



CONSENSUS BRIEFING NOTE 3

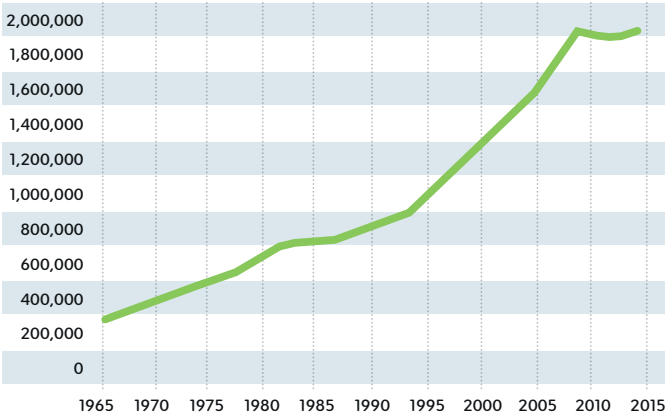
Mobility Biographies

A Study of Life Events and Mobility Milestones in Ireland

Introduction

This briefing note describes mobility biography research conducted as part of the Consumption, Environment and Sustainability (CONSENSUS) project. The research focused on people’s views and actions regarding transport and mobility and their transformation over the life course, with a view to identifying opportunities for curbing car-centric commuting and the ‘unsustainable consumption of distance’.¹

Number of cars on Irish roads 1965–2014



Life events and life-course transitions (e.g. arrival of the first child, moving house, transition from school or university to the workplace, retirement) can dramatically alter people’s consumption practices, especially regarding everyday mobility.² Mobility biography research (MBR) is a new field that investigates linkages between these critical ‘tipping points’ in people’s lives and major changes in mobility practices (e.g. switch from cycling to car-based commuting).^{3,4} Moreover, social scientists engaged in MBR recognise the connections between people’s biography and wider historical developments, including (infra)structural changes that either promote or preclude certain mobility options (e.g. car-sharing, use of bike rental schemes and public transport). Their work thus reveals the causes and effects of current (un)sustainable mobility practices and possible options for shifting them towards greater sustainability.

This study recorded mobility biographies in Ireland using an innovative survey tool. The impact of major life events such as moving home, starting college or changing jobs on people’s travel habits received particular attention. Moreover, we introduced the novel concept of ‘mobility milestones’, that is, events that are primarily mobility-related and depend upon favourable socio-political, economic and infrastructural conditions that directly or indirectly affect individuals’ mobility options. For example, getting a driving licence or buying a car or bike always reflect transport-infrastructure conditions, state-led regulation of mobility through laws and policy, mobility-related norms and wider social and economic circumstances.







A subsequent cohort analysis of mobility biographies data, combined with socio-historical transport research, established if and how life events and mobility milestones transform everyday mobility practices. Moreover, the study explicitly focused on the recent history of car use in Ireland, paying particular attention to investment in road infrastructure and pro-car policies and laws. Based on the scientific findings generated, a set of recommendations are made for improving sustainability in transport.

Mobility Biography Survey

An interactive online survey for recording the effects of life events and mobility milestones on mobility patterns across the life course was the main data collection tool. This innovative instrument included a life-course calendar (see below) and other custom question formats to ensure high levels of user-friendliness and accessibility and a visual appealing layout. The initial part of the survey used multiple-choice questions to collect information about respondents’ travel to primary and secondary school and leisure and work/school/college travel today. This was followed by the life-course calendar which

recorded respondents’ mode of travel and residential location for each five years of the respondent’s life to the current age. The third section of the survey recorded the occurrence of life events and mobility milestones in respondents’ lives and their perceived effects on mode of travel. The concluding section included attitudinal questions, such as ‘ideal’ mode of travel, and conventional demographic questions. The survey was rolled out across the island of Ireland in March/April 2015. 324 completed responses were returned and the sample was judged to reflect the demographic composition of the Irish population reasonably well.⁵

Life-course Calendar

						
Age 5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 35	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 40	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age 42	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Impacts on Driving

Life Events

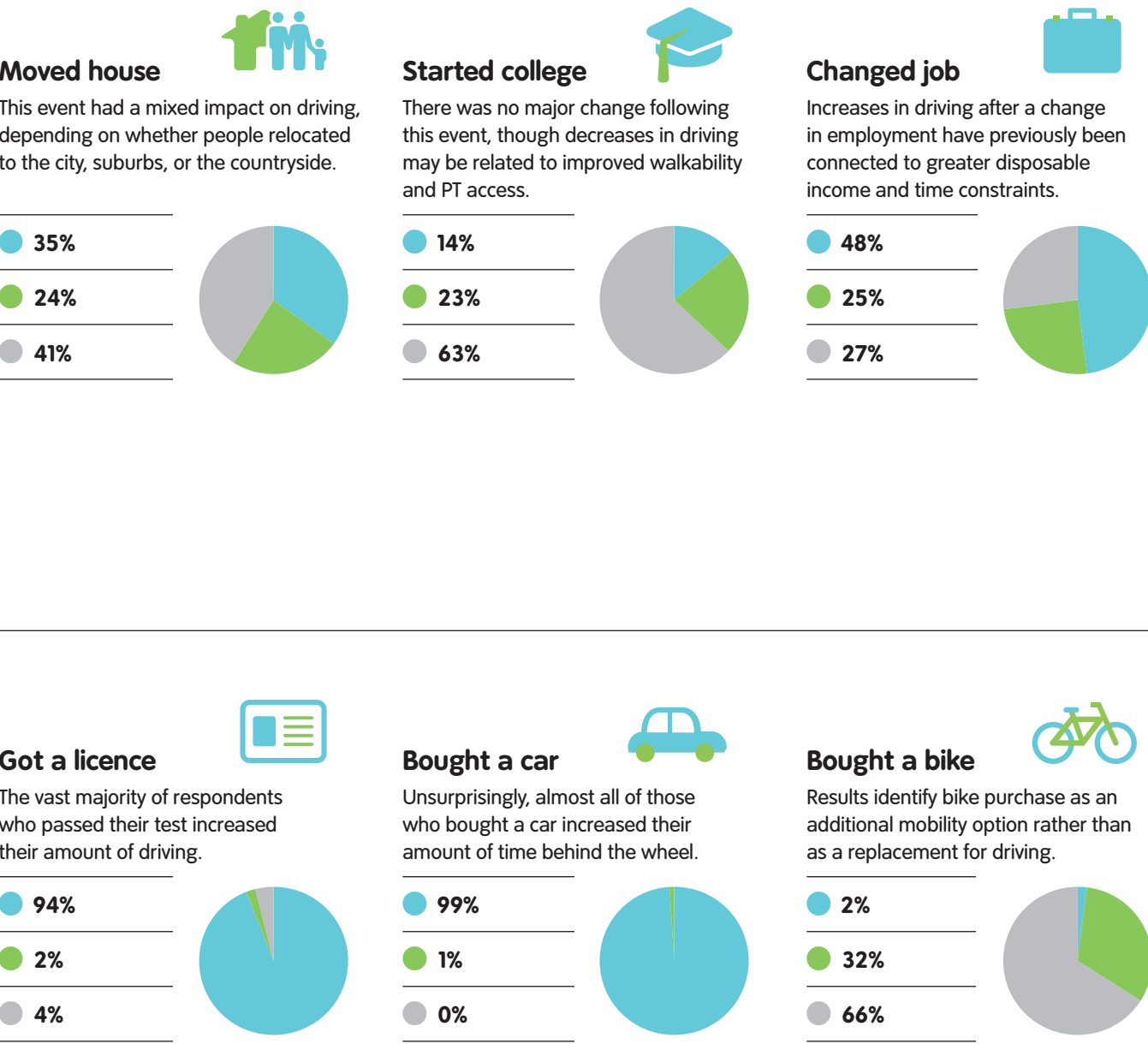
The life events most commonly stated as having influenced mobility practices were moving house, starting college, starting the first job and changing job. Regarding their effects on driving, results were mixed. 35% of respondents reported an increase in driving, 24% reported a decrease and 41% reported no change following residential relocation. While some respondents reported either a decrease or an increase in driving after starting college, the majority said that there was no change. Interestingly, sustainable modes saw the largest increases following this event: 71% and 69% indicated an increase in walking and public transport, respectively. Approximately half of those who changed job said that they increased their driving. Increases in driving also followed the arrival of a child (76%) and starting the first job (54%). In addition to reported changes in driving, it seemed important to learn more about the nature and direction of modal shifts (e.g. from bicycle to car, or vice versa).

Although it was not possible to causally link life events and modal shifts, combining life-course calendar data (mode of travel at each five years of age) with information about the respondents’ ages at which certain life events occurred allowed an association between the two. Using this method, an average of 2.3 changes in main mode of travel per respondent was identified. Focusing explicitly on modal shifts related to driving, approximately one third of instances of starting the first job and changing job coincided with a shift towards driving, with increases in disposable income and time pressure and residential relocation to a less accessible area identified as possible reasons. Although 15% of those starting college shifted their main mode away from driving, a further 13% took up driving after this life event.

Mobility Milestones

The three most frequently entered mobility milestones were getting a driving licence and buying a car or bike. Unsurprisingly, almost all respondents reported an increase in driving following the first two of these (at the expense of sustainable modes of travel). While 32% said that they decreased their driving after buying a bicycle, two-thirds did not report any change. Turning to modal shifts, getting a licence, getting access to a car and buying a car were all associated with substantial shifts towards driving (35%, 31% and 46%, respectively). Meanwhile, 14% of bike purchases and 12% regular public transport (PT) ticket purchases were associated with modal shifts away from driving.

- More
- Less
- No change



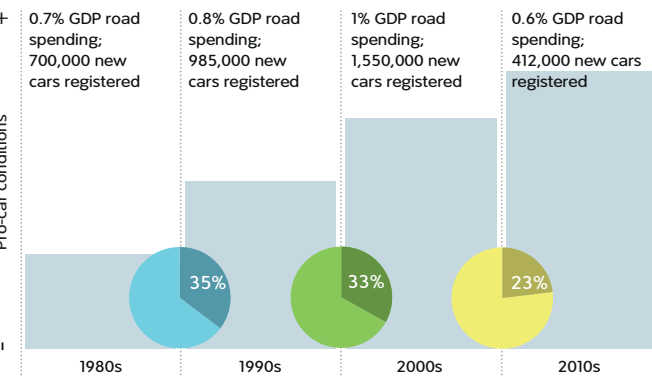
Cohort Analysis

To examine linkages between key life events and mobility milestones and historical changes to the transport system, three cohorts were formed on the basis of the year of birth of respondents: Today's 40s (born 1965–74), Today's 30s (born 1975–84) and Today's 20s (born 1985–94). Comparing the school travel of the three cohorts demonstrated the higher levels of walking and cycling by Today's 40s, while car use substantially increased for the younger cohorts. The most interesting data was derived from the life-course calendar, which revealed the modal share breakdown for each cohort at each five years of age. Here, Today's 20s exhibited the highest level of car use at each data point up to 20 years old (beyond which it was not possible to compare). For example, at five years old the percentage modal share of the car was 31% for Today's 40s, 51% for Today's 30s and 62% for Today's 20s; at twenty years old, the car modal shares were 14%, 16% and 26%, respectively.

An analysis of developments in Irish transport between 1965 and 2014 showed that the trend across the last fifty years is one of almost constantly growing car-dependency. The car established its dominant position in Ireland following the Second World War and, despite deteriorating road infrastructure in the 1970s and 1980s, car ownership, traffic volumes and road-based freight continued to rise. The 'Celtic Tiger' boom (1995–2007) saw a rise in pro-car policies and increased funding for road and motorway construction as well as a formalisation of the driving licensing system.⁶ Reductions in vehicle kilometres travelled during the recession (2008–2015) appear temporary, although some improvements to urban public transport and cycling infrastructure have been made. Today, more than three-quarters of people in Ireland travel to work in a car and there are two million cars on the road, travelling a total of 32 billion kilometres per year.⁷

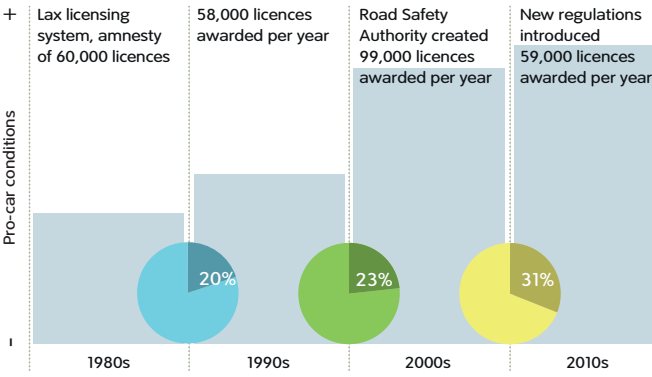
Cars & Roads

MOBILITY MILESTONE: BOUGHT A CAR



Driving Skills

MOBILITY MILESTONE: GOT A LICENCE



Today's 40s

Today's 30s

Today's 20s

% who recorded mobility milestone



Conclusions

To connect cohort-level and society-level information, we analysed car use under three headings: 'cars and roads', 'driving skills' and 'car culture'.⁸ In each case, cohorts' experience of mobility milestones was placed in the context of national historical data (see right). Firstly, the increasing pro-car nature of the Irish transport system is notable in terms of cars and roads. National investment and policy is linked to increases in the car modal share for each cohort and lower funding and priority in the last five years may explain reduced car purchasing by the youngest cohort. For driving skills, there has been major formalisation of the driving licensing system in the last twenty years, which is reflected in younger people passing their tests in greater numbers and at an earlier age. Finally, the findings suggest an increasing pro-car culture in Irish society. The youngest cohort, Today's 20s, reported the highest level of preference for the car as their ideal mode of travel. In all, this analysis suggests that car use has become increasingly entrenched through investment in transport infrastructure, policies and traffic laws.

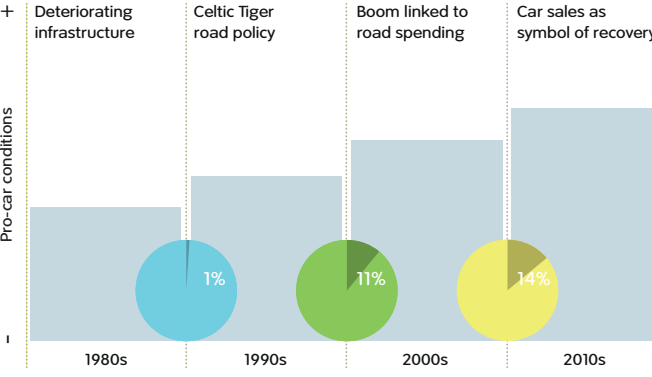
The transport sector in Ireland and internationally faces many sustainability challenges, not least due to the largely habitual nature of human travel behaviour and slow pace of infrastructural changes. While individual-level changes are undoubtedly effective if adopted by a large number of people, the challenge of achieving far-reaching, society-wide changes in how (much) people travel persists. Current efforts remain polarised between techno-centric measures that favour (infra)structural changes and narrow individual-level promotional campaigns that treat people as individual utility maximisers rather than active, socially embedded agents.

Offering fresh insights into everyday mobility practices that are relevant to policy and decision makers in the transport sector, the project:

- Adopted a mobility biography approach that focuses on changes in mobility practices across the life course
- Developed and introduced the novel concept of 'mobility milestones'
- Deployed the first ever mobility biography survey in Ireland, using an innovative online instrument
- Analysed the effects of life events and mobility milestones on mobility practices
- Derived three cohorts from this survey data and compared their travel patterns
- Reviewed the development of the Irish transport system over the last fifty years
- Suggested links between historical developments in car use and the cohorts' experiences of mobility milestones

Car Culture

CAR AS IDEAL MODE OF TRAVEL



Five key recommendations for research and policy:

1. Adopting a life-course approach would represent a major step change in transport policy, which often indiscriminately targets individuals' travel behaviour regardless of their life-course position. For example, this study found that travel behaviour in the period between 20 and 30 years old is particularly dynamic.
2. Recognising the effects of life events on mobility offers major opportunities to tailor policies and interventions to these 'windows of opportunity'. Ireland could learn from other European countries which, for example, deliver transport network information packs and free public transport tickets to all new residents.
3. The mobility milestones concept acts as a useful guide for analysing the social, political and infrastructural influences on mobility-related events in individual's lives. Consider, for example, the acquisition of the driving licence as a rite of passage for young people and the formalisation of the licensing system over the last twenty years.
4. The history of the Irish transport system offers very important lessons, especially regarding the entrenching of car dependence and its manifestations in everyday mobility patterns. Past experiences of increasing structural 'lock in' regarding car use serve to caution against a sole focus on changing individual behaviour or unrealistic expectations of immediate and radical transformation towards sustainable transport. Instead, advocating broader changes to transport infrastructure, policies and traffic laws emerges as a promising alternative.
5. Mobility biography research, while relatively new, is growing rapidly and offers huge potential for further conceptual and methodological development. It would be particularly instructive to roll out comparable mobility biography studies internationally, with the aim of better understanding influences on mobility patterns and pointing towards opportunities for sustainable behaviour change.

This publication was authored by the CONSENSUS research team in 2015. CONSENSUS is an Irish Environmental Protection Agency funded research project on sustainable household consumption and behaviour change. Launched in 2009, CONSENSUS has gained international recognition for its use of cutting-edge behavioural science and collaborative visioning exercises to generate innovations for sustainable consumption in the areas of water, energy, food and transport.

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