Understanding Geographical Mobility
Data note

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INTRODUCTION

Internal migration can be a major factor in patterns of population and employment growth and decline within countries. In the year ending June 2014, for example, there were an estimated 2.9 million internal migration moves between local authorities in England and Wales. It is fundamental to the efficient functioning of local economies and housing markets, as well as enabling individuals and families to meet their goals and aspirations (Green, 2018). As the economy and society change, so does the spatial distribution of people, firms and social institutions over time – with push and pull factors influencing the pattern of internal migration.

While migration from abroad and its economic, social and political effects, nationally and in local communities, have attracted a great deal of research and policy interest, less attention has been given to changing internal migration patterns. Understanding who moves – and when, how far and why – is useful to researchers and policymakers as the government sets out its ambition for “levelling up” the country. Using some of the unique properties of longitudinal data, this data note uses Understanding Society data collected over 9 years to provide high level insights into residential moves and internal migration. It aims to showcase some of the potential research questions that can be explored using individual residential mobility histories over time. Focusing on specific analysis, it explores both population moves at regional level and moves at neighbourhood level – just two of the different geographies that could be used.

Internal migration is affected by both changes in population composition and changes in people’s behaviour. Internal migration is only one form of geographical mobility – commuting (not covered in this data note) can also be an enabler of mobility. A wide range of factors such as jobs and technology, housing, age, gender, income, family formation and separation, schools, health and environment, retirement, caring responsibilities, social networks and transport can influence the decision whether to move, and over what distance.

However, there are a number of long-term imperatives for the need to better understand the drivers and consequences of short- and long-distance residential mobility and its effects on individuals, families, communities and economies, such as:

- Spatial inequality and economic development: Across a very broad range of 28 indicators, the UK is inter-regionally more unequal than 28 other advanced OECD countries (McCann, 2019). Spatial inequalities can be examined at various levels, i.e. regional, local and neighbourhood, and the way these are measured matters. London and the South East are far ahead in their economic development compared to other regions such as the North-East, Wales and Midlands but at a local level, or in terms of “functional urban areas”, the picture is more mixed (Financial Times, 2 March 2020).

- An ageing society: Increasingly, the age profile of places is polarising - cities are becoming younger, whilst most coastal towns are growing older. Some counties such as Devon and Cornwall are attracting more affluent pensioners as well as those seeking a better environment. How would an ageing society, with its growing need for care shape people’s moving choices in the future, where the burden for care will have to be shared between families and the state?
Diversity, cohesion and wellbeing: Britain’s population is not only becoming older but also ethnically and culturally more diverse. The wave of commonwealth migration from the 1950s to the 1970s saw many ethnic minorities settle in inner city areas but that pattern is now changing – with variations in the pace of change between groups. Authors such as Richard Florida have popularised the idea that there is a link between “open-minded, diverse and tolerant places where artistically vibrant, ethnically diverse, and gay and lesbian communities have settled and thrived” and the incubation of new ideas and entrepreneurial business ventures (Florida, 2012). These ideas are contrasted with the ideas of ‘homophily’ and white flight, which suggest that people prefer neighbours like themselves. This data note explores geographical movement patterns of White British and Black and Minority Ethnic (BAME) groups in England at neighbourhood level.

Transport, environment and climate change: Climate change is an over-arching threat, with the government committed to a net zero greenhouse gases by 2050. A zero-carbon future will have implications not only for the distribution of jobs but also in the choices individuals and families make about the value they place on connectivity, cost of transport, health and wellbeing, risk of floods and the environment. In the context of scaling up transport infrastructure investment, how will such investments interact with geographical moves and commuting, and who will most benefit from such investments? For example, commuting can help deal with local economic shocks but it offers only limited insurance against deeply embedded spatial inequalities because commutes tend to be typically over shorter distances (Amior & Manning, 2019).

The data note is structured into three sections.

- Section 1 provides a general overview of the frequency of geographical moves between different UK regions and among different age groups.
- Section 2 delves deeper into different reasons and types of moves.
- Section 3 provides an example of more detailed geographical analysis of origin-destination moving trajectories by merging Understanding Society data with the Index of Multiple Deprivation and Index of Dissimilarity.

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1. How often do people move?

The changing prevalence of residential mobility

A number of recent studies on migration in the UK have shown a decrease in the overall level of internal migration over the last four decades (e.g. Champion & Shuttleworth, 2017a,b; Lomax & Stillwell, 2017; McCollum et al., 2018). Changes in residential mobility patterns have important consequences both for policymaking as well as for individual-level outcomes. For individuals, residential mobility might be associated with positive changes such as improvement in the standard of living, but at the same time it can also be a source of stress and potential disruption of existing social ties. Frequency and direction of moves are also important for policy-makers as they affect service provision and investment planning.

There are many reasons why people chose to move house. Social mobility can be a factor for some as they move to areas with better labour market opportunities, to better-connected neighbourhoods or to areas that offer the lifestyle they want. Other people find that family life necessitates moving – to care for elderly parents, have more support when raising children or to live somewhere with better health or social care provision. The more we understand why people choose to move, stay or commute, the better able policymakers will be to design interventions that improve wellbeing and standards of living across the country.

Figure 1 presents the weighted proportion of regional population moving between waves. For the purpose of the analyses presented in this and the following section, individual-level ‘move’ is defined based on the time of moving into the current address and the time of the (individual) interview. In this example, geographical region is measured at the Government Office Region level. On average, 7.4% of respondents aged 16 and older have moved annually between 2009 and 2018 (a dotted red line on Figure 1). This proportion has been quite stable over time, fluctuating between 7.1% in Wave 2 (2010-11) and 8.5% in Wave 5 (2013-14) and Wave 7 (2015-16). There is some regional variation, with London and the South West exhibiting on average higher levels of in and out migration across all waves. Wales and Northern Ireland, on the other hand, show the lowest levels of in and out migration.

Figure 1. Proportion of regional population moving between waves (by region of origin)

Source: Understanding Society Waves 2 to 9 (2010/11 to 2017/18), weighted proportions. Note: Hereafter, the sample includes General Population Sample (GPS) and Ethnic Minority Boost Sample (EMBS) recruited in 2009-10 (Wave 1). Data collection for each wave takes place over a 24-month period. Note that the periods of waves overlap, and that individual respondents are interviewed around the same time each year. Scaled weights for the pooled pairs of waves have been applied to produce all tables and figures in this analysis.
Residential moves and migration often happen in relation to other events people experience in life, such as changes in employment or partnership status. Since some of these events, such as leaving the parental home or first co-residential partnership, were found to be driven by institutional and welfare developments as well as societal cultural norms, migration was shown to follow strict age patterns – the so-called “migration schedules” (Castro & Rogers, 1981). Early adulthood, for example, is marked with the occurrence of a large number of events triggering moves, and therefore migration rates among those in their 20s and 30s are typically significantly higher than among older populations (Bernard et al., 2014, Champion & Shuttleworth, 2017). Figure 2 shows the weighted proportion of adult population (16+) moving between waves by age groups (Wave 2 to 9). The graph highlights the elevated levels of migration occurring in younger ages with just under 18% of people aged 16-25 moving between the waves on average. The proportion declines steadily with age.

Figure 2. Proportion of adult population (16+) moving between waves by age groups
Source: Understanding Society Waves 2 to 9 (2010/11 to 2017/18), weighted proportions

2. Why do people move?

Different reasons at different life stages

The factors associated with geographical mobility can be generally grouped into three categories (Morris et al., 2018):

1. Individual characteristics (such as age, life stage, etc.)
2. Life events (such as childbirth, partnership changes, employment changes)
3. Moving preferences (such as considerations related to characteristics of origin and destination neighbourhoods).

One way to analyse why people move would be to look at self-reported reasons for moves.

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1 This figure is very close to the estimates produced from an event history analysis of moving trajectories among the same age group using 18 waves of BHPS data by Pelikh and Kulu (2018).
2 See Coulter and Scott (2015) for a conceptual discussion on the association between the desire for move and actual moving behaviour.
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*Understanding Society* collects data on the reasons for a move, allowing respondents to give multiple answers based on the following categories:

- family related reasons (21%)
- education related reasons (6%)
- employer related reasons (7%)
- housing related reasons (39%)
- area related reasons (7%)
- some other reason (21%)

Among the whole population across all waves, the most common answer was moving for housing reasons (39%), followed by family reasons (21%), employment (7%), area (7%) and education (6%). 89% of respondents in Waves 2-9 have mentioned a single reason for move, whereas 8% have mentioned two reasons and just under 3% have mentioned three or more reasons. A closer look at the most common combinations of multiple reasons for move has revealed the following patterns: “housing and area related reasons” (33%) and “family and housing related reasons” (26%).

Figure 3. Reasons for moves by age group

![Figure 3](image-url)


Figure 3 presents the distribution of reasons for move by age group. While housing is, as expected, the most frequently mentioned answer among all age groups, education- and employment-related reasons together are driving over 20% of moves in the 16-25 age group. The proportion of moves related to this reason decreases steadily with age. On the other hand, housing- and area-related reasons together increase in proportion by age. Family plays a stable role at all ages. This is not surprising, as it covers a wide spectrum of family-related events in life, such as moving in together or separating from a partner, moving closer to parents and grandparents, or the other way around, and moving closer to children or grandchildren (e.g. Michielin et al. 2008; Sage et al., 2013; Ermisch & Mulder, 2019). A significant increase in the proportion of “other” reasons is observed in older age,
which might be related to health or social exclusion reasons. While this cannot be captured directly using these variables at the moment, other individual characteristics collected in *Understanding Society*, such as self-rated health, access to a car, and social networks questions could shed further light on the matter.

### Moves within and between regions

The concept of ‘moving’ covers both long and short relocations, but clearly there is a difference between moving across the country and moving a few streets. The reasons why people might choose to move for shorter or longer distances might therefore be very different. There exists a research tradition of considering short-distance moves to be driven by housing adjustments and long-distance moves to be driven by changes in employment (Detang-Dessendre & Molho, 1999; Mulder & Clark, 2000; Clark & Huang, 2003; Boyle et al., 2008; Kulu, 2008). One way to define a long-distance move is to use the 40-50 km threshold for the distance of move (Boyle, 1995; Boyle, Cooke, Halfacree, & Smith, 2001; Clark & Huang, 2004; Champion & Shuttleworth, 2017; Thomas, 2019). An alternative is to use the functional labour market areas based on the Travel to Work Areas defined by the Office for National Statistics and distinguish between moves within and between labour market areas (Clark & Huang, 2003; Kulu & Washbrook, 2014; Pelikh & Kulu, 2018).

An example below uses the Government Office Region variable available in the main dataset of *Understanding Society* without the special license. On average, the largest number of moves has happened within a region – 88%, with 12% of the population moving between the regions. Figure 4 shows the distribution of reasons for moves within and between regions. Up to 48% of moves within a region were driven by housing- and area-related changes, while the most common reasons for moves between regions were related to changes in employment (26%).

### Figure 4. Reasons for moves within and between regions

![Bar chart showing reasons for moves](chart)

Source: *Understanding Society* Waves 2 to 9 (2010/11 to 2017/18), weighted proportions. Note: this example does not use the reference grid information available through the special license; therefore, some moves between the regions might in fact not be long-distance.

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3 See Wilding et al. (2018) for a discussion of internal migration and mental health. Using 25 years of combined BHPS and UKHLS data, the study shows that individuals with mental health needs are more likely to migrate than the general population. Moreover, individuals with poor mental health are more likely to make undesired moves.

4 See Sacker et al. (2017) for a discussion on health and social exclusion in older age using evidence from *Understanding Society*. 
However, given the increased complexity of life course transitions, family structure and living arrangements, recent research has shown that considering migration to be driven purely by economic rationality would be too simplistic (Clark & Whiters, 2007; Smith & Finney, 2015; Pelikh & Kulu, 2018) and that a large share of long-distance moves are attributed to reasons other than employment (Clark & Huang, 2004; Lundholm et al., 2004; Clark & Whiters, 2007; Clark & Maas, 2012; Coulter & Scott, 2015; Thomas, 2019). Data from Understanding Society supports that notion and shows that “other” reasons for moves represent a significant proportion of moves both within (22%) and between regions (15%) (see Figure 4). Those factors are sometimes referred to in the literature as environmental and personal reasons. Living environment, lifestyle, neighbourhood quality as well as ‘gentrification’ of the areas, and search for self-identification and further personal development, all contribute to our understanding of people’s decision to move (Lundholm et al., 2004; Morrison & Clark, 2011; Niedomysl, 2011; Vilhelmson & Thulin, 2016; Duncan & Smith, 2006; Hochstenbach & Boterman, 2017).

Changing tenure, living conditions, and moves

Understanding Society opens up opportunities to study in detail many different aspects associated with various moving trajectories and reasons for moves. For example, changing tenure and housing conditions are among the common drivers behind the housing-related moves. The 9 waves of data show that people living in the private rented sector are the most mobile. 24% of private renters have moved on average between wave, compared with 7% of social renters and just under 4% of home owners. It is not surprising that home owners on average move less frequently. According the English Housing Survey Headline Report 2016-17, home owners have on average lived in their houses for 17.5 years, while for social renters this figure is 11.3 years, and for private renters just under 4 years. Figure 5 presents the origin-destination moving trajectories by tenure. Out of those who had moved house in the first 9 waves of UKHLS, 66-67% were moves within the same tenure. Among moves from the home ownership tenure, around a quarter (27%) were to private rented sector and a further 6% to social rented sector. Among moves from the social rented sector, around a quarter (26%) were to home ownership; whereas among moves from the private rented sector, around a quarter were to home ownership (24%) and the remaining 11% to the social rented sector.

Figure 5. Origin-destination moving trajectories by tenure type

<table>
<thead>
<tr>
<th>Origin</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home owners (HO) 4% of all HO move from one year to the next</td>
<td>home owners 67%</td>
</tr>
<tr>
<td></td>
<td>social rented sector 6%</td>
</tr>
<tr>
<td></td>
<td>private rented sector 27%</td>
</tr>
<tr>
<td>Social Rented Sector (SRS) 7% of all SRS move from one year to the next</td>
<td>home owners 8%</td>
</tr>
<tr>
<td></td>
<td>social rented sector 65%</td>
</tr>
<tr>
<td></td>
<td>private rented sector 26%</td>
</tr>
<tr>
<td>Private Rented Sector (PRS) 24% of all PRS move from one year to the next</td>
<td>home owners 24%</td>
</tr>
<tr>
<td></td>
<td>social rented sector 11%</td>
</tr>
<tr>
<td></td>
<td>private rented sector 66%</td>
</tr>
</tbody>
</table>

Source: Understanding Society Waves 2 to 9 (2010/11 to 2017/18), weighted proportions
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While the transition to homeownership seems to be a natural step onto the housing ladder, the process itself is far from straightforward given how tight the housing market has become over the past few decades. Using over 25 years of data from BHPS and UKLHS, Clarke and Wood (2018) have shown how homeownership rates among young people differ based on their parents’ wealth. Housing- and family-related motives for moving often go together. Lersch and Vidal (2016) took a novel approach and looked at the extent to which home ownership is jointly held within couples, and investigated factors associated with the transition into sole home ownership for partnered individuals using 20 years of BHPS and UKHLS data. Using BHPS data, Rabe and Taylor (2010) have found that couples having a new baby tend to move to a better neighbourhood. Coulter and Thomas (2019), on the other hand, have shown how housing conditions can influence partnership stability and lead to separation and moving out.

The reverse pattern in the transition from home ownership to private renting might be related to a number of changes in the household composition. One of the most frequent transitions of this kind is driven by the increased numbers of separating and divorcing couples. Using 18 waves of BHPS, Mikolai and Kulu (2018) have shown how housing trajectories of separated couples differ between men and women in the short and long term. Another transition to private renting is related to young people leaving the parental home. Mergin merging UKLHS data with local housing prices, Bayrakdar and Coulter (2018) have shown how it affects the rates of leaving the parental home among young people.

Employment-related reasons are the most frequently mentioned among moves between the regions. Looking at the economic activity status of those who have moved between the regions for employment reasons, 65% were employees, 6% self-employed, 16% full-time students and 8% unemployed (see Figure 6). Out of employees who moved for the new job, a little over half worked in the private sector; with 60% employed in professional and managerial occupations and 28% in routine occupations. The data shows that moving for employment-related reasons is positively associated with progression in wages. On average, the hourly wage of employees has increased 24% after the move, with a significantly higher upgrade among those who moved between regions (31%) compared to movers within a region (20%). Linking UKHLS data to local unemployment rates, Langella and Manning (2019) have shown that people are more likely to move away from areas of high unemployment and move towards areas of lower unemployment. Using the information on the region of birth and parental occupation collected in UKHLS, Friedman and Macmillan (2017) have shown how occupational mobility varies by origin class, region, and internal migration patterns.

![Figure 6. Distribution of interregional movers for employment reasons by economic activity status and occupation (Wave 2 to 9; weighted)](Source: Understanding Society Waves 2 to 9 (2010/11 to 2017/18), weighted proportions)
3. Where do people move?

Characteristics of communities where people live and move to have an impact on their lives. For instance, research on ‘neighbourhood effects’ has shown that neighbourhood characteristics such as concentration of poverty, unemployment rates, the level of ethnic diversity and co-ethnic concentration affect individual outcomes such as individual employment prospects and poverty transitions (e.g. Buck, 2001); wellbeing and life satisfaction (Knies et al., 2016); as well as opportunities for social contact with other ethnic groups (e.g. Hewstone & Schmid, 2014; Laurence et al., 2017). Understanding Society contains a wide range of geographical identifiers, which can be linked with external statistics to analyse different aspects of neighbourhoods. (There is more information on using Understanding Society for neighbourhood effects analyses on the UK Data Service website).

An example below is taken from the analysis conducted for the Ministry of Housing, Communities & Local Government using the first 7 waves of data. It explores geographical movement patterns of White British and Black and Minority Ethnic (BME) groups in England in relation to neighbourhood deprivation (measured using 2010 Index of Multiple Deprivation) and evenness of distribution of ethnic minorities and white majority (using Index of Dissimilarity – a frequently used measure of segregation between two groups). In this example, deprivation has been measured on the Lower Super Output Area (LSOA) level, which on average contains about 1,500 residents (or 800 households), whereas minority-majority evenness (or segregation) has been calculated on Middle Super Output Area (MSOA) level, which on average contains about 7,500 residents. All areas have been classified into quintiles ranging from the least deprived/segregated into the most deprived/segregated. Here, ‘move’ has been also defined on LSOA-level, which means that very short distance moves, within the same LSOA, are therefore not counted. Figures 7 and 8 show the most and the least common moving trajectories in terms of levels of deprivation and segregation of the neighbourhoods of origin and destination. The majority of movement happens between similar types of area, although on aggregate level, there is a tendency among ‘movers’ from all ethnic groups to move into ‘better’ (less deprived) areas.

Similar tendencies to move into more advantaged neighbourhoods among people with higher incomes (from almost all ethnic backgrounds) have been found by Coulter and Clark (2019), who examined individual-level characteristics and movement trajectories in more detail using Understanding Society data. In the presented example, for ease of interpretation, the frequency of movement between different quintiles of deprivation and segregation (figures 7 and 8) has been colour-coded, ranging from red (most common) to green (least common). Interestingly, people who used to live in the top 20% deprived (or segregated) neighbourhoods as well as those who used to live in the bottom 20% deprived (segregated) neighbourhoods were the most likely to move to the same type of area.

Figure 7. Origin-destination moving trajectories by area’s level of deprivation

a) All movers with ethnic minority background

<table>
<thead>
<tr>
<th>Destination (moving into)</th>
<th>V. High</th>
<th>High</th>
<th>Med.</th>
<th>Low</th>
<th>V. Low</th>
<th>All</th>
<th>Origin (moving from)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. High</td>
<td>49.3</td>
<td>27.8</td>
<td>13.2</td>
<td>6.8</td>
<td>2.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30.7</td>
<td>26</td>
<td>27.6</td>
<td>9.3</td>
<td>6.5</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Med.</td>
<td>17.7</td>
<td>30.7</td>
<td>26.2</td>
<td>12.4</td>
<td>12.9</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>12.4</td>
<td>23.6</td>
<td>28.1</td>
<td>16.3</td>
<td>19.6</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>V. Low</td>
<td>4.2</td>
<td>20.4</td>
<td>12.8</td>
<td>34.4</td>
<td>28.2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>32.6</td>
<td>27</td>
<td>20.4</td>
<td>11.3</td>
<td>8.8</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
b) All White British movers

| Source: Understanding Society, pooled pairs of Waves 1 to 7 (2010/11 to 2015/16), weighted proportions, England only (Note: Area deprivation is measured by quintiles of 2010 Index of Multiple Deprivation) |

Figure 8. Origin-destination moving trajectories by area’s Index of Dissimilarity

a) All movers with ethnic minority background

| Source: Understanding Society, pooled pairs of Waves 1 to 7 (2010/11 to 2015/16), weighted proportions, England only (Note: Index of Dissimilarity is calculated based on the ethnic composition in the 2011 census with MSOA as the larger unit and LSOA as the smaller unit) |
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