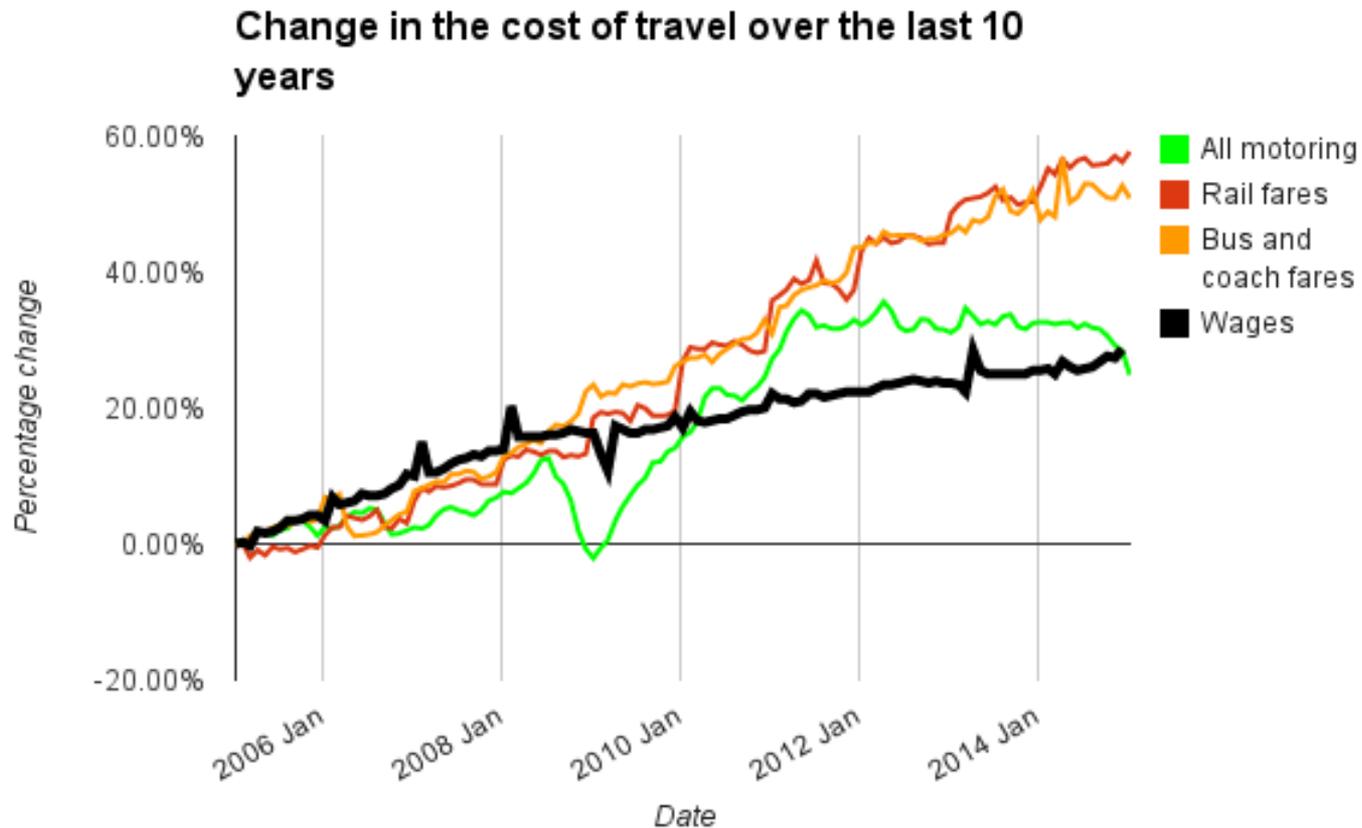
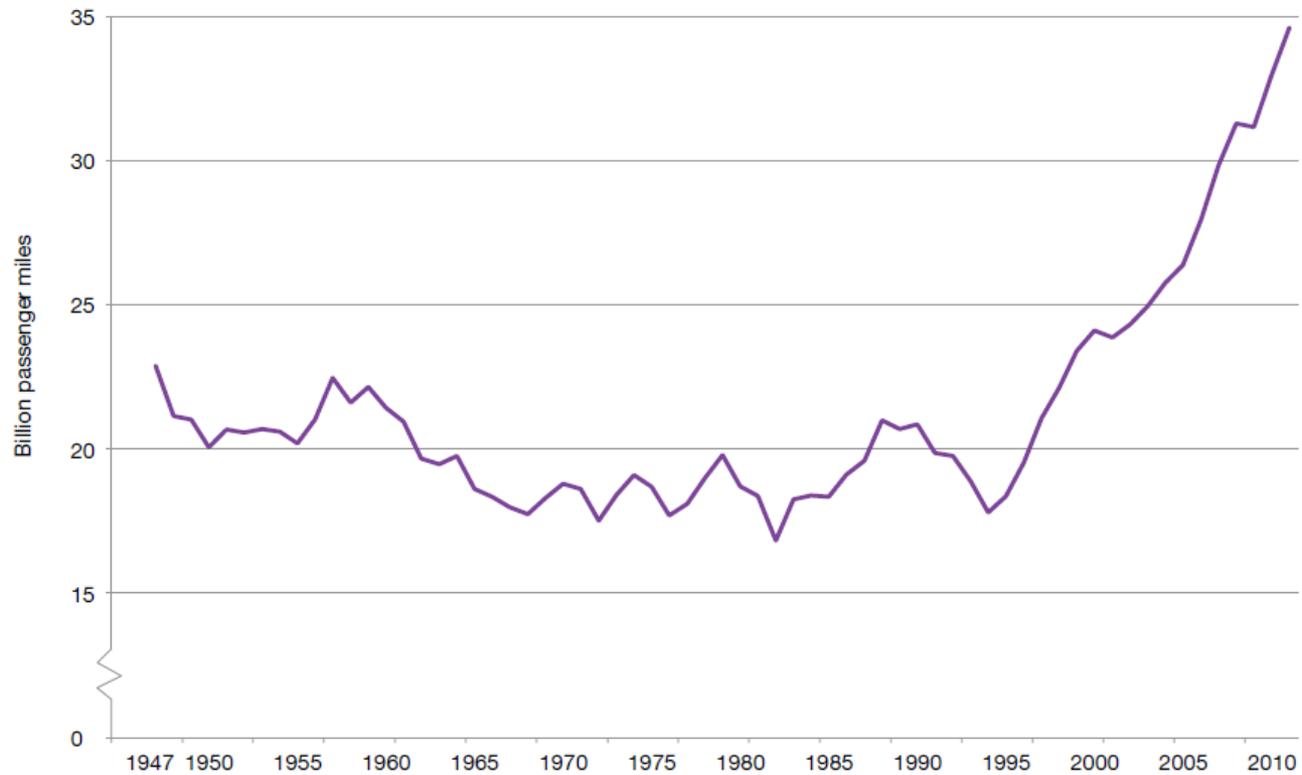


Figure 1.2: Growth in GB rail passenger mileage, 1947–2010



Source: Department for Transport (2012b)

'Peak Car'

- Suggestion that car mileage per capita has 'peaked'
- Goodwin – Peak Car
- Metz – Travel Time Budget
- Stokes – Cohort effect
- Headicar – People live in different places

Series of reports on travel trends:

- *On the Move* (Le Vine & Jones, '12)
- *Technical Compendium*
- *National Rail Satisfaction* (Preston & Jones, '12)
- *Rail Forecasting Using PDFH* (Worsley, '12)
- *On the Move Scotland* (Latinopoulos et al., '13)
- *Van Travel Trends in GB* (Clarke et al., '14)
- *On the Move Wales* (Le Vine & Jones, '14)
- *Generation Next* (Chen et al., '14)
- *Changing Lifestyles of Young Drivers* (Berrington & Mikolai, '14)

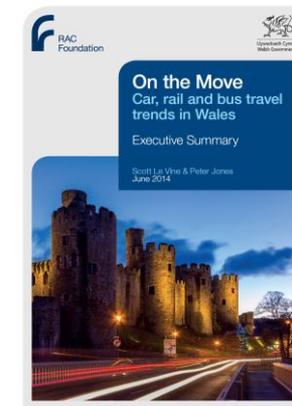
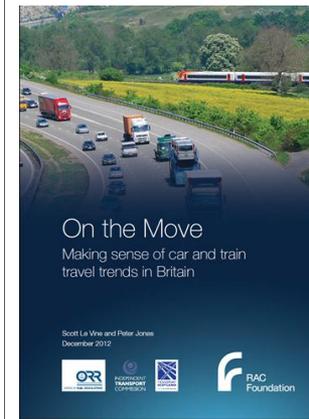
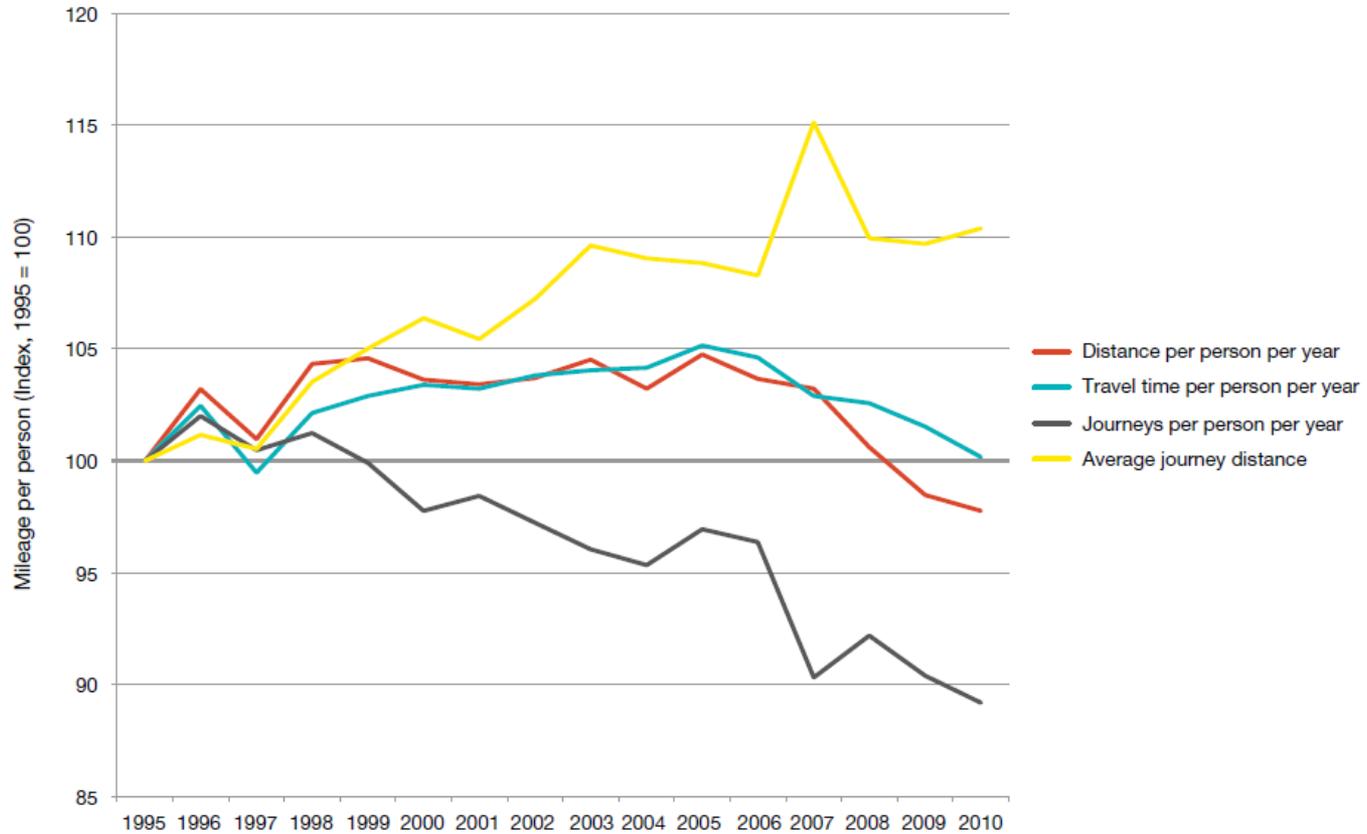


Figure 2.1: Overall trends in travel behaviour per person, 1995–2010



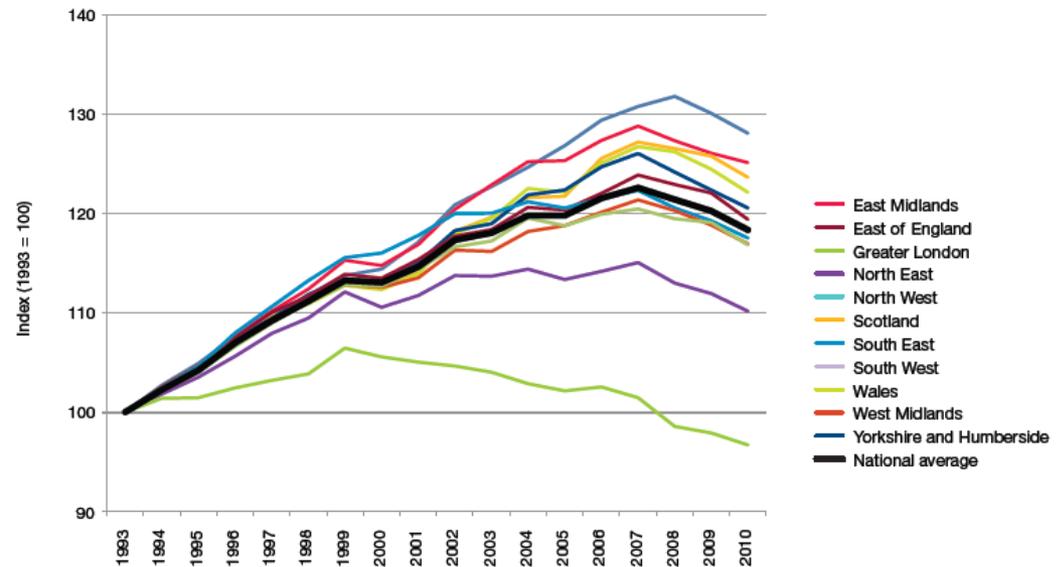
Key Points from On the Move (Le Vine & Jones, 2012)

- Large differences in car driving miles per head: men (decreased), women (increased), largest drop for men in 20s
- Most male mileage reduction can be accounted for by company car use drop (excluding 20s)
- Half of the increase in female mileage can be accounted for by female licence holding (56% in 1995/7, 62% in 2005/7)
- London is different from the rest of the country
- Continuing growth in non-company car use outside London for those aged 30+; for this group (70% of GB population) there has been no 'peak car' effect.

The need to disaggregate Differences in travel and licence-holding between:

- genders
- types of vehicle ownership (private/company)
- different areas (e.g., London)
- different area types
- different incomes, levels of employment, etc.

Figure 3.35: Index of growth rates in car traffic, by region, since 1993



Young people hypotheses

- Learning costs, learning time and testing
- Insurance
- Higher education
- Decreased levels of economic activity
- Increased urbanisation
- IT etc. (online activity, texting and suchlike)
- Environmental awareness
- Historically-high levels of international migration
- Life stage

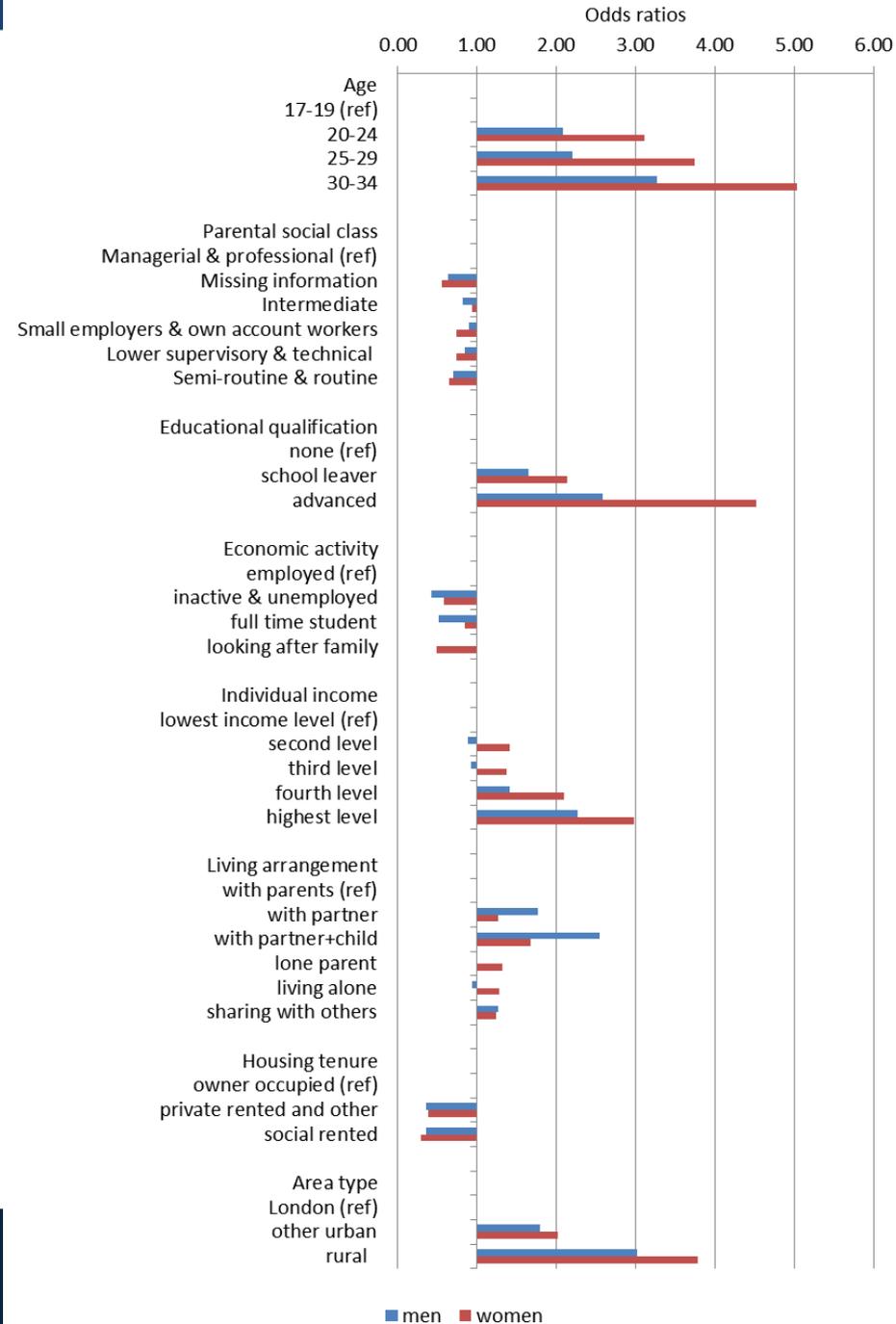
Changing Lifestyles of Young Drivers

- Berrington and Mikolai, University of Southampton
- Demographers not transport researchers
- Uses *Understanding Society* (incorporating British Household Panel Survey)
- 40k households in UK, longitudinal survey, enough data for regression
- Includes some transport questions
- 17-34 yr olds' driving and individual, household and local area characteristics
- Licence holding, miles driven, mode to work, difficulties in commuting

Changing Lifestyles of Young Drivers – Driving licence-holding

Predictors:

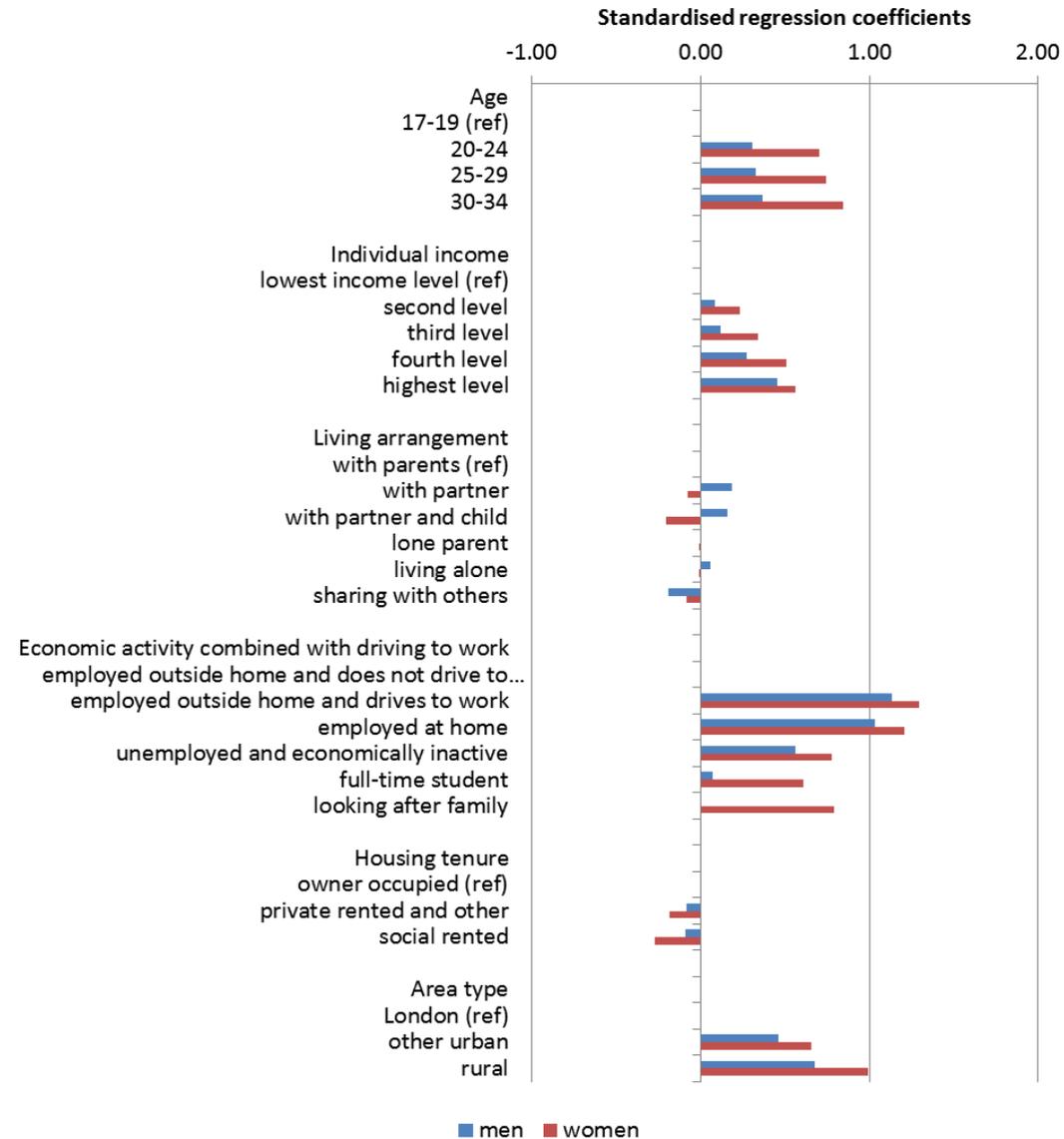
- age
- area type
- level of education
- individual income
- living arrangement
- economic activity status
- housing tenure



Changing Lifestyles of Young Drivers – annual car mileage

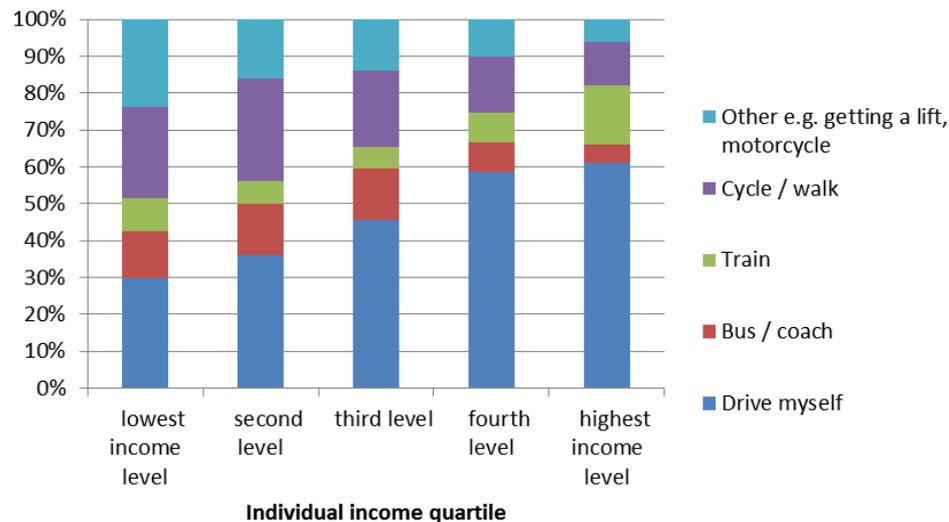
Predictors:

- age
- whether or not you drive to work
- economic activity status
- individual income
- area type



Changing Lifestyles of Young Drivers – Travel to work by car

- About half of employed 17-34 yr olds drive themselves to work
- % driving to work increases with age, education and individual income
- Difficulties: Congestion/Roadworks (almost 50%), Cost of Fuel (40% M, 30% W), Lack of parking (10%)



What does this all mean?

- Importance of forecasting
- The problems of forecasting
 - It is only a model
- Contentious debate
 - Assumptions and wishful thinking
 - Which stat is important to *you*?
 - Major gaps in our knowledge



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Any questions or comments?

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